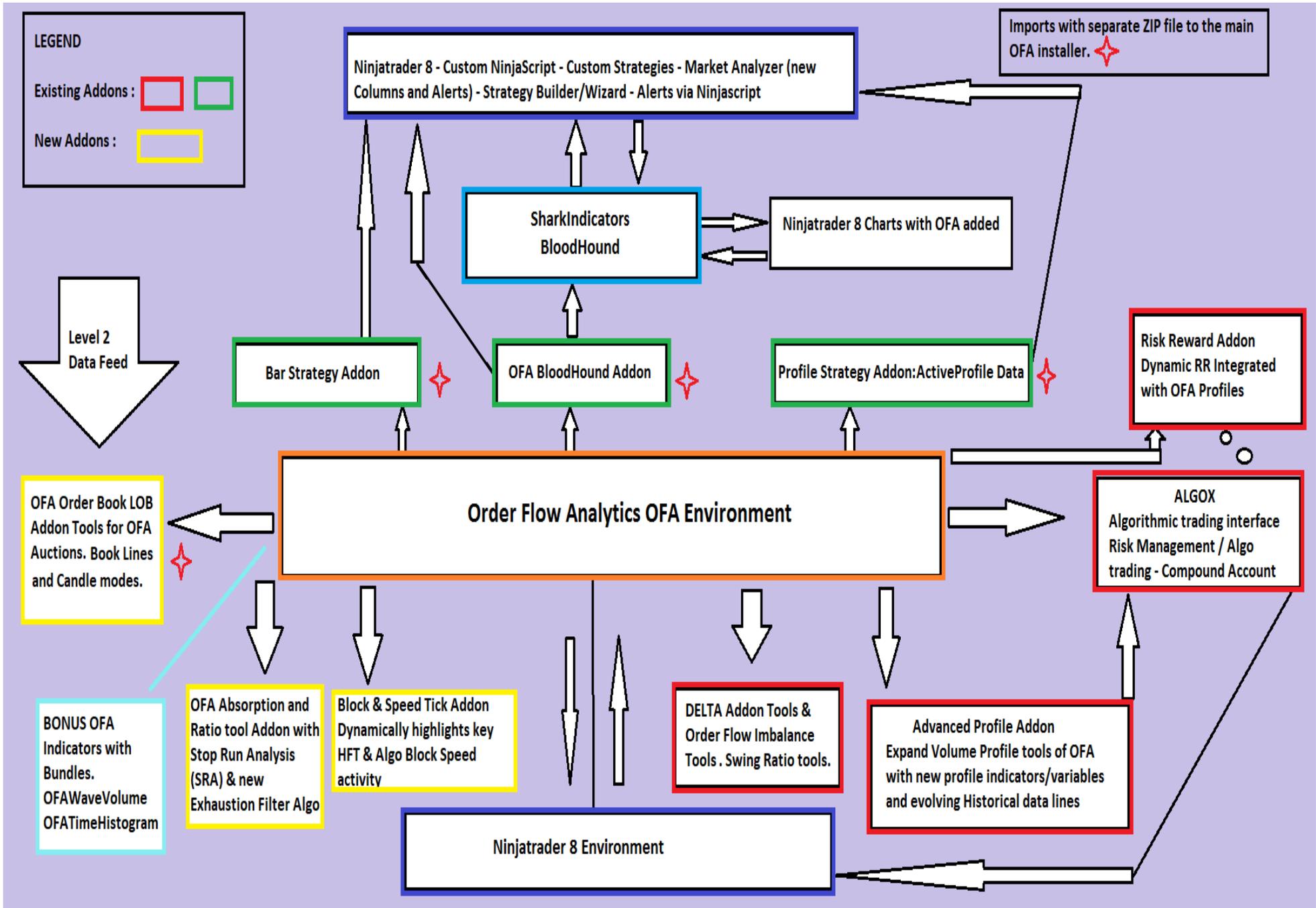


Table of Contents for OFA Absorption SRA Addon

- 1. Component Overview of OFA and the updated OFA Addon Suite with the new Addon(s) and interaction with OFA / Ninjatrade 8 components.**
- 2. Introductory Summary of OFA Absorption & Stop Run Analysis (SRA) followed by Features and Benefits**
- 3. Book Ratio and Absorption Calculation Example for OFA Up Auction followed by Down Auction**
- 4. Settings and Parameters**
- 5. 6 Case Studies and illustrations of the tools combined with some of the other Addons. A table outlining the dates/contracts/times is provided to enable an interactive mode of learning with the Cases in Replay Mode in NT8.**
- 6. FAQ Section.**



OFA Absorption & SRA Addon Summary

The features of this Addon have been in Research and Development for well over a year with observations and refinements being made during that time-frame before releasing as part of our Order flow Addon suite.

These are now presented as a group of tools to graphically highlight additional key orderflow information to use in your trading narrative and decision making process. Having this marked on an OFA Structure chart removes the need to open up to Print mode for this level of detail. These tools are distinct from the Delta tools and add more specific detail and color to the order flow read of any chart with focus on :

- **Absorption Zones** in price areas using several tools to highlight this pattern – four (4) slider menu filters are used to Qualify Buy and Sell Absorptions for each OFA Auction.
- **SRA – Stop run analysis** – this shows the price zones where stops are typically located above and below the **POC** price of an OFA Auction bar. The number of ticks can dynamically be adjusted for each contract traded ie ES CL GC NQ etc.
- **Book Ratios (shows Absorption(Defence) and form of Rejection)** managed & configured in the Dynamic menu tools to adjust ratio filter settings. Following from some user requests a while back it took some time to realise the value of this with proper interpretation in context and for the OFA Auction process. As others efforts were based on time based charts only with poorly defined usage and unclear which type was being used other than a Color ; this format is hopefully clearer in distinguishing between (R)ejection and (D)efence Ratios. Applying these on Non-Time Based OFA Auctions reveals more key information in the Probe and Rotation Process.
- **Two additional Exhaustion filters** – one is based on THREE rows of bid/ask volumes and the other based on FOUR rows (extra row). This uses a modified algorithm to detect exhaustion based on other factors including Probe Direction that have not used before.
- **Midline Marker** – a marker (line) to show the mid point / 50 % of each auction. This is very useful to see as often in a rotation price will rotate and pullback to this price zone.

Key Features/Benefits of the OFA Absorption SRA Addon

- ◆ **Absorption tool** – this is a dynamic menu based slider tool to capture and identify key Absorption patterns on the Bid/Ask Diagonal in the OFA Bar Types. This has been designed to capture the key absorption patterns with dynamic adjustments to the volume on the minimum side and the dominant diagonal side which forms the basis of part of the calculation process. One key feature of this is the ability to define a level of Rejection/Close/Depth away from the Absorption pattern. This enables you to filter to only have the key strong absorption patterns where price rejected from the level. As you will see from examples and in videos and case studies often price will come back to test this price level of Activity. Four values are used to qualify each absorption zone box.
- ◆ The OFA Imbalance/Absorption pattern calculates diagonal Imbalance with qualifying Depth/Rejection. Diagonal imbalance e.g. at Ask means that volume of filled Buy orders is greater by given percentage than volume of filled Sell orders at price just below that Ask price. Example a 71 volume at Ask @2384.50 is by 274% greater than 19 volume at Bid @2384.25: $(71/19 - 1) * 100 = 274\%$.
- ◆ **(Dominant Side Trade Volume / Minimum side volume) – 1) * 100**. Absorption is a **diagonal** imbalance but with a level of rejection and the % calculation result being **greater** than the Absorption Imbalance % filter. Absorption Rejection/Depth (in ticks) means how far price bounces from the level of absorption and closes. See case study illustration of Up and Down Auction examples. The calculation is provided for illustration purposes and overview and it is not necessary to fully interpret.
- ◆ Since the Limit Order Book will have changed in order to absorb the volume at that price level; Working with the OFA Order Book display indicator you can additionally determine when an absorption level will hold or price could break above/below. These levels are clearly denoted and marked with user defined color rectangles.
- ◆ Can show stacked absorption with as series of Sell Absorptions on an Up Auction and Buy Absorptions on a Down Auction adding support and resistance confirmation.

- ◆ To facilitate an understanding of this pattern for Absorptions and the Qualifiers required, consider the following :

Sell Absorptions are on an Up Auction – capturing Bid/Seller attempts to drive price lower and they are absorbed on the Limit Order Book
Buy Absorptions are on a Down Auction – capturing Buy/Ask attempts to drive prices higher and they are absorbed on the LOB

- ◆ Whilst some POC's (depending on their location in the Auction) may have the Qualified Absorption pattern, not all POC's are absorptions.

- ◆ In Addition to retest of the absorption box zones as price rotates from exhaustion back to the absorption zone (which is indicative of volume activity on the Bid/Ask marker orders and Limit Order Book) – pay attention to areas where the price breaks below Sell Absorption in an Up Bar and above buy exhaustion on a Down bar after retest. This failure to hold is information.
- ◆ To **Qualify** the following must hold :
 - Dominant side Trade volume (Ask or Bid) is \geq the Dominant Volume slider setting in the menu
 - Minimum Imbalance volume (Bid or Ask – ie the diagonal opposite of which is the dominant) is \geq the Minimum Imbalance Volume
 - Close of the Auction \geq the level of Depth/Rejection set
 - The Imbalance % calculated as above \geq the Absorption Imbalance Slider setting.
- ◆ Whilst there are 4 key elements to the display of the Absorption boxes this enables us to fine tune and refine our absorption requirements. By starting with the below initial suggestions you can then adjust accordingly for the Pre-market and then the US Market sessions.
- ◆ To get you started **suggested** Dominant side settings for ES 90 and the Minimum set to 20. Depth = 3 and Absorption Imbalance = 90%
 - CL – Dominant 25-30 minimum 8-10 – depth = 3 and Absorption Imbalance = 75%
 - GC – Dominant 25-30 minimum 8-10 – depth = 3 and Absorption Imbalance = 75%
 - NQ – similar to GC for NQ PR (12/4) if using OFA seconds ie 30 seconds slightly higher numbers.
 Open up the Print and look as you adjust to see the numbers pre cash open and cash open and make notes!
- ◆ **Stop Run Analysis (SRA)**. A Dynamic implementation of displaying the Stop levels above and below the OFA Auction POC. You can dynamically adjust the number of ticks where you wish to display the user defined color line in the zones above and below the OFA Bars. For example I found using between 6-8 ticks the level to use for the ES and for CL pretty optimal. This captures zones of stops/liquidity that you can see are tested and where the retail stops are 'likely' to be triggered as the swings progress up or down. Given this is based on the POC of each Auction it is basing the line from the highest volume of each OFA Bar/Auction.
- ◆ Having these zones of stops more visible and particularly when there is a cluster of 2 or more this can help you to understand the Why of the pullbacks to these zones. This is where Large players who use Limit orders can capture this stop volume before the trade progresses. This can facilitate more patience when you see the frequency these zones are targetted before the trade initiates in the other direction. Use this to improve your entries and be patient for this stop liquidity to be consumed and assess if the level is holding and comes back into value above if the stops were sell stops or back into value below if the stops were buy stops (market orders).
- ◆ In addition to the Stop Levels below the POC of an Up Bar and above the POC of a Down bar you can display the TP – **take profit** zone as well which has a different color setting. This is covered in the settings section below. Currently the TP zone is defined from the same slider as the Stop levels. A future revision may change this to a separate setting level.

- ◆ Sometimes called hidden liquidity - can be used in conjunction with key pivot (Decision Point) areas targetted for stops but using OFA key POC volume to identify zones of 'retail typical' levels from the POC price. You can see where these zones are targetted by Professionals to build size before continuing move and also to offload risk – so pros and MM will use areas for MM book balancing and others to increase/decrease position risk.
- ◆ You can see with the orderflow and auction flow where these areas are targetted adding context and validity to these zones before price continues higher or lower
- ◆ Improve your timing and entries and with confluence of key swing profile elements or decision point profiles
- ◆ **Book Ratios** : Rejection and Defense Book ratios highlight key order flow at the **Bid Low** Prices and the **Offer High** Prices and marks chart with **D** (Defence) & **R** (Rejection) and value to denote levels that are within the dynamic slider settings. The prefix R or D is for ease of recognition and identification of the Book Ratio type.

Ratio Numbers Calculations. For up-bar Ratio is bid value above bar low divided by the bid at the bar low. For down-bar Ratio is ask value below bar high divided by the ask at the bar high.

The process and calculation of these numbers is best illustrated in the following graphics :

The first graphic covers the Ratio numbers located at the **Lower Range** of an Up Auction on Page 8

The second graphic covers the Ratio numbers located at the **Upper Range** of a Down Auction on Page 9

- ◆ There are three types of ratios: Neutral Ratio: which means the market is facilitating trade. A number between the high and low ratio (29.0 and 0.71 by default). Note these numbers are a guideline and please check and verify with the contract your trade the number ranges that apply. If the number falls between these two numbers approximately, the market is facilitating trade. Ratio Bounds High: which indicates price is being **REJECTED**. A number above 29.0. So if the Ratio number prints below the bar (Up Bar) then lower prices are being rejected. And if the Ratio number prints above the bar (Down Bar) then higher prices are being rejected. Ratio Bounds Low: which indicates a price level is being **DEFENDED** in the market. A number under 0.71 down to 0 (zero). So if the Ratio number prints below the (Up Bar) then the area is being supported by buyers ie Defended. And if the Ratio number prints above the (Down Bar) then the area has sellers up there ie Defended
- ◆ Whilst attention is paid to where support or resistance zones form with a cluster of the Book Ratios at the Highs or Lows Pay attention also to when the Book Ratio(s) levels are broken – this is information on a failed attempt to Defend/Reject a price area ! This applies also to the Absorption zones that are broken. It takes effort/energy to break these zones and so again is as much information to pay attention to as when each is tested and holds.
- ◆ **Two Exhaustion filters** that takes Probe Direction into account as an aspect of the algorithm – this is a new exhaustion algo process and one

not performed before – one is based on 3 rows and the other uses 4 rows of bid offer in the price analysis. These filters provide a more effective exhaustion process highlighting fewer exhaustion boxes based on the additional criteria.

- ◆ **Mid line** – this is particularly useful when we have Fast toxic OFA Auctions – these can be distinguished by having a larger than average Probe Size indicating potential important activity and trading away from a level. Also for those bars with OFA sequence dots indicating toxic orderflow. Please see the **FAQ** link in the download page which covers toxic orderflow in more detail. The mid point represents the 50 Mid point of these Auctions and you will observe these zones are often tested before continuation.

DFA(6/3) VolumeProfile OFA/SC Settings Delta AdvProfile RR AlgoX

DP(XB A) RP RP(A) SP SP(A) DP DP(A)

der.Gui.Tools.SimpleFont,3
5:52:27.684

Example of Ratio Numbers at the lows of Up Auction.

D (Defended) number is < 1.0
R (Rejected) number is > 1.0

The Higher the R number the stronger the Rejection
The Lower the D number the stronger the Defence

At the Lows it is the 2 BID numbers denoted by A and B on the chart - A being the Bid at the Low of the Auction

Calculation of Both numbers is B/A - this applies at the lows and the highs - see other example for this.

0	13
112	102
164	140
9	459
82	48
8	64
3	42
0	55
44	71
119	145
88	81
20	50
125	143
7	37

B

0	24
30	99
2	24
67	148
108	38
70	4

A

D.24

0	10
7	97
291	307
841	471
421	362
214	90
19	0

B

51	21
1	0

A

R.51

0	13
23	169
76	128
0	84
40	54
188	334
210	223
352	236
187	111
4	0

B

0	22
50	130
108	135
219	238
331	224
158	82
43	16
94	78
151	103
104	58
21	0

A

R.47

The above shows B/A = 51/1 = 51 then B/A = 187/4 = 47 for the 2nd Auction. This format with R prefix signals price Rejection with an element of exhaustion at the bid print a the low (A). Also known as Ratio Bounds High signalling rejection is usually evident at highs and lows but also can show in OFA Probe & Rotation auctions within a swing move

0	1
22	18
59	50
134	95
113	66
175	206
225	244
127	62
8	0

R.99

0	17
20	64
76	73
34	40
1	48
56	53
92	141
108	172
217	243
197	98
2	0

R.99

98	170
189	85
27	90
0	24
30	99
2	24
67	148
108	38
70	4

B

0	29
4	4

A

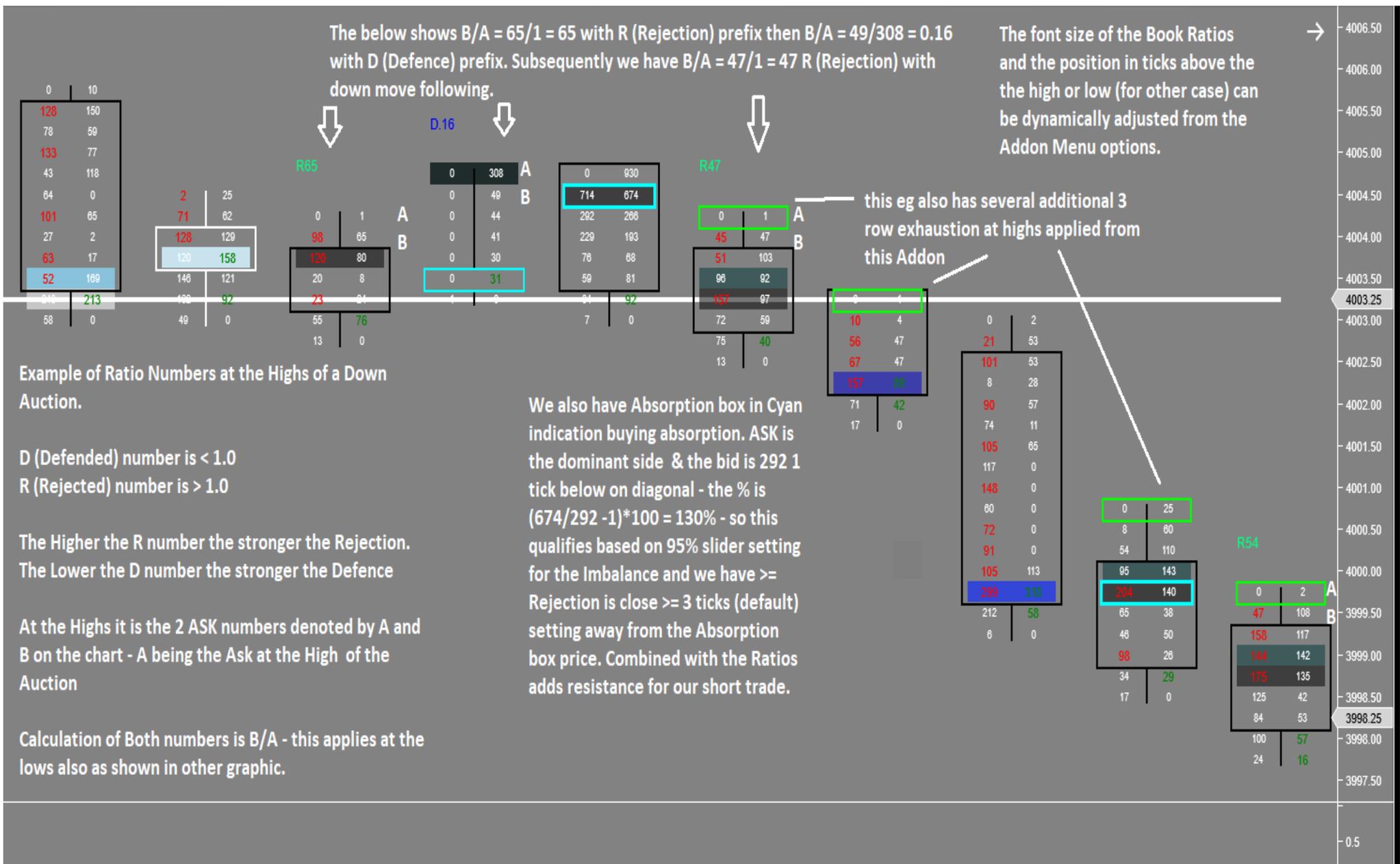
D.24

The above shows B/A = 7/29 = 0.24 with the D prefix (Defence) ie < 1.0.

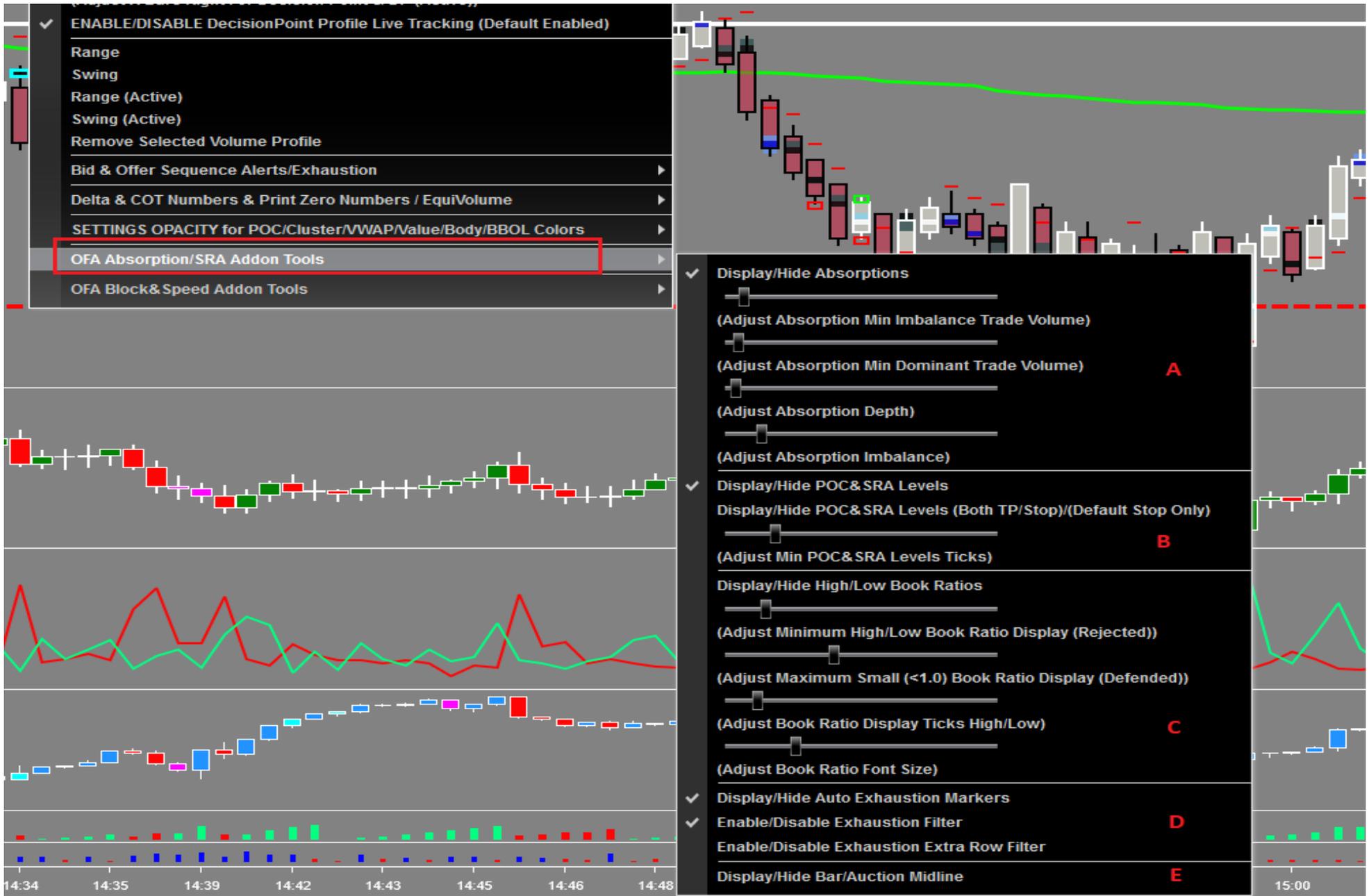
This can also be referred to as a Ratio Bounds low indicating some stopping volume absorption on the Book at the (A) price level

This example here also has an Absorption box in magenta. Note the diagonal imbalance 125 on the bid and 50 on the Ask. The bid is the dominant side and these values meet the minimum values set in the Absorption menu. The % is calculated as (125/50 - 1)*100 = 150% so the 125 value @ bid is 150% times the smaller 50 value @ ask. The absorption imbalance % slider was set to 95% so this qualifies. Also we have a rejection slider set to 3 - so price must close 3 ticks or more away from the Absorption box zone. With this criteria than can be dynamically adjusted in addition to the D (Defence) Ratio adds support for our long trade potential.

Book Ratio and Absorption Calculation Example for OFA Up Auction



Book Ratio and Absorption Calculation Example for OFA Down Auction



OFA Absorption SRA Addon SubMenu on VolumeProfile Main Menu

Properties

AdvProfileStopPrice

NinjaTrader.NinjaScript.Series`1[System.Double]

101

4

3

Solid, 2px

Solid, 2px

18.7

0.6

63

6

Solid, 2px

Solid, 2px

200

1000

Solid, 2px

Solid, 2px

12

2

20

template

▼ **OFA Absorption&Book Parameters**

Absorption Imbalance **A**

Absorption Imbalance Minimum Volume **A**

Absorption Depth **A**

▶ Buy Absorption Box Custom Color **A**

▶ Sell Absorption Box Custom Color **A**

Enable/Show Level 3 Exhaustion Filter **D**

Enable/Show Level 4 Exhaustion Filter **D**

HighLow Ratio Filter **C**

Max Small Ratio Filter **C**

Absorption Minimum Dominant Volume **A**

POC SRAlevel ticks **B**

▶ Long SRA Color **B**

▶ Short SRA Color **B**

Option To Show Both SR Levels or only Stop **B**

Max Minimum Absorption Slider Value **A**

Max Dominant Absorption Slider Value **A**

▶ Book Ratio Defended Color **C**

▶ Book Ratio Rejected Color **C**

Book Ratio Font Size **C**

Show Book Ratio **C**

Book Ratio Tick Display High/Low Adjustment **C**

Show Absorptions **A**

Show POC&SR Lines **B**

Show Bar Midline **E**

▶ Bar Midline Color **E**

▼ **OFA Bar Group Parameters**

OFA Bar Width - Structure

OFA@ Indicator – Parameter Settings Section for OFA Absorption SRA Addon Fig 3

The following settings description groups the settings as shown in the Dynamic Menu A – E as functional groups.

Each Menu Item is described followed by any OFA parameter setting and those not part of the Dynamic Menu eg Colors etc.

Absorption – Dynamic Menu Parameters and Settings in the OFA Indicator (A)

Display/Hide Absorptions : Display all qualifying absorption boxes on the OFA Bars. To qualify all the following settings must be true

Adjust Absorption Min Imbalance Trade Volume : This is the setting for the smaller Diagonal volume (Bid or Ask) for any qualifying volumes at price bid/ask horizontal. If the Dominant Side is Bid then the smaller side will be Ask – If the Dominant Side is Ask then the smaller side will be Bid. So for any qualifying diagonal this is the minimum the bid/ask volume can be in order to potentially qualify.

Remember **Diagonal Bid Ask** in OFA is Bid (1 tick below) to ASK (1 tick above) – this is the basis of most of OFA calculations.

Adjust Absorption Min Dominant Trade Volume : Adjust this setting to set the minimum volume for the Dominant/Large side of the diagonal for any qualifying Absorption.

For an Up Bar this will be a Bid/Sell Absorption shown in the default color (Magenta) and will be on the Bid Side. For a Down Bar this will be an Ask/Offer/Buy Absorption shown in the default color (Cyan) and will be on the Ask Side

Adjust Absorption Depth – (default 3) the key aspect of this Absorption pattern is that there must be a level of Rejection (Depth) from the horizontal bid / ask volume that qualifies. So the close of the OFA Auction must be \geq to the value of this setting (default 3). When you get multiple stacked Absorption boxes within an Auction it makes it a more powerful signal to lean on and be tested.

Adjust Absorption Imbalance : See Figure X below which outlines the formula for this and is covered in the Features and Benefits section above. This sets a minimum % multiple the Diagonal Ratio of the Dominant Volume/Smaller Volume side must be to qualify. Eg 100% = A ratio of 2 minimum the Dominant side must at least 2 times the volume of the smaller diagonal side. Remember in OFA the bid ask diagonal always goes Left to Right Up one tick

Calculation reminder :

$(\text{Dominant Side Trade Volume} / \text{Minimum side volume}) - 1) * 100$: So the Absorption Imbalance setting must be \geq the value of the left based on the Dominant and Minimum Side Diagonal Volumes. Open up the Print and look at some examples of this where a Magenta / Cyan Box appears.

Indicator Settings for Absorption in Figure 3 above

A maps to A – the key ones to note are :

Buy Absorption Box Custom Color : Default Cyan – width 2 – Set Color and Width of this Box zone covering one price level.

Sell Absorption Box Custom Color : Default Magenta – width 2 – Set Color and Width of this Box zone covering one price level.

Max Minimum Absorption Slider Value – this sets the Maximum value for the Minimum Diagonal volume side of the Absorption Slider.

Max Dominant Absorption Slider Value – this sets the Maximum value for the Dominant Diagonal volume side of the Absorption Slider.

POC Stop Run Analysis (SRA) – Dynamic Menu Parameters and Settings (B)

Display/Hide POC SR levels – enables / disables display of the SRA lines

Display/Hide POC SR levels (Both TP/Stop) / (Default Stop Only) – by default the Stop lines only are drawn – these are below the POC of an Up Auction Bar and above the POC of a Down Auction Bar. To display the TP (Take profit) lines also then toggle this setting and those will show in the color as set below.

Adjust Min POC SRA Levels Ticks – this adjusts the number of ticks to calculate for the Stop and TP from the POC in each instance of Up or Down Auction. Suggested values to start for ES 6-8 and OIL/CL the same – GC 8 .. NQ 8-10. If you reference back you will observe the zones with clusters of these relative to the prior Auction POCs. These numbers are based on standard Probe and Rotation bars for each. If you use OFA Minute/Seconds bars you may need to adjust slightly.

Indicator Settings for POC SRA in Figure 3 above

B maps to B in figure X

Long SRA Color – this color and width of the SRA line represents the Take Profit Line which is above an Up Auction POC and below a Down Auction POC

Short SRA Color – this color and width of the SRA line represents the Stop Line which is below an Up Auction POC and above a Down Auction POC

Book Ratio – Dynamic Menu Parameters and Settings (C)

Display/Hide High/Low Book Ratios – enables/disables display of qualifying Book Ratios that meet the settings values below.

Adjust Minimum High/Low Book Ratio Display (Rejected) – higher number stronger the rejection – reminder when at the Highs is based on the ASK price at the High and the ASK price 1 tick below the High. For both the R D is the 2nd volume/row down from High volume divided by the High ASK volume to determine if is R or D – if you look at the print you will note the difference. This is outlined in the screenshots above

Adjust Maximum Small (< 1.0) Book Ratio Display (Defended) – lower the number Stronger the defence – see the screenshot above for the calculation and which rows at Bid at Low and Ask at High are used.

Adjust Book Ratio Display Ticks High/Low – this setting will dynamically adjust the position of the Book Ratio number X ticks from the High or Low of the bar whichever is applicable to a qualifying Ratio.

Adjust Book Ratio Font Size (8 – 24) – this setting will dynamically adjust the Font size of the Book Ratio numbers showing on the chart.

Indicator Settings for Book Ratio in Figure 3 above

C maps to C in figure X

Book Ratio Defended Color (Default Blue) – this is the Color setting of the Book Ratio Defended Number ie < 1.0 prefixed with a D.

Book Ratio Rejected Color (Default Spring Green) – this is the Color setting of the Book Ratio Rejected Number ie > 1.0 prefixed with an R

Additional Exhaustion Filter Options (D)

Display/Hide Auto Exhaustion Markers – this is linked to other menu item on the Main Menu. In order for Exhaustion boxes to show this must be enabled first.

Enable/Disable Exhaustion Filter – once the Main Exhaustion option is enabled this will apply additional 3 row Filter algorithm

Enable/Disable Exhaustion Extra Row Filter – once the Main Exhaustion option is enabled this will apply additional 4 row Filter algorithm

Indicator Settings for Exhaustion Filters in Figure 3 above

only the persisted enabled/disabled values of the 2 filters are stored in the OFA Parameters.

D maps to D in figure X

Auction Midline Option (E)

Display/Hide Bar/Auction Midline – this enables the display of the Midline/50 level of each Auction Bar. A line is drawn from the Mid of the Bar extending right.

E maps to E in figure X

Bar Midline Color – this is the Color & width setting of the Midline Marker line.

Case Studies

The next section contains 6 case studies, illustrating this Addon features with annotated charts. Some of the case studies also include elements from the other Addons in this launch release ie OFA Book and OFA Block & Speed.

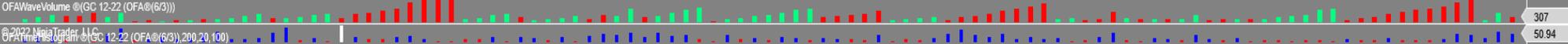
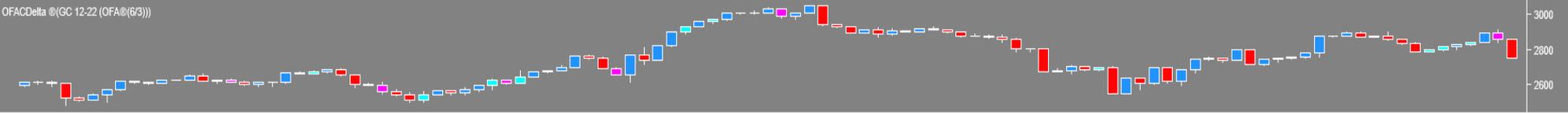
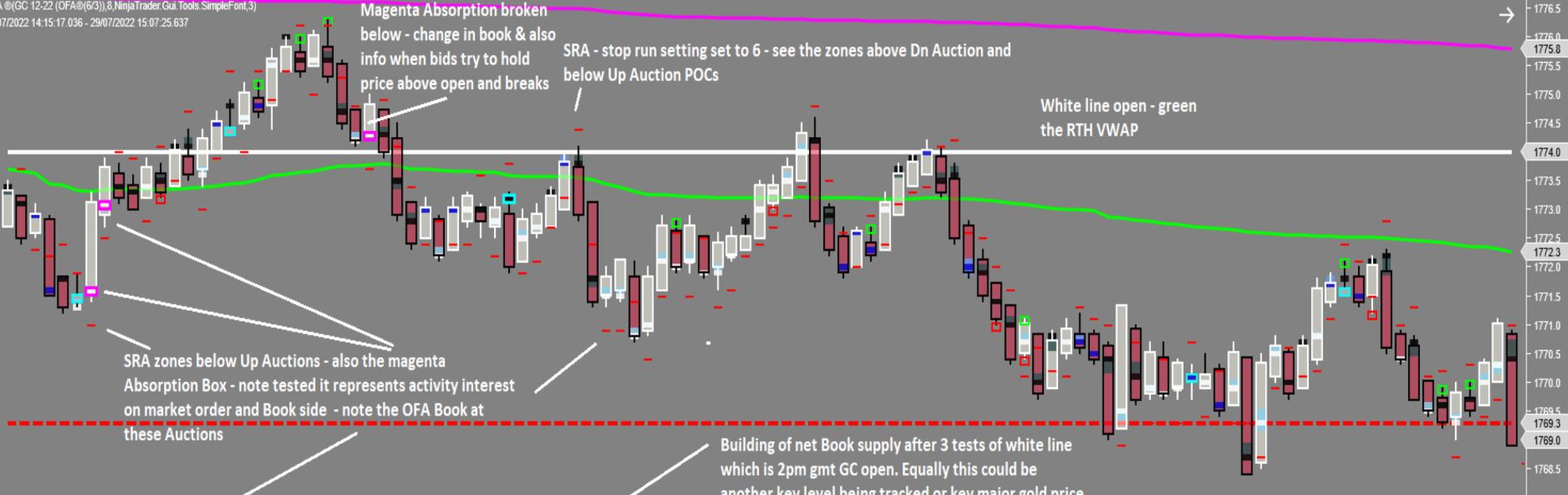
Prior to the Annotated Charts you will see a table of information relating to these Case Studies. This has been provided to facilitate learning and training of this Addon in addition to the video whereby you can load the contract data into Replay in NT8 and enable the settings that apply in each case. By interacting with the chart in NT8 and following the key points in the chart annotation it will hopefully enable a more interactive approach to these case studies. Please note for replay mode – there is a section in the last AlgoX lesson in the NT8 tutorials which covers some tips on using Replay mode in NT8. It is recommended to load one chart at a time and ensuring you have the data loaded for the days you are interested in. Some of the earlier bugs/issues in Replay have been resolved over the last few years thereby hopefully will make this a smoother process.

The table reflects the charts in order of appearance in the document following the table. The date and the time note is GMT – for EST time please subtract 5 hours; this refers to the leftmost bars in the chart view. For other times zones eg central / pacific or asia time zones please adjust accordingly.

Date	Contract/Expiry	OFA Bar Settings	Time (GMT – for EST subtract 5)
29 th July 2022	gc 12-22	ofa 6/3	14:15:00
29 th July 2022	es 09-22	ofa 6/3	17:02:00
29 th July 2022	es 09-22	ofa 6/3	15:24:00
1 st august 2022	es 09-22	ofa 6/3	15:23:00
4 th August 2022	es 09-22	ofa 6/3	16:35:00
29 th July 2022	es 09-22	ofa 6/3	19:00:00

DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) DP DP(A)

OFA ©(GC 12-22 (OFA(6/3)),8,NinjaTrader.Gui.Tools.SimpleFont.3)
29/07/2022 14:15:17.036 - 29/07/2022 15:07:25.637

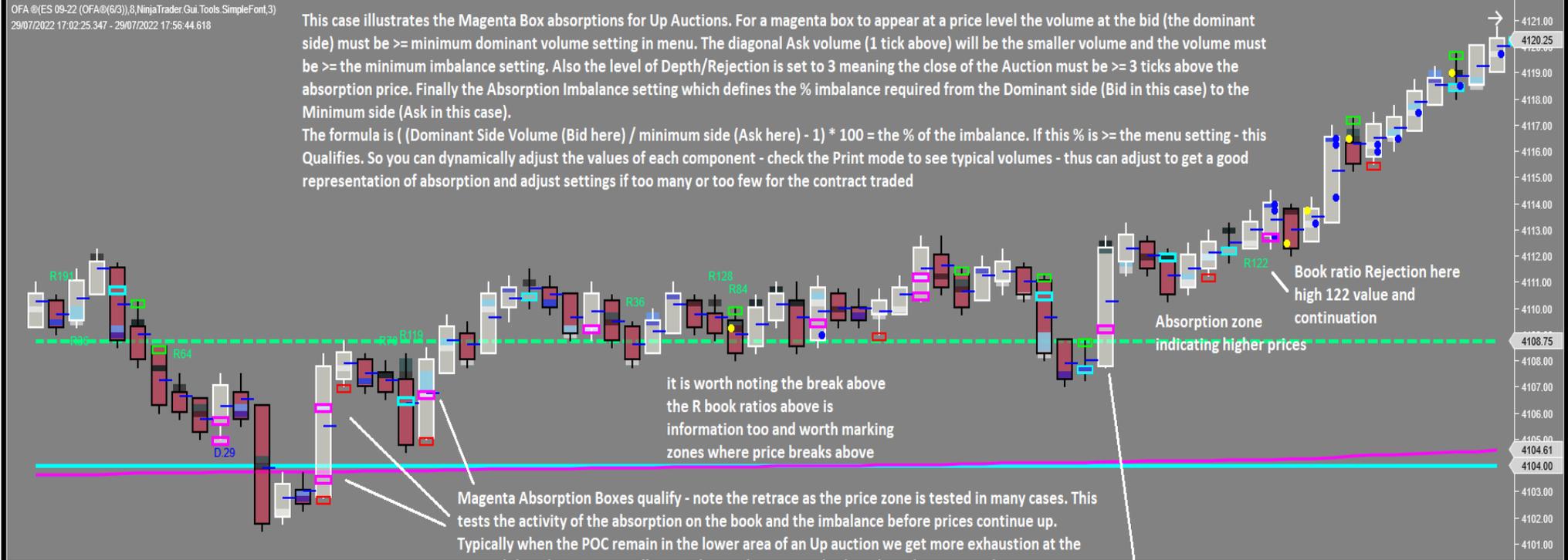


© 2022 NinjaTrader, U.S. GC 12-22 (OFA(6/3)),200,20,100

DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) DP DP(A)

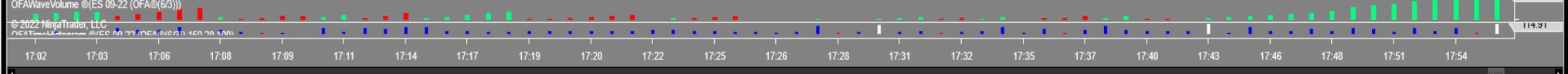
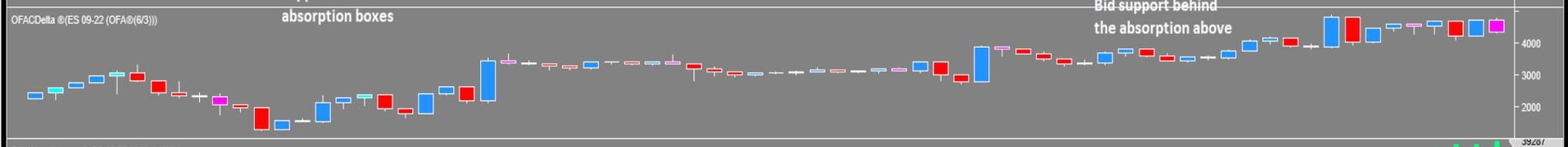
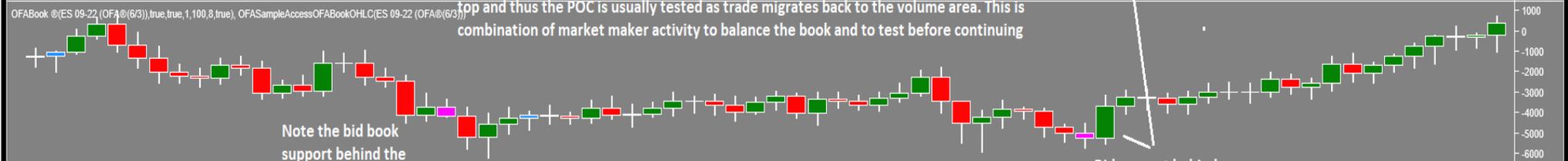
OFA @ (ES 09-22 (OFA(6/3)), 8, NinjaTrader.Gui.Tools.SimpleFont,3)
 29/07/2022 17:02:25.347 - 29/07/2022 17:56:44.618

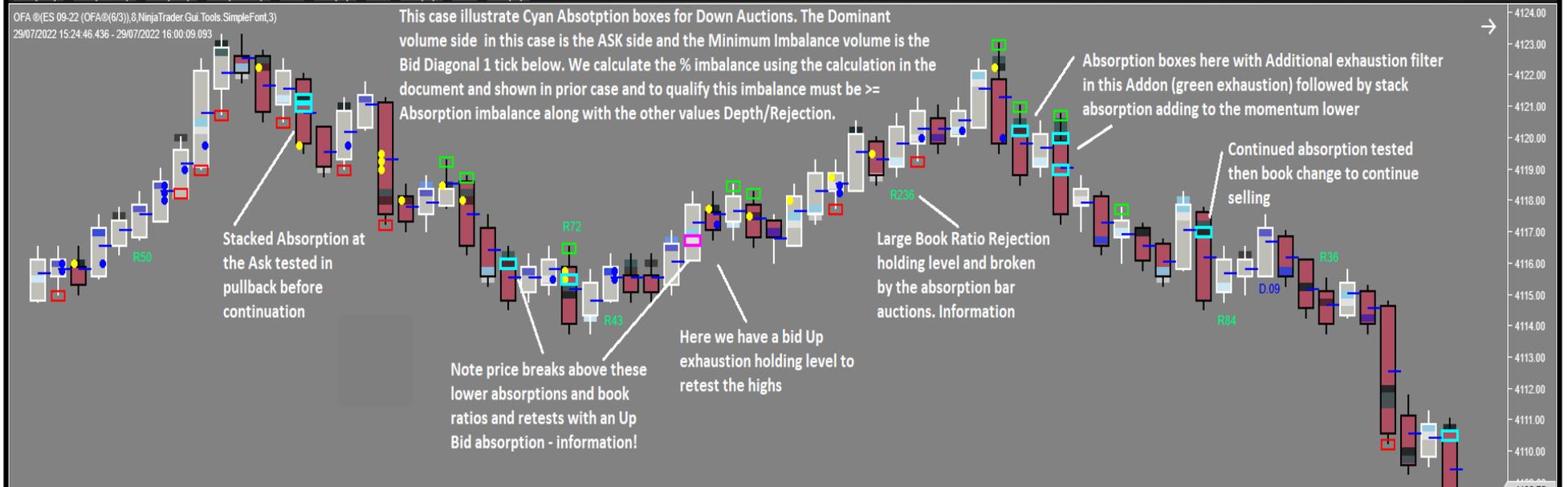
This case illustrates the Magenta Box absorptions for Up Auctions. For a magenta box to appear at a price level the volume at the bid (the dominant side) must be >= minimum dominant volume setting in menu. The diagonal Ask volume (1 tick above) will be the smaller volume and the volume must be >= the minimum imbalance setting. Also the level of Depth/Rejection is set to 3 meaning the close of the Auction must be >= 3 ticks above the absorption price. Finally the Absorption Imbalance setting which defines the % imbalance required from the Dominant side (Bid in this case) to the Minimum side (Ask in this case).
 The formula is $(\text{Dominant Side Volume (Bid here)} / \text{minimum side (Ask here)} - 1) * 100 = \text{the \% of the imbalance}$. If this % is >= the menu setting - this Qualifies. So you can dynamically adjust the values of each component - check the Print mode to see typical volumes - thus can adjust to get a good representation of absorption and adjust settings if too many or too few for the contract traded



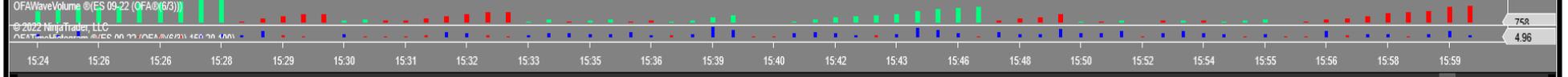
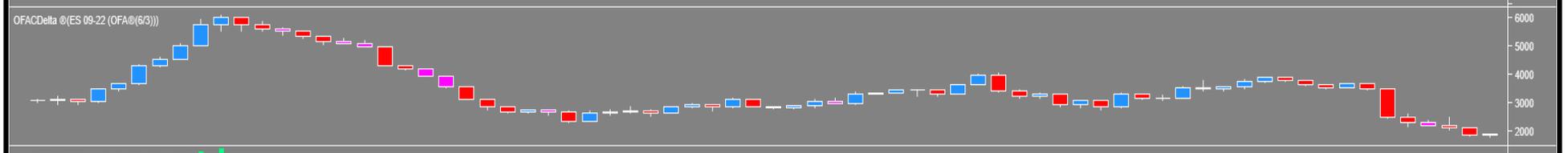
it is worth noting the break above the R book ratios above is information too and worth marking zones where price breaks above

Magenta Absorption Boxes qualify - note the retrace as the price zone is tested in many cases. This tests the activity of the absorption on the book and the imbalance before prices continue up. Typically when the POC remain in the lower area of an Up auction we get more exhaustion at the top and thus the POC is usually tested as trade migrates back to the volume area. This is combination of market maker activity to balance the book and to test before continuing



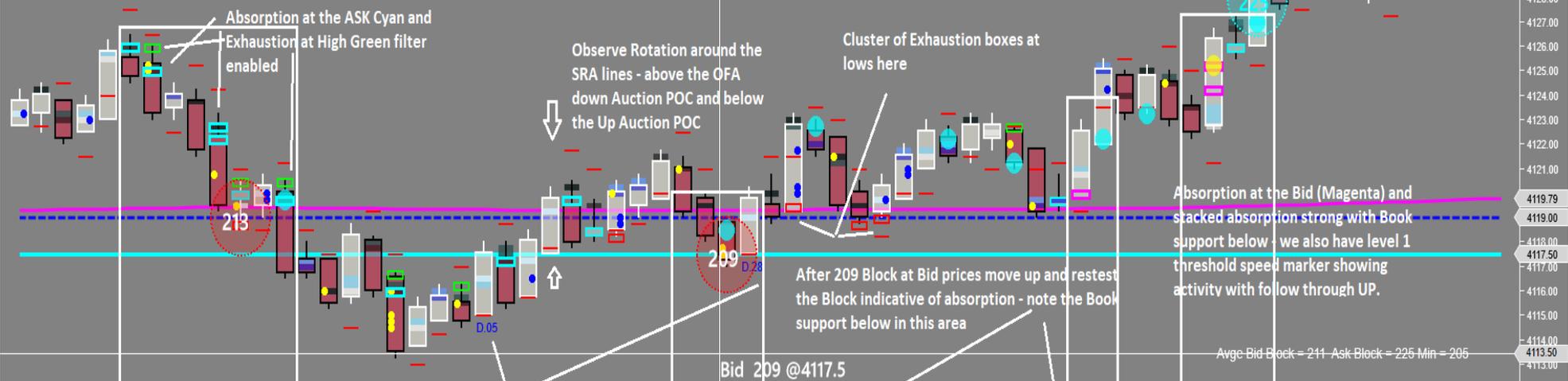


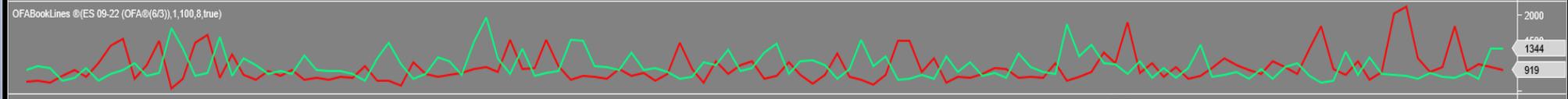
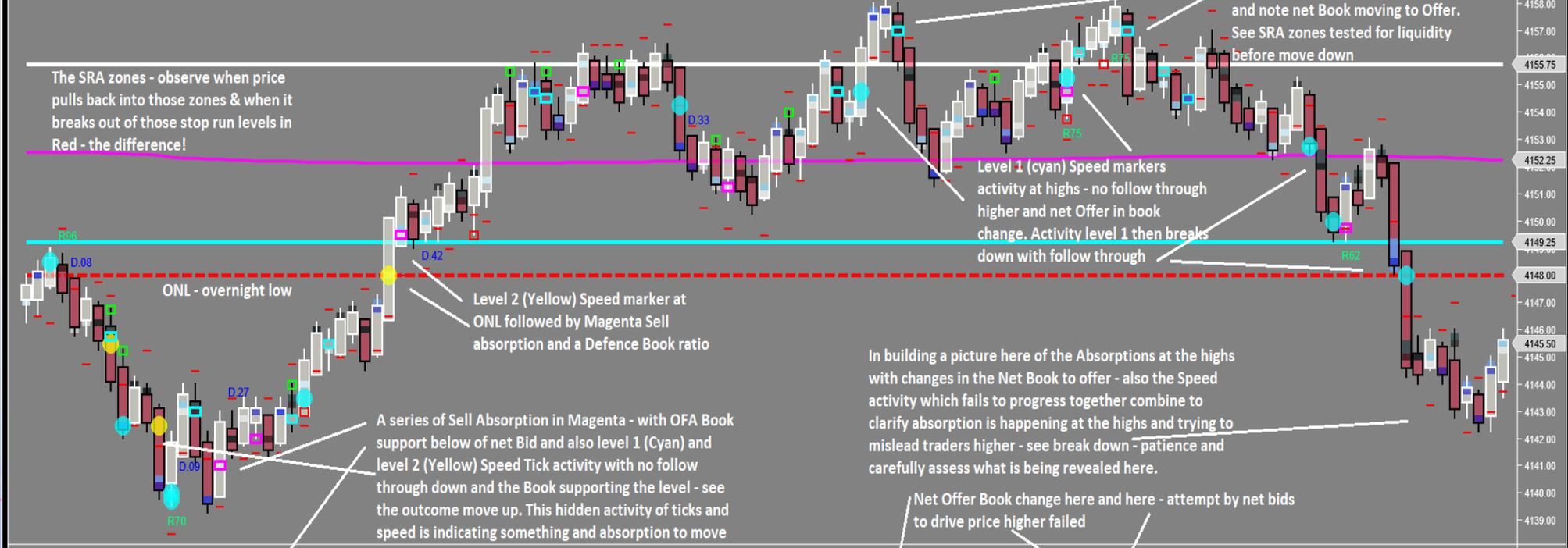
Note the overall cumulative net OFA Book initial strong supply change on left and then continued net offers as we retest the highs



This case brings together key Addon elements of SRA lines set to 6 ticks for ES - Absorption @ bid (magenta) and @ ask (cyan)
Book Ratio - min Rejection set to 64 and Defence min set to 0.36. Exhaustion filter 1 is enabled and OFA Book added to show book support at key areas.

What these case studies are trying to outline is the adding together components of narrative and orderflow with Limit Order Book Support to build higher probability confident reads of the price action flow



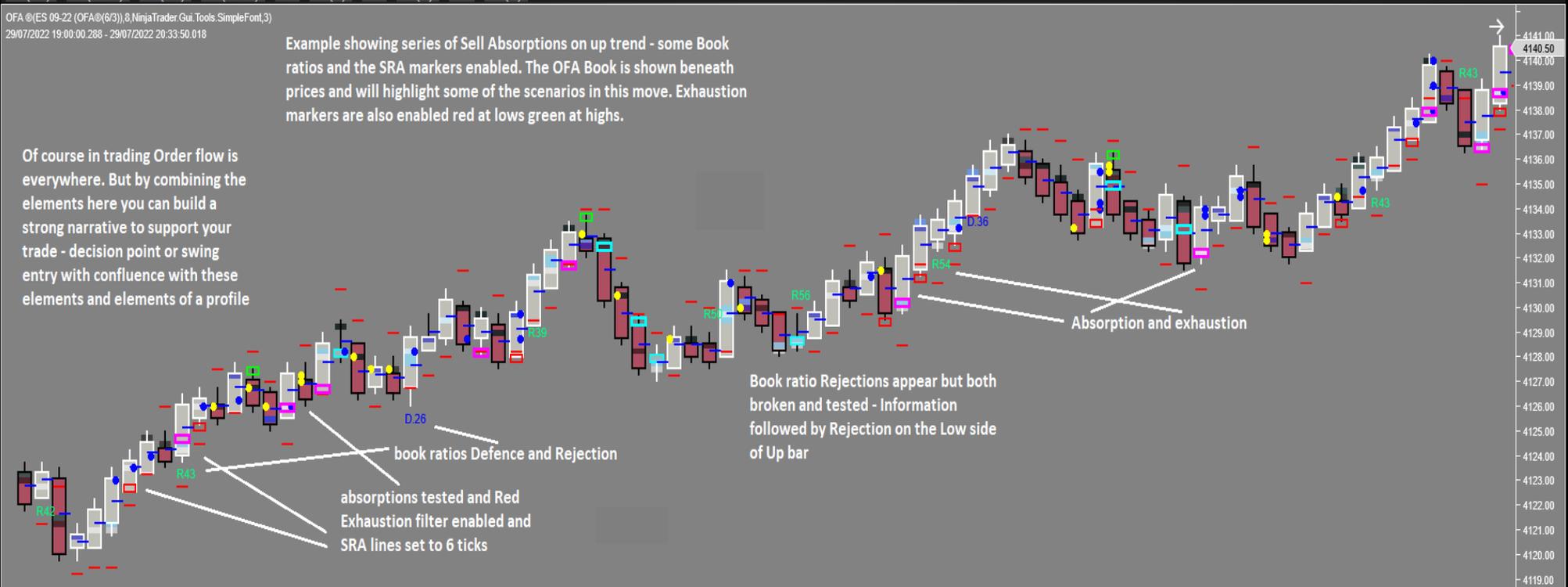


DP(1B) DP(1B A) DP(XB) DP(XB A) RP RP(A) SP SP(A) DP DP(A)

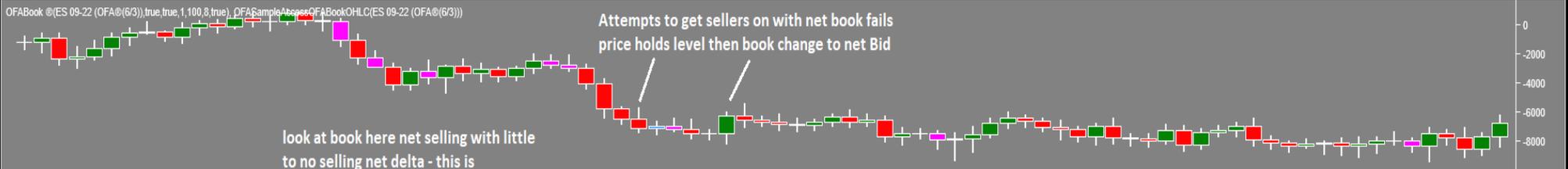
OFA ©(ES 09-22 (OFA@ (6/3)), 8.NinjaTrader.Gui.Tools.SimpleFont,3)
29/07/2022 19:00:00.288 - 29/07/2022 20:33:50.018

Example showing series of Sell Absorptions on up trend - some Book ratios and the SRA markers enabled. The OFA Book is shown beneath price and will highlight some of the scenarios in this move. Exhaustion markers are also enabled red at lows green at highs.

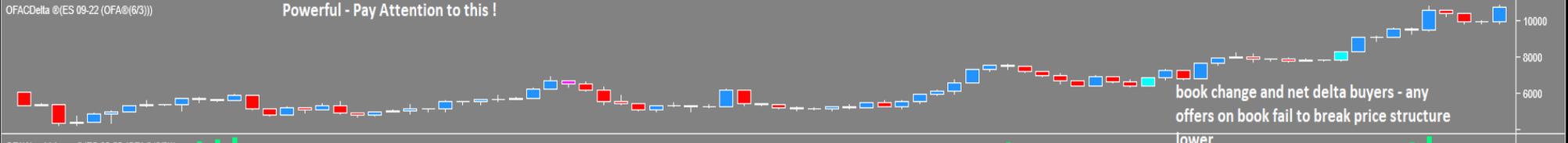
Of course in trading Order flow is everywhere. But by combining the elements here you can build a strong narrative to support your trade - decision point or swing entry with confluence with these elements and elements of a profile



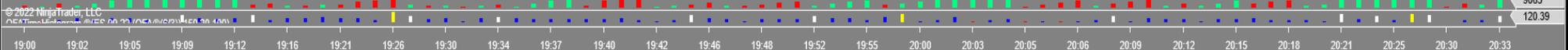
OFABook ©(ES 09-22 (OFA@ (6/3)), true, true, 1, 100, 8, true), OFASampleAbsorptionsOFABookOHLC(ES 09-22 (OFA@ (6/3)))



OFAcDelta ©(ES 09-22 (OFA@ (6/3)))



OFAWaveVolume ©(ES 09-22 (OFA@ (6/3)))



FAQ Section

How do I install this Addon?

This Addon is part of the main build that installed with the Installer process outlined in the download page; so there is nothing to import or install. Just make sure you download the Latest OFA release from the download page as this has been updated for this Launch. Once authorised you will see the Addon Menu in the OFA VolumeProfile Menu.

Do I need Level 2 data subscription for any features of this Addon – no only Level 1 data is required – the OFA Book Addon is the one that requires Level 2 data.

How do I know what settings to use for the Absorption tool (1st section of the Menu) ?

I suggest to open the OFA Print mode and observe the print numbers for the instrument being traded – get a sense for the Dominant side volumes and what the minimum side would be. Eg for ES around 80-90 minimum is set for the Dominant side and around 25 for the smaller side on the Diagonal. Start with some numbers that make sense based on the print for the london session if you trade this and then the US RT Session. Then you can adjust the imbalance % based on these. It is suggested to start with default Depth of 3 and perhaps increase to 4 or more depending again on the contract and if you are seeing too many absorption boxes. Suggestions have already been covered on **Page 5**.

Having stacked absorption boxes is useful to see as it builds upon the absorption either on the Bid side in an Up Auction or on the Ask side in a Down Auction.

What do the Book Ratio numbers mean for the Book Ratio ?

Look at the Graphics on **Pages 8 & 9** which clearly illustrates this and the difference between the two forms ie Rejection R and Defence D.

Any suggestions for the number of ticks to use for the Stop Run Analysis ? – please see the Settings section for suggestions to get started on this.