

ZoneTraderPro NinjaTrader 8 **Order Flow** Divergence **Price Patterns** Version 2

June 2019

Forward

ZoneTraderPro was created out of a need for something different. After attending seminars and reading books, it seemed that every trader had the same questions, and used the same indicators, and I was one of them. It also seemed that traders wanted that guru to hold their hands through every trade. Traders, myself included, paid large sums of money, for that Holy Grail black box system, only to find, there was a reason the seminar was held on a weekend. The reason was under real-time trading conditions the black box doesn't work. And there were no refunds. The guru has sold you a seminar, and showed you cherry picked examples about why his system is so great, so you buy the software. He has only had to perform one time, and on a weekend when the market is not moving.

I was constantly frustrated when I took a trade, watched it go against me, and then be stopped out. What was even more frustrating was that after being stopped out, the market instantly reversed. I would also set an arbitrary profit target based on what would be a "good" amount of profit. In other words, I was letting fear and greed drive my trading. I was also letting my preconceived ideas about what the market should do, affect my trading. That is another mistake. And I was using old and outdated indicators to guide my trading. In other words, I was losing money, along with the other retail crowd, by using the same indicators, going to the same seminars, and letting emotions be my guide to trading. It was out of this frustration that ZoneTraderPro was developed.

In developing ZoneTraderPro the main objective was to eliminate the fear and greed from the trade. If you know where the market should statistically trade at, for both the buy and sell areas, the emotions that drive your trading are reduced. And when you see the market reacting to the Zones as you expect they would, there will be less stress in your trading. This also eliminates any preconceived ideas about how the market should be trading.

The main advantage to ZoneTraderPro is that you do not need other common indicators that every other trader is using and you may have used in the past. ZoneTraderPro is all about recognizing 7 simple patterns. When you recognize the patterns you will read the short and intermediate term market direction.

It will be obvious when ZoneTraderPro says the market is bullish, and when it is bearish. If you have a bullish view of the market, but ZoneTraderPro says it is bearish, simply avoid the trade. If you are correct, ZoneTraderPro will give you a logical bullish entry.

This manual is meant to answer your questions by making you think. How do I trade the open? Where do I enter a trade? Where do I exit a trade? Where do I find the lowest risk, highest reward trades? The manual will also detail unusual circumstances and how you can read the market and understand that something unusual is occurring. Understanding and avoiding unusual circumstances prevents losses.

ZoneTraderPro Introduction

ZoneTraderPro is a revolutionary new way to trade, bringing to the trader a new tool providing a high degree of confidence in the trades. ZoneTraderPro allows the trader to visually see high probability trading zones develop *in advance of the market that zone*. ZoneTraderPro will define when a trend is established, where to enter a new trade, and most important, give the trader a high probability target to exit at.

When ZoneTraderPro was first created in the eSignal version, emphasis was placed on identification of patterns and their statistical probability. In the shift to NinjaTrader, emphasis was shifted to producing a higher quality of trade and simplifying the process. The same patterns that were created for the eSignal version were further refined and simplified for the NinjaTrader version. Filters that were not possible in the earlier version of the software are now incorporated into the NinjaTrader version. Order flow patterns are now the cornerstone of ZoneTraderPro. This version adds compatibility with Shark Indicators BloodHound and Blackbird products. ZoneTraderPro also introduces a new divergence product.

The Purpose of ZoneTraderPro Software

- 1. Education, by teaching the trader to understand the markets intent through price and volume. This is accomplished through the visual display of trading zones in ZoneTraderPro.
- 2. Reducing risk by developing high probability entry and exit profit zones.
- 3. Reducing risk by clearly defining high probability pattern trades.
- 4. Reducing risk by clearly defining when not to trade.
- 5. To identify the 7 commonly repeated market patterns. These patterns define the current trend in a markets' price, whether a market is reversing trend, or whether a market is under accumulation or distribution, and identification of TICK divergence.
- 6. Apply order flow patterns in conjunction with price patterns.

The difficult part about trading is knowing when and where to trade. What makes ZoneTraderPro different is that it will tell you where those pivot zones are, in advance. That information, about where the pivots will form in advance, is the most valuable part of information a trader can have. The ZoneTraderPro user will then have the information necessary to enter trades in the direction of the trend and at the proper pivots for lower risk trading opportunities. Additionally ZoneTraderPro will identify potential trend reversal areas. Notice in the chart below how trends and reversals are identified and the market trades within the zones.



No market will ever go straight up or down, it will move in waves, with retracements followed by resumption in the trend. In a bull market trend, higher highs are made, along with higher lows. The opposite is true for a bear market.

Notice on the below chart, the trend is bullish, because higher highs and higher lows are being made, until midday when a reversal occurs.



Created with MultiCharts (http://www.tssupport.com)

But the difficult part is knowing when and where to trade. The pivot lines on the above chart are drawn after the fact, and not when the highs or lows were being made. What makes ZoneTraderPro different is that it will tell you where those pivots are, in advance. That information, about where the pivots will form in advance, is the most valuable part of information a trader can have.

It should also be noted why only the ES contract is charted in the examples. ZoneTraderPro will work on all instruments, Russell, Dow, Nasdaq, stocks, Euro Futures, and most important, **the 10 year bonds.** The ES contract is the most liquid and has greater market depth than other indexes. There are also fewer excursions outside of the intermediate and trend zones. This is important and you will understand why when reading further, but the standard trend trade looks to take profit between the intermediate and trend zones, because it is the most predictable and lowest risk trade. Other instruments such as the Russell 2000, Nasdaq, and Mini-Dow, trade out of the trend zone more frequently. These instruments also **have less liquidity** and fewer traders, which allows for market manipulation by a few larger traders.

Chart Setup

Setting up ZoneTraderPro is very simple. Normally I will do it for you using Team Viewer. You will be sent a zip file and an executable file over Team Viewer.

With NinjaTrader shut down first run the executable file. Then start NinjaTrader. Use the NinjaTrader import dialog to install the order flow zip file.

It is suggested that for the ES chart you use a 150 tick setting for the chart. This is because ZoneTraderPro requires that the bar close before forming the next zone and it is extremely important that you know where the next zone is going to form. If this is set even to a one minute bar the zones would not print properly in a fast market. It is also preferable because with a 150 tick setting you can see volume created at the zone. If you use a minute chart the zone is not going to print until the bar completes.



After setting the interval, choose the appropriate template from the drop-down menu. It is also suggested changes the chart style to OHLC and the bar colors to black.

Tick Replay should be checked if you want to use the Delta Strength or divergence tools. **This will slow down your computer.** If you are learning then it is okay to add additional days. But if you are trading it is suggested that you reduce the numbers of days loaded to a minimum.

Data Series			×
Instrument Select 🗸 🗸			
Applied	Properties		\$
ES 09-18 (150 Tick)	✓ Data Series		Ē
	Price based on	Last	~
	Туре	Tick	~
	Value	150	
	Tick Replay		
	▼ Time frame		
	Load data based on	Days	~
	Days to load		
	End date	06/18/2018	~
	Trading hours	<use instrument="" settings=""></use>	~
	Break at EOD		
	✓ Chart style		
	Chart style	OHLC	~
	Bar width	2	
	Color for down bars	Black	~
	Color for up bars	Black	~
	Mode	OHLC	~
	▼ Visual		
	Auto scale		
	Center price on scale		
	Display in Data Box		
	Label	ES 09-18	
	Panel		~
add remove		pre	set tick
		OK Cancel A	pply

To use a volumetric chart these would be the settings. If Delta Strength is applied to the chart, then tick replay must be enabled. Just adjust the range setting you would like. I suggest using a 4 or 5 range for the main order flow signals (POC). Smaller settings will have lesser quality POC signals.

Data Series			×
Instrument Select 🗸 🗸 🔎			
Applied	Properties		÷
ES 09-18 (3 Range Volumetric)	▼ Data Series		F
	Туре	Volumetric	~
	Base period type	Range	¥
	Base period value		
	Delta type	BidAsk	~
	Ticks per level		
	Size filter		
	Tick Replay		
	▼ Time frame		
	Load data based on	Days	~
	Days to load		
	End date	06/18/2018	~
	Trading hours	<use instrument="" settings=""></use>	¥
	Break at EOD		
	▼ Chart style		
	Chart style	Volumetric	~
	Chart style type	BidAsk	~
	Strength sensitivity	20	
	Show imbalance		
	Color dominant side		
	Box outline	Solid, 1px	
	Box grid	Solid, 1px	
	Candle body outline	Solid, 1px	
	Color for up bars	LimeGreen	~
		preset v	orumetric
		OK Cancel	Apply
		OK Cancel	white

Definitions

In order to define a trade ZoneTraderPro looks for a pattern and the patterns develop between the zones. So in order to understand what a pattern looks like you first must understand how the zones are coded and colored.

ZoneTraderPro categorizes support and resistance as

- 1. Minor
- 2. Intermediate
- 3. Countertrend
- 4. Strong trend

Minor support is light green and intermediate support is green.



Minor resistance is a light red and intermediate resistance is red.



Countertrend zones, regardless of support or resistance, are always blue.



A strong trend zone, regardless of support or resistance, is always pink.



The ZoneTraderPro TICK Filter

The concept of tick divergence was developed before ZoneTraderPro had developed its order flow tools or divergence tools. The idea was simple. To use the \$tick as a way to measure if there was support for trade in the actual stock being traded. Since we now have order flow tools and divergence tools, this is a tool that is not 100% necessary. Normally the \$tick is not included in a futures data package. You would normally have to subscribe to Kinetick for just the single symbol.

The tick filter works this way. As price trades from high to low the \$tick is tracked. When price reaches a high apex, the highest value for \$tick is displayed above the apex. When price reaches a low apex, the lowest value for \$tick is displayed.

If you are not receiving real time information about \$tick then you should disable the plotting of this number. That is done with the following setting. Simply uncheck the box that says plot tick numbers.

 Signal Font 	Arial, 12px	
Plot Ticks Numbers	×	
BuySellSeparation	3	
MarkerSeparation	3	
ZigZagTicks	6	
TICKwiggleRoom	100	
BuyArrow	Green	~
SellArrow	Red	~

The second setting that you see that can be adjusted or the \$tick is the Tick Wiggle Room which is defaulted to 100. On a chart you have the ability to plot when the \$tick exceeds the previous high or previous low. Though settings are done here.

	Sell Signal Sound File Name		
•	Plot Size	Solid, 7px	
	Up Color	Green	~
	Down Color	Red	~
	Signal Shape	Arrow	~
•	Data Series		



The red and green arrows on the chart are indicating the exact bar where the \$tick exceeded the previous high or low by at least a value of 100. ZoneTraderPro also includes an indicator that you see on the bottom of this chart so that you can track the \$tick in the lower panel.

The TICK Filter is meant to tell you when there are buyers and sellers in the NYSE cash market and to provide a filter for a trade. In other words, a market making higher highs and higher lows should be a good market for taking longs. A market making lower lows and lower highs should be good for a short trade.

The ZoneTraderPro Patterns

Trend Trading Pattern

The ZoneTraderPro trend trading pattern is the basic trading pattern of the system. The theory behind the trend trading pattern is that when a trend is established the market will continue in the direction of that trend, following the pattern of profit taking and trend resumption. ZoneTraderPro prints these areas of support and resistance in advance of the market trading at these zones. If you know where those zones are in advance, **you can wait until you see order flow patterns to confirm a trade entry.** The blue counter trend zones are defined in advance of the market trading there. This is important because traders will want to place the target to take profit from the trade. It is extremely important to note that 50% of the time the market approaches a blue countertrend zone, price does not trade through the zone and the market retraces at least 6 ticks. Why give up 6 ticks of profit because you didn't know the zone?

The pattern is simple to understand. We trade at any blue countertrend zone and return to the intermediate zone of support and resistance. In the picture below we see three trend trades. The first trend trade short was only good for less than two points. Going into the trade we see that the \$tick was giving us a green arrow and that at the previous low there was tick divergence.



Trend Trade Pattern Setup

The trend trade pattern has 4 setup options for the pattern.

- Enabled True/False
- Distance from Counter = 2
- Distance from Intermediate = 2
- Warning Line from Intermediate = 4

SellArrow	Red	¥
➡ Trend Trade		
Enable	×	
Distance From Counter	2	
Distance From Intermidate	2	
Warning Line From Intermidate	4	
✓ Exhaustion Trade		
	1	

The user now has the ability to define the parameters for a trade. The reason this is done is because you may use different parameters for different charts. For example on a 150 tick chart with the zigzag set to six, you would want the distance from counter to be equal to a two. However on a larger timeframe chart with a zigzag of 10 you could increase this to three.



The warning line from intermediate is an important value. When a trend trade fails, that sets up a reversal pattern. The warning line for intermediate is telling the reversal trade that there is a failed trend trade.

Using the settings from above, the first condition for a trend trade is for price to trade within two ticks of the countertrend zone. We will receive a trend trade signal when price retraces within two ticks of the intermediate zone, as illustrated in the picture below.





The settings are also important in the BloodHound enabled version. In the BloodHound version you will receive a trade signal based upon the distance from intermediate setting. You will receive the opposing trade signal exiting the trade at the warning line from intermediate setting.



In the picture above we see two successful short trend trades and two trend trades that triggered the stop and set up the reversal patterns. Him

Reversal Trading Pattern

The ZoneTraderPro Reversal trading pattern is a low risk high reward trade. In a typical reversal, a trend trade will trade through the opposing intermediate zone and the market will reverse.

The example below is the setup into a reversal trade. We see a failed trend trade with 5 ticks of adverse excursion. The market then trades to the green intermediate support zone, where the reversal trade is indicated.



It is very important to understand how we calculate adverse excursion. If we are talking about a resistance zone as in the picture below, we began counting at the beginning or bottom of the zone. If we are talking about adverse excursion for a support zone, then we began counting at the top of the zone. If we look at the reversal trade below there were two ticks of adverse excursion to that trade.



Reversal Trade Pattern Setup

The reversal trading pattern has 4 setup options for the pattern.

- We have previously set the definition of a losing trend trade
- Enabled True/False
- Distance from Intermediate = 2
- Warning Line from Intermediate = 4 (BloodHound setting)

wanning Line From Counter	(株)
▼ Reversal Trade	
Enable	×
Distance From Intermidate	2
Warning Line From Intermidate	4
 Tick Divergence Trade 	
Enable	<i>i</i>

In the trend trade set up we have already told this pattern what we consider to be a losing trend trade. So we do not have to set that up. The distance from intermediate will begin printing the reversal trade signal. The warning line from intermediate is only relevant to the BloodHound version. It is to tell BloodHound when the trade has failed and to trigger a stop.





Here is an example of the stop kicking in on the BloodHound version.



Exhaustion Trading Pattern

The ZoneTraderPro Exhaustion Trading Pattern is a pattern that usually occurs after a strong market move without any retracement. This first retracement is the opportunity for retail traders to enter the perceived trend. Unfortunately for them the program trade that started the trend is over. The market found value and profit taking has started.



The exhaustion trade pattern has three setup options

- Enabled True/False
- Distance from Minor = 2
- Warning Line from Intermediate = 4 (BloodHound setting)

 Exhaustion Trade 	
Enable	· •
Distance From Minor	2
Warning Line From Intermidate	4

There are two conditions to the exhaustion trading pattern. The first condition is that price reverses from an area of minor support or resistance. The distance from minor is the setting that you will use to setup how far through the minor zone to consider a valid trade entry.



The second condition for an exhaustion trading pattern is a test of the high or low. **However this is an extremely important point.** Price can trade to the blue countertrend support or resistance zone and still be a valid exhaustion trade.

Here is an example of two exhaustion trades. The first is a test of a low. The second is a test of the blue zone.





BloodHound The warning line from intermediate is only relevant to BloodHound. It is to tell BloodHound when the trade has failed and to trigger a stop.

TICK Divergence Trade

As noted above, the tick divergence trade most likely requires a subscription to an additional data plan. If you do not subscribe to the \$tick please disable this trading pattern and also disable plot tick numbers in the indicator.

In a tick divergence trade price trades to the blue countertrend zone and if the \$tick is divergent from the previous higher low we are given a signal.

In the following example the market has made a strong move, which was then followed by a TICK Divergence. The market made a TICK high of 379 on the previous up move. As the ES makes a higher high and approaches the blue counter trend zone, the TICK has not, and will not make a higher high. The high TICK could only reach 204.



New in the NT8 version is the label turning red. The label will now move past the blue counter trend zone if the TICK is still divergent. If/when the TICK become non-divergent the label freezes on that bar and turns red.

TICK Divergence Pattern Setup

✓ Tick Divergence Trade	
Enable	*
Distance From Counter	2
Warning Line From Counter	4
✓ Strong Trend	
22 - 121	

The tick divergence trade pattern has three setup options

- Enabled True/False
- Distance from Counter = 2
- Warning Line from Intermediate = 4 (BloodHound setting)

The distance from counter setting is the distance in ticks from the counter trend zone where you will begin receiving a trade signal on the chart and in BloodHound.

BloodHound The warning line from intermediate is only relevant to BloodHound. It is to tell BloodHound when the trade has failed and to trigger a stop.

However, there is a problem with BloodHound recognizing the tick divergence trade pattern. This is a known issue that is being worked to resolve.

Do not under any circumstances use a tick divergence trading signal with BloodHound until this manual has been updated, and a blog entry has been made, that states the issue has been resolved.

Counter Trend Trade

A counter trend trade is any time price trades to a blue zone of support or resistance. The only exception to this rule is if price has reversed from a minor area of support or resistance which would give us an exhaustion pattern.

A counter trend trade is generally not considered to have a good reward because for the pattern we will only trade back to intermediate support or resistance. If you use order flow to confirm the move, this is generally only good for between two points. After trading back to the intermediate support, a trend trade which will have a better reward scenario can be initiated.

The difference between a counter trend trade and an exhaustion trade is that in an exhaustion trade we are expecting a reversal of the trend and in a counter trend trade we are experiencing profit taking and trend resumption.

If a counter trend trade is also tick divergent then that could be justification for expecting a trend reversal and a better risk reward scenario.

✓ Counter Trade		
Enable		
Distance From Intermidate	2	
Distance From Counter	3	
Warning Line From Counter	4	
✓ Reversal Trade		

The counter trend trade pattern has four setup options

- Enabled True/False
- Distance from Intermediate = 2
- Distance from Counter = 3
- Warning Line from Counter = 4 (BloodHound setting)

The distance from intermediate setting is the first condition to set up the trade. Price must trade within two ticks of the intermediate zone as the first condition. This condition is necessary to make a clear definition between an exhaustion pattern which reverses from minor and the counter trend which reverses from intermediate.

The distance from counter setting is for when we have a valid countertrend signal.

BloodHound The warning line from intermediate is only relevant to BloodHound. It is to tell BloodHound when the trade has failed and to trigger a stop.

Strong Trend Trade

The strong trend trade has been added to this version of ZoneTraderPro. A strong trend is simply defined as trading to the pink strong trend support or resistance zone. You will see that during a strong trend, a red label will appear reminding you that this is a strong trend.

Why is this important? This is important for two reasons. The first reason is risk and reward. When we are in a strong trend we have no idea where it is going to end, so trying to call the top or a bottom will result in numerous losing trades. There is no logical place to place a stop and the reward is also small, normally just back to minor support or resistance as in the above example.

The second reason this is important is that when you have the reversal from minor that is setting you up for an exhaustion trade to follow. So it is important to know what the pattern is so that you do not take an unwise trade, and so that you are prepared for the next trade.

This is also important to understand. The reason that this trading pattern was not originally included in the software is that the strong trend pattern itself has poor risk reward. Price can trade all the way to the intermediate trend support level so there is a huge risk. If you do make the trade the reward is also reduced because we frequently

trade just to test the previous higher low, and then entered the exhaustion pattern as seen above.

The reason this pattern is included in the software is so that you understand if the market is responding normally. If the market is not responding normally price will trade to the intermediate support level, and then this will set up the broken reversal trading pattern.

You will begin receiving a trading signal after the high or low has been put in, and we have a new zigzag. The trading arrow will move until price touches the minor area of support or resistance. When price touches the minor area of support or resistance the arrow will stop moving.

The strong trend trade pattern has four setup options

- Enabled True/False
- Enabled Warning True/False
- Warning Line from Minor = 2 (BloodHound setting)
- Warning Color (Chart Label)

framing circle rom ovarier	1 . M	
✓ Strong Trend		
Enable	×	I
Enable Warning	*	II
Warning Line From Minor	2	
Warning Color	Red	~
 Strong Trend Reversal 		

The enable warning and warning color are the settings used for the warning label that will appear as price approaches the strong trend support or resistance zone.

BloodHound The warning line from minor is only relevant to BloodHound. It is to tell BloodHound when the trade has failed and to trigger a stop.

Strong Trend Reversal Trade

The same exact discussion about the strong trend trade applies to the strong trend reversal trade. The same problems with risk reward and strong trends apply to this pattern also.

In a strong trend reversal price trades from a blue countertrend zone to the opposing blue countertrend zone. If the market is responding to the theory then we should only see a retracement to the minor area of support or resistance (it doesn't matter if we stop short of the minor), and the trend resume. We would be expecting it to trade into an exhaustion pattern as shown above. After price trades through the intermediate zone you will again receive a red warning label, marking strong trend reversal.

The strong trend reversal trade pattern has six setup options

- Enabled True/False
- Distance from Counter Start = 2
- Distance from Counter End = 2
- Enabled Warning True/False
- Warning Line from Minor = 2 (BloodHound setting)
- Warning Color (Chart Label)

 Strong Trend Reversal 		
Enable	×	
Distance From Counter Start	2	
Distance From Counter End	2	
Warning Line From Minor	2	
Enable Warning	M	
Warning Color	Red	~
➡ Broken Reversal Trade		

The enable warning and warning color are the settings used for the warning label that will appear as price approaches the strong trend support or resistance zone.

The distance from counter start and distance from counter end are settings to define the beginning and ending of the strong trend reversal. If the setting is at two, what we are saying is that price can trade within two ticks of the blue countertrend zone to be a valid condition. Price does not have to trade through or touch the blue countertrend zone. These settings allow price to get very close to it without having to touch it.

BloodHound The warning line from minor is only relevant to BloodHound. It is to tell BloodHound when the trade has failed and to trigger a stop.

Broken Reversal Trade

A broken reversal trading pattern occurs when one of the two strong trend patterns does not behave as expected. In both of the strong trend trading patterns we expect that price will reverse from the minor zone of support or resistance. If price does not reverse to minor, but trades at or below the intermediate zone of support and resistance, this is telling us that something is broken and we are possibly not in a strong trend. What is common is that price will retrace to the opposite intermediate zone, giving us a broken reversal trade.

What is Expected in a Strong Trend?

Here is an example of two strong trend patterns both reversing at a minor zone (it doesn't matter if it's before the zone) and doing exactly as expected.

Broken Reversal Example

In a broken reversal price had traded to the intermediate resistance zone and retraced too the intermediate support zone.

Important Point to Consider

In a broken reversal trade, you will have a trend or reversal preceding it, as shown above. If you take that trend/reversal trade, be aware that you are trading into a very high probability pattern opposite to your current trading direction.

▼ Broken Reversal Trade	
Enable	
Distance From Intermidiate Start	2
Distance From Intermidiate End	2
Warning Line From Intermediate	2
Enable Warning	
▼ TICK Filter	

The broken reversal trade pattern has five setup options

- Enabled True/False
- Distance from Intermediate Start = 2
- Distance from Intermediate End = 2
- Enabled Warning True/False (BloodHound setting)

• Warning Line from Intermediate = 2 (BloodHound setting)

The distance from Intermediate start and distance from Intermediate end are settings to define the beginning and ending of the broken reversal. If the setting is at two, what we are saying is that price can trade within two ticks of the first intermediate zone after the minor zone has failed. Price does not have to trade through or touch the intermediate zone. Distance from Intermediate End is how close to the retracement zone before you get a trade signal. These settings allow price to get very close to it without having to touch it.

BloodHound to trade has failed and to trigger a stop.

Accumulation and Distribution

The market moving between red and green is an accumulation or distribution. It's easy to identify because it looks like a Christmas tree. It is also frustrating because you will see patterns develop that may be tradable, but rarely go to the blue counter trend zone for an exit. Then if you have not exited the trade, then there is a strong move. It is not advisable to guess the direction. You can see distribution on the bond chart above in the upper left. There are at least two videos in the video library that talk about accumulation and distribution.

Another Bond chart with identifiable distribution before a big move.

Accumulation Distribution Indicator

The indicator has 4 settings. The indicator looks at the Level II SuperDom information for the indicator to spot spoofing, accumulation and distribution. Levels out is the numbers of levels in the SuperDom the indicator will look at. Display as Difference causes just a single line, either positive or negative to be displayed. You can display arrows on the chart or the indicator panel where there is a divergence. You can also display whether or not to display the maximums (this is recommended). The indicator is displayed in the bottom panel on this chart.

Order Flow Pattern Suite

The NT8 Order Flow Suite identifies 7 different patterns in the order flow. Those patterns are

- POC Absorption
- POC Extension
- Extension Zones
- Absorption
- Trapped Traders
- ZTP Order Flow
- Stopping and Continuation ratios

Refer to the <u>ZoneTraderPro blog</u> for their uses.

The POC Absorption and Extension patterns occur when the POC occurs at the bottom of an up bar and at the top of a down bar. Then large market orders and passive buyers are identified. It is possible to have both occur on the same bar as they represent different actions of market participants.

85	287
21	353
-23	1910
1071	1624
305	2442
\$757	2602
2319	1531
357	67
OC Absc	rption Buy
357 OC Abso	6 rptior

•	Parameters	
	01. Ratio Signal Enabled	•
	02. ZTP Order Flow Signal Enabled	*
	03. Trapped Buyer/Seller Signal Enabled	*
	04a. Extension Zones Enabled	×
	04b. Extension Zones Imbalance %	399
	04c. Extension Zones Minimum Delta	0
	04d. Extension Zones Minimum Contracts	0
	05a. Absorption Enabled	*
	05b. Absorption Imbalance %	199
	05c. Absorption Minimum Delta	1
	05d. Absorption Minimum Contracts	1
	06a. POC Enabled	8
	06b. POC Absorption Signal Enabled	*
	06c. POC Extension Signal Enabled	•
	07. Exhaustion Signal Enabled	×
	08. Delta Change Enabled	×

Extension Zones

There are two settings that control the patterns. Those are Imbalance % and minimum delta. The imbalance % is simply the ratio between the bid and ask. A value of 399 is a 4:1 ratio. The minimum difference is the difference in contracts between the bid and ask. This is to prevent 8 contracts on the bid and 2 on the ask (a 400% imbalance) from triggering the condition in an illiquid market. You can also set the minimum Delta to avoid low-volume signals

These settings also apply to the extension zones and absorption boxes when enabled.

The green and red boxes are the absorption boxes. The green horizontal zones are the extension zones. An extension zone will draw until price closes through the line.

Here the extension buy zone ends as price closed below the bar. Extension zones are areas on the chart where historically strong market orders occurred and the possibly of future support or resistance can occur as those market participants look to defend a position.

Here is an excellent example of the power of these zones. When POC Absorption and Extension signals and zones were created, those prices were defended by the shorts every time the price rose, until price broke down.

Ratio Signal

There are two types ratios. Stopping ratios and continuation ratios. The ratios are enabled when the ratio checkbox is checked.

A stopping ratio is a decimal and a continuation ratio is a number greater than 30.

Trapped Traders

A trapped traders signals occurs when a large number of traders are trapped in the wrong direction and price has moved away. The signal is meant to be used on a larger timeframe bar, a 4R or greater. Because the algorithm looks at several price levels it is irrelevant to a smaller timeframe chart because it would always be occurring.

Here is an excellent example of the signal in a consolidation. Here we see price trading back and forth, and trading signals being given, without the market really going anywhere. In the past this was identified as the markets traded between the red and green intermediate zones, and the suggestion was to avoid this type of trade because there wasn't a clear trading decision. Now with order flow patterns, it may be slightly frustrating to be reversing positions a couple of times (without losses), but in the end you were reward with a clear entry for a 6-point winner for your work.

ZTP Order Flow Signal

The ZTP order flow signal is an exclusive pattern to ZoneTraderPro which is excellent at identifying entries and reversals. The signal is activated by the checkbox.

It can be used on a short time frame chart to identify entries or on a larger time frame to identify reversals, as in the above example. Here is the signal being used as an entry trigger to the trades above.

Alerts

The indicator can also give an audible alert or email alert. However, you should be aware of the following limitation when using the alert. A signal is not permanent until a bar closes. So as a bar opens and trades, it is possible (and highly probable) that the criteria for the signal is met, but as the auction progress, the disappears because the order flow algorithm is no longer valid for that signal. You run the risk of an early trade entry if you jump the signal before the bar is complete.

✓ Alerts		
01a. Ratio Alert Enabled		
01b. Ratio Buy Alert Audio File	Alert2.wav	~
01c. Ratio Sell Alert Audio File	Alert2.wav	~
02a. ZTP Order Flow Alert Enabl		
02b. ZTP Order Flow Buy Alert A	Alert2.wav	•
02c. ZTP Order Flow Sell Alert A	Alert2.wav	~
03a. Trapped Buyer/Seller Alert		
03b. Trapped Seller Alert Audio	Alert2.wav	~
03c. Trapped Buyer Alert Audio	Alert2.wav	~
04a. Zone Alert Enabled		
04b. Extension Zone Buy Audio	Alert2.wav	¥
04c. Extension Zone Sell Audio	Alert2.wav	*
05a. Absorption Alert Enabled		
05b. Absorption Alert Buy Audio	Alert2.wav	*
05c. Absorption Alert Sell Audio	Alert2.wav	~
06a. POC Absorption Alert Enab		
06b. POC Absorption Buy Alert A	Alert2.wav	×
06c. POC Absorption Sell Alert A	Alert2.wav	*
06d. POC Extension Alert Enabled		
06e. POC Extension Buy Alert A	Alert2.wav	*
06f. POC Extension Sell Alert Au	Alert2.wav	~
06g. POC Absorption Alert Emai		
06h. POC Extension Alert Email		
06i. POC Alert Email To Address		

BloodHound The ZoneTraderPro Order flow signals can be used by BloodHound.

ZoneTraderPro Divergence Indicators

ZoneTraderPro has developed an extremely powerful set of divergence indicators. These indicators work based upon the Cumulative Delta indicator, which is itself extremely unique and proprietary to ZoneTraderPro. What makes the indicator unique is that it uses tape reconstruction in order to determine the size of the order, and not the size of the fill. The size of the fill is 100% completely useless information if you are looking to see where large lot traders are entering the market.

You set up the chart based upon what zigzag you want to see. Normally I want to see a 10 tick zigzag. In order to see a 10 tick zigzag, I need to set the zigzag indicator to a deviation point setting of 2.5. This is the same setting that you need to put into the divergence indicator, if you want to match the settings. Instead of using a 500 tick chart, I am suggesting that you turn that number down to 325 or lower. The reason for doing this is that the indicator itself is a real time indicator. However, you need bars to close for the indicator to do its work. So by cutting down the number of ticks, you receive faster answers. There will be a few extra bars on the chart, but who cares? What is more important, a few extra bars or a better FASTER answer?

I also place the Delta Strength indicator on the chart so that I can see when large lot traders are entering a trade. It is very common for a new trader to say there is a lot of stuff going on with my charts. This is true. But it's all information about what the large lot traders are doing as I am making a trading decision. If it wasn't relevant information, it wouldn't be on the chart.

There are three types of divergences that the software can identify.

They are

- 1. Standard bearish and bullish divergences. These are labeled on the chart as either Bearish or Bullish.
- 2. Special Divergence. A Special Divergence is a unique manipulation by the large lot traders to withdraw supply and demand so they can achieve a better price. These are labeled no demand and no supply. Special Divergence is a separate indicator so you can use different settings.
- 3. Accumulation and Distribution. The software identifies when large lot traders are accumulating or distributing contracts. These are labeled on the chart as either Accumulation or Distribution.

Chart setup

To set up the chart to see divergences is absolutely necessary to engage the tick replay from the data series. This will slow down the loading of the indicator as it puts a strain on the processor.

Properties		
➡ Data Series		
Price based on	Last	*
Туре	Tick	~
Value	325	
Tick Replay	*	
▼ Time frame		

Next we began to set the parameters for the indicator itself.

It is necessary to check the box to reconstruct the tape if you want to see the size of the order.

The minimum order size filter is a value that can be adjusted. It is highly suggested that you change that value and run several different tests of the indicator to see if you can optimize the number. Setting this number will also result in the Cumulative Delta that prints in the lower panel.

The reset time is used to reset the Cumulative Delta in the lower panel back to zero. Make sure that this is not reset close to any time that you will be trading.

Make sure that show divergence and accumulation distribution is enabled.

The next values of price deviation type and value set the size of the zigzag.

The Delta deviation contracts is the number of contracts needed to have a divergence. The number can be set as low as 1.

The number of key points is the number of apexs' that you are looking to for divergences. The chart becomes very confusing with the number higher than 3.

You also have the option to keep and plot when a divergence signal becomes nondivergent and to be able to plot that as a different color. This is extremely helpful in determining optimal settings if you are conducting an optimization. You can also choose to have a sound alert enabled.

Labels	Arial, 14px		
Labels offset, ticks	0		
Arrow offset, ticks	2 4		
Show delta plots	*		
 Delta plots 	Solid, 2px		
Alert			
Sound	divergence.wav		
▼ Data Series			
Input series	ES 06-19 (325 Tick)		
▼ Set up			
Calculate	On each tick	*	
Label	ZtpDeltaDivergence		
Maximum bars look back	Infinite	~	

The software now has added capability to determine the number of contracts that have traded from the last two apexs, which are called key points. This will allow you to make a decision based on real numbers.

In the picture above you see the information about the contracts displayed as KP2=2217 an KP3=-618. Key point 2 is the low where you see the strong trend label. Key point 3 is where the trend trade started. This information is updating in real time. So these numbers are significantly different from what was being displayed at the time of the distribution trade. The sellers have come in and key point 3 changed from a positive value to where it currently is a -618. This information is also updating based upon the filter that you have set for the divergence indicator. In other words, this is not reflecting all contracts. It is reflecting only the large lot contracts that you have set the filter size to. The indicator also shows the historical numbers so that you can have a reference to base decisions on.

Here's another picture of a bullish divergence slightly after price is started to trade up and we are interested in the KP3 number 579.

You also see the historical data points also

These are important for a couple of reasons. You can obviously look back historically and see what worked. But there is a more important real time use. Let's say you make a trade and price moves in your favor. You will see the historical numbers stay at the price apex. They real time number will move with price. So, you take a divergence trade and it trades 5-7 ticks in your favor. Suddenly, price begins to move against you, and you see in real time, that your divergence is no longer divergent, and you have time to exit with a small profit. It is very important to understand that the indicator WILL NOT RECALULATE until a new apex is put in. So in real time you can see the number and make a trading decision and not have to have until a new high/low apex is made. Unfortunately, we are very limited to the way that this information can be displayed. In order to display as you see on the chart you need to make the following adjustments to the indicator.

We don't need to see the zigzag so you can uncheck that box. But you want to change the zigzag plot color to the color that you want to see the text label. You need to show the key points Delta. The box for show Delta plots must be checked and you need to offset the label. In my example I have offset the label 5 ticks. Using the settings from above will display the label as I have done in the 2 examples.

The last setting that I suggest you change is the calculate setting. It was originally set to on bar close. However there was a few seconds of delay in calculating the divergence. By changing this to **on each tick** the indicator does update in real time, once the bar closes. I ran a test on my machine and found that my processor did not go over 3% during normal trading. You should enable this setting and then check your processor to verify that it is not an extremely high number. If it is, you will need to reduce the setting to on price change and test again.

There are no significant differences between the settings on the special divergence indicator and the regular divergence indicator. The only difference on the chart is that the labels will read no demand and no supply. I personally use a smaller zigzag on special divergence to get more trading signals. These are settings that you should investigate and determine what is good for you.

Properties	
▼ Signal	
No Supply color	Solid, 7px
No Demand color	Solid, 7px
No signal color	Black 🗸
▶ Labels	Arial, 14px
Labels offset, ticks	
Signal alert	
Siagnal alert sound	specialdivergence wav
No signal alert	
No siagnal alert sound	non-divergence.wav
 Divergence 	
Reconstruct tape	
Min filter	
Max filter	2000
Resettime	02:30:00
Price Deviation Type	Points 🗸
Price Deviation Value	
Delta Deviation, contracts	
Show ZigZag	
Show divergence	
Non-divergence color	Solid, 7px
✓ Data Series	
Input series	ES 06-19 (325 Tick)
▼ Set up	
Calculate	On each tick 🗸

You will notice that I am using different settings for the minimum filter in the deviation point value. I am going to create a special video that will detail the use of the settings in both indicators. Look for the video after this manual is published in June 2019.

Understanding how the indicator works

This is really important because the software draws a green/red line from the apex where the divergence starts. But that is not where divergence signal to trade begins.

For a regular bullish/bearish divergence the signal begins when price exceeds the prior high/low.

For Accumulation and Distribution, the signal starts at the new zigzag.

For the special divergence indicator, we are using a different zigzag setting of 2 points. So in this example we have a zigzag at 9 ticks, which was 1 tick from the low. This is really important because the theory of the trade is that there is manipulation to get better prices, so you see these trades sometimes with very little adverse excursion.

What to look for

As I was designing and testing this indicator, I found something absolutely amazing. About $\frac{3}{4}$ of the time there is an order flow signal. The order flow signal is an extension zone being created 1 tick from the high or one tick from the low.

Notice how we don't get a sell signal until the apex. Now here is the problem. It is entirely possible that an extension zone could have been created at a lower price, but then price continued to trade and that extension zone disappeared.

In this example here were the exact numbers

Now remember we have settings to discriminate when we receive a signal.

04b. Extension Zones Imbalance %	399
04c. Extension Zones Minimum Delta	0
04d. Extension Zones Minimum Contracts	0
05a Absorption Enabled	

The 399 gives us a 4:1 ratio.

Extension zones minimum delta is the minimum delta required between the bid and ask, so if that is higher number, you can eliminate some low quality zones in real time until significant selling comes in.

Extension zones minimum contracts is the minimum number need on the bid here. In this example if you put a 20 there, the extension zone would go away.

The purpose of these settings is to not create an extension zone if we have 2 contracts on the bought and 8 contracts being sold.

If you do make an early entry, then you should consider a very tight stop. If price had moved 2 ticks higher, then do we have an extension zone and justification for a trade?

The current version of the order flow indicator will not capture the extension zone creation and send a signal to BloodHound in real time. A special indicator has been designed and will be released when available to capture this and trigger a signal in real time. Watch the blog and YouTube for this release.

The divergence indicator cannot be picked up by BloodHound at this time. This is a known issue being worked on by BloodHound.

Delta Strength Indicator

The Delta Strength indicator is a unique proprietary indicator to ZoneTraderPro. **The Delta Strength indicator is not the Delta of the bar.** In the picture below the Delta Strength was 579, but the Delta of the bar was a -341. Which value was correct?

Delta Strength can also be put on a tick chart to show you when large orders coincide with either a trading pattern or a divergence.

Delta Strength Setup

▼ Delta Strength	
Show	
Buy	Green
Sell	Red
Extreme buy	Black
Extreme sell	Black
▶ Font	Arial, 18px
Alerts	
Alert threshold	2000
Buy sound	buy.wav
Sell sound	sell.wav
✓ Delta change	
Show	
Filter	50
Positive	Green
Negative	Red
▸ Font	Courier, 12px
- Common	
Reconstruct tape	
Filter	75
Bubble distance, px	100
Values	White

In order to enable the Delta strength, you need to check the show box.

You are able to set alerts based on the size of the order.

It is very important to check the box reconstruct the tape and put in the value that you want to see filtered for in the Delta Strength calculation.

You are also able to show the Delta change from bar to bar and you can put in an order size limit also. So here's what that would look like. Delta Strength is the number that is closest to the price ladder. Delta change is the smaller bubble above or below the Delta strength.

In the picture above we can see the real fight going on between the bulls and the bears. Especially since we are tracking the Delta Strength of 75 lot orders or more, and the Delta change of 50 lot orders or more.

Delta Strength has an additional feature to be able to show you when there is low volume and high volume. If volume is normal, then the color of the bubble will be either red or green.

We are using an average value of the last 14 periods to determine what is normal.

If we have low volume, which is currently set to 40%, then we will have a text label that reads low volume and the color of the Delta Strength will be brown. Why is low volume important? If you are in a trade and you see low volume you need to become aware of this.

The theory is this. If price rose on very low volume, was it because normal selling pressure was reduced so that sellers could get better prices more easily.

The following bar is dark blue. Dark blue signifies that price was between 140% and 175% of normal. The theory is this. On this bar the sellers came in after getting better prices, had a fight with the buyers and price fell 5 points. If the circle is black then volume was over 175% of normal.

This indicator cannot be picked up by BloodHound at this time. This is a known issue being worked on by BloodHound.

DISCLAIMER: The risk of loss in trading futures contracts can be substantial. You should carefully consider whether such trading is suitable for you. No representation is being made that any account will or is likely to achieve profits or losses. Past performance is not necessarily indicative of future results. The maximum favorable excursion of winning trades could never be achieved in real trading. The total loss is an absolute minimum. Both the MFE and loss are based on examination of the charts, after the trade has completed. Market conditions and trader experience may affect profits and losses. MFE and loss do not account for slippage and commissions. A break even trade is defined as when the market price on the exit trades at the entry price of the trade. It does not account for any commissions or if a limit order would have been filled at that price. This information contained in this document is opinion and not trading advice. Please refer to the <u>ZoneTraderPro Terms and Conditions</u> and <u>Disclaimers found at http://zonetraderpro.com</u>.