

Candle Profile

Introduction

The Candle Profile indicator constructs a price (or tick volume) profile of the aggregated price action of the instrument, for each candle / bar on the chart. This profiling concept is similar to Market Profile or Volume Profile.

The indicator utilizes a lower-timeframe data stream which is loaded separately (and in the background) to the main chart. For example, for a daily chart (where each candle / bar represents 1 day duration), the Candle Profile can construct a profile using 1min bars (or 5min, 15min, etc.). Obviously, the smaller the timeframe used, the more detailed the profile will be.

The technique allows you to easily see what happened to price action “inside the candle”, without the need to constantly refer to lower-timeframe charts (which can often present too much data to analyse effectively anyway).

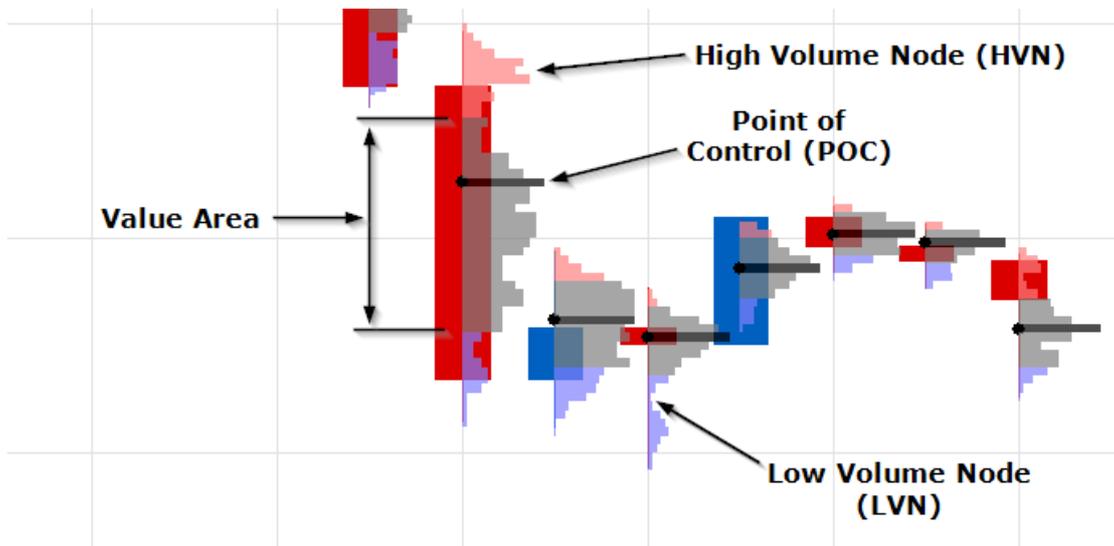


Figure 1 : Anatomy of Candle Profile chart

One of the most important pieces of information generated by the profile is the “Point Of Control” (POC), which is the most traded price (by time or volume). Higher timeframe POCs are often pivot points and might act as future support or resistance.

The “Value Area” is another concept from Market Profile. It comprises of 70% of the volume around the POC (i.e. approximately 2 standard deviations). The concept of Value Area is only usually relevant in balanced market conditions, where the profile assumes a typical “Normal” distribution or “bell curve”.

One of the key features of the Candle Profile is the ability to draw the profile as a vertical histogram for each candle/bar on the chart. The shape of the profile is important, and the Candle Profile indicator allows you to easily spot areas of high trading activity (High Volume Nodes or HVNs) and low trading activity (Low

Volume Nodes or LVNs). The profile graphic automatically scales as the chart is zoomed in / out.

The indicator works on any timeframe. However, please note that there is an upper limit to the amount of data that can be loaded (currently 15000 bars, or 5000 ticks). For example, 15000 bars of 1min data is approximately 10 days; 15000 bars of 5min data is approximately 52 days, etc. This limit only applies to how much data can be loaded when “back-filling” a chart (e.g. when it is added to the chart); the indicator can continue to collect live data beyond that limit.

It is also possible to use MarketScope’s “Data Source” setting to specify that the indicator should use a different time-period than the chart actually uses. For example, you can have a 30min chart, but set the “Data Source” for the indicator to 4H (see Figure 8).

Installation

Please use the provided installer.

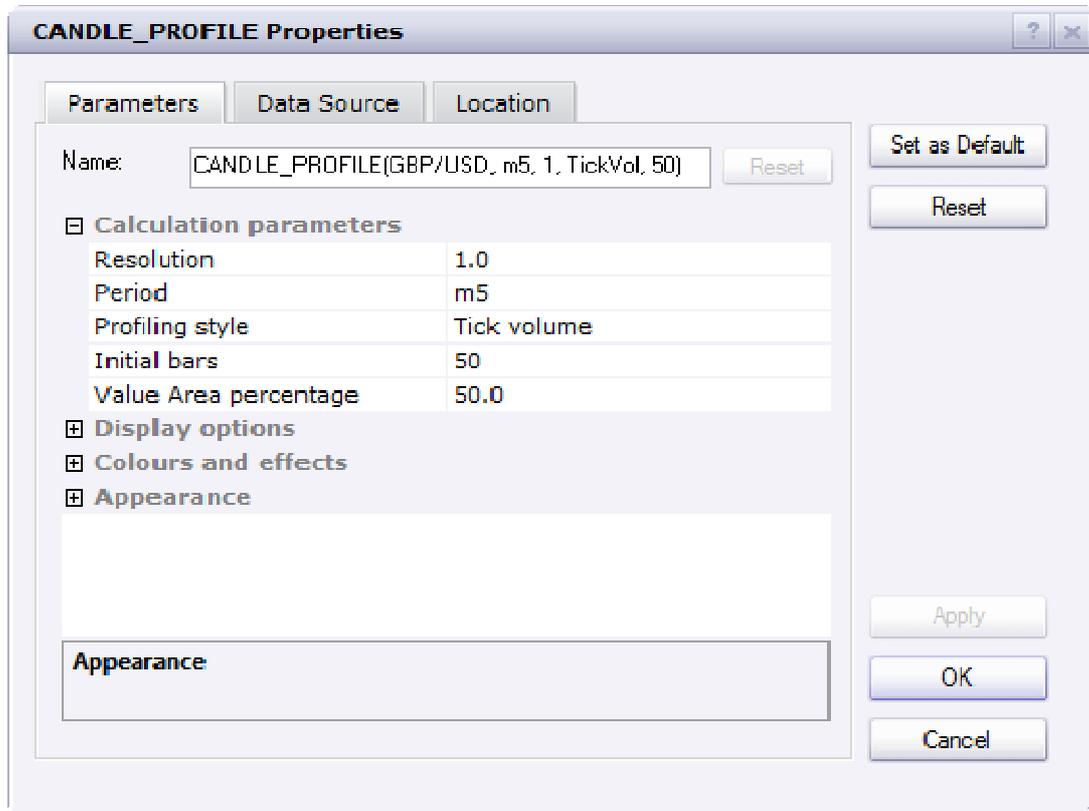
This software is for MarketScope 2.0 charting/trading application. There are no special hardware or software requirements. If your PC will run the MarketScope 2.0 software then you should be good to go. A good performance internet connection is recommended.

User Guide

The Candle Profile indicator uses some terminology commonly used by Market Profile and Volume Profile traders. A small glossary of terms can be found towards the end of this document.

Input Parameters

Calculation Parameters



Resolution: This is the size of the “statistical bins” which are used to collate the price action data. The value is in pips. This value should not be too small relative to the time-frame and instrument used, otherwise it creates too many “statistical bins” which can be computationally and graphically expensive.

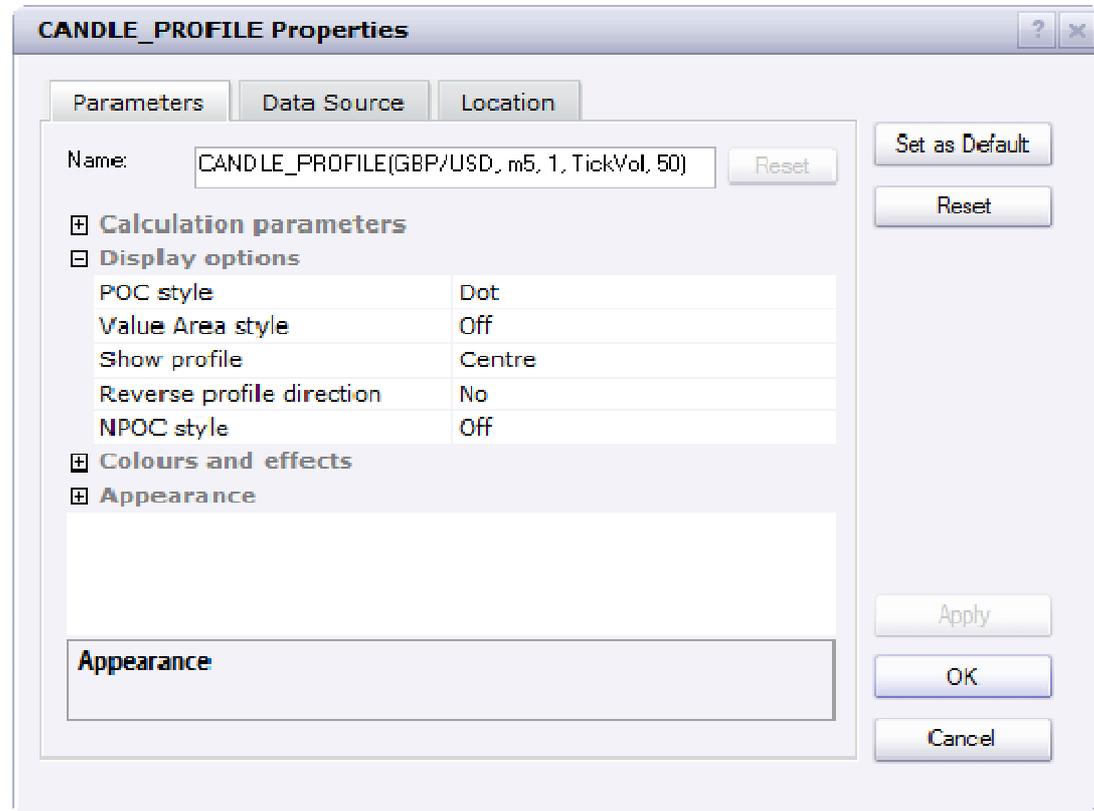
Period: This is the bar size used to create the profile. For performance reasons, there is a limit on how much data can be loaded by indicators (currently 15000 bars, or 5000 ticks). For example, 15000 bars of 1min data is approximately 10 days; 15000 bars of 5min data is approximately 52 days, etc. This limit only applies to how much data can be loaded when “back-filling” a chart (e.g. when it is added to the chart); the indicator can continue to collect live data beyond that limit.

Profiling style: This can be ‘TPO count’ or ‘Tick volume’. The ‘TPO’ mode generates a profile based purely from the price bars, with each bar having equal weighting. The ‘Tick volume’ mode will use the bar’s tick volume value to weight its contribution to the profile, with higher volume bars having a larger contribution to the profile.

Initial bars: The “Initial bars” parameter can be used to reduce the amount of lower timeframe data required by the indicator. For example, if “Initial bars” is set to 20, then when the chart loads, only the last 20 bars / candles will have their profiles computed. This value only affects the initial loading of the chart; the indicator will continue to compute the profiles for any new bars / candles, over and above this initial value.

Value Area percentage: The percentage used for Value Area calculation. The default is 70% which is approximately 2 standard deviations of a normal distribution.

Display Options



POC style: This can be Off, Dot or Line.

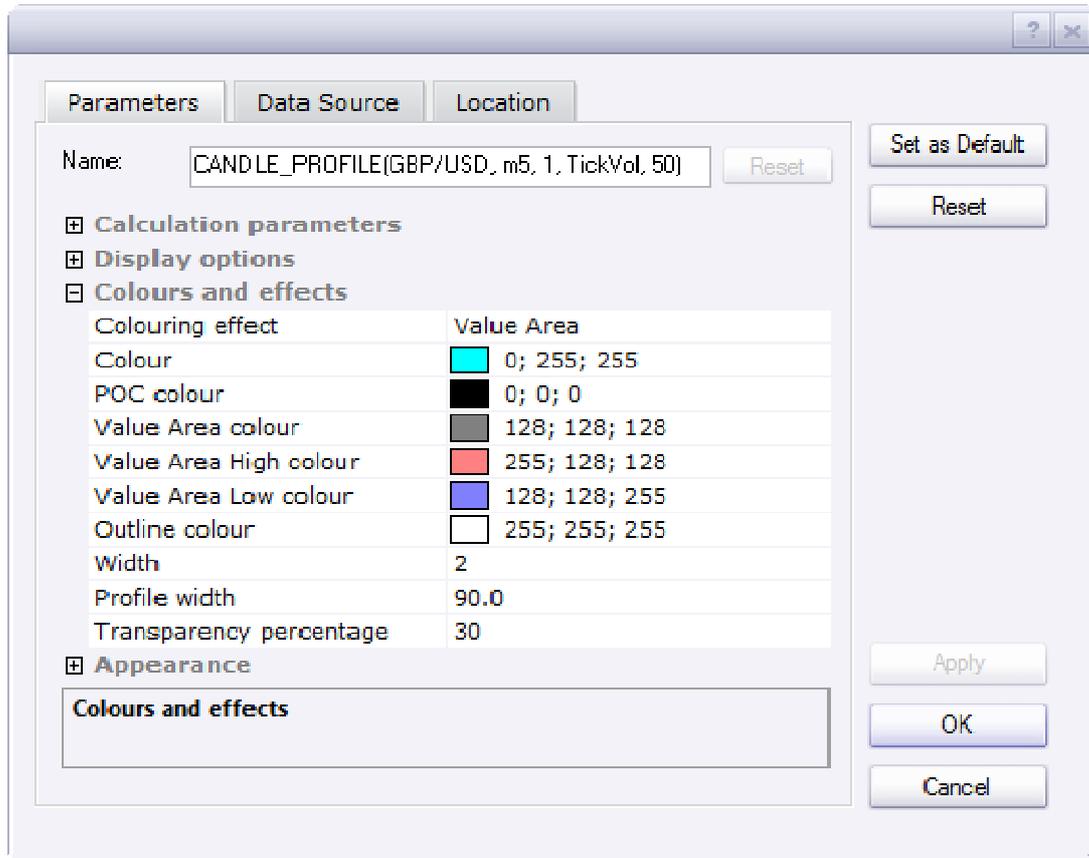
Value Area style: This can be Off, Dots, Lines or Vertical line.

Show profile: This can be Off, Centre, Left or Right. The parameter controls the alignment of the profile with respect to the bar/candle. When set to Off no profile is drawn.

Reverse profile direction: When set to Yes, the profile is drawn facing to the left.

NPOC style: This can be Off, Fresh or Historic. When set to Fresh only fresh NPOCs are displayed (i.e. not yet touched by later price action). When set to Historic the older NPOCs are also shown for reference.

Colours and Effects



Colouring effect: This can be Plain, Shaded, Faded, Rainbow or Value Area. It is used to set the colouring of the profile graphics. If the effect is Plain then the graphics are just drawn with the specified colour. If the effect is Shaded, then the graphics are shaded from the selected colour to black. If the effect is Faded, then the graphics are faded from the selected colour to white. If the effect is Rainbow, then the graphics are coloured with a “temperature” hue which varies from purple (cold) to red (hot); higher values (TPO count or volume) have “hotter” colours and lower values (TPO count or volume) have “cooler” colours. The Value Area option colours the graphics according to the Value Area (with separate colours for the area above and below the Value Area).

Colour: The base colour of the profile.

POC colour: The colour of the Point Of Control (POC).

Value Area colour: The colour of the Value Area.

Value Area High colour: This colour is used for the area above the Value Area.

Value Area Low colour : This colour is used for the area below the Value Area.

Outline colour: This is the colour of the outline of the bars for the profile. When this is set to “White”, the outline is not drawn at all.

Line width: The width used for the POC dot/line and Value Area line.

Profile width: This value is used to scale the width of the profile. It is a % value. If set to 100%, then the profile will be the same width as a candle.

Transparency percentage: The transparency of the profile.

Screenshots

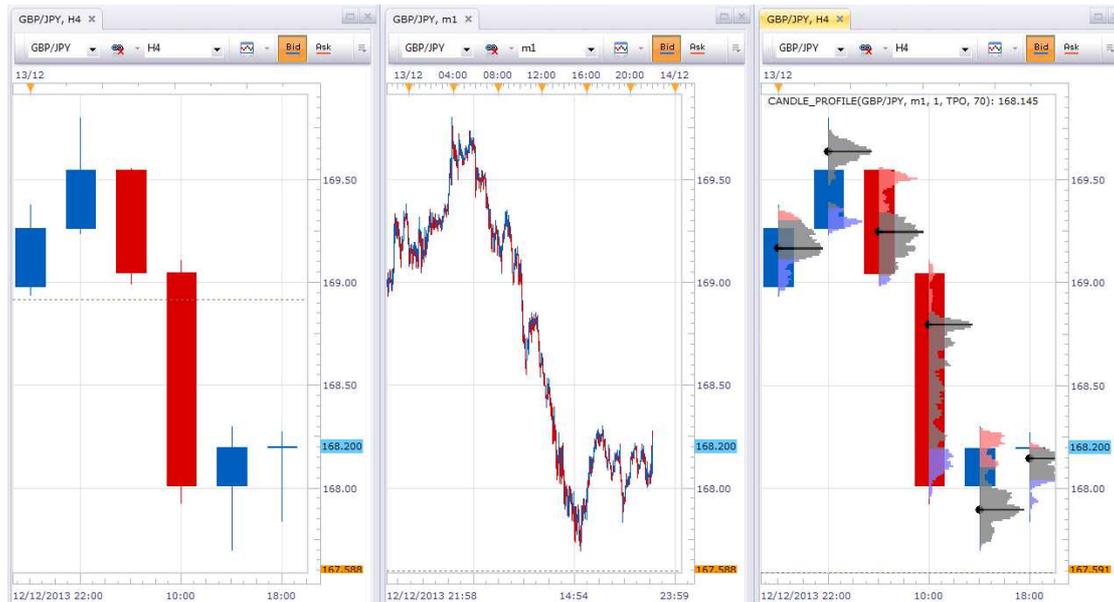


Figure 2 : (left) 4H bars; (centre) 1min data for the same period; (right) original 4H bars + Candle Profile indicator showing the price profile of the underlying 1min data



Figure 3 : Candle Profile using 1min data source on 4H bars, "Value Area" colouring effect

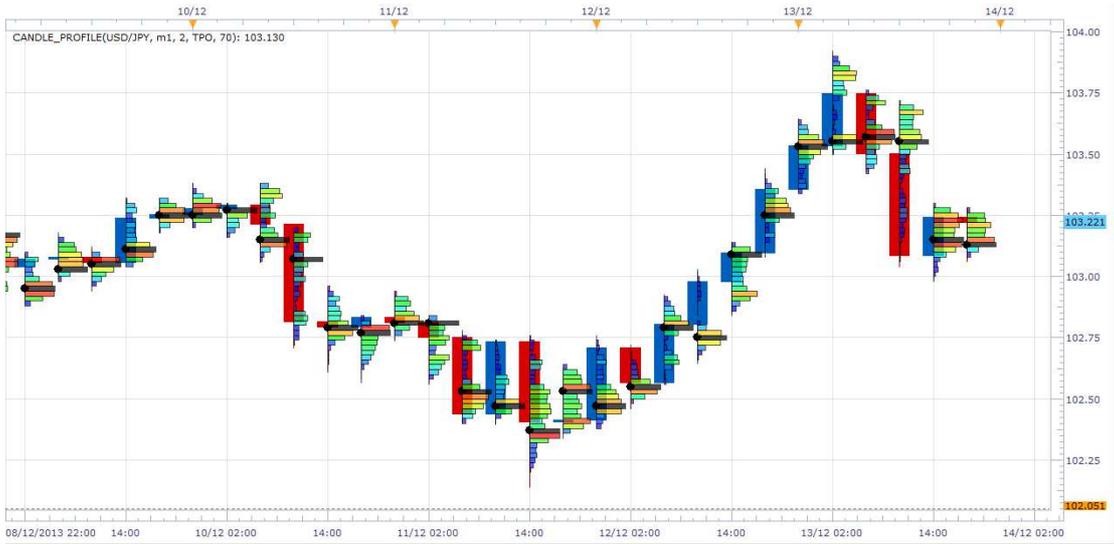


Figure 4 : "Rainbow" colouring effect

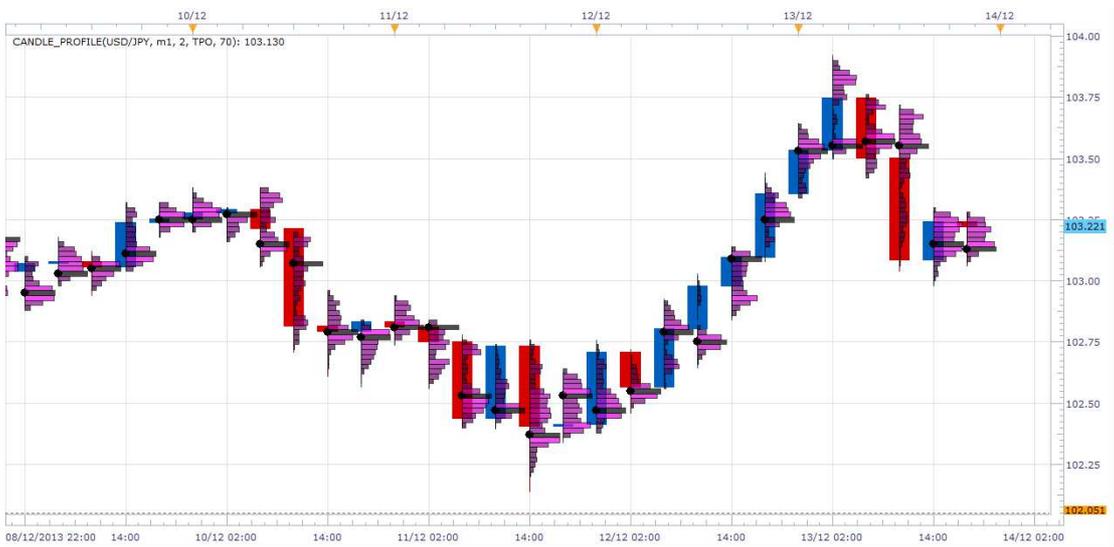


Figure 5 : "Shaded" colouring effect



Figure 6 : "Fresh NPOC" display



Figure 7 : POC drawn as Dot, Value Area drawn as a Vertical Line, no profile



Figure 8 : 30min chart, but with the indicator's "Data Source" set to 4H (NOTE: "Show profile" is also set to Left which aligns the profile to the left of the 4H period on the chart)

Glossary of Terms

Term	Description
High Value Node (HVN)	An HVN is a price area of high TPO count or volume. The market traded for a long time at this level. These can act as magnets, attracting price to them. Once rejected, they will often act as support or resistance when the price re-visits the area.
Low Value Node (LVN)	An LVN is a price area of low TPO count or volume. The market did not trade for very long time at this level. These often form support or resistance levels when the price re-visits the area.
Naked Point Of Control (NPOC)	A Point of Control (POC) which has not yet been touched by ensuing sessions.
Point Of Control (POC)	The POC is the highest traded price in a profile. This can be based on TPO count, or volume. When based on volume, the POC is usually referred to as the VPOC.
Time Price Opportunity (TPO)	In a traditional Market Profile, the trading day is divided into 30 minute periods, called TPO's (Time Price Opportunities). However, in general the term just means that the instrument traded at a certain price level.
Value Area (VA)	Area where 70% of all trades take place, centred around the POC.
Value Area High (VAH)	The VAH is the high of the Value Area.
Value Area Low (VAL)	The VAL is the low of the Value Area.

Further Information

Additional information can be found on my blog (<http://robocod.blogspot.co.uk/>).

Support

Should you have any problems with installation or use of this indicator, then please email sjdcknsn@gmail.com with a description of your problem or query.

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