Trader Guide MZpack Indicators for NinjaTrader 8 Rev 1.0



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Contacts, Links, and Social

- Knowledge Base https://mzpack.freshdesk.com/en/support/solutions/
- Helpdesk https://mzpack.freshdesk.com/en/support/home
- WWW <u>https://www.mzpack.pro</u>
- MZpack Trading Room in Skype https://join.skype.com/B480jcjNeodD
- MZpack YouTube channel <u>http://www.youtube.com/channel/UCqabMIgUEjk3Bkee8G-oSMq</u>
- Facebook https://www.facebook.com/mzpackninjatraderindicators/
- Newsletters subscription and feedback form http://www.mzpack.pro/en/contact-mzpack-ninjatrader-indicators-team/

FAQ

Q: Send me the best settings of mzXYZ indicator for XYZ future, please.

A: There are no the best settings for an instrument. The settings depend on

- 1. Your trading strategy if any
- 2. Trading times
- 3. Market volatility

Make adjustments of parameters at your end. Spend 2-3 days or how much it takes to fine-tune indicators

Q: How to import a chart template into NinjaTrader 8

A:

1. Close NinjaTrader 8

2. Unpack downloaded .rar or .zip file (use WinRAR), and copy XML file to

Documents\NinjaTrader 8\templates\

Using Iceberg Orders and DOM Pressure Pattern In Day Trading

You can find iceberg orders and DOM pressure functionality in mzBigTrade indicator.

Iceberg Orders

An iceberg order is a special limit order. The main size of an iceberg order is not shown in the order book. You will never know the size of the hidden part of the iceberg order, without analyzing algorithm running in real-time.

Fortunately, mzBigTrade indicator includes such searching algorithms.

Significant iceberg orders normally are exposed on reversals of local trends.

A SELL trade may trigger BUY iceberg orders.

Iceberg orders are shown with fuchsia contour.

DOM Pressure

We use the DOM pressure term to describe the behavior of liquidity on the way of a market order.

Any trade, you see in mzBigTrade indicator, is the result of matching market order, with a limit order, resting in the order book or DOM (Depth Of Market). This matching occurs at the best Bid or Ask prices, depending on the direction of the order, sell or buy.

DOM pressure can be negative or positive. Positive DOM pressure means adding the liquidity on the best Bid or Ask price right after matching. Negative DOM pressure means removing the liquidity on the best Bid or Ask price right after matching.

Positive DOM pressure always occurs at the opposite side of the order and is a resistance to the trend.

DOM pressure is shown as a triangle. Note, that expensive level 2 data, are not required for the indicator.

Watch video: https://youtu.be/Dv_xlfKHvyc

In this particular case, we can see a huge group of sell orders with buy iceberg orders, along with dom pressure. We call this a Reversal Order Flow Cluster.

The next occurred reversal order flow cluster is a smaller one. It contains fewer sell iceberg orders and dom pressure volumes. The price broke the level of the cluster and did test the

second cluster. This could be your buy entry point, with the stop-loss order just below the first reversal cluster.

Use Reversal Order Flow Cluster pattern in conjunction with other MZpack indicators for better results.

Further Suggestions

Always look at the big picture first. Then drill down to the order flow and market microstructure.

Reversal Pattern with mzFootprint Indicator

These conditions must be met for the Footprint Reversal Pattern. Lets consider the Sell example:

- 1. Down-bar
- 2. Sell Imbalance zone is near the top of the bar
- 3. Three merged POCs at the middle or higher half of the bar
- 4. Sell Delta Rate at the top (optional?)

These values should be adjusted for the traded instrument

- Imbalance, %
- Imbalance volume filter

The mzFootprint indicator should be applied to Range bar type

Download NinjaTrader 8 chart template. MZpack 3.16.2 or later required.



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Setting Up MZpack Indicators for Cryptocurrencies

Volumes for Cryptocurrencies (eg. BTCUSD, ETHUSD, etc.) are adjusted automatically.

1. Check if Instrument type is Crypto for your Cryptocurrency instrument



- 2. These settings are essential when adjusting charts for a Cryptocurrency instrument:
 - General Crypto decimal places
 - mzVolumeProfile: Common Ticks per level
 - mzFootprint: Filters Ticks per level
 - mzMarketDepth: Common Level min height, px. Set the minimal height of level in pixels on the chart. It's useful for instruments with tiny tick sizes

Check out pre-installed workspace 'MZpack – Day Trading – BTCUSD' **Note: MZpack 3.18.1 or later required.**

See mzMarketDepth Indicator vs NinjaTrader Order Flow Market Depth Map on BTCUSD futures

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Veritas OrderFlow Chart Template

Indicators on the chart: mzFootprint, mzVolumeProfile, mzMarketDepth.

This layout includes:

- 1. Bid/Ask footprint with imbalances
- 2. Session volume profile with delta ladder to spot horizontal volumes.
- 3. Developing POC/VAH/VAL levels of the session
- 4. Volumes and Cumulative delta at the bottom
- 5. DOM ladders on the right side

The chart helps to make decisions near significant day levels (POC/VAH/VAL) and volume nodes. Often, volume spikes represent reversals (local or daily) inside sessions with low volatility or with price rotations.

Multiple POCs (which are part of mzFootprint indicator) will be helpful also. Often, we can spot joined 3 POCs inside reversal bars.

Minutes bars can be changed to range bars. Try different values for bar duration.

Optimizing VolumeProfile and TPO Charts in MZpack

Comprehensive order flow indicators like MZpack with a lot of features require significant CPU resources. The performance issue is aggravated by the fact that NinjaTrader 8 can utilize only one CPU thread per instrument. No matter how many CPU cores your system has – only one core will be used for processing market data for this particular instrument (even it is opened on ten charts). The purpose of this was to synchronize data and orders' handling on all your charts, but in reality, this may lead to significant delays. And you guessed it, this greatly reduces the performance of the platform.

In this topic, we will show how to create beautiful MZpack charts like this one with around 1% CPU load and a very short overall loading time.



The idea is to use Minute profile accuracy for huge periodical profiles. Minute accuracy doesn't require tick replay mode, requires much fewer CPU resources, and has significantly less loading time. As what about TPO profiles, those can be used with Minute accuracy mode even for very short periods like session.

THE REQUIRED STEPS

1. Open a new clean chart. We use 5 Min ES chart in this example.

Add two Data Series: 1st Data Series with Tick replay enabled and Days to load = 5 and 2nd Data Series with Tick replay disabled and Days to load = 30.

We recommend using equal time periods for both data series.



Now you have two panels with added data series.

2. Add mzVolumeProfile indicator to your chart. By default, it will be attached to the 1st data series. We used Weekly periodical profiles and Monthly profile as a stacked VP.



3. Choose 2nd Data Series as Input series for your mzVolumeProfile indicator.

Choose Minute for Profile accuracy. Then click Apply. The profile now is attached to 2nd data series.

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4. Add mzFootprint indicator. It will be attached to the 1st Data Series by default.

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Volume 1602 1205 1091 649 Buy volume 683 529 453 335	Buy sell pressure	Background opacity, %		-863 739	12163 4682	15034 6813 6691 3290	5540 2855	16936 21594 7619 9764	12766 152 6046 72	
Sell volume 919 676 638 314 Delta -236 -147 -185 21	Camarilla pivots	Buttons font TPO	Arial, 9px	:124 385	7481 -2799	8343 3523 -1652 -233	2685 170	9317 11830 -1698 -2066	6720 80 -674 -8	
Delta % -14,7 -12,2 -17,0 3,2 Cum Delta -1723 -1870 -2055 -2034	Configured	TPO levels		10,0 1910	-23,0 -4709	-11,0 -3,4 -6361 -6594	3,1 -6424	-10,0 -9,6 -8122 -10188	-5,3 -5,3 -10862 -10870	MZpack 3.15.20 -3315,00
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© 2020 NinjaTrader, LLC										MZpack 3.15.20 -3330,00
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ES 12-20 +										

5. Send 2nd Data Series to the panel containing 1st one. Now you have both Data Series on the same panel.



THE RESULT

The resulting image will look like this. Our Footprint indicator covers the latest 5 days of the chart. Whereas mzVolumeProfile indicator is applied to all 30 days.



The micro-dynamic of order flow can be observed by zooming in the chart.



ADDING MORE INDICATORS

Add 2nd mzVolumeProfile indicator doing the same steps if you need more plots. Eg. we added another mzVolumeProfile to plot monthly WVAP with standard deviations.

Also, you can add more order flow indicators, like mzBigTrade or mzVolumeDelta to your 1st Data Series with Tick replay enabled.

NOTES

The common method of adding mzVolumeProfile indicator with Minute accuracy:

Add mzVolumeProfile with Tick accuracy on your Data Series with Tick replay enabled

Move added mzVolumeProfile indicator to Data Series with disabled Tick replay

Change Profile accuracy to Minute

THE WORKSPACE

Download NinjaTrader 8 workspace: MZpack Mixed VP-Footprint

MZpack Settings for NSE (Indian Market)

HYBRID MODE FOR ORDER FLOW

NSE data providers (for example Accelpix) don't translate historical bid/ask data so far. For Indian users, the **Hybrid** mode for '*Orderflow* – *Calculation*' settings has been added. The Hybrid mode uses UpDownTick calculation for historical data and BidAsk calculation for real-time data, which is more accurate. Hybrid mode is available starting from version 3.15.11. For '*Spread trades*' set **Split** or **LastKnownSide**.

operties		
Orderflow		
Calculation mode	Hybrid	~
Spread trades	Ignore	~
Non-Crypto volumes divider	20	
General		
Licensing		
 Data Series 		
Input series	BANKNIFTY_I (30 Minute)	
r Visual		
Auto scale		
Displacement	0	
Display in Data Box		

NON-CRYPTO VOLUMES DIVIDER AND TICKS PER LEVEL

Indian users must adjust Non-Crypto volumes divider and Ticks per level parameters (see image above).

MZpack.NT8.mzFootprint(NIFTY_	I (240 Range)) settings	— — X
Properties		÷.
▶ Left Footprint		Ē
Right Footprint		
▼ Filters		
Ticks per level	40	
Trade min	1	
Trade max	-1	
Display value	0	
✓ Presentation		
Bid	Red	~
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Auto-scale values		
Bar border		
▶ Bar border	Solid, 1px	
Bar marker		
Bar space, px	95.00901	
Bar width, px	1.57400072020166	
Bar outer margin inv	8	

For NIFTY features set volumes divider = 75 according to lot size. BANKNIFTY features has 20 as the lot size. See the above image. Non-crypto volumes divider is available starting from version 3.16.3

For NIFTY futures set Ticks per level = 40. We use this value for mzFootprint on 240 Range chart and for mzVolumeProfile on 30 Min chart.

For BANKNIFTY futures set Ticks per level = 1500.

MZBIGTRADE INDICATOR

mzBigTrade Indicator requires fine-tuning. See image. You can use 10 Tick chart to refine your entries. Take some screen time to make adjustments suited for your trading strategy.



Download <u>BANKNIFTY – NIFTY workspace</u>. MZpack 3.16.3 or later required.

MZPACK BOOKMAP STYLE WITH DOM PRESSURE AND MIGRATION DELTA

Overall Liquidity Migration mini-chart is the unique feature of MZpack for NinjaReader 8 (mzMarketDepth indicator). In this particular case, we used OfferBid delta for calculations of migration represented by bars on the additional mini-chart.



The second unique feature we used here is the DOM pressure (mzBigTrade indicator). It also uses Level 2 data for analysis and shows pressure by limit orders in the DOM against the direction of the trade.

Signals:

- 1. The Resistance level on Overall Liquidity Migration mini-chart
- 2. 99-Lot of DOM pressure at bid side (green triangle) against 211-Lot sell order.

Both signals are signals of resistance. Therefore, we can use those to determine a reversal pattern.

Download <u>MZpack Bookmap Style</u> chart template.

HOW TO SPLIT/MERGE RTH AND ETH SESSIONS FOR VOLUME PROFILE AND TPO?



On this chart two sessions (RTH + ETH) have been combined using Trading Hours settings.

You can easily do this with Trading Hours

- 1. Close NinjaTrader
- 2. Download <u>Trading Hours</u> template (click **Save as** in your browser) and place it to **Documents\NinjaTrader 8\templates\TradingHours** folder.
- 3. Open NinjaTrader. You will get Trading Hours like on the image
- 4. Adjust Time zone from NinjaTrader settings: UTC-6
- 5. Restart NinjaTrader
- Open pre-installed workspace MZpack TPO CME Index Futures RTH ETH (or <u>download</u> and install it: a) place it to Documents\NinjaTrader 8\workspaces b) Restart NinjaTrader)



Trading Hours									X
Templates	Properties								
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CFD UK	Name			OME US	and an External ETH+	DTU			
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China Futures	Sunday		8:30	Sunda	ау	15:15			
China Futures Night Off	Sunday		15:30	Monda	ay	8:30			
China Futures Night_0100	Monday		8:30	Mond	ау	15:15			
China Futures Night_0230	Monday		15:30	Tuesd	lay	8:30			
China Futures Night_2330	Tuesday		8:30	Tuesd	day	15:15			
China Index Futures	Tuesday		15:30	Wedn	lesday	8:30			
China Stocks	Wednesday		8:30	Wedn	hesday	15:15			
CME Agriculture Dairy ETH	Wednesday		15:30	Thurs	sday	8:30			
CME Agriculture Dairy RTH	Thursday		8:30	Thurs	sday	15:15			
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CME Global Index Futures RTH									
CME Housing Futures ETH	Trading data	Chart data	Clart time	Facturate	Fast time		Description		
CME US Index Futures Asia	I rading date	Start date	Start time	End date	End time	Туре	Description		
CME US Index Futures ETH (Split)	19.01.2015			19.01.2015	12:00	Early Close	Dr. Martin Luther	King, Jr. Day	
CME US Index Futures ETH+RTH	16.02.2015			16.02.2015	12:00	Early Close	President's Day		
CME US Index Futures RTH	03.04.2015			03.04.2015	8:15	Early Close	Good Friday		
CME US Index Futures RTH (w overnight)	25.05.2015			25.05.2015	12:00	Early Close	Memorial Day		
Cryptocurrency	03.07.2015			03.07.2015	12:00	Early Close	Independence Da	ay	
Default 24 x 5	07.09.2015			07.09.2015	12:00	Early Close	Labor Day		
Default 24 x 7	26.11.2015			26.11.2015	12:00	Early Close	Thanksgiving		
Eurex Equity Index Futures	27.11.2015			27.11.2015	12:15	Early Close	Day after Thanks	solving Day	
Eurex Equity Index Futures Extended	24.12.2015			24 12 2015	12:15	Early Close	Christmas Eve		
Eurex Fixed Income Futures	25 12 2015					Euli Day	Christmas Day		
Eurex Fixed Income Futures Extended	01.01.2016					Full Day	Now Year's Day		
Eurex German Equity	18 01 2016			18 01 2016	12:00	Full Day	Martin Luther Kir	tr Day	
Eurex German Equity Extended	15.01.2010			15.01.2010	12:00	Early Close	Marun Luurer Kin	g, Jr. Day	
Eurex SMI Index Futures	15.02.2016			15.02.2016	12:00	Early Close	President's Day		
add copy remove								add edit ren	
						ОК	Cancel	Apply	

Trading Hours to split ETH and RTH sessions

Note, that mzVolumeProfile Common - Chart Profile mode is set to Session

N	//Zpack.NT8.mzVolumeProfile 3.15	.1 beta(ES 06-20 (30 Minute)	
	Properties			▲ ▼
	▼ Common			
	Show Chart Profiles	All	~	
	Chart Profile mode	Session	~	
	Profile accuracy	Minute	~	
	Ticks per level	10		

Video: Using Footprint Chart In Your Trading

This video was recorded by EASYEMINITRADE.COM

You will learn how to trade breakdowns using Order Flow reading with mzFootprint indicator

