

MarketProfile for MultiCharts Toolset Installation & Usage Instructions

CBOT Market Profile® is a trademark of the Chicago Board of Trade (CBOT).

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1. Introduction

Swisstrader Market Profile toolset is a third-party ISV add-on that has been custom built for MultiCharts. It is designed to show market generated price & time/volume information organized into profiles showing the distribution over the period being analysed. These custom indicators update in realtime, and allow realtime identification of the changing Value Area and Point-of-Control.

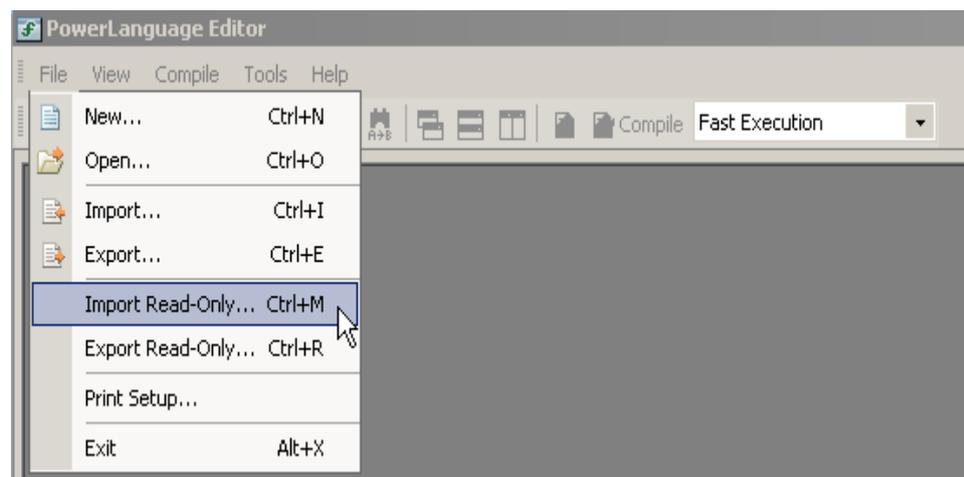
2. Installing the software

- a. System requirements
 - i. CPU: Pentium 3 GHz or Dual Core
RAM: 1 GB of RAM
Hard Drive: 1 GB of available hard-disk space
Multi-Monitor solution
Operating System: Windows 2000, Windows XP SP2, Windows XP x64, Windows Vista, Windows Vista x64
- b. Platform Support:
 - i. This product is written exclusively for MultiCharts. Tradestation is not compatible or supported.
 - ii. The indicators are compatible with Tick Bars, Minute Bars, Daily Bars, Range Bars (Change or Point Bars in MC), P 'n F Charts, Kagi Charts, 3LineBreak Charts, Renko Charts
- c. Installation steps
 - i. New installation

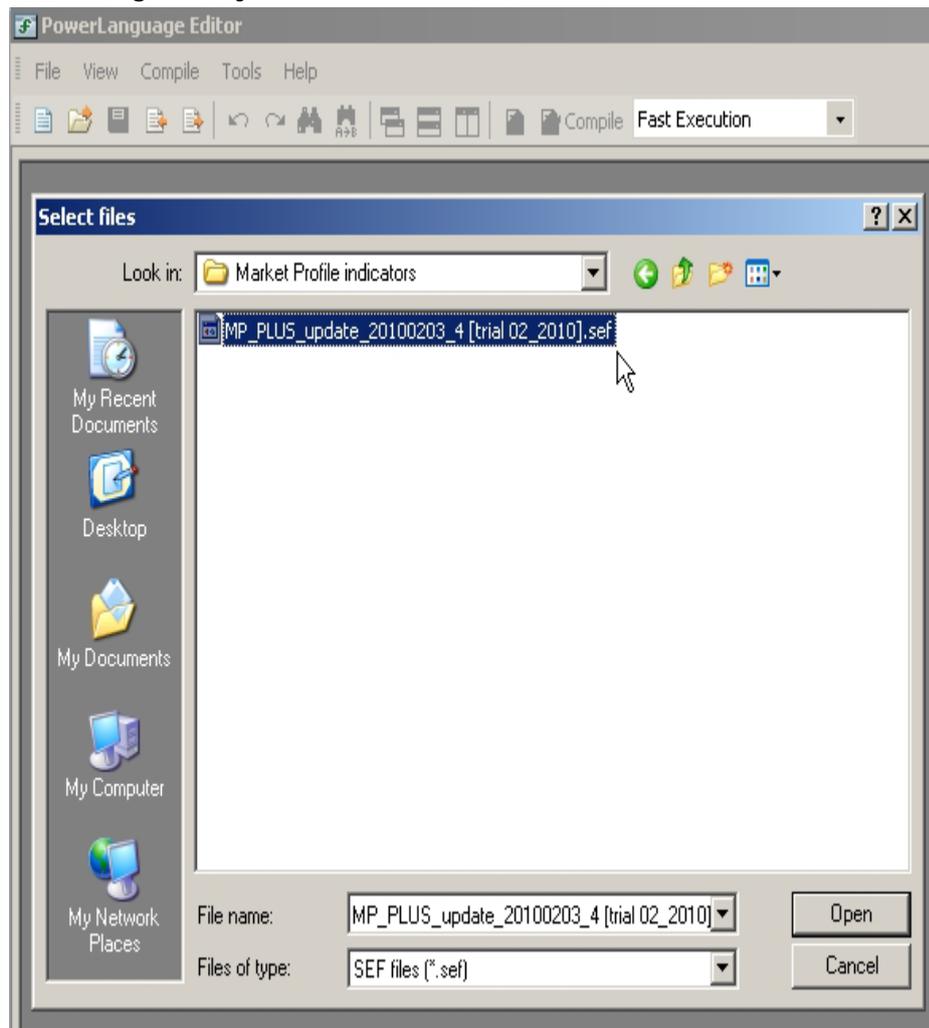


From the Start menu, select MultiCharts and open the PowerLanguage Editor application.

Then, from the PowerLanguage Editor menu, select File, Import Read Only.



Then navigate to your saved .SEF file, and select the file



Open the file, and click “OK” to confirm the import. MultiCharts will automatically import and compile your indicators, and add them to the collection of available Studies in your MultiCharts Indicator Library.

You will now be able to apply the indicator to your charts by following the subsequent instructions.

- d. When a new version is released, in order to correctly upgrade your indicator please follow the steps described below:
 - i. Open PowerLanguage Editor, accessible from Start / Programs / Multicharts menu
 - ii. Select File / Open from the PowerLanguage Editor toolbar menu
 - iii. Check the box marked “Function” in the “Study Type” window,
 - iv. Scroll down the list of indicators and functions, find the function uwAutoDelete_MP, highlight it and press “delete” on your keyboard. This will automatically remove the old indicator. Repeat the steps in Section 2 to install the new version upgrade.

3. Using the software

o Introduction

- The Purpose of the software is to display accurate, realtime Market Profile information onto charts of any interval.
- The software consists of four separate indicators, each designed to display a different aspect of Market Profile

1. **MarketProfile® indicator.** This shows the traditional letter based market profile distribution, and calculates in realtime.
2. **MarketProfile® D indicator.** This shows the Day session profile, on an intraday chart, and calculates the session Value Area and POC in realtime. Additionally, this indicator will project the previous session VA and POC forward to the next session as projected levels to trade from and features a TPO counter for the distribution above and below the POC.
3. **MarketProfile® W indicator.** This shows the Week session profile and calculates the session Value Area and POC. Additionally, this indicator will project the previous session VA and POC forward to the next weeks session as projected levels to trade from and features a TPO counter for the distribution above and below the POC.
4. **Last Price on Chart indicator.** A simple function that draws a trendline at the last traded price across the day or week session. It allows easy visual identification of where the current price is in relation to the Market Profile distribution, Value Area and Point of Control drawn by our other indicators.
5. **Day Session indicator.** A simple indicator that colour codes the price-bars differently for each day of the week.

○ Main Features

- **Letter-based Market Profile**

Traditional letter based market profile distribution, calculated in realtime.
[Screenshot.](#)

- **Auto Projection of Historical Point-of-Control for S&R, Daily & Weekly**

This calculates all historical chart data and displays Day or Week session Historical POC calculations projected forward as levels of potential Support and Resistance.

[Screenshot #1.](#) [Screenshot #2.](#)

- **Realtime Intra-Profile calculation of Value Area & Point-of Control**

On an intraday or intraweek Market Profile, the toolset calculates the session Value Area and POC in realtime. Additionally, this indicator will project the previous session Value Area and POC forward to the next session as projected levels to trade from and features a TPO counter for the distribution above and below the POC.

[Screenshot #1.](#) [Screenshot #2.](#)

- **Day Session Colourcoding.**

A simple indicator that colour codes the price-bars differently for each day of the week.

[Screenshot.](#)

- **Last Price trendline**

A simple function that draws a trendline at the last traded price across the day or week session. It allows easy visual identification of where the current price is in relation to the Market Profile distribution, Value Area and Point of Control drawn by our other indicators.

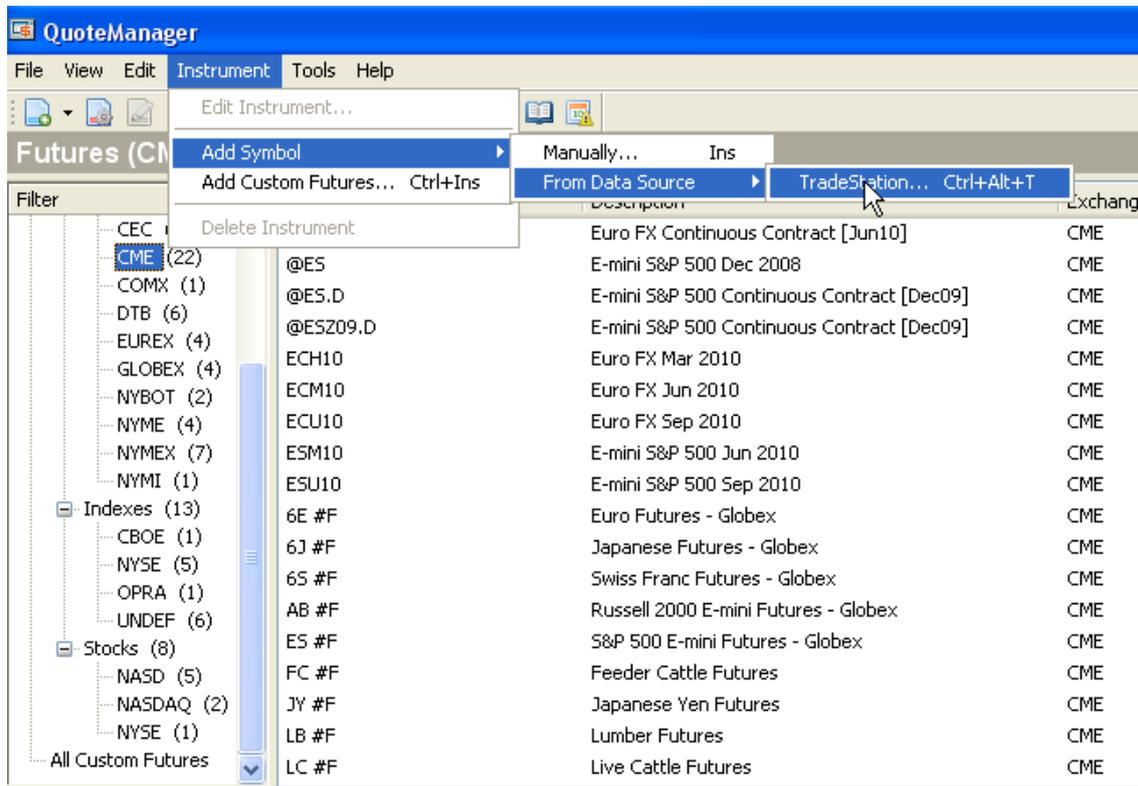
User Defined Composite Profile.

A single Profile can be drawn for a user-defined sample of market data, including upto 30 days of intra-day data. The user specifies the start and end dates, and the Profile will be drawn for this period.

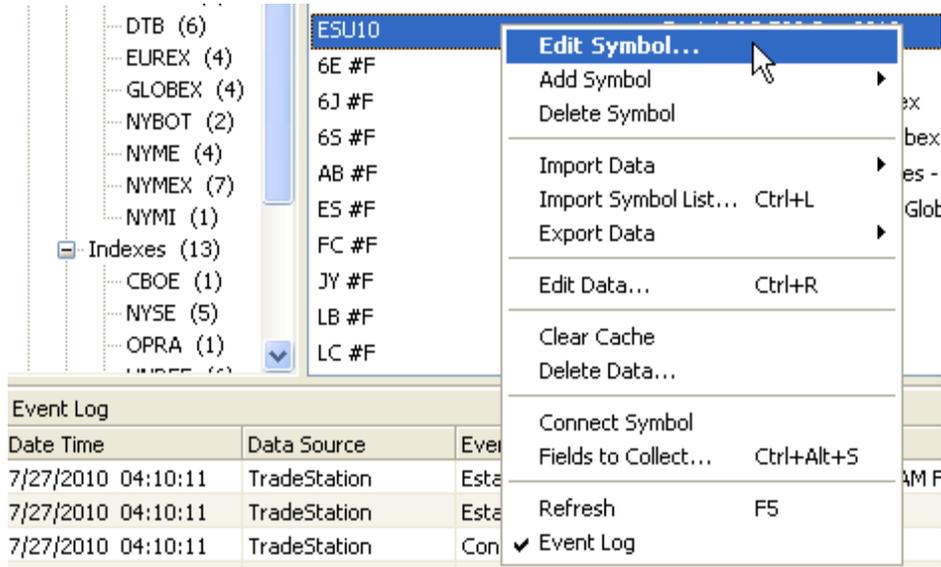
4. Before you add the indicators to a Chart

a. It is important to check that you have imported your Chart settings correctly using the correct tick size/value, or the indicators will not calculate the profile correctly.

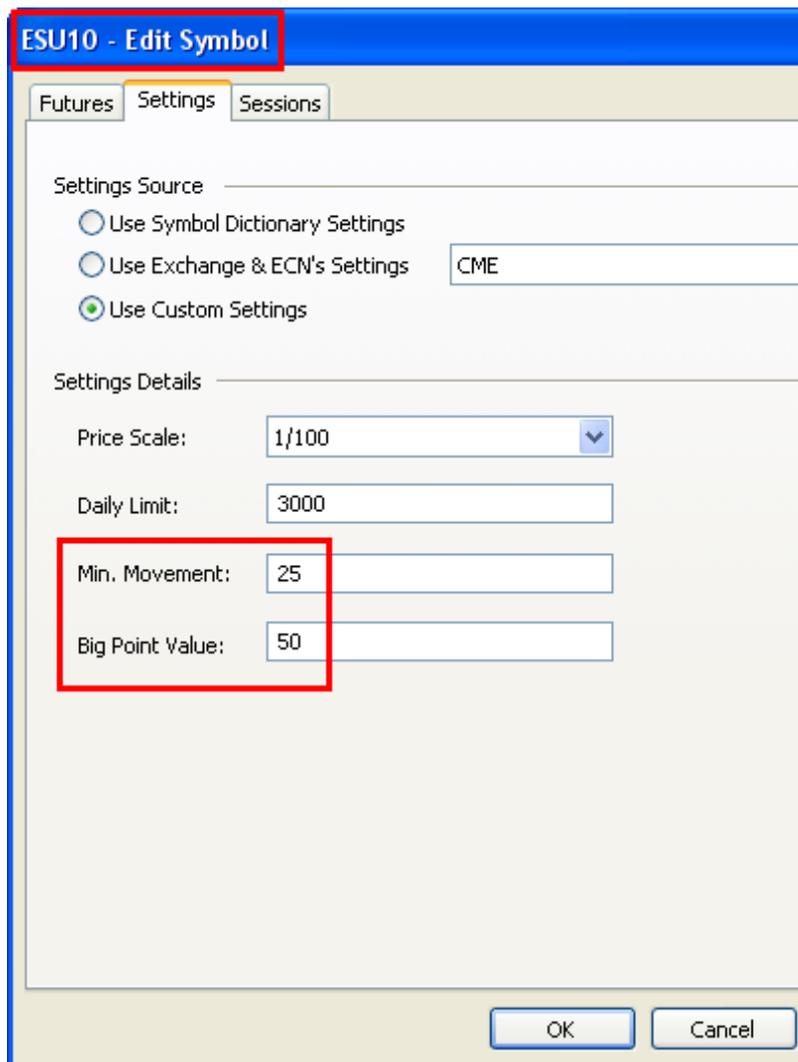
i. If you imported your instrument settings automatically directly from the datasource, you can skip this step:



ii. Open QuoteManager from your Windows start menu, under the MultiCharts tab. Find the instrument you want to Profile, and right-click, Edit Symbol.



iii. Check that the MinMove and PriceScale match the given values for the instrument you are trading. In this instance, on a 1/100th scale the Emini S&P has a 25 tick value and a \$50 big point value.



5. Adding the Indicators to a Chart.

a. Displaying the MarketProfile® indicator.

Start MultiCharts application. From the toolbar, select File/ New/ Chart window. In this example we are using a 15 minute chart of emini S&P data. Input the instrument details, and using the 'settings' tab, select the desired chart timeframe resolution.

Once the chart has loaded, Right Click on the chart and select "Format Instrument", select the "Style" tab, highlight Invisible Bars and click OK. Right Click on the chart again, and select the 'Background' tab – uncheck the 'Show Grid box, and uncheck the 'show session breaks' box. This will display the MarketProfile indicator only on the chart with a plain background, rather than overlaying the profile on top of price bars or candlesticks. If you would like to see both, miss this step out.

Next, Right Click on the chart and select "Insert Study". Find the "\$TT Market Profile" indicator in your list of available indicators, highlight it and select OK.

The study format dialogue box will appear. Click OK to accept the default settings. The MarketProfile indicator will load onto the chart.

To change the default indicator variables, please refer to the Key below with regards to the available inputs and how these will change the behaviour of the indicator.

b. Displaying the MarketProfile® D indicator.

Start MultiCharts application. From the toolbar, select File/ New/ Chart window. In this example we are using a 15 minute chart of emini S&P data. Input the instrument details, and using the 'settings' tab, select the desired chart timeframe resolution.

Once the chart has loaded, Right Click on the chart and select "Format Instrument", select the "Style" tab, highlight Invisible Bars and click OK. Right Click on the chart again, and select the 'Background' tab – uncheck the 'Show Grid box, and uncheck the 'show session breaks' box. This will display the MarketProfile indicator only on the chart with a plain background, rather than overlaying the profile on top of price bars or candlesticks. If you would like to see both, miss this step out.

Next, Right Click on the chart and select "Insert Study". Find the "\$TT Market Profile D" indicator in your list of available indicators, highlight it and select OK.

The study format dialogue box will appear. Click OK to accept the default settings. The MarketProfile indicator will load onto the chart.

To change the default indicator variables, please refer to the Key below with regards to the available inputs and how these will change the behaviour of the indicator.

c. Displaying the MarketProfile® W indicator.

Start MultiCharts application. From the toolbar, select File/ New/ Chart window. In this example we are using a 15 minute chart of emini S&P data. Input the instrument details, and using the 'settings' tab, select the desired chart timeframe resolution.

Once the chart has loaded, Right Click on the chart and select "Format Instrument", select the "Style" tab, highlight Invisible Bars and click OK. Right Click on the chart again, and select the 'Background' tab – uncheck the 'Show Grid' box, and uncheck the 'show session breaks' box. This will display the MarketProfile indicator only on the chart with a plain background, rather than overlaying the profile on top of price bars or candlesticks. If you would like to see both, miss this step out.

Next, Right Click on the chart and select "Insert Study". Find the "\$TT Market Profile W" indicator in your list of available indicators, highlight it and select OK.

The study format dialogue box will appear. Click OK to accept the default settings. The MarketProfile indicator will load onto the chart.

To change the default indicator variables, please refer to the Key below with regards to the available inputs and how these will change the behaviour of the indicator.

d. Displaying the MP Session of the Week indicator.

Start MultiCharts application. From the toolbar, select File/ New/ Chart window. In this example we are using a 15 minute chart of emini S&P data. Input the instrument details, and using the 'settings' tab, select the desired chart timeframe resolution.

Once the chart has loaded, Right Click on the chart and select "Format Instrument", select the "Style" tab, highlight Invisible Bars and click OK. Right Click on the chart again, and select the 'Background' tab – uncheck the 'Show Grid' box, and uncheck the 'show session breaks' box. This will display the MarketProfile indicator only on the chart with a plain background, rather than overlaying the profile on top of price bars or candlesticks. If you would like to see both, miss this step out.

Next, Right Click on the chart and select "Insert Study". Find the "\$TT MP Session Of Week" indicator in your list of available indicators, highlight it and select OK.

The study format dialogue box will appear. Click OK to accept the default settings. The MarketProfile indicator will load onto the chart.

To change the default indicator variables, please refer to the Key below with regards to the available inputs and how these will change the behaviour of the indicator.

6. User Defineable Input Settings

a. Important Technical Notes

- i. The Market Profile D & W Indicators use a Data Array to store historical datapoints and plot the information quickly. This greatly speeds up the calculation and display of the indicator when viewing large amounts of historical market data, however to ensure optimal performance, you should manually check the size of Array required to display the indicator on your chart.

The Array defaults to a size of 2000, if you are not using the entire array, checking the required size and reducing the Array will further enhance the speed of the indicator. Additionally, if you wish to view an extremely large amount of historical data, you will need to increase the size of the Array to ensure the indicator can display correctly.

To check the necessary Array Size, add the Market Profile W or D indicator to your market chart. When the indicator has loaded, right click on the chart, select Format Studies, highlight the indicator you wish to check and click the "Format" button.

When the Inputs window opens, scroll down to the inputs menu to the bottom using the scroll-bar. You will see two inputs entitled GetArraySize (false) and SetArraySize (2000). Change the GetArraySize input to "True" and click OK and then Close the Format Objects window.

The Indicator will load onto your chart and in Red text will display the Array necessary for the data set you have loaded. Follow the steps again to Format the Input settings, change the GetArraySize back to false, and change SetArraySize to the number you saw displayed on your chart, rounded up to the nearest 50.

ii. Loading sufficient historical data.

To draw historical Profile data onto your chart, you will need sufficient historical chart data loaded. For example, if you wish to draw ten days of prior session data, you need to load twenty days plus two extra days in order to display all of the sessions you want to see. This is due to the maxbarsback aspect of MultiCharts.

iii. Profiling the Regular Session vs Overnight

If the user requires a profile calculated only on the regular market session, not including overnight data (ie: Emini S&P 8.30am – 4.15pm) then a chart must be loaded that excludes the overnight/globex session. If the overnight data is drawn on the chart, it will be included in the Profile calculations.

Some data vendors permit day-session only symbols, such as TradeStation @ES.D please check with your data source if they provide a day session only datafeed for your instrument.

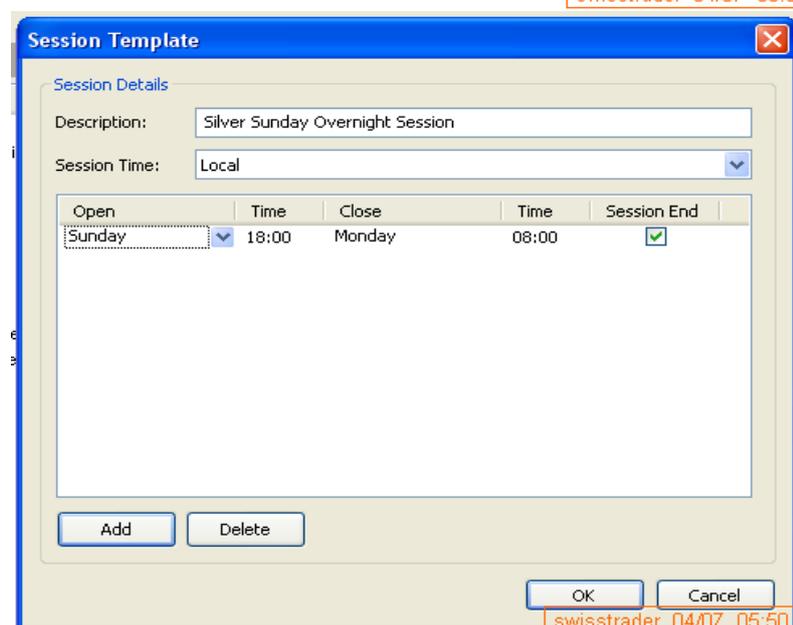
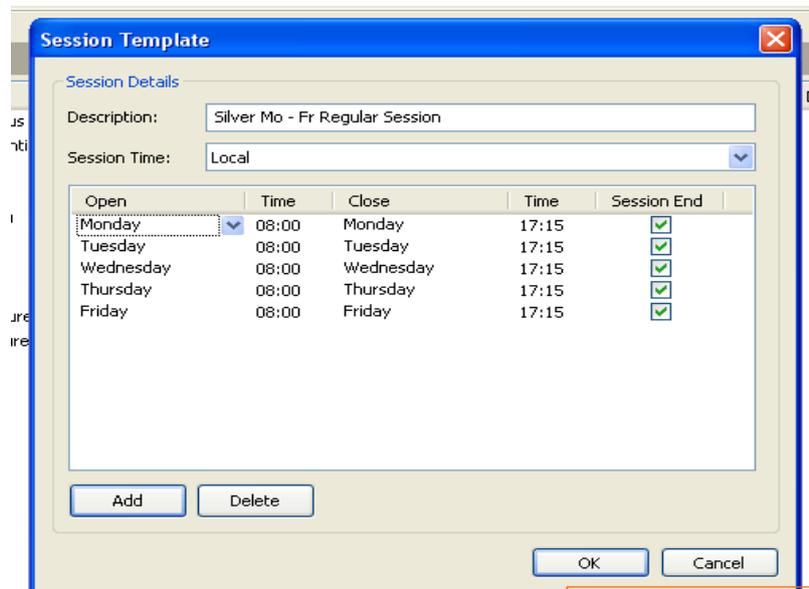
Alternatively, MultiCharts allows customized sessions which can be set from within MultiCharts – right click on your chart, select "Format Instrument" and choose the "Setting" tab from the toolbar at the top of the Format Instrument window. In the "Chart Settings" section, you will

see a drop down menu called "Sessions". Select the appropriate session for your market; ie: CME Equity Index Futures Open Outcry session.

You can also define a customized chart session within MultiCharts if you wish to display and Profile on a specific period of trading. Please click on the "Help"/"MultiCharts Help" menu in MultiCharts, and search for the phrase "setting custom session" in the User Guide.

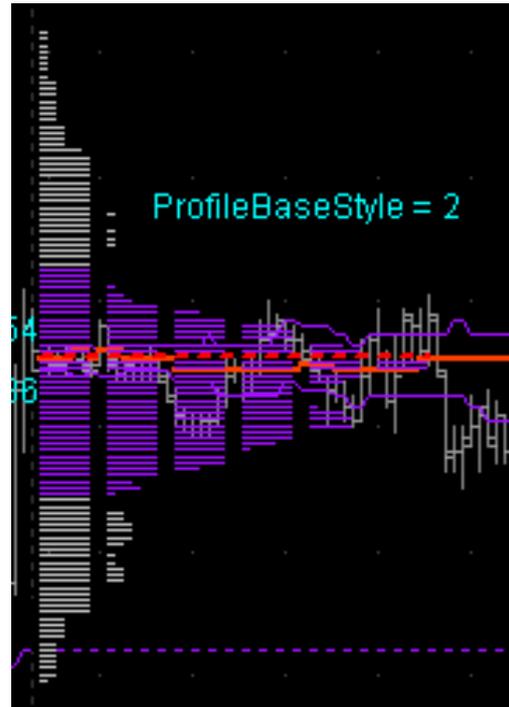
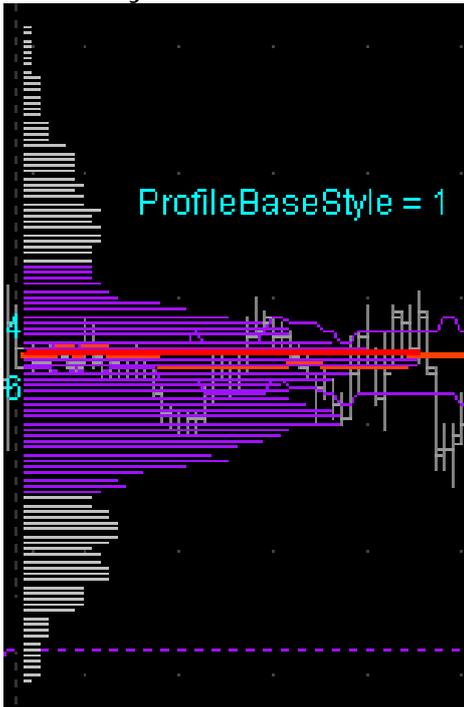
iv. Creating a Customized Session Templates

If the user wishes to draw a customized profile, with non-standard intervals, ie: regular weekday profiles, with a profile for Sunday evening session, it will be necessary to create custom sessions. In order for the profiles to draw correctly, each "session" should start at the same time. Therefore, to correctly draw Sunday evening, you should create a custom session only for Sunday evening, finishing at the open on Monday, and then a separate custom session for the Monday-Friday sessions. To display this on one chart, you would load each instrument session – essentially two charts, one for each session template, and insert them into one chart display as data1 and data2. You would need to add two instances of the Market Profile indicator and apply the indicator to each datastream.



v. Profile Styles

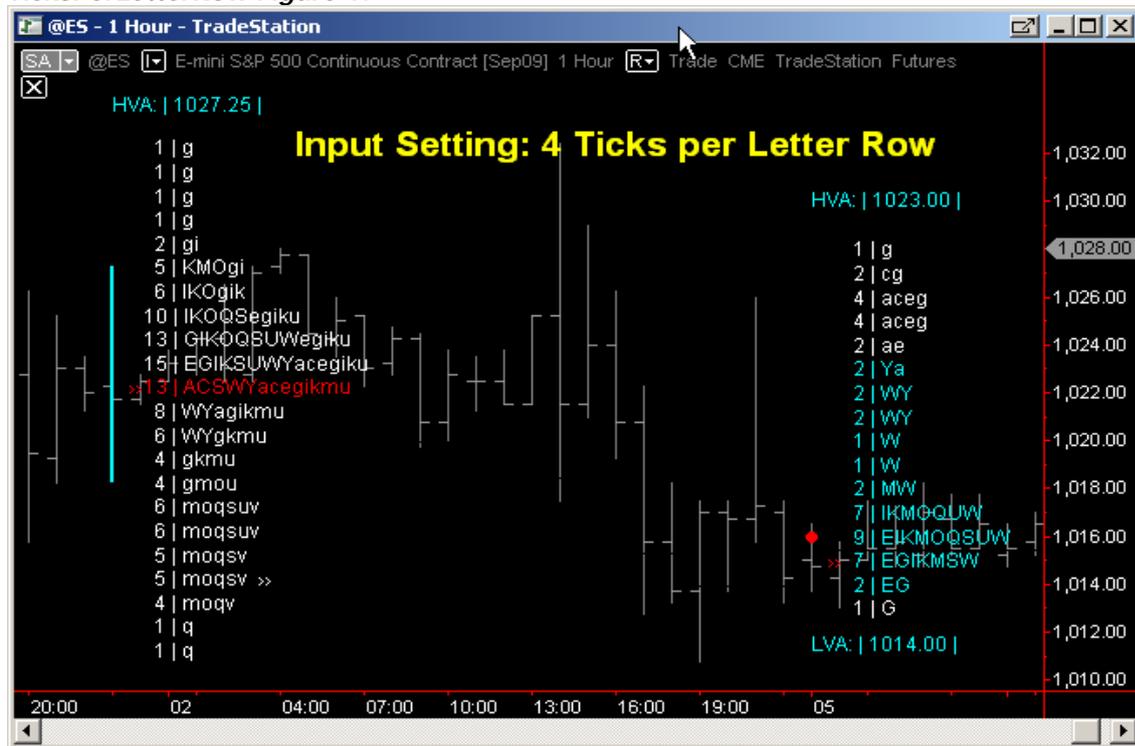
This input controls the style of line used to draw the histogram. The available options are 1-5, one being a solid line, and 2-5 being different styles of dotted line:



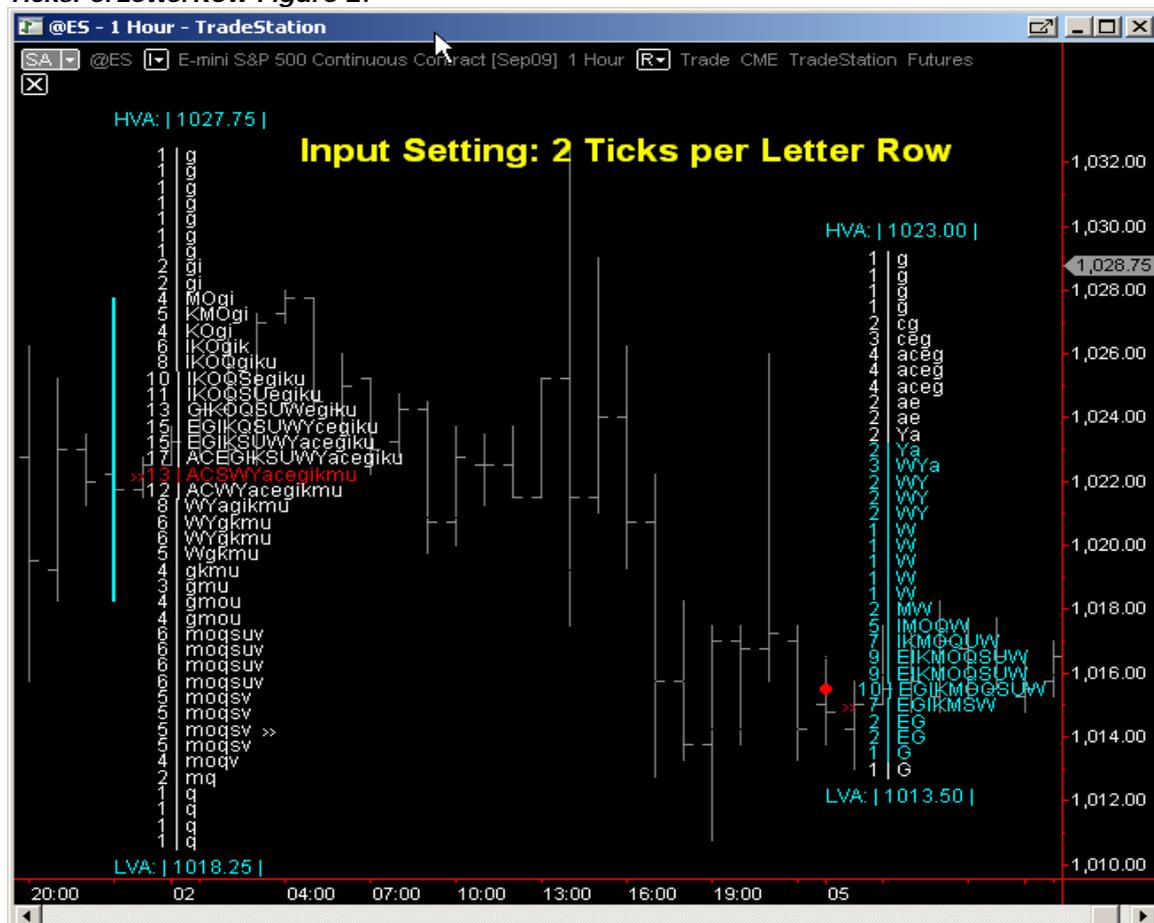
b. MarketProfile® indicator: User Inputs

- i. **StartTime:** Changes the start time of the session being profiled. The default setting auto-detects the start of the session. Alternatively, use 24hr clock to set a custom start interval; ie: 0830 for 8.30am.
- ii. **TicksPerLetterRow:** Sets the number of price increments per profile letter row. If you select 4 for example, all the ticks on four price increments will be totalled into one Row of Letters for the Profile.

TicksPerLetterRow Figure 1:

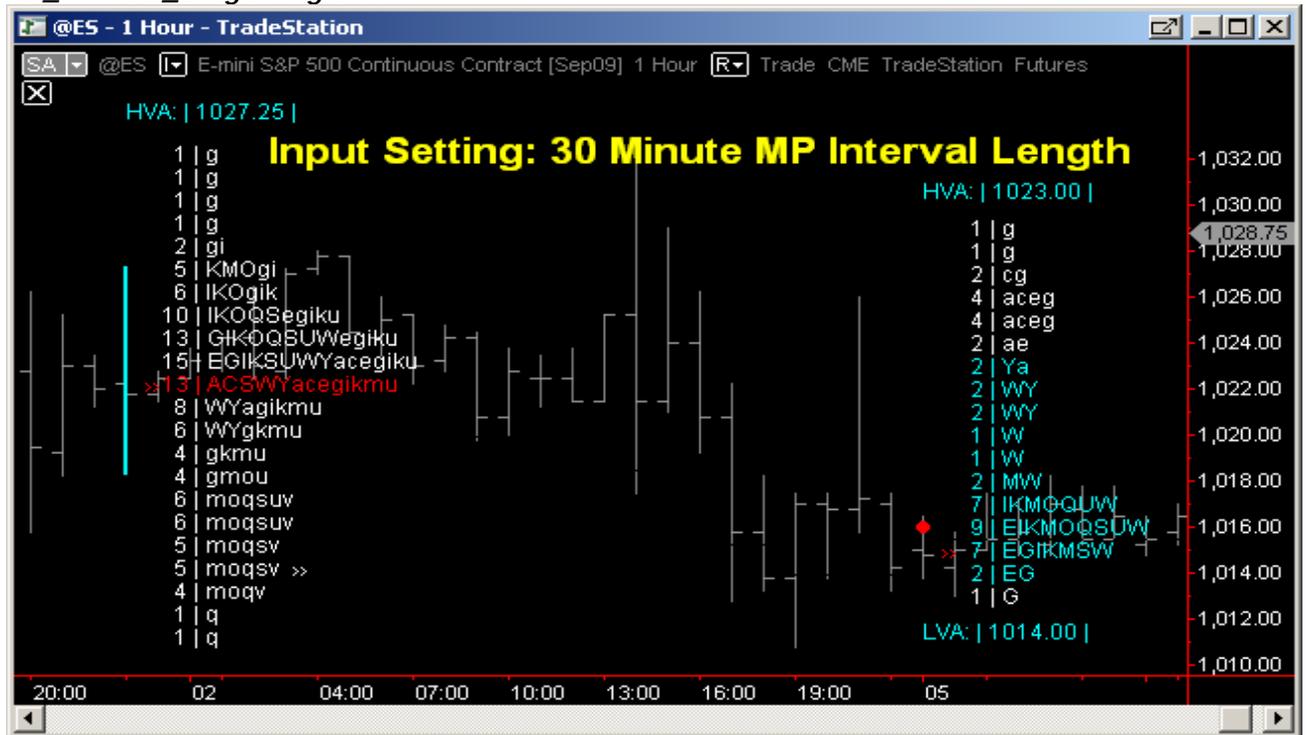


TicksPerLetterRow Figure 2:

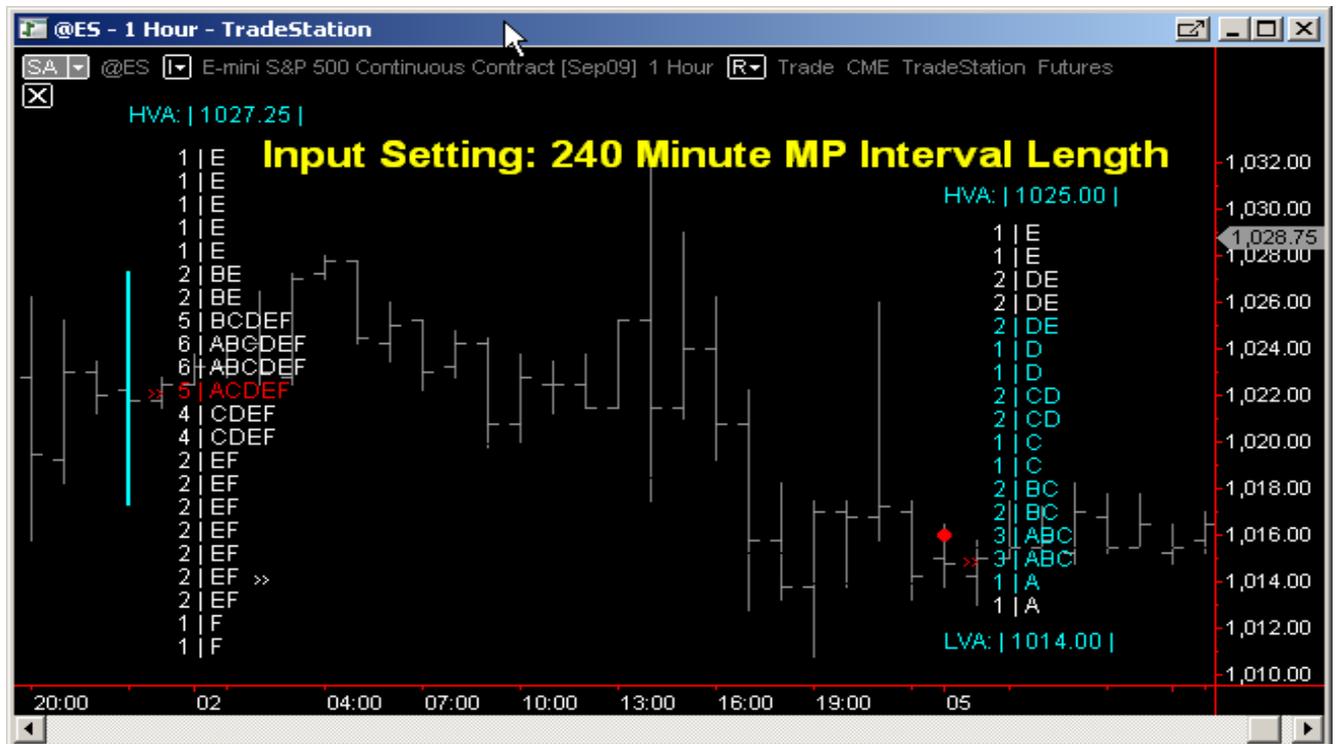


- iii. **MP_Interval_Length:** Default is 30 minutes. This means that one Letter or Interval Marker (in conventional letter based MP) will be generated and closed every 30 minutes in sequence, a, b, c / A, B, C etc. If you change this to 240 minutes then the indicator will generate a new Interval Marker every 4 hours.

MP_Interval_Length: Figure 1

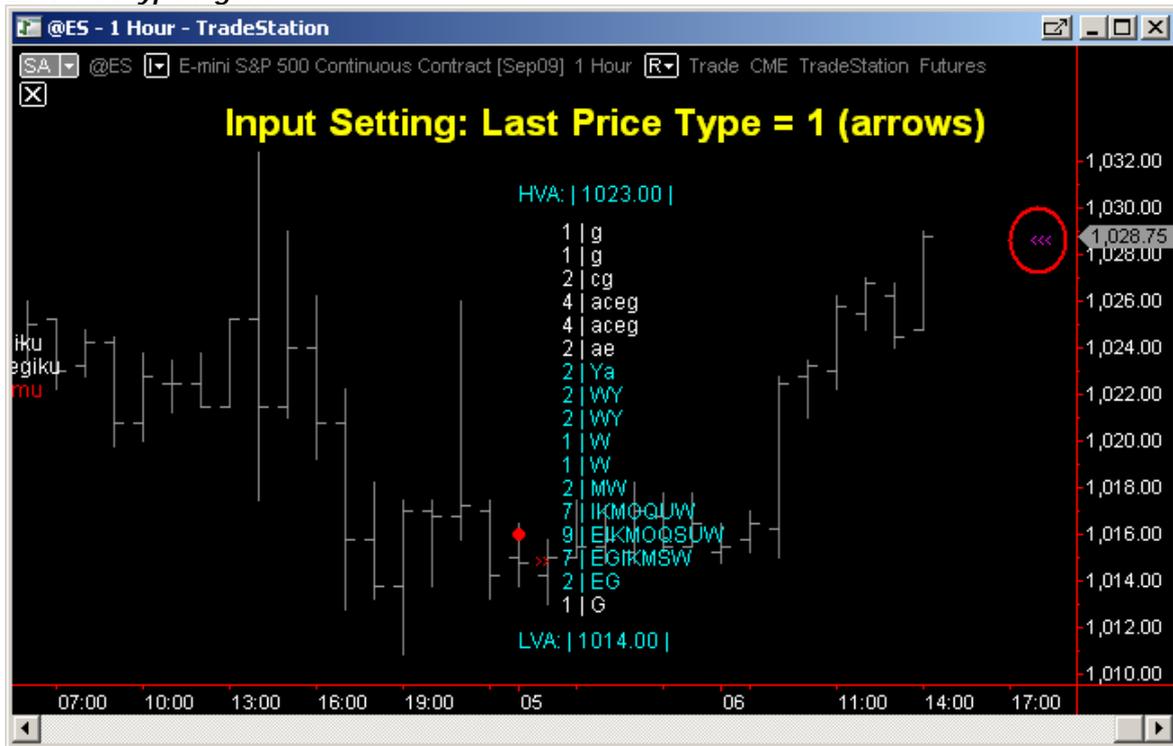


MP_Interval_Length: Figure 2

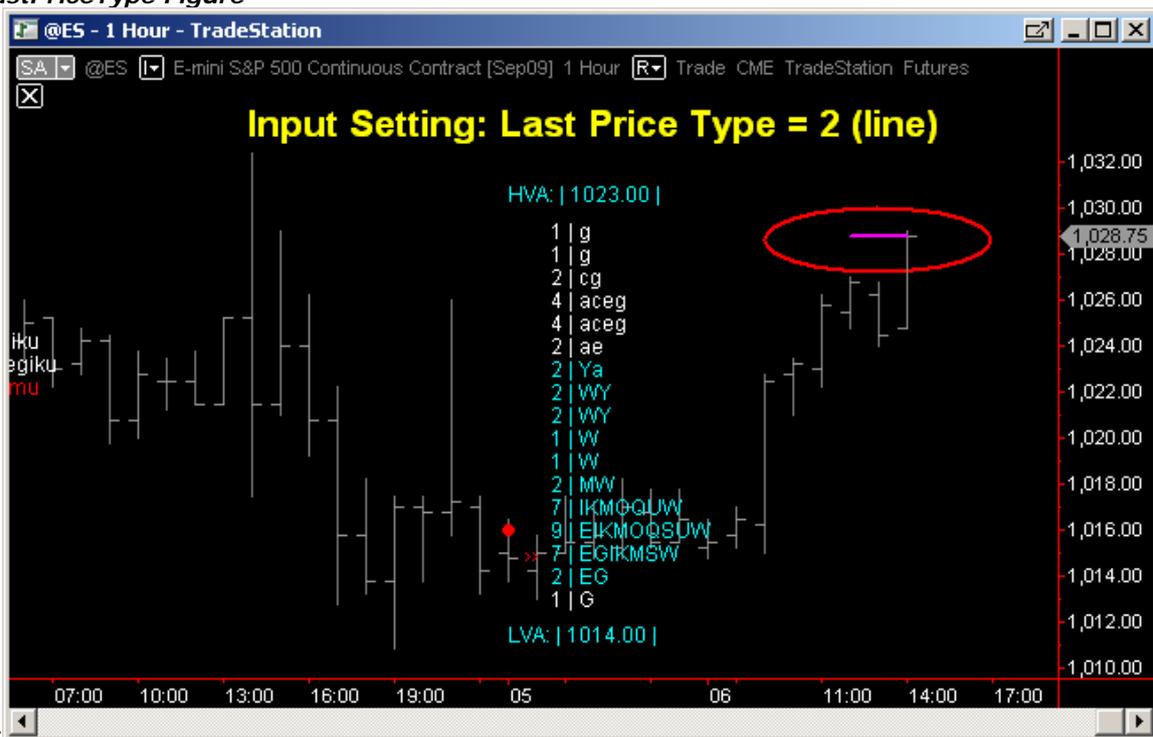


iv. **LastPriceType**: 1 = Arrows 2= Trendline: this changes how the indicator shows the last price on the chart.

LastPriceType Figure 1:



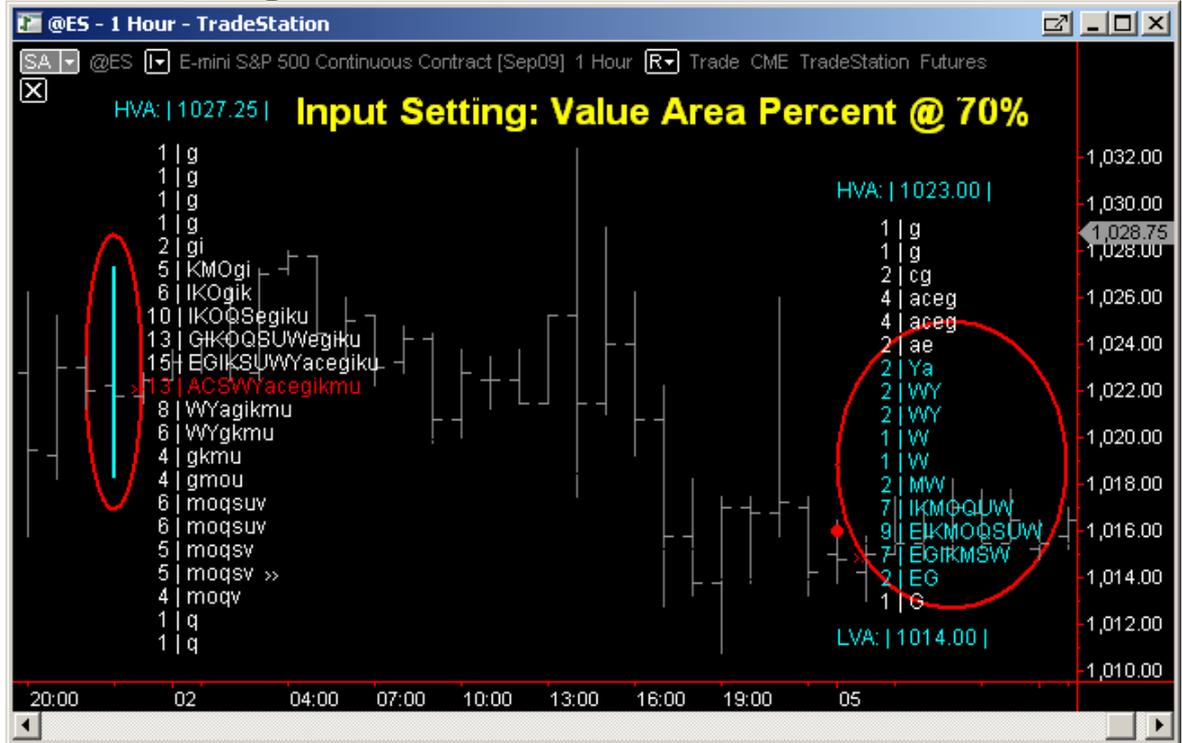
LastPriceType Figure



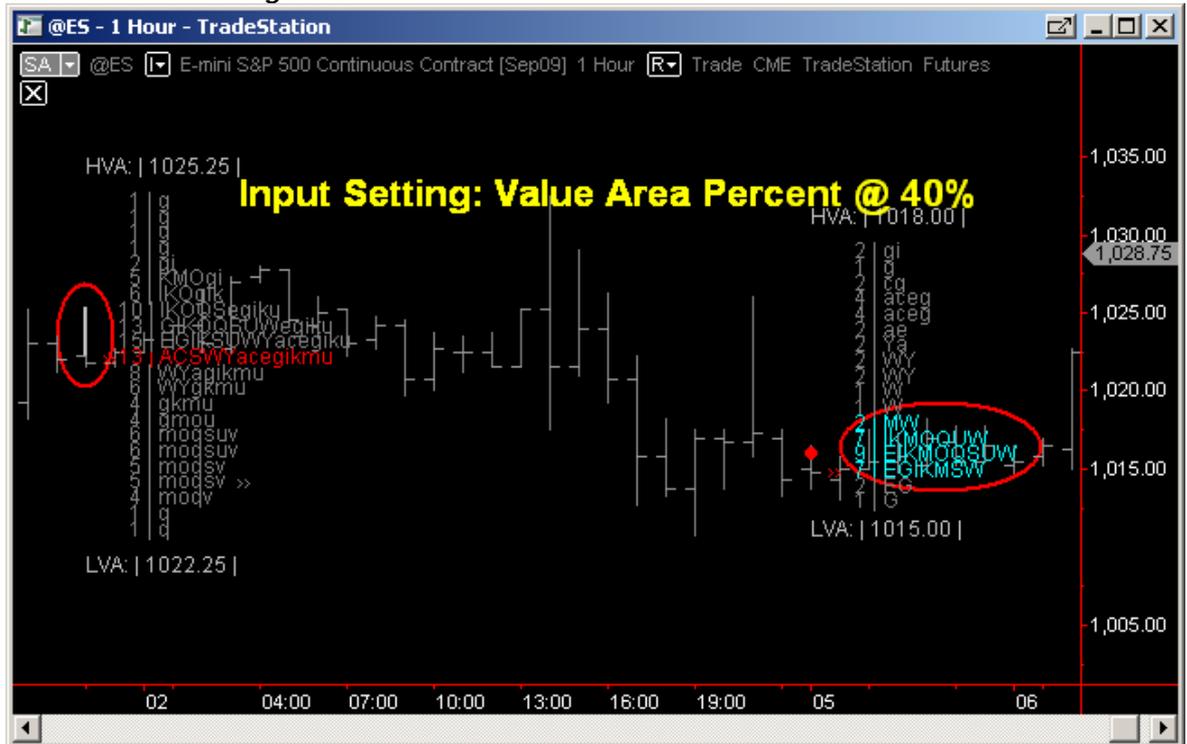
2.

v. **ValueAreaPercent**: Input as a Percent Value. Default is the commonly used 68%

ValueAreaPercent Figure 1:



ValueAreaPercent Figure 2:



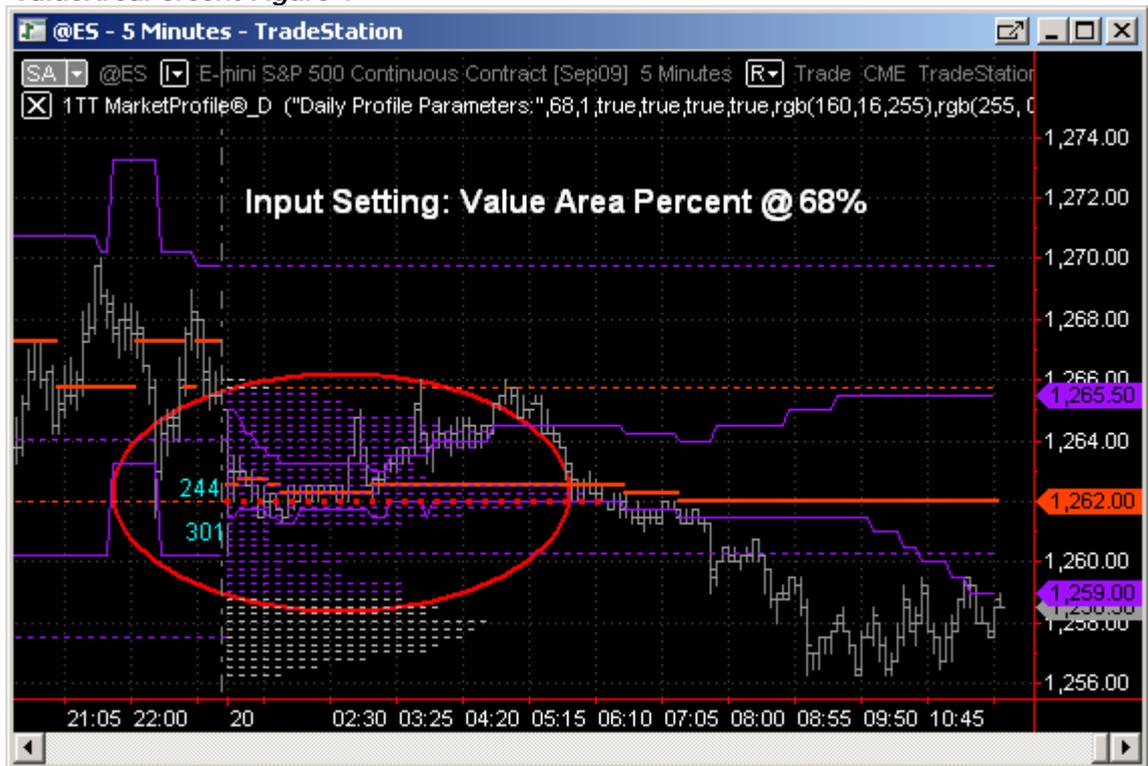
vi. **LastSessionVA_BoldFont**: True or false, gives the option to make BOLD the fonts for the last Value Area session. Default is false.

vii. **POC_DotSize**: changes the size of the dot indicating the Point of Control. Default is 12 but can be set larger or smaller as required by changing this input.

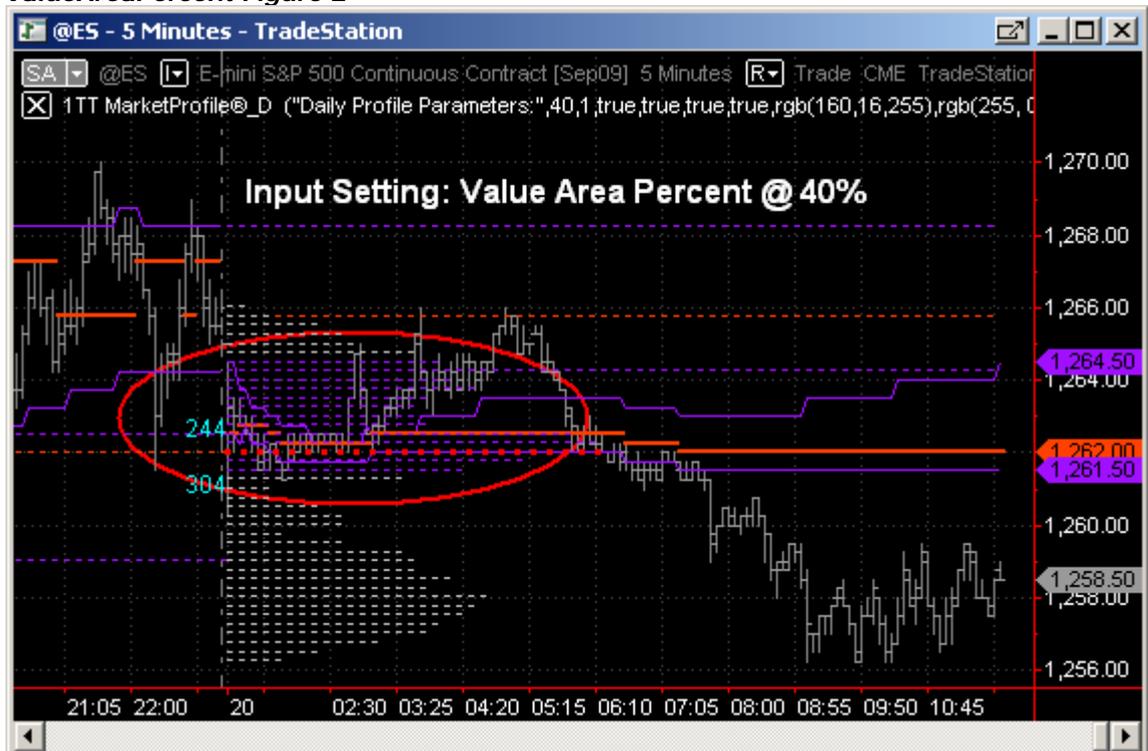
MarketProfile® D Indicator: User Inputs

ValueAreaPercent: Input as a Percent Value. Default is the commonly used 68%

ValueAreaPercent Figure 1

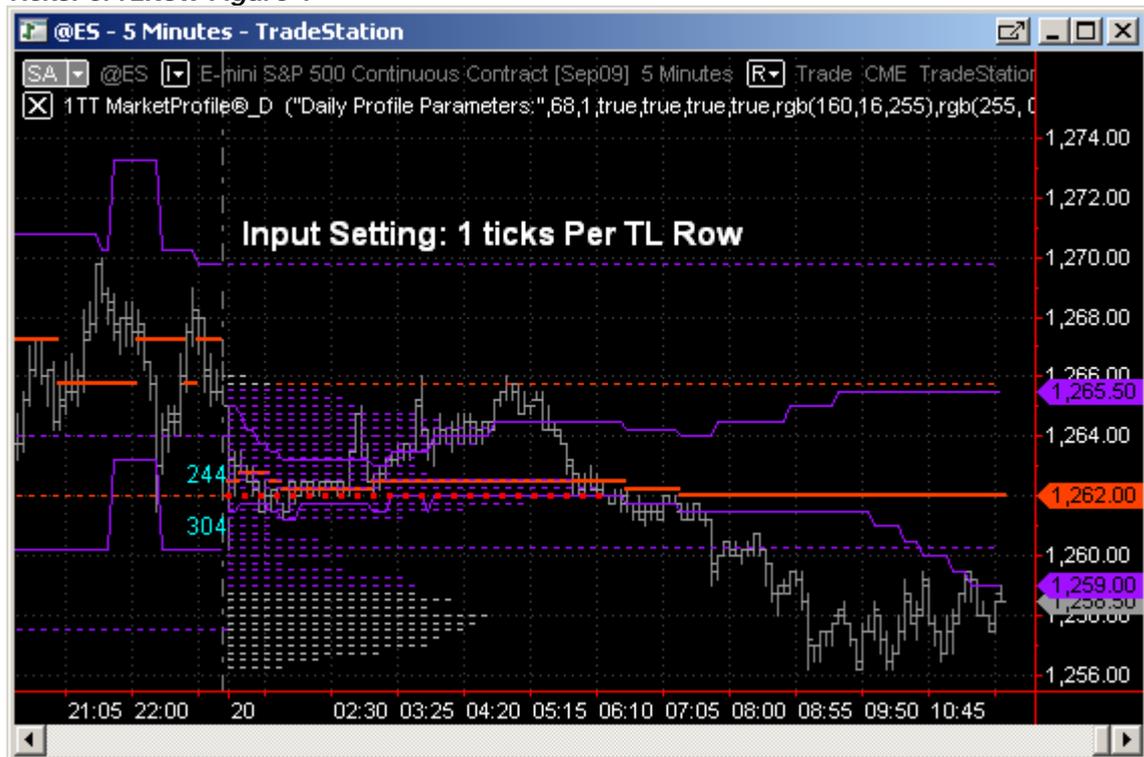


ValueAreaPercent Figure 2

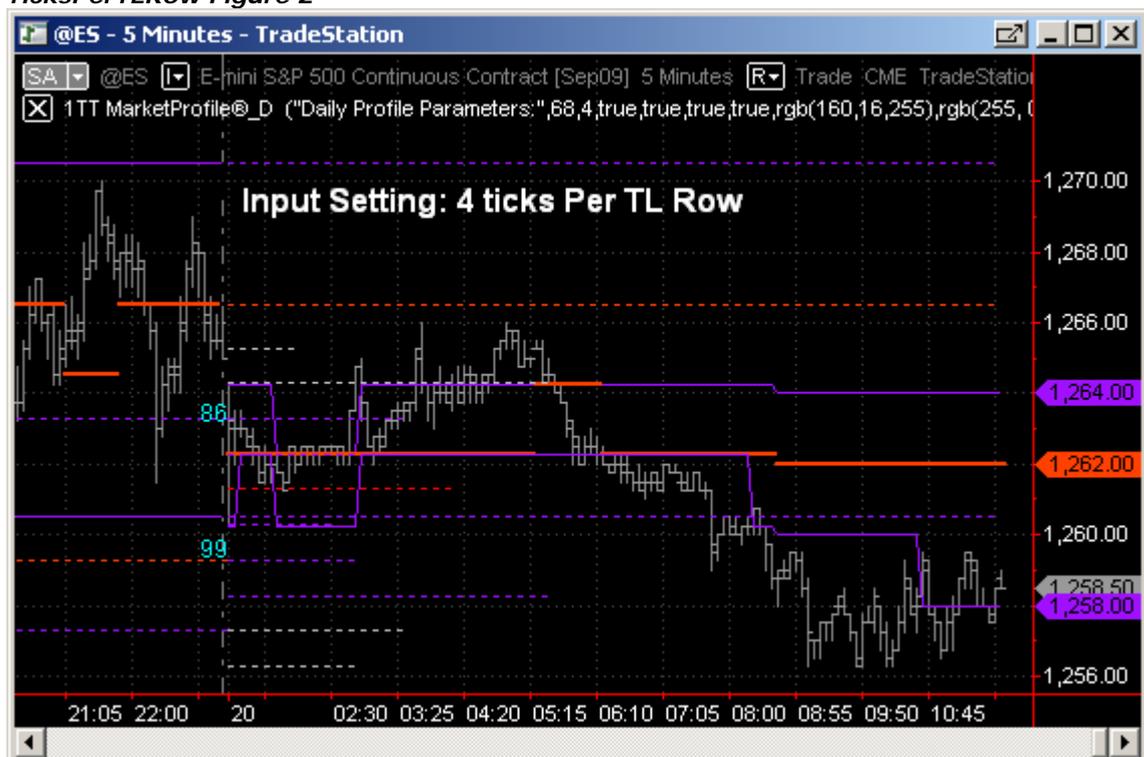


TicksPerTLRow: Sets the number of ticks per profile letter row.

TicksPerTLRow Figure 1

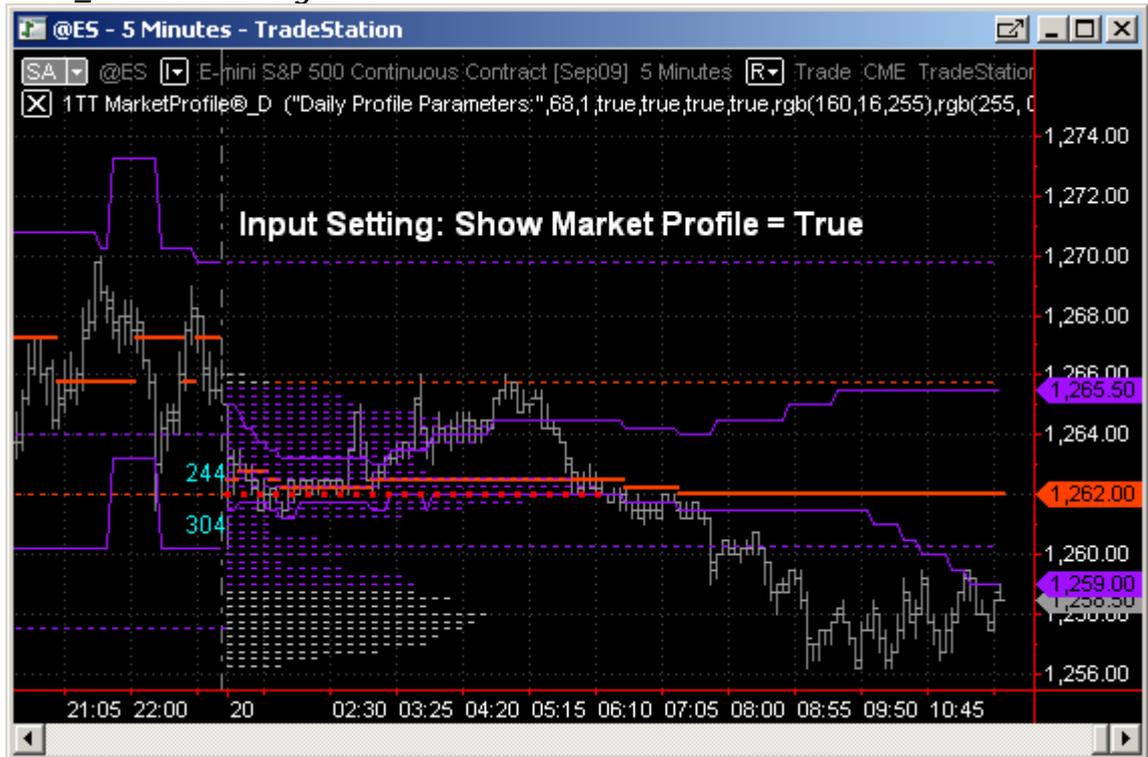


TicksPerTLRow Figure 2

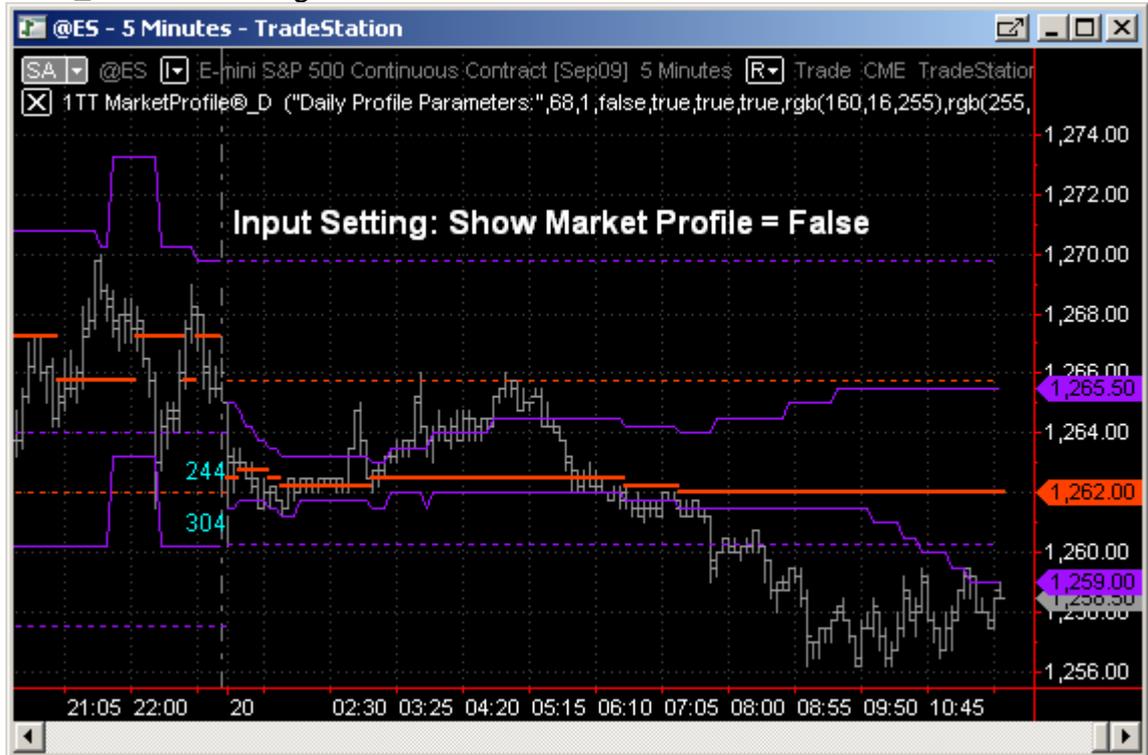


Show_MarketProfile: Defaults to True, this input toggles drawing the MarketProfile onto the chart (whether letterprofile or histogram). Change to False if you do not want to see the profile drawn.

Show_MarketProfile Figure 1

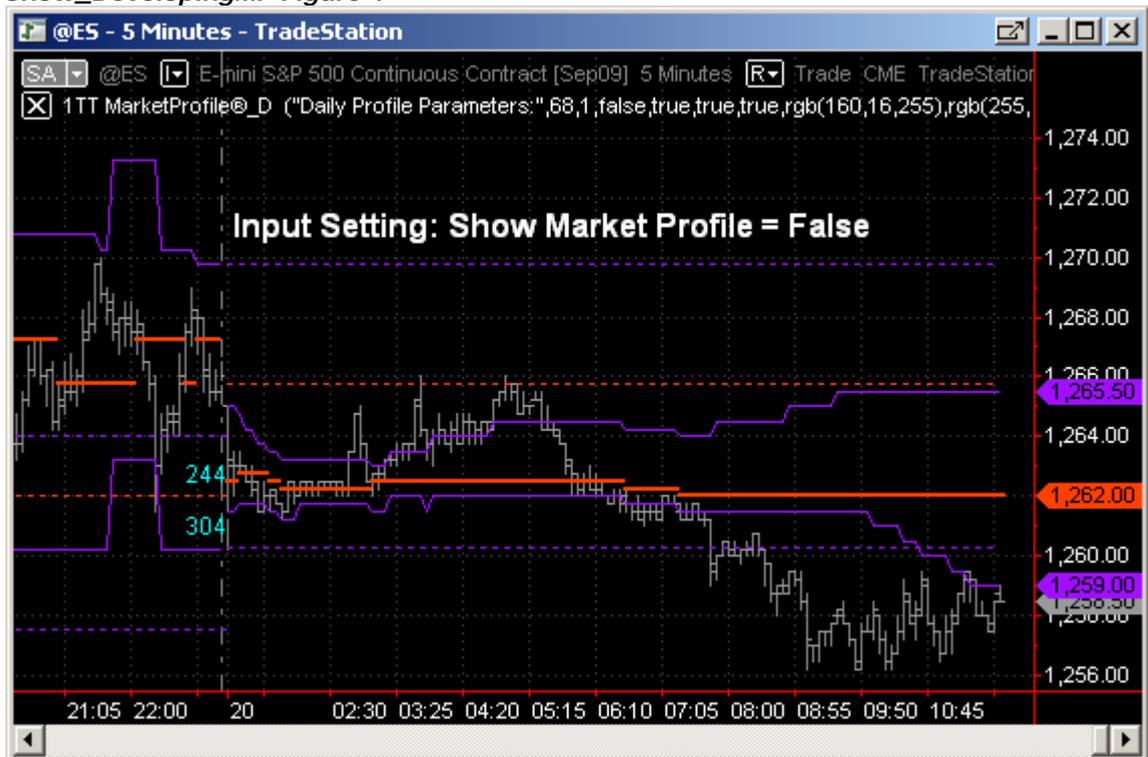


Show_MarketProfile Figure 2

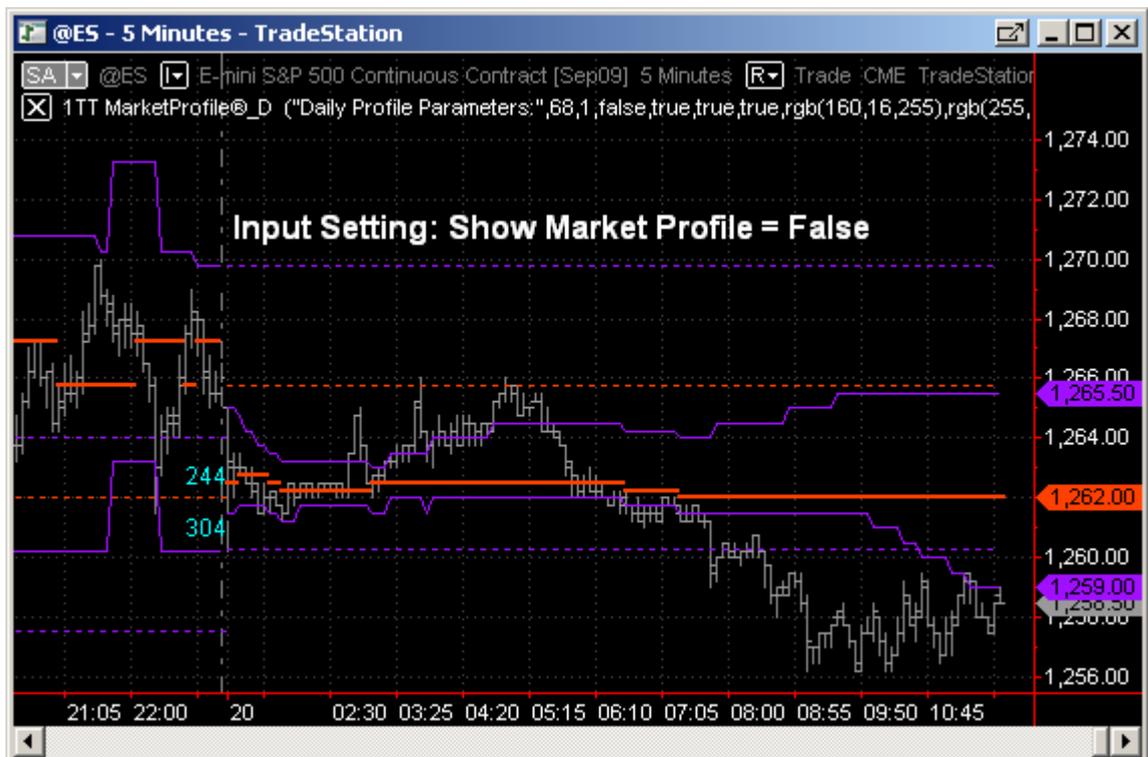


Show_DevelopingMP: True or False, shows developing intrabar Value Area.

Show_DevelopingMP Figure 1



Show_DevelopingMP Figure 2



Composite Profile.

Our MarketProfile D indicator permits the creation of a user defined composite profile comprised of data from multiple days trading for as much data as you have available.

In the Input Setting entitled: "Composite Profile Parameters:"

Start Date: the date you wish the profile to begin

End Date: The date you wish the profile to close – this can be a date in the future if required, and the composite profile will update in realtime.

Date formatting – the date needs to be entered into the input field in EasyLanguage format, which looks like this: 1YYMMDD - So a date of 27th July 2010 would = 1100727. The start date MUST be less than the end date or the composite will not work and you will get an error message.

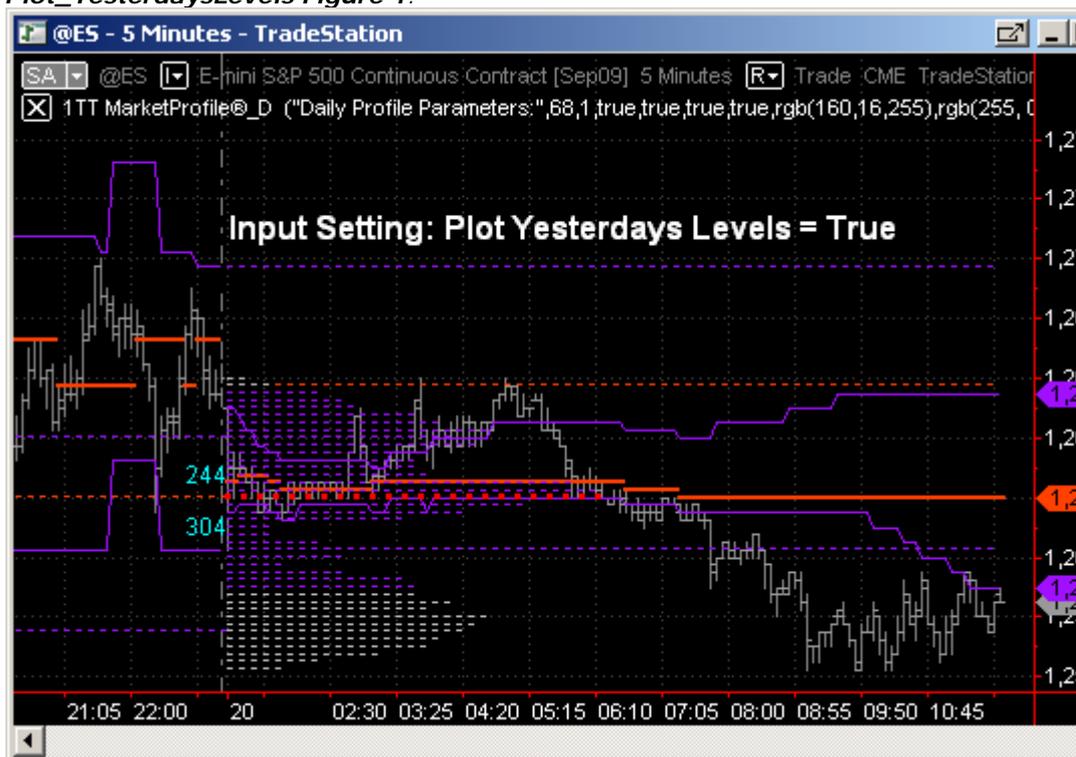
NOTE: You should check the start date on your chart to ensure there is actually data drawn for that date – mouse-over the date of the first bar of the session you want to begin the composite from. Note the date and use this for your composite. If you accidentally enter a date that does not have market data on the chart – ie: a weekend day or holiday, the composite will not draw,

Error Messages:

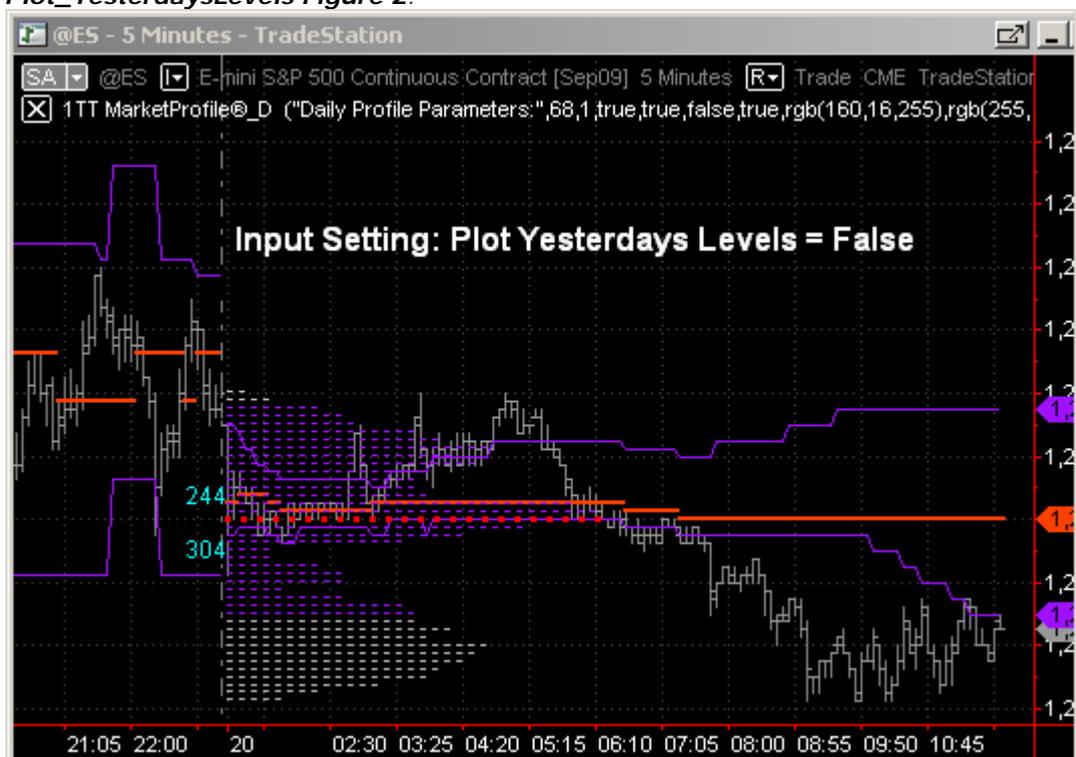
- *Please add more historical data to the chart - insufficient data loaded* – this message means you do not have enough data loaded onto the chart to display the composite start date you entered. You need roughly 60 days of history for a 30 day composite due to the MaxBarsBack function of MultiCharts
- *Note! Please increase the array size value using input >>SetArraySize<<, because current array size is too small. You can check the required array size with setting input >>GetArraySize<< to TRUE.* This means you need to increase the data array size. Please check section 6-A-I of this manual to see how to increase the array.
- *Note, please check your settings for Composite MP. EndDate must be larger than Start_Date!* This means you set the start date for the composite to a more recent value than the end date. Change it to an older historical date.

Plot_YesterdaysLevels: True or False, displays yesterdays Value Area and POC as trendlines for the next days trading.

Plot_YesterdaysLevels Figure 1:



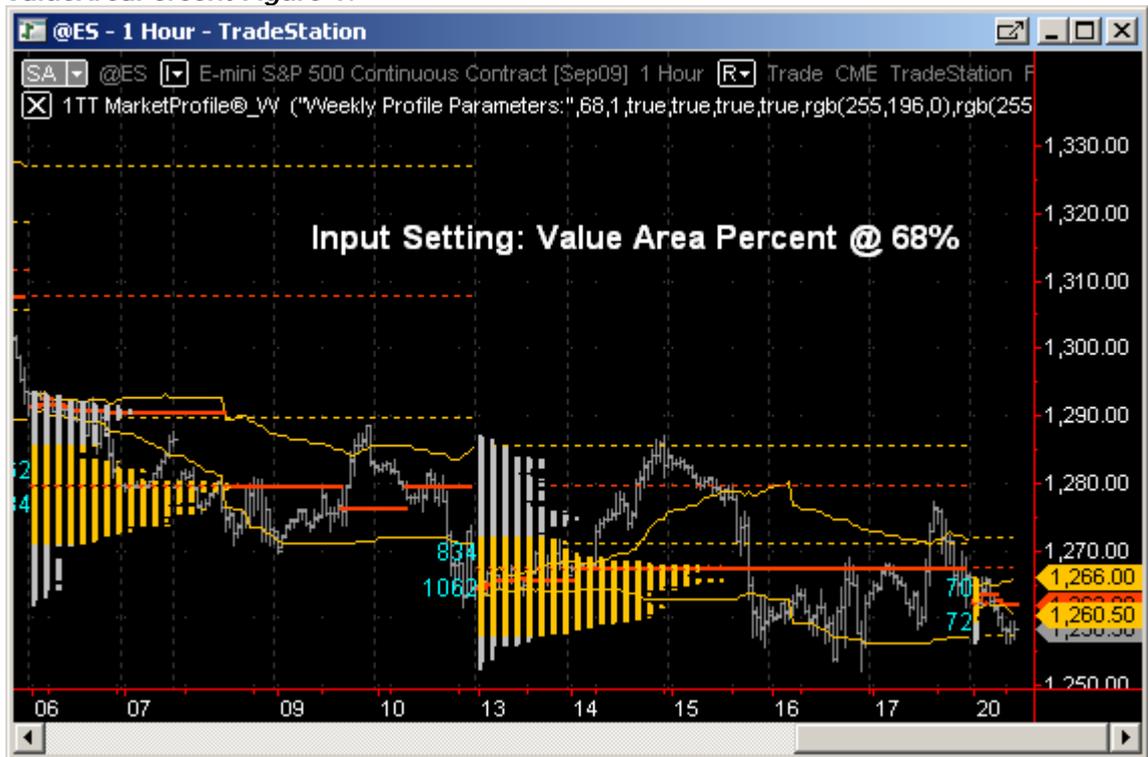
Plot_YesterdaysLevels Figure 2:



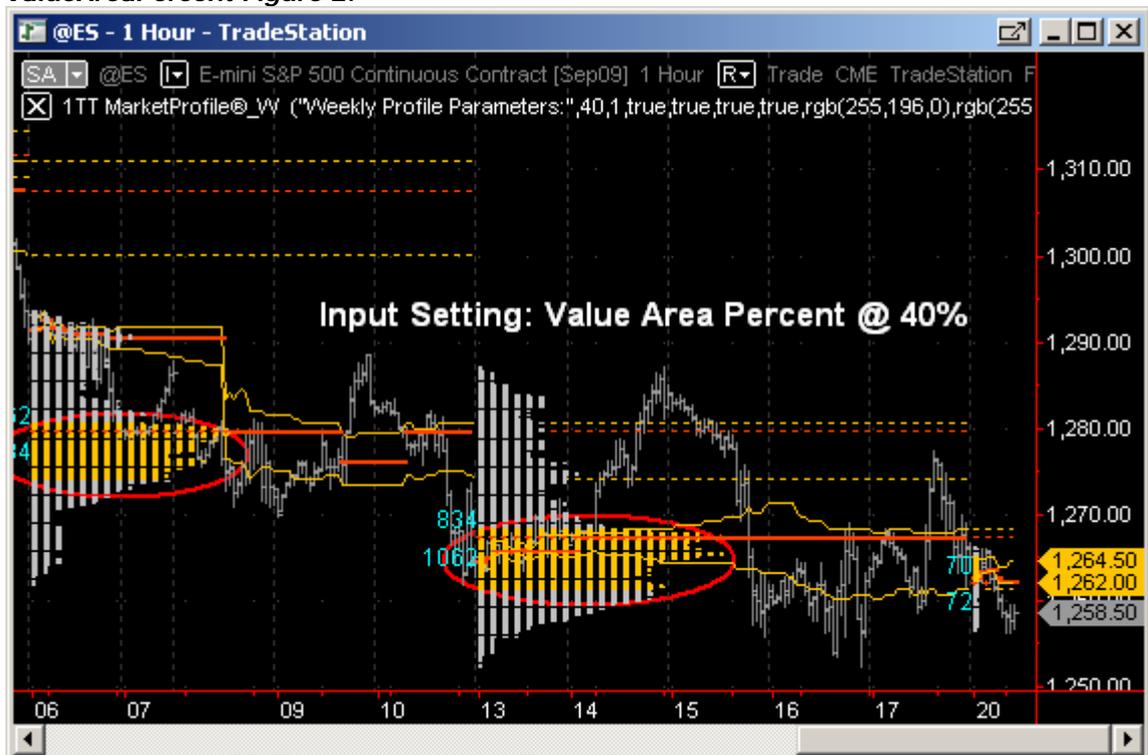
MarketProfile® W Indicator: User Inputs

ValueAreaPercent: Input as a Percent Value. Default is the commonly used 68%.

ValueAreaPercent Figure 1:

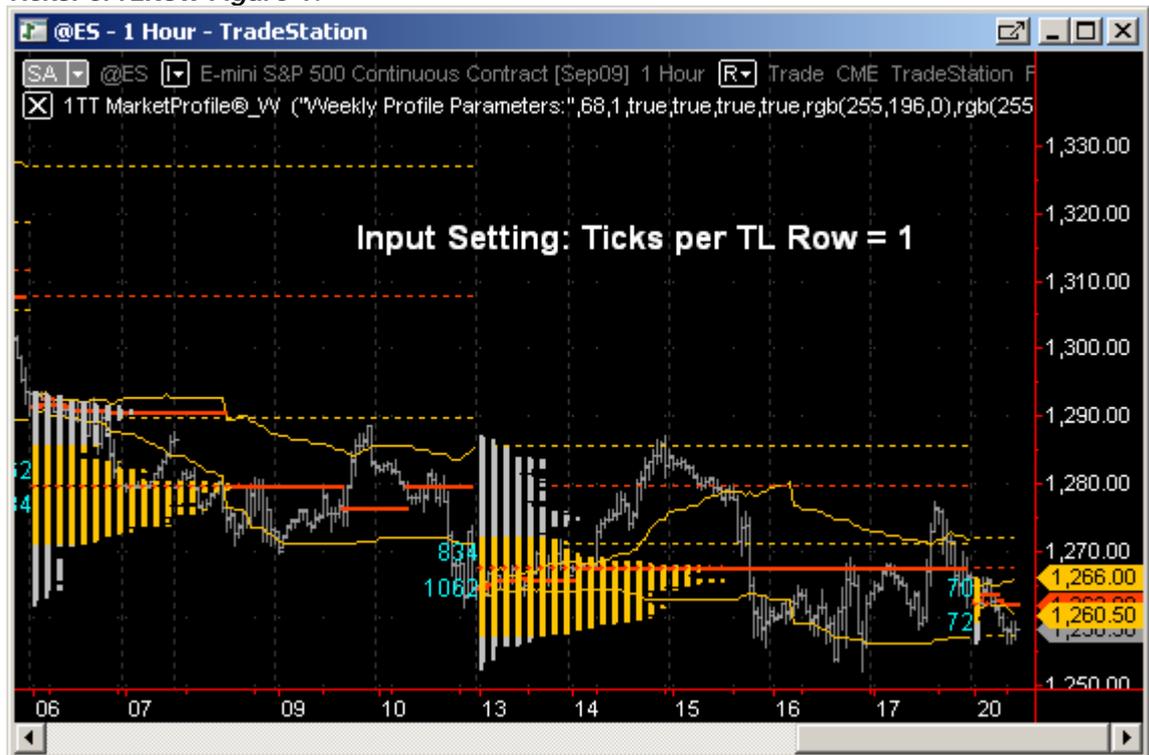


ValueAreaPercent Figure 2:

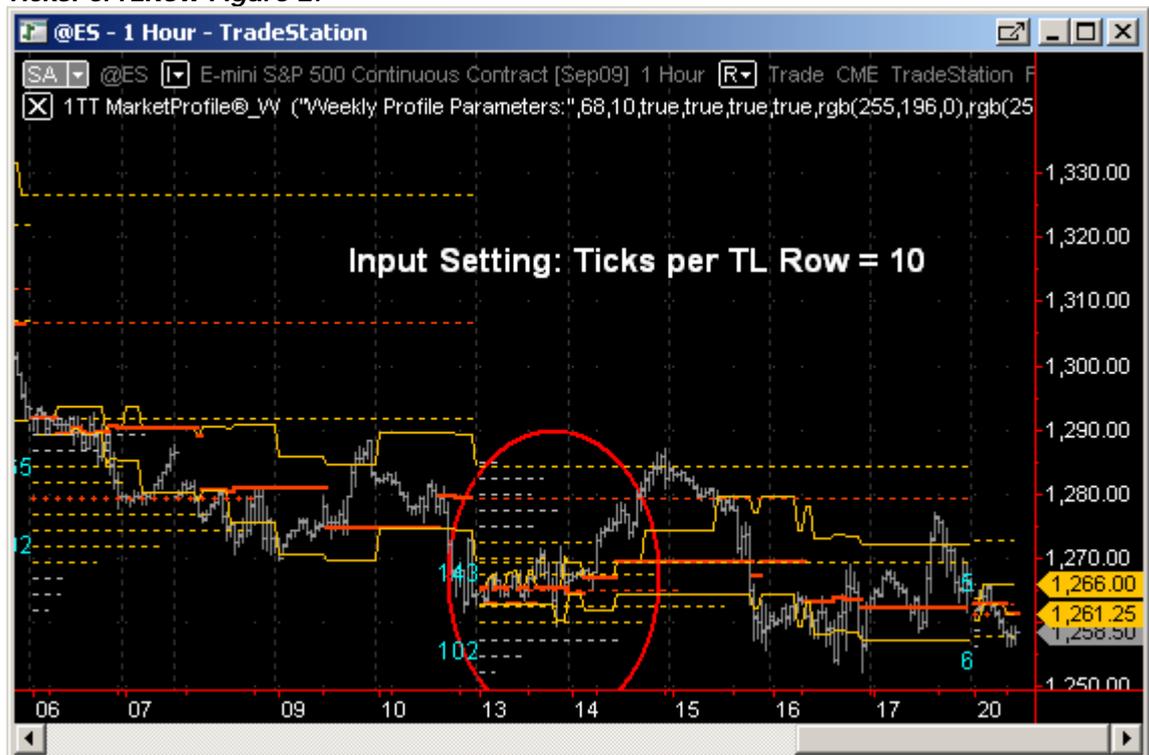


TicksPerTLRow: Sets the number of ticks per profile letter row.

TicksPerTLRow Figure 1:

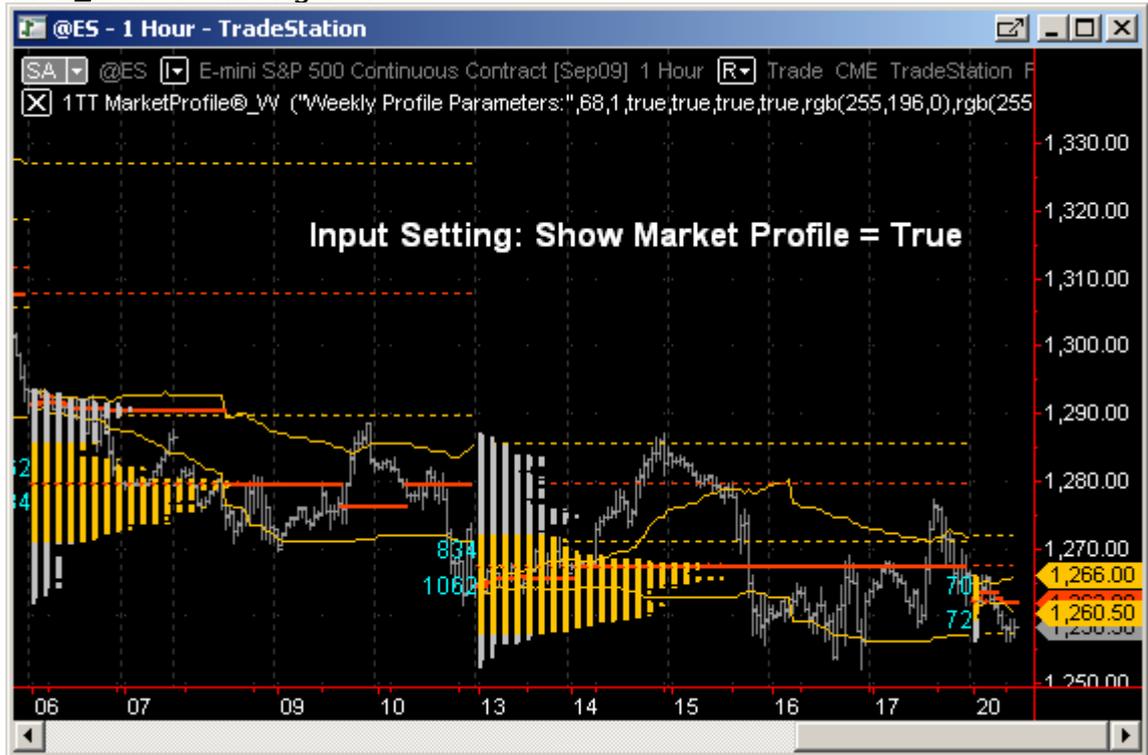


TicksPerTLRow Figure 2:

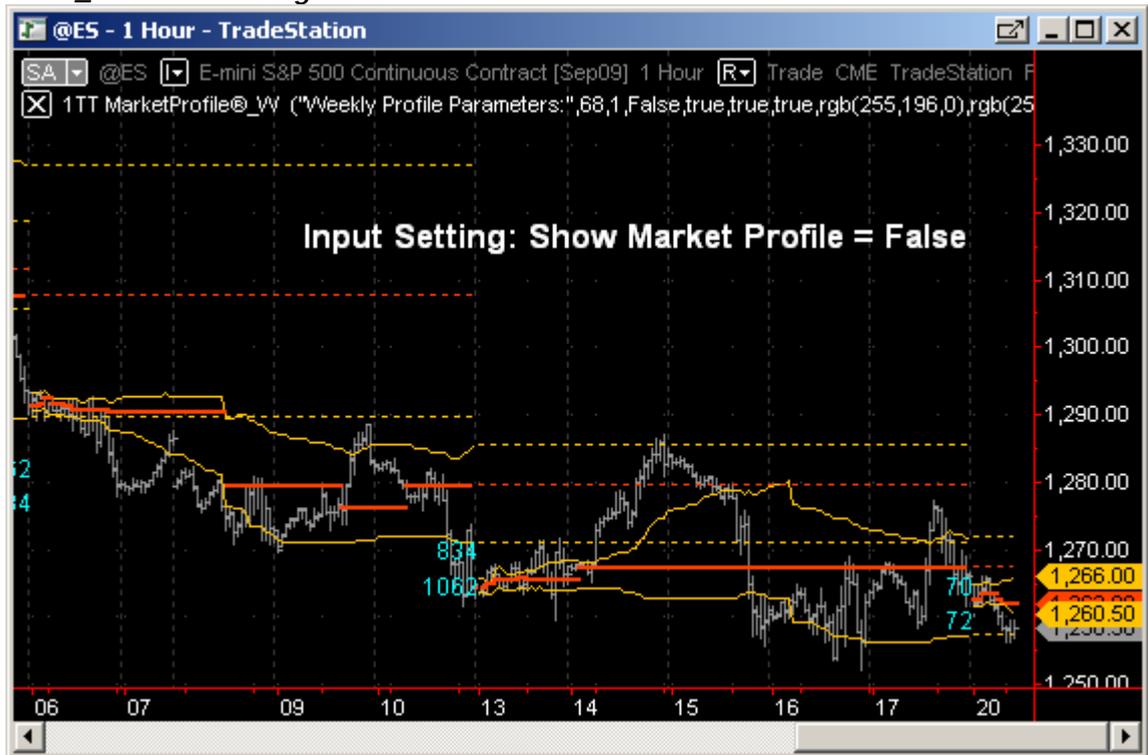


Show_MarketProfile: Defaults to True, this input toggles drawing the MarketProfile onto the chart (whether letterprofile or histogram). Change to False if you do not want to see the profile drawn.

Show_MarketProfile Figure 1:

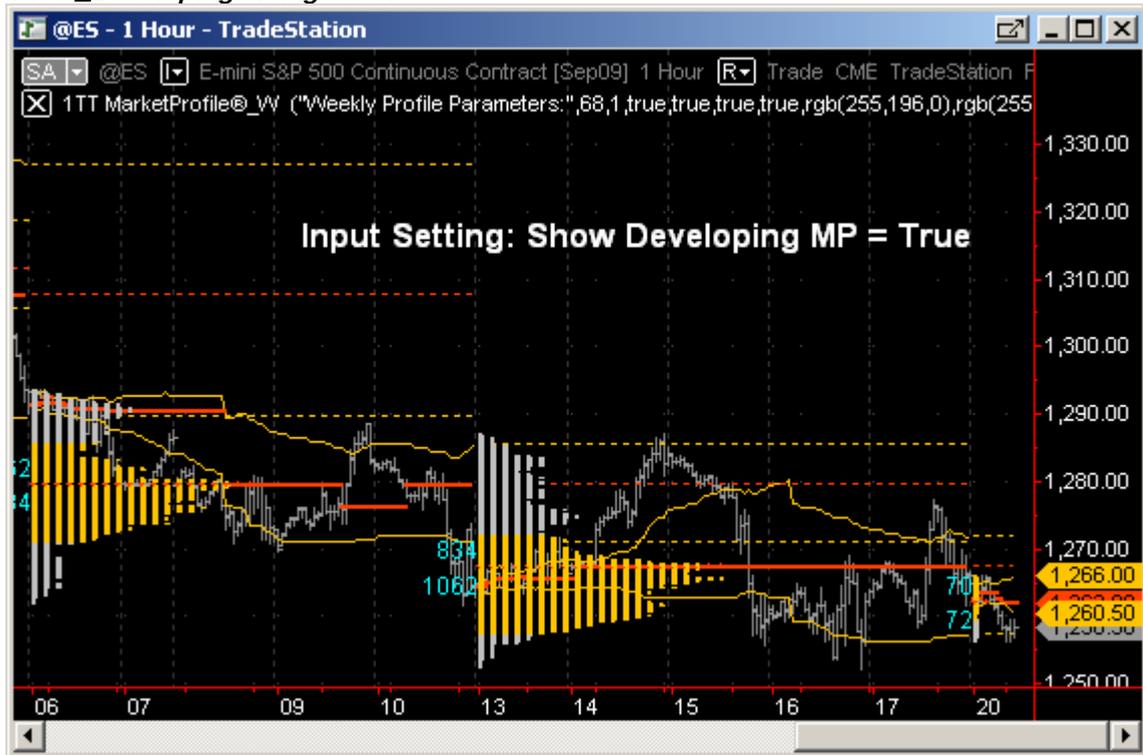


Show_MarketProfile Figure 2:

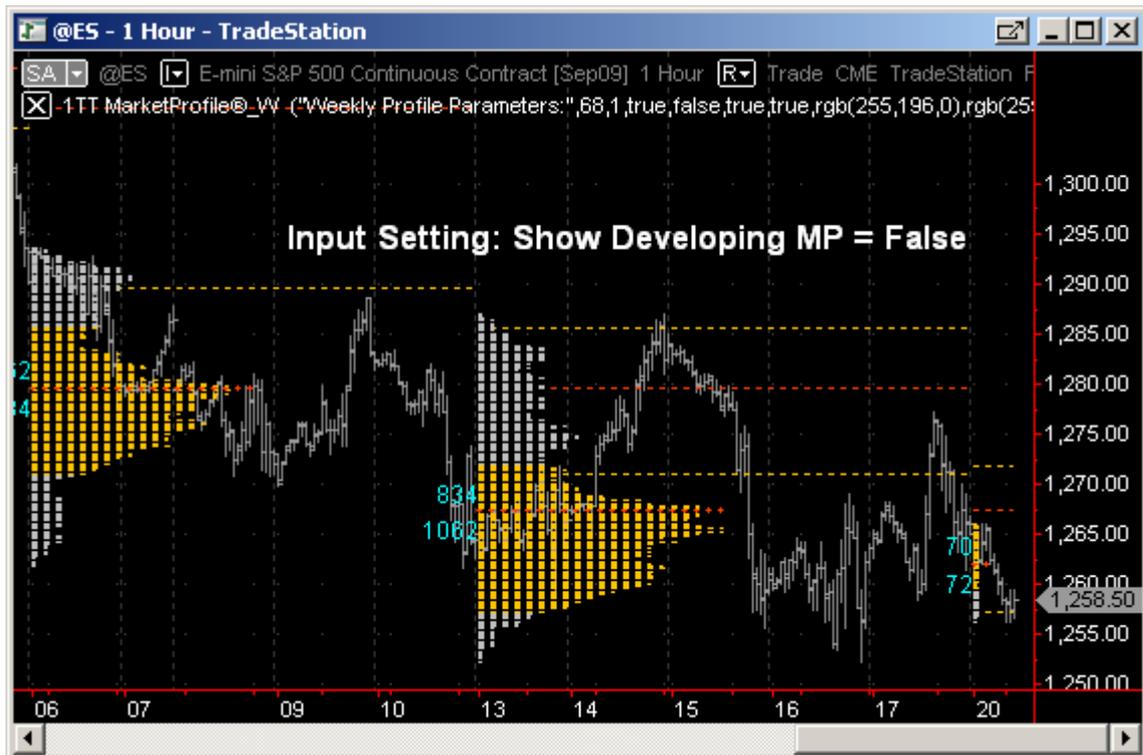


Show_DevelopingMP: True or False, shows developing intrabar Value Area.

Show_DevelopingMP Figure 1:

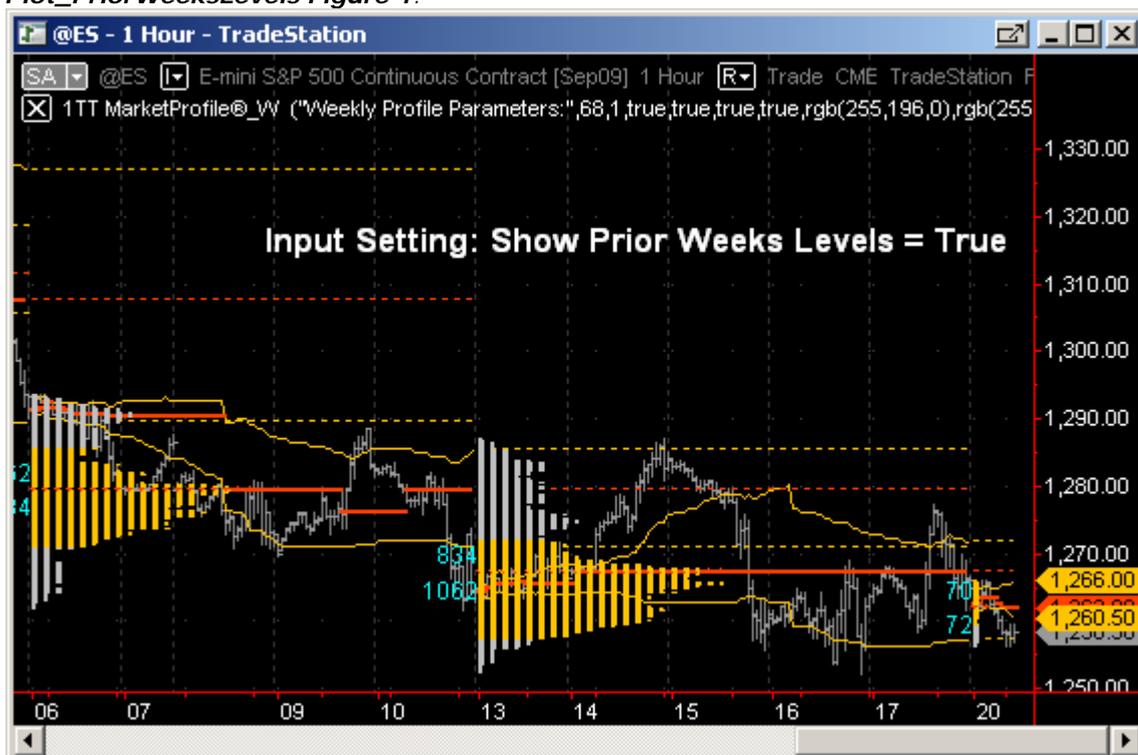


Show_DevelopingMP Figure 2:

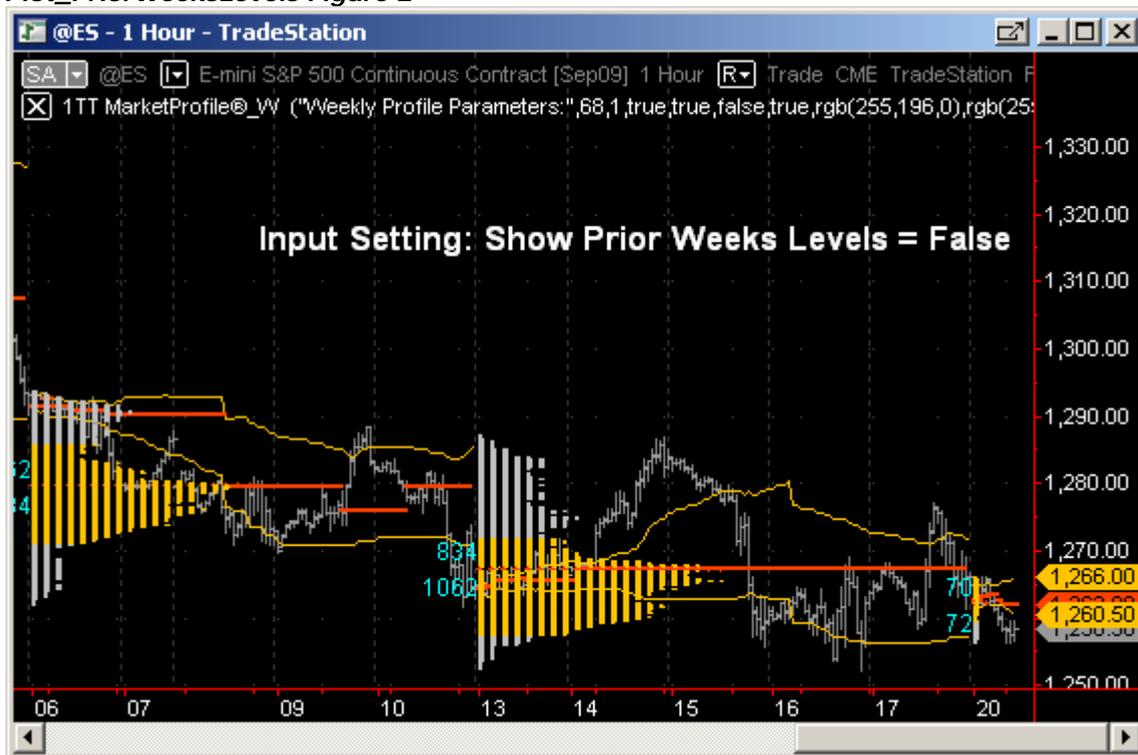


Plot_PriorWeeksLevels: True or False, displays the Prior Weeks Value Area and POC as trendlines showing major potential Support & Resistance for the next Weeks trading.

Plot_PriorWeeksLevels Figure 1:



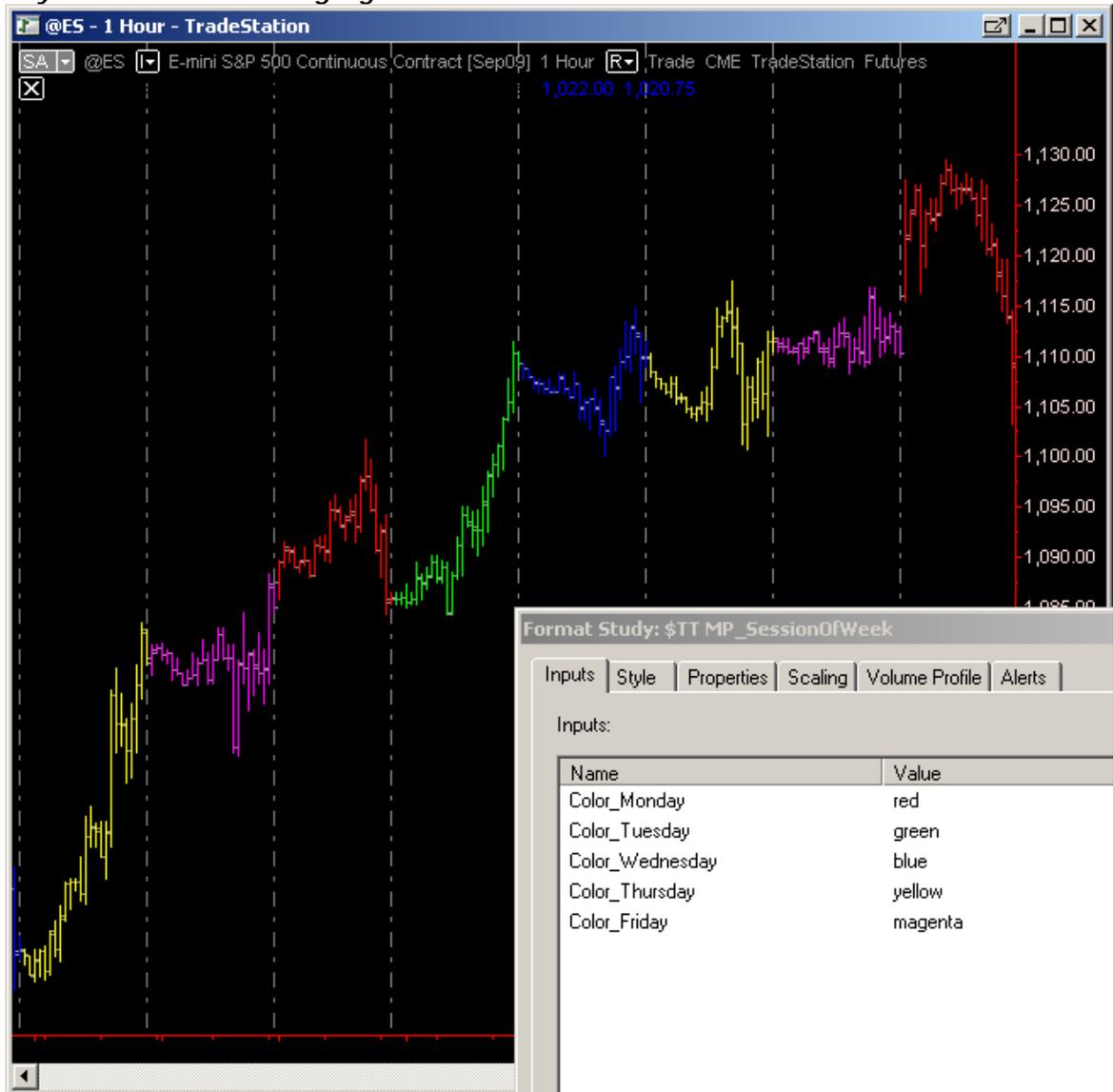
Plot_PriorWeeksLevels Figure 2



Market Profile Session of Week indicator: User Inputs

The indicator inputs permit you to change the colour for any day session.

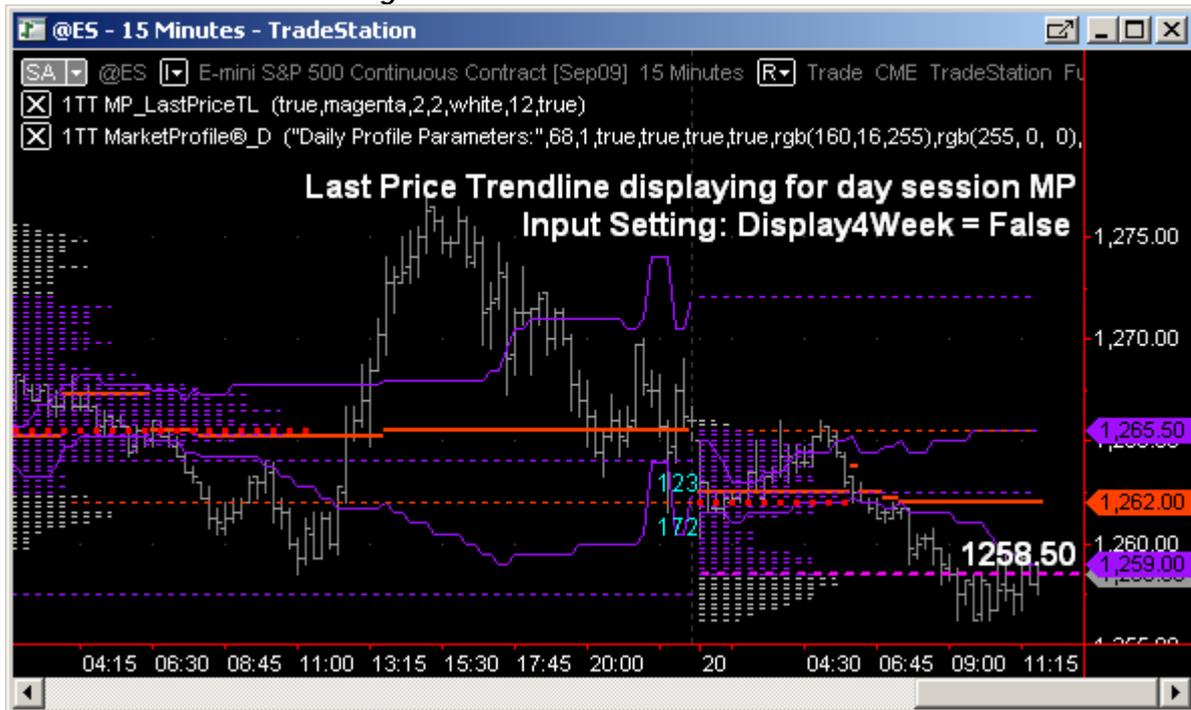
Day Session Colour Coding Figure 1



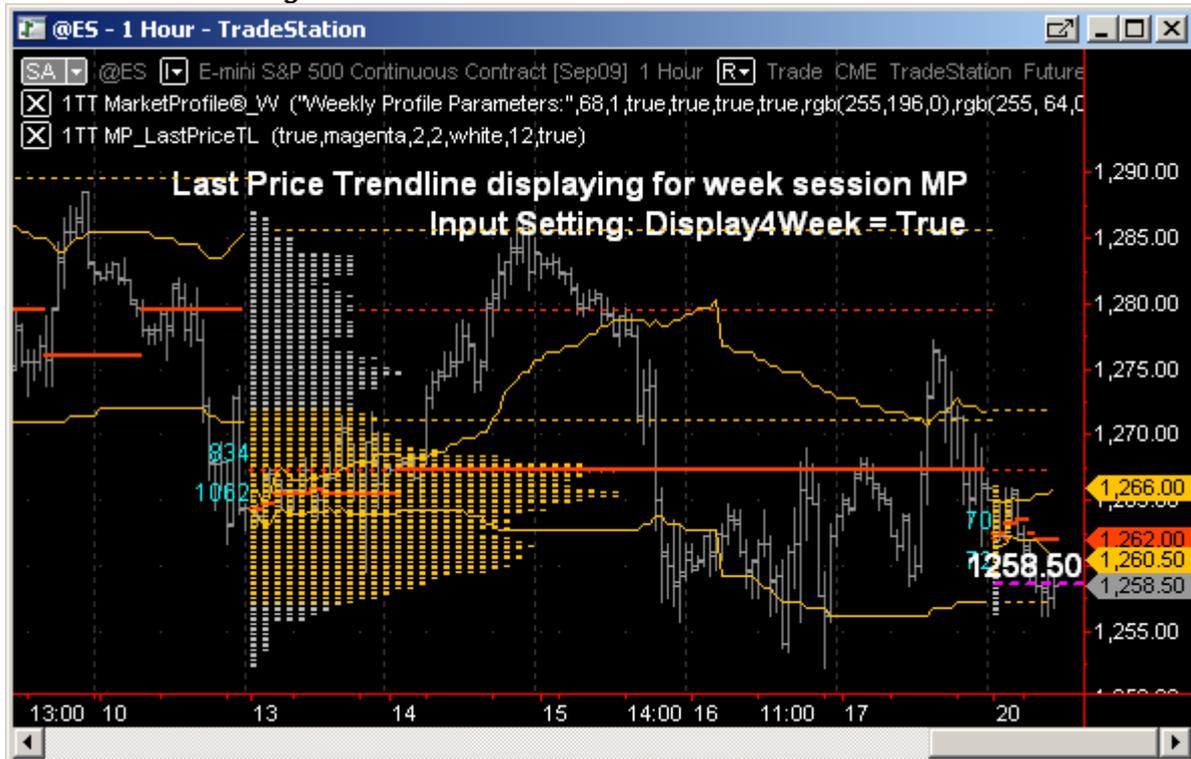
Market Profile Last Price indicator: User Inputs

Input Display4Week changes whether the trendline is drawn across the current day, or across the entire current week session

Last Price trendline Figure 1



Last Price trendline Figure 1



7. Troubleshooting

- a. For technical support, please contact support@1st-tradingtools.com
- b. TeamViewer is our solution for easy and friendly desktop sharing. We can remote control a partner's desktop to give online assistance, or you can show your screen to a customer - all without worrying about firewalls, IP addresses and NAT.

[Click here](#) for more information, or to download the Teamviewer support tool.