

NinjaTrader + Indicator = Nindicator

# Nindicator Trading Manual

Total Package

Bring ye all the tithes into the storehouse, that there may be meat in mine house, and prove me now herewith, saith the LORD of hosts, if I will not open you the windows of heaven, and pour you out a blessing, that *there shall not be room enough to receive it.*

Sales: [AlgoNinja.com](http://AlgoNinja.com)

Support: [Nindicators@gmail.com](mailto:Nindicators@gmail.com)

Education: [MarketTradersJournal.com](http://MarketTradersJournal.com)

Website: [Nindicator.com](http://Nindicator.com)

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## **Nindicator Trading Manual- Introduction**

The Nindicator Total Package covers a number of areas of trading that are structurally aligned with the way markets work. First off, there is context (Nindicator Comprehensive Tools), then the Pattern (Nindicator Pattern Tools) which provide for the analysis of market patterns from which trading decisions, often with known probabilities can be based. Then, finally, the order flow and position management (Nindicator Order Flow and Position Management Tools) which provides for managing the actual trade.

Trading is either simple, or very hard. Each of us decides whether consciously or unconsciously which. I will assume you have a basic knowledge of technical analysis. Much of this is available in books or on the web. Where applicable, I will reference sources that you can read to learn more if you like. But my focus will be to keep it simple and to the basics. I may supplement this material with other sources for you to access as I see it applies. If something is not clear, ask me and I will do a video or write an article for you in response. This way, we will build an ongoing database of relevant information. You should always have read all the blog articles at [www.MarketTradersJournal.com](http://www.MarketTradersJournal.com), have read the Nindicator sales manual, Terms and Conditions and reviewed all the relevant materials before asking a question. Please be courteous in this respect.

If I could show you how to trade so it took the minimum resources to do so, I might write a couple pages and give it to you. I have read hundreds and hundreds of book (possibly thousands) and I have literally coded every concept in every book and tested it. What I found was that what most people were saying was just plain false. I have an educational background in experimental psychology. I have always used what I learned in school in my trading research. You see, my degree was a research degree. It stressed how you set up tests so you route out some sort of truth. The interesting thing about psychology however is, more often than not, you are doing this with some sort of intangible. This as compared with my wife's degree, mechanical engineering, is a world of difference. So, I am glad I have the degree I do, because trading is intangible at best. I am also glad I have learned from her mechanical way of thinking as well; two different approaches that broaden the process of analysis. I think the thing that has kept me glued to trading for so many years is the fact it is always different. The market only does two things; It goes up or down. Discerning this is very tricky; intangible.

There is a school of thought that says you can test past data and come up with strategies that work. This idea is not different from a religious notion or paradigm. If you decide you believe that, then you contextualize how you will deal with the market within that framework. In my early years, I lived by the motto, "if you cannot code it, it does not exist." I did well with this, but markets are always changing. So past contexts, that might have worked in the past, become unusable. Sometimes forever, sometimes on and off. As market structures shift, the systems stop working and you begin to lose. You just then hope you lose less than you made. After so many years of this, I began to loosen my hard held creed in only back tested systems, and began to look at discretionary methods of trading. Discretionary methods are presently adaptable.

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One of the harder lessons to learn was that to trade successfully, my method does not necessarily have to relate to what the market is doing in any day to be successful. My trading became shorter and shorter in duration. Then, as I got older, I did not have the stamina to trade for hours at a time. So I tried to trade in short time intervals and take breaks. I found this to be quite effective. Many people do not realize at this point, something like 84% of all trading is programmatic HFT, or high frequency trading. These programs at the time of this writing last an average of 22 seconds. The rise of HFT, has really changed the way the markets work. So, either you trade fast, or you trade real slow (i.e. monthly charts). The reason for this is a large percentage of market directional movement occurs in fairly short time spans. As a result, the name of the game is to be in the game when this is occurring and stay out when it is not.

Let's look at a chart to see this phenomenon. Any one will do, I am just grabbing today's chart intraday on the TF Russell Futures.



I have highlighted all the bars that are 2 points or greater in range (in magenta). You can see from this, looking from the low of the day to the high of the day, that the range for the day was largely attributable to these larger range bars. In fact, if you were to combine these bars together, there would be no overlap of yellow. So, the entire range for the day (which is 405 minutes) can be essentially reduced to 5, 3 minute bars (or 15 minutes). On this particular day, this is a 27:1 ratio. This is not uncommon to have most of the day's range covered in a handful of bars and the rest of the trading is more-or-less noise.

Another thing that I found is that trading short term, it enabled me to maintain perspective on what the market was doing. I also found it was easier to be in the zone for shorter durations. In this way, trading is like a sport, and if done in that spirit, I believe you will do better. If it does not feel like play, you just might be in big trouble. I go in for a score, and then I am done. Knowing when you are in the zone is also best learned in short spans because you will have to learn what your internal state is when trading; a kind of feedback mechanism with yourself. This

is where trading becomes religious; know thyself. Because you WILL meet the enemy, and you are it.

With that being said, I will, in this manual, show trading examples in shorter intervals. If you want to, then go into longer durations, or trade for more hours in a day. That is for you to decide. But if I can show you how to make one good trade and know why you made a good trade, then you will have learned everything you need to know, because from there, you will have the context to hone your skill, correct errors. You will have learned to fish, and in a way that works for you.

So, where do I start. Trading is such a huge topic. So I am going to skip all the lore. You can read some trading books: <http://markettradersjournal.com/recommended-reading-for-traders/>. Get familiar with the terms and concepts. Then use what I am showing you here. If something does not click for you. Write me a note. I will answer, and maybe do a video on the topic. I will keep doing this till people who follow me stop asking. That is when I know I have done my job; when you stop asking. So I am going to jump right in and skip the content of 1000 books with stuff that is largely worthless. You do need basic concepts however, so work on it.

Speaking of work. Trading is probably the toughest thing you will ever do. It may take years of study to be successful, but then again it may take days. So first off, I will ask you to trade on a simulator. Most simulators work with proper order queuing. So your first assignment is to simply practice getting in and out using market or limit orders. I almost always use limits. Certain markets are tougher than others. I like the Russell futures because the pricing is sloppy and will usually fill me. In the ES, it can be tougher to get a fill.

Once you get this order placing to where you are comfortable, you can move on to using some tools. Trading can require you to be aware of a number of things while you are trading all simultaneously. This can be difficult. I probably have an advantage because when I see a chart, I see 20 things that are natural processing to me. I am also a musician of many years and my kids are musicians. Here are a couple principals in learning. When you start learning in music, it is imperative you learn slowly, and at the pace you are able to play *correctly*. If you try to go too fast, you will make mistakes. These mistakes will become part of your playing. The muscle memory in the playing will not be solid enough to play faster. This is where the concept of *first learned behaviors* comes in. If you learned wrong, and by going too fast, then when you come under stress (and you will), then you will automatically *revert back* to first learned behaviors. If you tried to push the envelope learning too fast, you will revert to improper behaviors, and this trading wise, will result in loss. Never forget this concept of first learned behaviors. You need to function at full capacity under stress. This gives you some head room to make mistakes and still be solid. If a musician learns something wrong, then they have to unlearn it and relearn it right. I believe it takes *10 times* the effort to *unlearn* and relearn than it does to have just learned right in the first place. In trading, it is worse because you may not have the capital to sustain improper learning.

This brings us to another topic. Money management. I will be brief here. There are a lot of ways this term gets used.. Let's keep it simple. You have to make more than you lose. This is done in two ways. One, your winners should be bigger than losers if at all possible. Second, your win

rate should hopefully be greater than your loss rate. So, you win 78% of the time and your average win is 1.5 times your loser. Having these two factors in your favor is huge in determining your outcome. I have written about this many times and some articles are floating around the web on this topic. Here is one on the blog that is very important to understand: <http://markettradersjournal.com/the-psychology-of-money-and-trade-management/> I suggest you read everything in this blog (in fact, the blog is an extension of the manual) but I will paste links in here also that are relevant to the topic we are discussing.

Here is another principal: Only risk about 1% of your account (or the least amount possible. After all, if you cannot operate a small company, how on earth will you operate a big one? This is a huge problem for many traders. The contract value of a Russell futures contract is \$100 times the index. The index is trading at 792 right now, so when I put on a one lot, it is \$79,200 worth of stock. In the ES, it is  $1364 * \$50$ , or \$68,200 worth of stock. I try to trade with about \$100 stops in the Russell. so this equates to 0.126% the index. So, if I have \$79k in the account, I can literally have hundreds and hundreds of back to back losers and still be in the game. This is not likely, so it makes my learning curve easier, and it is less scary. To trade at 1% on a 1 point stop, I need \$10,000 in the account. If you push this envelope to 2% or more, then the risk dramatically escalates. I have found this topic to be very difficult for people to grasp. So, you can stay in line with this, by simply keeping your size very small.

Then comes the issue of trading multiple contracts as a money management strategy. The idea works like this. It is easier to predict short term than intermediate term. i.e. what is going to happen in the next 30 seconds, as compared with the next 10 minutes etc. So, what I do is put on multiple lots and more-or-less immediately take them off at a profit. I then move to a breakeven (or something close to it) on the remaining position. This has the effect of dramatically lowering risk (assuming proper trade placement which we will get into soon).

I suggest, if you have the account size, that you start with a strategy like this . Do it on the Simulation trader. Trade a 5 lot, take off 3 at 3 ticks and then tighten your stop. Practice this til you get a feel for the market you trade. The Nindicator Depth Analyzer could be used as somewhat of a standalone strategy doing this, so you could potentially actually make a living as a scalper by picking your times well and knowing nothing more than what I have discussed here with a couple tools and plenty of practice. More on the tools later.

The problem of course in these markets quickly becomes, how do I trade a 5 lot, of \$395,000 worth of stock when I have only \$10k in my account; Answer, you can't, unless you do and get lucky. Keep it small above all else. You can make huge amounts in any day if you have the capital and manage it right. But you have to manage yourself first, then the money. See how this can get complicated?

So my first effort is to show you how to contextualize the market. This is how you establish where opportunity is. Repeat after me... trading is about context, context context. Chant that a few thousand times.

So we have certain tools for establishing context. The most basic principal of context is support and resistance (SR). Support and resistance is the points where you would expect a counter-

trend move, or move in an opposing direction from the current one. Markets, especially in the HFT environment do this, probably 80% of the time. So, by definition 80% of your trading (or thinking about trading) should be counter-trend oriented in expectation of a market that moves sideways or ranges. A large percentage of traders trade trends. But what happens to these guys is they wait for a trend to develop just in time to hit a key SR level. Then they take some heat. The key is to understand what is driving the market. Much of this, these days is in knowing what reports are coming out (or came out) and their impact. A third contextualization is trend itself. Are we trending? Does the market want to leave established areas of value? Much of this kind of analysis is based on the direction the market is moving and the volume associated with it.

OK, so in review, we have support and resistance, news, and trend. From these three things we have context. So chant again.... SR, news, trend, context, context, context. If you do not have some sort of a handle on context in this moment, you should not be trading in my opinion. It is just that simple. Later we will expand on the notion of context, but for now this is it.

By the way, we discussed trend trading versus counter trend trading above. You should know the kinds of statistics associated with systems that trade off trends compared to ones that go against them. Knowing this (down to the intuitive level) will help you to understand where you are in a bigger picture of money management. You can read this blog post for that: <http://markettradersjournal.com/what-makes-a-trading-system-good/>

The Nindicator trading tool package was designed to be more or less comprehensive. It works only on the NinjaTrader (NT) trading platform which you will need to be fairly well versed in operating. Here is a link to some of their videos to help you become an expert if needed: [http://www.ninjatrader.com/support/helpGuides/nt7/index.html?video\\_library.htm](http://www.ninjatrader.com/support/helpGuides/nt7/index.html?video_library.htm)

If you pull up a Nindicator on your chart and there are lines missing, you might need to change a color as sometimes the plots on the Nindicators will be the same color as your chart. Or, it may be you are not licensed for that Nindicator because you did not purchase it.

Another important point about setting up charts is making sure there is enough data on them. NinjaTrader has the unique idiosyncrasy that it will and can compute and present partially computed results. Therefore, make sure there is always enough data on your charts to correctly compute.

So, Nindicators, working in the NT platform, have the tools within it to help identify context. From the establishing of context, we can then move forward into trading applications. The Nindicator package is composed of three basic groups. 1) Contextualization tools and basic indicators, 2) Patterns, 3) Order flow and position management.

So, without enumerating descriptions that may be in sales material, I will just go through them. First is the Nindicator Value Profile. This Nindicator in and of itself could be a whole book. So I will do my best to cover it here.

At the end of this manual, there are hundreds of pages of trading examples, techniques and discussions in the Special Examples and Discussions section. This section covers a lot of

territory and it will take a lot of time and effort and thought to get through many of the points in it. These general ideas are provided for you in order to encourage your thought as a trader. Feel free to ask questions on it, but do not be surprised if I tell you in response to ponder or research it on your own and let me know what you have found. I do not say this to be lazy, but by the time you have gotten through that material you will know so much, it will likely be time for you to tell me a few things :-). Also, you might review those sooner than later. I have given some of my most guarded secrets in this section and do not guarantee they will be there at the end of the manual forever.

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## Nindicator Support and Resistance Tools

### Nindicator Value Profile

The use of the Nindicator value profile is a huge topic. It begins with the idea that there is a difference between price and value. Most traders trade price. Volume profiling lets you see volume at price. For an introduction to this topic, you want to read and study the following blog posts on my blog here:

<http://markettradersjournal.com/volume-profile-analysis/>

and

<http://markettradersjournal.com/using-composites-in-volume-and-market-profile-as-support-and-resistance/>

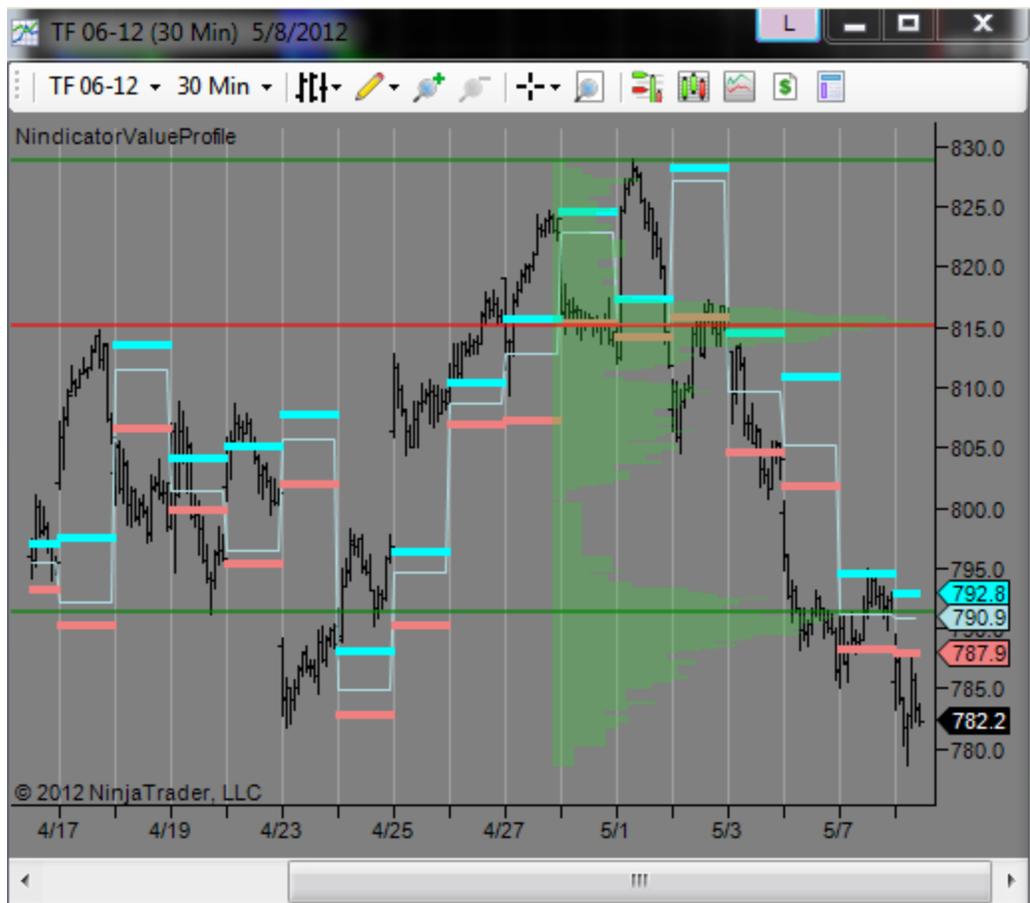
There is also a fairly comprehensive webinar on the topic here:

<http://www.bigmiketrading.com/traders-hideout/21795-webinar-auction-market-theory-trading-value-rob-mitchell-new-post.html>

There are other articles and blog posts related to this topic. Do some looking around on the Market Traders Journal blog. Also look at the Emini Value Area Report on the blog. Do this daily until you have a full grasp of the topic. Read the above links first though, so you are familiar with terms.

Keep in mind different Volume Profiling software programs will generate different volume levels at different times and charts intervals. There can commonly be differences across numbers in different timeframes and software. So expect to see values that may vary if looking at levels from various sources. A key point here is volume profile analysis or Market Profile analysis is not rocket science and should be approached with a spirit of discovery. As you practice it in time using the principals I show you, you will develop an *intuition* about it that will help you to trade like you are engaging in a sport rather than trading like you are analyzing data in a machine-like way.

I always keep a composite and a daily view on my screen like this:

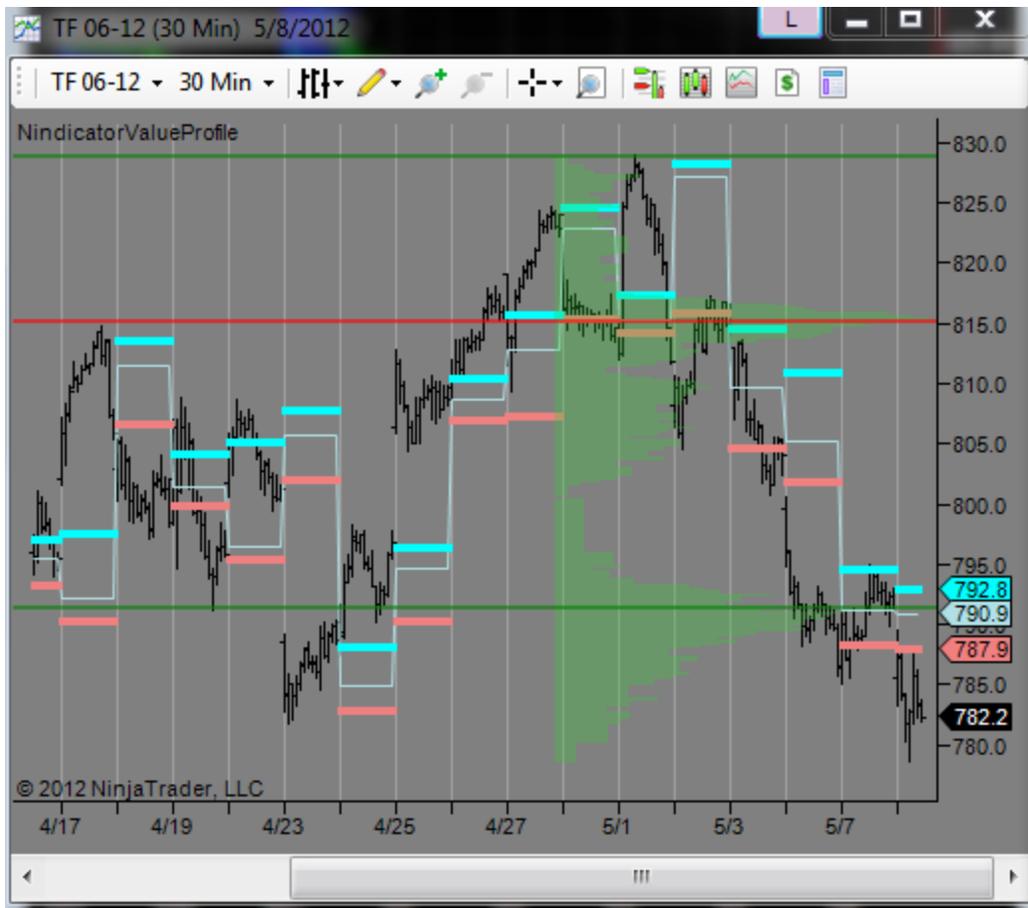


This keeps me in tune with the bigger picture. The chart above is a composite that goes back 7 days.



The one above is a daily profile based off 30 minute data. You can do longer term composites, but it is subject to accurate data feeds, and this can be an issue for a couple reasons. One is the fact that contracts roll over on futures, so the further you go back in time, the less relevant the data becomes. I have seen some people use composites going back over a year. Though I do not disagree with doing this, you have to understand there are distortions built into the data. Further, a trade someone did at a price a year ago may not be relevant to them currently.

There is another factor to be aware of. Composites become more relevant in trading markets, or markets that are range bound than ones that are at new highs or lows. Areas of support and resistance can often be determined by these range levels. When you get out to new highs or lows, other methods become necessary, like projecting ranges. So, keep in mind these are usable in different ways in different conditions. The Nindicator Value Profile uses data in the Ninja historical data base. So, it may be computed differently than other value indications. I will not generally use the value area high (VAH), value area low (VAL), and point of control (POC), on composite charts. I am using the shapes. Let me give you an example:



The composite is a bi-modal distribution, meaning it has an area with a peak above (at about 815 on the chart) and one with a peak below (at about 790.90). So, two peaks is called bi-modal. Often we will call a peak area a high volume node (HVN). A low volume area, we will call an low volume node (LVN). The current price of 782.2 is in the lower part of the lower HVN. We can also see the price closed for the day below the value area (VA) which is defined by the cyan and coral lines. The rule in profiling is that prices move between areas of high volume, (which act as resistance) to areas of low volume (which do not impede price movement).

What I would be inclined to say about the above charts is, we are closing below value in a low volume area. If we open the next day below value, then we will likely seek lower in search of value where prices will consolidate or move higher. It takes a while to see this on the chart. This is why I put out the Value Area Report on the blog. To help you to see it. No guarantees I will do this forever, but it is there for now. Hopefully you will learn this important form of analysis by following, or reading old daily posts. This will teach you to use the individual profiles as shown on the right on your own. It is like a training system for this type of analysis. It will take time, but you now have the tools.

Ok, back to the topic: If the market were to go above that high at the 795 area, I would expect it to not fail in the breakout because there is no volume directly above that area. I might surmise it would be good up into the 810 area, or possibly to 815.

Composites and volume profiles are great, but I do not use them on their own most of the time. I use them to contextualize the market. I then use other indications to tell me what the market is doing. I wrote an article on the use of candlesticks to give you some ideas on this right here: <http://markettradersjournal.com/a-tale-of-tails-putting-candlestick-analysis-into-perspective/>

So, I use the profiles to help me to paint a picture of what the market is doing on a larger timeframe than the one I trade. As we move through the Nindicator tools in this manual, you will no doubt start seeing how you will combine different tools into your own unique way of trading.

Looking at profiles will be confusing at first. It took me a long time to get profiles as a conceptual whole and I have a background in statistics. So, be patient until you learn to see what it is saying to you at a glance. It is well worth it to learn the levels on this important Nindicator.

Another thing I want you to learn to see automatically is the virgin points of control on the profile. A virgin point of control is like a gap, but you cannot see it by just looking at a chart. These areas become "magnet" prices as the market moves towards them and will often terminate at those points. Therefore, it is critical that you know where they are. The Value Profile has the functionality to show you these (as dashed lines), But I have newly added that and it is not in the screenshots below. If you note the virgin point in the screenshot above at 790.9, that price became a magnet later in the day after I made the above screenshot. This kind of thing happens all the time with virgin points so you will want to get them integrated into your psyche.

There is a **huge** range of select-ability on this Nindicator. Here is a screenshot of the settings I like to use. I suggest you start with these settings and change it if you like. I urge you to play with this. The use of this Nindicator should be largely intuitive, but because this code has so much functionality / variability, I may not be able to answer all your questions on every setting you might try.

<b>Display Settings</b>	
Show Developing POCs	2
Developing Line Height	4
E Line Transparency	40
Developing VAH Color	 Lime
Developing POC Color	 Red
Developing VAL Color	 Lime
Virgin POC Color	 Cyan
Slot Min. Height	0
Slot Session Color	 White
Slot Pre-Sess Color	 Salmon
Slot Transparency	70
Real Time POC	False
Real Time VAH	False
Real Time VAL	False
Virgin POCs	True
<b>Parameters</b>	
InclWeekendVol	False
PctOfVolumeInVA	0.7
PresentMethod	2
PreviousSessions	0
ProfileType	VWTPO
ScreenMapType	0
ScreenPercent	100
ScreenPosition	1
ShowDailyPlots	True
TotalSlots	1000
<b>Parameters (Session)</b>	
SessionBeginTime	630
SessionEndTime	1315
<b>Data</b>	
Calculate on bar close	True
Input series	TF 12-12 (30 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	False
Displacement	0
Display in Data Box	True
Label	NindicatorValueProfile
Panel	Same as input series
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
POC	 Dot; Dot; 1px
RtPOC	 Line; Solid; 2px
VAH	 Dot; Dot; 1px
RtVAH	 Line; Solid; 1px
VAL	 Dot; Dot; 1px
RtVAL	 Line; Solid; 1px

If you are doing a composite, you will want to make sure your chart has the data loaded sufficient to do the computation and then set the number of days you want in the composite. The only difference between these two charts is that previous sessions is set to 6 days.

Parameters	
InclWeekendVol	False
PctOfVolumInVA	0.7
PresentMethod	2
PreviousSessions	6

Times are set to pacific time, you might need to change the hour on those two inputs to get a proper result.

Parameters (Session)	
SessionBeginTime	630
SessionEndTime	1315

You can change the Profile Type to do TPOs or other volume methods, but I have found the VWPTO to be the best setting.

It is possible the settings shown above may vary slightly in your version. If this is the case, you should be able to find the settings to match the screenshots above easily.

If you are interested, there is specific information on how to compute value areas in the appendix in Jim Dalton's book "Mind Over Markets."

We just covered all of volume profiling in a few pages and a few blog articles. Follow the Value Area Reports on the blog and compare them to your own analysis. You can also watch the Open Report on the Nindicator YouTube channel here:

<http://www.youtube.com/user/Nindicators?feature=mhee> Be patient and it will come in time.

Most of your question you might have should be answered by following the resources I have provided on the blog and youtube channel. Please use them well. I appreciate that your questions are not asking me to go over the blog or youtube channel etc.

## Nindicator Key Support and Resistance Tools

There is no magic to this next set. I coded this for you because I often forget about these levels and then later recognize the market turned right on these numbers. These levels act as support and resistance (SR) on an ongoing basis. Why? Because there are levels where the market is redefined in some way. Let's take a look:



Let's go over each of them.

- 1) yesterday's close (solid blue)
- 2) yesterday's high (solid red)
- 3) yesterday's low (solid red)
- 4) Initial Balance (IBP) (Dashed White) - the first 60 minutes is default
- 5) 1.5 times IBP (above and below) (Dashed Cyan)
- 6) 2 times IBP (above and below) (Dashed Red)
- 7) Today's Open (solid narrow white)

8) Today's High (so far) (Orange)

9) Today's Low (so far) (Orange)

10) Globex High (cyan)

11) Globex Low (cyan)

A nice thing about these is I made them all selectable. Here are the basic settings. I would start with them all set to true. It will be confusing at first.

Looking at these key SR levels will be confusing at first. Be patient until you learn to see what they are showing you at a glance. It is worth it to learn the levels on this important Nindicator. You can switch some of them off to start until you have memorized the color schemes.

<b>Parameters</b>	
GlobexSRLines	True
IBPSRLines	True
TodaySRHighLowLines	True
TodaySROpenLine	True
YesterdaySRCloseLine	True
YesterdaySRHighLowLines	True
<b>Parameters (IBP)</b>	
IBPPlotEndTime	1315
IBPTime	60
<b>Parameters (Session)</b>	
DaySessionBeginTime	630
DaySessionEndTime	1315
GlobexSessionBeginTime	1315
GlobexSessionEndTime	630
<b>Data</b>	
Calculate on bar close	False
Input series	TF 12-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	NindicatorKeySupportResistance
Panel	Same as input series
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
GlobexHigh	 Line; Solid; 2px
GlobexLow	 Line; Solid; 2px
IBP_1MH	 Line; Dash; 1px
IBP_1ML	 Line; Dash; 1px
IBP_2MH	 Line; Dash; 1px
IBP_2ML	 Line; Dash; 1px
IBPH	 Line; Dash; 1px
IBPL	 Line; Dash; 1px
THigh	 Line; Solid; 1px
TLow	 Line; Solid; 1px
TOpen	 Line; Solid; 1px
YClose	 Line; Solid; 2px
YHigh	 Line; Solid; 2px
YLow	 Line; Solid; 2px

You may need to set the IBPPlotEndTime and other session times to your local relevant time.

I would not discount the importance of these levels. The key levels in the Nindicator tool should be known by you when you are trading. This is why this tool is on my screen at all times. You should also be aware of other relevant levels from the Value Profile, C-levels and the Daily Target Levels (if that was part of the package you purchased) which we will discuss shortly. Following the discussion of those, I will discuss the concept of confluence and how you might use knowledge of these levels in a meaningful way in your trading.

One more point: In addition to these levels, you must also know various areas on your longer term charts where the highs and lows are. I will typically get these levels off my Value Profile Charts (Composite and 1 day profiles).

## Nindicator C-Levels

The C-Levels are based on a type of floor pivot called a Camarilla level. I have seen various formulas for these, but this is the one I use. These are similar to floor pivots, and I have found they work better, so I have included them in the package. Unlike floor pivots, Camarilla levels are basically like a standalone trading system. There are 3 levels I use above and below. The mathematical formula for these is below:

$$L3=YstCl-(1.1*(ysthi-ystlo)/4);$$

$$L4=YstCl-(1.1*(ysthi-ystlo)/2);$$

$$L5=YstCl-((ysthi/ystlo*YstCl)-YstCl);$$

$$H3=(1.1*(ysthi-ystlo)/4)+YstCl;$$

$$H4=(1.1*(ysthi-ystlo)/2)+YstCl;$$

$$H5=(ysthi/ystlo)*YstCl;$$

L3,4 & 5 are price zones below yesterday's close. H3, 4 & 5 are above yesterday's close.

So what you have here is something not dissimilar to the Value Profile tool, but it is much simpler, but with the added factor of having a breakout mode built into it. Here is how it works.

- 1) The yellow lines act as support and resistance
- 2) the cyan lines are a breakout
- 3) the red lines are a target.

So, if we are ranging, I might expect the market to bounce back and forth inside the yellow lines to some extent. If we cycle through the cyan line, then red is expected. I have made live market calls using these lines alone that were nothing short of miraculous. Especially if I combine them with cycle analysis as I will teach you with the Nindicator CycleWidth and WaveCounts Tools (if you got that package). On a more general viewpoint, the C-Level system is another way to contextualize the market. Yesterday's close is a very important number, and for this reason, price variance around this number is subject to being faded or pushed back the other way. Some of the best trading systems I have ever written are based on this concept. Ranging at or around the close or breaking from this zone. When you put the C-levels together with value analysis, you can get even more sophisticated. The C-Levels work better in different markets at different times. It is my observation that the ES market likes to respond to these levels more than the TF Russell futures. But this can change over time.

You can also use the levels in any of the above indicators from the viewpoint of failure. Failing to get to a level can mean weakness. Take a look below:



The 5:30 AM report (Pacific time) resulted in an *attempted* test of the upper resistance level. When the market opened at 6:30, it cycled through the blue line, indicating we should expect red.

On the day I am writing this we see an open below yellow. This is similar to opening below value on the Value Profile. See below:

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We opened below yellow, then tested blue. First with an up-down railroad track pattern (two sequential long bars in opposing directions) at 6:30, Then again afterwards it touched it and failed (or was rejected) with a large tail at 6:51 AM. For more on the use of candlesticks go here: <http://markettradersjournal.com/a-tale-of-tails-putting-candlestick-analysis-into-perspective/>

The C-levels are worthy contextualizers for your market analysis. Do not discount them. When used in conjunction with other levels mentioned above, it helps paint a SR picture that will improve your trading.

Here are some settings for the C-Levels Nindicator:

<b>Parameters (Session)</b>		
DaySessionBeginTime		<b>630</b>
DaySessionEndTime		<b>1315</b>
<b>Data</b>		
Calculate on bar close		<b>True</b>
Input series		<b>ES 06-12 (3 Min)</b>
Maximum bars look back		<b>TwoHundredFiftySix</b>
<b>Visual</b>		
Auto scale		<b>True</b>
Displacement		<b>0</b>
Display in Data Box		<b>True</b>
Label		<b>NindicatorCLevels</b>
Panel		<b>Same as input series</b>
Price marker(s)		<b>True</b>
Scale justification		<b>Right</b>
<b>Plots</b>		
+ H5		<b>Line: Solid; 1px</b>
+ H4		<b>Line: Solid; 1px</b>
+ H3		<b>Line: Solid; 1px</b>
+ L3		<b>Line: Solid; 1px</b>
+ L4		<b>Line: Solid; 1px</b>
+ L5		<b>Line: Solid; 1px</b>

The only thing here you might need to change is the times for your location.

OK, we have covered the basics of the Support and resistance tools: Nindicator Developing Value, Nindicator Key Support and Resistance Tool and Nindicator C Levels

The next concept I want to introduce is that of confluence. Confluence is when levels stack up with one another in a close proximity, This article discusses why this is important.

<http://markettradersjournal.com/the-rule-of-three-confluence/>

**NEWS**- An indicator that is free of charge and tells you in advance when to trade

Let's talk about news for a bit because often the markets are driven by or moves are catalyzed by news. So, this is very important. You will need to learn to discern whether news is driving the market in one way or another. Often there will be initial moves and then the market will turn around and go the other way. The key is in knowing when the reports are. I see this discussed very little. This is crazy, especially in the current economic environment. There are a couple good sources for this. I like the second one best. It also gives graphs and descriptions right on the page.

<http://bloomberg.econoday.com/byweek.asp?cust=bloomberg>

<http://www.forexfactory.com/calendar.php?c=2&week=1336262400&do=displayweek&month=5&year=2012>

ALWAYS know the times of reports.

There are a couple different kinds of report day concepts that are important. One is days where there are one or more reports at before the market opens for the day session. Examples of these reports are Unemployment claims, Trade Balance, Producer Price Index (PPI), Consumer Price Index (CPI), Non-Farm Payrolls, Unemployment rate, Retail Sales.

Then, there are reports that come up about 30 minutes after the market opens. Such as Sentiment, Manufacturing Indexes, Business Inventories, Construction Spending, Factory Orders and others.

Some of the times vary a bit, so you check. Often the market will go dead into the report and then program HFT trading goes off once it is released moving the market. You do not want to be on the wrong side of these reports. So you know when they are and how traders might respond to them. This you will learn over time. For example, a real big report is the Non-Farm Payrolls, which may be the biggest volatility inducer of the month these days.

Report times are times when the market will move aggressively. You can hop on for moves during these times using the money management strategies I mentioned earlier (or that are on the blog). Don't worry, I will get into more details about this as we move into the other Nindicators.

You could probably make a good living trading (scalping) reports and using the Order Flow tools along with the "context" tools above. The nice thing about this approach is you show up at the appointed times and *don't mess with the rest*, something that could be a great lifestyle choice.

## **Nindicator Trend Tools**

The Nindicator trend tools can be used as standalone trading devices or as a support tool to other methods of analysis and trading (i.e. as a context for scalping). As we move on into the Pattern Tools and the Order Flow Tools, you will see how the concept of context continues into higher and higher levels where everything becomes a form of context. When you start thinking at this level, you will truly be a trader.

The Nindicator Trend Tools are simple. They show you *existing* trend. I say existing because trends, often, once they set up are over. I have discussed this anti persistency here:

<http://markettradersjournal.com/intraday-seasonals-trading-goals-and-price-persistence/>

and here:

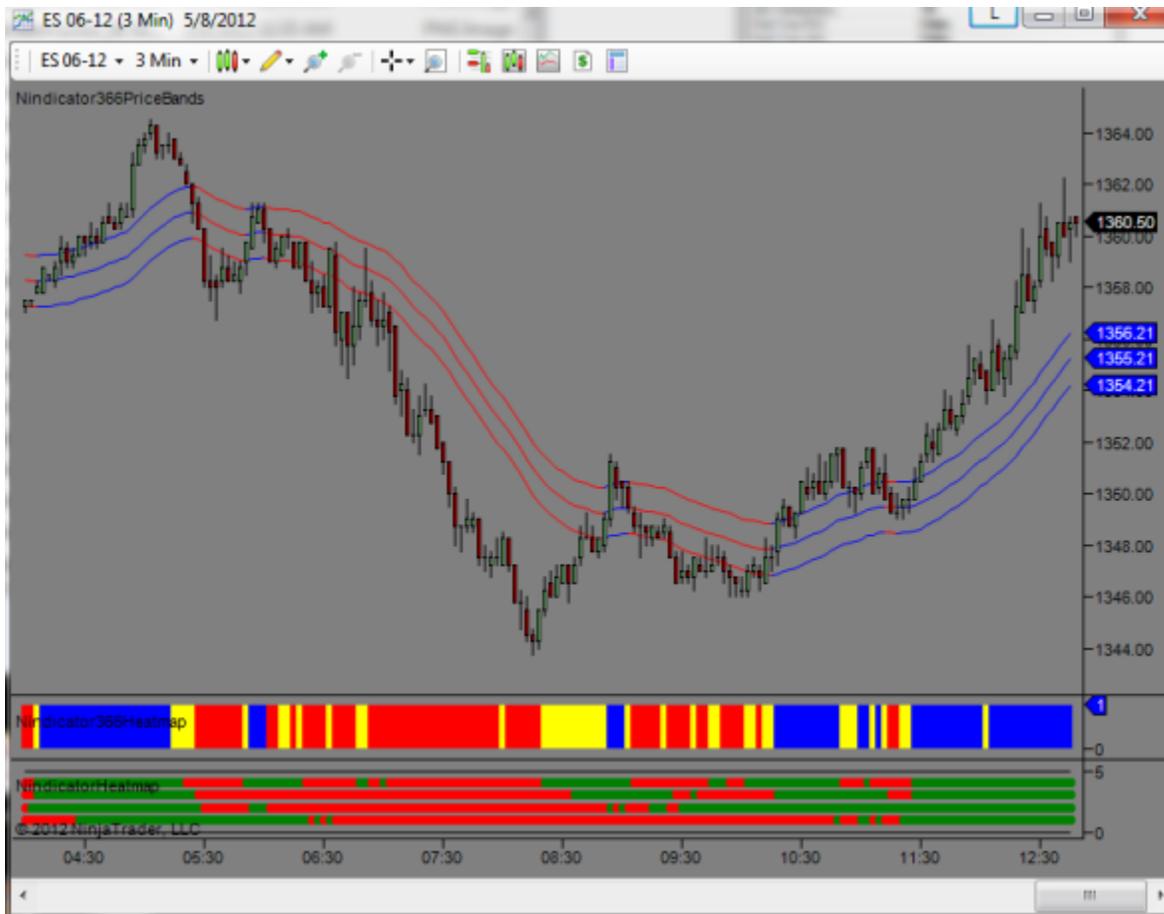
<http://markettradersjournal.com/a-discussion-on-the-es-emi-sp-futures-and-liquidity/>

A lot of my trend analysis is based on the use of linear regression and moving averages. A lesser used type of moving average that is great for this purpose is a Hull moving average; especially on longer term charts. The trend tools use these kinds of calculations to summarize for you what is occurring, not only in the time frame of your chart, but in other time frames as well.

There has been much hype about using other time frames in analysis. In my opinion, this is overdone. I won't get into a big long discussion about it, but suffice it to say a 10 period simple moving average on a 5 minute chart (50 minutes total) will give you very close to a 5 period moving average on a 10 minute chart or a 50 minute moving average on a 1 minute chart. This becomes a mute point also with NinjaTrader because you can actually specify on your indicators the length of time interval of the chart you want to be used on the indicator you are applying.

## The Nindicator Heatmap

This tool uses a linear regression analysis in 4 different time frames to give you trend. Let's take a look:



The Nindicator Heatmap is the plot on the bottom. You will note from the 6:30AM (pacific time) open, down into 8:30, it was predominately red. What this tool is telling you is there was a longer term downtrend from 6:30 until around 10:45 when the longer term trend on the very bottom began to turn green from red. The area around 9:30 or so, showed you points where the shorter term trends were going south again. These kind of indications are great for hopping on an already existing trend. So, the pattern goes like this: The longer term trend is red, and the shortest one turns green and then back to red again. This is the sell. By 11:30 when everything had turned solid green again. When you are solid, you can then use other tools to take scalps inside that context using the Order Flow tools. If you did your homework on the volume analysis, you would have known there is a high volume node at the 1366 area, so trading northward was fairly safe at this point, and there was room for some persistency.

The parameters for this tool are set up in multiples of 1, 2, 3, & 4. So, you get 9, 18, 27, and 36 bar lengths. You can play with other settings and/or multiples, but these are what I have found to work well for me. Let's take a look:

<b>Parameters</b>	
AlertsOn	False
Length1	9
Length2	18
Length3	27
Length4	36
<b>Visuals</b>	
Down Color	 Red
Up Color	 Green
<b>Data</b>	
Calculate on bar close	True
Input series	TF 12-12 (610 Tick)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	**NindicatorHeatmap
Panel	4
Price marker(s)	False
Scale justification	Right
<b>Plots</b>	
LowerBound	<input type="checkbox"/> Line; Solid; 1px
PlotLinReg1	<input type="checkbox"/> Dot; Solid; 2px
PlotLinReg2	<input type="checkbox"/> Dot; Solid; 2px
PlotLinReg3	<input type="checkbox"/> Dot; Solid; 2px
PlotLinReg4	<input type="checkbox"/> Dot; Solid; 2px
UpperBound	<input type="checkbox"/> Line; Solid; 1px

## **Nindicator 366 Heatmap and Price Bands**

The Nindicator just above here is the Nindicator 366 Heatmap and, on the bars on the chart is the Nindicator Price Bands. I know of people who trade successfully using this alone; simply following intraday trends. By 11:30, you knew as the price bands turned from blue to red to blue again. As you went to a new high, you knew that you were in a bigger trend. You would also have known that, using the Cycle Width Tools (if you purchased that package), which we have not yet covered, that the cycles were expanding. This equates to a larger scale trend pattern that we can use to trade breakouts into new highs. The Nindicator 366 Heatmap works in conjunction with the Price Bands, but is a bit more sensitive to the changes. When we cover the other tools, you will trade trends using these tools with confidence if that is your style.

Note also that these trends are associated with areas where higher highs and higher lows (uptrend) or lower highs and lower lows are occurring (downtrend) are forming, and we tend to stay out of the question areas that occurred between 5AM and 6:30 and 9AM and 11 AM.

We will get into the chart patterns more in the Pattern Tool section (if you purchased these). The pattern tools take the kinds of analysis we are doing here to a whole other level.

Note: At some point, you may not need the Nindicator trend tools at all, because you will have learned to see, by glancing at the chart exactly what is going on.

This is a good time then to discuss the idea of mentoring. I firmly believe you have to trade on your own; making your own decisions (and mistakes and successes) in order to become successful in the long term as a trader. Many of these Nindicator tools are designed to help you with this; to teach pattern recognition. Then, later, as you have mastered the concepts inherent in them, you will no longer need them. If you need help, I am here to answer questions for you, but you must, do this on your own or you will not progress. This is true for a variety of reasons that I could write a whole book on. So, I will not get into it here. You have to get to a point where your first learned behaviors have become the right ones. And only you can do that and have confidence to be progressively successful. So, the Nindicators, many of them, are designed to get you through a learning period. Some of them, show you things you cannot see by looking at a chart. These will never be dispensed with, such as the Nindicator Order Flow and Position Management tools.

I suggest you use the parameter sets I have set as defaults on these three indicators. You can change them if you like later on with experience. Other than that, the inputs of these tools are self explanatory, so we will not do parameter screenshots on these tools.

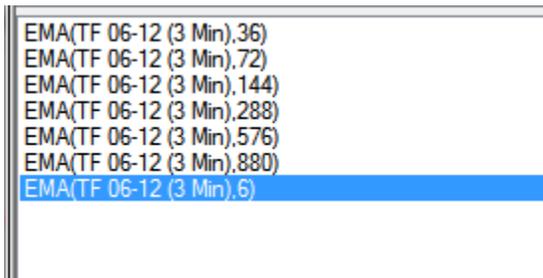
There are only a couple parameters for these tools, so I will not show the inputs here.

They are simply set to 36 and 6. That is where the name 366 comes from. These are settings I have used for years, though you can certainly experiment with different lengths.

## Nindicator Rainbow

I promised you the Nindicator rainbow. This is a way of analyzing the current trend in another way that might be a bit more visual for you. It is a kind of multi-time frame analysis and it uses exponential averages that are already built into your NinjaTrader.

Here is how you set it up:



The above screenshot shows the application of 7 exponential moving averages onto your chart. Use a 6, 36, 72, 144, 288, 576 and 880 period EMA for this. I use a 3 minute 24 hour session chart for this (as below):



I have selected these averages based on portions of a day that I have used for years in doing trend analysis. Using this tool, you can see the trend of all 7 time frames simultaneously. On a 3 minute chart, the longer one; 880 period corresponds to 2,640 minutes. This is about 1.8 days. Most trends these days even in the longer time frames of only last about 2.5 days on average according to my research, so these will show you bigger trends a little bit quicker than it would with a full 2.5 days on there.

The cyan line corresponds to the Nindicator 366 bands. You can see it began to hook upward just before 10:30. The 72 was quick to follow, so by the 11:33 breakout, you had 3 lines up. So, we will note looking at his chart that the longer trend is now flat. We will want to know this in

conjunction with our value analysis. So, if we break higher tomorrow, we could quickly go north. When we see the lines going flat, we are often in consolidation looking for breakout, if we are moving in a direction we are looking for continuation. Can you see how what we have discussed so far can provide a context for the establishment of our trade strategy; entry and exit?

One other topic that I already mentioned and that is the topic of persistency. I said two things. One trends ultimately fail or are non-persistent. The other is that trends on the longer scale often last (as of this writing) about 2.5 days plus or minus about 1.5 days or so; let's not call it rocket science- just a rule of thumb. We are coming off a low here that tested a multi-day low in the ES. I had mentioned this low in the Value Area Report for this day (5/8) here: <http://markettradersjournal.com/value-area-report-for-582012/> It is always important to be aware of multiday lows as I noted here, because they are often key turn around points in the market.

## Nindicator Volume Tools

The Nindicator Volume Tools make it possible to analyze volume activity on a time basis as compared with a price basis as is the case with the Value Profile Tool we talked about in the Nindicator Support & Resistance Tools discussed earlier. When you combine these two sets of volume tools, you are able to analyze volume in two dimensions: price and time. This makes Nindicator volume analysis very powerful.

There are four types of volume these tools measure. Two are types of tick volume (measures of price movement) and two are types of volume that comes from actual trades at bid and ask prices. The two categories of Volume and Tick further break down into trades and the volume of those trades. Each trade has a certain volume associated with it. So, the best way to explain it is that a trade is a transaction, and the volume is the size of the transaction. If the data were in a spreadsheet, then a trade would be a line entry, and the volume would be the volume for that specific entry. Here is a spreadsheet from the ES Emini for the date 9/26/2012:

22	20120926	70001	1439	1	148	18
23	20120926	70001	1439	1		
24	20120926	70001	1439	1		
25	20120926	70001	1439.25	1		
26	20120926	70001	1439.25	47		
27	20120926	70001	1439.25	2		
28	20120926	70001	1439	10		
29	20120926	70001	1439	6		
30	20120926	70001	1439.25	45		
31	20120926	70001	1439	6		
32	20120926	70002	1439.25	6		
33	20120926	70002	1439.25	3		
34	20120926	70002	1439.25	5		
35	20120926	70002	1439.25	2		
36	20120926	70002	1439.25	6		
37	20120926	70002	1439.25	1		
38	20120926	70002	1439.25	2		
39	20120926	70002	1439.25	3		

Over the above interval there are 18 trades (cells 22-39) but the volume of those trades is collectively 148 contracts. These tools enable you to select between these sorts of volume in your analysis.

The two volume choices should always work properly for you on tick data. However, currently various data feeds cannot provide accurate bid ask volume data. So, depending on your data feed, you may not be able to pull proper *historical* data for bid ask. But, it may work properly for real time data. In fact, most data feeds should work properly using these tools in real time. We

are currently working with NinjaTrader to make these tools function properly with historical data. That improvement will be provided to you free of charge when it is available.

## **Nindicator Net Volume**

The first one to discuss is the Nindicator Net Volume. This tool is straight-forward. It measures the tick volume inside any bar on your chart. Net volume is an excellent tool for looking inside the other, more sophisticated tools we will discuss shortly. Additionally, it can be used in standalone volume analysis such as would be the case with divergence analysis. Typically, volume should move with price, but there are times in which this is not true, and this is an important form of analysis. Let's take a look:

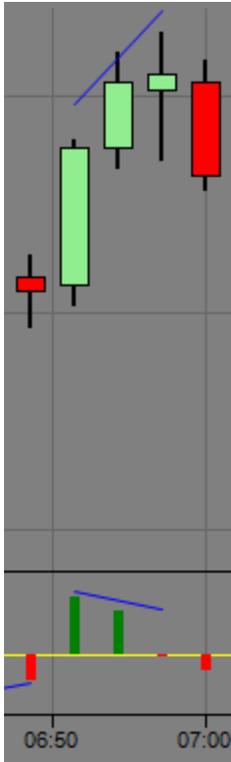


\* Note: The above chart shows the name Nindicator Net Ticks. This tool has been improved recently to reflect improvements in NinjaTrader that broaden the types of volume we can use with it. The examples below are still valid, though the name of the tool has changed to reflect the upgrade.

Above is the current screenshot of the Net Volume as I write this document. We can see we got red bars as price went lower off the open (from 6:30 to the 6:45 area). Note that the red bars went higher as price went lower during this interval:



This type of price / volume relationship is called divergence. We will use this concept quite a bit and in various ways with the volume (and other) tools. There are several types of divergences, but the type above is the most important one to know. Following this move lower with divergence, we saw a turn in price and went higher. Note in this interval the volume again spiked and then dropped off as price went higher, again forming a divergence. It looked like this:



Then, price goes lower from there. Note what is happening here is, *volume leads price*. This is a very important concept so drill that into your thinking. Volume Leads Price. Does this always occur perfectly? No, but learning to watch volume like this will change your trading for the better. Let's continue with this chart and then on to more advanced volume analysis tools.



Notice what happened next is the volume went lower with price at 7:16. This was followed on the next bar by upward movement in price with no corresponding volume. In fact, the net volume on this bar was about 0. So, negative volume on down bars with 0 volume on up bars. This tells us the trend is still down as it goes higher.

Then we came into the 7:30 area and began to get positive volume accumulation going up. You also see the tail in the 7:33 bar showing rejection at that lower price and the green volume bars at that same time (I write about tails here: <http://markettradersjournal.com/a-tale-of-tails-putting-candlestick-analysis-into-perspective/>). This is a form of divergence that looks a little different from the earlier divergences we discussed. You will want to learn to recognize this as well.

There are no non-intuitive settings for this Nindicator. You will want to use historical data on all the volume tools in this toolset, so be sure that is set to true.



However, be aware when you have charts with a lot of data in them it will take a while to load. So, I like to keep mine fairly short; charts that go back a couple days.

One more note before moving on, and this applies to all the volume tools. This notion of volume leads price is a very important one. When analyzing volume in real time, you ask this question. When is it true. Is volume leading price right now? If it is, then this is often where price is moving. These are the times where you might be better off trading. When it is not, it might be worth staying away.

Let's move on to the next volume tool, the Nindicator Volume Ratio Dual Tool.

## Nindicator Volume Ratio Dual

The Nindicator Volume Ratio Dual tool helps us to see another form of volume behavior you cannot simply see by looking at a tool like the Net Volume tool. It shows us the front weighted ratio between two different time frames. This makes it possible for us to see volume accumulating (or distributing) in time and the rate of change in that volume. Let's take a look:



I have marked out the divergences on this chart showing the ratio divergences. Many of these occurred at the same time and place as the Net Volume divergences. Would we have wanted to trade all these? Probably not, after all, we are in a down trend. Combined with more powerful Nindicator tools however, you could have scalped all through this period on this chart. Further, you could have chosen to hold it short through much of this chart knowing there was a 94% probability we were going to the 783 level using the Daily Targets tool (if you purchased that / or it is included in your package), but we will get to that a bit later.

I will not belabor this divergence topic here. Let's talk a bit more on the computation of this Nindicator so you understand and are able to interpret it better. What this tool is doing is it is taking the difference between two exponential moving averages of net volume. Thus it is a derivative that is not dissimilar to an MACD of volume (if you are familiar with MACD). Here is an article I jokingly wrote on the topic of MACD construction and research related to its construction: <http://markettradersjournal.com/debunking-the-moving-average-convergence-divergence-indicator-macd/>. You will note after reading this article that we are using this structure of related rates of change to identify where volume is under accumulation or distribution. This is in contrast to the MACD which can, in many circumstances just introduce delay.

What do you think is about to happen to price on the above chart right now?

Go up right? Here is what it did while I wrote:



The settings on this tool are fairly simple and do not require a lot of explanation. I have always used the following settings:

Parameters	
AlertPercentDnVol	-5
AlertPercentUpVol	5
AlertsOn	False
Calculation Type	<b>UPTICKS_DOWNTICKS</b>
FastLength	3
Input Type	<b>VOLUME</b>
SlowLength	5
Use Historical Data	<b>True</b>

There is an alert on this Nindicator, but it will likely drive you crazy :-). I have found the alerts in general, on any indicators to be very distracting as they are often making noise too often, but also at times when you need to be focused. For this reason I leave them off. Feel free to try them if you like however where applicable. Ninja also has sophisticated alert capabilities you can use. Please refer to Ninja support for how to do this if you are interested in having alerts.

On the calculation type, you can, as we discussed in the beginning of this section, select various types of volume and trades etc. I will often run both Volume and Tick calculations on my charts at the same time. I like to see them working together in the same direction. This suggests there is more conviction in the reading (meaning it is stronger). So those choices look like this:

Calculation Type	UPTICKS_DOWNTICKS
FastLength	VOLASK_VOLBID
Input Type	UPTICKS_DOWNTICKS

and

Input Type	VOLUME
SlowLength	VOLUME
Use Historical Data	TRADES

I like to use the volume setting on this one and not trades so much. I encourage you to experiment extensively with all these settings however on all the volume related Nindicator tools, even running all four choices on the same chart. A true trader is a practitioner, not unlike a doctor or lawyer practices law or medicine. So practice, experiment, explore and ask yourself questions, take notes. If you look to yourself for answers, you will get good at what you do because you will make yourself responsible for your analysis and this leads to personal growth.

OK, let's take a moment and discuss two very important volume analysis principals before going further. One is that volume can be tricky to read because there are intraday seasonal volumes you have to deal with. I wrote an article here that talks about this "suspension bridge" tendency: <http://markettradersjournal.com/intraday-seasonals-trading-goals-and-price-persistence/>

So, around the open and the close and as we go into mid day, volume readings can be tricky because there can be sudden changes in the volume at these times. For this reason, I cannot simply take a divergence reading at the open of the day. This is true because we are transitioning from one group of traders to another. There are times during the day when we get changes in volume during the night as well such as 3AM New York time when Europe comes on line. For the most part I will not use volume analysis at night. It is thin and variable. Readings during the day that are inclusive of the open to around 11:30 AM New York (first two hours) are one chunk of time you can get fairly consistent readings. Another is from about 2PM to the close (two hours). As we pass into the zone between these two, you need to be asking yourself if a drop in volume is impacting my reading and in which direction. This can be fairly complicated, but you should be aware of this.

You should also ask yourself if there is a change in participants in a given period of time. For example, sometimes a change in trend will not line up with volume. This can occur when a new set of participants may have entered the market. In various articles I have called this OTF. When you observe this going on, in your charts, you will be aware that "*something is up.*" Being aware of this can improve your trading because it tells you when there is a shift in the group of traders in the market. This also typically happens around the open and close of the session etc., so take note of it.

Another important volume analysis concept is: Volume analysis should be done from point to point. It is easy to look at charts and see divergences that are not there. Divergences are computed based on closing data of a bar; the end of a bar. Not the high and low. One way you

can help to see these things is to add a 1 period moving average to your chart with a point on the close. That would look like this (note the orange dots on close).



This SMA can be set up in your NinjaTrader like this:

<b>Parameters</b>	
Period	1
<b>Data</b>	
Calculate on bar close	True
Input series	TF 06-12 (3 Min)
Maximum bars look ba	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	SMA
Panel	Same as input series
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
<b>SMA</b>	Dot; DashDot; 1px
Color	DarkOrange
Dash style	DashDot
Plot style	Dot
Width	1

This makes it possible for you to easily make correct volume divergence analyses without seeing inside the bars on your chart (or doing it without).

So, let's review concepts:

- 1) volume leads price
- 2) volume divergence is powerful
- 3) volume can vary at different times of the day
- 4) volume analysis is point to point.

For example, we might choose to combine these volume concepts with the support and resistance tools we discussed earlier. In the above image the last divergence drawn on there was occurring at the first IBP multiple. I have written about this concept here: <http://markettradersjournal.com/the-initial-balance-report/> Further, the concept of confluence is discussed here: <http://markettradersjournal.com/the-rule-of-three-confluence/>

Some of these concepts will get more advanced so be sure you understand them. If not, read the resources I have provided for you and if after studying them, they are not clear, then be sure to ask.

Next in the Nindicator Volume Tools is the Nindicator Net Volume Sum.

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## Nindicator Net Volume Sum

So far, we have looked at raw volume and ratio of volume. This powerful Nindicator looks at the volume from a running total standpoint. Something you can also not see simply by looking at a chart or volume plot. Let's take a look:



Each of these Volume Nindicators we have covered so far are progressively more sophisticated. So, you will want to have read the description of the Net Volume tool before reading this section. You will note in the above image there are 3 lines that plot along with the volume plot and a horizontal line that changes color. Then you will note the colors of the volume plot dots change. These are defined as follows:

Parameters	
AlertsOn	False
Band High Low Lookback Period	3
Band Standard Deviation Multiple	1.5
Band Type	HIGH_LOW
Calculation Type	UPTICKS_DOWNTICKS
Compute Mode	NET
Input Type	VOLUME
MA Period	3
MA Type	T3
ResetTime	0
Status Line On	False
Status Line Value	0
Tillman VFactor	0.4
Today Only	False
Use Historical Data	True

1) The yellow line in the volume dot plot above is simply a type of selected averaging of the selected volume Sum. There are five types of averaging you can select as follows:

MA Type	T3
ResetTime	SMA
Status Line On	XMA
Status Line Value	VWAP
Tillman VFactor	HMA
Today Only	T3

From top to bottom, we have Simple average, Exponential average, Volume Weighted Average Price, Hull moving average and Tillman averaging. Each of these has various benefits. I encourage you to try out different settings. I use the T3 (Tillman) a lot.

You can control the length of these on the MA period setting.

2) The white lines surrounding the yellow line are standard deviation bands; sometimes called Bollinger bands. You can set the standard deviation multiple which is now set to 1.5, which I find to be a pretty good setting.

3) The reset time is so the values do not get too large, so it is currently set to 0, so it will reset at midnight.

4) Sometimes it is distracting that previous days data will cause the scaling to become compressed, so it has an option to only plot today's data (currently set to false).

5) The horizontal line that changes color simply tells us if we are outside the standard deviation bands and to which side; red for down, green for up. Yellow is in the center of the bands. I have spent a lot of time and research on trading volume breakouts of these bands. This is a stand alone strategy, or can be used with other analysis. You will note there is often persistency associated with breaks from these bands. If you combine this with other tools it is very powerful indeed. I have written about persistency in other contexts here:

<http://markettradersjournal.com/intraday-seasonals-trading-goals-and-price-persistency/> but it also applies to Volume Sum volume analysis as well.

You can also select to move the status line to the level you would like. It is currently set to zero-the middle of the plot. You can also select to turn it off (Status line On = False):

Status Line On	False
Status Line Value	0

By the way, on any of these key terms, like persistency, you might do well to search the blog on those terms using the search function I have for you there. For example:

<http://markettradersjournal.com/?s=persistency&searchsubmit=>

There is a whole other mode of analysis this tool can do. In the above example and screenshot, the tool is set to using an average. You can also set it to use a high low type of format. This will make the tool track breakouts in volume as opposed to a more trend based viewpoint that is

done by using the averages. To select this mode, go to the Band type and select High\_Low. You can also control the High Low Lookback period by changing that:

Band High Low Lookback Period 3

I find the high low mode to be very powerful. See the parameters I have in the screenshot above if you want to see how I set up this tool right now for my trading.

I have a journal. Each day I print my charts and analyze the day's action. I always notate the volume breakouts. I also do this in conjunction with the Nindicator Patterns we will get to later (if you purchased that option) as well as the Order Flow Tools (if you purchased that option). I suggest you keep a journal as well. Print your charts. Take notes on what you missed. I know of no better way to become a better trader faster than this. I spend about 1-1.5 hours each night doing this.



OK, back to volume and the bands. You can also use the bands to identify possible trend changes and continuation. For example, you might note a return to and through the central tendency following a color as happened at 8:20 in the above image. You could have traded this by placing a stop order above the previous bar's high, and taking the breakout long going higher. Again, we will get to more of this later and how to use it in conjunction with the other Nindicator tools (as is relevant), but I give you examples here to start your thinking process on this topic. The combinations of the ways you can use these tools is huge and you will no doubt come up with way to use them that I do not and for the way you like to trade. I will give you things I know that work, and then you can evolve to your style from there.

The horizontal color line simply gives you a summary of where we are; yellow is in between, Red is below and green is above.

Another way to use this tool is to look for areas where the volume bands *narrow* and look for breakouts in those zones. This occurred around 7:10, 8:25 and 7:55 or so. The principal here

is that these are areas where volume has gotten quiet. This will happen where traders are not confident on direction, so the market will form a small area of value that it then breaks out from. This is a powerful form of analysis that other traders cannot see.

Another (very) powerful way to use the Net Volume Sum tool is divergences. Can you see any in the above image?

You should see a clear divergence at the 8:15 area going north. There is also another one, that is a bit harder to see at around 6:55.

Do you see anything going on in this chart?



Note this is a large scale divergence where we are comparing between the high around 8:40 and now. See how the volume is net negative over this interval? It will be difficult for the market to continue higher like this without some corresponding positive volume. Combining with other tools then, we might try to pinpoint the reversal.

Sometimes we get what is a reverse divergence (also called a type 2 divergence). We can see it on this chart. This occurs at times where price leads volume. At about 9:05 we had higher volume than we had at 9:45. This can often be a strong indication and should definitely be something you should be aware of. There is a kind of failure that is occurring on the chart. Always be aware of areas on your charts where volume is not correlated to price. The bears were trying to sell it lower, but the price continued higher while this was going on. As I wrote this, the market broke out higher a few minutes later and volume went with it. Volume and price can only stay out of correlation for so long. Then there must be a correction. Here it is:



This concept of failure will be covered later in more detail as well as other patterns that you would know were occurring in this chart before it went higher. So it does not drive you crazy, I will tell you for now. Something was occurring on two levels. One, the market was in a succession of higher highs and lows as of the 9:39 bar. This is an uptrend. I have marked this on the chart below:



But there is another similar pattern going on here. Can you see it?

We have higher highs and lows inside the bigger pattern making this a double structure:



Note this time, I have drawn the zigzags of the two trends for you. The bigger one in blue and the smaller one in coral. When you see a pattern like this and a failure, as mentioned. It means one side has gotten the upper hand and the stops of the weaker group will act as fuel to drive the market higher away from the failure. The above is an example of using multiple forms of analysis at the same time, and is a bit advanced at this juncture in our discussion, but this patterning we see here is significant in more ways than one, as we will see later. We will also see how we can make a prediction for how far the move will run.

OK, so we have seen how we can use volume in a number of ways with these tools. We have also seen how it is not always perfectly straight forward, but there is always a *story* being told. If you can translate the story, then trading becomes much more fun. It is like solving a *puzzle*. It becomes play. I have written about this state of mind here: <http://markettradersjournal.com/the-key-support-and-resistance-reports/>

So, do the volume relationships we have discussed above always work the way I have shown them to you? No, more often than not they do, but, in the cases where they do not, I have shown you enough here to get you going strongly. I can't wait to show you how all this ties in with the order flow tools to paint a powerful picture (if you purchased that).

Secondly, we must always ask ourselves is how much volume has made the divergence we are looking at and is it likely we could change into a non-divergent status in a fairly normal change in volume. This applies to all volume analysis. For example, is the divergence I am looking at due to 100 contracts of net volume in a market where 100 contracts of net volume is equated with 1 point of price movement (this is the case with the Russell TF futures as of this writing). If so, could the divergence scenario change easily or with a relatively small movement in price/volume? We will talk more about this later (as it is relevant), but for now, just keep it in your mind.

One other concept I want to cover before moving on is that the market operates on series of plays where one group gets a positional advantage over another as described above. This will

result in moves in price that are often clear, sudden and profitable. These are periods where you enter the trade and price immediately goes or runs in your favor. These are the situations we (want to) trade for.

So let's review some key points again:

- 1) volume leads price
- 2) volume divergence is powerful
- 3) volume can vary at different times of the day and needs to be interpreted with this in mind
- 4) volume analysis is point to point.
- 5) Volume can at times reverse from price and this can lead to large moves.
- 6) Volume divergences can show up in the noise
- 7) Volume should have a direct relationship with price
- 8) Analyzing charts is like reading a story or solving a puzzle and I should (probably) feel like a kid when I am doing it; in that spirit.

Next we have the Nindicator Net Volume Sum Divergence tool.

## Nindicator Net Volume Sum Divergence

This tool illuminates certain kinds of patterns in the Nindicator Net Volume Sum Tool. Divergences on the net Volume are important and they can occur point to point as discussed, over several bars, over a number of bars (pivot to pivot) or over any point in the chart. It is my suggestion you stick with simple ones to start, like over a couple few bars and from pivot to pivot. I will show this below (look at the horizontal dots at the current price in the upper plot):



First off, it is important to note that this Nindicator shows you divergences relative to the *current price*. I have set it so we can see magenta dots for a downward oriented type 1 divergence and blue for up. We are currently in the quiet time of the day right now, so let's look to the current time back to the 8:30 area. The line is telling us we are below the volume at that peak time. So we are higher in price, and lower in volume at this time. This suggests we might see downward movement.

When the line turns all grey, we are in a zone where we have no previous volume that influences price movement over the interval of analysis. This type of reading typically happens when we may be trending, or at times/prices where the volume is out of range. For example, what we are seeing above is that we are lower than the AM (mentioned above, but on yet another time period (currently) we are going lower where price is flat (divergence). What do you think will happen?



A several point drop ensued. Now what we are seeing is a rise in price, but we see the magenta dots which suggest a negative bias right now.

When I designed many of these tools, I had in mind a certain concept which I had discussed earlier, but will mention again. These tools teach concepts: a form of mentorship, if you will. At some point you may not need this tool because you will see what you need to see for the way you trade. But I like it because of what it tells me at a glance. Particularly where we are at key support and resistance / levels or pivots in the market.

Will the Net volume Sum Volume always diverge? NO (remember I discussed this at the beginning of this section). Often there are 2-3 of these in a day on a 3 minute chart or so. I suspect this alone could be the way you trade; just isolating these cases and trading them. Later we will cover having multiple simultaneous divergences across multiple Nindicators that is also very powerful.



Another function within the divergence tool is to have it show you multiple (multi) prices. This is done by setting Multi to true:

Parameters	
Calculation Type	UPTICKS_DOWNTICKS
Input Type	VOLUME
Lookback	100
Multi	False
Use Historical Data	True
Visuals	
Dot Size	3
Down Color	Red
Neutral Color	White
Up Color	Blue

Note: When you use this functionality in a mode with history turned to true, it will use a *lot* of processing power.

Note: The volume settings have already been discussed in the description for other volume tools.

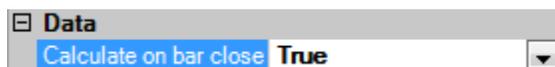
I have the lookback set to 100, so it will compute it going back in time 100 bars. On the TF (shown) there are 10 ticks per bar, so it will use a ton of processing power to do this. So be prudent in the number of days you set on your chart (i.e. set it to one day).

For right now, we are seeing a lot of grey and grey means either neutral, or trending:



Notice the low at 11:33 was showing blue there along the lows immediately following 11AM. We got rejection at that price and went a bit higher.

One other point. You will note there are grey dots that go up to the current price, but as you go higher the dots stop. For example, look at the 11:30 bar. The dots stopped there at that high. So, that line going back from there shows you the conditions that were true as of the end of that bar. Therefore, the blue dots along the bottom discussed above were last relevant at 11:33. I do not advise using this tool set to Calculate bar on close equal to false. So use it like this:



Having this tool on your screen shows you volume zones as well. For example, you can see the magenta dots back around 10:50 at that high and the blue ones along the 11:10 low areas with somewhat of a volume void in between. So the market was bounded by these two area on a





This enables you to see how the breakout mode I first started discussing with his tool can be used in a powerful way (all red and no green after 10:30 or so). Later we will combine these with other forms of analysis. For example. In the Support and Resistance Tools, we talked about key areas on the chart. The high on this chart was the Globex high, a retest of the Initial Balance Period, the high of 3 days ago, and the Value Area Lows of 3 and 4 days ago both; a strong area of confluence (at least 5 of them) followed by volume indications confirming the selloff. I had also mentioned the 795 area being an important key area in the Value Area Report for this date: <http://markettradersjournal.com/value-area-report-for-5102012/>.

I will remind you again, you should definitely learn how to do these Value Area Reports on your own. I have them on the blog as a learning aid for you and they may not always be there. It is wise to never be dependent on others for your trading.

I will also reiterate, now that we are looking at a whole day's chart (above) about keeping a journal, printing charts and notating what you see on them etc.

Above, did you also notice that the volume had been at new lows since about 11:50 (and initially since about 11AM)?

Now, in many cases, what I am showing you applies to scalping kinds of moves. If you trade longer term, that is fine. I teach the scalping because trade entry of all kinds entry should always begin with *good trade placement*. This is one very significant and important way to manage risk.

Beyond this, I suggest you play with this tool using the various functionality described above.

We will get into more advanced volume concepts with the order flow tools (as it may apply).

We need to use all tools at our disposal prudently. In particular, I expect you will work with these tools for a while before using them live so you are comfortable with their operation.

Trading is always tough, even with good tools. You often have to be very smart, intuitive and quick. As always, after being well informed, ask me if you are not sure. You can always mail questions to [Nindicators@gmail.com](mailto:Nindicators@gmail.com).

## Nindicator Oscillator Tools

We have only one section left in the Nindicator Comprehensive Indicator Tools Set the Nindicator Oscillator Tools. These are composed of an MACD, Stochastic and the Momentum tool. I have been known to poke fun at such indicators in the past. These tools are presented here however because people use them. It is just that simple. But, at the same time, these are not ordinary MACD, Stochastic and Momentum tools either. Because people use them though, they can help us to understand or know where others might be placing their orders or seeing a change in trend etc. They can also be a context reminder. For this reason I often have them on my charts. Another thing Oscillator tools are doing is they are covering the same interval as the volume tools, they provide a cross context between price action and volume action. When these two line up, it is often a stronger reading than it might be if price and volume are not lining up. Let's take a closer look:



All three of the Oscillator tools help you to identify patterns in the market related to strength of movements and trend. This can be useful, particularly if you are new to trading because they show you patterns. Learning patterns is a key aspect of successful trading as it can tell you what the trend is, if we are ranging, or if traders are trapped in a way that can fuel a break in one direction over another etc. Even if you are experienced they are good for having on your

charts because other traders use them. Knowing where other traders are likely to trade is an aspect of trading that is good to know.

Often the market trades in such a way that you can do quite well just trading off oscillators alone. There are a couple ways to use these tools. One is divergence; something we have discussed in the earlier parts of this manual so I will not spend a bunch of time on it here. You will note any number of divergences in the above screenshot. In many cases you will get divergences of multiple tools simultaneously. Often you can combine this sort of analysis with the volume tools we discussed earlier, getting a confluence between the tools. These are often the best trades as larger numbers of traders agree there should be turns (or buying and selling) at these points. When you include the volume in the analysis, it tells you not only if you have a divergence on the oscillators, but it is also backed by corresponding weakness or strength in the volume that can lead to fuel for a reversal.

## **Nindicator Momentum**

Of the three Oscillator tools in this set, the Momentum is the fastest and measures the rate of change. It does this by taking the difference between two Hull moving averages. A Hull moving average uses cycle analysis principals and applies them to a moving calculation. I like to use these tools for longer term trend analysis as well by applying them to charts and watching for the changes in slope of the average. Because the Hull computation responds very quickly to changes, it makes an excellent momentum tool. We have said earlier Volume proceeds price. Well, this same concept applies to momentum. If you look in the above chart, for example, you will see large Nindicator Momentum divergences at the price turns. Line this up with volume analysis and it can be powerful.

You will also note the Nindicator Momentum tool has a line above and below. This level will vary from market to market. For the TF Russell Futures, I like to use 1.3 as the level. When the level breaks this, it is telling you the rate of change in the market is abnormal. When you see a change of this level or greater, coming out of a period of quiescence, it is often a breakout. This occurred in the above chart just after the open at 6:30 (Pacific time). It also occurred just before 8AM. You can also trade failures of the level by looking for changes in trend following a high reading.

One of the dangers of using oscillators is they can become hazardous to your health in trending markets. This is true because they can set up repeated divergences against the trend. Many sources teach the rule of trading certain levels on an oscillator, like selling readings above 80 and buying readings below 20 on a Stochastic. I do not recommend this. The problem with oscillators in general is they really have no point of reference. I do not want to get into a long drawn out discussion about it because it will not help us much. Suffice it to say, you should use oscillators in two ways generally: 1) as a reminder. 2) for divergences supported by other tools. By reminder I mean, if the Nindicator Stochastic is turning, you should be aware traders are thinking about taking counter positions there. And, in fact these are very often turning points. I have already discussed one way to use other tools in conjunction with these. In the Emini Market Open reports I currently ( it is not guaranteed I will do them forever) do on YouTube on the Nindicators channel (<http://www.youtube.com/user/Nindicators?feature=mhee> ). In these reports I give my thoughts about whether the market is ranging or not. In ranging markets, oscillators are safer tools. We will discuss others later.

Let's take a look at the settings:

<b>Parameters</b>	
MomLen1	5
MomLen2	15
OBLevVal	1.3
OSLevVal	-1.3
<b>Visuals</b>	
Paint Bar Colors	False
Down Color	 Red
Up Color	 LimeGreen
<b>Data</b>	
Calculate on bar close	True
Input series	TF 06-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	NindicatorMomentum
Panel	7
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
<input checked="" type="checkbox"/> OBLev	 Line; DashDot; 1px
<input checked="" type="checkbox"/> OSLev	 Line; DashDot; 1px
<input checked="" type="checkbox"/> Signal	 Dot; Solid; 1px
<input checked="" type="checkbox"/> ZeroLine	 Line; Solid; 2px

The above settings are recommended but, as mentioned the levels that are currently set to 1.3 will be changed based on the market- This can be done by experimentation. The above levels work well for the Russell futures. I have also coded this tool to paint the bars on your chart according to the momentum reading. You can turn this on or off on the Paint Bar Colors setting.

I have set the two periods to 5 and 15. I have found this to be optimal, but if you were experimenting, these would be the parameters you would change. You can also change the OB/OS levels. As mentioned, this will vary by market.

## **Nindicator MACD**

MACD is essentially a trend indicator that can also be used as an oscillator (in fact, you can always use a moving average as an oscillator in a trading range market, or at least view it from this perspective). So, you will want to be aware of divergences. I have coded the Nindicator MACD to keep track of the trend for you on the horizontal summary line. It paints blue when the MACD line is above zero and red below zero. This MACD also has standard deviation bands surrounding the MACD line. This can help you to use the tool as a momentum tool. We have already covered some aspects of this on the NindicatorNetVolumeSum tool. I suggest you review those notes above and take into consideration that the same principals apply. I have also coded the breaks of this zone to change color. There are several color dots. Red for down, green for up. You will see a blue dot when breaking the bands upward and a yellow for breaking the bands downwards. You will also take note of the narrowing and expansion of the bands.

There is a rule in trading that the width of these bands helps to identify. Storms follow calm and calm follows the storm (remember the beginning of this manual where we discussed a 27:1 ratio on the bars that make up the days entire range? If not, you might read it again). So, as you look at more and more charts, you will be able to recognize more and more, not just the alternation of price, but the alternation of volatility or range. The Momentum and MACD tools help you to see that more easily which is another reason I have included them in this package. As a general rule, in stock indexes, increased volatility or range is associated with downward pressure in price (this is mostly true on a daily time frame). Small ranges are associated more with upward movements in price. There are markets for which this is not true. I use this general rule to try to decide which kind of market it is: If the market is made primarily of long participants (like stocks), then there will be fear in declines. Fear, or uncertainty is therefore associated with down moves. In markets like crude oil, for example, there may be fear of prices going too high. As a result, this market (which I do not have a lot of experience trading, so we are speaking theory here), may be more volatile in increases in pricing. This is another dimension of analysis. Often crashes in the stock market or protracted periods of declien are proceeded by oscillation and or increases in range. This can happen in just about any time frame. So, keep an eye on the MACD for these clues.

Let's take a look at some settings:

<b>Parameters</b>	
FastLen	8
Length	9
SlowLen	13
StDv	1
<b>Data</b>	
Calculate on bar close	False
Input series	TF 06-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	NindicatorMACD
Panel	6
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
<input type="checkbox"/> BBLower	<input type="checkbox"/> Line: Solid: 2px
<input type="checkbox"/> BBUpper	<input type="checkbox"/> Line: Solid: 2px
<input type="checkbox"/> MACDPlot	<input type="checkbox"/> Dot: Solid: 3px
<input type="checkbox"/> Zero	<input type="checkbox"/> Line: Dash: 1px

I have always used the MACD on the above settings on any charts I apply them to but as always, I encourage you to experiment. The StDv input adjusts the width of the bands. Here I have it set to 1, but you could also try different levels for different markets if you see fit.

The three lengths, I have always used as shown. Because an tool like the MACD is free floating, optimal settings will vary in time. So there really is no optimal setting if you want to get down to statistical analysis.

## Nindicator Stochastic

The Nindicator stochastic is a different computation than your normal stochastic in that it uses as a smoothing device a Tillson moving average. I have had this Nindicator on my screen for a very long time, and have come to the realization this is the very best computation for stochastic I have ever seen. I have also coded the dots on the turns/crosses of the lines. There are also a number of different settings you can use for this tool, but I suggest just sticking with the defaults I have provided for you. I use this setting for all time-frame charts.

Let's look at some settings:

<b>Parameters</b>		
MidPoint		50
OverBought		80
OverSold		20
SmoothLen1		3
SmoothLen2		3
StocLen		8
StocType		FastD_SlowK
T3Factor		0.5
T3Period		3
<b>Data</b>		
Calculate on bar close		True
Input series		TF 06-12 (3 Min)
Maximum bars look back		TwoHundredFiftySix
<b>Visual</b>		
Auto scale		True
Displacement		0
Display in Data Box		True
Label		NindicatorStochastic
Panel		5
Price marker(s)		True
Scale justification		Right
<b>Plots</b>		
MidPointLevel		Line: Dash: 1px
OverBoughtLevel		Line: Solid: 1px
OverSoldLevel		Line: Solid: 1px
SmoothStoc		Line: Solid: 1px
Stoc		Line: Solid: 1px
Xdn		Dot: Solid: 3px
Xup		Dot: Solid: 3px

These settings are fairly normal stochastic settings. There is an input for the T3 factor. I use 0.5, Tillson might have used a 0.7 as I recall. You can change the StocType, but I have always used it as shown. There are 3 choices here: Raw, which is too rough for most uses. Slow\_D which is a bit smoother. The middle one FastD\_SlowK is in between.

In general, I will say the following to expand your thinking about moving averages and oscillators: Like a moving average can be used as an oscillator, so can an oscillator be used as a moving average (i.e. a trend indicator). But I caution getting too creative with this.

Let's move on to some trading examples:

## Advanced Topics / Examples



Typically, I will not use data across the open of the day, or if I do, I will do so very cautiously. This is because a whole different set of traders enter the market on the open. So I cannot really rely on readings across this boundary. So, I will not reference times before the open (6:30AM Pacific time). You can see in the above we were getting a divergence at the 7:30 low in both the Stochastic and the Momentum tools. This was followed shortly by a break northward in the MACD (blue dot that also followed a narrowing of the bands. As we went higher from there, the

tools followed, correlated or corresponded with price. When this occurs, we are aware of it; that the tools are matching price movements. It may be a bit harder to see, but there is a beautiful divergence after the open. Remember earlier what I talked about point to point divergence reading? This is a case of that and it is occurring on all three of these tools going south. The 6:42 AM bar has a lower close than the 6:54 bar's close. At the same time, all three tools were lower, indicating the divergence. Here is a detail of it:



You can see the higher prices with the lower readings on the oscillator(s).

You can also see as this chart progressed in time from the earlier screenshot that a divergence on the momentum and the stochastic set up pointing in the southerly direction. This occurred at 8:30.

We could have also combined these readings with indications from the order flow tools and the volume tools (if you purchased those) to get even more of a handle on what was happening. I did not see readings that I like on the volume tools on these earlier readings, but the 8:30 one showed significant divergence with volume. In fact, the volume at this point was going to new lows on the day. Can you see it hitting new lows in the second plot? Let's take a look:



This is an example of a quintuple divergence in this market. In addition to this, note how the volume on the Net Volume Sum is at a new low on the day (which I would never take lightly). This is certainly not a place where you want to be long in my opinion. Things are significantly stacked towards the short side right now. From here I might go over to the Order Flow tools (which I missed while I was writing this), and find some good trade placement for the short. I would also take into consideration whether there were pending news etc before making a decision. Further, I might take a look at the ES and whether it is showing a similar trend (which it is not). This would tell me if the reading I am getting is a broad market reading, or if it is only the TF Russell futures. I would be more confident if I was getting the reading for the broader (ES) market as well (which I am not).

Note also that the trend is up (higher highs and lows which we will cover in detail in the next section on patterns), so if we do trade, we want to be tight on it as we are counter-trending at this point. We opened this AM (in the above scenario) below value and below the previous days range and are still inside that range, so we must also keep in mind that the value is lower. All these factors influence how we will manage the trade and to what degree things are in our favor etc. We will have plenty of examples in the Order Flow and Position Management section of the manual (if applicable). Suffice it to say, most traders do not know what is set up technically in this market.

Can you see how the above analysis is similar to solving a puzzle?

Of course you should always be skeptical to some extent when entering a trade. You should also have a handle on the scope of what you are doing in a money management perspective. Keep in mind you do not need much to make a good living trading these instruments especially if you are super short term trading. For example, one point per day on a 5 lot in the TF futures equates to \$125,000 per year. This is why I often establish a very short term outlook on various scenarios that set up during the day such as the quintuple divergence scenario above.

Later in the day we saw a test of the morning (IBP) high (not shown). At this time we saw yet another quintuple divergence (see below):



I have mentioned elsewhere that often the very best trading opportunities occur, or initial set up at or near key levels. This retest of the high resulted in a strong sell off following the divergence and a blow off of exhaustion buying on the Net Volume at the high. Can you see the spike in the Net Volume just after 10:50AM?

This set-up above also corresponded with a sell in our pattern tool when the market came back up to test the 783 area. Pattern trades are, in general, trend trades. So here we have repeated selling in the volume tools into a test of resistance. These kinds of "failure" trades are also some of the very best set-ups. We will also talk more about the identification of failures in the Pattern Tools section.

As mentioned, I included the Oscillator tools for you as a reminder, and as a way for identifying patterns. We will get to the Nindicator pattern tools later if you also included that in your purchase. Identifying patterns is probably the most important part of trading. So use the Oscillator tools from that perspective.

This concludes the portion of this manual devoted to the Comprehensive Indicators. These are differentiated for the pattern and order flow and position management tools which are not indicators in the traditional sense as you will see.

Before leaving this section however, I want to address the point that NinjaTrader has the ability to play back sequences (note this playback functionality may not work with all data types and vendors; particularly bid ask volume). You can use this to practice trading and study sequences. This should always be done with the larger context in mind. So, you should do your homework about the areas on charts you are studying.

In the event you have questions about a certain set up or situation on a chart. So I can often duplicate your trade scenario if you send screenshots. You should also send details about the larger context you saw at the time of the set-up. This way, if I am answering your question, we are discussing the entire situation and not just part of it. Unfortunately, I cannot do this with the order flow and position management tools because they use data that is not stored in NT, but for the comprehensive set and the pattern tools, I can usually duplicate it so I can address your questions (this is, of course subject to my having data for it). Be sure to include dates and times in your email.

By the way, the Nindicator package is not available in Tradestation. There are a couple reasons for this. One, Tradestation cannot do the Order Flow and Position Management analysis (in case you purchased those). It just cannot be coded to achieve such a thing. Additionally, Tradestation, uses filtered data and the Order Flow tools require unfiltered data (such as Rithmic). There are other reasons I will not get into that are beyond the scope of this manual.

This concludes the Comprehensive Nindicator Tool set manual.

## **Nindicator Pattern Tool Set**

Over the years, the very best trading systems I have ever developed have a design consistency to them that I call the "Push-Pull." It is fundamental to many things in life. One thing is creating a context, and the other is creating a trigger, In another way this push-pull relationship established the relation between balance and imbalance. I first was introduced to this kind of pattern as it applied to engineering / physics problems and I have found it to be the most usable of concepts. This is why I talked about context earlier on. But what happens eventually is you notice that various contexts become contexts to still yet finer discernment of patterns, and those patterns often become contexts for yet other patterns and so on. The Nindicator Pattern Tools are like this. They also provide a context of what is going on. I will not belabor it any further, but recognize as we go through these patterns how they provide a backdrop for what the market is doing in addition to other things we have labeled as context earlier on.

Before getting into examples with the first couple of tools in this package, we will cover some theory and definitions first, then we will move into examples with the specific tools.

Nindicator Patterns. This tool has two basic patterns in it that, when interpreted become more patterns. This occurs in the analysis of pattern failure; a concept we will talk about shortly. First, I want to start with the basic structure and concepts behind the patterns so we know what we are talking about going forward.

The basic structure of market price builds like you would build logically in a geometry class. First you start with the concept of point, then you have two points which make a line and three points that make a shape and so on. This same thing happens with market data. You have a tick; a price at which a trade takes place. Then you have another at a slightly different price. From this you create a price bar. Then price bars are segregated by time interval (usually), so, over time you get sequences of bars that make shapes. These shapes are the subject of the pattern tool. The most basic shape can be identified with a tool in most charting packages called a zigzag. Look at the dashed lines in the image below:



There are various ways of drawing zigzags that I will not get into here, but because there are many different ways you can see or draw patterns, this tool uses a complex formula for drawing them that is the most rudimentary form. It will not draw all such patterns on every chart. This would, in fact be distracting. So, in this sense, this tool is limited and I consider it a training tool to help you to learn to see the patterns. I had found over time that when I tried to show people these patterns on charts, they could not see them. Even I have trouble seeing them all the time. It takes a certain eye to see them. So, just know the software too will miss some, but in time you will learn to see the patterns not just on one level but various levels. Then you will start to see patterns inside of patterns and so on, until you master seeing charts in this way. Either way, when you begin to see charts in this way, you will see the world of trading in a completely different way.

I had also noted that in order to see these patterns all day took virtually all of my attention. This powerful tool finds a large percentage of the patterns in the current time frame. In the examples to come, I will point out where I am seeing other patterns on the chart that the tool did not catch.

Above I had discussed going from two points to make a line (drawn in solid blue below).



On the next point, you get a zig or a zag (what-ever you want to call it).



As price departs from this basic structure, you will get the third leg.



If you have a basic zigzag with 3 component legs, there are only so many shapes that can be made from this. It can vary in the *ratios of the legs* and in the *width in the time* between when the various legs come into existence. We will cover those in a moment. The third leg officially comes into existence at the moment the high of the first leg is taken out. If we were to label these sequentially, we would have "A" at the low, "B" at the end of the first leg, "C" on the retrace leg and "D" would begin at the point "B" was taken out and would continue higher until another pivot was created (which would be point "E"). That would look like this:



So the very *first* pattern we learn to see in the identification of these patterns is the *breaking of a B*. You may recall in various writings, we have talked about the definition of trend being higher

highs and lows (uptrend) and lower highs and lows (downtrend). This definition is at the core of this concept because at the point in time that B is taken out (which originally occurred on the same bar as point C before it went higher from there), we officially had an uptrend. Review this concept until you have it down. Then begin to practice seeing this on an ongoing basis on your charts.

When a current point takes out the zone created by the previous two points, then we have either a continuation (*breakout*) or *failure*. In the above image, we stay in between C & D and then point E is formed so there are no failures here. If we had broken point C or D, then it would be a failure. I hope you can see this. As long as we are trading between points C and D (which is any time after 8AM or so), we are not trending with respect to the bigger wave ABC.

If we look at point C, we will see it retraced a relatively small percentage (a shallow retracement) of the AB leg. I can use the drawing tools on my NinjaTrader (NT) to compute just how deep this retracement was (see below):



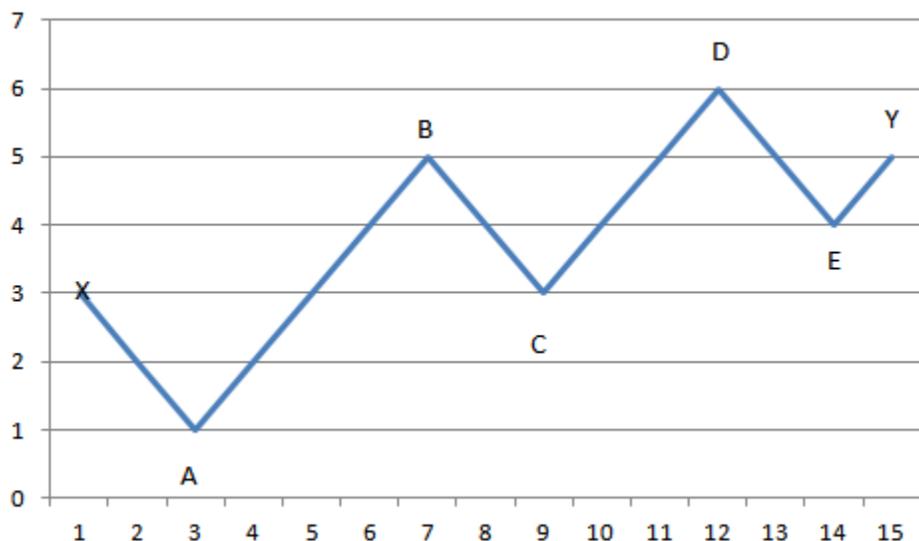
We can see in the image above that the retracement was somewhere between 38% and 50%. You can use this tool on NT using the F8 button which activates the Fibonacci Retracements tool. We will get to more Fibonacci applications later. In order to compute this retracement exactly, we would compute as follows:  $(B-A)/(B-C)$ . This comes to 40.54%. So basically what we have here is a shallow retracement going up (point C). What this is telling us is that the bears were unable to push the market any lower during the time they had control from B to C. This was then further confirmed when the bulls broke point B. When we went to point E, the bulls were still in control. So we would expect them to push higher. In other words, the region around point E is a buy. The risk (or failure of the pattern) point is the break of point C.

Do not discount the importance of the shallowness of the retracement; something you should always be aware of. This is also true of other relationships and ratios as we will see.

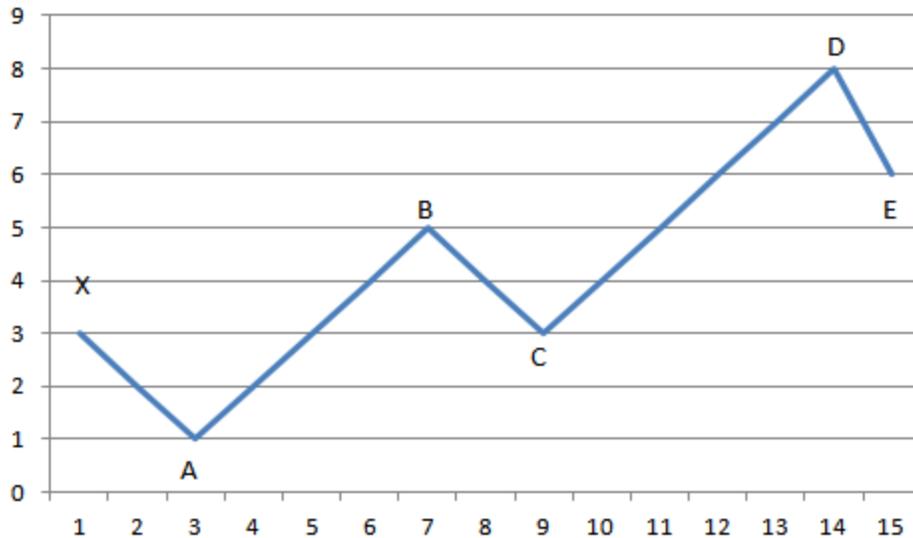
Often the market works on what is basically a sucker-play kind of scenario. It lures traders into what appears to them to be a bearish situation (as in the case above). The CD leg in the above screenshots is smaller than the AB leg. This is a critical factor in our analysis. To the onlooker, it might look like weakness, but it is not. So I will say this: If the ABC leg shows strength by having a relatively shallow retracement, and CD is shorter than AB, then as long as we remain between CD, we are in a bullish mode.

This kind of pattern we are discussing is called P2 on the Nindicator Zigzag Pattern Tool. We will cover this more in a minute. You will note from the first image in this section that the market broke higher into 8:30 AM as the pattern predicted. If CD has gone higher, and had become longer than the AB leg, then the market would have been *overbought*, and likely would not have had the strength for the breakout. This is also a key concept you will want to commit to memory.

Let's look at these two structures in more detail:



The pattern in the above image is the P2 pattern we have been talking about. Here is how that pattern could fail or become invalid:



CD exceeds AB means an overbought condition exists (above); the bulls got too carried away. This could be a set-up for a scalp short. At this point we could have broken point C, which would be very bearish or we could have continued up to a point F, which would have started, or reset to a new sequence. At this point, point C would become point A and we would start our analysis over. We have another tool called the Nindicator WaveCounts tool that works by *not* resetting the sequencing, and we will talk about that later.

We have another pattern in the pattern tool that identifies successively smaller retracements. In the Pattern Tool, this is called P1. Initially in the above image, as we broke point B going higher, we would have been on the lookout for a retracement that was shallower than the one that occurred at the ABC point. In other words less than the 40.54% that occurred and that we computed above. The image immediately above shows such a pattern. The ABC retracement is 2/4 (up 4 then down 2) or 50% and the CDE retracement is 2/5 (up 5 then down 2) or 40%. In this case, even though CD was longer indicating a potentially overbought condition, the fact that it was followed by a shallower retracement indicates the bears cannot muster the strength to push it lower. As a result, we will expect to go higher.

Now, rules are made to be broken, but this is the general pattern you will see over and over. If your volume tools are supporting the movement, then things are especially stacking in your favor. Though, you may need some more sophisticated volume reading techniques to see this (to be covered in the advanced topics section).

Following this set up, if we were to break lower through point E and following point Y (as in the earlier image), we would be shifting into a bearish mode as we would now have an ABCD leg going down AND E will have been violated. This does not mean, of course there is not a larger bullish pattern going up, but the immediate trend is now down. This notion of a pattern inside a pattern is important too as it reveals layers of market structure that can help to paint a picture of what is going on in the market. So, you will want to be aware of this when you look at charts as well. For now, let's keep it on one level.

When we see a P1 level being violated, there are two cases for this. One, if  $CD > AB$  and the other where it is less. If  $CD < AB$ , then a P2 pattern still exists and that will take precedence over this "failed" P1 pattern. However, when a P1 fails and there is not an already existing P2 condition, then that is actually quite bearish (using the above scenarios. It would be bullish if going the other way).

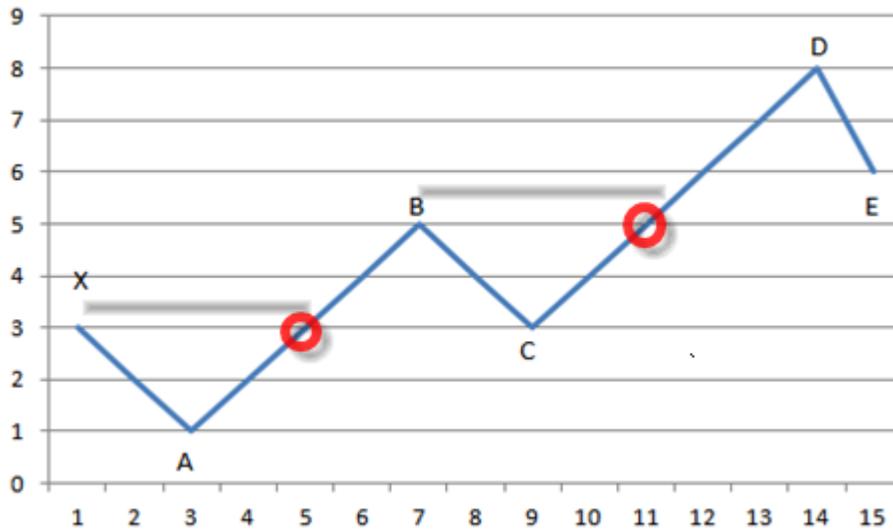
Naturally, this will become clearer when you see and/or use the tool. We will go through some screenshots on the actual indicator later. For now, there are other concepts we want to get under our belt. I realize this is a LOT to take on in a few minutes so bear with me.

There is another dimension to the patterns we have been discussing and that is what is happening in the time dimension. For this purpose I developed the Nindicator Cycle Width Tool. Those who have followed my work know I have done a lot of research and development in the area of cycle analysis. One of the most basic concepts in cycle analysis that you want to know is that trending markets have a longer cycle length than trading or ranging markets. There are cases where this is not true and for this purpose we have the Nindicator Box which we will discuss later.

On cycles, the most common way you will see people measuring them is from peak to peak or trough to trough. In the above image the AB leg goes from 3 to 7 on the domain, or horizontal / time axis. Four units total. The CD leg goes from 9 to 14, or 5 units total. Therefore the cycle is expanding in this scenario and cycle expansion suggests trend. If the market had come up to point D more quickly than the interval for AB, then it would be overbought on a cycle basis. We had already discussed it being overbought if  $CD > AB$ . Now there are two dimensions in which we can make the analysis.

When we see a pattern like in the first example; a P2 and the cycle is widening as we go to point E, then this is much stronger than a signal where it did it quickly. I believe this is true because it gave the bulls more time to accumulate inside the DE retracement area (accumulation you should also see inside the volume tool measurements).

The way I measure these on the Cycle Width tool is to measure the point where the breakout occurs (remember when we break point B for example, it gives us a point D? But then point D continues higher). I have pasted the image again below with these areas (breakpoint and cycle points) highlighted in grey:



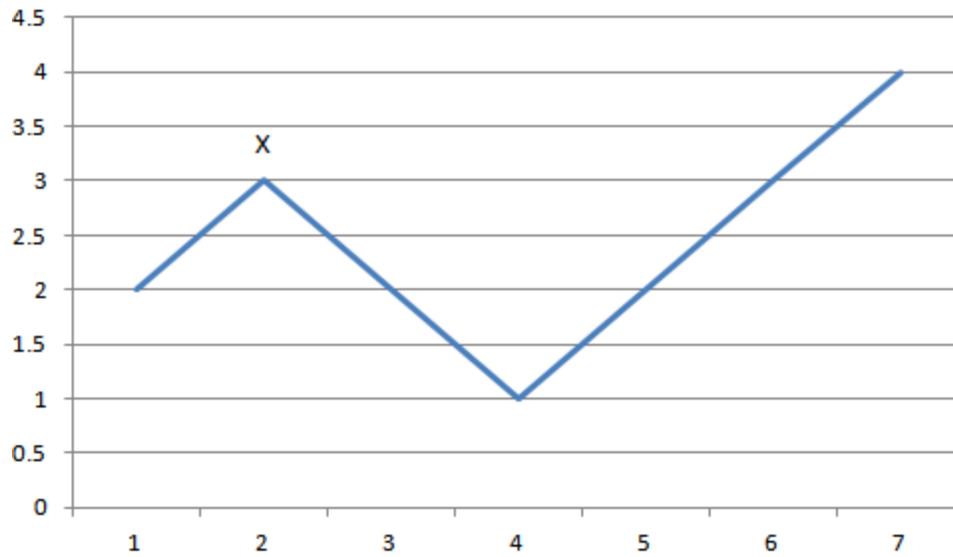
So, I will measure the width (in the above image) from X to the point where it is broken on the way to point B and from B to the point where D originally comes into existence (at the break of B). I am only covering the upside cases here, but analysis of the downside cases is of equal validity. When you see cycle expanding in line with the patterns we have discussed, it can often lead to more reliable breaks in price.

Further, when you analyze the area under these zones created by the patterns on a volume basis, you can often do even more superior detective work. So, when you combine this with volume analysis, support resistance work and order flow analysis, you really have a more-or-less complete picture of what is going on. This, of course is not a guarantee, but suffice to say, you can now see about 99% more than most traders even know about or even know exists in analysis. The nice thing about analysis at this level is it based in solid fundamental and tactical concepts and not indications that are free floating, sequential and based on purely past data.

There are likely thousands of ways you could use these tools together and I will not be able to cover them all. Later I will cover the basic settings on these tools, show some basic strategies that you can use as a launching board for your trading. I understand most users will want to keep it simple and use strategies /set-ups simpler to what I provide. I do however look forward to seeing the ideas of those who forge forward using these tools in new and unique ways.

We will get to the actual pattern tool in just a minute. For now though let's go over a couple more concepts; that of types of reversals. There are a couple basic ways you can zigzag through a reversal.

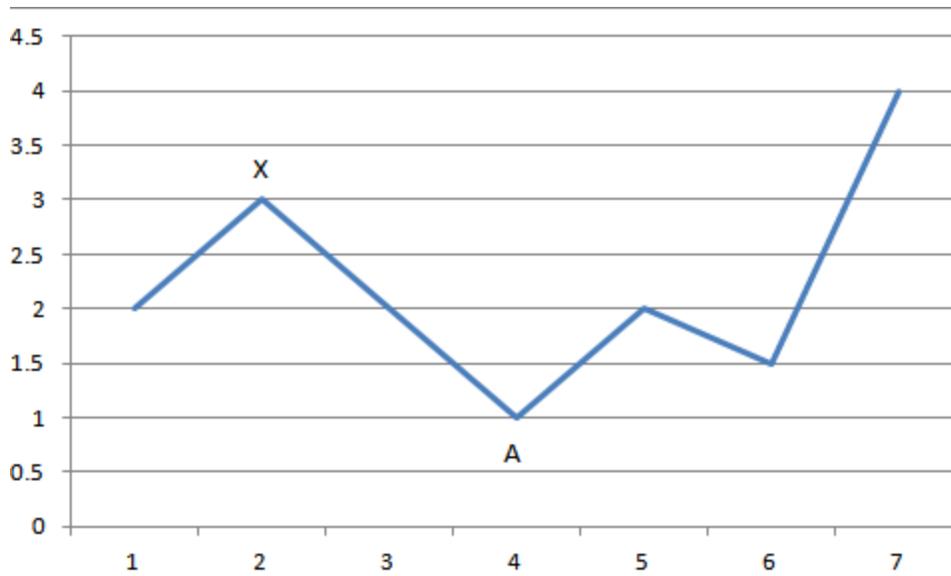
1) make a low and take out the previous swing in one run. This is less common, but is the most bullish (reverse for bearish) reversal because you have not paused in the break of the previous swing at point X:



Here is an example of the same from a real chart. See how we took out point X in one run?:



2) This pattern forms the pattern (P1 or P2) inside the range of XA



Here is an example from a real chart. See how we zigged and zagged to get through point X?:



Be aware of this context and the implied strength in the pattern. We will get to this concept a bit more with the Nindicator Box that is part of this toolset.

Let's take a look at the individual settings of the pattern tools themselves:

<b>Parameters</b>	
Deviation value	0.2
<b>Visuals</b>	
Number of Historical Patterns	2
Pattern 1 Line Color	<span style="color: red;">■</span> Red
Pattern 1 On	True
Pattern 2 Line Color	<span style="color: orange;">■</span> Orange
Pattern 2 Minimum Retracement	0.5
Pattern 2 On	True
Pattern Line Style	Solid
Pattern Line Width	3
Pivots High Color	<span style="color: lightgreen;">■</span> LightGreen
Pivots Low Color	<span style="color: tomato;">■</span> Tomato
Pivots On	False
ZigZag Line Color	<span style="color: yellow;">■</span> Yellow
ZigZag Line Opacity	65
ZigZag Line Width	2
ZigZag On	True
ZizgZag Line Style	Dot
<b>Data</b>	
Calculate on bar close	False
Input series	TF 12-12 (193 Tick)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	False
Label	NindicatorZigZagPatterns
Panel	Same as input series
Price marker(s)	True
Scale justification	Right

Above is a screenshot for the Nindicator ZigZag Pattern settings. At the very top, we have an input that will filter the size of the minimum wave in percent. It is currently set to 0.2%. So if you were an ES emini S&P trader, this would force the minimum wave for counting to be 0.2% of the index. If the ES is trading at 1425, then this would be a minimum of 2.85 points ( $1425 * .2 / 100$ ). You can also set this to zero. With this setting the tool will read the waves on your chart unfiltered. I like to put a couple of these on my chart, setting one at .1 and the other at .2.

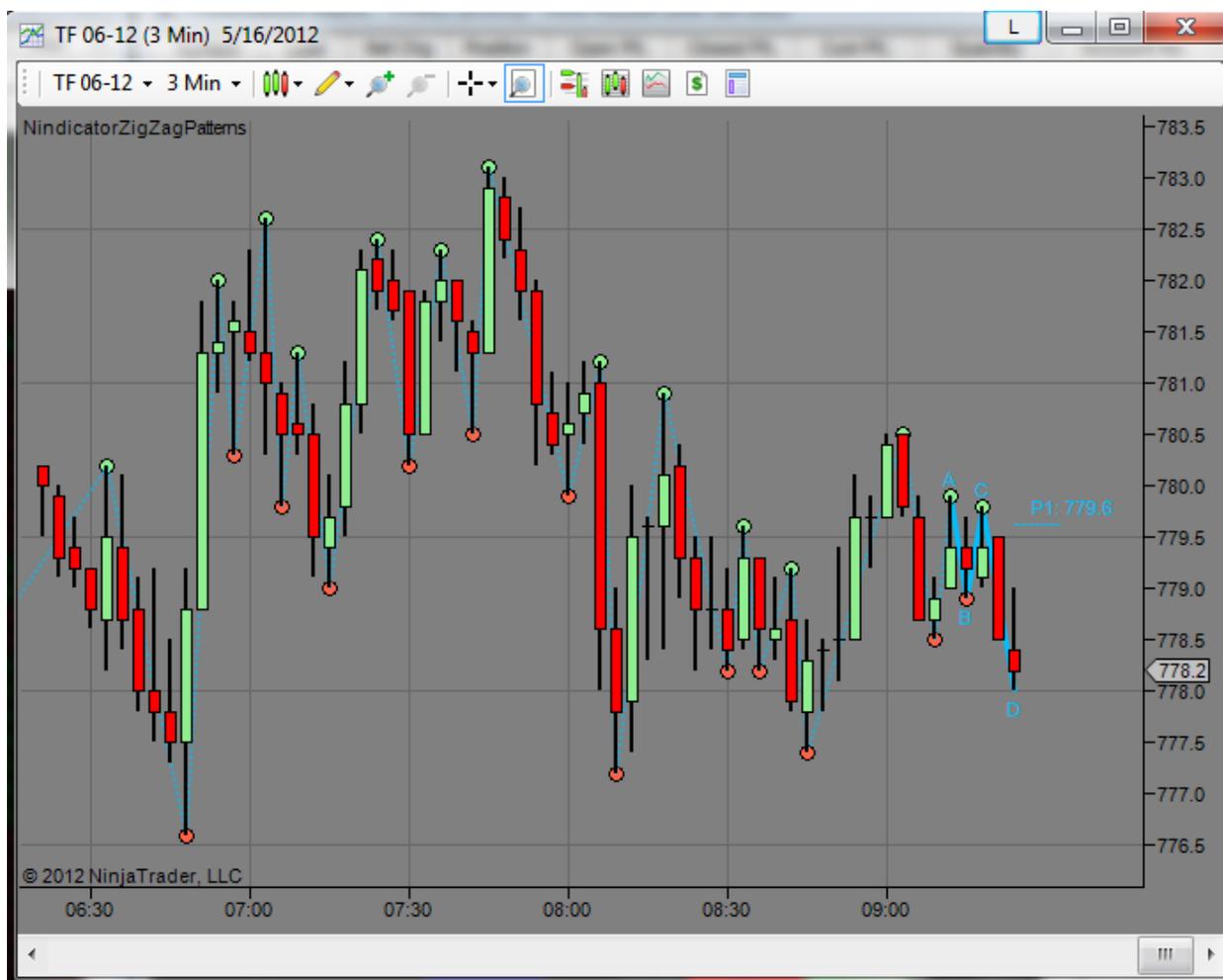
There is also validity in setting it to zero and it is how all the examples were done for this section. When we get to the theory on the WaveCounts tool, you will see how you can use these tools together for an even broader analysis.

Next down from the top, we have a setting for the number of historical patterns (past tense) it will show. I like to set this to two so the chart does not get too cluttered. You can individually control if you will have the P1 pattern, or the P2 pattern, or both on the chart by setting Pattern 1 & 2 on or off. I like having them both. The other important setting here is the minimum

retracement allowed for P2. I typically set this to .5 to .618. Retracements greater than this are more associated with ranging markets. Very often the first retracement off a low is fairly deep. As you scan more charts and see more charts from this perspective you will begin to get a feel for this. The rest of the settings should be self explanatory.

Note the ZigZag Pattern Tool is designed to identify and get you into trending situations. But, the failures discussed above can be used for counter-trend trading or to identify reversals. Keep this in mind going forward.

Hopefully the brain twister I have presented you with so far will resolve some with some examples. Then, later you can re-read and go back over this section til you have it more intact. Keep in mind, it will take time and thought. It took me years to come up with and to be able to see this kind of patterning. Let's take a look at specific set ups using the Nindicator ZigZag Pattern Tool:

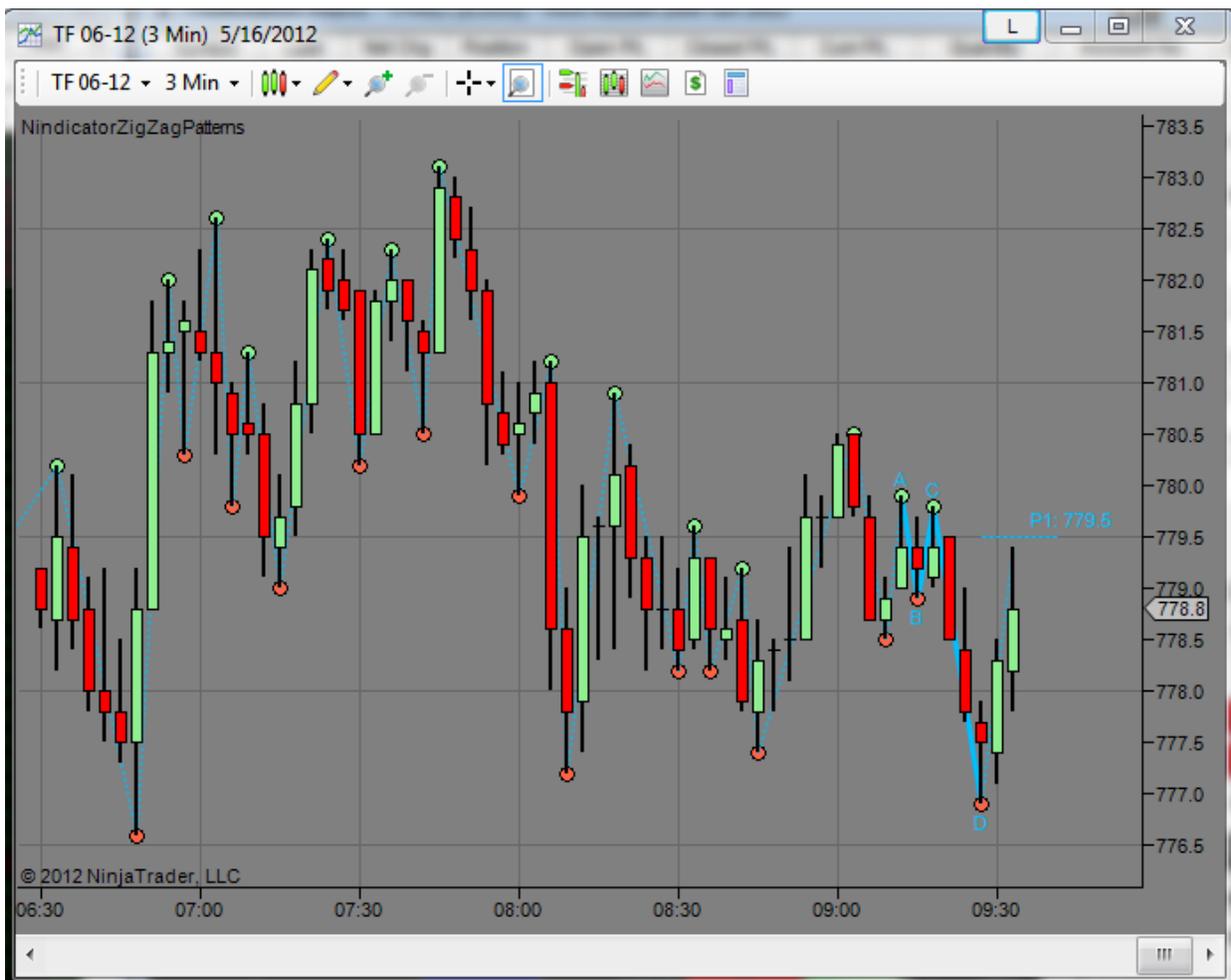


Above we see a P1 set up. Note we did not get a P2 because the retracement is too deep for the setting I have chosen (.5). We also have  $CD > AB$ . The level it is giving at 779.6 is the level for which the retracement will be deeper than the ABC portion of the pattern. We are technically still bearish beneath this point. Keep in mind, this pattern is inside the earlier price action and it

is a relatively small pattern. Note we are in congestion and are trading inside the range that was established between 8 and 8:30AM, and yet another range that was established between 8:30 and 9AM. So, we have inside, inside consolidation patterning. This puts us in a bit of a breakout mode.

Note also the zigzag that come off the high of the day going lower (not labeled with ABC etc.). This had a shallow retracement going down, followed by the consolidation mentioned. It is not uncommon to consolidate through this part of the day after 8:30 (pacific time) which is lunch time in New York. With this in mind, I might decide we are in a down trend with progressively lower highs and this pattern is a continuation. So that would be a bear pattern inside a bear pattern or trend.

When retracements are very deep as they were in this pattern, I give it less credence than I would if it was a bit shallower. For example, the ABC leg is probably close to an 88% retracement (eyeball method). As I wrote this, we tested below the consolidation lows, confirming my hypothesis.

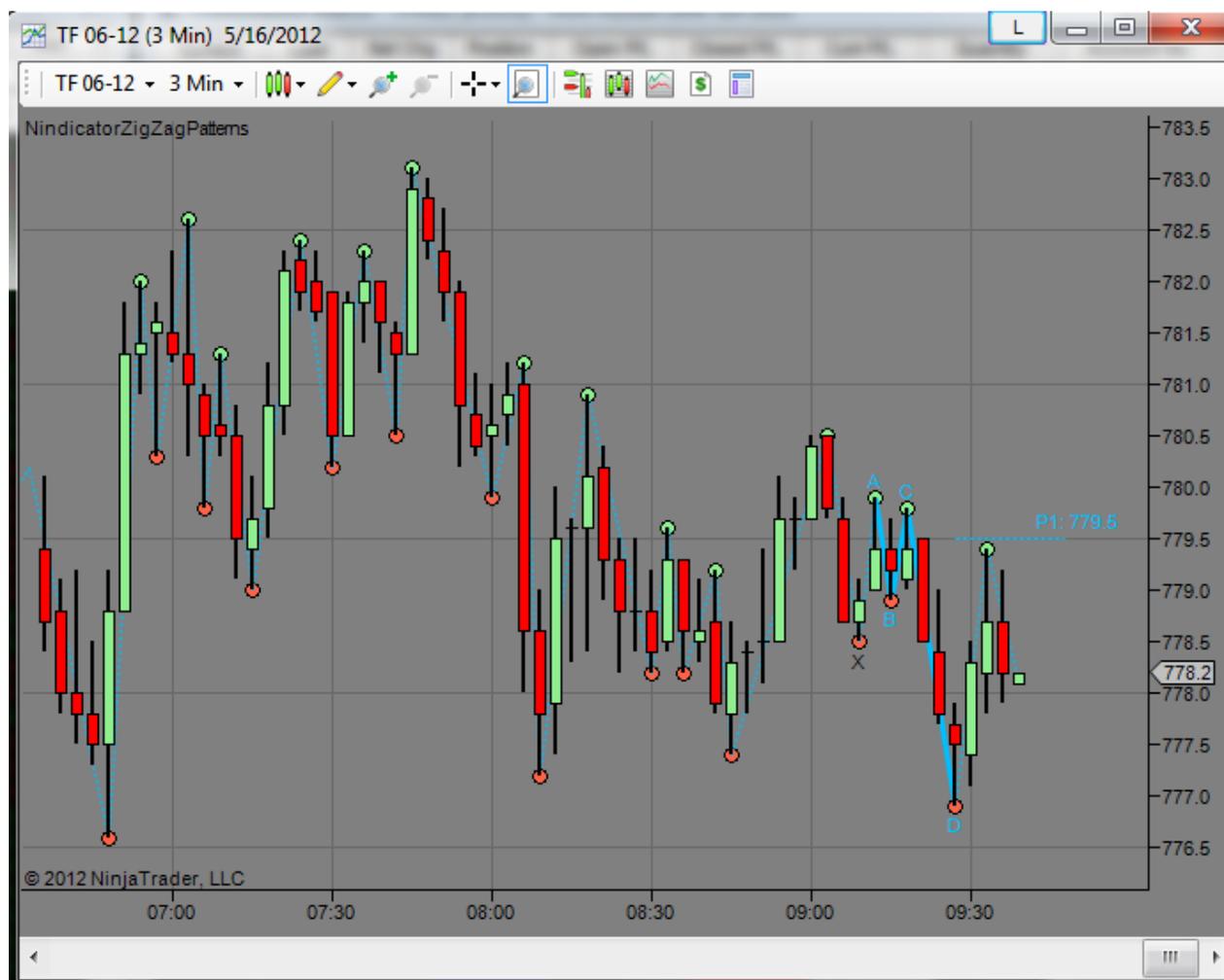


We then came back up towards the max retracement or failure point (779.5). Note also again, that CD was greater than AB, which can be a solid indication of an oversold condition,

particularly in some level of congestion. This is even more true when you consider we were testing two other lows on the chart at the same time (at about 8:10 and 8:45).

In the above scenario, I might have decided to sell somewhere around the point that broke point X (not marked). From the above charts, are you able to tell where point X is?

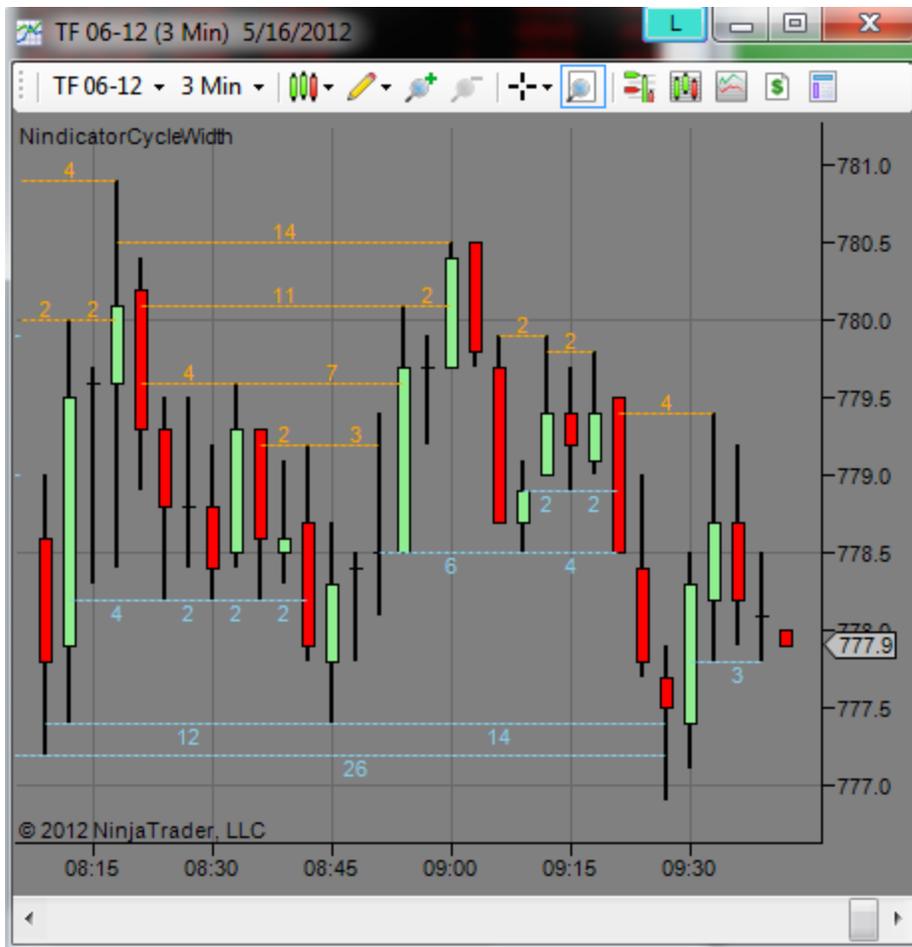
It would look like this:



The break of point X established a double sell pattern. Can you see it?

If you go from the high at 9AM, you can see going down to X, up to A, and down to D, was a bearish trend. At the same time the ABCD pattern shown (a P1), occurred inside it.

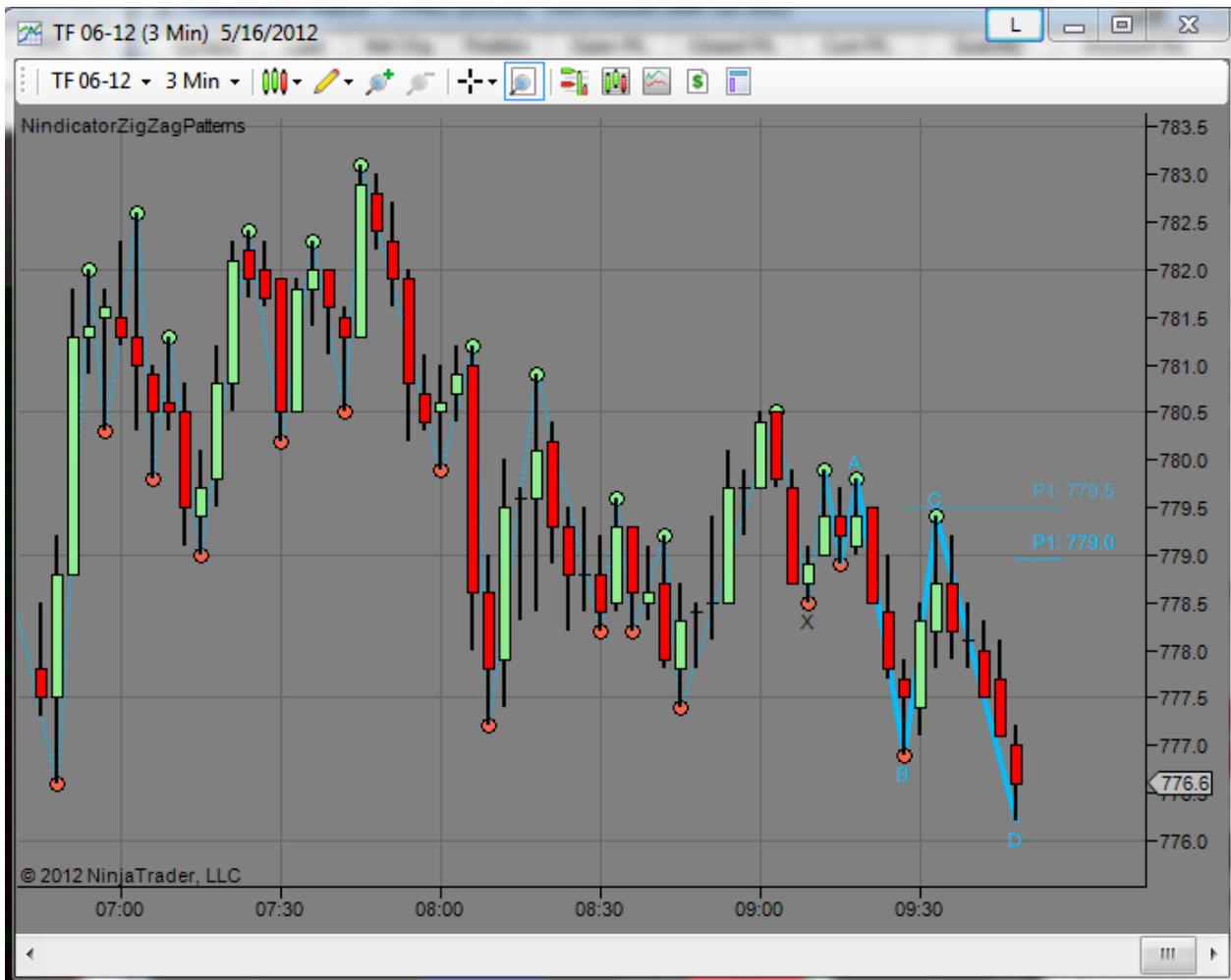
At the same time, the Cycle width tool was showing me a narrowing of cycle width. For this reason (and combined with  $CD > AB$ ) I do not expect the move to continue for a long way:



Using cycle widths is a bit of an art form that we will cover more on later (if you got this tool with your package).

We then came back up into the P1 level and sold off. As a result, our P1 retrace prediction was true. That is: a shallower retrace than the P1 level should result in more selling.

We could have conceivably decided to buy somewhere around the low based on the above analysis, but I would not. There are just better opportunities like the one we saw above. We certainly could have sold the shallower retrace however. That is part of our tools set here; selling a shallower retrace of a P1.



As I wrote, this is what the market did. You will note that there is a new level. The patterning shifted to the next (and new) point A. This made a new P1 level. Notice that the old one dimmed slightly. This dimming tells you it is now history.

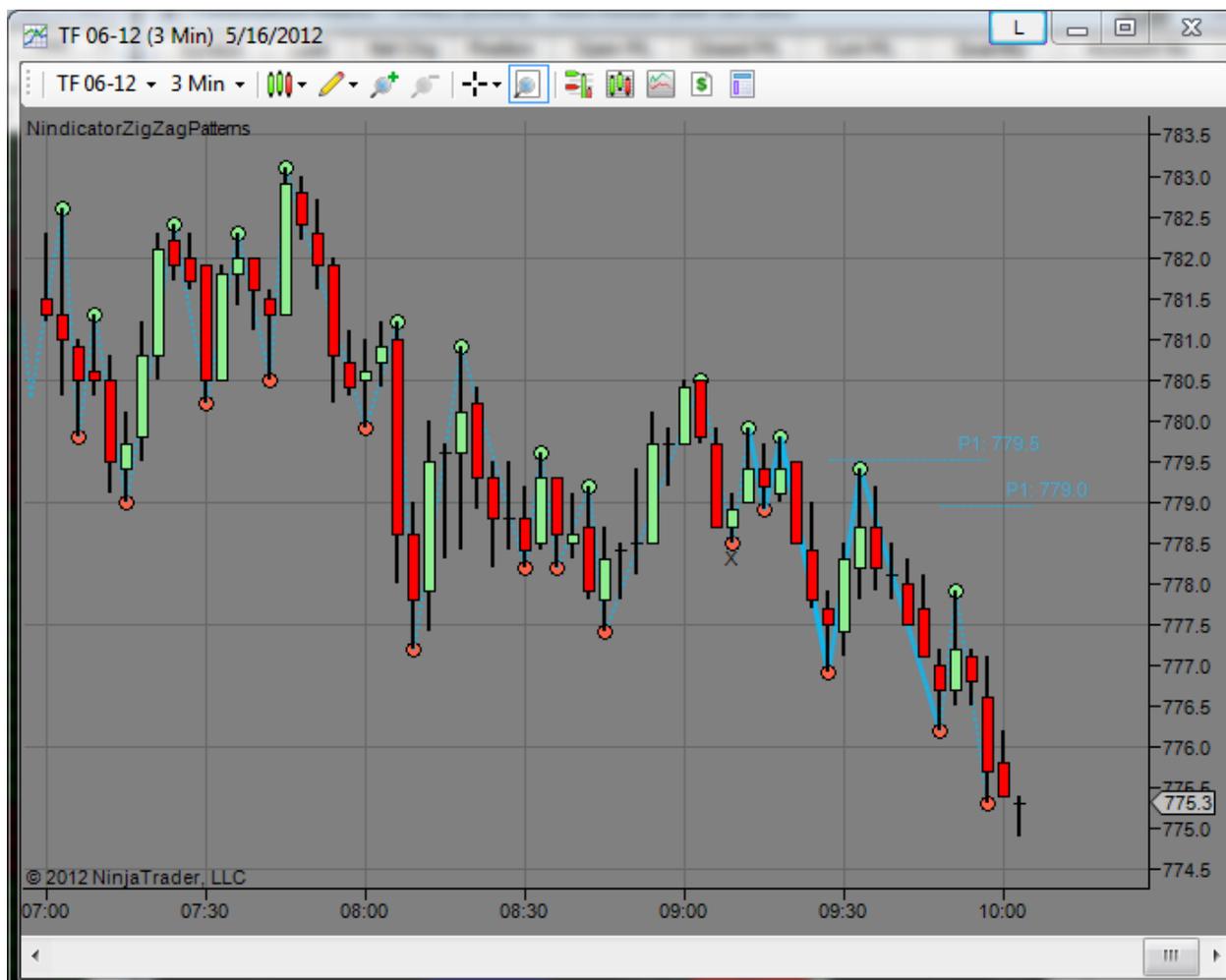
If the P1 level had been violated going up, then it would have turned red. That would be a failure that we talked about earlier. This would mean we are likely in congestion or that we are reversing. Of course, there are still cases where the failure, as in the case above, will again head south, but we have a beautiful contextualization of the whole movement, and it is occurring in such a place on the chart that the vast majority of other traders have no clue about. Based on the failure, if it had occurred, I would have then been cautious and re-evaluated the situation.

If we did go through 779.50, does that mean we will not go down from there? No, of course not. But, it tells us about the structure the market is presenting to us, and that we are not trending in the time frame we are analyzing. If you could simply know when the market is trending or not, it would be a large advantage. The market can help to tell you this.

This brings up the topic where do we enter? There are several strategies to this. It really comes down to risk reward analysis and how you like (or can afford) to trade. I could have sold near the

test of the P1 level; just below 779.5. This could have been a good strategy because we could have placed our stop just above that area; a couple ticks above what is the A point in the above chart. This would have given us a large potential reward for the risk. The other strategy would have been to sell the low, or break of point C in the above image. This would have been about 2 points of risk probably just glancing at it. This scenario, by many is considered "safer", but it is higher risk and the potential reward will always diminish as the risk increases. Therefore, I might use yet another strategy, and that is to use a fixed one point stop, for example, and take my chances. There is yet another strategy, and that would be to use the Order Flow and Position Management tools. I was not watching this while I wrote, so did not grab a screenshot for it, but what you would have seen is the selling coming in near the top for a low risk trade. Of course we have not yet covered the Order Flow tools if you ordered them. Just remember, it gets better.

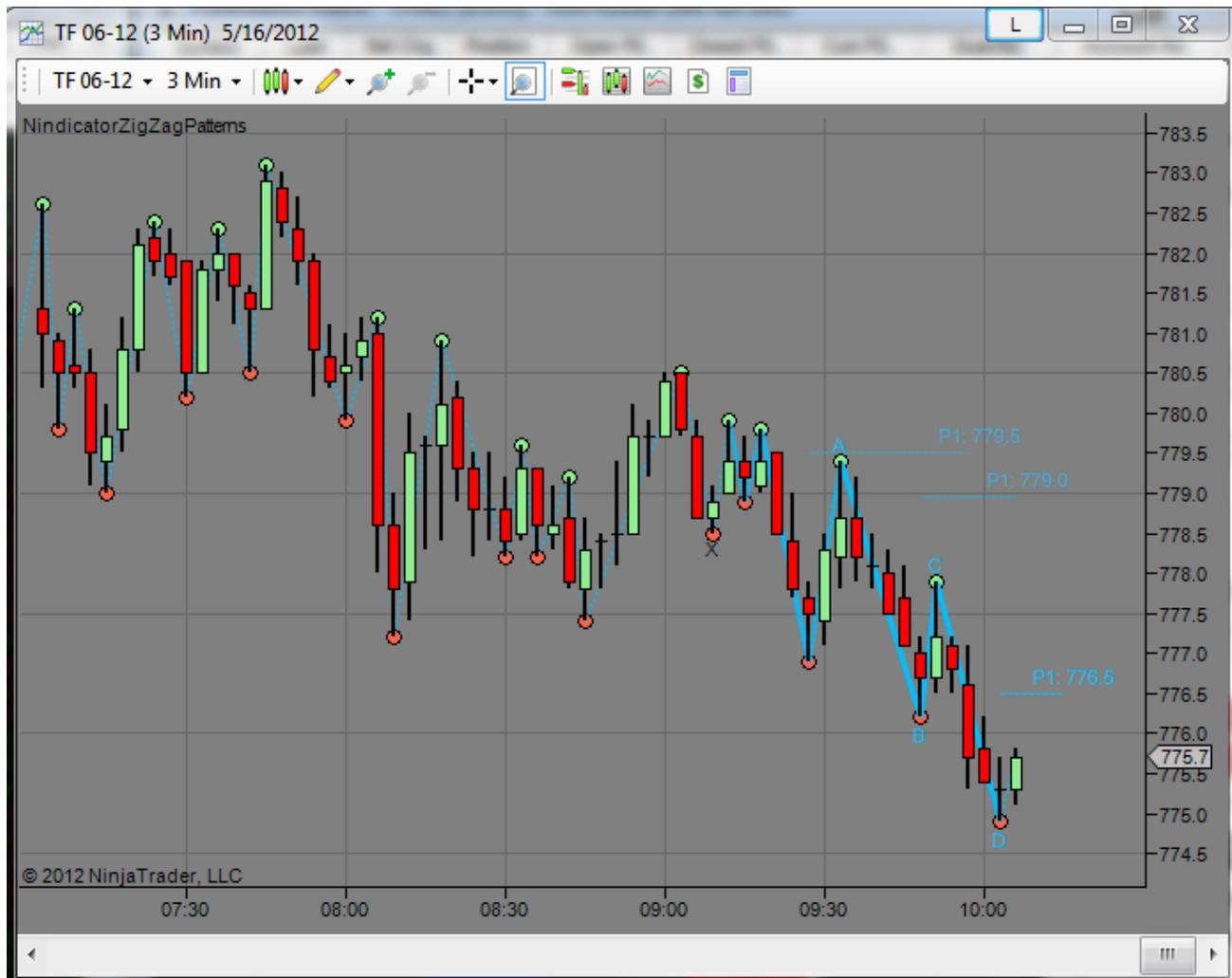
As I wrote this the following occurred:



This image answers the following question: Will we always go to the P1 level? The answer, as you can see is no. This retracement at around 9:45 is shallow and the market heads south at a higher rate. In his case, we would have sold the low of the pivot high bar at around 9:45 or the

new low. The same risk reward factors apply as we had discussed above. Can you see the sell points?

Following this, we saw this:



Do you see the new P1 level? Do you see the old one dimmed slightly?

Now we went to a new low...



So the new P1 level was invalidated. The reason we got a new P1 and it was invalidated is because we got an outside bar (the last bar on the current chart). If we start to go higher again, the tools will tell us by drawing a new level. At some point the level will get broken or fail. This may be the end of the trend.

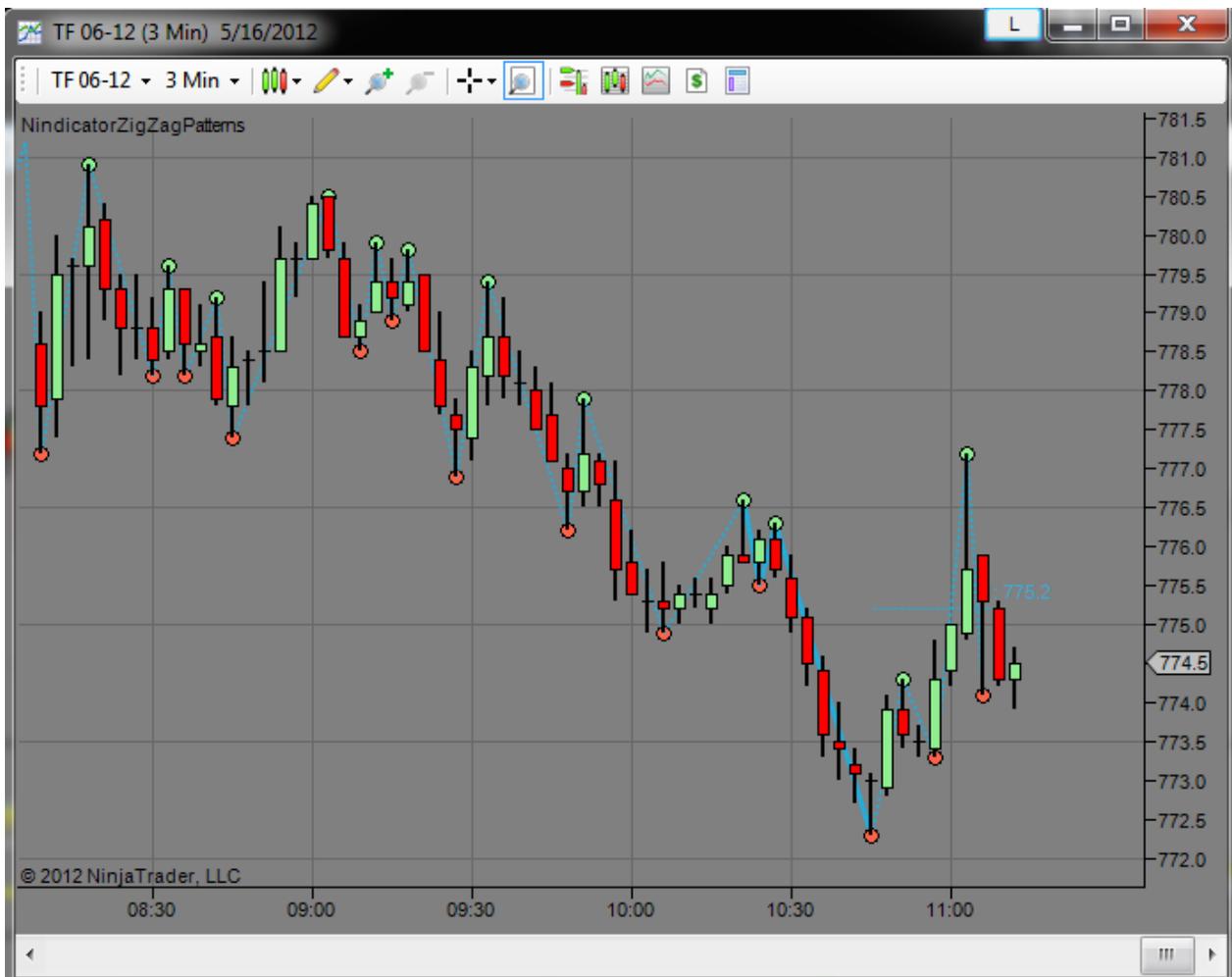
As we get more and more patterns going lower, we will want to start asking ourselves, can the bears persist? Of course our volume tools discussed in the previous section will help us to see this. The Order Flow tools will also help if that applies to you. We will cover some of these scenarios in later sections of this manual as is applicable.

Once a new zigzag forms, the Pattern Tool, will not identify another P1. That does not mean you cannot compute it yourself. I have given you enough information above to do this, so that will be a good exercise for you.

As we continued:



Note on this leg, the pattern got wider on the cycle width (not shown, but you should see it anyway). This indicates a strengthening trend. Later I will show you how to make predictions out of congestion with the Cycle Width tool. I will also show you how to make predictions as to where the trend we observed above will go using the daily targets tool which predicted a low of 772.30 with a 94% probability of being hit (if you got the Total Package). Sometimes you get front running at or about these levels so I always trade a bit inside them. Here is what happened:

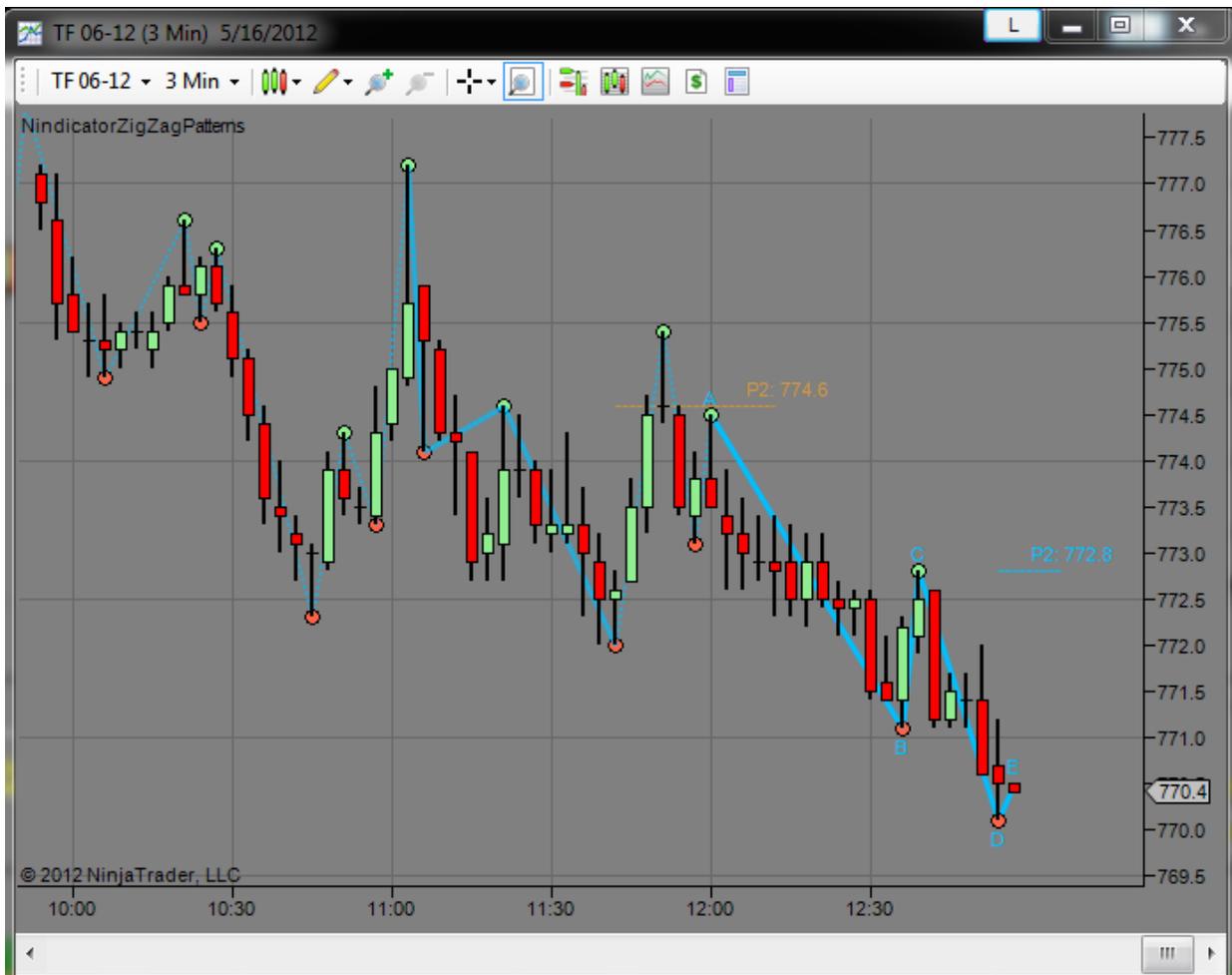


This violation of the P1 level would have me concerned about the remaining strength in the trend going down. In addition to this is the breaking of the swing high at or about 10:20. So, I'd be thinking a prioritization of possibilities in the following order: 1) consolidation, 2) trend reversal, 3) trend continuation. I am able to do this because of the context the Pattern functions provide. I would probably decide to stay out from here. I am also not too excited about that big tail on the 11:03 bar as it tells me there are shorts ready to fight even though we went through the previous swing high from 10:20 or so.

Later we will get into more levels of analysis including support and resistance as well as we combine all the Nindicator tools as is applicable.

We have had a good broad discussion of the P1 tool. This tool will generate more activity than P2 which I have not yet shown. We will now move into the P2 patterns.

It is getting to be a bit late in the day but there are a couple factors on the P2 set up that I would like to point out. As mentioned, these do not occur as frequently as the P1s, so they won't likely happen in sequence like the above. For this reason, I will have to find examples for you at various points in charts.



First off we had a failure on the P2 (orange line). P2s will turn orange when they fail. This is a great place to start because failures are an important part of trading. When we get a failure like this, it reduces to a form of what is called a Trader Vics 2B pattern. Here is more about the pattern here: [http://www.surinotes.com/Tradestation/articles/suri2B\\_TJDec2007.pdf](http://www.surinotes.com/Tradestation/articles/suri2B_TJDec2007.pdf). By the way, this link is not an endorsement, it is just a way of helping me to show you the pattern without spending extra pages on the subject.

In essence what you are doing is a trap. Here is how it works. Traders at around 11:40 trade the market up past the previous swing high. Much of this price action was induced by stops being placed above that high. As they were hit, it drove the market higher through the past high. This is known as short covering. Most rallies begin with short covering, but then must be followed by new buyers entering the market. Never forget this (and its converse)!

What happened here, is there were *no new buyers*, so what you get is a failure. You could also call it a false breakout, but it is important to understand the dynamics of what has happened. This will help you to understand market dynamics. Traps and pitfalls. This will make you a better trader.

By the way, some volume analysis during these retracements and/or failures would reveal a lot about who is in control at the various points it is relevant to your trading.

The break lower that ended at 11:42 was also a 2B form that tested the low at approximately 10:45. As I had mentioned earlier, we knew congestion was likely. These are the kinds of traps you want to stay away from. A true 2B will be a more well defined low or high (20 bar high or low), but we are using this pattern as a learning tool for the purpose of our discussion. You can learn more about these patterns in the Trader Vic books which deal with all kinds of interesting issues from money management to economics and trading. For now what I want you to drill into your consciousness is how these traps form and what drives them.



We then saw the market retrace upward into the 771.50 area. This is a short set up. Similar to the above discussion about P1 patterns, I would look to sell this pattern as follows: 1) The low of Pivot C (or possibly the bar before it's low), 2) Look for selling on other relevant Nindicator tools, 3) a 38.2% retracement of the AD leg (see above). As it turned out, we missed the 38.2 by a couple ticks before heading south, so you might have chosen to use a combination of the above i.e. numbers 2 & 3.

Once this low was formed, we got a new P2, which I did not expect initially, but this is good. And we would repeat the strategy as applicable.

Let's talk for a minute about intraday seasonals. I do not suggest trading up into the final minutes of the day. OTF can come into the market at these times and foil your plans. Many times you can get a strong counter-trend rally at the end of the day. For more on this subject go here: <http://markettradersjournal.com/intraday-seasonals-trading-goals-and-price-persistence/>

Ignoring that for a moment, let's think about the following: We came up and missed the 382 retracement by a couple ticks and then headed south. This concept is similar to a failure we have been discussing but it is a bit more subtle. The 382 is like a minimum retracement level. When it fails to be reached as in this case, that is pretty bearish. The beauty of this failure, is most people cannot see it on their chart. So, when it did not reach and went lower, it clued us in to what was really going on. Do not forget these kinds of unseen failures. Watch them and you will learn a lot going forward.

That actually covers P2 patterns which I did not figure I would get done today. There is one that you have not seen yet. When a P2 sets up, it can become invalid if CD becomes greater than AB. When this occurs, it will notate on your chart. This will help you to see over bought/sold conditions and to make more advanced discernments about the overall market structure that is unfolding before you. I had mentioned earlier in this material that trading is like solving a puzzle. I hope you are beginning to see how these tools help you to see the bigger picture.

One last point before moving on. The pattern tools are for use in trending markets but they can provide substantial information about when this is not occurring. The market alternates between periods of trend and consolidation as well as contraction and expansion. Inherent in these oscillations are patterns. So reading the market in this way is more fundamental than any traditional indicator can provide.

I recommend taking a fairly substantial period in which you observe and learn these patterns. You may also make use of the NT Market replay functionality to accelerate the process in some ways, but there is no substitution for also seeing it in real time and combining the analysis with larger context analysis as described elsewhere.

What I have shown you with these patterns is not likely going to stick in your brain in one reading. You will want to review (and review and review) and possibly ask questions as they are relevant. You are in the process of developing intuition, and this may take a while and a lot of hard work to realize full benefit.

The principals in the patterns should apply in basically any timeframe, though my focus for these materials is short term. I have not spent any time trying them on longer term charts, but you can try that if you are so inclined. What I mean by this is, I have done this manually for a long time and the software is new, so I don't have a ton of experience with it in all contexts. The principals are all solid however.

By the way, what we have done in this session today if done manually is all consuming. The software is a dream to use comparatively, that will help you to learn the patterns efficiently. If I

had tried to show you the logic from scratch, it would have taken a small book to do so. Remember this however, and I reiterate, there are larger patterns occurring in your charts than the one you are on. So learn to see the patterns so you can glance at a chart and know what is going on.

The first example we did (on P1) was a pattern inside a pattern. Remember that? I showed you the bigger pattern and from this we were able to determine (while still in congestion) which way the trend was going. I would like to see you get to this level of analysis at a glance. It will take time and effort. I have provided you the fundamentals, from here it is up to you to expand your palette.

## **Nindicator Cycle Width**

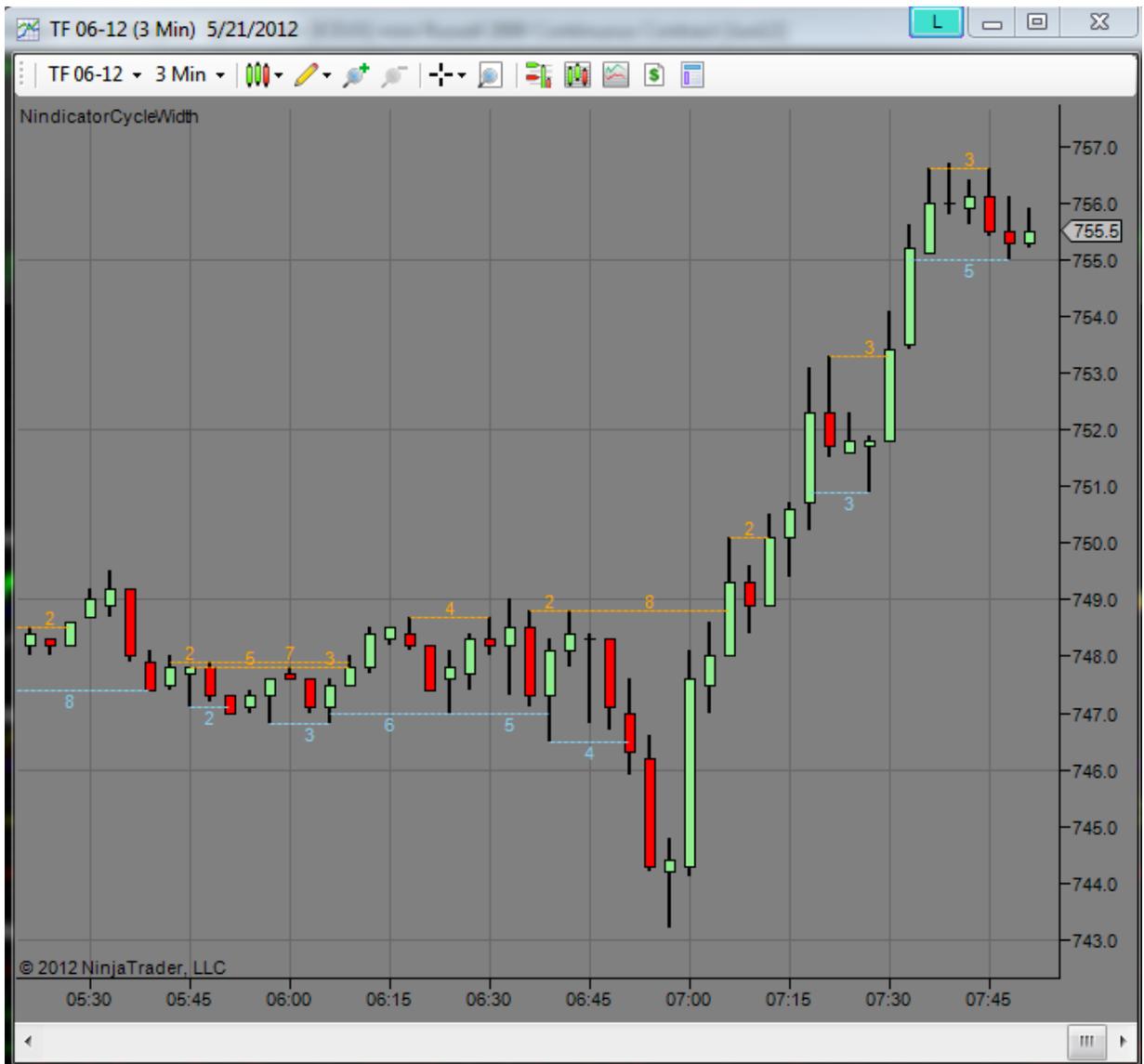
I have already covered the cycle width tool in some measure in the above section, but I wanted to go into some detail on more refined patterns. To a certain extent, this tool is designed as a supplement to the pattern tool. One is dealing with analysis of expansion and contraction in vertical movement; price ( the zig zag patterns), and the other is dealing with expansion and contraction in horizontal movement; time (the cycle width tool).

I believe it is good for you to know the use of this tool as a theory of markets and trend as already discussed. So, I urge you to keep this tool up on your screen next until seeing the patterns becomes second nature. Put in a very simple way, expanding cycles in time = trend and contracting cycles in price = trend. There are exceptions to this of course, like when the market has a strong interest in re-valuation. In these cases, the price retracements will take precedence. This occurs in cases where the market cannot wait to develop and the cycle in play is actually a bigger cycle. I have written about this on the blog, and regarding the entrance of OTF into the market place. This is likely to occur around the times of reports and at the beginning and end of the session etc.

Often the cycle expands before the trend manifests, and in this sense the tool is predictive. Later, I want to show you how to use the tool to make predictions in time in a powerful and fun way.

First off, I do not generally use the Cycle Width in the night session. Not that this cannot be done, I just do not have much experience doing that to share with you. If I did, I would probably use longer charts (i.e. not 3 min charts), because the trading at night is more sparse than the day session.

Using the CycleWidth is often more of an art than science. This is true because there are cycles inside of cycles and it may be difficult to discern which ones go with various other ones etc. Originally, I did this analysis manually. I would mark out each interval as I went forward in time throughout the day. This would give me a solid sense of the strength and patterning that was occurring, but it would also give me the ones I thought were particularly relevant. In that sense, I recommend you do the same; do it manually. The CycleWidth tool will give you every single count within the parameters you select. As a result, you need to become sufficiently versed with the tool that you can see what you need to see using it. This may take some time. For now, however, let's look at the tool to get a feel for this kind of analysis:



Note that the night session had a lot of shifting back and forth activity. Where we want to be observing this Nindicator for now, is when a trend is starting to develop. I have written about this in various places on the blog; the idea is that markets increase in their cycle length as they trend. This can often be seen in the smaller cycling *before* the trend actually develops (i.e. higher highs and lows for an uptrend).

As previously mentioned the Cycle Width tool looks back any time there is a breakout condition and counts from there. So, when a new high or low occurs such as 7:06 AM in the above chart. Note that count was 8. The previous count before this time was a 2. So we went from 2 to 8. On the bottom side of the wave, we saw a diminishing cycle width; going from 5 to 4. This narrowing tendency suggested the move downward may be of limited scope. When the market hit that low there, it was also the previous day's low. These factors combined suggested a counter move could develop there. So we get the combination; support or resistance combined

with narrowing cycle means ranging (going back into the range). If the cycle had been expanding, I would have been much more skeptical about that low.

You will note as we went higher, at 7:21 we had another high there. From there we moved lower for a width of 3 and then broke higher again. This turn corresponded to the overnight high. Let's take a look:



This chart is a bit cramped, but I wanted you to see the overnight high. So, what we had here was an expanding cycle at the high (i.e. from 2 to 3). To me this suggested going higher. At this point we have an established trend. We would be using our pattern tool to analyze the trend. But the expanding width would have given us the confidence to buy the new high. You will also note another pattern on this chart I have talked about. The run up off the low took out the previous swing high without any retracements. This was very strong and it should have told us

we were heading higher. This also should have given us confidence to buy the new high. The failure to go lower at the 2 count going up, also told us this.

I will take a moment now to introduce a concept associated with the Nindicator Box tool. The box would have shown you also that we had significant buying pressure coming out of the low because we had encompassed the entire days range of 9 bars in an interval of only 4 bars. This told us the buying was overtaking all the previous activity in that range in a ratio exceeding 2:1 ( $9/4=2.25$ ). More on this later. I just wanted to mention it to get you thinking this way a bit.

So, we are looking at the cycle widths *in time* in a variety of ways. So, we do not use the Cycle width tool on volume, tick or range bar charts; on time based charts (thought I suspect you could experiment with it a bit if you are so inclined).

Let's take a look at the set- up occurring right now:



What did you notice?

First of all, you would have noticed going up (and following the 8 count) we saw the following: 2, 3, 3, 2 followed by another 2 at the peak.

You will also note there became a 4 count at 7:51 AM as it broke higher. But, we had a narrowing count inside of it. More on this in a moment. For now I want you to note we had decreasing widths in a trend that was telling us the cycle was narrowing. This is another way of saying the trend may be losing strength.

When we broke that low on the 8 count, we no longer had an uptrend. So, the tool also points out trend *failures*. Can you see that (remember an uptrend is higher highs and lows)?

Part of the reason I believe stronger moves come from wider widths is because it provides more time for accumulation to occur; more time for bulls or bears to develop a more skewed position vs. the other side. So, if we have a case where the bulls for example accumulate leading into that span of 8 at the low, they have more power in having worn out the bears. Give that kind of thinking some of your time. It will be worth it. Another area of consideration is how do cycles vary in a ranging or cycling market condition compared to a trending one. I touched on this briefly elsewhere in this article and the fact that the presence of OTF and a market that is re-valuing impacts the cycling. This is particularly true in the lower timeframes.

I want to introduce you to another concept with this tool that is quite powerful. Starting at 6:48 AM, we know if we broke higher, we had a width greater than the previous width. So, with this in mind, if we were anticipating a breakout, we would have known it was wider. In this way, we are making a prediction. We are saying, now we are greater than 2 and if we break higher, we have a widening cycle that should provide at least some continuation to the move. Sometimes you can do this sort of thing over bigger cycles involving widths of an hour or more. These can lead to powerful breakouts and the balance of power shifts. The thing about it is, you know about the skew of it. because of the widths or time based shapes that are showing up. the vast majority of traders cannot see this.

I can also make a prediction starting when I get to about 1/2 or so of the previous count. If the count fails in this case, it does not matter but, when the bulls or bears can maintain the pattern over the large scale without the pattern failing, it often leads to powerful breakouts. I believe this is true because it is building a huge tension when it does this. To me, this is probably the most powerful use of this tool (and I should probably be telling you this IS the use of this tool, but I want you to see more). You can of course also combine this kind of awareness with knowledge of what is going on in the volume readings such as the NetVolumeSum and other indicators.

OK, I promised to get to another pattern for you. We saw (above) the 4 over the 3,2 sequence. When we see compound patterns where two levels are expanding, it can be more powerful than patterns where only singles are expanding. Let's take a look at one:



Is there a report due out? Are we trading in value? Out of value?, near support or resistance? etc.

Sometimes expanding Cycle Widths lead to powerful failures. By this I mean you get an expansion and the OTF and HFT steps in and crushes the market in the opposite direction.

I have found it of value to note whether I am using this tool in a trend mode as in the above example; using it as a strength of trend tool. Or, if I am using it as a tool in congestion. Used collectively with the other pattern related tools, it makes it easier to discern if we are in congestion or trend or possible breakout. In this sense the Cycle Width is more of a context related tool.

Using this tool is probably the trickiest of all the Nindicators tools. Actually we coded this as part of the functioning of other Nindicators, but I felt giving the tool to you in this form would expand your consciousness in the way you are looking at patterns developing on your charts. Be aware of expansion and contraction in time and the price action that follows. That being said, when we see patterns setting up, we also take into consideration what is happening with the patterns and the Box. These help us to be able to identify which side is gaining strength (and which sides stops are going to provide the fuel for the breakout. The longer the patterns persist without failing, often the more powerful the moves that follow. Of course we could do many more examples, this should get you started. Ask questions if you see something that does not make sense I do not have all the answers, but I am sure you will find this level of analysis to be very powerful especially combined with other Nindicators.

Before leaving this topic, I have one other concept to mention that is important. In the above screenshots, you saw a market that began a trend out of consolidation. As the market did this, it began to trend which was a longer time interval of cycle. At this point you start to see smaller intervals inside the trend. But think about this for a moment; the larger cycle that represents that trend applies to a larger scale analysis than the patterns you are seeing inside the trend. For example, in the trend you are seeing 2s and 4s for example, but the trend itself is creating much larger widths that you very well may not be seeing. So, as the numbers got smaller at the trend level, you were actually becoming larger. I hope you were able to follow that line of thinking. The trend had small cycles inside it, but the bigger cycles could not be seen. If I had a longer term chart for the same data as the above charts, I would have likely seen the bigger patterning. So, just beware these patterns are happening on different time scales at various times. You could put up multiple charts if you are so inclined with different intervals i.e. 3 minute and 15 minute for example. You may find this to be a fruitful area of research for your advancement later on.

OK, before we move on to the Nindicator Box, let's see the settings of the cycle tool:

<b>Parameters</b>	
Count Equal Highs	True
Maximum Cycle Width Allowed	8
Minimum Cycle Width Allowed	2
<b>Visuals</b>	
High Cycle Color	<span style="color: orange;">■</span> Orange
Line Style	Dash
Low Cycle Color	<span style="color: skyblue;">■</span> SkyBlue
Show Lines	True
<b>Data</b>	
Calculate on bar close	False
Input series	TF 06-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	False
Label	NindicatorCycleWidth
Panel	Same as input series
Price marker(s)	True
Scale justification	Right
<b>Count Equal Highs</b> Includes bars that make equal highs within cycles	

For me, I usually use the tool with the Equal highs set to true. If you use it with this setting to false, you will count areas divided by an equal high. Play around with it some and you will see what I mean. The cycle width tool is not rocket science. In fact whole counts can shift if you shifted this in time a bit, so, with tools that use bars, you have to be aware of how slight time shifts would alter the reading you are getting. Of course this is whole topic in itself I have addressed elsewhere.

The maximum cycle can be set to fairly large numbers. One of the things that can be confusing about this setting is you can get large number of counts on the chart, Often they can be clustered. This contrasts with doing the counts manually that I had discussed in the beginning of this section where you are only doing the counts that makes sense to you at the time you are doing them. In this sense, this tool is a learning aide. Begin to think about the theory behind this indicator and it will change the way you look at charts. then, later, you may just see the patterning without the tool. Here is an example of the setting on 100:



So, I will set this lookback on this at no more than 30 in general. And I might change the setting in order to help me to see different things (or to filter out too much). The third setting on this tool, I always leave on 2.

That's all for now on this tool. I strongly encourage you to make predictions using this tool until you expand the way you see charts.

Before we go on to the Nindicator Box, I would like to take a moment to point out, how when you combine the widths in the Cycle Width with the zigzags and ratios, you have really created in that combined analysis a complete analysis of the market in any given dimension. Of course you can expand this into higher levels. This, I will discuss later in the special discussion and examples section. For now, I want you to be aware that these forms of analysis combined are

comprehensive and can establish a certain kind of very powerful and more-or-less all encompassing structure on which you do your analysis.

## **Nindicator Box**

The Nindicator Box is the next tool in this toolset. This is a very interesting piece of work that took tremendous contemplation on my part to develop. The vast majority of traders would have no clue these things were going on when looking at a chart. The theory is fairly simple. It says this: when the market goes up faster than it went down (or visa -versa), then there is a predominance of control of one side over the other (i.e. bulls or bears). The Nindicator Box (Box) captures certain of these patterns and displays them on your chart. As is often the case with computerized indications that involve patterns however, it may not catch every little nuance, but in time, you will start to see these patterns and will adapt them and interpret them within a larger context that may give you a significant edge over the code alone. You may even use this to anticipate such cases of price skewing in advance. As of this writing, the programmer is still working on this code, as the coding is quite complicated. Here are some examples however so you get the concept.

Yesterday afternoon was like a Nindicator Box party that was going on while I wrote instructions for the programmer. Here is what it looked like:



Now that you can see that, let's talk about the pattern. The most basic concept of a box is that price bars cross an area that engulfs previous price action such that the engulfing bars collectively are fewer than the engulfed bars by a minimum ratio of 2:1 (default).

That is a bit of a mouthful, so let's go over each case on the chart and then you can refer back to the description to clarify. On the left most box, we have a 3 bar pattern. The third bar however broke lower than the other two but also engulfed them. So, we would say there were 2 bars that were engulfed by one. That is 2 bars on the left, and one on the right; a 2:1 ratio. In other words, it was an outside bar in this case. This suggested the market would go lower, and it did (a bit).

Next we saw a structure of 5 bars that was overtaken by one bar; a ratio of 5:1. This broke higher for a significant run till we got another Box heading south in another 5:1 pattern.

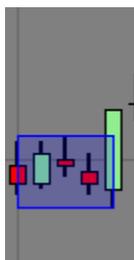
This was followed by a 2:1 going higher, followed by another. This one however did not *actually* break higher. If it had, it would have been a 5:2. Can you see that? This is an example of what I

was saying about not catching every pattern. The Nindicator Box is coded to only show a box that gets broken. In some cases like this one, you may wish to make a judgment about whether you want to go with it or not. With the Box, you are now seeing you were very close to a pattern. I marked it as one because I am asking the programmer if he can make it identify this one. We'll see. If not, no problem, you will learn to see them on your charts quick enough.

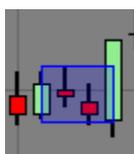
The next one is a legit 2:1. This made for a humorously repetitive Nindicator Box afternoon bonanza :-). But it is not always like this. Some days we will not get a single Box, other days they will be intermittent.

Here are some other applications of boxes. Sometimes the market will go into an area of congestion. During the period, most traders will not know which direction the breakout will occur in. We know from above examples that Nindicator Patterns can reveal the direction of a breakout from congestion. Boxes can do very much the same thing. They often reveal in these cases that either the bulls or bears are accumulating. To us they are tipping their hats to us; others cannot see it. Watch for this. Sometimes in an area of congestion I will see a box revealing bull or bear control for 5, 6, 7 times or more. Of course when you build this much tension in a consolidation area, it will often run quite strongly out of the bigger box in the direction of accumulated action.

We have also talked about the concept of failure. Boxes that fail can often create counter trades or zones of support or resistance later on the chart. I believe this is true because boxes are areas where a lot of traders experienced damage on the chart so, as we go to those areas again, we can get some good price action off of them. Can you see any failures in the above examples? How about the one that happened just before 10:15. Can you see it now? Here is a detail of it for you:



Here it is at one bar less (remember we only require a 2:1 ratio minimum):



By definition, and in a strict sense many Boxes are failures. This is true because the breaking bars must have engulfed the price action of some consolidation bars. Some of the patterns will be equal at one end of the box before breaking; others will go through it by a bit. Know this, so you do not jump on a Box pattern too early.

So, above, see how the last bar went out of the box before it again broke it going higher in the same bar (outside bar in this case)? That was a box failure that was immediately followed by a breakout in the opposite direction. These are often some of the most powerful boxes because they have trapped a lot of traders. You see the traders that went short on the break lower, likely placed their stops above the high of the box. As the break went higher, the stops acted as initial fuel to push the market higher. Do you see how the buy stops of short traders acted as initial fuel for the break? We have discussed this topic briefly in other places where we said P and b shapes on volume profiles are often retraced. The reason being is that p's and b's are associated with short covering and long liquidations. This same thing is happening here in miniature. Give this concept some thought and review those sections of the manual or examples or the blog on this topic. These types of patterns are often occurring in many time frames at any given time. Seeing the traps on a chart coming out of congestion can be a very rewarding area of research and trading.

This covers some of the main uses of Boxes that I know and use at this time. You may find others. Of course you can combine such patterns with other Nindicators such as the volume tools or order flow tools, that are standard procedure, or at least should be in your trading.

One other thing I want you to know on the box is it may not in all cases represent historical patterns correctly. For example. You run a chart all day with the box on it. If you reload the tool by hitting F5 in NinjaTrader or you close NT and come back to it later, it may not be exactly the same. Just be aware of that as you look through old charts.

Let's go over some settings....

<b>Parameters</b>	
AlertsOn	False
RatioMin	2
WidthMax	20
WidthMin	3
<b>Visuals</b>	
Base Color	 LightSlateGray
Recent High Color	 Tomato
Recent Low Color	 LimeGreen
<b>Data</b>	
Calculate on bar close	False
Input series	TF 12-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	False
Label	NindicatorBox
Panel	Same as input series
Price marker(s)	True
Scale justification	Right

On the Box, I usually use the above settings. The Ratio Min is the smallest box the software will allow. This, set to 2 will show boxes that are 2:1 and larger. On the Min Width, it will simply control the minimum width of the box. The max width will not look past 20 bars to find a box. You can play with these settings to get a feel for it. It is pretty self explanatory. I have played with the box on various types of charts and find I like it on both tick, volume and time based charts.

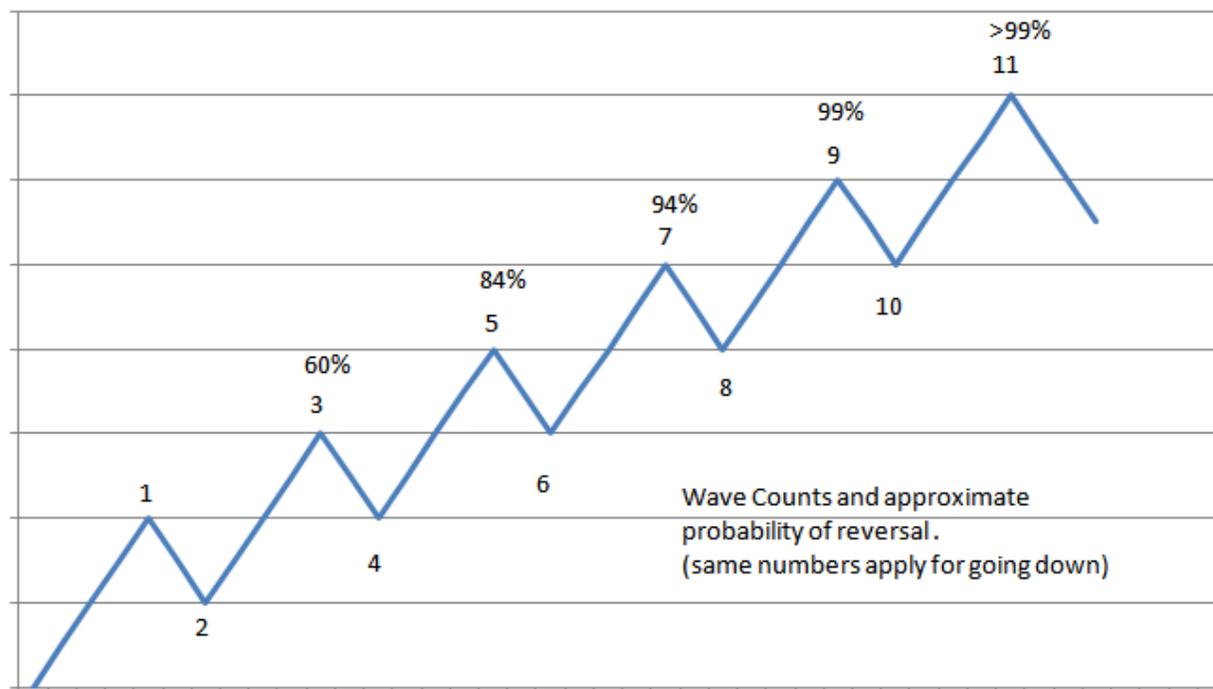
The use of the box is fairly straight forward. Either you are looking for breakouts or failures from boxes, or for boxes to become zones of support and/or resistance. In the image below, I have pointed a few of these kinds of situations out for you. The best way to learn to use the box is to use it. I always have this one on my screen:



## Nindicator WaveCounts

The Nindicator WaveCount Tool is a whole theory of market movement. At one level it is pretty simple, at another it contextualizes the market in a powerful way. By powerful I mean I have tested this tool to specific probabilities so you can know at various patterns what the chances of going up or down are within a range. Of course you can use this with the volume and order flow tools etc. to get better identify high probability trade situations.

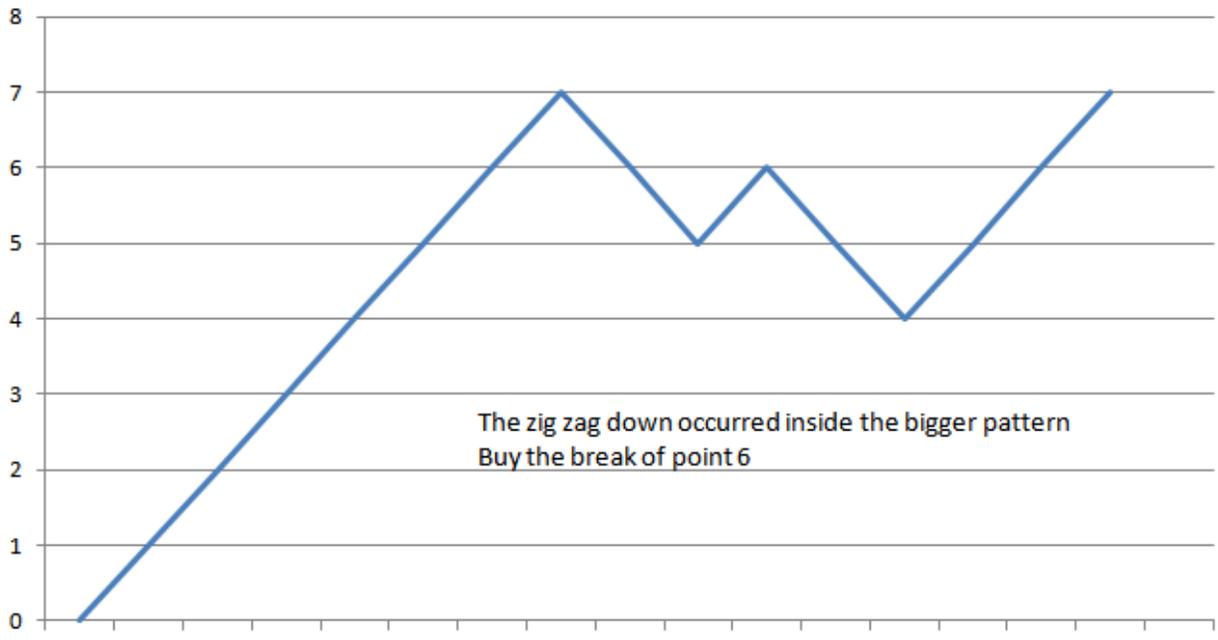
To start with, I will present this graph, and then we can discuss it:



Note, I have a theoretical market with a trend going on (successive higher highs and lows). On the top of each wave, I have written the probability of going down. The great thing about this patterning is it applies in any time frame you apply it to. It seems strange that such a thing could be true, but it is. I even believe this tool is more powerful than Volume Profiling in many ways (from the Nindicator Value Profile tool).

Now, when I post the probability at each wave, it only tells me the probability of breaking the pattern. So, if, for example, I am on a count of 5, there is about a 84% chance I will break point 4. Now, if I have a reading on whether there is OTF in the market as I have discussed in the volume tools section or in the pattern section earlier etc. then I can reasonably expect these sorts of patterns will have an even higher probability where OTF is not present. I have also discussed the trader Vic pattern above and gave you a reference on this. Essentially this prediction above is trying to predict if a Trader Vic pattern will set-up.

That would look like this:



In addition to the above pattern probabilities for the various WaveCounts, 60% of the time the bars are greater than a 3 count (or -3). Therefore, the best trade is often where you take out a previous swing while the count is > 3. This stacks things in your favor based on probability studies I have done. This is like in the above example where, you have either a shallow retracement or are on a higher count on the higher timeframe ( ie. 0.2). In this way, it is good to keep track of wave resets that are occurring on your charts as wave resets in a trend are a fairly reliable pattern as the reset traps traders who's stop orders later provide more fuel for the continued move. This concept alone likely is worth the price of the entire toolset you have purchased if combined with good money management.

Following the break of the pivot at level 5 going down, the wave count will reset because we no longer have higher highs and lows.

In the next pattern, we did not reset, so what we get is a uptrend inside another uptrend without a reset. On the wavecount tool, as we break the 7 level going higher, we will count higher. If we break the 4 level, we will reset.

When I set up the WaveCounts tool on my charts, I do so at two levels. I like to use the .1% filtering (similar to the filtering we discussed on the ZigZag Patterns Tool above). And, another on at the .2% level. This looks like this on my chart:

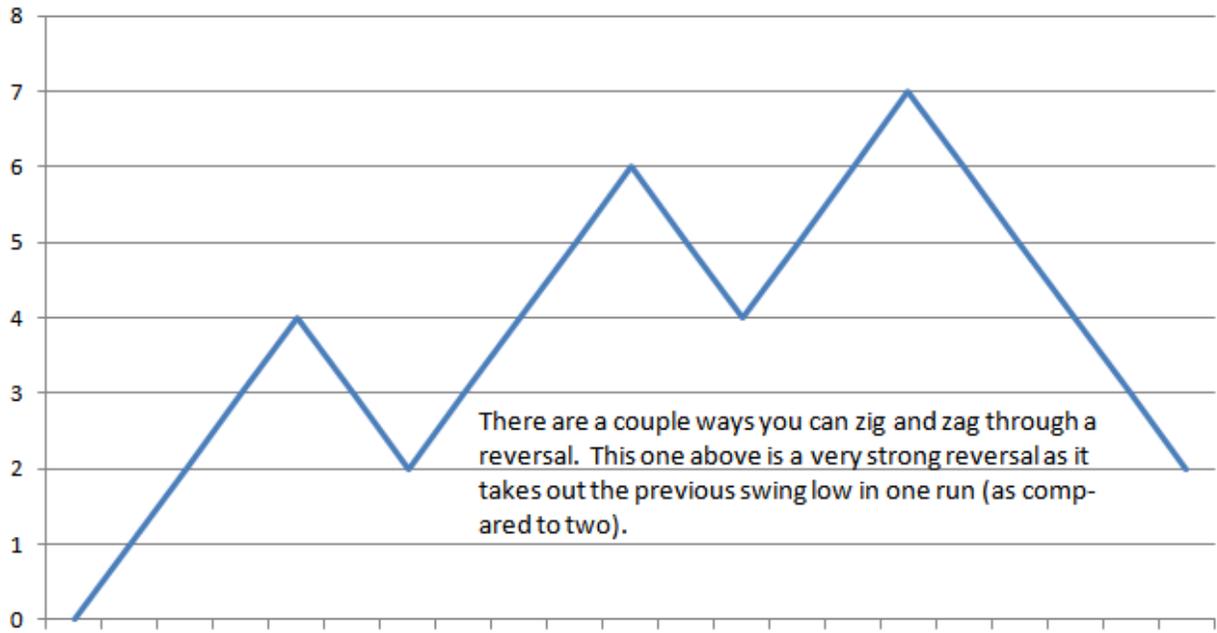


If we analyze the above chart, we can see the counts on the two plots on the bottom, The one on top is the plot at .1%. The corresponding waves on the chart are cyan (light blue) for this .1 level pattern). The one on the very bottom is the plot for .2% and the corresponding pattern on the chart is gold..

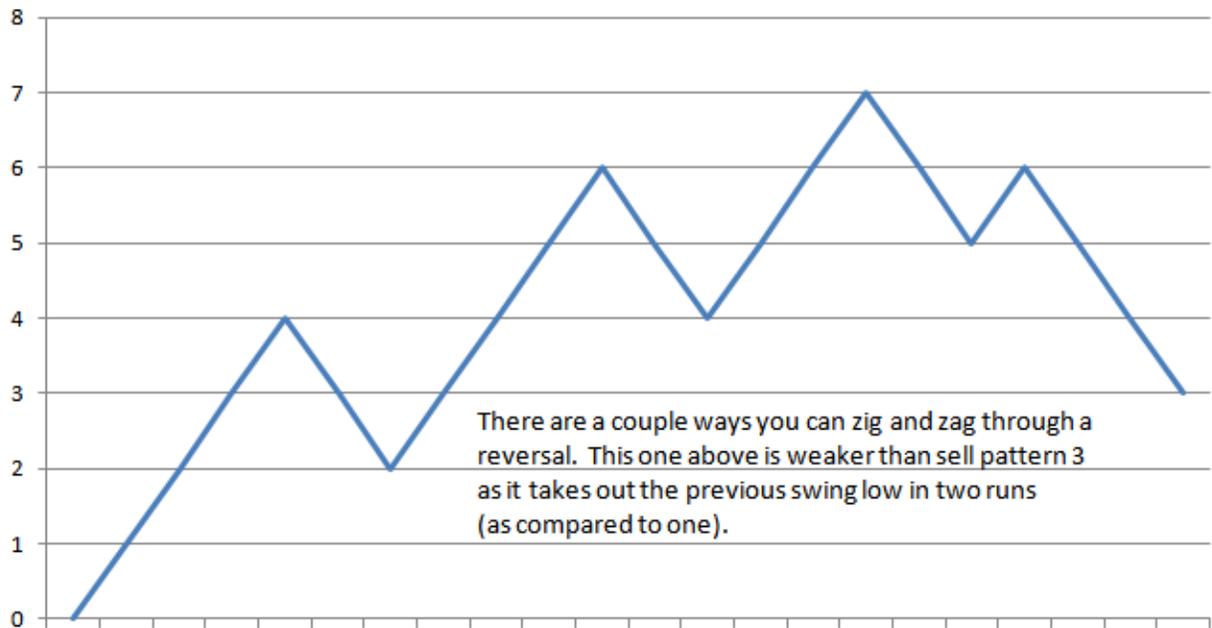
What do we see here? Well, first off, we see that the .1 was actually trending down while the large time frame was trending up (look at about 11:30). You can then see that the .2 plot had zigged and zagged downwards to a 3 count. just before the vertical cursor line. Now, we know from the distribution theory that there is a 65% chance we will break up to at least the previous pivot on the chart (gold). The .1 level was on a 7 count down. So this was at the 94% probability of breaking higher to the same point as the gold.

If you got the theory down on the ZigZag Patterns, you would also know that the last leg down on the .1 level had a  $CD > AB$ , so you knew there also it was over sold. Further, the last retracement was close to 100% which suggested we were not trending. This is just one way you could really get a handle on this situation in this chart.

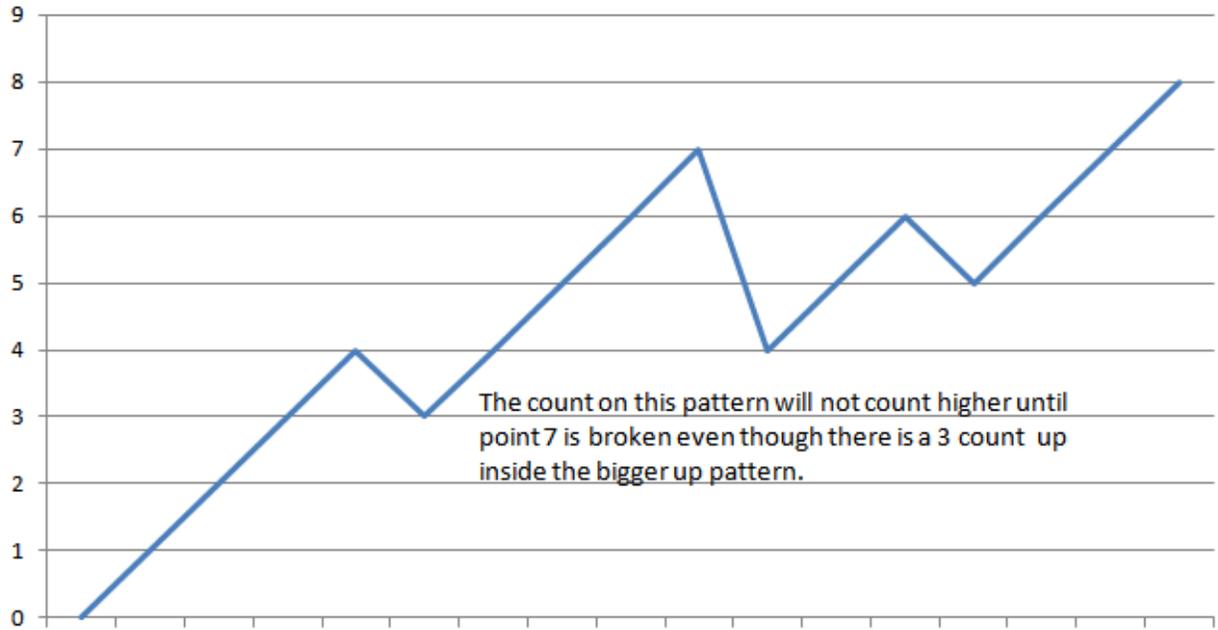
Let's look at some more patterns:



This chart above (sell pattern 3) is fairly self explanatory, and we have discussed this pattern elsewhere, but I post it here so you can think about its implications in the current context of WaveCounts.



Here is another for you to think about. I will leave you with these graphs and let you ponder the implications as it pertains to the wave count probabilities:



I will post more examples of this theory for you in the advanced topics section.

## **Nindicator Order Flow and Position Management Tools**

First off, as a primer on this topic, you can read this article on this particular set of tools: <http://markettradersjournal.com/nindicator-order-flow-and-position-management-tools/>. More often than not, my final trading decision in the top down analysis of going from context to an actual trade occurs in conjunction with this tool set. For this reason, I have saved it till last. Of course you might have already noticed this as I have mentioned it a number of times and it is often the screen you will see in videos I do of trading examples.

Many of the topics in this manual are necessarily limited because there is no logical stopping point in the discussion of them. Often I write what I believe is extensive coverage only to realize later that there were things I have missed. For this reason, I have created a section at the end of this manual covering more advanced topics. I have numbered them so you can know which ones you might have missed for times when the manual may get expanded.

Order Flow and Position Management tools cover 3 specific areas of trading most people don't even realize exist to a large extent. One, it analyzes the flow of actual orders being filled. Second, it analyzes standing orders on the order book and sees what kind of pressure they are under as a result of order changes and the buy sell pressure created by actual orders. The third tool acts in two capacities it can analyze the flow of orders or volume with respect to corresponding price movement. A very advanced technique. Next it analyzes order flow following the entry into a position. If you use the NT Chart trader for example, it will do this automatically and will let you know how current order flow or volume changes on their own, or with respect to price movement are impacting your current position.

The above 3 categories of analysis finish the final link in trading that goes from context (Nindicator Comprehensive Tools), to Pattern (Nindicator Pattern Tools), to order flow and position management (Nindicator Order Flow and Position Management Tools). The structure of these levels of analysis lend themselves to proper "top down" analysis, trade entry (with some reasonable expectation of probabilities and then finally, management of the trade. I know of no other package of trading tools at the retail (or even professional) level that brings all this together for you into one Total Package.

## Nindicator Time and Sales Summarizer

Let's start with the Time and Sales Summarizer (TSS) as this is the simplest of the three tools in this package. The Time and Sales Summarizer is really just what the name suggests, but it has a couple of things on it that may also not be so obvious. This tool simply summarizes the data in the time and sales functionality on your NT. Time and sales represents *actual trades* that have gone off; market orders in other words. Every trade is represented that is cleared through the system. For this reason it gives an correct indication and/or measure of actual buying and selling pressure. This, of course is important. Time and sales is parsed out at price, so it is literally a *volume at price analysis* tool. The difference between time and sales and a tool like the Value Profile Tool is the time and sales is showing you current time at price only; it is more immediate.

The problem with normal time and sales display systems on trading packages is, it is just a bunch of numbers going down the screen so fast you cannot see them. On top of this, the data is not organized so you can see patterns in the data. The TSS deals with this in a couple ways...

One, it enables you to filter out small trades that may be inconsequential. For example, on the Russell (TF) futures, I set it to ignore all trades below a certain size of 6 contracts. If the volume at a certain tick does not meet the level I set, it does not represent it. Volume moves markets, so eliminating data that is not moving, helps to paint a better picture in most cases. You can, of course, set this filter to zero in quieter markets if you like.

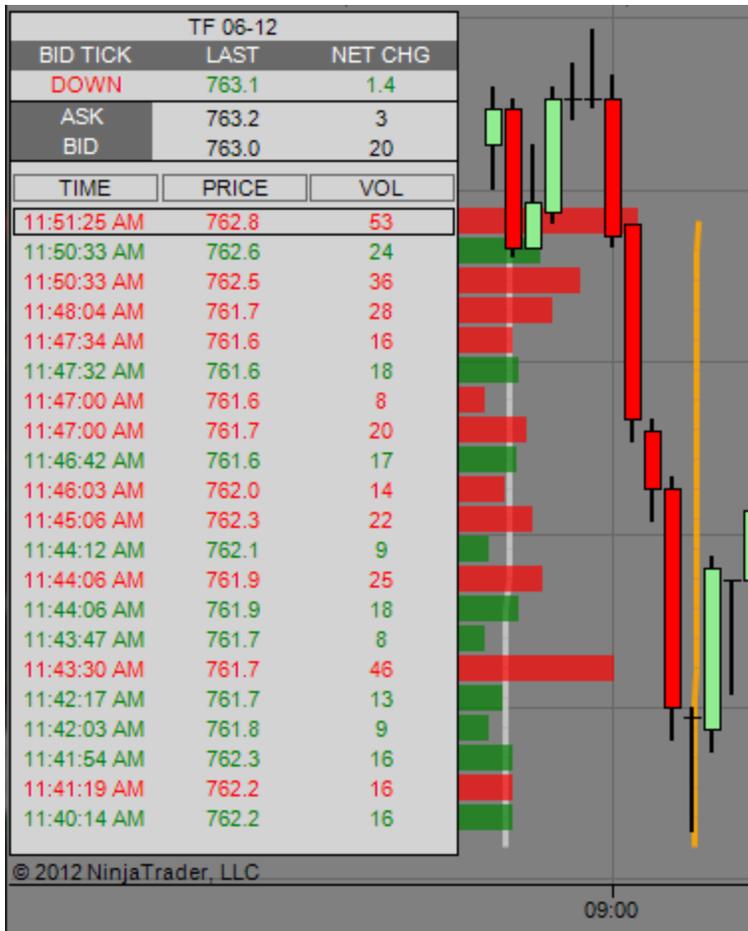
The next thing the TSS does is it provides a statistical analysis of volume and plots 2 lines that contextualize the data you are seeing. This is important because breakouts and change in trend often occur with a spike in volume that tires the players on the other side and makes it difficult for them to function. I have talked about this in other ways elsewhere, but this is an important concept. First you will get, following for example, a selloff, short covering as the market reverses higher. This fuels a rally. at some point the shorts are all covered and if new buying does not come in at this point, the market will head back south again. This all happens in waves, of course and is why the charts look the way they do. Alternating patterns of buying, long liquidation followed by either new shorts or continued buying. If new shorts enter, then this will continue till they start to cover. If the short covers are followed by new buying then it heads higher, repeating the cycle. The time and sales summarizer lets you know if unusual buying and selling is occurring at any one tick on your chart. As mentioned the two lines show you average and average plus a standard deviation multiple. I typically set this to 1 standard deviation above the mean which would cover about 2/3rds of all cases. This mans 2/3rds of all trades should come in below this line and volume should alternate around the grey line the rest of the time. Let's take a look (the tool on the left of the chart with volumes at prices and times):



You will note some of the lines in the histogram are green and some are red. The red ones are selling volume at price and time and the green ones are buying volume at price and time.

Do you see the grey and orange lines? These are the statistical levels described above. Now, there is not necessarily any magic here. But, when we start seeing spikes here, it will often tell us some new information has entered the market that is impacting valuation in some way. In other words, OTF of some sort may be entering the market, or possibly the initiation of HFT trading programs.

I put another indication on this tool that notifies you of block trading activity. I set it for the Russell at a level of 20. So when there are more than 20 contracts at a tick (time and price) in the Russell, it draws a box around that tick:



Notice the box drawn around the top entry?

How about now?



Do you think something might be going on? If I were to eyeball it, I'd say we have 3+ standard deviations above the mean (grey line + the distance between the grey and orange line times 3). Of course you can see the corresponding negative ratio on the depth tool we will cover next. This does not guarantee we will go down. After all grandma might have unloaded \$19,000,000 worth of contracts so she could go to Vegas for all we know, but there is a chance something is up. We can see it, most other traders do not have a clue. We may see a pattern like above repetitively. This would be more independently actionable of course. So, we can see if it is sequentially occurring or if it is an isolated event. Let's take a look at the settings:

<b>Parameters</b>	
AlertsOn	False
BlockAlertSize	20
Length	100
NetOffset	0
SizeFilter	6
StdDevMult	1
<b>Visuals</b>	
ShowBlockAlerts	True
ShowTime	True
<b>Data</b>	
Calculate on bar close	False
Input series	TF 06-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	False
Label	NindicatorTimeSalesSummariz
Panel	Same as input series
Price marker(s)	True
Scale justification	Right

There is an alert on this tool. I may have mentioned at times the alerts drive me crazy so I do not use them, but it is there in case you might like to try it. NT also has some pretty advanced functionality for making your own alerts. This is not part of our Nindicators. So feel free to make more advanced ones if you like.

The BlockAlertSize we already covered. I set this to 20 for the Russell and 80 for the S&Ps at this time.

Length is how many entries it looks back for the computation. You will note when you first turn this tool on, or change settings, it will be a bit funky until it gets enough data for this lookback. I default to 100 as it covers a sufficiently broad range of data for reliable readings. I do not suggest going less than 30.

I want you to note something else. At various times of the day the market changes its mood. For example, at the open each day the Stock Exchanges open. Suddenly all the stock traders who do not have access to trading in the off hours like we do, suddenly enter the market. You have to be cautious of volume readings at these times. This is particularly true if you are comparing the current reading with past data in any way as may be the case with divergences or averages etc.

The NetOffset is in case there is a discrepancy and you want to correct the change in net of the market from the previous day's close. I suggest leaving it at 0, but in some cases when there are holidays, this reading will get messed up. At these times you can use this to correct it. Be sure to change it back the next day however. I have never mentioned this, but many traders trade the net (change from yesterday's close). They buy green and sell red. So be aware of crossings of this value as you trade. Another is crossings of the opening price for today.

Size Filter, as I mentioned, I use 6 for the TF. For the ES, I might use 80, but you may want to play with it to find your favorite setting for the block.

The Standard deviation multiple (StDevMult) is set to 1. Did you notice I was able to identify a 3 sigma event from the above (where I said, " we have 3+ standard deviations above the mean")? To do this I simply looked at the difference between grey and red lines and added it about 3 times. Of course I could have set it to 3 if I had wanted to, but 1 lets me get a view of other readings at a glance.

The remaining items on the settings are more of less intuitive, so I will leave you to them.

You will note some other functionality I put on the tool at the top; Bid Tick, Last and Net Change. These are self explanatory. Bid tick is the most recent trend of the trading.

One other thing on this tool. The scaling of the average and Standard Deviation lines are floating. So, if you start to get big or small values it will rescale. This is done so it does not overtake the chart. Just be aware the scaling is floating. I think you will get the gist of what I mean as you spend most time with the tool.

You will not want to change your settings too often on the tools in this set. If you do go into the parameters and change them, and there are other Nindicators on the chart, it will recompute all of them. This is the way NinjaTrader works. So changing settings is best done while you are not using the tool.

Sometimes the market will move to a point where it will hit a large number of stops. In cases like these you will see a ton of selling after a protracted move. This is most often long liquidation and can often be the end of a move (remember our discussion above on this order flow cycling?)

Do you think the market went up or down in the time I wrote this? You might have noted in the above screenshot, that there was an overall short bias up to around 11:15 or so, and then we went into consolidation. Other Nindicators headed south during this time as well, but things are fairly quiet with a gentle southerly drift overall. Thank you grandma:



## **Nindicator Depth Analyzer**

Next we have the Nindicator DepthAnalyzer tool (DA). This is probably one of my favorite Nindicators. It tells us a lot in a very simple way, so do not discount its power and relatively short description. One way I like to use this tool is as a trend indicator. When this tool starts persisting on the ratio reading it is a great trend tool and it is totally responsive to what the market is doing on an immediate basis. This is true because, simply put, the depth analyzer measures the rate at which the time and sales data is eating up the standing orders on the book.

At each price, above and below the last trade, there are orders on the order book. On the Russell, this might be an average of 25 to 50 contracts or so during the day. When the market starts to move, it goes through these orders and leaves the order book short of orders. This is why I use the term eat. The orders get cleared off the book and this induces compression of the order book. When the order book gets compressed, it means one side is losing the battle in a strong way. I have coded this tool to represent that compression for you so you can see it with a glance on the ratio indication at the bottom of the tool.

Of course you could get more complicated in the description because new orders are constantly being placed on the book and this impacts the readings too. This is an aspect you could give some thought to; how the patterning on the DA represents different kinds of situations. For our purposes here, I will keep the discussion to the most basic use of the tool; compression.

Over the period that I wrote the above example for the TSS, the entire time the Ratio on the DA stayed red. It just kept persisting. This is no guarantee it will continue of course, but it tells us there is a fairly relentless pursuit of lower pricing. Over time you will gain an intuitive understanding of this as you likely make it one of your main Nindicators. When you can see the expansion and compression of the order book at key support and resistance or other areas or set-ups, it becomes even more powerful. You will note the orange Alert Lines on there. These are intended to show you extreme readings of compression. Let's take a look at the settings:

<b>Parameters</b>	
AlertLinesOn	<b>True</b>
AlertsOn	<b>False</b>
AlertThreshold	<b>1.73</b>
Depth	<b>8</b>
FilterLength	<b>50</b>
FilterSmoothMultiple	<b>1</b>
FilterStdDevMultiple	<b>1</b>
NetOffset	<b>0</b>
Smooth	<b>0</b>
<b>Visuals</b>	
AlertLinesColor	 <b>DarkOrange</b>
AlertLinesStyle	<b>Dash</b>
AlertLinesWidth	<b>1</b>
<b>Data</b>	
Calculate on bar close	<b>False</b>
Input series	<b>TF 12-12 (1 Min)</b>
Maximum bars look back	<b>TwoHundredFiftySix</b>
<b>Visual</b>	
Auto scale	<b>True</b>
Displacement	<b>0</b>
Display in Data Box	<b>False</b>
Label	<b>NindicatorDepthAnalyzer</b>
Panel	<b>Same as input series</b>
Price marker(s)	<b>True</b>
Scale justification	<b>Right</b>

The top setting is the orange alert lines. I always leave these on. I have them set to 1.73 (AlertThreshold), which is fairly extreme compression. 1.333 is good, 1.5 is good. Play with it if you like.

I have put an alert on this tool as well. It triggers when the tool exceeds the threshold. Again, it drives me crazy so I do not use it. Then when you are placing orders it makes all kinds of noise. I like peace and quiet as I trade, so use it if you like or write your own as I have discussed elsewhere.

The depth is set to 8. This is 8 ticks each side of the current price. I like this setting for the Russell. For the ES, I might use 6.

There is a lot of deception that occurs on the order book. High Frequency trading firms will place orders not with the intent of being filled, but with the intent of skewing the order book. So, I have designed a filter to help foil their deceptions. This is set to a length of the last 50 changes. I always use this as it is a sufficient length for smoothing.

The smoothing multiple is set to 1. This controls the size of standing orders that will be considered for filtering. The filter Standard Deviation Multiple is also set to 1. This controls how selective the filter is.

I usually use these 1 and 1 levels on the above though I certainly encourage you to test other settings..

The Net offset works the same as in the Time and Sales tool.

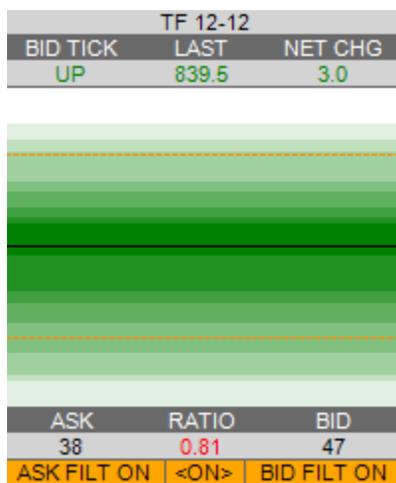
Smooth is set to 0. This functionality slows the changing of the ratio to make it easier to read persistency in trends. I usually am very attentive to my Nindicators when trading, so I feel them intuitively. You may like this function. I put it there for your flexibility. Play with it and see what you like. I would start with about 20. That would be a 20 period smoothing of the DA compression.

I probably won't take a trade unless the Depth Analyzer is going with me. These are higher probability trades in my experience.

If you want to move the DA about your chart, you can do so as follows: First hover your mouse along the band at the top of the tool. You will see it turn orange. Simply grab it there with your mouse and move it to the location in your chart that you would like. Sometimes this tool gets buried under price data on the chart, so it is nice to be able to move it.

Often times you will see a market in a retracement of trend like in a Pattern 1 or 2 set up and through the entire retracement the order book will be under compression going against the retracement. If the trend is down, this is a strong sell signal because it is telling you the bears are in control as it goes higher on that leg of the pattern. You can combine this kind of analysis with the volume tools as well. Often, the DA, volume tools and TSS are a package that are all used together in analysis. Of course we have the Position Tracker which is certainly part of this that we will cover in a moment. Together these give a more-or-less complete picture of the volume scenario.

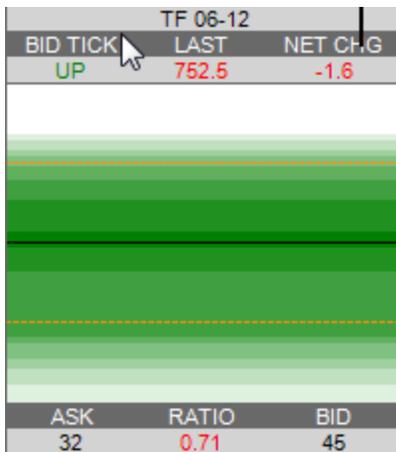
You will note some other functionality I put on the tool at the top; Bid Tick, Last and Net Change. These are self explanatory.



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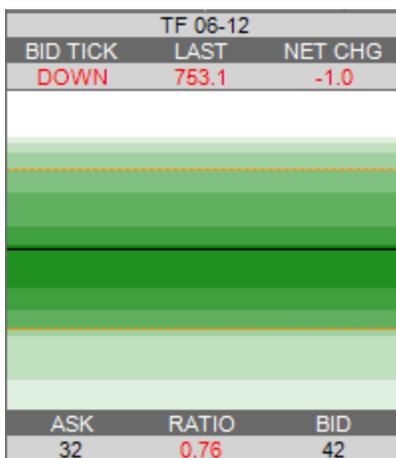
On the bottom, you will see the filter buttons. You can turn these on and off here on either side. Bid / Ask or both. I usually just leave the filtering on as there is little filtration if there is not skewing.





Do you see the big order on the bid side? If you removed this order, or made it average, then it would probably balance the book, meaning there really is no bias.

Here is another example:



For illustration purposes. I took these at night and you will notice the Bid Ask numbers are much smaller than the earlier shot.

So, just be aware that the readings can be made to look false. In time you will become a pro at discerning what is going on with the order book and the depth on each of its sides.

Another thing that happens on the Depth Analyzer is the readings can sometimes be the opposite. In other words, you will get a strong reading on the Ratio in red when the market is really headed up (or vice-versa for a down market scenario). I believe this occurs many times when traders are "chasing." My observation is that this can often occur when the market is running and it left a lot of traders behind. But, they don't want to go in at the market because the risk is too high, so they will place limit orders hoping the market will pick them up and take them with the trend. Watch for this next time the market makes a sudden move. Either way, when you see skewing on this tool there is a market disturbance and market disturbance means opportunity (as well as both risk and reward potential) may be very high. I am just telling you this

so you realize, it may not always show in the expected direction depending on the circumstances. In time you will see the various scenarios and will get a good feel for the tool. The nice thing about the DA, is it is instantaneously summarizing data that is more than most people's brains can really handle processing on their own. Especially if you still need a little additionally processing for trading and managing stress during the times you have trades on.

## Nindicator Position Tracker

The next tool in the Order Flow and Position Management Tools is the Nindicator Position Tracker (PT). This versatile tool is mainly for the management of current positions, however is has some very powerful capabilities as a volume analysis tool as well that we will cover shortly.

You will note, of the three Nindicators in this tool set, we had one that analyzes order flow, which is the standing orders, one that analyzes actual filled orders and another that analyzes the trade itself. These three bases, or sources of information are a complete system of analysis in and of themselves as they approach the market and the trading of it by its very structure. The Position Tracker provides much more than just an analysis of your current position however, and can be used as a powerful volume analysis tool as I will show you shortly. First let's cover the position tracking functionality.



There are three modes for the PT. Automatic, Monitor and Manual. In automatic mode it will simply work as a tracker. The three modes can be selected by clicking the A, MO or MA buttons on the tool. When the PT tracks, it will simply monitor the volume accumulation from the point you enter the trade. It will display that accumulation as net volume since entry on the histogram. The green area is for positive volume and the red for negative. The basic idea here is you do not want to see opposing volume accumulation following an entry into a trade; you want to see it move with price. This is true because it is a likely pre-cursor to a failed trade. So it alerts you to this; something other traders cannot see.

You will note three zones in the green and three zones in the red. The volume levels for each of these can be set on the settings which we will cover in a bit. You will want to set these a bit differently for different markets. I have this one set to 200, 400 and 600 cumulative units of net volume for each zone (in the TF, Russell futures). You can see above we are near the center of the second red zone which is close to -300. You will note on the top cell of the PT, the number -279. This cell summarizes this data for you. In the next cell down, you can see -3.2. This is the amount the market has moved since you entered the position. The next cell down from there is the entry price and the next cell down from there is the position size. The position size is now 0 because I did not actually take a trade right now (a function we will cover shortly). The functionality of these cells we just covered in the various modes I am about to show you is the same however, so if you have a handle on those, you have a good handle on the most basic functioning of the tool.

The second mode is the Monitor mode (MO). The tool is currently (above image) has MO selected. You will see the button below those says MAN TRK. This tells us we are currently in manual track mode (in other words, without a position). In this mode, it will track from the point in the market I activated it at without a position, but, if I put a position on, it will begin tracking from that point. I will put on a trade now so you can see it:

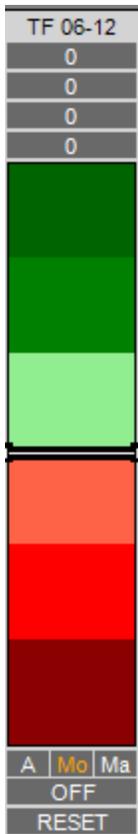


The tracker is showing me I am long 5 contracts from 760.6. I am down 3 ticks (-0.3) of price and the market has accumulated 22 units of volume against me (it is negative and I am long).

As the position goes in my favor, it begins to show me this on the chart trader and Position tracker together. Note the orange line from the Chart Trader is going over the top of the PT. If you see this on your PT, simply know this is not part of the PT.



If I close out the position, it will reset:



The next mode is the Manual mode (MA). In this mode, I can use it independently from trading and it will not reset or change if trading commences. In this mode, if I did put on a trade however and wanted it to track, I could simply click reset and it would track from there.

That covers the modes. I want to show you another use of the PT before we move on to the settings. Markets have an average net volume / price movement relationship that will at various times be very consistent. For example. In the TF Russell futures, a 1 point move corresponds typically to 100 net contracts of volume (bid\_ask). You can determine this by watching the market you trade or using the PT to take a few tests and see the relationship. In time, you will know, because it is very powerful knowing this. In the above image of the tracker with the position on it, we are seeing 20 ticks of net volume with a 7 tick move in price. Would you say this is strength or weakness? If you answered weak, you would be correct. because I would have wanted to see a 70 net ticks positive on this position at that time in order to be normal. This is why I exited the trade. This is what happened following:



Can you see how the PT could be used to analyze the retracement and interpret the bulls were weak at the 761 area? Can you see this could have been converted into an actionable with-trend short trade? Practice this concept. Always know if volume is leading and/or lagging price movement from various points on your chart. Practice this and it will treat you well based on my experience. Also be aware that on some days this rule may vary a bit. With a bit of practice over a number of days, you will get a handle on it.

Another way you can use the PT for analysis similar to the above example is to watch it on an ongoing basis. By doing this, you will gain an intuitive understanding of where the strength and weakness in a market is. I will leave you with these ideas for your development. For these reasons, I use the PT extensively and on an ongoing basis in my trading. I cannot stress this enough for you.

The PT is a time independent tool (which is also the case with the depth analyzer). This means it will function in the same manner on any time frame chart. The PT is in a fixed location on the chart and cannot be moved. It will rescale to your chart. Let's look at some settings:

Parameters	
AlertsOn	False
Input Type	VOLUME
ResetOnAddedPosition	False
ReverseBiasWhenAutoTrack	False
Selected account	Sim101
TrackerMode	MANUAL
TrackerThreshold1	200
TrackerThreshold2	400
TrackerThresholdMax	600
TrackerType	VOLASK_VOLBID
Data	
Calculate on bar close	False
Input series	TF 12-12 (1 Min)
Maximum bars look back	TwoHundredFiftySix
Visual	
Auto scale	True
Displacement	0
Display in Data Box	False
Label	NindicatorPositionTracker
Panel	Same as input series
Price marker(s)	True
Scale justification	Right

I had coded an alert in the first parameter. I think you know my thoughts on alerts. Try it. If you like it use it or, use NT's alert system to make one you like.

The second cell in the parameters, if true, will reset the tracker in Auto mode if you add to your position. I typically leave this off.

You can invert the tracking if you like in the next one. I like it the way I have shown you and strongly recommend using it in the default manner. But play with this if you feel inclined.

The tracker can be assigned to a specific account in the next cell. This is in case you have a multi account situation with your NinjaTrader.

The levels of the thresholds, I already discussed. Set these for your particular market. The above, I use for the Russell. It is not critical because you get used to the settings you make, but too small will max out quickly. explore and find the settings that work for the market you are trading. For the ES, I would start by multiplying the above by a factor of 10.

In the tracker type setting, you can select which type of volume reading you are using. I have always used the tool in the mode in the above screenshot. This mode is taking the volume at the Bid and Ask. You can also set it to UPTICKS\_DOWNTICKS. And, for each of the choices of UPTICKS\_DOWNTICKS or VOLASK\_VOLBID, you can select if the measure is trades or total volume etc.. Feel free to try each and see which you prefer. I did this for your flexibility and exploration.

If you find various techniques as you use the various Nindicator tools, by all means let me know what you find. That is the great thing about Nindicators. Each user uses Nindicators in a unique

way, so we can share ideas and advance our knowledge collectively. When you have those, "wow, I didn't know you could do that moments", feel free to share your findings. It also helps me to improve the tools for you because I cannot always factor in or be aware of all the possibly variations a tool will be used under. Each user trades differently, has a different creative way of seeing things and sees different things at different places on the chart, so sharing benefits everyone and should not compete with your fills. Sometimes, I can also help you to advance your ideas, so feel free to tell me about them. If you do not wish for your idea to be shared with others, simply tell me, and I will keep it between us.

The rest of this tool's settings are self explanatory I think or will be discovered with your use and practice.

## **Nindicator Daily Targets**

The Daily Targets Tool in a way is worth the entire value of what you paid for your Nindicators. The reason I say this is because it answers the question. At what point do traders begin to agree the range for the day is too much. Of course many factors come together to answer this question, but the basic logic goes like this, "if the market usually goes up 10 points and we are up 10 right now, do I still want to be long?" The converse is true for the downside. So, people who are in the market every day, this particular group, is inclined to be thinking this way at the relevant points.

Of course there is always the issue of OTF who may not care (for more on OTF search the blog) if we are up 10 points so far today. This group of traders are usually active in the day time frame when it is perceived that the current pricing is not at value. This motivates them to enter and trade accordingly which, since they are bigger and well capitalized, moves the market into new ranges and trading zones.

Another factor that can impact what range might be appropriate on a given day is whether or not the previous day's range was large or small. Often following a large range day, there is just not the motive to continue pushing higher. And, in this logic is a key point about risk and reward: If we have gone higher by a more than normal amount, then bears are afraid to sell (risk of entering against the trend) and bulls are afraid to continue staying long (risk of losing gains). This often translates into consolidation. Then the market may cluster in a range and daily targets may not be hit. Often, days following consolidation, the market may find motive to seek new ground and, in so doing create a range expansion. These days may exceed expected ranges. Of course this is a rule of thumb. As a result, in the computing of the Daily Ranges, I do not try to compensate for this alternation of range. You will want to keep this in the back of your mind as you use the tool. This will also be a way you intuitively keep the pulse of the market in your mind. So, in this way, the Daily Target becomes a training (or mind-set development) tool.

All that being said, the daily range has a couple modes; One to try to predict moves based on overnight price action where significant ranges occur over night. Another is where ranges over night are more normal. For this reason, there will be a couple pairs of lines on your chart for this tool. On the days that the second pair of lines is active, they will turn yellow. This occurs on days where the overnight range is already too large. The line turns back to grey the rest of the time. Therefore, if you have yellow lines, those are the ones to use. If not, then use the red ones.

The red lines are the normal targets. At the time of this writing, a yellow line has a 94% chance of being hit based on historical records. A red line (when the other line is not yellow) has a 77% chance of being hit. To reiterate what I said earlier, if the range is expanded on the previous day, we may not be as likely to hit the target, but this is beyond the statistic. I just want you to know, this, so you can use the tool more intuitively later and after you get a handle on its use.

When I use daily targets I, of course like when the market goes right to the target in the morning. Often if this happens early in the day, it will slow things down quite a bit if it is not too

explosive of a move. Sometimes however, the market will ease its way there hitting it later in the day. I have not done time of day studies on this research (yet), but it is something you might do well to be aware of. That reduces to the following question: "What kind of day is it when the market cannot hit the daily target in the first couple hours?" and... "What kind of day is it when the market can hit the daily target early on?"

Another important form of analysis I do with the targets is to note more than one market. Was the target hit in the ES and the TF futures both? If so, there is more consensus that we have hit our range limit for the day. In this case and on most market conditions, I would not be interested in trading much in the direction or the range expansion i.e. continuation is less likely.

Sometimes targets in both markets are hit at more-or-less the same time. Other times the target is hit in the TF, but the ES is a ways off yet. I may in this case trade the TF still as it follows the ES higher (as I usually trade the TF). So, keep in mind intermarket relationships as it relates to the Daily Target Tool.

Let's take a look at the settings:

<b>Parameters</b>	
ADJMult	0.75
AlertTime	630
CloseTolerance	3
GapMult	0.5
MinGap	7
OffsetNoGap	1
SessionEndTime	1315
<b>Visuals</b>	
MinGap Color	 Yellow
<b>Data</b>	
Calculate on bar close	True
Input series	TF 06-12 (3 Min)
Maximum bars look back	TwoHundredFiftySix
<b>Visual</b>	
Auto scale	True
Displacement	0
Display in Data Box	True
Label	NindicatorDailyTargets
Panel	Same as input series
Price marker(s)	True
Scale justification	Right
<b>Plots</b>	
BearTarg1	 Line; Solid; 1px
BearTarg2	 Line; Solid; 1px
BullTarg1	 Line; Solid; 1px
BullTarg2	 Line; Solid; 1px

The AdjMult setting sets the percentage of the range it will set the target at. I have set this to .75. The line that comes from this setting, as mentioned above operates at the 77% probability level. So, that means taking 75% of the range happens 77% of the time.

Alert time is the time at which it computes. I have this set to the open my time (Pacific). You may need to change this setting for your time zone.

CloseTolerance is an adjustment for when the market opens very close to the line. I have this set to 3. So, the rule here says, if we open within less than 3 points of the red line, then use the yellow.

GapMult sets the percentage of range it will set the target at on days where there is an overnight gap that is larger than MinGap points.

MinGap is set to a default of 6 points which I use for the Russell. I have found a setting of 7 points works a bit better for the S&P ES futures.

The OffsetNoGap setting will adjust in cases where the open of the day is too close to the target. The default is set to one point. In this case it will shift to a gap setting. I recommend not playing with the settings as I have done statistical testing to make this Nindicator optimal for your use. If future tests show different settings, then I will post it.

The session end time tells the code when to stop printing at the end of the day session. You may need to set this for the close at your location i.e. 1615 for Eastern time zone

On the CloseTolerance, you can also set this to 0. I have this set to a default of 0. This setting is in some sense for future research. What this setting does, as already mentioned, is it effectively makes the normal bands tighter in the computing to force it into a gap mode. The reason for this is we know the gap percentages are higher (at 94% vs. 77% as of this writing) so there is an option to try to increase this edge in various cases.

I recommend that aside from the time settings for your area, you should leave this Nindicator on its default settings with exception of the CloseTolerance which you can do 0 or 3.

The Daily Targets is really a whole theory about the market that we have alluded to in the above conversation. The reason it is such a special tool is it contextualizes the broader time frame on a day time scale that helps keep an intraday trader in perspective. This helps to keep us as traders from getting too myopic and being aware of the bigger picture, an issue that plagues many short term traders. This tool could very well be a standalone system if combined with an entry technique. I have talked about this subject elsewhere on the blog. So, be sure to be well versed in all the material on the MarketTradersJournal.com blog as a supplement to this manual.

### **Blog Articles:**

If you have not read all the articles on the blog at MarketTradersJournal, I recommend you do so. Those articles were largely written for this manual, but I broke them out to help with organization. Refer to this link: <http://markettradersjournal.com/category/trading-topics/>

Also, required reading on key points about being a trader here:  
<http://markettradersjournal.com/keys-to-successful-trading/>

Other sections of the blog are also instructive for the thinking that is behind them such as in The Coming Week section and the Volume Profiling section.

\* Note: Many of the examples in this manual were simply written in real time. There may seem like a bias to the side of success. I want to urge caution as you begin to use these tools. I have been watching these tools and developing them over a period that has been the most intense period of study in my life and over a period of about 6 months. Of course that adds to what I already knew before that. In this time I have learned much that I have shared with you here. Be aware that in order to achieve such a level of awareness will likely take time. Ease into it slowly and let success prove itself before you decide to get aggressive.

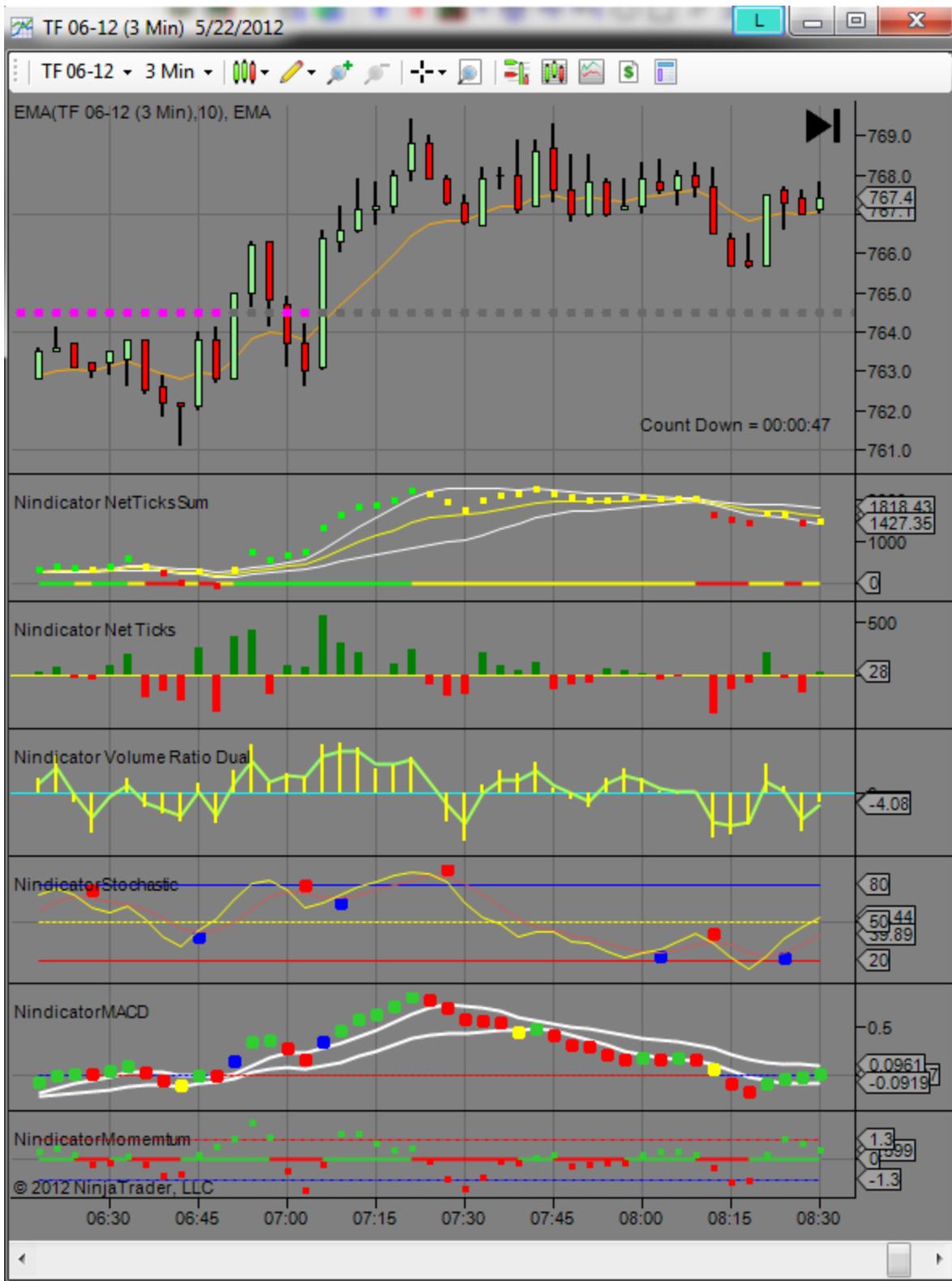
## Special Examples and Discussions:

At various times I see different patterns on the tools I want to discuss with you. They are posted below in no particular order:

1) Failure to take out new high following a run. When we make a zigzag that is not followed by a new high, that high becomes very suspect. It tells you the move may be running out of steam. This is true because the side in control is unable to overcome the orders of the group who is opposing them.



In the above screenshot, I was expecting the market to go to the daily target. Today was a day following a large range expansion, so I knew the probabilities of hitting the daily target could be less than usual (77%). The first alert for you should have been the failure to take out the new high. Even if it had taken it out by only one tick. But failure to take it out at all, was bearish. Then, we formed a range inside the range. Once we did this, we were in breakout mode. Breakout mode occurs any time we do not have higher highs and lows. When we came up to the P1 at 8:30 we knew we were down, so you should/would have been looking for a sell there. From here we would go over to the order flow and/or been analyzing the volume to see what was going on. Many times the volume will be in disagreement at a place like point C because patterns are often counter. Here is what the volume / oscillator screen looked like at this time:



Do you see the NetVolumeSum had broken out going south and that there may be divergences? Did you see the MACD was southerly also? Did you see that the Volume Ratio

and Net Volume were selling off into the rise in price over the last several bars? Did you see the momentum was dropping over the last 3 bars? Based on all these things, we could come up with simple a rule set: if there are 3 or more reasons I see to sell, then do it. Often with these Nindicators and the examples I have given in the manual, you can find 6, 7 or 8 reasons. Then it just becomes a matter of good trade placement followed by good trade management. These are the steps you master in order to be successful.

## Special Examples and Discussions (continued):

2) You could have also traded the above example as a breakout trade when the wedge formed. These kinds of breakouts I did not cover specifically in the manual, but this is a very valid way of trading the above formation. What you want to see when you do this is a down trend inside the wedge. Let's take a look:



You see the wedge, but do you also see the zigzag that forms a downtrend *if* it breaks lower? Let's look at the next bar:



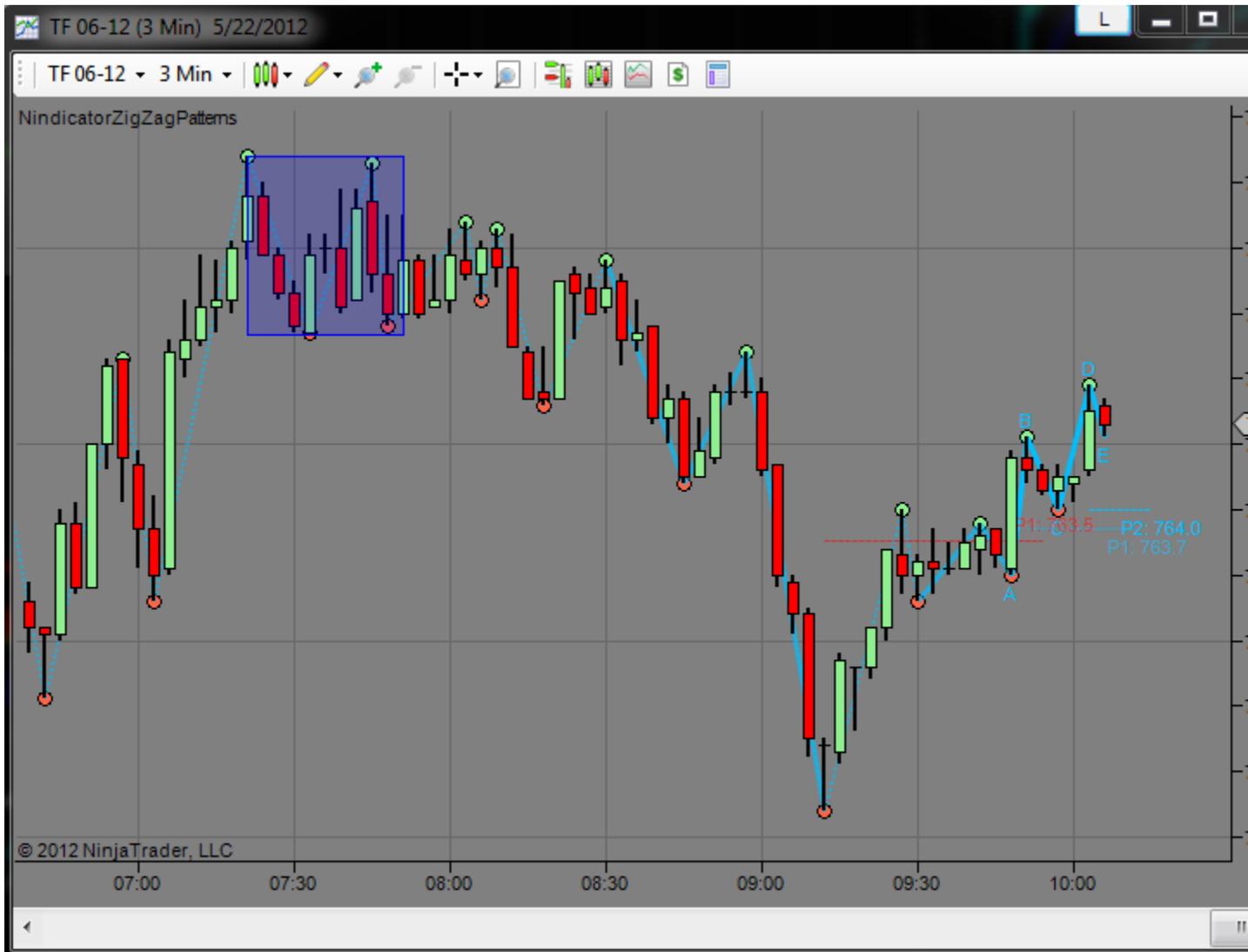
Do you see the zigzag now? Did you also see the high at 8:03 was lower than the previous double top at just after 7:45? I will draw the zigzag for you in blue:



Did you see I put my cursor so you could also see the beginning of the pattern was below that double top I mentioned. So, what you really had here was a down trend inside a downtrend that looked like a wedge to most traders (who had the sense to notice). Never forget this lesson.

### Special Examples and Discussions (continued):

3) I am going to show you another trick based on the above trading situation. When you have a failure, very often it is a double top or bottom. When you see a double top, I want you to mentally from a box around that price action. Like this:



When boxes like this form on your chart they are surprisingly often associated with movements in price to the 2.618 or 3.618 Fib multiple. Never forget this. This alone may be worth the price of the entire Nindicator package if applied correctly. Set up your Fib Extension tool to have these levels on them and then apply them to the box from the low to the high of the box. Like this:



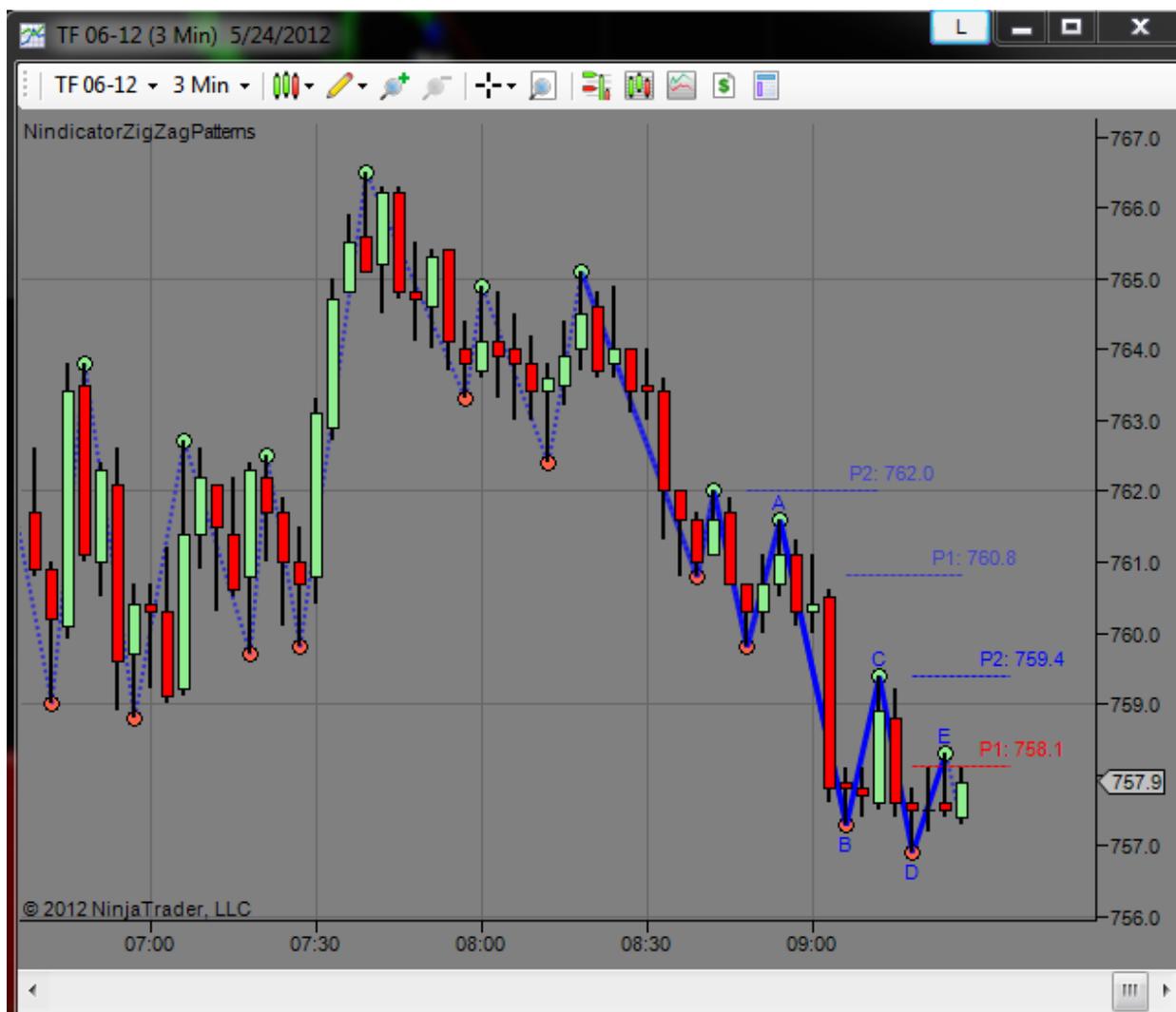
Do you see it went there to the tick? You will see this over and over again in your trading.

By the way, these are the levels I want you to have on your Fib extension tool. 38.2, 50 (optional), 61.8, 78.6, 127.2, 161.8, 261.8 and 361.8. These are the most usable levels in my experience.

Go over examples 1, 2 & 3 again and note all the opportunity that was here for you; especially if you combined all of them in an ongoing analysis. Of course, this 361.8% target sets up another trade or context for you. This kind of thing happens all day alternating between these kind of congestion areas to trends and trend failures etc.. Does this make trading easy? Absolutely not, but it certainly helps to stack things a bit in your favor and these tools help you to see it a bit more easily. Enough said on this for now :-)

### Special Examples and Discussions (continued):

4) Failures of retracements on the Pattern tool are a point in time when the tool is telling you to be alert to a change. I love this part of this tool because it shows you levels other traders do not see. Most traders are doing Fibonacci levels, but this is showing you equal % retracement. Let's take a look:



You can see the failure of the P1 level. At this point, we know the retracement is deeper than the previous swing. This of course is bullish, but it is our first indication. We are in a solid downtrend, but note we are also clustering and we are in the lunch time of day period (chart is Pacific time). We also have a P2, because the CD leg is short. This is bearish, so this puts us into a kind of breakout mode. On P2s, I like to sell the 382 of the whole wave or, wait for the break. In this case, it just missed the 382 retrace. failure to reach a minimum 382 retrace is bearish in this case.



So, I will go over to my order flow tools and see what is brewing there.



I am getting a break higher following some positive volume accumulation (70 contracts of volume for .2 points of movement) going to a new high (D point). At this point I have an ABCD going up.

I am suddenly seeing negative volume into my trade, so I decide to scalp out for + \$300. After all, this is a counter-trend trade with only a small ABCD formation going up against the bigger trend, so I need to be cautious. See the images below:





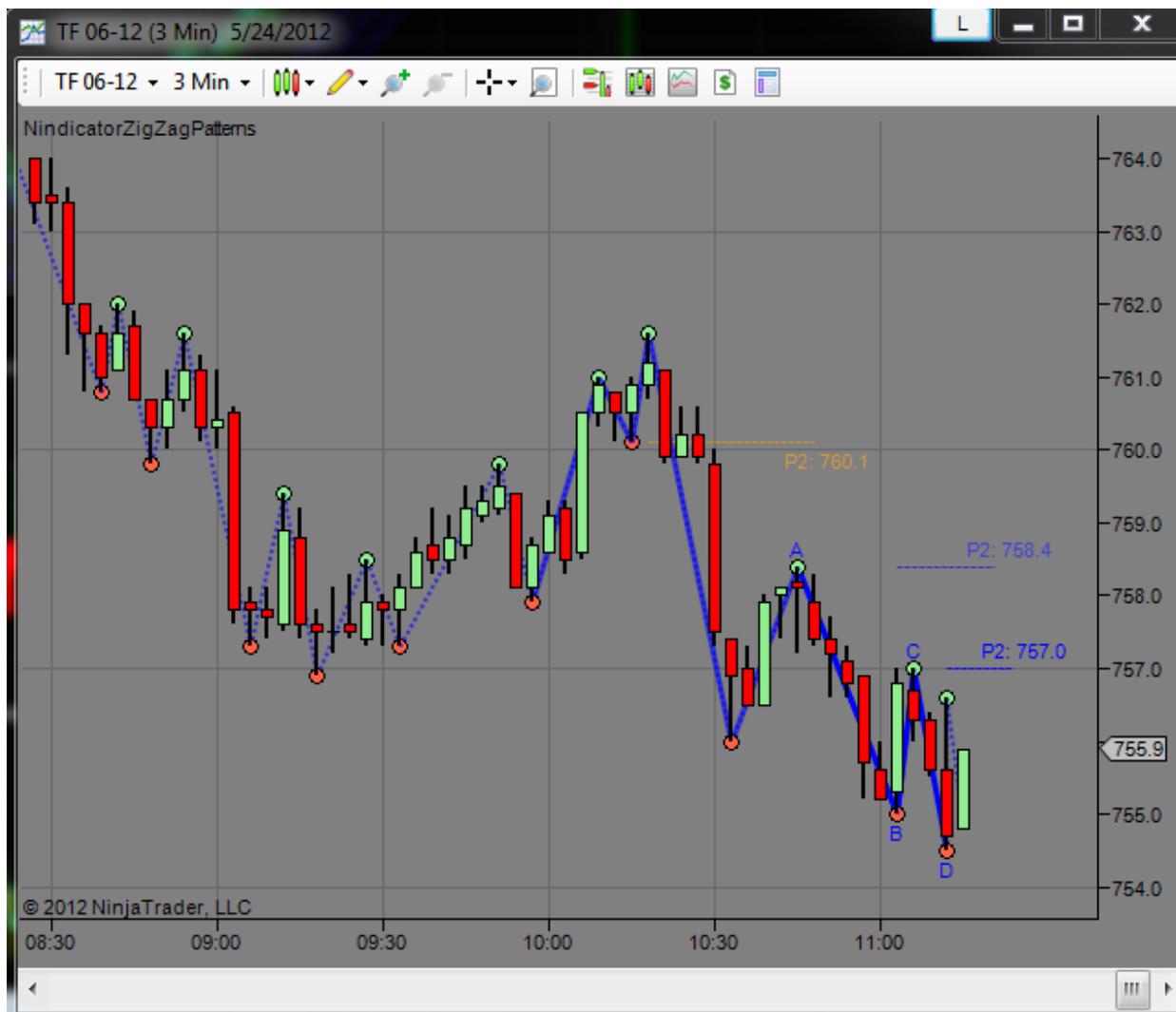
Now, I am seeing the ABCD went to the P2 level and is forming a box area (not to be confused with the Nindicator Box). Exiting near that past swing high was not a bad idea. I will now consider another long near the new P1 level at 757.80 following a break higher from there. A break above P2 will also be quite bullish. See below:



That's all for now....

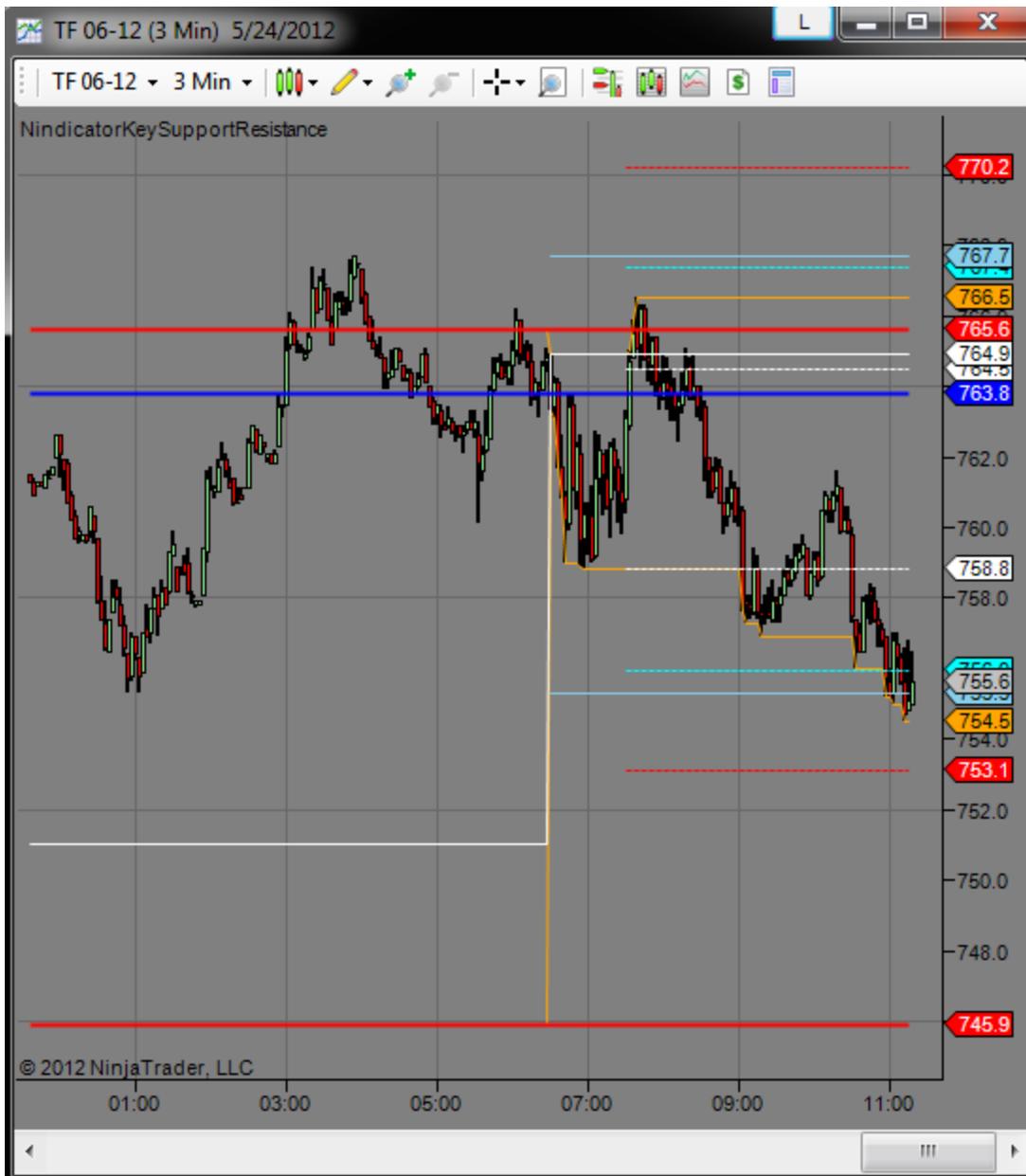
## Special Examples and Discussions (continued):

5) When we see a narrowing of the cycle width, it is an indication of losing strength in a trend.  
Let's take a look:



You should be noting the closeness of the B & D points. This does not mean the end of the move down necessarily, but that it is potentially losing strength. This is an important point because this can work two ways. One is you can have a narrow retracement because the market is on a mission lower (for this case). By this I mean there just aren't many buyers so the retracement is of short duration. On the other hand, it can be a sign the trend is weakening because it did not have time during the retracement to establish new shorts.

Cases like that above are points where you want to be evaluating what is going on. Actually, you should know this in advance because you would have your key support and resistance tool up on the screen. You would know we were also around the Globex low at this time as well and, additionally the 1.5X IBP multiple. Let's look:



Getting response, or reaction at these levels gives us additional evidence. We also should be very aware of the Daily target level. Let's take a look at this:

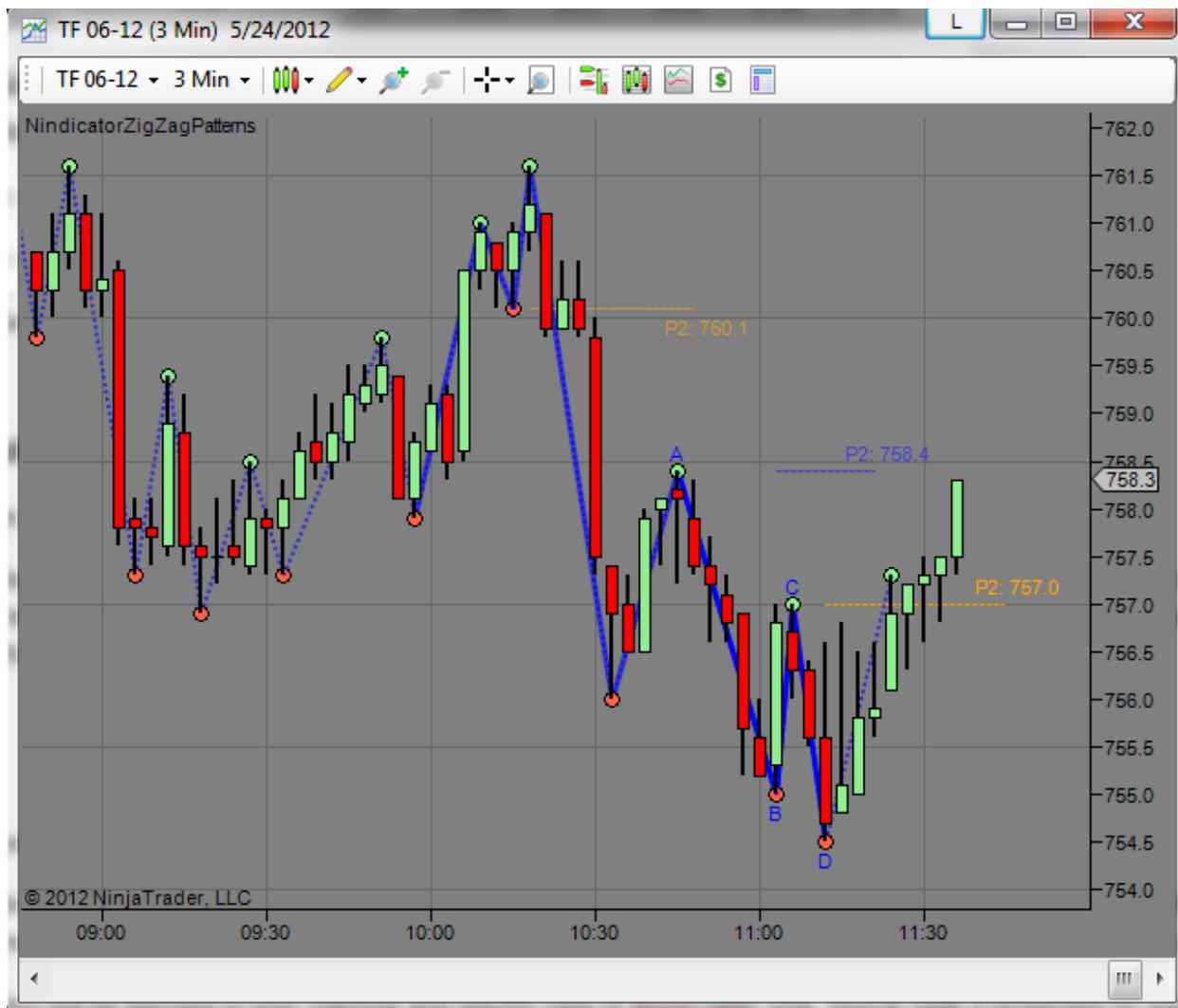


The daily target was just touched.

At the same time as this, we were also experiencing a minor divergence in the Momentum, MACD, Volume Ratio, and Net Volume Nindicators:



Here is where the market was a few minutes later:



This is a good example of putting a number of analyses together into one decision process. If you had been short, it would have been an exit situation. You could also have entered long on the counter-trend. Note the violation of the P2 level (which is bullish, especially when it was done in one straight run with no retracements). I will now wait for a retrace and formation of a pattern going up. I will be suspicious that this was likely the low of the day (a rough hypothesis) following so many simultaneous indications, but I will not obscure my awareness we are in a down trend. However, a break of point A will be a significant accomplishment for the bulls; breaking 2 P2s in one run; That's strong!

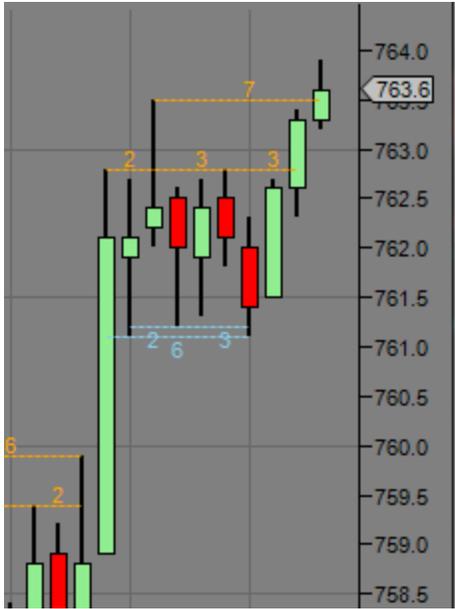
That's all for now....

## Special Examples and Discussions (continued):

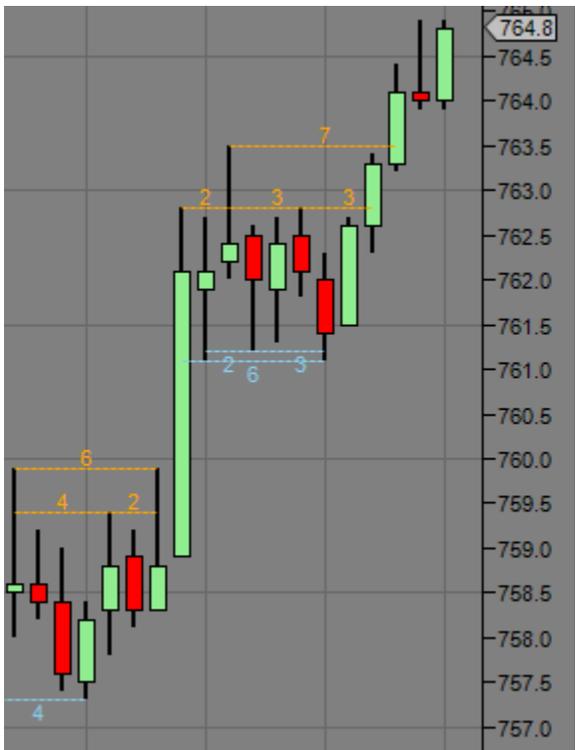
6) I came back to the office later in the day to see my prediction had come true. Can you think of a projection technique I taught you that will apply to the box we started the previous analysis with? Let's take a look:



Review special example #2 above. Do you see anything else setting up? Is there enough time in the day for that prediction to come true? Here is my prediction. If we go higher (above point C) and then fail, we will go to the 361.8% of the current box. Of course, it is too late in the day for that to likely occur. Did you notice we have a widening cycle width (i.e. 2 to 7 and 3 to 3)? The other (with-trend) hypothesis is if we break P2, then we will run higher into the close.



This is even wider than the one before it:



Note the 6 width to the 7 width on the next cycle.

Here was the DA on the break:





I note this case above because it is a case where divergence or volume accumulation was occurring into the decline that was with trend.

Following the P2 failure and new high break, we ran as predicted into the close.

We ran out of time in hitting the full 361.8% target out of the retracement box. This is a less common use of the projection technique, but is still valid in cases like this one where we have expanding cycle and volume. It all told you who was in control.

We finished the day like this:



By the way, the 261.8 is often the target as well, so beware of this. Sometimes when we get end of day rallies, the participants get carried away. Also, can you see an indication on the chart above that we are over bought based on pattern principals that the pattern tool is not showing?

The answer is  $CD > AB$ . Here is how I measure this easily. Step 1) draw a line from A to B. Step 2) move it to C. As follows:



Then to this:



So the above suggests to me we are over-done in the move. We will likely see some retracement in Globex. The move above was actually 100% of the height of including the main previous swing low. 100% is called a "measured move" for future reference. This one:



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Note also that I did not change the slope of the line. By moving the line in this way, I could also see we got there a bit early. This is not a trite concept so I will say it again.  $AB$  is less than  $CD$  and we hit 100% from the key swing low that occurred at about 11:45 early, or at an accelerated slope. This was a good time to be out of the trade because it is in a zone of diminishing returns being over done, as I said or overbought in multiple dimensions. This is not rocket science, so when doing this, I do not look for exact numbers; only tendencies. This is often difficult for many beginning traders to grasp. We deal in the realm of fuzzy concepts that sum up to a hypothesis. Then we manage risk in the attainment of the hypothesis or actual trade.

On the topic of this, what we are really talking about is developing an intuition in the assessment of various bits of information. This takes time and is best done in the spirit of play. This, of course is hard to do. So it comes with time. Realizing this however can accelerate the development time for you. When you kind of feel like you really don't care (even though you are passionate about it), you are probably on the right track.

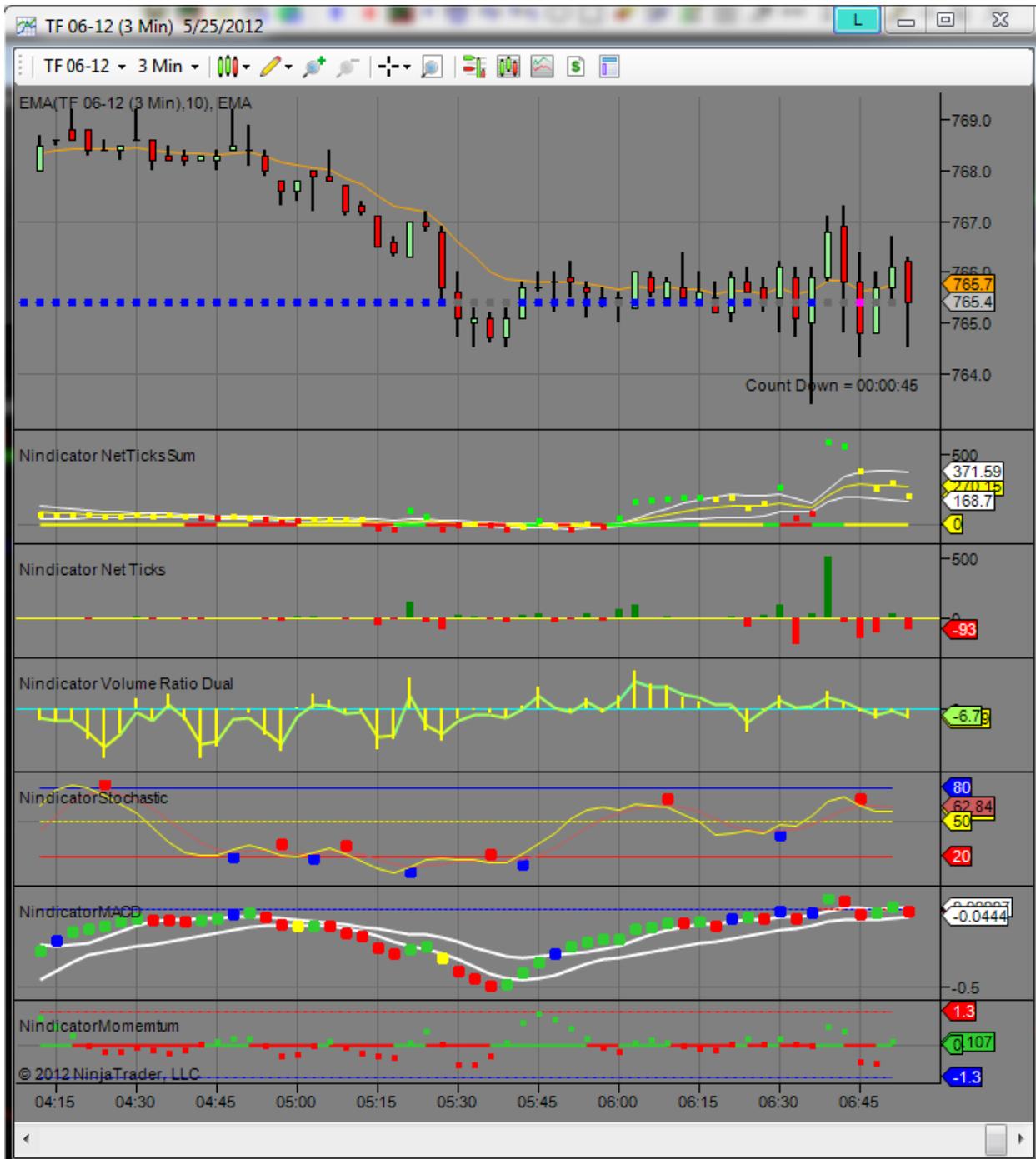
In this way, it is very important to make sure you learn things right from early on. Because it takes ten times the effort to unlearn a lie you hold in your head (whether intentional or unintentional). This is what I call first learned behaviors. When you come under the stress of trading, your current level of ability will be mitigated or reduced to first learned behaviors. This is typically substantially below your non-stressed ability. So when you come under stress, your level drops. If you are aware of this phenomenon, you can start to notice your zone. As you are aware of this, you will be more confident of your range of behaviors trading. This will result in better performance and improvement in your life. This is true because this awareness and development will migrate to other aspects of your life.

The topic above is related to being in the zone when you are trading and how to be there, know you are there and stay there as needed. This lets the intuitive or natural mind function properly; something most people probably don't even know exists. I hope it will be of benefit to you. I make myself available to Nindicator users to discuss such things on an hourly basis. At the time of this writing I charge \$125 per hour and limit any one session to an hour. I do this as a last resort and will want you to have read and know at a minimum the books numbers 1, 4, and 7 on my reading list at the following link: <http://markettradersjournal.com/recommended-reading-for-traders/>

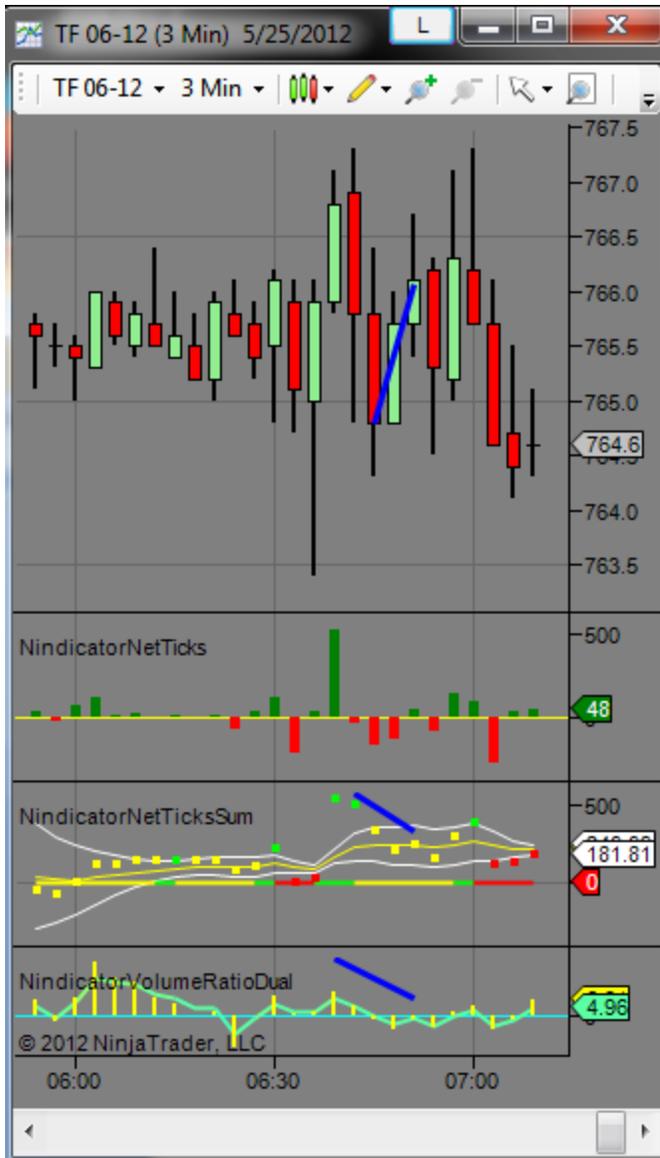
That's all for now...

**Special Examples and Discussions (continued):**

7) Here is a scalp set up while waiting for a report. On this morning we opened in value while awaiting a sentiment report. The market had closed bullish the day before (5/24/2012), so I want to use caution or not trade in this case. I believe I have written elsewhere about how the HFTs come into the market on the release of reports. For this reason, and I do not want to push this point, but trading right before reports may be somewhat "dumb money." This is true because there is no participation there to move the market; it is ranging. That being said, let's see if there is some opportunity:



Can you see it? What you should be seeing here is the market went up for a couple bars on negative volume. You can see this in two of three of the volume tools; NetVolumeSum and Volume Ratio. Can you see it now? I will highlight it below:



Can you see that the NetVolume was negative on the middle of the three bars I highlighted? Even though this is a micro example, this is an important point about learning to read NetVolume. The NetVolume in this case are moving with the bars going up, however, they are still negative. So, it is important to ponder the meaning of shapes on the NetVolume in various circumstances. We should expect to see green/positive net volume on up bars. When we do not, something may very well be up.

In this example we knew there was an absence of OTF, and we very well could have scalped it for a point or so. Remember, markets move with ease through areas of low volume and consolidate in areas of high volume. Further, markets move south through areas of negative volume easier than they do through areas of positive volume. You will do well to give this a lot of thought. Let's cover the other side of it, just to be sure you have it down. Markets will rally up through areas of high positive volume faster and easier than they will through areas of high negative volume and they will also move more easily through areas of low volume in general.

So, back to the point: In this example, we saw the market rally on negative volume into a high. We knew if the market broke lower, there would be little resistance of movement, even acceleration of movement back through the previous bar. This principal should apply to analysis in any time frame.

Do you see anything else on the above screenshot? How about this:



Did you remember to analyze divergences from point to point on a closing basis (at the time they are computed)? See how the market rallied on declining volume? Much of it that was actually negative on the NetVolume? The report was released. We know HFT will enter at this time. Those programs know there is a volume hole below the current market, so as we enter that zone, we should expect some movement. This is a larger scale analysis to the pre-report scalp we just discussed. The same principals apply. We know we have a set up inside the set up and, because we have been watching, we have a total pulse on this situation. Here is what happened:



The trade was on the break as the depth got compressed:



I will not belabor this further. Trades like the above can lead to quick gains. I trade with a daily target designed to meet my family's daily financial needs and then I am done for the day. This is an example of achieving that in about 15 minutes. Does this level of analysis come easily? Probably not, but I hope you get the gist of it, and work it into the way you trade. Work towards working in a way that it feels natural to you.

### **Special Examples and Discussions (continued):**

8) I had talked in the manual about the various oscillators in the package. Most of the examples I covered were oriented around the use of divergence as was the case in the above example. This is not by accident. Momentum often leads price and oscillators are measures of this. This should be a phrase in your ongoing mental vocabulary, "Momentum Leads Price." This "leading" often occurs in the form of divergence. An oscillator can really only lead in this way however, because it is based on past data.

What else leads price? "Volume Leads Price." Volume on the other hand, does not rely on past data. The only volume tool in the Nindicator Volume Tools that delays volume data through some form of smoothing is the Volume Ratio Nindicator. So, when we see readings on these remaining tools, it is absolutely current in time. As a result, you can observe volume leading price in the present tense, without the use of divergence. I have discussed this in other places. The above screenshot is a good example of it. Did you note the tracking volume was pegged to the bottom (-579)? At the same time there was 3 points of price movement? This is an example of volume leading price in the present tense and not in the context of divergence. Note also that we combine these concepts together in order to come up with a more complete analysis. Does the situation in the above screenshot mean continuation? Not always. Take a look here:



Do you see the NetVolumeSum diverging against that low at about 7:15? This was occurring at the same time as the volume was leading price in a non divergence sense. As we come into areas like this low, I often reset my Position Tracker to get an analysis of the volume leading price against my position from the low. Sometimes I will reset it a number of times if I think we might be forming a low area. Doing this, I am using the Monitor mode of the tracker. I will reset it because if it does become the low, I want to know from that point when the volume begins to lead the price again. This is not a trite point.

You can see by the second bar off the low, as the range expanded, we saw the NetVolumeSum break higher than that previous red dot at 7:15.

Let's talk for a moment about the Oscillators, as this is a topic I had not covered much. Note the blue dot on the stochastic. The MACD also went green at this time, while the Momentum tool turned green. There is not a divergence here on any of them, but you won't always get one. Here we have the three of them turning out of that micro divergence on the NetVolumeSum. This is often a valid turn that identifies chart patterns where there is no consolidation before the turn. This phenomenon often occurs on days where the market is ranging. Many people trade using similar types of oscillator tools, so when they turn, especially collectively, it is a time you should be aware of what is going on. You can create set ups off this same kind of patterning as we do in other examples we have covered. Often in this scenario, I will wait for the Pattern tool to pick up a pattern, or I might try to catch the bottom on a volume or order flow type of trade. Then, as I have said so many times, I will scalp out a few of the contracts and then try to let the remaining ones run.

Do you see another set up in the chart above? What was the volume doing during that run up? What is the momentum already doing? What is the stochastic about to do? I will leave you with that...

The above reasons are why I couple these tools together on to one screen. They fall into a similar mode(s) of analysis. Be sure to review some of the concepts above, they group together in powerful ways that enable you to discern the bigger picture.

One other thing. Did you notice price had come up into the same area as the night session? This is a form of value analysis (see below horizontal blue lines). The market sought a form of

value where the previous trading had occurred. Does this tell us we are ranging? Typically it will.



Here is what the market did while I continued to write:



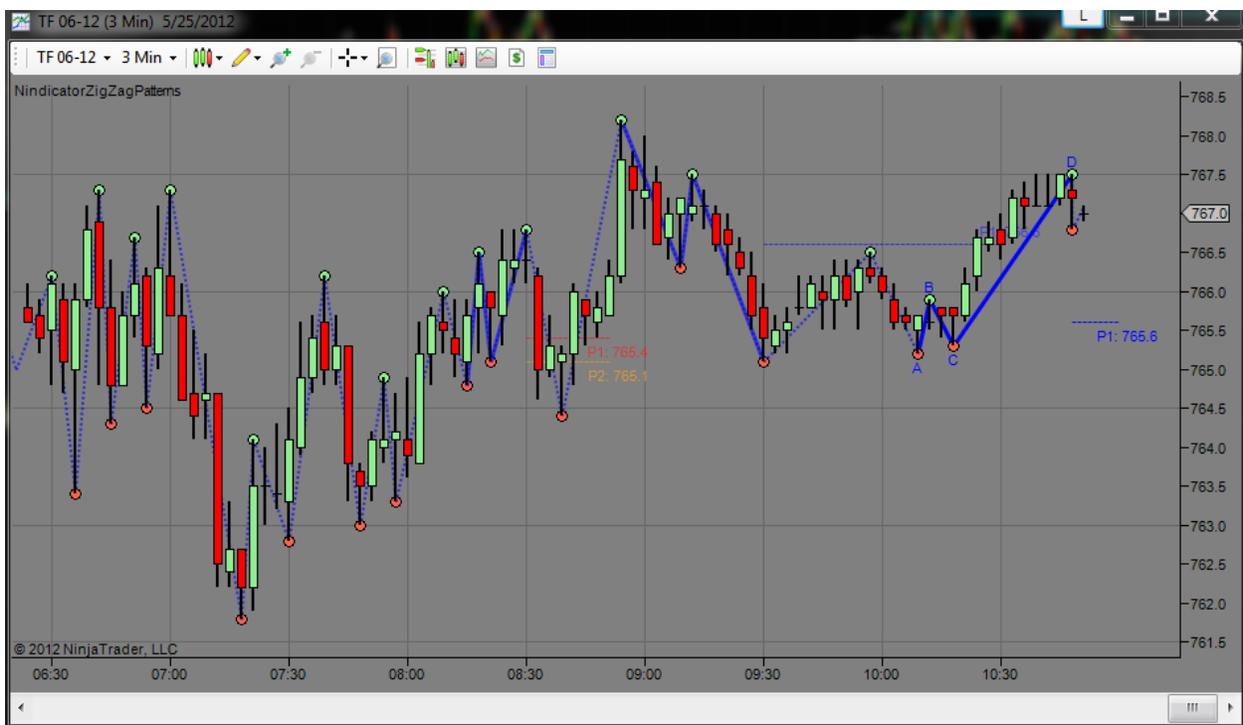
One more note: See the Volume Ratio Nindicator has a relatively high reading right now? That is because the tool is set to compute intrabar. At the time I took that screenshot it was the very beginning of the bar where the numbers are such that the ratios can pop a bit. Be aware that the current reading on this tool can be skewed in the beginning of a new bar.

That's all for now...

## Special Examples and Discussions (continued):

9) Let's talk about the rules for analyzing bigger waves than the Nindicator Zigzag Patterns can provide. This is a significant topic. The pattern tool only identifies the most local patterns it can find; ones where there is a straight point to point run. But, sometimes the analysis gets wider. This is why I told you in the section for that tool, that it cannot capture every pattern and that it was training tool for you to learn the patterns in general. Now that you hopefully have learned the patterns on the Pattern tool and the Cycle Width tool, I am going to introduce you to a concept that relates cycle widths to Zigzag patterns that can expand your analysis into higher structures on your charts.

The basic idea goes like this: You can make bigger patterns off structures that are composed of larger Cycle Widths. Let's take a look:

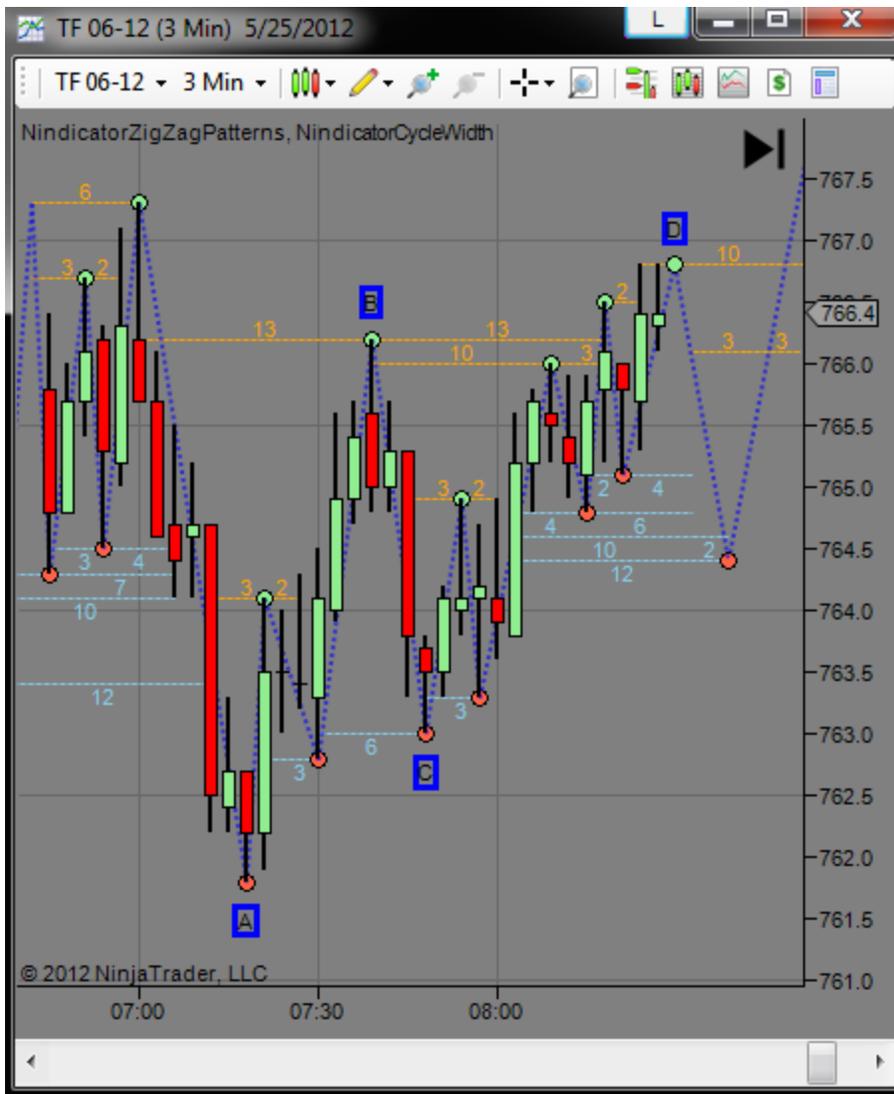


I can draw the pattern where the cycle widths are wider. This can happen over the tops of the smaller patterns, or in a manner that encompasses them. This can give you a couple results if you do it on two levels. You can get a pattern that goes with a larger pattern i.e. a bullish one inside a bullish one for example. Or you could have a bearish one inside a bullish one (or the converse).

Starting from early in the chart, around 7:20 AM, we have a low there. You can see the existing zigzag going up to around 7:40. From there it comes down to a low and continues higher, finally breaking the previous high. I will label it for you:



Above I have put in the ABCD structure. You will note the following:  $AB < CD$ . This means the market is not overbought here. Further, the current, or CDE retracement is shallower than the ABC retracement. Both these factors are bullish and can be interpreted as a P1 or a P2 at this point. Notice that I have chosen these points based on the cycle width. Let's look at the cycle width for the same period:



See how under the AC area you have a 3-6 and we have chosen the pivot by the 6?

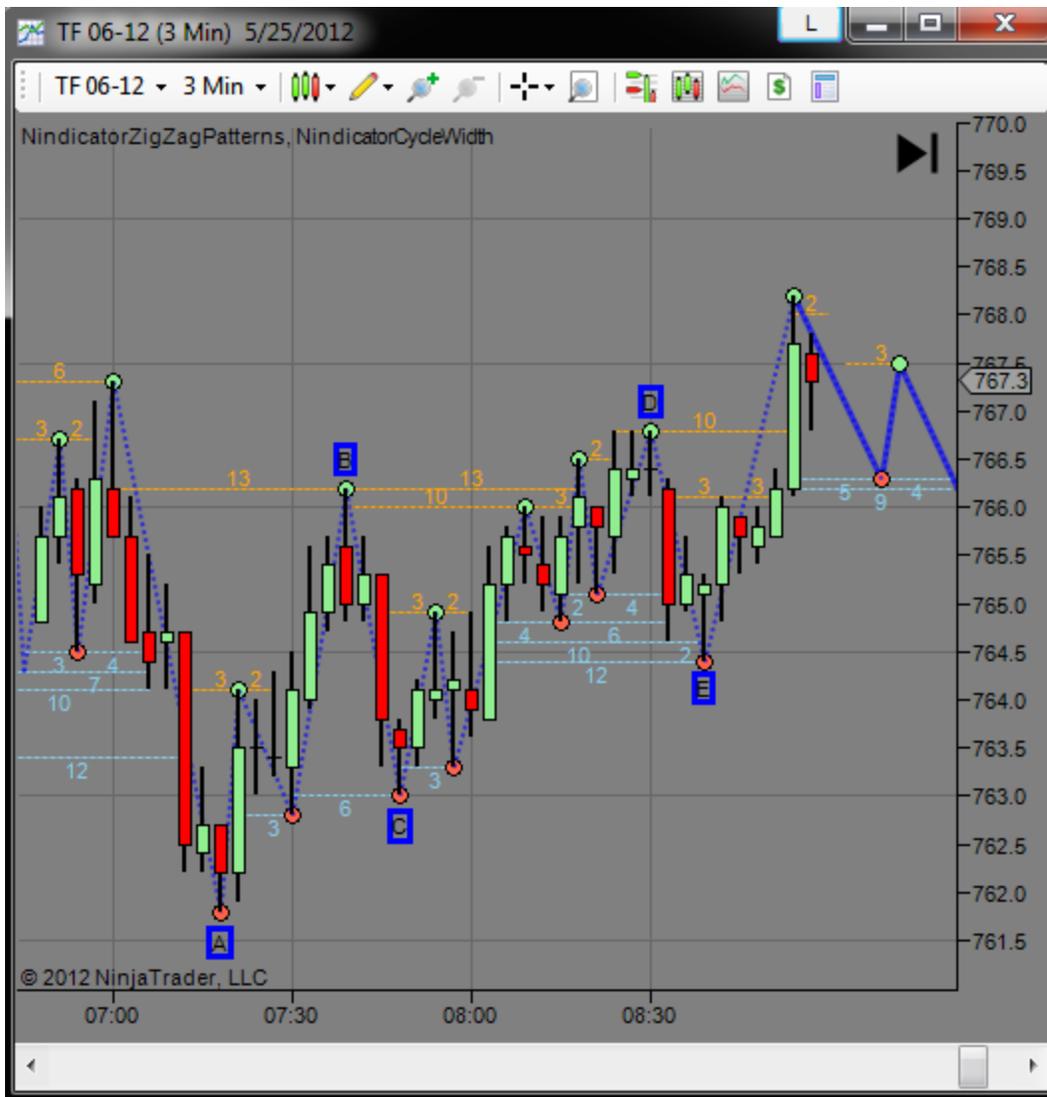
See how we have chosen at point B the wider 13 width?

See how the D point originally was a 13, but then went a bit higher, so we moved it up.

See how there are patterns inside this bigger structure? For example, AB is a compound up wave and CD is a compound up wave. This is a bull formation inside a bull formation. The bigger one is using the wider structures and those structures correspond to the higher highs and lows in the pattern, so everything fits the rules for trend. This is a very bullish structure.

Of course you can see from the zigzag to the right of the chart where it went from there.

In this case above we would have remained bullish anywhere down to point C even though the smaller structures had been violated or failed by the time it got to point E. Let's look:



This is a very advanced topic, and will likely take a long time for you to fully grasp. By the time you can see this on the glance of a chart, you will see the world in a whole new way because you are now thinking in 3 dimensions (actually four, but who is really counting :-). Please do not ask me questions about this unless you have fully mastered the earlier concepts of Cycle Width and pattern structures. It will likely take a lot of work to get there. I believe if you truly have mastered the earlier concepts, you will not be asking. This is why I structured the materials this way; so your learning is progressive and structural. Is this level of analysis necessary? Possibly not, but many times when a simple pattern fails, you have a larger structure going against it in a higher dimension (remember I described this above a bull inside a bear etc.).

Of course you could take this to 3 levels. I have never done this, so have at it if you are that smart :-)

Though I have described in detail a process above, it can really be made more simple. You can look at the chart and see the bigger structure. After all, your eye can see it right? But, knowing

the mechanics of the structure is a whole other animal, because from there you can build into higher learning. This is why I address this.

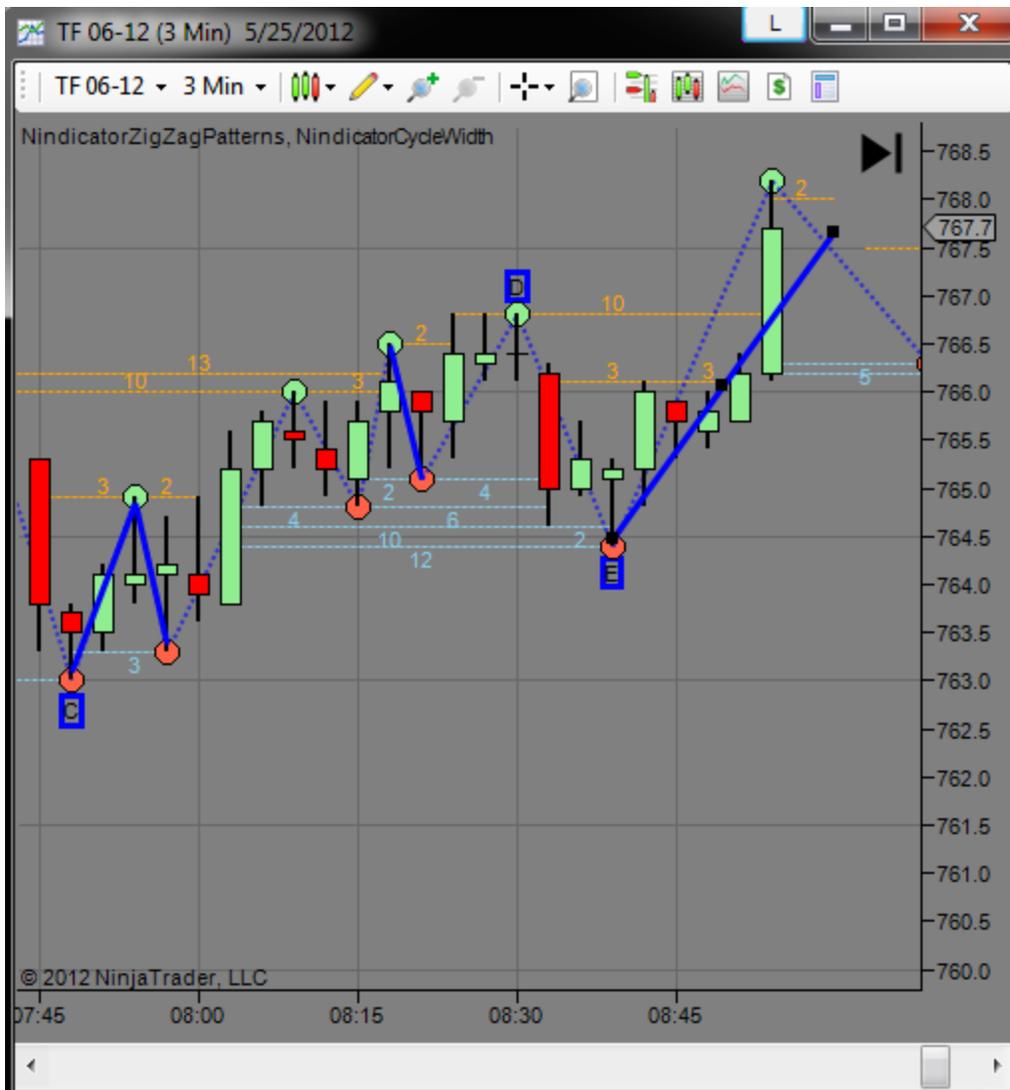
Let's look at this kind of thinking in another way here before I leave you to go study some charts. This patterning can happen sequentially as well (the above pattern was not sequential because it involved many other zigzags). Can you imagine what part of the chart above I might be referring to? How about the section from C to D? Let's take a look:



Can you see the high point at 8:18? That level supersedes the prior one. Note, this is not the very best example. I chose it because it is in front of us, but the concept still stands so.... I could have elected to draw my zigzag starting from point C in the above chart as follows:



This scenario would correspond to a P1; progressively shallower retracement. Did you notice we have a case of  $CD > AB$  (substantially, as in maybe 2 times)? This is a bullish pattern, but may but be ideal. We might have taken it. If we used the money management approach I have shown you where we take off something like 3/5th of the contracts, we might have scratched the trade if we took it. I had already pointed out in the above examples, we knew with some reason we were range trading so that would have weighed in as well. . As we went to point E however, we knew we were still bullish. Note Point E projected to the 100% level of the CD run in dark blue above. Here, I will move the line so you can see it using the projection technique I showed you in earlier examples:



See the tail on the high bar? What do you know here? 1) We are range trading, 2) we just exceeded 100% of the past leg based on cycle widths. 3) we are forming a tail.... Are you still in?

I want to point out another thing that looks at this line another way. Did you ask yourself why we drew the blue line we just moved originally why we did not draw it to point D? I am just checking here that you got the concept. D was narrower. Can you see that? Now at this point we can get into some level of subjectivity about this whole thing, and that is where I bow out, because we have now reached the limit of our analysis. So, please don't ask me questions about it. Reaching the limit of explanation tells you that you got the concept. So, don't challenge the teacher on it. You will be just preaching to the choir :-)

What I am essentially pointing out in the above analysis is this is not rocket science. That being said, there are no hard rules that one must follow beyond the basics, so, from this point you are a PhD student and you are a researcher. If you find something amazing and consistent, let's discuss it and advance the technology we have here. Otherwise, let's stick with some basics

and try to make money and not spend too much time thinking about the profound. Otherwise, next we will be writing a treatise on the limits of consciousness or something.

That's all for now :-)

**Special Examples and Discussions (continued):**

10) Did you ever think about the fact any time the market starts to make a move you need to automatically be thinking where am I in the bigger context? Am I breaking out to new highs, am I in a larger range? etc. I won't belabor this point. It is just a reminder. The answer to this question can tell you if there is likely an OTF influence. There are also time of day considerations such as is it early in the day, or late in the day. I have talked about these subjects elsewhere. Just be aware of where you are with respect to range and or value at any given time. Are retracements in the trend going back into the previous range, or are they also out of range (i.e. of the last run in the trend). This is an important point in your analysis. One, it gives a measure of strength of trend and may be a strong indicator of OTF participants.

### **Special Examples and Discussions (continued):**

11) Another similar issue to the above that I discuss from time to time, and that is important to have a solid handle on is the idea of what I call "push / pull" or "inside / outside" analysis. All systems have some sort of balance associated with them. In order to analyze something, there is always a context. So there are different levels of things going on. When you have more than one level you are aware of, this creates the contrast from which you can really begin to form some working hypotheses about what is going on in the situation. The more of these perspectives you have at your disposal, often the deeper the analysis you can perform.

When I talk about inside / outside analysis, I am usually referring to a support and resistance structure that has a trend structure within it. So this would be something like a value analysis, or a daily target that is combined with a concurrent trend setting up. When we see these structures together we can begin to draw conclusions that we are going to one target or level or the other. After all, support and resistance should really be combined with an analysis that says we can get there, or, as we did get there, we were getting weak. This tells us it may be safe and worth the risk to take the trade.

The term push pull came to me when I realized years ago, that the systems I had developed that worked always had something working against what the market was doing and something going with. The simplest example of this that comes to me right now is something like I am currently below a 50 period moving average on a daily chart; something many consider bearish, but I am seeing positive volume accumulation and breadth in the market internals that is contrary to this. From this, I hypothesize the market is trying to go higher. Naturally it may be the case at any point in time that the market would ultimately go higher with improving breadth and volume, but when it occurs at an area that may be considered a buy point by various groups, I am lining it up with a lower risk profile. In English that might read like this: buy low, sell high.

Using the push / pull or inside / outside concept has been key to my success and thinking. Therefore, I mention it to you here in the spirit that you may conceptualize various situations in these terms and structure.

### **Special Examples and Discussions (continued):**

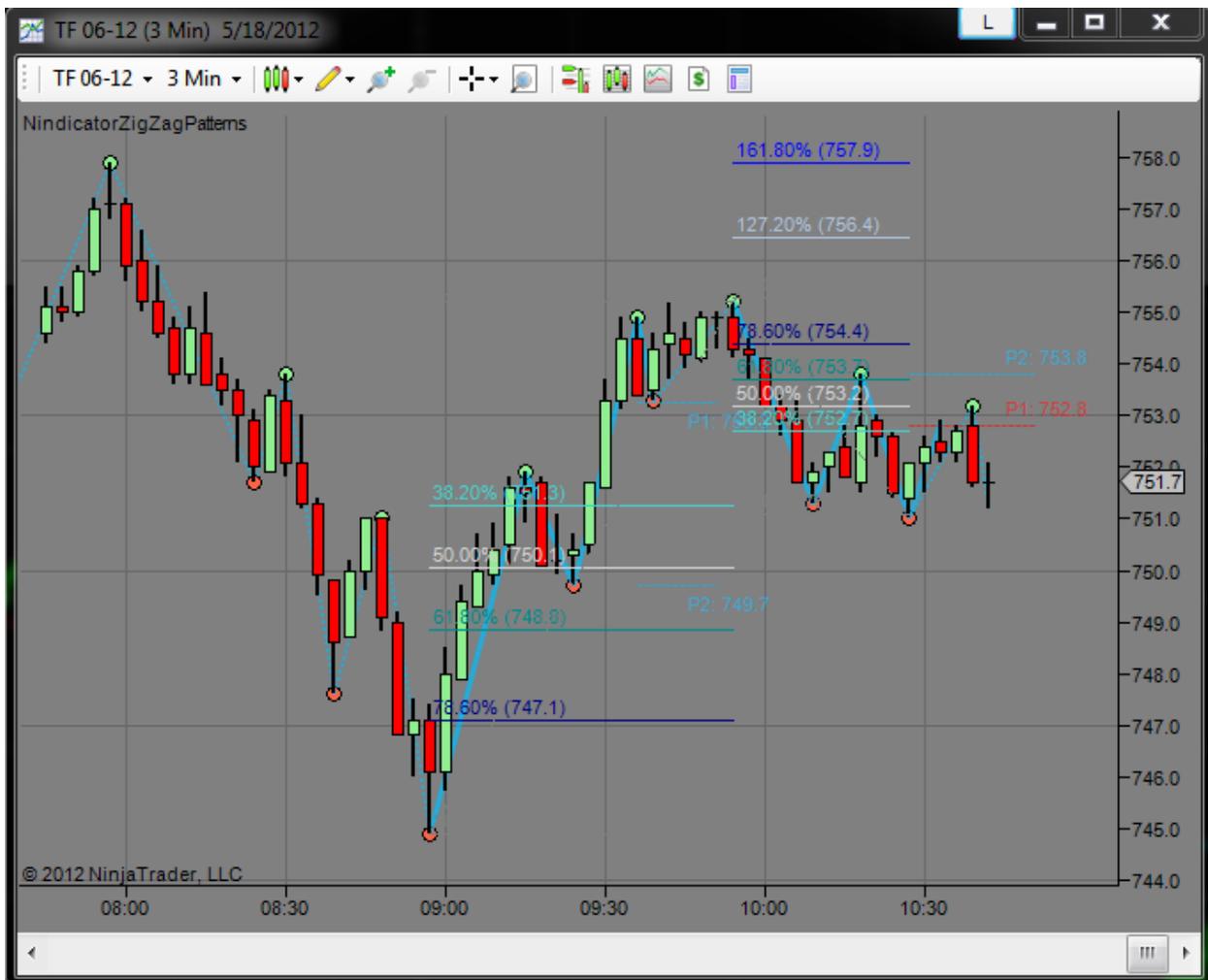
12) In the Chart below there are multiple zigzag patterns on the chart. One is going up, and the other is going down. I have already covered the concept of Cycle Widths being associated with larger formations.

So here we have a smaller formation that is bearish inside a larger formation that is bullish. We have not exceeded the P2 level on the first formation, so you can see it could still be valid. Now, ideally we would not want to necessarily take a long here because the very best formations will not have a lot of consolidation within them, but this could be used to trade long or in a higher level analysis. Either way, you should be fully aware that on possibly a 10-15 minute chart, or so, there is a P2 set up going up. We are into the 10:30 hour (Pacific) which is 1:30 PM Eastern; just after lunch, so we want to be aware that this may be coming into that time of the day where we could see a move. It would not take much to violate the P2 level on the previous pattern. So, I would want to be aware of this also. If I discerned we were breaking one way or the other, I would weigh the risks and rewards and plan a trade accordingly.

When you are new to these patterns, you may elect to trade patterns inside patterns that go in the same direction. Either way be glad you can now see the market from these various viewpoints simultaneously and at a glance; areas that for many other traders may get trapped into.

Going forward from this point in time, if we began to form a zigzag going up, then we would have a substantial width going up at the same time. This might lead me to believe a new break to a new high will follow through. If we broke below P2, we would also have established a wide width. Therefore, I might be inclined to try a short on a retrace or where there was a retracement on low volume going upward. I would do this knowing we may also be part of a larger formation you cannot fully see on this chart. For example, note that we are currently inside the range formed between 8 and 9 AM.

By the way, I want to point out that the P2 on the first formation, that we have been discussing will not change color if violated as it is no longer active. Therefore, you must monitor that level and if you are doing this broader kind of analysis we are doing here.



## Special Examples and Discussions (continued):

13) Another topic that we should address is the idea of whether a formation we are seeing on our chart is natural or induced through some sort of news event or shock to the market. This can help us to understand the formation we are seeing a little better.



When I see a chart like the one below when I come into my office in the morning, I want to get an idea of what it was that precipitated such a move. Often there isn't anything much on the newswire about it. In the case of today, there was a story that told me this news was coming from Europe.

When you get a patterning like this, you can get a number of oscillations inside the original spike. You can see the market was headed south before this event and then it began to cycle lower following the event as well. This was a clue, that we would likely test lower. You should go over in your mind all the combinations you could see of this and ask yourself if you know them. For example, The event could have shifted sentiment following, instead of going with.

Let's look at the rainbow for a clearer picture of this:



You can see that the rainbow lines were headed south before and after. This of course is no guarantee, but it tells me the pre and post event sentiment was largely the same. I will check what reports might be due and will include this in my analysis. This is why I often keep my night session charts up for me to see.

As long as we stay inside the range that was created by the release of new information we are range trading. In the case above we are range trading with a continued bias. So, each case will be a little different. I just wanted to promote this idea for those of us who are trading detectives.

## Special Examples and Discussions (continued):

14) On 5/31/2012 we were cycling lower into the open. We had closed below value the day before. We opened just above the lower value area as given in the Value Area Report on Market Traders Journal. I had also reported based on these findings in the Open Report on The Nindicators You Tube channel.

At the same time as the above. the market was in a minor uptrend on the zigzag, but that was occurring inside a larger pattern going down (6:30 is the open):



This is a great example of a failure. In fact, we can see that the P2 pattern did break higher right at 6:30 before heading south. There are a couple of points here that I wanted to point out that we have discussed before. One is that markets can change around the time of the open because the participants in that market change at that time. Another is that we have a larger context here i.e. where we are opening with respect to value immediately followed by a failure.

Note also that at the time of the break going south we were widening in our cycle, thus forming a bigger pattern going down. An ABCD setting up against the trend is often a shakeout. So, at the time of the break lower, it should be expected to see some continuation of the move going lower. All of these topics have been covered previously of course, but this was a great set-up that included a failure, change of session, widening cycle and a larger context of where we were in value. That being said, this is a very good example of a top-down complex analysis one might

make in a decision to trade. At this point, with  $CD > AB$ , we might choose to trail stop an exit due to the momentum that ensued heading lower.

## Special Examples and Discussions (continued):

15) Below we have a P2 and P1 going lower that is with a larger trend. Do we want to take it?



The above situation may, at first glance, look like a great set-up. Technically, it is, but we must ask, where are we in the bigger picture. We are definitely in a solid downtrend. However, we have sold off down to a Virgin Point of Control at the low after having gone through a High volume node. From this perspective, we know the market may want to consolidate here following a range expansion.

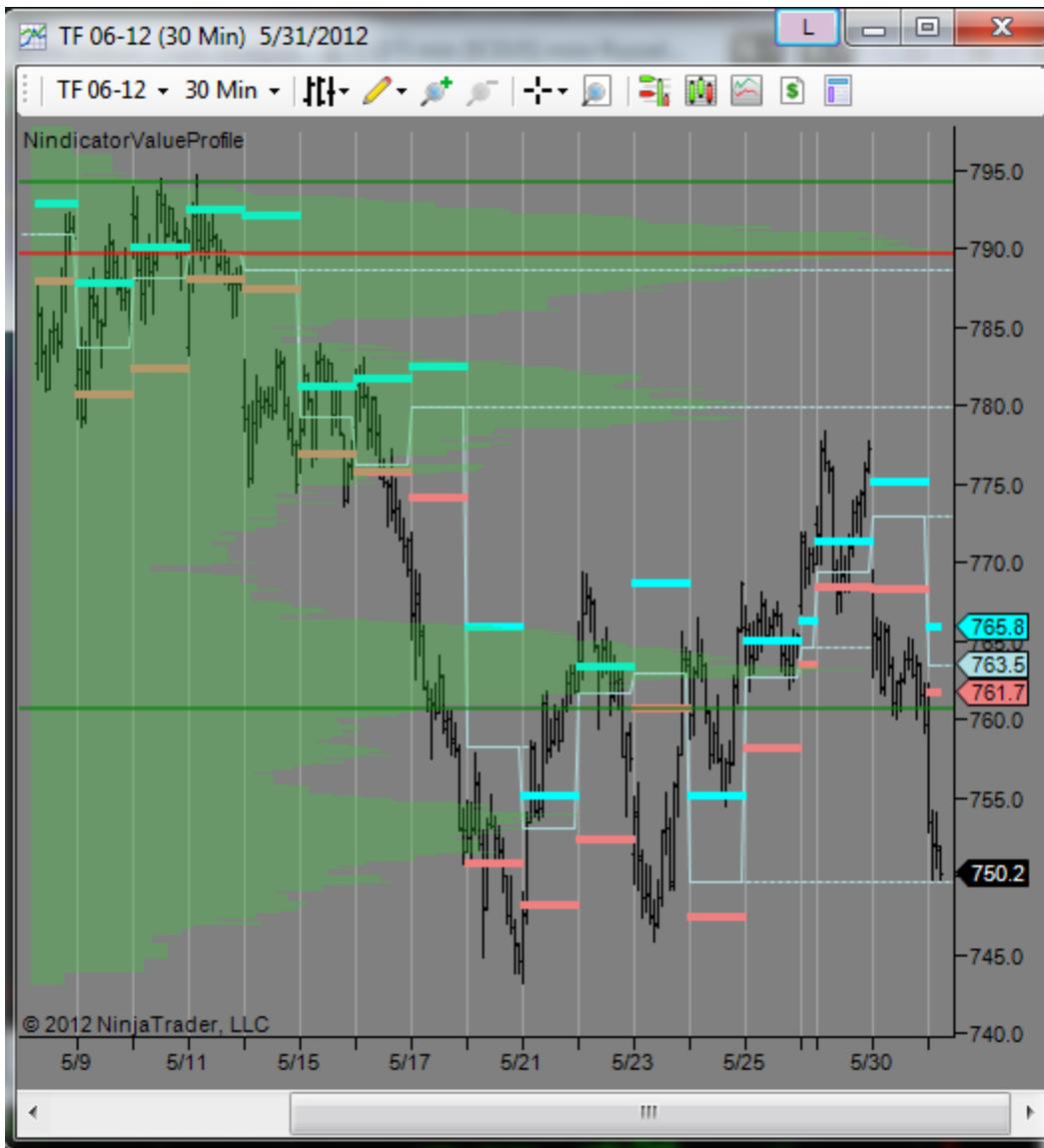
Here are a couple concepts I have not discussed previously: One, What is the range in the first hour of trading. The answer is 12.6 points. I know this by setting up a chart with a custom session with one hour of data on it; the first hour and applying a range indicator. You can do this in Ninja on your own. Another thing I do, is I measure the range range for this interval over 5 or 10 days or so. Today, the average first hour (IBP) range is 7.7 points. So, I know I am already expanded for this interval by about 1.5 times. Two, I want to know what is the average range daily (you can similarly set this up in NT on your own if you like). At the time of this writing that is about 14.5 points. This tells me, to hit a "normal" range I only have about 2 points to go.

So, the question is, based on that, do I want to risk it? Probably not. Even though we may go lower.

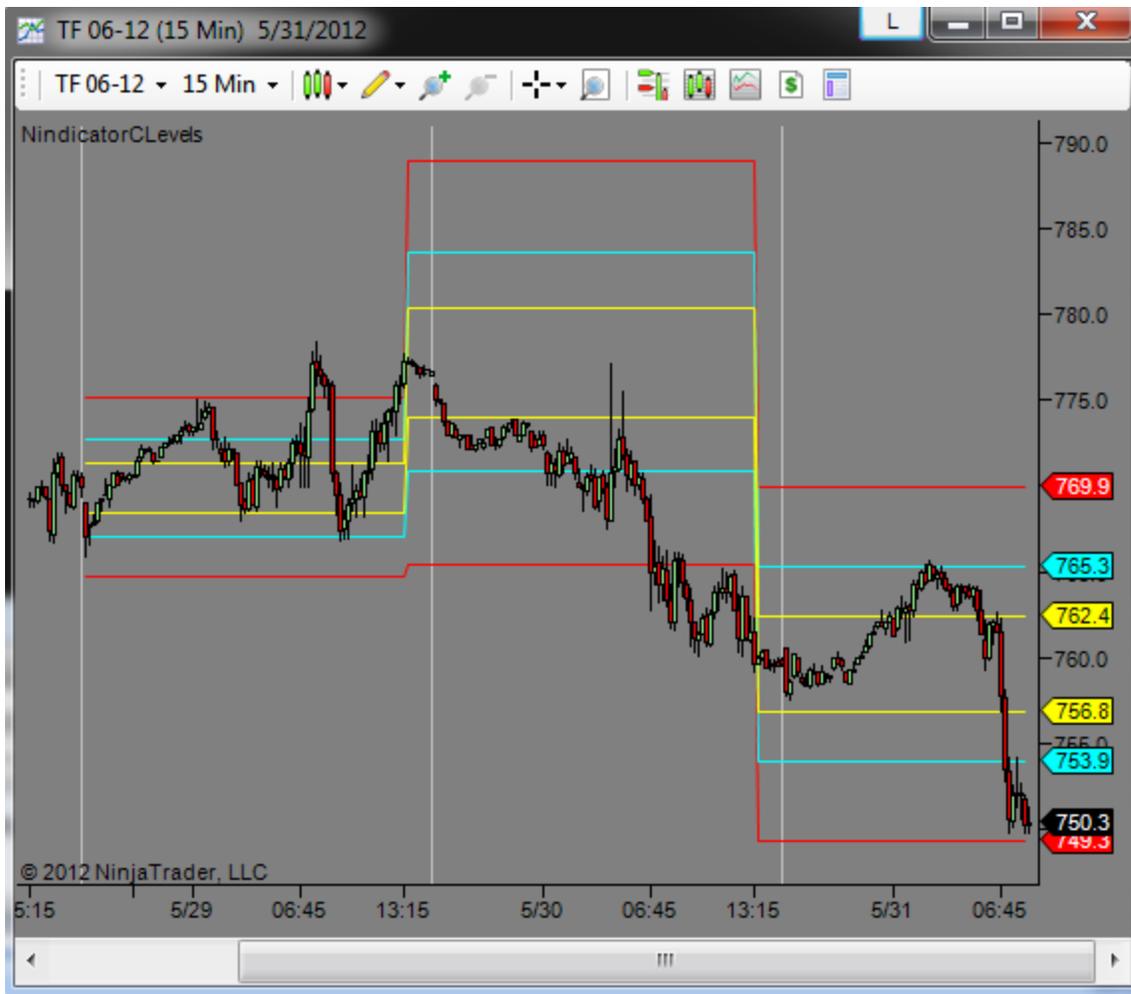
I also know we just hit a VPOC:



We are also not too far from multi day lows (5/23) and, in the composite we can see (5/21):



We are at our target level on the C-Levels:



If I look at this bigger picture, I can see a measured move would take us down into the 745 area; near the multi day lows. The clustering I am seeing at the low currently and the break higher in volume would have me suspicious:



We also have a large northward divergence on the MACD, Volume Ratio Dual, NetVolume, and a shorter term divergence on the NetVolumeSum. This suggests to me, we may be at or near the low of the day; that the bulls are gaining an increasing control.

Did you even notice you sometimes get a divergence inside a divergence? Look at the MACD for example. There is a divergence in the last few bars, but also a much bigger one. Can you see any other Nindicators above that have a divergence inside a divergence? I will leave you with that.

That's all for now...

## Special Examples and Discussions (continued):

16) Below is a perfect example of a trend change that is being identified while the market is still clustered in a range following a trend. Let's take a look:



First we saw the  $CD > AB$  come on the screen. This was like a first warning. Then we saw P1 fail; a second warning. Then the other side of P2 failed when we went through it; a third warning. You will also note another pattern I have pointed out many times; that we went through P2 in one run, without retracement. The trend in this market has changed. This had also followed the Daily Target being hit, a test of the previous day's high as well as various divergences on the Oscillators and Volume tools. Shorting in this situation was relatively low risk and could have been initiated, particularly as negative volume began to exceed normal (I have talked elsewhere about this method while using the position tracker manually).

## Special Examples and Discussions (continued):

17) Below I have posted a screenshot of what I consider to be one of the most powerful uses of the ZigZag Pattern tool. I had written about this in the main section, but feel it is worth repeating here. The basic pattern is a shallow retracement (point A in the screenshot) followed by a new high (point B) then a retrace that is within range. In the main section, I may have mentioned looking for a 38.2% retrace to hop on the wave for a long. In this case however, the 38.2 was actually below point C. Look below at the fib levels on there and see that both (shown) points A and C are above it:



The real trigger here was when we also got a Nindicator Box set-up (>2:1) at point C. Can you see it? The bar of point C is engulfing the 3 prior bars.

There is another point I want to bring up about this P2 set up that can happen a fair amount. Often this kind of trade can go against the volume patterning. I watched through this entire trade the rally occurred on negative volume on the position tracker (not shown). Let's take a look at the volume patterning through the rally on our volume tools:



Did you note on the NetVolumeSum how it had broken out, but had failed to go to new highs. This, of course is also a volume divergence that sets up another trade. You can also see it nicely on the divergence tool on the magenta dots at the 758.40 level. Take a closer look and see what was happening on the NetVolumeSum as it went higher in the rally. Can you see the volume was flat and even declining in that period? This, of course was a bit nerve racking as I held the position higher, so I chose to get out a bit before where it is in this screenshot. This will often be the case that the volume will not go with in the case of the patterns. I have witnessed this time and again. The patterns are so strong in theses set-ups, that they seem to go against other factors at the time they are true. Do not however discount the validity of this sort of P2

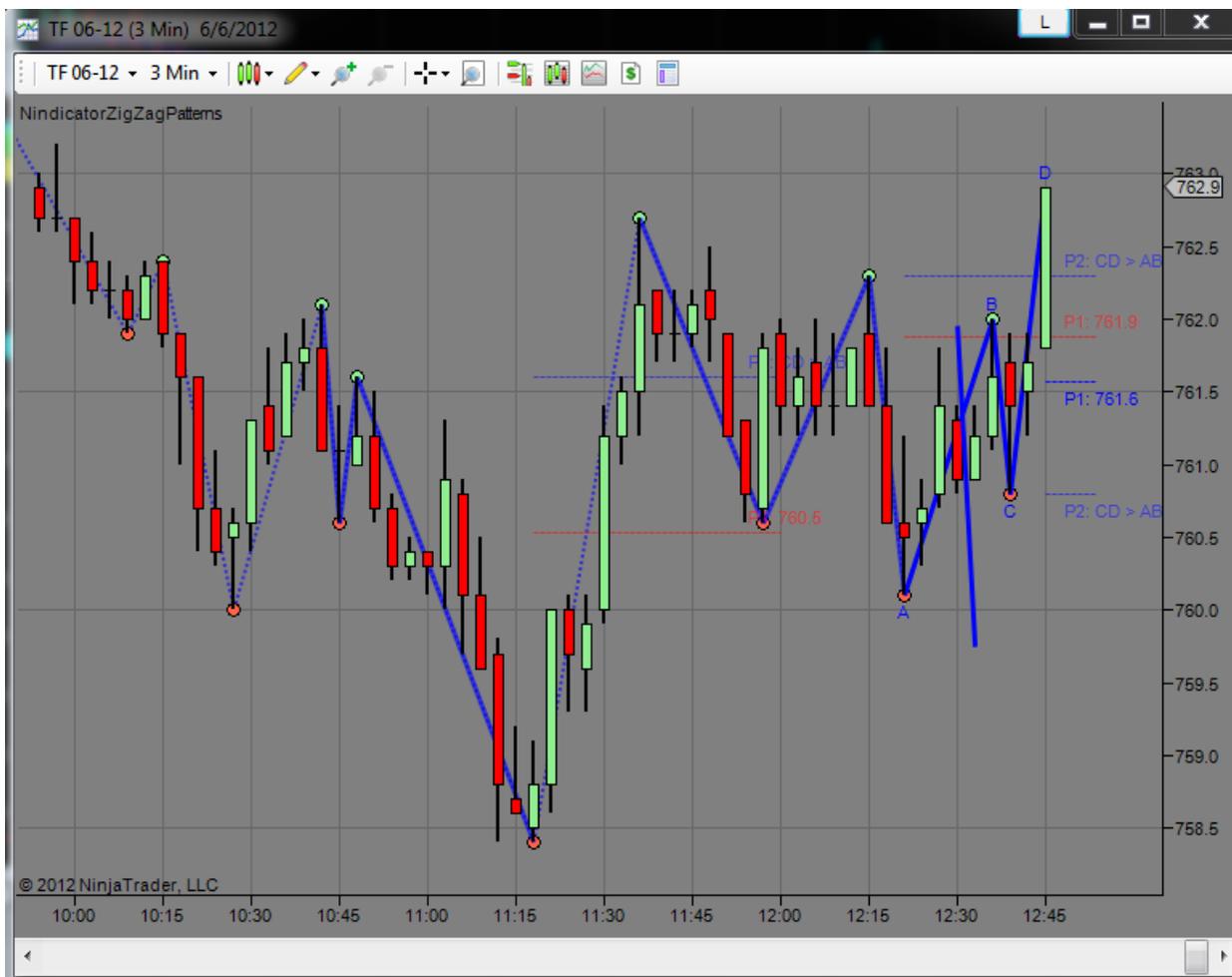
set-up. In my experience they might be 85% accurate with reward running 3 or more times the risk (possibly higher with other supporting analysis).

There is another factor for you to be aware of in this trade I may have mentioned elsewhere. Because the retracement was shallow (<382), I expected the excursion to run more than the previous wave. What I mean by this is that the minimum expected move on this trade would be simply a new high. But, because of the shallow retracement (and possibly other factors like the gap up etc.), I theoretically expect it to go further (even though I did not stay with it, as mentioned).

Will I want to go short on the divergence south? Probably not. We are getting into the quiet period of the day. Also look at this article covering the intraday seasonal of range study. [The Best Time of the Day to Trade](#) . Another consideration I might have about the idea of trading southward is the fact we gapped above value and range and then ran. This is quite bullish and I might suspect the bulls will not give up that easily. As a result, I will wait for a ZigZag going down before evaluating the idea of taking a short.

## Special Examples and Discussions (continued):

18) I had a P1 going down and took the trade. It was then followed by a failure. I wanted to cover this case for a variety of reasons. Let's take a look:



In the above, you can see the ZigZag going down to what is shown as point A. When the market came up to the bar just before 12:30 and began to sell off, I decided to short it. The market did not follow through, but I liked the fact it had not made it to the P1 line and felt at the time that I was in consolidation, but that the market was trying to go lower. You can see the blue line I was using to project to a minimum retest corresponding to just below point A. You might also note an Nindicator box pattern (not shown) that showed strength to the downside at 12:18. Can you see it?

This short was also consistent with my volume readings at that time (not shown). Following my short entry however, the market stalled and I observed my Position Tracker showing positive volume accumulating against me. I exited the trade and went flat for a small gain.

Following this, the market headed higher and took out the P1 line (point B) and then began to retrace to point C. At this point I began to think the bulls, as this had been a bull day, had not lost control. That they were going to try to rally into the close (note the time of day is 15 minutes before the New York close).

I entered the trade as it broke P2, scalped out part of my position and held it for additional gains on my remaining 3 lot (see below). The market did, in fact rally into the close, but I was writing this document and was distracted, so simply exited with about a \$500 gain overall. At the point we broke P2, we also had an ABCD going up.



Another point I wanted to cover in this set-up was the fact that as this market broke higher, it actually had a complex wave pattern of ABCD going up from the 11:18 low. This became true as the market took out the 1136 AM high at point D. I was also aware that the rally off the 11:18 low had overtaken the 11:42 high in one straight run. A bullish pattern we have talked about before. This is an example of a bit more complex patterning that I am identifying by analyzing multiple past ZigZag patterns. I wanted to show it so you could possibly see an complex example of how you can put multiple patterns together into one analysis.

That's all for now....

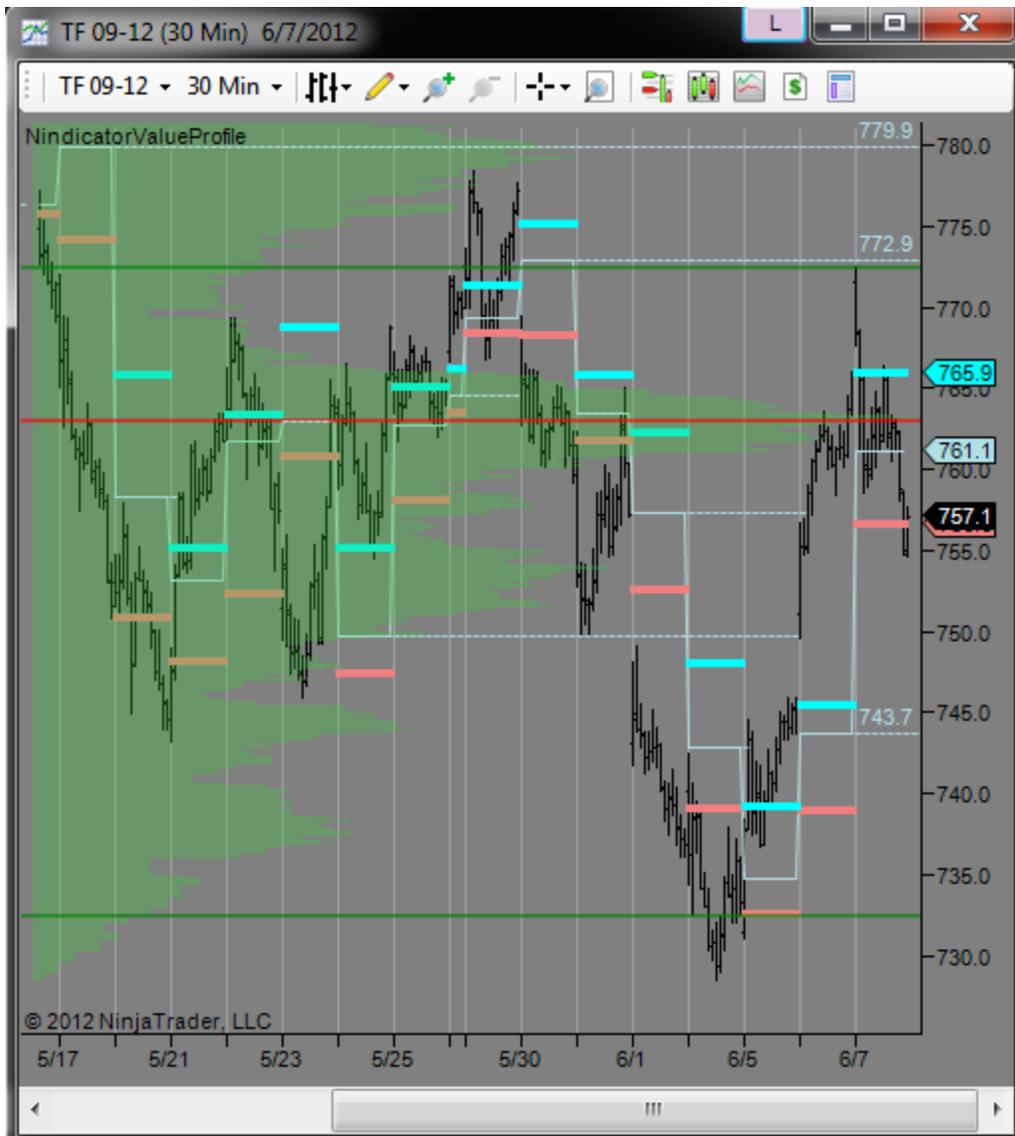
### **Special Examples and Discussions (continued):**

19) Today was a very interesting day (6/7/12). The market opened higher following a strong rally day and then began to fail. In the afternoon, following successful set-ups in the morning, there were failures repetitively all day. For example, the market was selling off, but the DA was showing neutral to positive. Further, there were patterns of zigzags that failed and turned into some very profitable situations going short. This southerly bias is what I meant when I said the DA was showing neutral to positive through the sell-off. What this was telling us was that the bulls were trying to buy through the decline, and fairly consistently. There could have been a couple of reasons it appeared this way. First off, this was a contract roll day. So, much of the volume activity was split between June and September (I was following September; the new front month). This might have been skewing the readings. Secondly, on the Position Tracker, I was following the volume. I am typically resetting it at points I see a picot, and working the PT vs. the NetVolumeSum. Between these two, I am trying to get a clearer picture of what is going on. What I was seeing however, was buying. At the same time, before the strong decline southward into the close, I was seeing a large divergence on the NetVolumeSum. See below (about noon):



This was also contrary to what I expected to see. What this tells us is a large number of bulls were trapped into the decline. What occurred after, was the market continued trading lower after the close. What we probably have here is a bunch of worn out bulls, who, if they do not defend on the open, will likely provide fuel heading southward as their stops are hit further.

This kind of inversion of normal reading may be consistent with markets that have made strong directional moves and they failed; trapping large numbers of traders. Normally, we are looking for this to occur on a smaller scale, but in this case, following the big run-up the day before, it makes for a very large trap. Let's take a look at the profile so you can see the larger scale action over the last couple days:

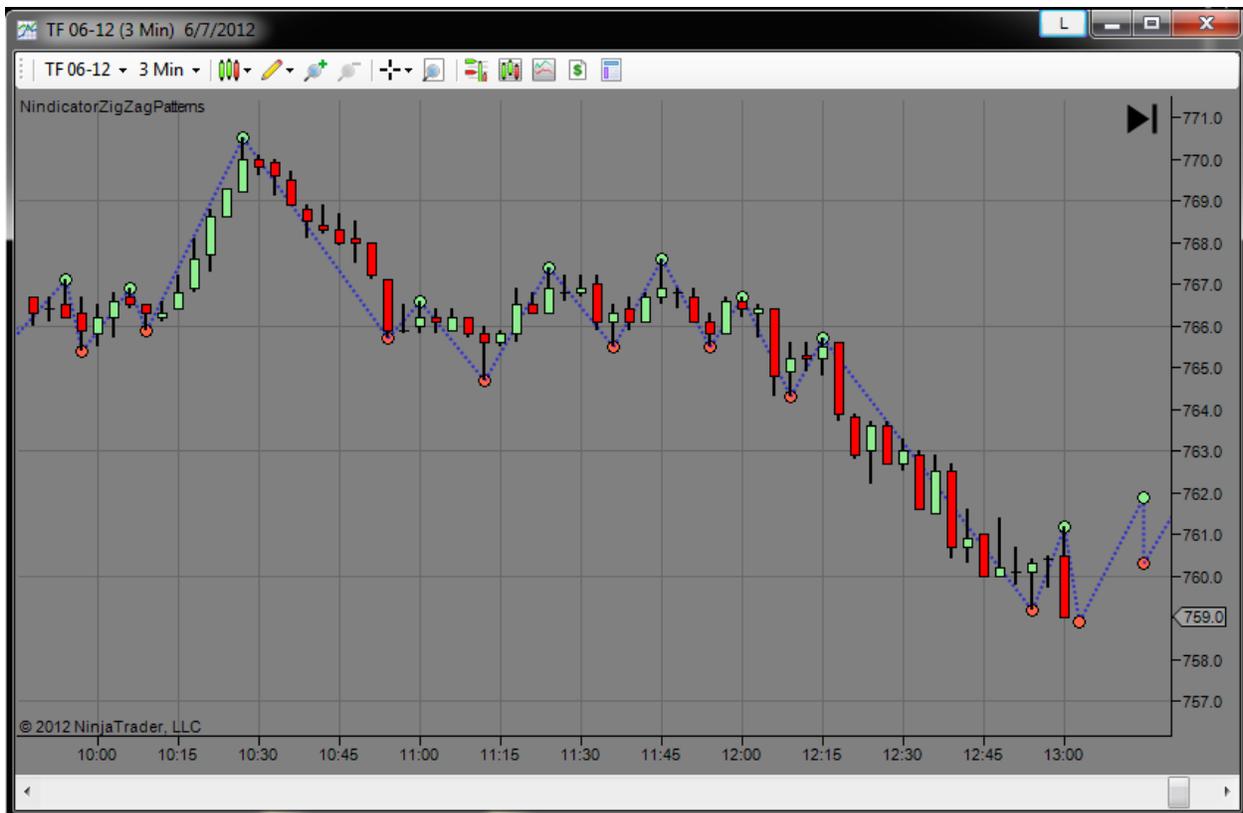


Can you see the gap up and then retreat into the previous day's range? Can you see it centered on the POC for the previous day where all the price action clustered? I had pointed out on the Nindicator You Tube channel for today (6/7/12), that what we likely had was short covering up into the 1308 level that was followed by *new buying* late in the day on the 6th (where it rallied into the close). I hope you can see that. Then it continued through the night and gapped higher on the open on the 7th where it ran out of steam near the 772.90 Virgin POC.

You may have also noticed that there were multiple expanding widths (3-5, 2-4, & 12) at the time of the break lower that fuel the sell-off from the trap it created:



You might also have noticed this ended up being a P2 failure scenario (not specifically shown) that was followed by a P1 going lower into the break. Can you see them? Let's go over it:

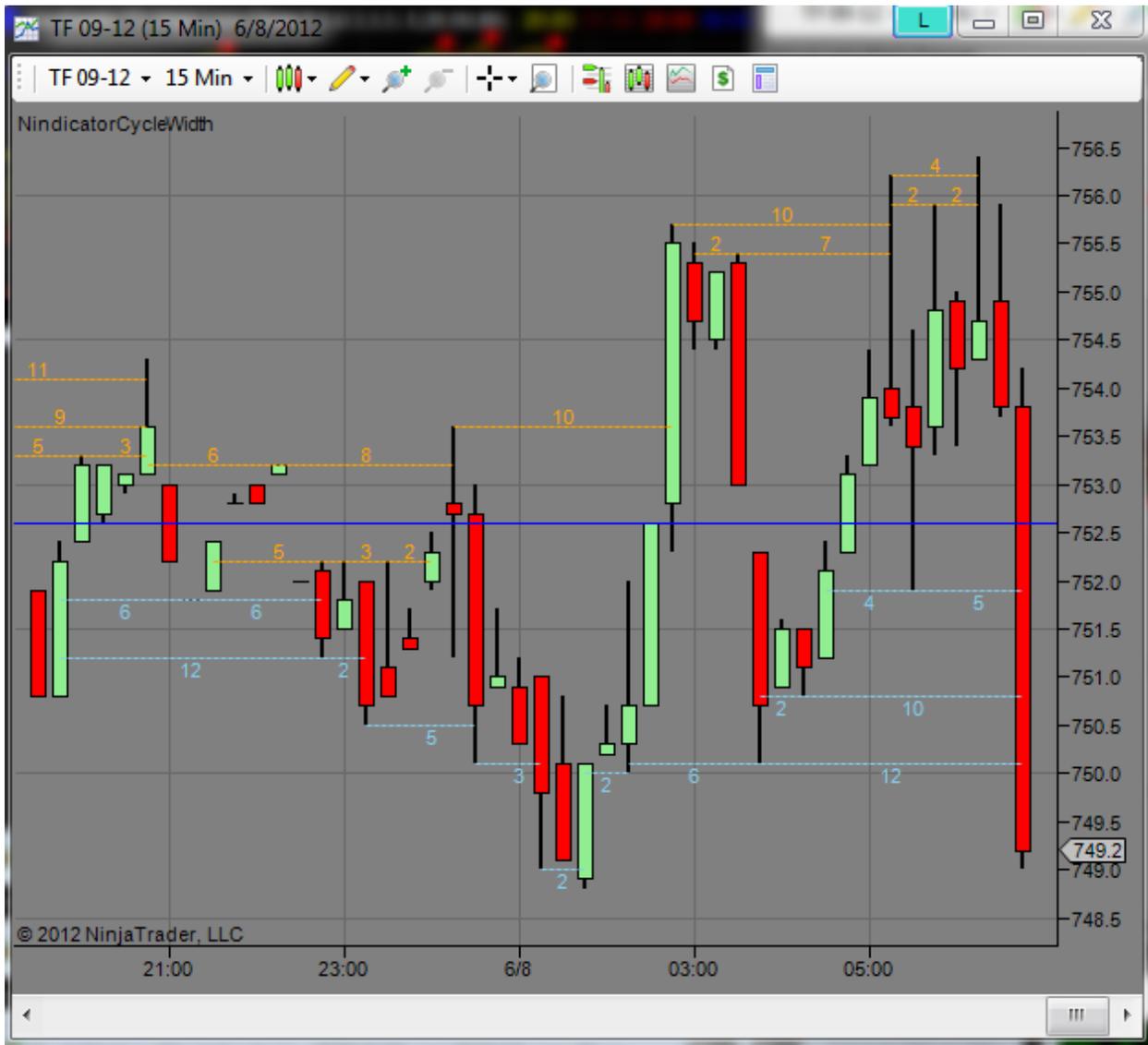


We had a fairly large ABCD going down into 11:12 AM. This was followed by another smaller structured P2 going up into 11:45 AM. When the failure occurred at the 12:06 PM bar, we officially had the ABCD going down. This was followed by a retrace exactly to P1 and then it failed into the New York close.

So, I wanted to point out a case where there were a variety of factors leading to a powerful sell off as one side, who persisted for most of the day against the forces of the other, finally gave in resulting in the sell-off. Typically, I won't trade in the afternoon, but I was writing the manual and saw various set-ups. I did get trapped in some small moves (trying a long trade at the P2 going up) where I was able to scalp out with minimal damage. I then caught that break lower for a few points. Whenever readings do not make sense (especially for extended periods), it may be of value to pay attention.

## Special Examples and Discussions (continued):

20) This morning I saw an interesting case that I wanted to point out about the Cycle Width and doing the predictive method I discussed in the CycleWidth portion of the manual. Let's take a look:



You will note the 10-10-4 pattern going up; a weakening trend. On the bottom of the pattern, we are seeing a 4-5, 2-10 and 6,12.

Now it is nice to point that out after the fact, but the fact of the matter is, you could have asked the question (in advance), "if we broke lower here, what would I be seeing?" If we had done this at or about the peak, when the 4 was formed at the high, we would have been able to see the 5, 10 and 12 if we had been taking the time to notice. Knowing we had multiple expanding cycles heading southwards, may have helped us to catch the 5 + point move that came off the open.

Often, we want to be thinking in terms of what the count will be as we break. By this, I mean we have the 4-5. This becomes a 9. The 2-10 a 12 and the 6-12 becomes an 18. So keep that in mind.

You can also see on this chart we had a P2 going northward up into the high, but the retracement was quite deep. This brings up another point about the Patterns that deserves some discussion: As the depth of retracements becomes deeper, the likelihood it will fail becomes greater. This is true because depth of retracement can be understood in terms of conviction. When retracements are shallow, it tells us traders are on a mission and one side is in control. These are often the best trading situations. When retracements are deep, it tells us there is not a lot of conviction from one side over the other. This is an important point to always have in mind as you make your analysis. This is why I promote the use of volume analysis; because it helps to discern this control or dominance of one group over another.

Another point I would like to make here is I often note at the low or high, we often get a pivot that is followed by a fairly deep retracement. This is the first retracement off a low or high that has occurred. Often these are great trading opportunities. The reason this is true is because the market has not yet figured out there is conviction (because traders will start to hop on the bandwagon as the move develops). Now, I know that might sound a little funny but think about this for a moment. On a P1 pattern, the main criteria is that we have progressively shallower retracements. So, often the first retracement is deeper off a high or low followed by a shallower one. So, naturally, if we can discern the pressure going in the opposite direction from the low or high that was formed is increasing, we may be able to be on to the move before it gathers more steam or conviction that ultimately leads to the shallower retracement. Something that may be worth considerable thought.

### **Special Examples and Discussions (continued):**

21) We recently had a contract roll as I wrote this section of the manual so it was fitting to bring this into our discussion in a bit more detail. When contracts roll, you need to be careful. This is because the volume and order book gets split between two contracts. The old, expiring contract can hold quite a bit of the volume for a number of days following the roll. And, the new contract may be thin. This can be challenging for the reading of volume because normal, may not be the case during these days of transition.

Typically stock index futures roll one week before the contract expiration. This is usually on the first or second Thursday of the Month or so. As a result, by the next Monday, most traders have rolled out to the new front month and the volume resumes normality. Use caution during these transition periods.

## **Special Examples and Discussions (continued):**

22) Today (6/15/2012), has a number of features I want to point out. This is a day where the market repeatedly rallies on negative volume (before about 8:09 AM). The afternoon before, the market had traded on negative volume into the close. Then, the [market opened](#) above value (and almost above range), indicating a strong bull open. The market had tested higher overnight and had traded back down into the open. There were reports and the U of M Consumer Sentiment numbers were due out at 655AM Pacific time. I did a [video here](#) on this set-up, so will not reiterate it here. Now that you have watched the video, I will comment that we have conflicting information.

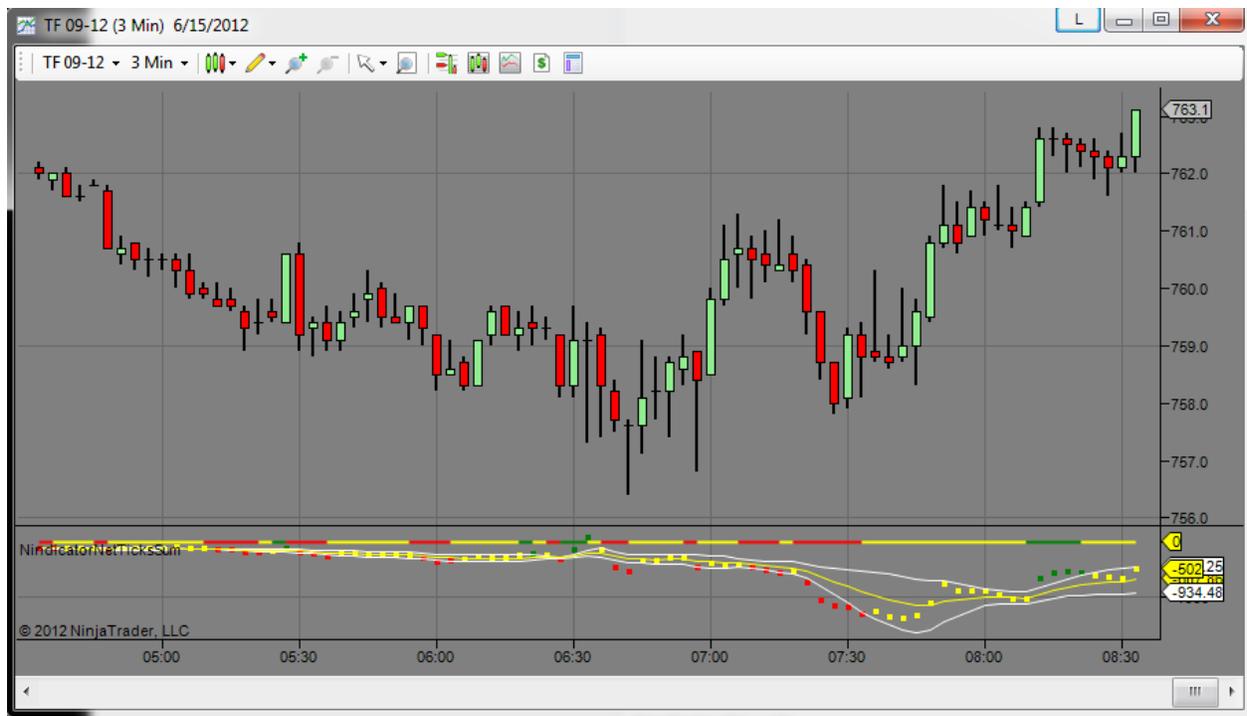
This is not too strange on a Friday, but it begs the question, what do we go with patterns, which are saying higher or volume, which is saying lower. My answer is this. Simply use caution and keep it tight. I have mentioned elsewhere that volume can often be contrary to the patterns. Price rules of course because that is what we actually trade. Of course if the patterns, volume and volume profile analysis had all gone together, we would have a very different situation.

I have traded 3 times today, each time short. The rally persisted however. Some days are like this. I do know this however. It is not likely that the rally can continue under these circumstances. In addition to the above mentioned facts, we have an interesting week in that we have essentially traded all week inside Monday's range. On the ES, we had tested Monday's high overnight.

The rally as I currently observe it, is again testing the overnight high and Monday's high in the ES. As a result, I expect to see weakness here. On Fridays I will often not trade past the first couple hours. We may continue the rally.

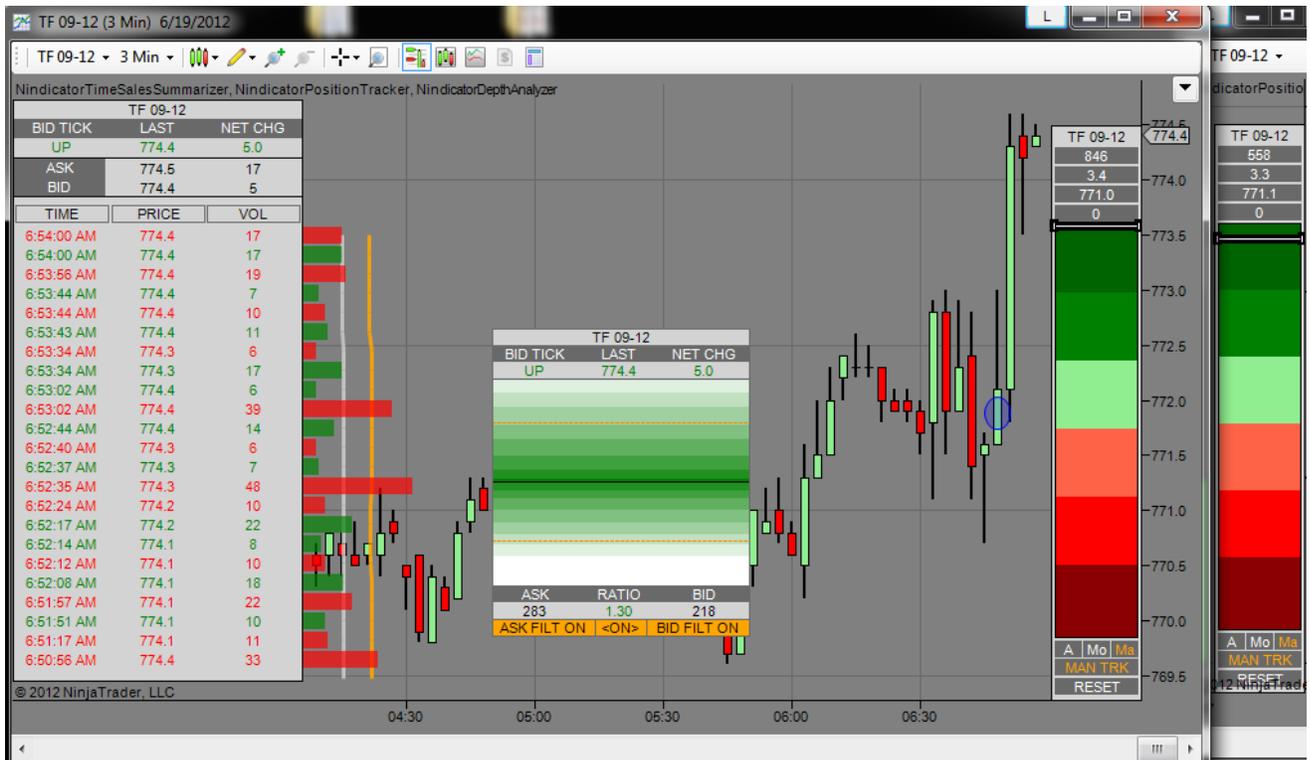
In addition to repeated zigzags higher, we also had a few Box breakouts going higher. So, We, as traders have to weigh out all the factors. I enumerated a number of them above, and quite a few at that. What we may be looking at is OTF entering new. At this point I am behind the curve with a grand whopping \$20 in gains for the day, so I will wait for better opportunity where the risk is lower.

The fact is, I probably should have gotten long following the sell-off, but today I got too caught up in my analysis (and doing other things, like making videos :-)). Here is a chart covering the period we are discussing and the volume (note we are on negative volume since the open at 6:30):



## Special Examples and Discussions (continued):

23) Today is 6/19/2012 and here is a trading example that should serve you well. I am using the order flow tools in conjunction with the box concept and some other concepts (mentioned below). Let's take a look:



Here I have two PTs up. One is set to Bid/Ask and the other to Up/Downticks. I have put a small light blue ellipse on the 6:48 AM bar. So, what do we have here? One we had a bullish open above value and range. We were zig-zagging upward from just after 5:30 AM (uptrend) where there were some reports that were not bad. You will also note the 6:03 bar was engulfing and bullish (a Box). The same thing at 6:33. These two factors suggested there were buyers present with strength. Then we tested lower on the 6:45 bar. This invited the shorts who's stop orders would later fuel the initial breakout. During this time, there was positive volume on the PTs. So, we had shorts entering, but with no conviction. The 3 bars off the 6:45 low engulfed more than 6 previous bars and broke higher hitting the stops I just mentioned. At this time (the light blue ellipse) the volume on the Ticks and the bid ask volume on the two PTs was more than about 2 times normal. The DA was persisting with positive Ratio readings during the entire analysis. As of this writing, we jumped another 5 points or so from the ellipse region of 772. The Daily Target was hit at 777 in relatively short order. I believe this combination of using the PT, DA and Box concepts is extremely powerful and could easily comprise your entire strategy; Nindicator Box set-ups confirmed with Volume and Order Flow analysis.

### **Special Examples and Discussions (continued):**

24) I want to take a minute and discuss the use of two PTs like what I was doing in the above example. There are two kinds of volume this tool reads and summarizes. Tick volume and Bid/Ask (BA) volume. Bid/Ask volume represents the actual contracts that have traded from the time and sales. In this mode, the PT is summarizing all the actual trades. The tick volume, on the other hand, represents the number of price changes, up or down, that are occurring. As a result, if you have two PTs set up and set at the same time with each one reflecting the result of each of these types of volume, you can get several different results. Let's go over them (I will abbreviate with T for tick can V for the Bid/Ask volume PT):

- 1) T/V both moving together up or down
- 2) T/V moving in opposing directions

Going into some further detail (remember, they are both started at the same time and price):

- 1) T&V both positive with  $T > V$
- 2) T&V both negative with  $T < V$
- 3) T is negative and V is positive
- 4) T is positive and V is negative

You can further distinguish or select between the trades and the actual volume on this and other volume related tools by selecting the following (I like to use the volume setting here most of the time):

Input Type	VOLUME
ResetOnAddedPosition	VOLUME
ReverseBiasWhenAutoTrack	TRADES

Typically, you will see the ticks representing a number of greater magnitude than BA volume. For this reason also, it may tend to lead BA volume at times. But, sometimes they go together pretty closely. There is an art to reading the volume, and many of these points have been made elsewhere. Each aspect of your reading is part of a whole story. The departure of these two volume readings, when they occur, may have various implications depending on what mode the market is in i.e. trending but retracing, trending at new high or low, ranging etc. I will not try to cover all cases here, but if you put these up on your screen, you will begin to start to understand these differences. Study this, it should serve you well. Often the best trades are going to see both these going in the direction of your trade. I am suspicious of the sustainability of a situation when these two diverge i.e. ticks are positive but BA volume is rolling over negative (as below).



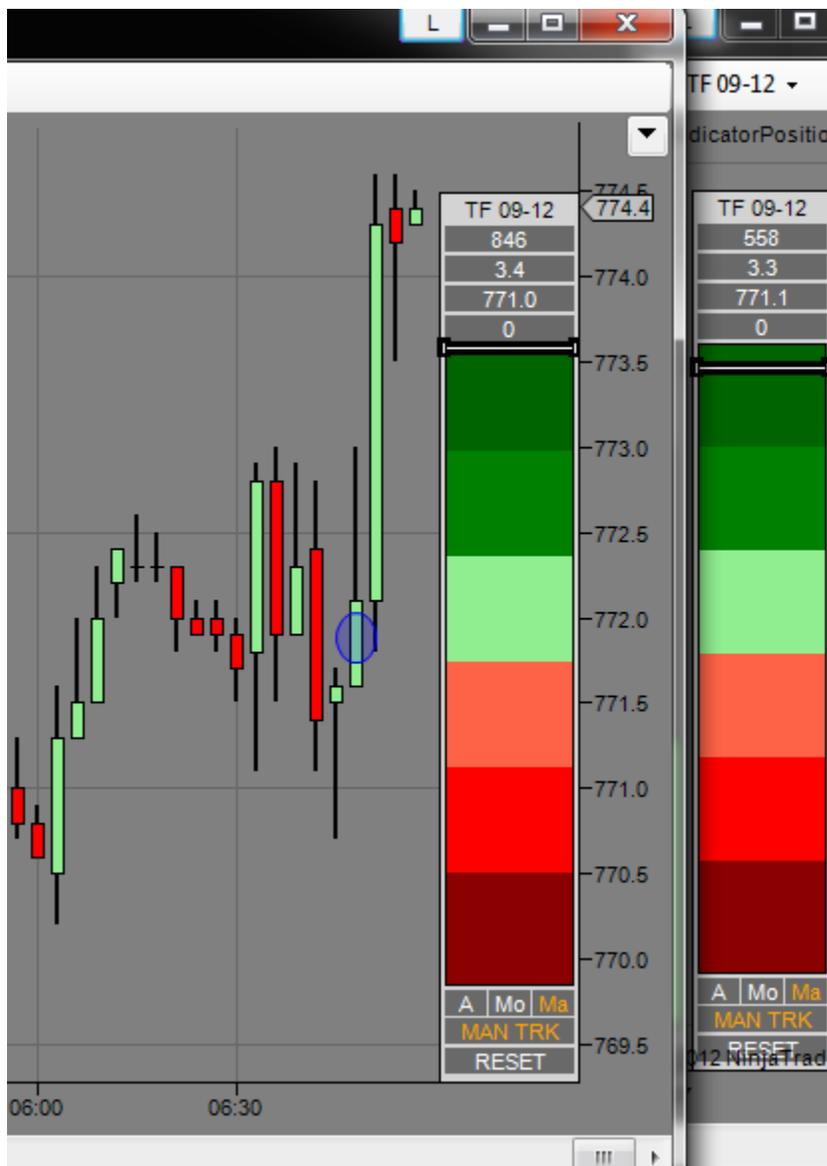
Sometimes you will notice that the Bid/Ask volume can diverge from the tick readings at various times. This can also happen during prolonged directional moves up, or positive during prolonged declines. I believe this occurs at times where OTF has stepped in and there is a sentiment change in the making in the market you are seeing the BA volume divergence to tick volume divergence in. Make no mistake however. BA volume *is* actual trades and tick volume is essentially an estimate.

This brings up another topic. Where do you reset these and for how long can you use them from a given reset point. I typically reset them where I feel the market is turning bringing in new buyers / sellers. At and after these points, changes in volume compared to the past may be less relevant than it was while the market was directional. So, I will reset them to test my hypothesis. Either way, there is an art to this. You, in time, will develop your technique as to where the best reset points are. At another level, the reset point is not as important if you have

been analyzing on an ongoing basis. You will begin at some point, and with practice, to understand a whole context around watching these tools in conjunction with price. Then, later, you will likely start to see the market in terms of the ValueProfile, ZigZagPatterns, Box patterns and volume and order flow analysis all at the same time.

I have also mentioned elsewhere. In the market you trade you will find that there is somewhat of a normal volume price relationship for certain times of the day i.e. 1 point per 100 contracts of BA or tick volume. So, the reading above is bullish on the ticks (PT on the left) and bearish on the one on the left. This tells me the market may be ranging. This may be a clue to stay away. It may be ranging, or it may be a short set-up, or it may just be the market taking a rest (setting up a trap) if it is trending. Either way, you would want to be aware that something may be shifting in the sentiment / control.

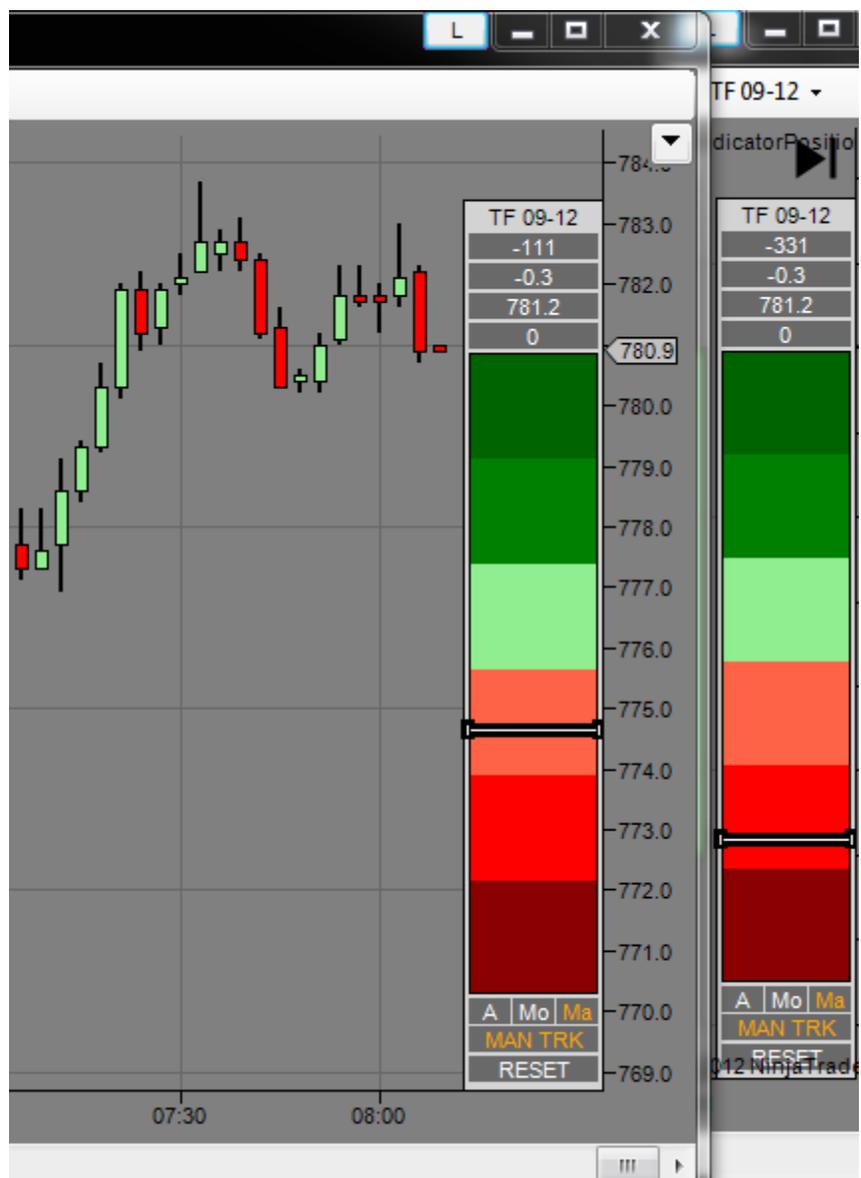
In the previous discussion, just before the break higher we had this (below):



This is a strong indication of buying pressure with long volume being greater than the normal 100 ticks to the point rule of thumb for this market. The market is much more likely to continue the trend because sellers are being overwhelmed.

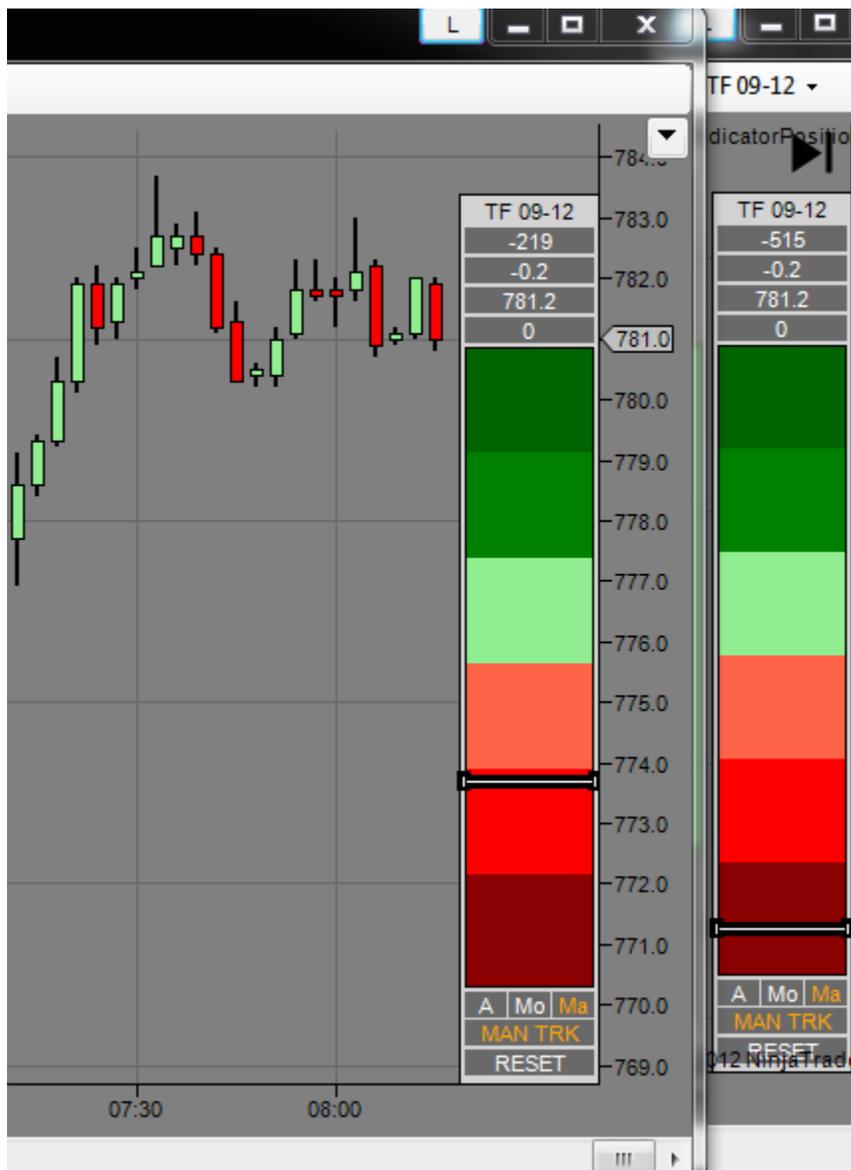
Always keep in mind, another group can step in at any moment. These indications described above can help you to identify fairly early on when this is occurring.

As I wrote, this began to manifest:

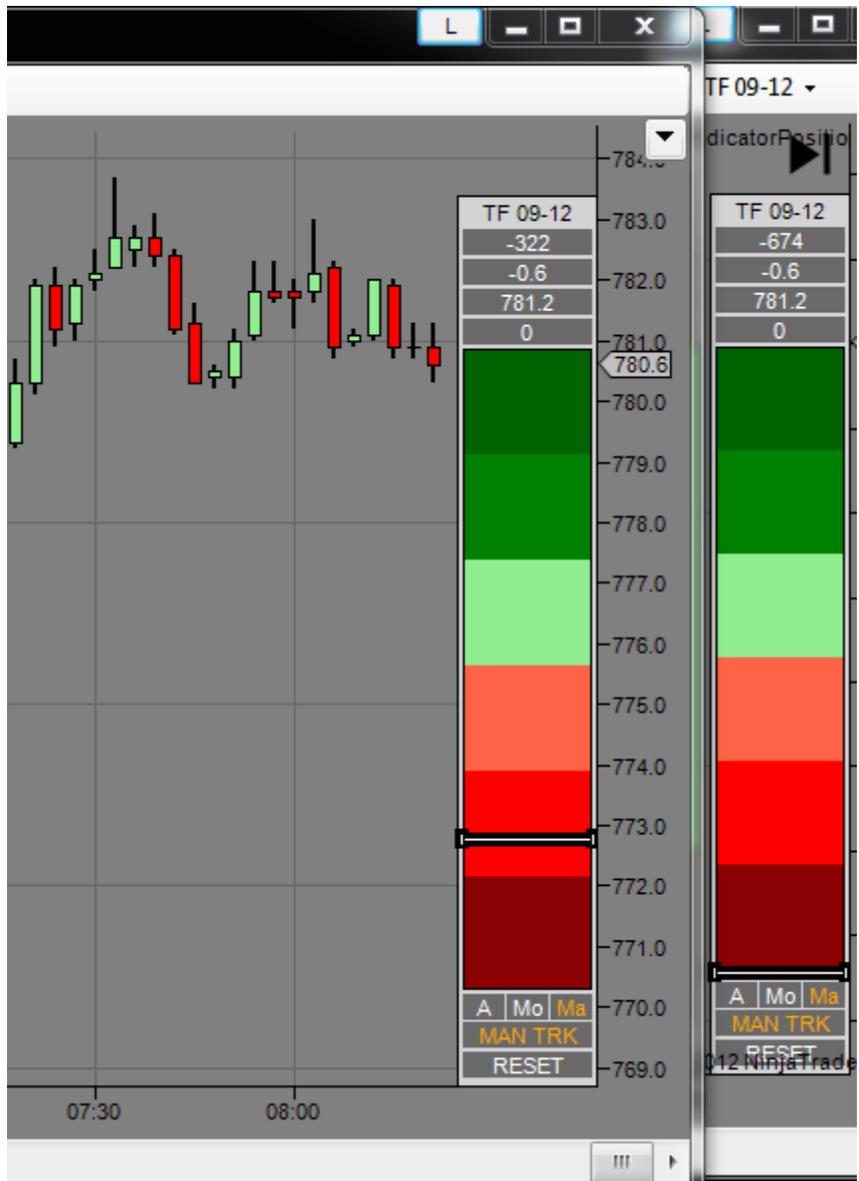


Now, we are into the 11 hour in New York. So this is not my favorite time to initiate a trade. We are trading inside the range of earlier with multiple alternations. We are at a one month high and there are various other factors in the S/R analysis. Also there was a very strong uptrend going into this writing. So, taking a counter trend trade would be done most safely done in the spirit of scalping.

The negative volume is building even more:



A downside break, if it occurs, will be wider as of the next bar. We have accumulated a lot of volume on a change of only two ticks. This tells us if we do break up, it is going to have a lot of stops above. This will likely fuel further rally. This is why it is important to be cautious on the short idea. The most recent bar is a 2:1 Nindicator Box down bar. If we were to break lower now, with the wider time range, one might place a stop order below the 8:06 AM bar and try for a scalp short:



This brings up another very important topic. The shorts have amassed a large position during this discussion. However, they have been unable to move the market more than a handful of ticks. This is not a good thing for the shorts. This means there are bulls still present. Another hypothesis is the market might test that 7:45 AM low and find buyers there. If one were using the money management strategy of taking off after a few ticks or so of profit and going to break-even, it would likely be wise in a case like this.

Then we drifted lower:



But began to see rejection (buying) at the low (not the increase in the buying volume from the last screenshot):



Seeing this buying at the support level, it may be wise to scalp out.

Also, if we break above 781.00 on the current bar, we will then be in a bull mode (2:1 Box skewing). We can adjust this analysis going forward. For example, on the next bar, we will want to see 781.30 to become bullish. On the next bar, 782.00 and so on.

Remember, there was a strong uptrend earlier. It is not unlikely that the bulls will come back and strike a bit later. This kind of thinking involves pattern vs. volume analysis on an ongoing basis.

This discussion has covered a variety of topics I hope will get you thinking about using volume and pattern to analyze what is going on. I am sure you could ask me a bunch of questions, and this is fine, but the very best question to ask from this point is to ask yourself. This will help you to learn and advance your skill as a master trader.

**Special Examples and Discussions (continued):**

25)

**Special Examples and Discussions (continued):**

26) Today, 6/20/2012 is an FOMC day. They have any number of meetings and reports at different times today. I have noted the volume (both ticks and trade volume) are all over the place today. Also the Order book is a bit inconsistent as well. Beware on days where there is no consensus, but newly interpreted information entering the psyche of traders that additional caution should be taken. This is seen in the indicators themselves as well. For example, the DA might be showing downward bias while the volume is going up and ticks are going up:



**Special Examples and Discussions (continued):**

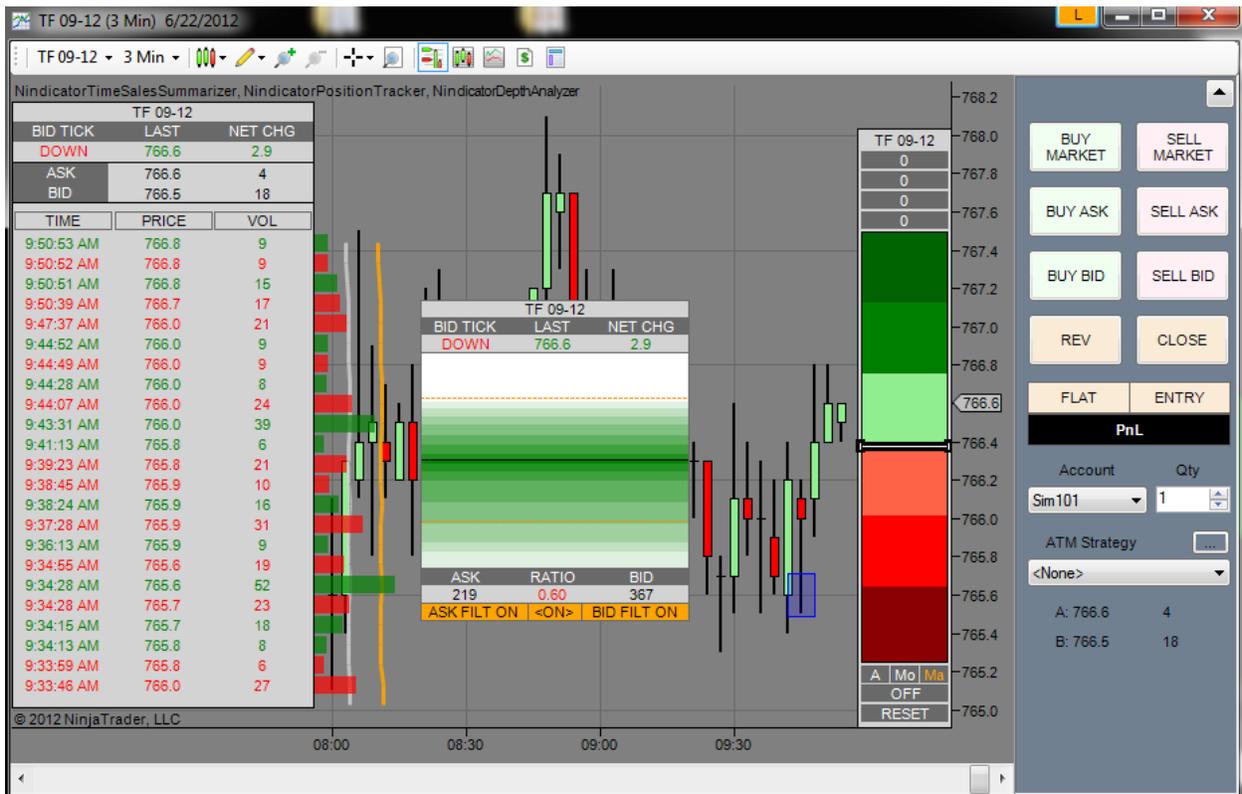
27) Some days we will get a market that is trending but the ratio on the DA remains relatively flat all day. It is good to remember that the DA does not have to compress if the price movement is more-or-less orderly. I try to give you these notes because often at these times, a shift to pattern trading may be in order. I have mentioned elsewhere that trading patterns is often out of sync with volume and order flow readings. Price, of course always rules. There is an old saying, "if in doubt, get out." This is not a bad strategy during times when things do not make sense.

### **Special Examples and Discussions (continued):**

28) Over analysis is a problem you can get into that can shut down your ability to trade. If you find you are in an analysis loop at the point you are firing a trade. There are a couple ways to deal with this in my experience. One, is to use stop orders to take you into the trade. This way you have to manage your position once you are in. Another way is simply to simplify your analysis. For example. Trade patterns, but limit the volume or order flow analysis (remember, the closer you are to pure price analysis in the moment of the trade the more important the measure. This is why pattern trading is so powerful). If you just scalp. Just use the DA and the Position Tracker combo. If you try to get on intraday trends, use the trend tools inside. Once you get the more simplified trading under your belt, expand it and possibly try to go for bigger trades. As always, you will want to use good money / contract management. This, properly done will make it so you can be wrong and still come out of it with a few ticks of profit. Once you fully realize you can do this consistently, it will become more like a game to you. This will build confidence. Try to be aware of how you are trading and behaving so you can get at the perils that have you in an analysis mode. This may also be helped by keeping a journal. You may even make an audio recording of your thought process as you are trading. This way, you will begin to hear yourself, your doubts and mental alternations from another viewpoint. As you do this, describe the trade. Mark time so you can go back later to that chart area. All this can be done with relative ease, that is not distracting to your trading. In fact it will help it.

**Special Examples and Discussions (continued):**

29) A pattern I have seen over and over again that I would like to share with you using the Box. Often following a box break, you will get a retracement into the breaking bar. These are often very good set-ups. Once the Box sets up and breaks, I reset the Position tracker to track the volume into the retrace following the break. What I like to see is some accumulation of volume in the direction of the break (which is opposing the retracement). I did not catch this quick enough to show the volume in / during the retrace, but here is a screenshot where I marked the retracement low with a rectangle following the box break. There are, of course other ways to play boxes. Many times they will run, but where I see this retracement scenario often, it is something I want you to know about.



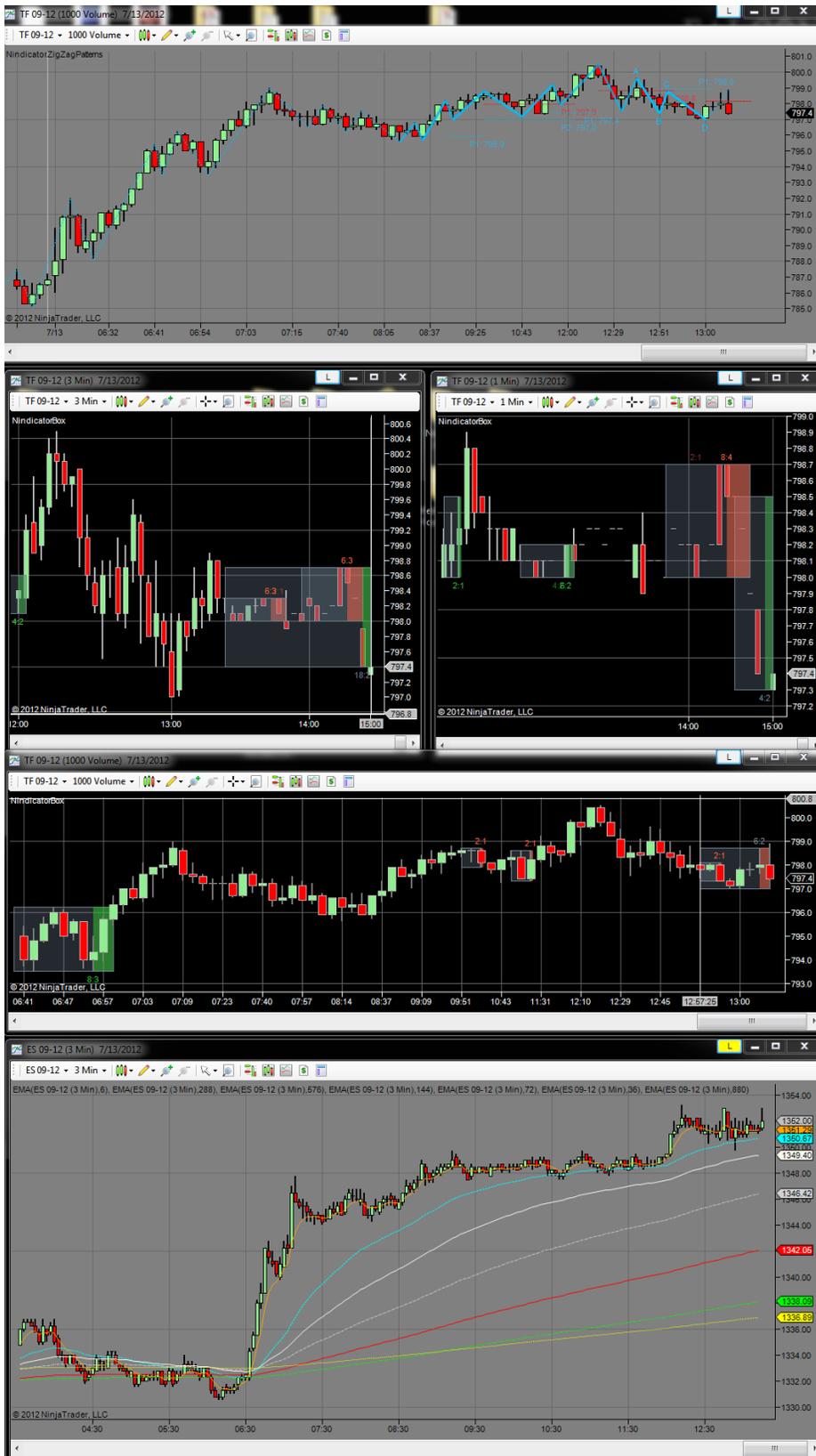




**Special Examples and Discussions (continued):**

31) My NinjaTrader screens with Nindicators on them are typically in a state of evolution. Currently, I am using three monitors for my setup. I decided to share this with you in order to help you with setting up your screens.

On the first screen I have a zig zag on a volume chart. Under this are three Nindicator box charts (1 min, 3 min and 1000 volume on the TF) and a rainbow chart.



On the second screen, I have my main ZigZag chart, my order flow and position management chart and my Value profile charts:



On the third screen I have my Volume Tools, Key Support and Resistance screen, Daily Targets with Trend Tools Cycle Width and C-Levels charts:

Note: My screens are 25" tall. Yours are likely more vertically oriented. I find this set-up enables me to see the big picture and the small at the same time- something I learned keeps me from getting too myopic/short term oriented; a key point for success (at least for me).



**Special Examples and Discussions (continued):**

32) Buy a box break that failed consistent with the wavecount. Example, buy the crosshairs / break of the 8:4 box that failed:



**Special Examples and Discussions (continued):**

33) Buy a close above the T3 moving average on a higher wavecount following a retracement (The T3 can be found in your NT indicators, as I have included it for free for you. Experiment with different settings):



Note the volume has also turned up and is leading to new highs

**Special Examples and Discussions (continued):**

34) Buy a count reset on the .1 count. In this image, we are on a 5 count on the .2 with a reset on the .1. Following we get a volume break and a close above the T3:



**Special Examples and Discussions (continued):**

35) The Net ticks (type 1) can at times go into divergence for long periods. This occurred today 8/17. The other volume indicators do not do this. It should make you more cautious, however do not avoid opportunity over the issue- Just keep risk tighter (the above image is a type 2 net tick computation; NET\_RNGADJ on your tool).

## Special Examples and Discussions (continued):

36) ALWAYS be aware of the depth of retracement:



Note above that at 8:30 we have a wider cycle AND a shallower retracement.

Note also the deeper retracement following the zigzag down into 7:06 AM. This deeper retrace was followed by a break with an expansion bar, going to a 3 count on a range expansion following a deeper retracement. The volume also went with it.

Note also the deeper retracement just after 9:30. In this case the new high had been taken out on the previous upswing. Therefore, shallower retrace is no longer relevant as it is a new count. This is a Pattern 2 zigzag.

If we were to see patterning like this above at about 8:30 taking out a previous day's high it would be very bullish.

**Special Examples and Discussions (continued):**

37) Reminder: Most first waves are deep this is why you often want to take them.

### Special Examples and Discussions (continued):

38) In this example, we get a long yellow (.2) that has shallow .1s inside it (before 7:15). This is then followed by a count reset on the .1 that is still shallow (on the .2). This is still a long signal because it is shallow inside the bigger wave (even though it is a 3 count down on the blue at about 8:45). However, I would be suspicious as to the potential for upside strength following this 3 count down shakeout.

We also have a big bar followed by a shallow retracement. The size of the bars should be noted at ALL times. Here then is, big bar, shallow retrace and break higher (at 6:51 AM). The big bar also sends the volume well above the Std Dev line, which is common near the open of the day.



Similarly, when you see red on the volume in the above, you should be looking for a buy. This is true because the *retracement is shallow*. More clearly, the retracement is shallow on the blue inside the yellow (note: it did not look like this at the time because the yellow would have been lower), AND the blue is deep retracement inside the bigger shallow one. Weak against strong to go long...

### Special Examples and Discussions (continued):

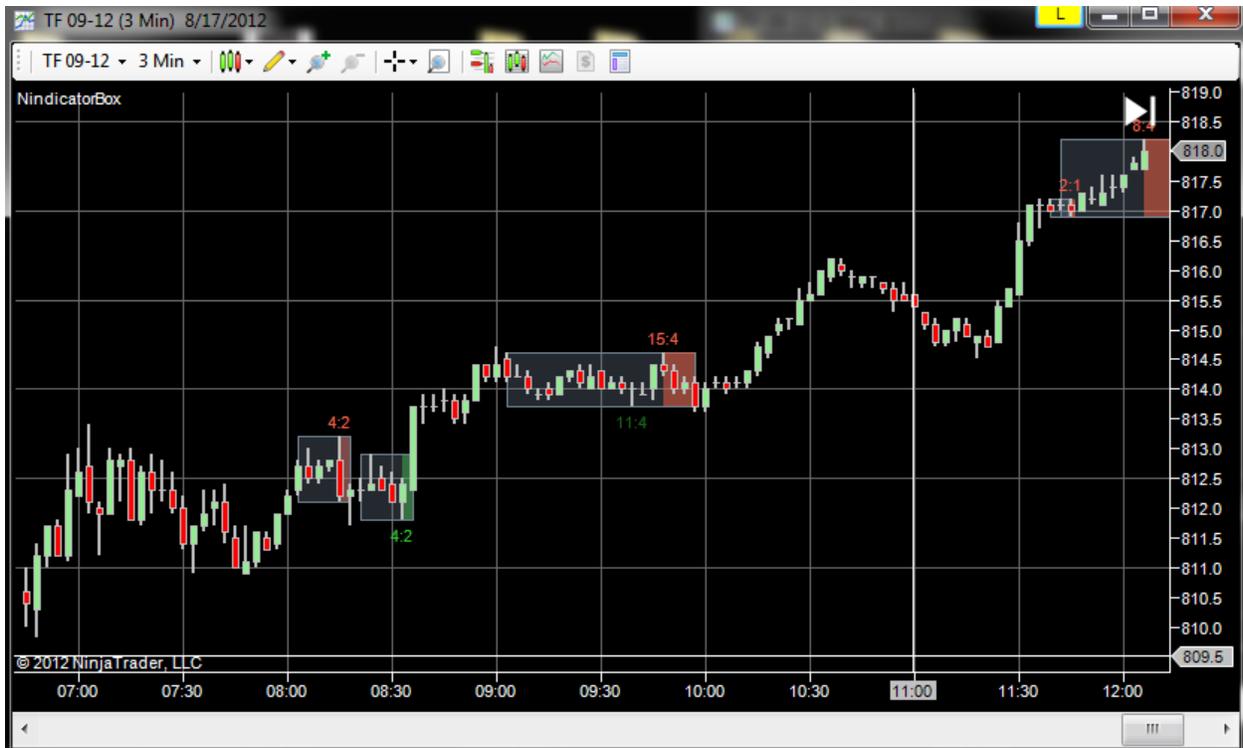
39) Here get a shallow retrace on the .1 at about 930 AM while we are going to at least a 3 count on the .2 (yellow). The retrace on the cyan (.1) is also shallow. So, break to higher 3 count (.2) followed by a shallow retrace (.1):



In the afternoon in the above, we FAILED to make a retrace at all on the .2 in over 1.5 hours and THEN had a shallower retrace on the .1 (note the retrace at 12 was greater than the retrace at 12:20) for a sell. Well, almost, as it is a 50% retrace. Remember most first retracements of a new count are deep. This is especially so at key bottoms, as you have more fighters there trying to push it lower. This is why this pattern is so indicative of the way the market works; First deep then progressively shallower as the other side gives up

### Special Examples and Discussions (continued):

40) Note this box failure that occurred at about 10:00 then it went higher and broke. This move was an: 1) extremely shallow retracement. 2) progressively shallower retracement (i.e. the retracement at 9:57 is < that one at 8:33).



**Special Examples and Discussions (continued):**

41) Here is another case of a box failure that occurred on the next wave:



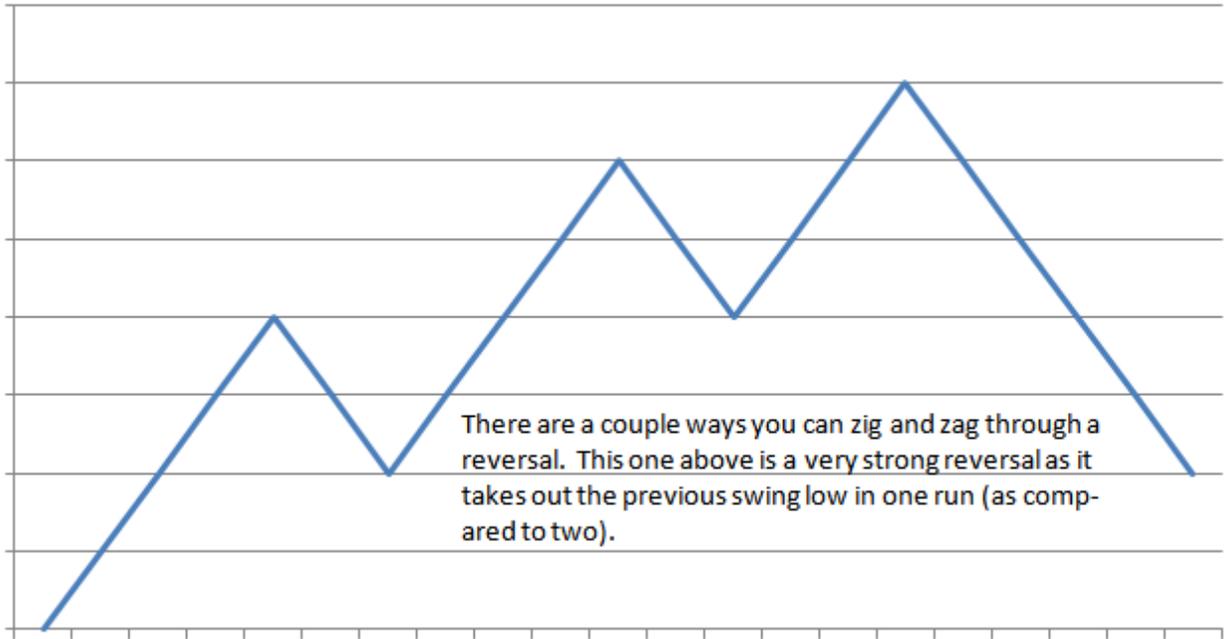
This also had a type 2 volume breakout at the same time



following a 0.618 retracement (the low at about 11:18). 0.618s can still be considered shallow as many people trade the 0.618.

**Special Examples and Discussions (continued):**

42) There are two ways a wave can reset. One is simply by taking out an old swing in an opposing direction to the trend. Another is to make 2 new swings in the new direction, thus establishing a new 3 count/wave. Below are these two cases illustrated:



Pattern1 (above)

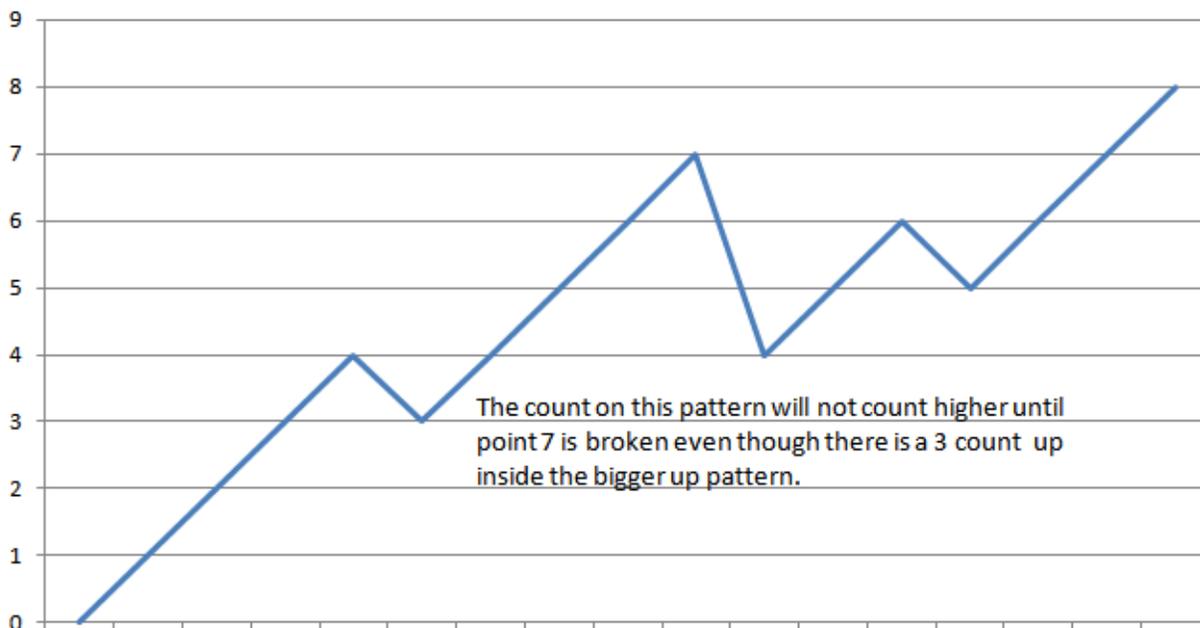


## Pattern 2 (above)

Because the first type is a more powerful reversal, if it fails, the failure may also be more powerful. This is because many more traders have been humiliated on the first pattern than the second. Therefore, the most stop orders will likely be present at the high of the first pattern above. Here is an example of this (note the cyan has taken out its previous swing high):



In the image above. Look at the cyan line (0.1%) at the point where the red arrow is. What we have here is a taking out of the previous swing high in one run as in Pattern 1 above. Then it fails. Note the size of the bar on the failure at 9:06 AM. This expansion is indicative of a large number of sell stops being present at that previous low. When the price action took out this low, it induced momentum. This point also caused the yellow (0.2) line to go to a 3 count down. Be cautious any time there is a count reset as these are often associated with opportunity. The rules go like this (for the long side only): As long as no previous swing low is taken out, continue to count higher on new highs only. If we get a zigzag inside a bigger pattern, then it will only count higher by taking out the earlier swing. Here is an example of this:



So, if we were on a 3 count at the initial reaching of a 7 level, then on the next break of it, we would go to a 5 count. This is true because no lows were taken out in the sequence.

### Special Examples and Discussions (continued):

43) Note the patterning below. What we have here is successive longer runs (I have marked them in pink with parallel lines) as well as successively more shallow retracements starting from the red down arrow. Again, note that each successive pink line is longer. This situation indicates an extreme oversold situation. We were actually on a 9 count going down, which, of course is about a 99% probability of going up, at least to the 818 level, or by getting a new 3 count up (see pattern 1 and pattern 2 above).



**Special Examples and Discussions (continued):**

44) Here we have (at noon) a progressively shallower retrace following the 100% retracement. We then saw a close below the T3 average and a type 2 volume breakout lower:



## Special Examples and Discussions (continued):

45) Sometimes you get a 3 (or higher) count and it fails. This will have many stops to hit. It looks like this:



Just after 9AM, we were on a 3 count on the cyan (0.1). Then it failed by breaking the low of the 2 count. It did this in one straight run with no retracement, showing a lot of strength. You can also catch this same trade on a failed box set-up. There was a 4:2 down that failed by going higher. Then it came back through; triggering at the same (810) level as the above trade:



## Special Examples and Discussions (continued):

### 46) The Two Bar Trading Method

The following trading method(s) are based on a pattern of tick bars and on a pattern of zigzag counts.

1) Trade following a sequence of similar color bars (candles), when you get two bars in an opposing direction:



Sell 6:50 which is two red bars following green

Sell 8:32 as same pattern

At 7:54 (the bar after), we have an exception, but when the high of the red bar is take out, it is ok to go long.

At 12:45 (below), we got a red, green, red, green and then a break lower. This occurred on a deep retracement. When the low of that cluster was taken out, it was ok to short as it was a count reset.

2) There is a high probability if you have a zig, that you will take a second wave in the direction of the zig (following a zag). See the blue lines below:



If trading the patterns discussed in #1 above, is it best if a buy, for example, occurs inside the retracement. This occurred on the bar before 11:05. The bar at 8:15 was not as it was on a higher count.

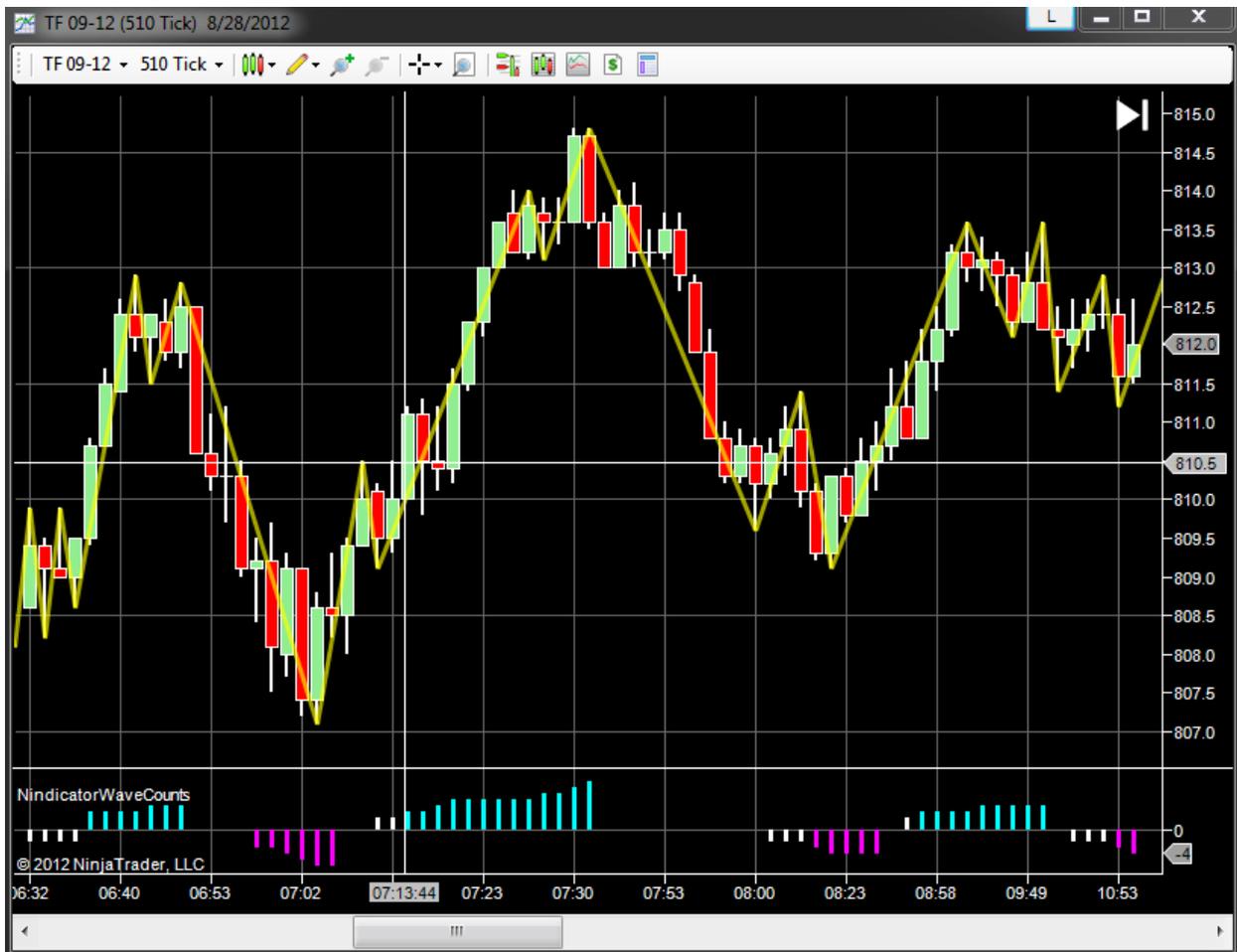
The zigzag should stand on its own however and you can trade any break to a new low or high. Especially if it is shallow and of short duration. This occurred at 3 bars after 8:03. Four bars after 8:32. 3 bars after 6:38 etc. These are the patterns where you continue quickly and cannot get 2 bars of one color following a move (as described in #1 above).

More examples covering both concepts (note the cursor in the images):



Ex1.

Sell the break (above).



Ex2

Buy the break (above).



Ex3

Sell the break lower(above).

Note these last two are losers. There are two issues here. One, trading shallow retracements following long runs can be dangerous. Additionally, volume confirmation using Nindicator volume tools can make a world of difference in filtering the garbage trades. Volume would not have helped on the above trade as the volume was strong. Note 3 bars later the pattern failed as the green bar took out the high of the (nearly) inside red bar. If you missed that, then the second green was the buy.



Ex4

Buy the break higher

Enough of these. Let's look at some of the color patterns:



Ex5

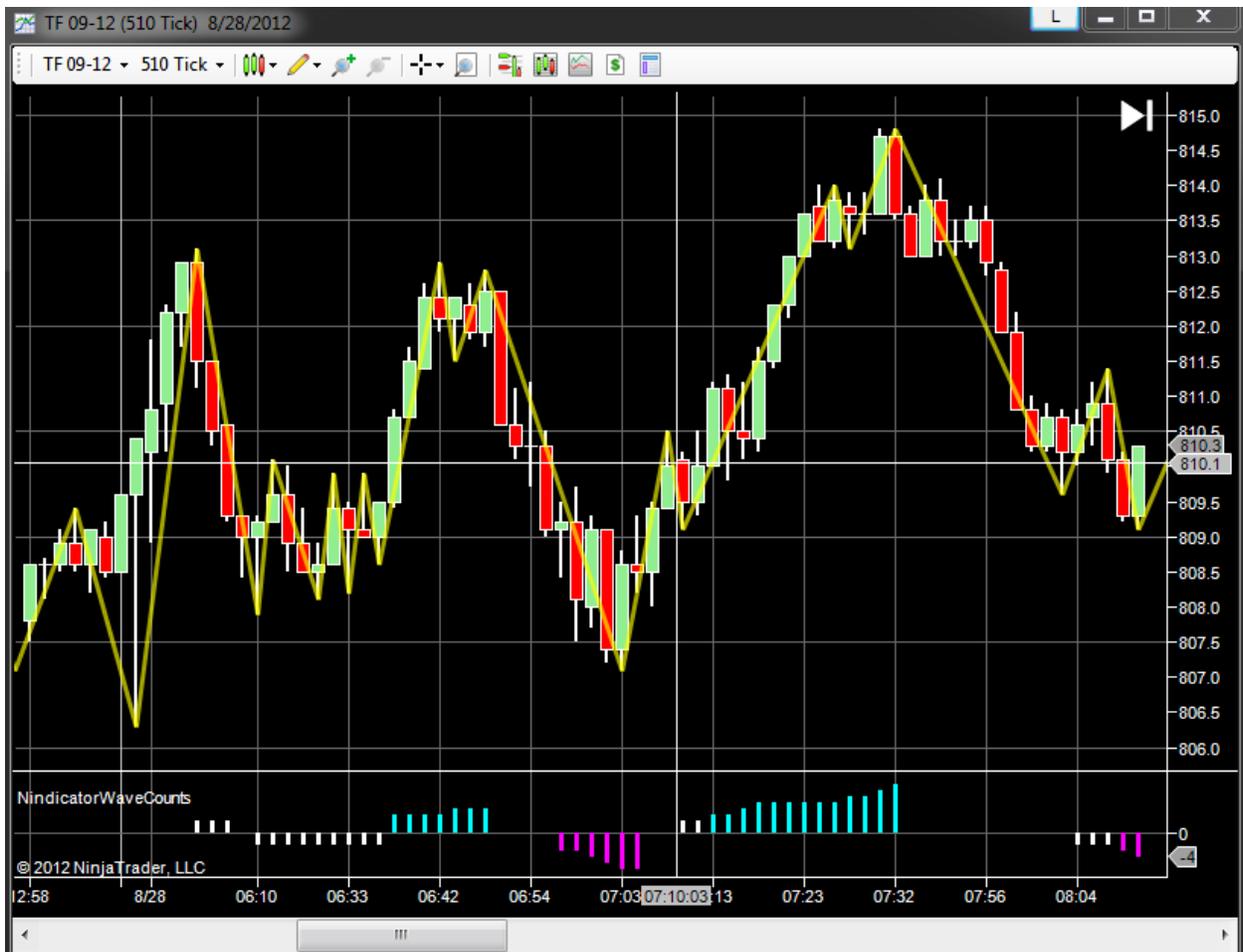
Sell the second red (at the crosshairs).





Ex7

Buy the second green bar. You might make a case for buying the break of the cluster here as well.



Ex8

Buy the crosshair. You could also make a case here for buying the break of the high of the red doji bar two bars earlier.



Ex9

Sell the cross hairs; two reds following a green.

When the new high was made on the next bar, that was a buy. Call this a two bar color failure.



Ex10

Sell the crosshairs.



Ex11

Buy the crosshairs.

You would then have sold the failure and gotten whipsawed.



Ex12

Buy the cross hairs. You could also have bought the previous bar on the break of the red bar high.



Many (like all of them) of these patterns, like the whipsaw above should be confirmed with Nindicator volume tools.

Note below the volume was largely divergent in this interval:



All the above is very effective for scalping. This approach virtually guarantees you will get caught in big moves (supposing you take all the trades).

Note long runs are often followed by failures of continuation moves. This is similar to the CD> AB pattern in the Nindicator ZigZag Pattern Tool; long runs are associated with overbought and oversold conditions. Let's look at an example (below):



Early on the chart we see a quick run south followed by a retracement and strong break lower. Later in the run we get a shallow retracement following a long run. This has a very short run associated with it. This happens again at about 8:30 where the break is only a tick or two. Truly a trap for many traders who bought up there. So, this pattern of long run followed by retrace that fails with two red bars gets you in a large move going south. Remembering this patterning may be of significant benefit for you. Further, if we look at the Nindicator Volume tools at this time, we will see the volume on all 3 of the suggested Compute Mode s on the Nindicator Net Ticks Sum tool were diverging with price action at that high.

Compute Mode	<b>NET</b>
MA Period	NET
MA Type	NET_RNGADJ
ResetTime	TOTAL_RNGADJ
Standard Deviation Mu	TOTAL_RVIADJ
Standard Deviation Sigma	TOTAL_RVIADJ

There are also patterns occurring here that are associated with the Nindicator Box patterns so you can watch for those as well..

If you are stopped, are reversing or trading in short intervals, it may be of value to increase the number of ticks in the chart. For example, going from 510 ticks to 610 etc.

Many times bad trades can be avoided by using trendlines on the volume plots. That will look like this:



To an extent this is an art. Because we know waves often go in a minimum of two counts, you want two points on the volume to make a trendline. Often the best trades will be a long to a short wave like the above. This one is also divergent on the volume. So, we have divergence, trendline break and the signal.

## Special Examples and Discussions (continued):

### 47) **Two and Reverse Method** (AKA: Two and screw)

This approach is a trap that looks for two consecutive candles of a color that are immediately reversed. Different settings would be used in different markets at different times- Experiment to see what might work for you. You want to trade the break through the first candle's high or low. The yellow line defines the zone of the two set-up bars. Let's take a look:



You should see this pattern happening in short order after the set-up. Not many bars.



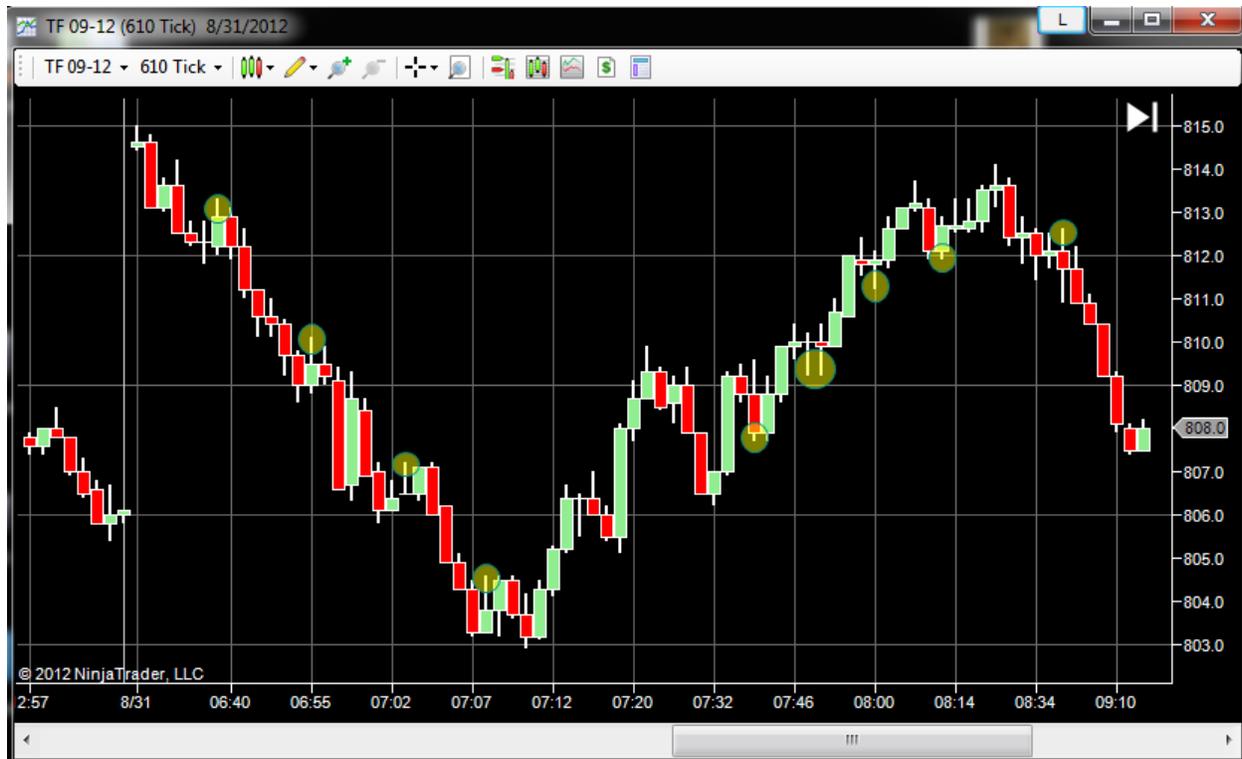


The above charts are consecutive days. The win percent is extremely high and you get caught in some very good moves.

## Special Examples and Discussions (continued):

### 48) Trader Trap Bar Violation

Here is a trading concept based on a trader trap that can be good for scalping or other larger scale trading where you are looking for entry. The pattern violates the high or low of an immediately previous bar against a trend. Let's take a look:



See the ellipses; four going down, four going up and then one more going down. Of course you could extend this to larger patterns like the one at 7:32.

You buy or sell on the break of the pattern risking the height of only one bar. Trading the break of the bar that was violated against the trend.

Be caution as just a few ticks different in the chart will change all the bars, so there may be opportunities on say a 618 tick that may not be there on a 610 tick chart.

This pattern can have many subtle variations but basically you will get something like a minimum of two down, another bar and a test that fails.

This method can provide a couple decent scalps a day that are a point or more. Sometimes you will get caught in bar by bar moves that will sustain for quite a few bars (such as in the below image):



Another nice feature of monitoring the market on this level is that it can clue you in to the end of a run. In the image above the above image we saw 4 of these patterns in sequence twice (4 going down and then four going up). As you see the bars clustering more, it indicates weakness. As an example, in the above image, you have the brief retest. Note the bars going into the retest do not contain the pattern. Further, the topping that occurred in a relatively narrow cycle width was divergent (I do not have to look to see this as this pattern is a strong topping pattern).

Note also that this pattern is the same as any normal cycling that occurs in a market's data. It is the scale of it that is of interest to us here; that is, one bar. The short interval of the reversal is what causes the trap for the traders.

One way to expand this pattern a bit without getting into too much trouble is this pattern. You get the two down bars then the next bar, but it is followed by inside bars before the violation against the trend that triggers the order placement. Look at this example to see it:



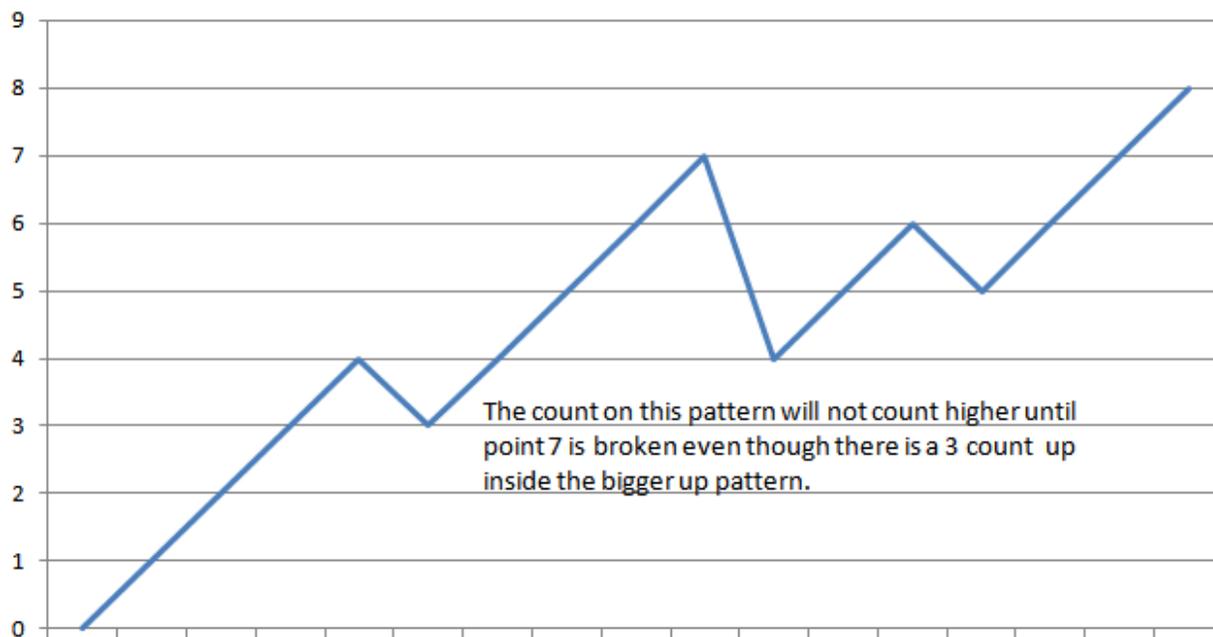
I have drawn a box around the two inside bars. Following this, you get the violation, and then break to a new low.

Now that we have opened the topic of inside bars, inside bars do not qualify for a pattern like this. You want to see movement, so keep this in mind.

Here is a tricky one with inside bars:



Here we get a big down bar that is inside the three up bars. then we get 4 or 5 inside bars inside of this depending on how you want to look at it. Then, we break the low of the bar following the two up bars. What we have here is a micro patterning of the following pattern:



This is very bullish as you have two zig zags going up with one inside the other. It is good for about 3 points on a very choppy day.

Note this patterning is nothing but the trading of micro zig zags that are counting higher at points where traders are trapped. These often gain huge momentum as the market reverses to screw them over.

## Special Examples and Discussions (continued):

### 49) Trading Box Failures

The Nindicator Box provides excellent entry signals near tops or bottoms. What you will see is a topping pattern (going up) followed by a new high. Then the market will come back through the lower end of the box. See below. I marked the sell level with the cursor:



Here, you can sell the 3:1 break going down:



Here is another from the same chart selling the 4:2 up that the box did not catch, but showed as a 3:1 instead:



There are other opportunities on this chart but I have not shown them.

Again, the pattern is: 1) high 2) higher high, 3) box break.

I prefer to break an up box going down and visa versa going up. But you can find reliable patterns in either type of box as traders are trapped in these areas. What you want to see is a violation of the box going in the opposite direction. So, it had some success and then turns around and goes through the other side of it.

Here is one from earlier in the session where you came back through the red 2:1 following a retest. At the same time you had a 13:6 going up that confirmed the trade:



**Special Examples and Discussions (continued):**

**50) How to Read Divergence in Two Dimensions**

One technique in trading that I constantly do throughout the day is to determine the bias in any given structure on my chart.

You can actually have a bullish and bearish divergence at the same time. What you really want to see is where both above and below the range you are analyzing that there is volumetric bias in your favor. Let's take a look:



In the chart above I have a bullish volume accumulation. I have pointed this out with the yellow lines. Equal lows/closes of price have rising volume. This, of course is bullish. But, is there something working against me in the opposing direction that may invalidate this analysis? Let's look below:



You can see the volume is rising to a new high here. So, we have a bullish divergence with volume and volume pushing to a new high. This suggests we will go higher in two ways. Here's what happen in the next several minutes:



Here is another example of this happening right now as I write:



I have color coded the two yellow has a bear volume divergence. Turquoise is showing a decline.

Which tool settings can you use? It does not matter that much. This is simply the net ticks setting.

Why is this very important? Because most of the time, the market is in congestion. This will help you to see when a play is under way. Remember, most of the day's range occurs in just a few bars. The rest of the time is consolidation. This is why trading is particularly difficult to do successfully.

As a result, if you can filter even a small percentage of the cases where you are not likely in congestion, it is a huge advantage. Look for situations where both above and below, you are moving in the same direction. The concept is based on the idea that volume leads price. Will it

occur all the time? No, of course not, as nobody knows what orders are about to be placed at any given time.



What do you think will happen?

This analysis would continue throughout the day as conditions change. The above situation quickly changed to this and the market headed much lower:



This approach used in the above way can also give you a good idea of trend continuation. This can help to determine if you should hop on a trend retracement and or exit a position that might be starting to go against you etc.

Any technique I show you is to be practiced. Trading is like medicine or law. Lawyers and doctors "practice" medicine and law. We as traders do the same, as nothing is absolute.

Past performance is not necessarily indicative of future results. There is a large risk of loss trading futures.

**Special Examples and Discussions (continued):**

**51) Trading Divergences with Multiple Volume Tools and Oscillators**



Note the retrace has a higher level of volume. This is a reverse point-to-point divergence. The choice here would be to buy following this at the high of the bar with the last red dot on the volume (last red bar in the retracement). This would be called, "failure to make a new low."

The right most high was a failure to make a new volume high. So you could plan to sell the low of the second green bar from the high. This would be called "failure to make a new high."

When you get a volume divergence, use the oscillator (Stochastic) and or/ Volume Oscillator:



The divergence is followed by a roll over in the stoc, the Volume Oscillator and 3 red dots on the A,B & C volume tools. *Everything* agrees to sell there.

Just before this one above, we had divergence on the B&C volume tools (2nd and 3rd one down):



The same buy pattern occurs as the previous example.



In this one above, we see a divergence on all three volume tools and it takes a number of minutes (10) to roll over.

Here we get a nice divergence on the A volume tool and then greens immediately along with the volume osc:



Of all these, price, volume, volume osc, and stoc. The stochastic is the least reliable. Also remember, trades with higher wavecounts have better probabilities. This setup above is actually on a 2 count going up, so it is just ranging.



In the above we have upward divergence on the B&C volume oscillators and the volume Oscillator Dual followed by 3 green dots on volume, and everything else going positive. The A volume Osc. was taken out by a few ticks and then closed higher. This is also a "3up volume pattern, where all three oscillators have the dots in a row making an upward bias.



Here we have all three volume going to new highs. This is bullish of course. Then we get 3 green dots, VoIOscDual goes positive and the stoc turns.



Here we have triple divergence, three green dots, VolOsc goes positive and a mini divergence on the stoc.



Here we get triple divergence, 3 green dots. etc.

The patterns where you have a reversal

**Special Examples and Discussions (continued):**

**52) Professional Volume Trading**

Here is a case where a mini divergence occurs and the NetVolume Sums all turn over red (see below)



The interesting thing about the above case is the signal short followed another one short just a couple minutes earlier. Most traders would be caught up in the management of the first trade to see the second one set up so fast:



I have observed and believe that often the net volume is superior on these kinds of turns. Following is a technique that does not involve divergence. Rather it involves the NetVolumeSums turning following going through (or a test of) a previous volumetric support or resistance area. See below:



This one went through by a margin and then they turned over red.



































This kind of trading goes on all day long and is fast, fun and profitable.

Be cautious in times where OTF may be entering- times of reports, open (especially Monday)  
Closes (especially Friday) etc.

## Special Examples and Discussions (continued):

### 53) Trading with 4 Range Bars and Net Volume in the ES

Comparing the two equal highs at the cursor line, you can see there is sell volume accumulating in the rise. There is also a 3 count going up. This is a sell. Either wait for the dot on the Volume Sum tool to turn red, or realize it is turning and place a stop order below in anticipation of the turn. Note also, on the bar where the volume does turn red, the movement is larger than other movements indicating conviction. The bar also has no tails (the 3rd bar to the right of the cursor).



It is a good strategy to first have a divergence in volume and then a turn or break- Lined up with SR can be even better. Watch for divergence in the higher time frame. This may help to identify the trend.

Now I have moved my horizontal line on the volume tool to the pivot low on wave 1 down. I will look for the volume to go through this level following wave 2. I will use this strategy where there is no divergence (this is not as good as the divergence trades, but it is viable. I do not recommend taking these trades if they take too long to develop as is the case here:



The buy would have been the break of the volume trend line. Note this is the high. This is what I mean when I say don't let it take too long to develop. This point shown below is a bearish divergence:



Note the crosshairs is showing the green dot below the volume line. This means when the dots go back through this level, 3 bars later, it is a sell. It is also a wave 3.

Now, we see the volume is going lower on the 3 count down. I have drawn two lines showing the volume and price at this point:



This tells us trend continuation is likely.

We failed to get a green dot, we could sell again on the break.

Now we go to a new low and volume goes to a new low also:



Volume is lower in yet another dimension here:



This tells us a long is not a good idea.

This next one shows us there is net selling over the intervals of the yellow lines:



This tells us selling is likely.

The market does continue lower but not in any degree. It is a quiet time of the day.

We then come down for a retest but it fails to make a new low. What is the volume saying now?



The volume is not divergent, but it is breaking to a new high at the cursor. Now, at this point we are actually divergent bullish. We have gone to a new high, but the volume has not. This would be a sell, but a red dot never materializes. When it does, in fact go higher here, it tells us some kind of OTF (higher time frame participants have a bullish interest) is entering. The market makes a 7 count up.

Now, on the next wave, we are still divergent to bull side. Note the cursor, we are below the yellow trend line:



Something is going on. Sentiment is changing. And either we are going to go down, or a whole lot of traders are about to get screwed. Let's see what happens on the next wave.

In the next shot, we are still diverging as the volume has failed to make a new high. This is evident in the longer yellow lines:



Note however that the shorter yellow lines are pointing out a bullish divergence. Further, we have a down bar with buying inside it (at the crosshairs). Then we get a bull run that takes volume to a new high. But not much higher. Now I will move the magenta line to the previous volume high:



We then get a sell as volume goes back through it (crosshairs).

Now, we know some group stepped in at about 7:30 or so who had a bullish interest. This is why previous volume readings were wrong. This was a change of game.

Next we go higher breaking the swing high in one run:



Note the jump up in volume following this next bar after the magenta line / cursor line.

Next we move the cursor to the previous high and we get a sell as volume comes back through it:



Here we see volume is failing to make a new high (crosshairs):



We then go lower.

Next, we break through in the same pattern we have been doing over and over- It is the end of the day, so this is our conclusion. You can often expect OTF at the end and beginning of the day, so trading this technique is riskier here.



Today is a day that does not have many of the divergences we want to see for preferred trades. So this is a tricky day.

Because we are trading 4 range bars, we are generally risking 5 ticks. If it fails and goes again reentry may not be a bad strategy. Doubling following a stop-out might not be bad either. though I do not like to recommend aggression, so ignore that I said it.

In some cases, it is hard to find a match for the level comparisons on the price. The TF Russell is 10 ticks to the point, so there is more sampling of the points. This means there are more places to compare. There are pros and cons to this.

We might also like to see divergence happening to our intended direction in the top and bottom of the clusters. That is even higher probability and can indicate a trend day.

You always have to be evaluating if a trade is worth the risk.

Trading is art, so you have to practice it. These techniques can help.

Now I will go through the Russell, TF but with fewer notes for the same day:



Often you will see a trigger is not at the best point. You can see here waiting a few bars following the retrace is often lower risk, but you will miss trades.















