

Initial Balance



Table of Contents

New In Version 9.....	2
Overview.....	2
Getting Started – Quick Start.....	2
Output of the Initial Balance Indicator.....	4
Configuration.....	4
Configuration: General Tab.....	5
Configuration: Inputs Tab.....	5
Configuration: Alerts Tab.....	8
Configuration: Style Tab.....	8
Configuration: Color Tab.....	8
Configuration: Scaling Tab.....	8
Configuration: Advanced Tab.....	8
Chart Types Supported.....	9
Using the RadarScreen.....	9
Inputs Configuration.....	9
Alerts Configuration.....	9
Columns Configuration.....	10
RadarScreen Troubleshooting.....	10
Using the Vertical Line with Market Profile.....	11
H.IB.PlotR Indicator.....	12
Configuration: General Tab.....	12
Configuration: Inputs Tab.....	12
Configuration: Alerts Tab.....	12
Configuration: Style Tab.....	12
Configuration: Color Tab.....	13
Configuration: Scaling Tab.....	13
Configuration: Advanced Tab.....	13
Chart Types Supported.....	13
How To Develop Your Own Indicator for the Global Dictionary.....	14

Format of Stored Variables in the Global Dictionary.....	14
Strategy/Indicator Initialization.....	14
Capturing The Initial Balance Variables: Source Code.....	15
Support.....	16
Disclaimer.....	16

New In Version 9

- **Configurable font for displayed messages.**

Overview

This indicator draws the “Initial Balance” (aka Initial Range or Opening Range) on .D or 24 hour charts and RadarScreen windows. In addition to the Initial Balance (typically the first hour of trading), the indicator draws the mid-point of the Initial Balance, generally called “half back” and the 150% and 200% extensions of the Initial Balance range.

The Initial Balance area for each session is significant - market profile traders consider the Initial balance as the range of the first 60 minutes of trading. Other trading methods consider the Initial Balance as the first 5 minute, 15 or 30 minutes of trading. This indicator can plot any Initial Balance range.

This indicator supports equity index futures (“.D” or continuous contracts), other futures (e.g. currency, interest rate, energy, metals, grains), stocks and forex. This indicator is a support tool for traders, not a trading system.

Configuration options allow the trader to select the Initial Balance time range, the look and feel of the lines, and alert conditions.

Getting Started – Quick Start

This indicator includes a sample workspace called InitialBalance.TSW

TradeStation should install the workspace into your default workspace folder. Open that workspace to see a number of chart windows with the indicators installed in various different configuration settings. If you can not find the workspace or TradeStation did not download it, keep the following points in mind:

- The default time period of the indicator was developed for a platform that uses the Exchange Display time zone of the @ES futures symbol (Central time zone in the USA). If you use a different display time zone for the charted product, or the charted product has different session open time, then click on “Prompt for Format” when you insert the indicator. Go to the Inputs tab and adjust the IBStartTime and IBEndTime accordingly. Read the “Configuration: Inputs Tab” section for more information.

To start h.InitialBalance on a new 24 hour continuous or “.D” index futures chart analysis

window that trades on CME (@es, @nq) or CBOT (@ym), perform the following steps:

1. Create a new Chart Analysis chart
2. Insert the @es symbol on the chart; make sure the display time zone is set to "Exchange"
3. Set the chart interval to 5 or 30 minutes
4. Insert the Initial Balance h.InitialBalance indicator (turn on "Prompt for Format"). Select the "Input" tab, set IBStartTime to 0830 and IBEndTime to 0930.

To start h.InitialBalance on a new NYSE listed equity such as IBM, perform the following steps:

1. Create a new Chart Analysis chart
2. Insert the IBM symbol on the chart; make sure the display time zone is set to "Exchange"
3. Set the chart interval to 5 or 30 minutes
4. Insert the Initial Balance h.InitialBalance indicator (turn on "Prompt for Format"). Select the "Input" tab, set IBStartTime to 0930 and IBEndTime to 1030.

Output of the Initial Balance Indicator



This picture represents the default output of the **h.InitialBalance** indicator installed on a @ES.D 5 minute chart. The indicator works on minute interval charts only and updates the lines only at the close of the bar/candlestick.

The horizontal lines represent the Initial Balance or multiples thereof. The Initial Balance lines are drawn at the end of the IB period. During IB period, no lines are drawn

When a new session begins, the lines are not drawn for that session until the completion of the IB period.

Note: The text strings "+200% Initial Balance" through "-200% Initial Balance" were added to enhance the readability of the chart, they are not output by the indicator.

Configuration

After you import the indicator you can insert it in any chart analysis or RadarScreen window on minutes interval. The name of the indicator is **h.InitialBalance**.

When you format the indicator there are several tabs of interest.

Configuration: General Tab

In the default configuration, the “Update value intra-bar (tick-by-tick)” is NOT selected. Only select, or check, this box if you turn on the indicator's alerting capabilities (either in a Chart Analysis or RadarScreen window). See Configuration: Inputs Tab for information to turn on alerting.

Configuration: Inputs Tab

Name	Default Value	Description
IBStartTime	830	Defines the beginning of the time period that the indicator will use to determine the IB range. Use 24 hour format. Typical session settings are: <ul style="list-style-type: none">• NYSE, NASDAQ Equities, displayed in “Exchange” time zone: 0930• CME, CBOT equity index futures displayed in “Exchange” time zone: 0830 While these are the typical settings, the trader may select any time range for the indicator to operate during as long as IBStartTime is earlier than IBEndTime AND the these inputs correspond EXACTLY to the open/close of the specific candles of the Initial Balance period.
IBEndTime	930	Defines the beginning of the time period that the indicator will use to determine the IB range. Use 24 hour format. Typical session settings are: <ul style="list-style-type: none">• NYSE, NASDAQ Equities, displayed in “Exchange” time zone: 1030• CME, CBOT equity index futures displayed in “Exchange” time zone: 0930 While these are the typical settings, the trader may select any time range for the indicator to operate during as long as IBStartTime is earlier than IBEndTime AND the these inputs correspond EXACTLY to the open/close of the specific candles of the Initial Balance period.
Show_VertLine	FALSE	When True, a vertical line is displayed once the Initial Balance period completes
VertLine_Weight	2	0 through 6, where 0 represents the thinnest line and 6 represents the thickest line
VertLine_Color	“Aqua”	A text string that defines the color to display, see http://help.tradestation.com/09_01/tsdevhelp/Subsystems/elobject/class_win/color_class.htm for the complete list of colors. The input must be placed in quotation marks.

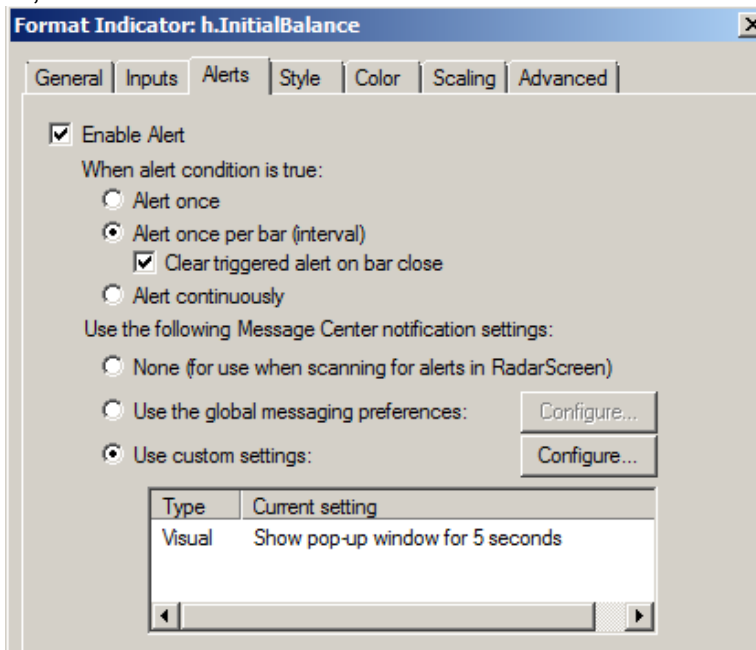
Name	Default Value	Description
VertLine_Transparency	0	0 = solid, 100 = clear; any number between this range is allowed
VertLine_Offset	0	0 forces the indicator to draw the Vertical Line on the first candle in the Initial Balance period; a negative number moves the line left, a positive number moves the line right
ShowText	TRUE	When True, a label for the IB Hi and IB Lo line is displayed The text's font, style, and size are defined by the defaults of the integrated Text tool.
Text_Font	"Arial"	The font used to draw the text labels. Use any font that is displayed in the platform's text drawing tool
Text_Font_Size	9	Size of the label font
Text_Font_Bold	FALSE	Whether to display the font in italic (true) or not (false)
Text_Font_Italic	FALSE	Whether to display the font in bold (true) or not (false)
Show1x	TRUE	When true the IB Hi and IB Lo lines are drawn. The style and color of these lines is defined in the style and color tabs.
ShowHalfBack	TRUE	When true the price that is the middle of the Initial Balance range is drawn. The style and color of this line is defined in the style and color tabs.
Show1p5x	TRUE	When true the price that is 50% of the Initial Balance range is added to the IB Hi and subtracted from the IB Lo and these lines are drawn. The style and color of these lines is defined in the style and color tabs.
Show2x	TRUE	When true the price that is 100% of the Initial Balance range is added to the IB Hi and subtracted from the IB Lo and these lines are drawn. The style and color of these lines is defined in the style and color tabs.
AlertHiLo	FALSE	When set to True, any candle outside of the Initial Balance period that crosses the IB high or IB low price will generate an alert. No more than one alert per candle (or interval) will be generated. For timely delivery of alerts, be sure to click on the "Update value intra-bar (tick-by-tick)" setting in the General Tab.

Name	Default Value	Description
		The Configuration: Alerts Tab explains how to set up the alert.
Alert1p5x	FALSE	<p>When set to True, any candle outside of the Initial Balance period that crosses the 150% IB high or 150% IB low price will generate an alert. No more than one alert per candle (or interval) will be generated.</p> <p>For timely delivery of alerts, be sure to click on the "Update value intra-bar (tick-by-tick)" setting in the General Tab.</p> <p>The Configuration: Alerts Tab explains how to set up the alert.</p>
Alert2x	FALSE	<p>When set to True, any candle outside of the Initial Balance period that crosses the 200% IB high or 200% IB low price will generate an alert. No more than one alert per candle (or interval) will be generated.</p> <p>For timely delivery of alerts, be sure to click on the "Update value intra-bar (tick-by-tick)" setting in the General Tab.</p> <p>The Configuration: Alerts Tab explains how to set up the alert.</p>
SMA.Avg	20	Valid values are 0 through 20. If ShowText is true, then this number represents the number of previous IB ranges that should be averaged to find the Simple Moving Average of IB sizes. This can be useful to determine "normalcy" of the current day's IB. When zero then the average of the IB ranges is NOT displayed.
Channel	""	<p>Specifies the UNIQUE name of the global dictionary that this indicator uses to 'transmit' initial balance high and low variables information to</p> <p>Leave as "" if the 'transmission' is not required.</p> <p>Think of the usage of the <i>Channel</i> input as you do the "symbol link" on chart analysis windows with</p>

Name	Default Value	Description
		added functionality to share across workspaces, and desktops (in addition to charts).

Configuration: Alerts Tab

If AlertHiLo, Alert1p5x, and/or Alert2x is true then the alerts tab should be set up as follows:



If “Alert once” is selected then only the first instance of price crossing an IB “line” will generate an alert.

“Alert once per bar (interval)” does exactly that; any time prices crosses and IB line an alert will be generated as long as the previous cross did not occur in the same bar (interval).

Configuration: Style Tab

Sets the style and weight of IB lines. Keep “type” as Line.

Configuration: Color Tab

Sets the color of the IB lines.

Configuration: Scaling Tab

There is nothing on this tab that should be changed.

Configuration: Advanced Tab

There is nothing on this tab that should be changed.

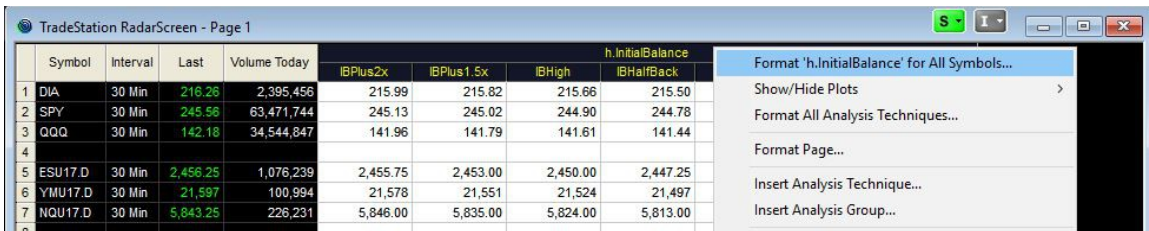
Chart Types Supported

Only minutes intervals are supported on the chart window or RadarScreen. If you change the interval to seconds, shares, ticks, or any other unsupported interval, the indicator will not display anything and it will not display an error message. Returning the chart to minutes interval restores the indicator output.

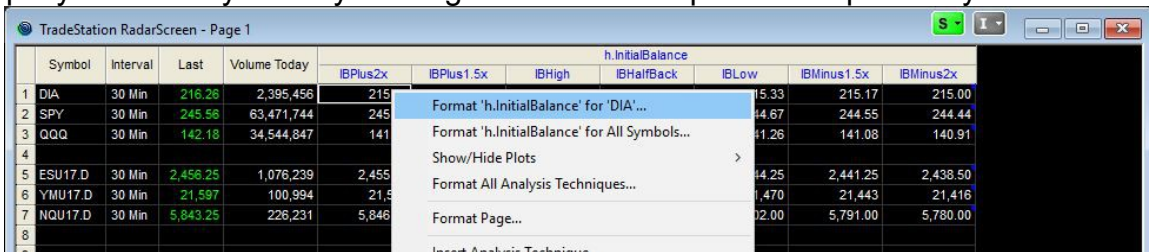
Using the RadarScreen

Inputs Configuration

Inputs to the indicator can be set exactly the same for each symbol by clicking on the indicator name:

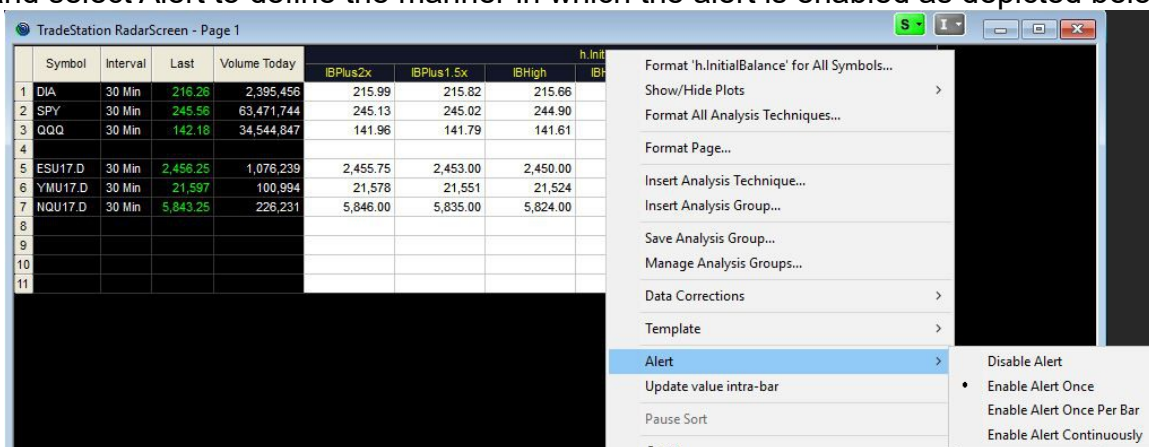


or uniquely for each symbol by clicking an indicator output in the specific symbol row:



Alerts Configuration

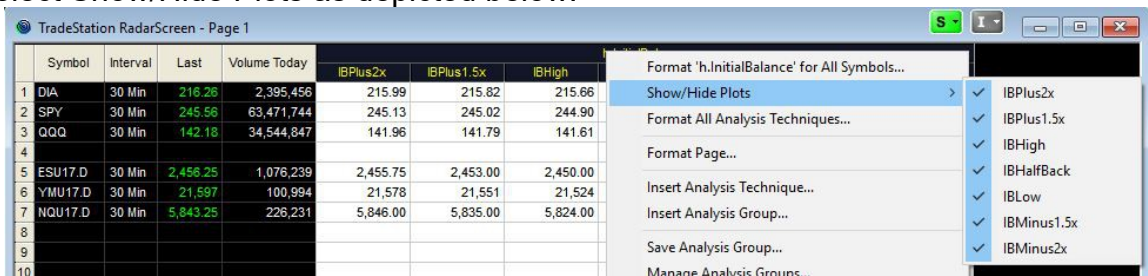
In addition to setting the proper input(s) to True, click the h.InitialBalance heading then right-click and select Alert to define the manner in which the alert is enabled as depicted below:



As with inputs, alerts can be set uniquely to each symbol.

Columns Configuration

Define the specific columns to display by clicking the h.InitialBalance heading then right-click and select Show/Hide Plots as depicted below:



The screenshot shows the TradeStation RadarScreen interface. A table displays market data for various symbols. The columns include Symbol, Interval, Last, Volume Today, and three Initial Balance (IB) indicators: IBPlus2x, IBPlus1.5x, and IBHigh. A context menu is open over the IBHigh column, showing options to format the indicator for all symbols, show/hide plots, format all analysis techniques, format the page, insert analysis techniques or groups, save analysis groups, and manage analysis groups. The 'Show/Hide Plots' option is selected, and a sub-menu is visible showing checkboxes for each IB indicator, all of which are checked.

	Symbol	Interval	Last	Volume Today	IBPlus2x	IBPlus1.5x	IBHigh
1	DIA	30 Min	216.28	2,395,456	215.99	215.82	215.66
2	SPY	30 Min	245.56	63,471,744	245.13	245.02	244.90
3	QQQ	30 Min	142.18	34,544,847	141.96	141.79	141.61
4							
5	ESU17.D	30 Min	2,456.25	1,076,239	2,455.75	2,453.00	2,450.00
6	YMU17.D	30 Min	21.597	100,994	21,578	21,551	21,524
7	NQU17.D	30 Min	5,843.25	226,231	5,846.00	5,835.00	5,824.00
8							
9							
10							

RadarScreen Troubleshooting

If nothing shows in the RadarScreen after the h.InitialBalance indicator was inserted then check the following:

- Ensure the interval is a supported interval
 - The only supported interval is minutes. To determine the RadarScreen interval, either insert the interval indicator into the RadarScreen or right-click the symbol to view and change the interval to minutes
- If the interval is a “minute” interval then format the h.InitialBalance indicator. Select the General Tab. Increase the “Additional bars to load” to a value that is equal to, or larger than the number of intervals in a trading session. For example, a NYSE equity trades 6.5 hours per regular session, if your interval is 30 minutes then the indicator requires at least 13 “Additional bars to load”

If Alerts are “missing”:

- Minutes interval setting with “Alert once per bar (interval)” does exactly that, any time prices crosses an alertable IB line an alert will be generated as long as the previous cross did not occur in the same bar (interval)
- The smaller the minutes interval increases the possibility for more alerts. The larger the minutes interval the likelihood of fewer alerts (if price crosses IB High and IB High 1.5x in the same 30 minute interval then there will be only one alert generated)
- Set the minutes interval to an amount that fits your trading plan

Using the Vertical Line with Market Profile

The following 30 minute chart of @ES.D shows how a Market Profile trader may reproduce a traditional MP chart where the TPO are defined by the green letters and the Initial Balance range is represented by the cyan line drawn on the first period.



In this chart, the TPO are displaced by the Market Profile for Regular Trading Hours indicator available on the TradeStation AppStore at <https://tradestation.tradingappstore.com/products/MarketProfileforRegularTradingHours>

The Initial Balance indicator is included in the Market Profile Combination Pack indicator available on the TradeStation AppStore at <https://tradestation.tradingappstore.com/products/MarketProfileCombinationPack>

H.IB.PlotR Indicator

This indicator receives IB high and IB low values from the Global Dictionary and plots those values on any chart interval or a RadarScreen. The following is an example of the indicator running on a RadarScreen:

		H.IB.PlotR		
	Symbol	Last	IB Low	IB High
1	@ES	2059.75	2060.50	2072.75
2	@ES.D	2059.75	2060.50	2072.75
3	SPY	207.41	207.52	208.74
4				

Created with TradeStation. ©TradeStation Technologies, Inc. All rights reserved.

Configuration: General Tab

In the default configuration, the “Update value intra-bar (tick-by-tick)” is NOT selected. Only select, or check, this box if you turn on the indicator's alerting capabilities. See Configuration: Inputs Tab for information to turn on alerting.

Configuration: Inputs Tab

Name	Default Value	Description
Channel	""	<p>Specifies the UNIQUE name of the global dictionary that the IB.PlotR indicator uses to 'receive' initial balance high and low variables information from</p> <p>If "" then this indicator does nothing.</p> <p>Think of the usage of the <i>Channel</i> input as you do the “symbol link” on chart analysis windows with added functionality to share across workspaces, and desktops (in addition to charts).</p>

Configuration: Alerts Tab

Alerts are not supported.

Configuration: Style Tab

Sets the style and weight of IB lines. Keep “type” as Line.

Configuration: Color Tab

Sets the color of the IB lines.

Configuration: Scaling Tab

There is nothing on this tab that should be changed.

Configuration: Advanced Tab

There is nothing on this tab that should be changed.

Chart Types Supported

RadarScreen and all interval charts are supported.

How To Develop Your Own Indicator for the Global Dictionary

This section assumes you know EasyLanguage and is intended as a reference for the trader to develop their own indicator or strategy that relies upon the Initial Balance variables.

Format of Stored Variables in the Global Dictionary

When the Channel input variable is not NULL (""), the Initial Balance indicator creates two global dictionaries as follows:

```
variables:
    GlobalDictionary IBDict( Null ),
    GlobalDictionary IBDictSignal( Null );

    IBDict = GlobalDictionary.Create( true, Channel );
    IBDictSignal = GlobalDictionary.Create( true, Channel & "-Signal" );
```

Your strategy/indicator to access these IB values from the Global Dictionary should use the same code. IBDict contains the Initial Balance values and IBDictSignal exists for the "transmitting" IB indicators to signal to the "receiving" strategy/indicator that values in IBDict have changed. The information shared by the Initial Balance indicator is stored into the Global Dictionary as follows:

```
IBDict.Items[ Channel & ".IB.Hi" ] = Initial.Balance.High astype double;
IBDict.Items[ Channel & ".IB.Lo" ] = Initial.Balance.Low astype double;
IBDict.Items[ Channel & ".IB.date" ] = Date astype double;
IBDict.Items[ Channel & ".IB.time" ] = Time astype double;
```

The transmitting IB indicator places the final initial balance information into the Global Dictionary at the end of the IB period.

Strategy/Indicator Initialization

When items in the IBDict have been updated a dummy item is stored into IBDictSignal. Indicators or strategies should wait for a change or add event in IBDictSignal as follows:

```
Method void NewIBValues( elsystem.Object sender,
    elsystem.collections.ItemProcessedEventArgs args )
Begin
    // called when the signal dictionary has an added or modified item
    // only occurs when IB period ends
    // Perform required processing, e.g. capture new values from the dictionary
End;

Once
Begin
    // Initialization and setup of the dictionaries
    IBDict = GlobalDictionary.Create( true, Channel );
    IBDictSignal = GlobalDictionary.Create( true, Channel & "-Signal" );
    IBDictSignal.ItemAdded += NewIBValues;
    IBDictSignal.ItemChanged += NewIBValues;
End;
```

Capturing The Initial Balance Variables: Source Code

Sample source code is provided to assist subscribers to create additional indicators and strategies that use the Initial Balance data transmitted by the Initial Balance indicator. The source code shows the proper mechanism to use to access the global dictionary and the specific types for each datum provided by the Initial Balance indicator.

```
Using elsystem.collections;

inputs:
    string Channel( "" ); // Defines the UNIQUE chart that is the source of
                          // the Initial Balance data

variables:
    GlobalDictionary IBDict( Null ),
    GlobalDictionary IBDictSignal( Null ),
    Intrabarpersist double ddate( -1 ),
    Intrabarpersist double dtime( -1 ),
    Intrabarpersist double IB.High( -1 ),
    Intrabarpersist double IB.Low( -1 );

Method void NewIBValues( elsystem.Object sender,
elsystem.collections.ItemProcessedEventArgs args )
Begin
    // called when the signal dictionary has an added or modified item
    // if the value exists in the dictionary then extract it; this indicator
    // NEVER modifies the Channel values; only captures the latest value
    If IBDict.Contains( Channel & ".IB.Hi" ) <> False then
        IB.High = IBDict.Items[Channel & ".IB.Hi"] astype double;
    If IBDict.Contains( Channel & ".IB.Lo" ) <> False then
        IB.Low = IBDict.Items[Channel & ".IB.Lo"] astype double;
    If IBDict.Contains( Channel & ".IB.date" ) <> False then
        ddate = IBDict.Items[Channel & ".IB.date"] astype double;
    If IBDict.Contains( Channel & ".IB.time" ) <> False then
        dtime = IBDict.Items[Channel & ".IB.time"] astype double;

// Note: While only IB.Hi AND IB.Lo are exported, the calculation for other
// IB values is straightforward.
// "Halfback" = Round2Fraction((IB.Hi + IB.Lo) / 2)
// "IB + 150%" = IB.Hi + Round2Fraction( .5 * (IB.Hi - IB.Lo) )
// etc.
End; // Method void NewIBValues

Once // Initialization
Begin
    IBDict = GlobalDictionary.Create( true, Channel );
    IBDictSignal = GlobalDictionary.Create( true, Channel & "-Signal" );
    IBDictSignal.ItemAdded += NewIBValues;
    IBDictSignal.ItemChanged += NewIBValues;

    // Capture the Initial Balance variables, if they exist
    // This code may have begun execution after the IB hi/lo was set
    // Do this rather than to wait for the next write of developing values
    If IBDict.Contains( Channel & ".IB.Hi" ) <> False then
        IB.High = IBDict.Items[Channel & ".IB.Hi"] astype double;
    If IBDict.Contains( Channel & ".IB.Lo" ) <> False then
```

```

        IB.Low = IBDict.Items[Channel & ".IB.Lo"] astype double;
    If IBDict.Contains( Channel & ".IB.date" ) <> False then
        ddate = IBDict.Items[Channel & ".IB.date"] astype double;
    If IBDict.Contains( Channel & ".IB.time" ) <> False then
        dtime = IBDict.Items[Channel & ".IB.time"] astype double;

    // If IB.date = date then the variables were updated today and are fresh
    // and OK to use; if IB.Date <> date then any strategy or indicator that
    // requires today's IB values must wait.
End;
```

Support

send email to indy.by.harvey@gmail.com

In addition to a clear description of the problem, configuration details of the symbol and indicator, include the version of **h.InitialBalance** and your TradeStation platform.

Disclaimer

- Success in trading is not guaranteed
- The developer of this indicator has made good efforts to produce a quality product, however the developer is not liable should importing and inserting this indicator impact the performance or utility of the customer's TradeStation platform
- The results of any and all trades that the customer takes which may have been influenced by this indicator are the customer's and the customer's alone, regardless of whether it is a profit or a loss

Neither TradeStation Technologies nor any of its affiliates has reviewed, certified, endorsed, approved, disapproved or recommended, and neither does or will review, certify, endorse, approve, disapprove or recommend, any trading software tool that is designed to be compatible with the TradeStation® Open Platform. TradeStation®, EasyLanguage® and the EasyLanguage Specialist® logo are registered trademarks of TradeStation Technologies, Inc.

Required USA Government Disclaimers: Futures and Options trading has large potential rewards, but also large potential risk. You must be aware of the risks and be willing to accept them in order to invest in the futures and options markets. Don't trade with money you can't afford to lose. This is neither a solicitation nor an offer to Buy/Sell futures or options. No representation is being made that any account will or is likely to achieve profits or losses similar to those discussed on this web site or during instructional sessions. The past performance of any trading system or methodology is not necessarily indicative of future results.

CFTC RULE 4.41 - HYPOTHETICAL OR SIMULATED PERFORMANCE RESULTS HAVE CERTAIN INHERENT LIMITATIONS. UNLIKE AN ACTUAL PERFORMANCE RECORD, SIMULATED RESULTS DO NOT REPRESENT ACTUAL TRADING. ALSO, SINCE THE TRADES HAVE NOT BEEN ACTUALLY EXECUTED, THE RESULTS MAY HAVE UNDER-OR-OVER COMPENSATED FOR THE IMPACT, IF ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. SIMULATED TRADING PROGRAMS IN GENERAL ARE ALSO SUBJECT TO THE FACT THAT THEY ARE DESIGNED WITH THE BENEFIT OF HINDSIGHT. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFIT OR LOSSES SIMILAR TO THOSE SHOWN.