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1 INTRODUCTION

This document covers how to configure the runwiseFX Dashboard that will display a multiple indicators across multiple timeframes and symbols, with an optional alert.

Also covers the Pro version that allows custom indicators to be configured, even if just have the ex4/5 file, or those purchased from MetaTrader Market, as well as additional standard indicators.

1.1 Document Conventions

The following icons are used to throughout the document:



Take note – try to remember



Very import to take note of and remember - could cause undesirable results if ignored



Top tip – shortcut or other useful information that can make the system easier to use



Advanced feature/subject – can skip over when you are first learning how to use the system



Technical 'behind the scenes' detail that you don't strictly need to know but maybe interested in

2 Main Dashboard Panel

The panel appears when you add Dashboard to a chart. Please allow enough time for start-up as chart data may be downloaded from your broker for the symbols displayed. This can take a while, especially on MetaTrader 5.



The Dashboard shows solid arrows when % of indicators in agreement has reached input **Important_alertThresholdPercentage** (by default 100). Else will show hollow arrow if just a majority indicators are in agreement.

The alert column will change when an alert is generated. The number next to the arrow is the number of pips the market has moved in the direction of the alert since the alert. Can be used to see if you've missed the boat if delayed action up on alert. Will go negative and orange if price deteriated.

The ADR column shows how much symbol has moved in current trading day, based on it's average daily range. As number gest towards 100% then less likely symbol will move further for the current trading day.

Use the Alert Period? row to tick which periods you would like to be alerted for. By default Dashboard will alert when all selected periods are in agreement. If you wish to be alerted on the periods separately then set input Important alertOnlyWhenAllSelectedMatch to false.

The Pro version also has another row with tick box to show pips market moved since arrow changed for each period.

You can click symbol name to go to that chart or will open new chart if one is not found.

3 Dashboard Positioning & Sizing

The position of the Dashboard can be changed with inputs **Box_corner** and **Box_X** and **Box_Y**, which controls the corner of the chart Dashboard appears in and the X/Y offset from that corner, respectively.

The general sizing/scale of the panel is controlled by inputs **Gen_GUIScaleX** and **Gen_GUIScaleY**. The default of -1 means the system will attempt to scale based on the DPI settings reported from Windows. However, you can set the values yourself. Recommend trying 1.5 and 1.5 and then gradually increase, say 2.0 and 2.0, and so on. **Tip:** If you just need more space between the columns then just increase **Gen_GUIScaleY**.

The font size is controlled by **Gen_GUIFontSize**.

The line height between the rows of Dashboard is set by input **Main_lineHeight** in pixels.

The width of the symbol (left) column is set by input **Main_widthLabel**, again in pixels.

4 Indicator Inputs

Don't worry if you don't understand something we can help! Please note, we use a common library of general routines for all our products. So, there are Inidi_*, Color_*, Gen_* and Func-* inputs that aren't used / shouldn't be changed. All the relevant inputs are shown below, ignore any others:

Variable	Description
Important_alertThresholdPercentage	Percentage of indicators that need to be in agreement for alert to happen, e.g. if set to 75 would mean 75% of indicators would need to agree for alert on the timeframe. Also the threshold to show solid arrow, rather than hollow.
Important_alertOnlyWhenAllSelectedMatch	If true then will only alert when all selected timeframes for alert are in the same direction, i.e. each selected timeframe has reached Important_alertThresholdPercentage. If false then will alert each selected timeframe individually. Note, see Main_alertAllResetLevel input as well.
Important_defaultAlerts	Used to tick alert on/off boxes at the bottom of panel. Set to 1 if alert tick box should be ticked/on by default. Values are comma separated for each timeframe.
Important_periodsToShow	Periods (timeframes) to show in Dashboard. Values are comma separated.
Important_symbols	Comma separated list of symbols to show. Can specify currencies as well.
Important_symbols2	Can be used to specify additional symbols, if not enough space in Important_symbols (due to 63 character limit of inputs)
Important_symbolCurrencyExclude	Can be set with a comma separated list of currencies not to add when currencies are supplied in Important_symbols. Used to prevent exotic currency pairs from being included.

Variable	Description
Main_alertAllResetLevel	Number of timeframes that need to have gone the other way before alert will happen again. This is used when Important_alertOnlyWhenAllSelectedMatch is true. For example: If set to alert on M5,M15,M30 and this input is at 2 then will re-alert if M5 and M15 (say) went the other way and then came back. However, if this input is set to 3 then M30 would have to have go the other way as well before another alert could happen later on. The higher the value then the more the market has to have reversed before alert can happen again if direction comes back.
Main_alertResetForTimeFramePrct	What percentage of indicators need to have gone the other way for a reset for another alert if direction comes back. If set to 50 (say) then if alerted buy then 50% of indicators would have to go to sell and then come back to buy for another alert to happen. The higher the value then the more the indicators have to go to reverse direction before an alert can happen again if come back to the original direction.
Main_alertTextExtra	Additional text to be add to alert text. Can be useful if using multiple instances of Dashboard for different strategies an this alert text can say which strategy.
Main_allowAlertAtStartup	If true then will allow alerts on start-up of Dashboard for symbols/periods that are at or above the alert threshold. Otherwise, won't alert until there is a fresh change of direction, i.e. reset has happened and then gone at or above alert threshold.
Main_averageDailyRangeDays	Used for ADR calculation show in the right most column.
Main_averageRangeMaxAlert	If not set to -1 then will prevent alerts if average range percent is above this value. Instead, a log message will be written to the Experts log. Can be used to prevent system from alerting when symbol has already moved a lot today and probably won't do more. A value of around 80 to 90 is

Variable	Description
	recommended to be considered.
Main_averageRangeMode	Allows you to select between ADR and ATR (Average True Range)to be show down in right most column, or turn off
Main_averageRangeWarn1	If average range (AR) has reached this level then will show in Color_warn1 on Dashboard. Also causes! to be included when AR value is reported in alert text.
Main_averageRangeWarn2	If average range has reached this then will show in Color_warn2 on Dashboard. Also causes !! to be included when AR value is reported in alert text.
Main_averageTrueRangeDays	Used for ATR calculation if Main_averageRangeMode is set to ATR.
Main_defaultShowExpanded	If true then will default to showing symbols in expanded mode, where can see what the individual indicators are reporting
Main_defaultShowPipsPerPeriod	Pro Version Only. If <i>true</i> then will tick 'Show pips moved since period changed direction' on panel by default.
Main_disableSpreadAskBid	If <i>true</i> then will disable showing ask/bid prices in large text on the chart for the chart that Dashboard is attached to.

Variable	Description
	Pro Version Only. Used for custom indicators that are set to capture method Distance to say how the system will look back to see if the last arrow/dot the indicator showed was for buy or sell.
Main_distanceMethod	Scan Back: Will look back through chart to find the last type of arrow/dot the indicator show, i.e. whether it was a buy or sell one – uses more CPU but good for indicators that repaint. Remember: Won't scan back. It will just wait for arrow/dot appear and the remember if buy or sell. Low CPU but won't get buy/sell arrow until appears in live candle. Initial Scan then Remember: Hybrid between the two where will scan back initially to get last buy/sell indication, which will change going forward if new arrow/dot comes from indicator. Low CPU except at start-up but still need indicator not to repaint historically. This is the recommended setting but not set by default as can make Dashboard need more time to start-up.
Main_drawBackground	If false then will not draw solid rectangle background of Dashboard, i.e. will make Dashboard more 'see through'.
Main_globalVariableSetBuyVal	Value to set global variable to for buy signal when Main_globalVariableSetName input has been set
Main_globalVariableSetName	If not blank then global variable will be set when an alert occurs, using this as part of the name. The symbol will be added at the start of the supplied global variable name. E.g., if set to pin10 then global variable EURUSDpin10 will be set to value given by Main_globalVariableSetBuyVal when a buy alert occurs on EURUSD.
Main_globalVariableSeSellVal	Value to set global variable to for sell signal when Main_globalVariableSetName input has been set
Main_indiExamineCandles	Pro Version Only. Used for what is discussed in Section 7 about outputting indicator values so can see color indexes needed for capture. Will give number of candles to output information for, i.e. how far to go back from current live candle.

Variable	Description
Main_instanceID	Needs to be set if want to have multiple instances of Dashboard on the same chart, e.g. with different indicators. Needs to be set with a value different to other instances, so objects on the chart can have unique names. Note, you will also need to set the Box_* inputs in order to position the Dashboard instances in different places on the chart.
Main_lineHeight	Line height in pixels of the rows of the Dashboard
Main_maxBarsToSearch	Pro Version Only. Used for custom indicator capture method of Distance to say how far should look back through chart for the last arrow/dot the indicator outputted, so can know if buy or sell is being signalled. Does use more CPU if have to scan back further. If the indicator shows it's arrow/dots quite frequently then can reduce this value. If shows very infrequently then may need to increase, otherwise, will just get yellow squiggly line until new arrow/dot appears.
Main_onlyResetOnNewCandle	Restricts when reset can happen for another alert in the same direction. Used to prevent you being bombarded by alerts if indicators repaint on live candle and are on the cusp of buy/sell. No: Reset will happen as soon as indicators have gone in opposite direction. Note, this setting can cause frequent repeated alerts if indicator repaints on live candle and is on the cusp of buy and sell. New Candle Intelligent: Will only reset for new alert on new candle if indicators have gone opposite. The timeframe for the new candle depends on which timeframe periods have been selected for alert and will use the lower of those. New Candle Chart: Will only reset for new alert on a new candle on the chart that Dashboard happens to be running on.
Main_openChartOnItemClick	If true then will switch or open chart (if doesn't exist), as appropriate, when mouse click on symbol name in the Dashboard panel.
Main_openChartTemplate	If set then will load supplied template when click on symbol in the Dashboard panel and the

Variable	Description
	corresponding chart is switched to or opened.
Main_showPipsAsPrctOfAvgRange	If true then will convert any pips shown on the Dashboard panel to the percentage of the symbol's Average Daily Range. This allows for better comparison between symbols, as for some symbols 30 pips (say) is a lot, where others not so much. Using this option will scale the pips moved to the percentage of what the symbol normally does in a day. Tip: Experienced traders requested this feature - it's only off by default so as not to confuse newbies.
Main_symbolAddChart	If <i>true</i> then will ensure the symbol of the chart that Dashboard is running on is in the list of symbols shown. Used to make sure the Dashboard always displays something, so newbies don't think Dashboard isn't working.
Main_timerFrequencyMS	Time interval, in milliseconds, between updating each symbol/row of Dashboard. Can increase to reduce CPU load and decrease to update more frequently.
Main_widthLabel	Width in pixels of left column showing symbol name
Custom <i>n</i> _indicatorName	Name of indicator as appears in the Navigator panel in MetaTrader. If from Market then will need to include that sub-folder, e.g. Market\ADX Arrow
Customn_indicatorDisplayAs	What the indicator should be called when displayed in the dashboard. Can be left blank and will just be truncated indicator actual name. Note, if name starts with !! then will print indicator value for various shifts and for the supplied color indexes, which can be many comma separated.
Customn_indicatorProperties	Allows indicator properties to be set that are different to the default. Should be comma separated and in the same order as they appear in the Indicator Inputs tab. Only need to specify up to the one you want to change. See section 8 for more guidance. Note, there is 63 character limit on text inputs like this, but you can use

Variable	Description
	Add <i>n</i> _inputProperties to add additional inputs.
Customn_colorIndex	Gives the color buffer index of the indicator that should be examined to give the buy/sell indication for the Dashbarod. Can be comma separated if one index is used for buy and a second for sell. In this case the buy index should be put in first. A single color index can be supplied if the indicator gives a single value which if greater than a certain mid point (say 0) then it's buy and less than for sell. Note, some indicators may have two colors for buy and two for sell, in which case supply as buyIndex1,sellIndex1,buyIndex2,sellIndex2
Customn_shift	The offset from the live candle for the indicator value to b used. If 0 then will value from live (latest) candle, else 1 would be candle just closed, etc. Most indicator are fine to 0 but indicators that do not draw on the live candle may require 1 to be set here.
Custom <i>n</i> _midPoint	Used if single color index is supplied and caputreMethod is default. The input gives mid point that represents the transition from buy to sell and visa versa. If many indicators this will 0 but for some could be 50. Also, supports different thresholds for buy and sell but using /. For example, if wanted buy if > 80 and sell if < 20 then can set midpoint to 80/20. If wanted as reversal signal then, where buy if < 20 and > 80, then put 20/80.
Customn_nullValue	Null value is used if more than one color index is supplied and gives the value that indicator has when the color is NOT shown. AUTO means will look for either 0 or EMPTY_VALUE. EV means will look for EMPTY_VALUE. Otherwise, can set to the numerical value that indicator uses when color is not shown, e.g. a few indicators use -1. Note, EMPTY_VALUE is the official value indicators are supposed to use to not display the color of the index. Although as 0 is quite common too we recommend keeping on AUTO.

Variable	Description
Custom <i>n</i> _captureMethod	Gives the capture method, i.e. how the color indexes are to be interpreted and relate to how the indicator display it's information. We have a separate tutorial on this: https://www.runwisefx.com/tutorials/capture.htm
Customn_maxBars	If set will supply number of bars/candles indicator can signal for in a certain direction before regarded as void. Useful to ensure alerts happen close to where an indicator transitions for buy to sell, or visa versa.
Custom <i>n</i> _holdbars	Useful for indicators that only briefly signal, e.g. on particular candle. If this input is set the will remember the signal for given number of bars/candles in order to give chance for other indicators to line-up. Can set to * in order to remember until there is change in direction.
Add <i>n</i> _inputProperties	Can be used to add on to Customn_indicatorProperties to overcome 63 character limit. Note, make sure Customn_indicatorProperties ends in comma as the two inputs are just added together
Include_*	Allows the standard indicators to be turned on/off, in terms of being in the dashboard and contributing to the alert
Box_*	Allows the position of the dashboard to be changed
Property_	Allows the properties of the standard indicators to be changed, e.g. period of moving average
Indi_checkErrorReturnFromICustom	If false the will not check indicator prior to capturing. Can be useful for indicators that are slow to initialise and cause check to fail (causing alert) even though indicator will work but just needs a bit longer.
Gen_alert*	Allows the alert to be sent to mobile / email



Once you are happy with the inputs you've set you may wish to save it to a MetaTrader template.

5 Settings for Popular Custom Indicators



Pro version only

Details for settings for popular custom indicators (both free and paid for) can be found on this webpage: http://www.runwisefx.com/rules/i.htm?md=mxdb

Note, a very small number of indictors that don't use color index buffers to output their information are not compatible with Dashboard. Click Details link to check and will say if that is the case.

6 Settings for Additional Standard Indicators



Pro version only

Details for settings for additional standard indicators can be found on this webpage: http://www.runwisefx.com/rules/si.htm?md=mxdb

For example the following inputs would set an additional moving average cross check for periods 20 and 60:

```
Custom1_indicatorName=F:MovingAverageCross
Custom1_indicatorDisplayAs=MAX2
Custom1_indicatorProperties=20,60,0,ema
Custom1_colorIndex=
Custom1_captureMethod=Default
Custom1_shift=1
Custom1_midPoint=
Custom1_nullValue=AUTO
```

Example 2 will add the Awesome Oscillator, which although is a standard indicator isn't in our list of built-in indicators:

```
Custom2_indicatorName= F:AwesomeOscillator
Custom2_indicatorDisplayAs=AO
Custom2_indicatorProperties=
Custom2_colorIndex=
Custom2_captureMethod=Default
Custom2_shift=1
Custom2_midPoint=
Custom2_nullValue=AUTO
```

Example 3 will add RSI but as reversal indicator, where buy if below 20 and sell if above 80, with period 14 as set in indicator properties:

```
Custom3_indicatorName= F:RSI
Custom3_indicatorDisplayAs=RSIrv
Custom3_indicatorProperties=14
Custom3_colorIndex=
Custom3_captureMethod=Default
Custom3_shift=1
Custom3_midPoint=20/80
Custom3_nullValue=AUTO
```

7 Examining Indicator Color Indexes

If you are struggling to work out the color indexes to use, you can get them printed out in the Experts tab on MetaTrader. This can be achieved by adding '!!' to Custom n_indicator Display As.

The color indexes supplied Custom n_colorIndex (which can be many – comma separated) will be printed for shifts 0 to 9. Note, shift 0 is the live candle and shift 1 is the candle just closed. The values are outputted comma separated in the same order as Custom n_colorIndex. If you see 'EV' in the output then that stands for EMPTY_VALUE, which is the official value a color index should be set to if the color is not to be shown.

The values appear in the Experts tab in the Terminal panel of MetaTrader. This happens when the indicator is added to the chart or the properties changed.

When you no longer require the values to be outputted you can remove the !! from the indicatorDisplayAs.

8 Setting Custom Indicator Inputs/Properties

It's possible to specify custom indicator inputs, e.g. to turn alerts off, remove unnecessary items the indicator displays or adjust settings. The inputs need to be supplied comma separated. If left blank then the defaults of the indicator will be used. If specified then should be in the order they are listed in the Inputs tab of the indicator. You only need to specify up to the ones you want to change.

We have a separate tutorial for setting indicator inputs: https://www.runwisefx.com/runwiseFX_Dashboard_Pro_User_Guide.pdf

9 CONTACTS

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