

Crystal Volume Profile Auto POC

See where the money traded. Trade the levels that matter.

The complete manual for the MT4 v3.00 engine: draggable range handles with a live Point of Control, a 70% value area, a smart fixed-price grid, 3D chart controls and POC / VAH / VAL buffers for your Expert Advisors.



Product Crystal Volume Profile Auto POC for MetaTrader 4

Publisher Crystal AI Systems

Covers Setup · Every setting · Playbooks · All markets · EA buffers · PRO upgrade

ML5 mql5.com/en/users/jawadtrader22

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If you only have ten minutes

- **Chapter 3** gets the indicator on your chart and configured.
- **Chapter 4** tells you what every coloured bar and line means.
- **Chapter 5** shows you how to drag the range and when the profile freezes.
- **Chapter 14** gives you a ready preset for your trading style.

Welcome

Price tells you where the market went. Volume Profile tells you where the market *agreed*.

Most indicators are drawn against time. Crystal Volume Profile Auto POC turns the chart sideways: it measures how much volume traded at every price inside a range you choose, and draws the answer as a horizontal histogram. The longest bar is the **Point of Control (POC)**, the price where the most business was done. Around it sits the **value area**, the band that holds 70% of all volume. These are the levels professional desks watch, because they show where buyers and sellers were both happy to trade, and where they were not.

What you get on the chart

- **Volume histogram** starting at your left range edge, coloured from grey-blue (thin) to bright blue (heavy), with the POC bar in orange.
- **Value area tint** that marks the rows inside the 70% band at a glance.
- **POC line** across the whole chart, plus optional **VAH** and **VAL** lines.
- **Two draggable chevron handles** that set the start and end of the range. The profile recalculates live while you drag.
- **Live info box** while dragging: bars, time range, POC, VAH, VAL and total volume.
- **3D RESET VP and HIDE VP buttons** with status LEDs.
- **Three indicator buffers** (POC, VAH, VAL) so an Expert Advisor can trade the levels.

What it is not

It is not a signal arrow indicator and it does not place trades. It shows you *where* the important prices are. You decide *what* to do when price gets there, using the playbooks in Chapter 12.

What is new in v3.00 for MT4

Area	Old MT4 v1.74	New MT4 v3.00
Range control	Two vertical lines you had to select and drag	Canvas chevron handles, grab and drag, no object selection
Update speed	Delete and redraw every bar on each change	Pooled objects + incremental maths, about 40 frames per second
Levels	POC only	POC, VAH, VAL and value area tint
Row grid	Rows re-cut on every range change	Smart fixed-price grid, rows stay stable while dragging
Colours	One flat colour	Volume gradient, VA tint, highlighted POC bar
Controls	Plain buttons	3D buttons with hover, press and ON / OFF LEDs
EA access	None	Buffer 0 = POC, 1 = VAH, 2 = VAL
Feedback	None	Live info box and gold guide lines while you drag

KEY POINT

The MT4 v3.00 build runs the **same engine** as the MT5 v3.00 build. Same maths, same controls, same buffers. Your settings and habits carry across both platforms.

Volume Profile in Five Minutes

Markets are auctions. Price moves to find a level where trade happens, then it builds value there.

Every candle carries a volume number. The indicator spreads each candle's volume across the prices that candle touched, adds every candle in your range together, and shows the total at each price. The result reads like an X-ray of the auction.

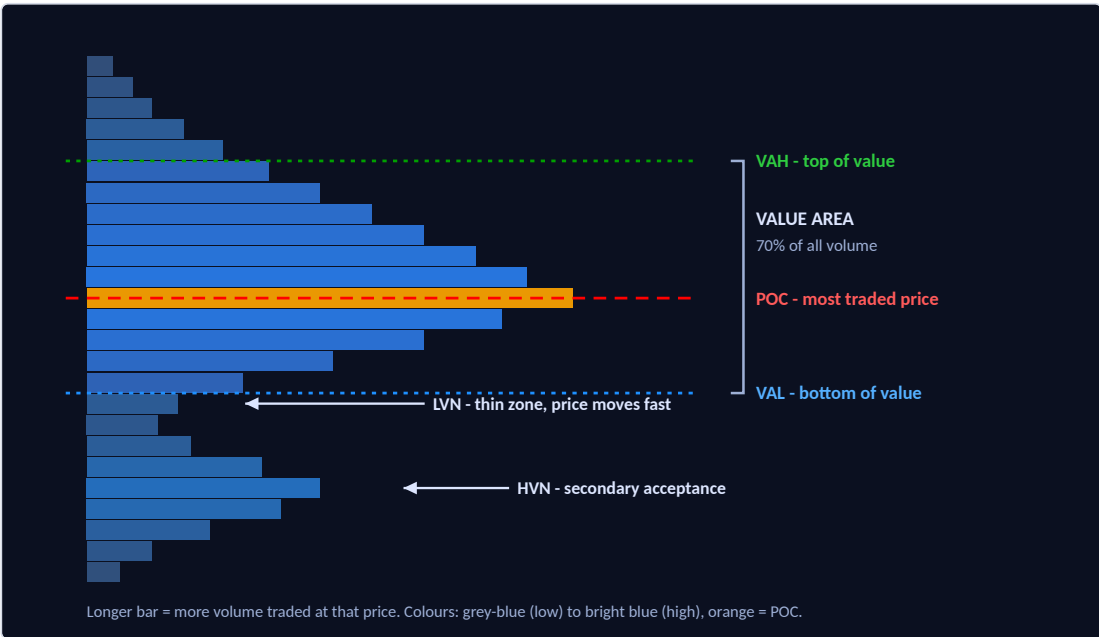


Figure 2.1 — Anatomy of a volume profile. Every label on this figure appears on your chart.

Term	What it means	How traders use it
POC	Point of Control. The single price row with the most volume.	Fair price of the range. Strong magnet and pivot.
Value Area (VA)	The band around the POC that holds 70% of volume.	Inside = balance and rotation. Outside = imbalance.
VAH	Value Area High, the top edge of value.	Resistance from inside, support after acceptance above.
VAL	Value Area Low, the bottom edge of value.	Support from inside, resistance after acceptance below.
HVN	High Volume Node. A fat zone of heavy trade.	Price slows, chops and reacts here.
LVN	Low Volume Node. A thin zone with little trade.	Price moves through quickly. Good for stops behind it.

NOTE

Fat areas are prices the market **accepted**. Thin areas are prices the market **rejected**. That one idea explains almost every setup in this guide.

Reading profile shapes

The silhouette of the histogram tells you what kind of auction took place. Classify the shape loosely while a session is still building and firm it up near the end, because an early P or b often fills into a D.

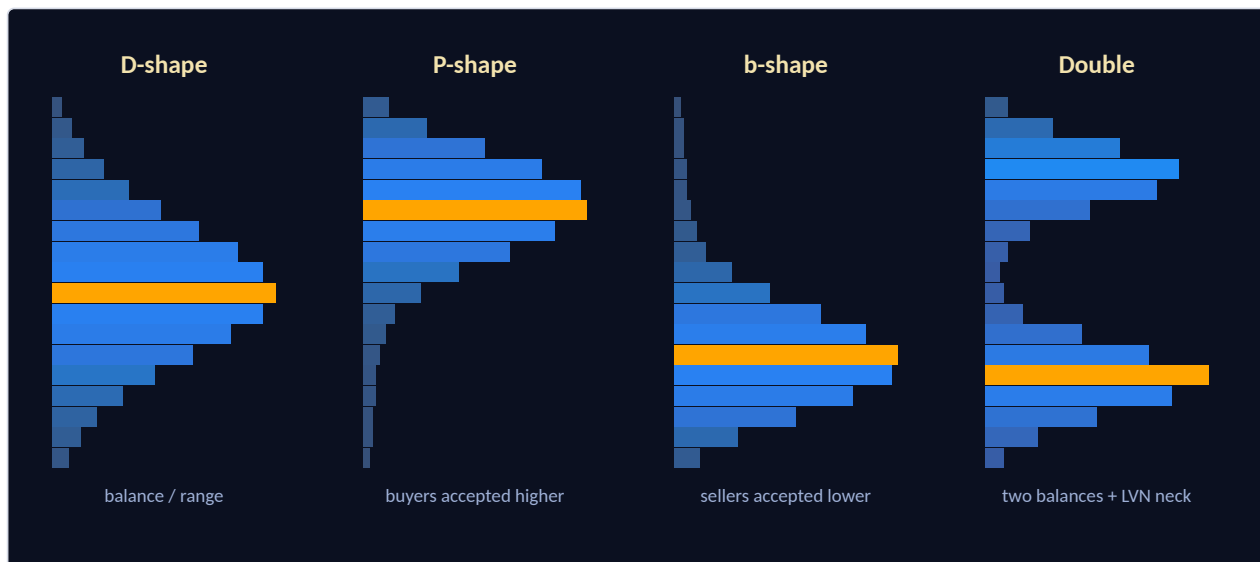


Figure 2.2 — The four shapes you will see most often.

Shape	What happened	What to expect next
D-shape	Balanced two-sided trade around a central POC.	Range trading. Fade the value edges back towards the POC.
P-shape	Fast rally, then acceptance higher. Thin tail below.	In an uptrend: strength. In a downtrend: often short covering. The thin tail can be revisited.
b-shape	Fast drop, then acceptance lower. Thin tail above.	Mirror of the P. Long liquidation; the upper tail can be revisited.
Double	Two balances separated by a thin LVN neck.	The neck is a key reference. It can act as a pivot or be crossed fast.

Why tick volume works on MetaTrader 4

Spot forex has no central exchange, so MT4 brokers supply **tick volume**: the number of price changes in each bar. A published study comparing hourly tick volume with real traded currency volume found correlations above 0.95 on EURUSD, GBPUSD, USDJPY and EURCHF. In practice, the busier the market, the more ticks it prints, so tick volume draws the same shape of profile that real volume would.

KEY POINT

Use tick volume with confidence on liquid symbols and during active sessions. On thin symbols or quiet hours the profile is still valid, but give each level less weight.

Installation and First Run

From download to a working profile in under five minutes.

Install from the MQL5 Market

1. In MetaTrader 4 open **Terminal** (Ctrl+T) and select the **Market** tab, or open the product page in your browser while logged in to your MQL5 account.
2. Find **Crystal Volume Profile Auto POC MT4** and click **Install**. MetaTrader places it under **Indicators > Market** in the Navigator.
3. Open the chart you want to analyse, then drag the indicator from the Navigator onto the chart.
4. Review the inputs (the defaults are a strong starting point) and press **OK**.

Five-minute setup

Step	Do this	Why
1	Leave Calculation Timeframe on Current for now.	Fastest and needs no extra history.
2	Keep Number of Rows at 75 and Row Grid Mode on Fixed Grid.	Balanced detail and the smoothest dragging.
3	Turn Show VAH Line and Show VAL Line to Enable.	You will want the value edges for every playbook.
4	Pick Histogram Size Small or Medium.	Keeps candles readable behind the bars.
5	Press OK, then drag the left chevron to a session open or a swing point.	Anchoring is what gives a profile meaning.

Your first look

On attach the indicator profiles the **visible chart**: from the leftmost visible bar to the current bar. The left chevron sits at the start of the range and the right chevron at the end. The histogram grows to the right from the left chevron, and the red dashed POC line runs across the whole chart.

NOTE

The first time you use a lower **Calculation Timeframe**, MT4 may need a moment to download that history. The indicator retries automatically every 100 ms, so the profile appears on its own as soon as the data arrives.

Removing and resetting

Right-click the chart, choose **Indicators List** (Ctrl+I), select the indicator and press **Delete**. Every object it created uses the **CVP_** prefix and is removed with it, and the chart's mouse scrolling is always restored. Changing the timeframe re-anchors the profile to the visible chart in AUTO mode, which is the quickest way to start fresh.

Reading the Chart

Eight elements. Learn them once and you can read any profile at a glance.



Figure 4.1 — The default chart layout. Numbers match the table below.

#	Element	What it tells you
1	POC bar (orange)	The busiest price row in the range. The POC line passes through its centre.
2	Histogram rows	Length = volume at that price. Colour runs from grey-blue (low) to bright blue (high). Rows inside the 70% value area get a royal-blue tint.
3	POC line (red dashed)	Extends across the full chart so you can see how today's price relates to the range's fair value.
4	Left handle ‹	Start of the range. The histogram is drawn from this bar to the right.
5	Right handle ›	End of the range. In AUTO mode it follows the newest bar.
6	RESET VP button	Re-anchors to the visible chart and switches to AUTO. Its LED is bright in AUTO and dim in LOCKED.
7	HIDE VP / SHOW VP	Hides or shows everything the indicator draws. Green LED = visible, red = hidden.
8	PRO message	A short note about the MT5 PRO edition. It hides itself after about four seconds and can be switched off.

KEY POINT

Read the profile in this order: **where is the POC, how wide is the value area, where are the thin zones**, and finally **where is price now** relative to all three.

Value area lines and volume numbers

With **Show VAH Line** and **Show VAL Line** enabled, the edges of value are drawn as dotted lines across the chart: green for VAH, blue for VAL. Together with the POC they form the three-line framework used in every playbook.



Figure 4.2 — POC, VAH and VAL lines enabled. Price rotating inside value, then testing the edges.

With **Show Volume Numbers on Bars** enabled, each row prints its volume at the end of the bar in a compact format (`850.00` , `12.40K` , `1.25M`). Rows with the same value as the row before are not repeated, which keeps the column readable.

Colour	Default	Meaning
Low Volume Fill	Slate blue C'58,72,104'	Thin rows. Little trade happened here.
High Volume Fill	DodgerBlue	Heavy rows. The gradient blends between the two by volume.
Value Area Tint	RoyalBlue at 34%	Applied on top of the gradient for rows inside value.
POC Bar	Orange	Only the single busiest row.
POC / VAH / VAL lines	Red / Green / DodgerBlue	Full-width horizontal levels.

NOTE

The histogram is drawn behind the candles, so price action always stays visible on top of the profile.

Interactive Controls

Grab a chevron, move it, and watch the POC follow your hand in real time.

Dragging the range

Place the mouse over a chevron, press the left button and move. While you hold it:

- The chevron turns **gold** and glows.
- Two **gold guide lines** appear: solid at the handle you are moving, dotted at the other edge.
- The **live info box** shows the bar count, FROM and TO times, POC, VAH, VAL and total volume.
- The histogram and lines recalculate continuously, capped at about 40 frames per second so the terminal stays smooth.
- Chart scrolling is paused so the chart does not slide under your mouse. It is restored the moment you release.



Figure 5.1 — Dragging the right handle. Guide lines and the info box exist only while you adjust.

The two handles always stay at least **3 bars** apart. The info box positions itself next to the handle and flips to the other side, or slides up, so it never leaves the chart. When you release, the guide lines and the box disappear instantly and one final full-precision pass removes any rounding from the live updates.

Tips for smooth dragging

- Press on the chevron box itself. A press anywhere else is a normal chart click and scrolls the chart.
- A handle can only travel across the part of the chart you can see. To anchor further back, zoom out or scroll first, then drag.
- Turn off chart **Auto Scroll** while you study an older range, so new bars do not push it off the screen.
- Turn on **Chart Shift** to leave room on the right, so the right handle at the newest bar is easy to grab.
- Lost a handle off-screen? Press **RESET VP** and both come straight back to the visible chart.

AUTO and LOCKED modes

The indicator always knows whether you placed the range yourself.

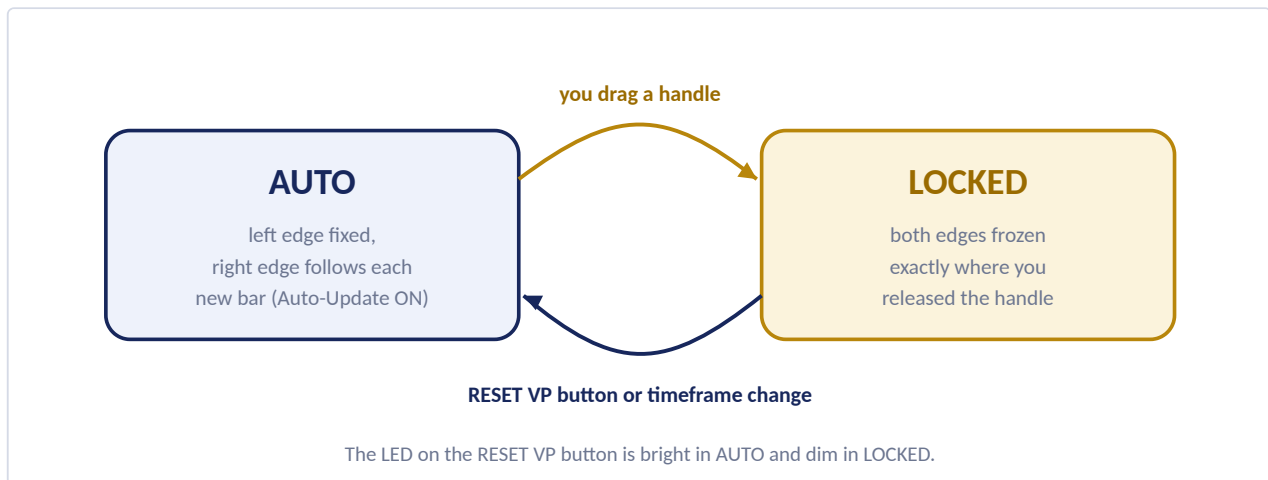


Figure 5.2 — The two range states and what moves between them.

Mode	How you enter it	What happens on a new bar
AUTO	Attaching the indicator, pressing RESET VP, or changing timeframe.	If Auto-Update is enabled, the right edge moves to the new bar. The left edge stays where it is, so the profile grows.
LOCKED	Releasing a handle after a drag.	Nothing moves. The range stays exactly where you put it until you press RESET VP or change timeframe.

The 3D buttons

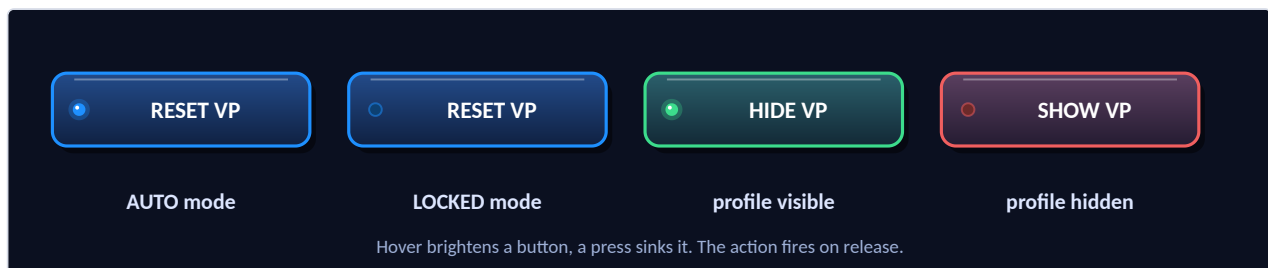


Figure 5.3 — Button states. The LED tells you the state without reading the label.

- **RESET VP** re-anchors from the leftmost visible bar to the current bar and switches to AUTO.
- **HIDE VP** removes the histogram, lines and handles from view; the button turns red and reads **SHOW VP**. The hidden state is remembered for that chart, even across timeframe changes and terminal restarts.

Where to anchor the left handle

Anchor point	Best for	What the profile then shows
Session open (London, New York)	Intraday traders	Where this session has built value so far.
Daily or weekly open	Day and swing traders	The developing value of the day or week.
Swing low / swing high	Trend traders	Where the current leg was built and where it is defended.
Break of structure (BOS / CHoCH)	SMC / ICT traders	Volume behind the new structure leg.
High-impact news candle	News traders	Whether the market accepted the news price or rejected it.

How the Engine Works

Understanding the maths makes you trust the levels, and use them better.

Step 1: splitting each candle's volume

A candle has a High, a Low and one volume number, but no record of exactly where inside its range the trades happened. The engine assumes trade was spread evenly across the candle and gives each price row a share in proportion to how much of that row the candle covered.



Figure 6.1 — One candle of 1,000 ticks spread across five rows.

Step 2: a grid that does not move

Classic profiles cut the range into exactly N rows, so every time the range changes, every row boundary moves and the POC can jump between neighbouring prices. The **Fixed Grid** mode instead sets the row height to the symbol's tick size multiplied by a power of two, and locks rows to fixed price multiples. Row boundaries never move while you drag, so the POC only changes when the volume actually changes.

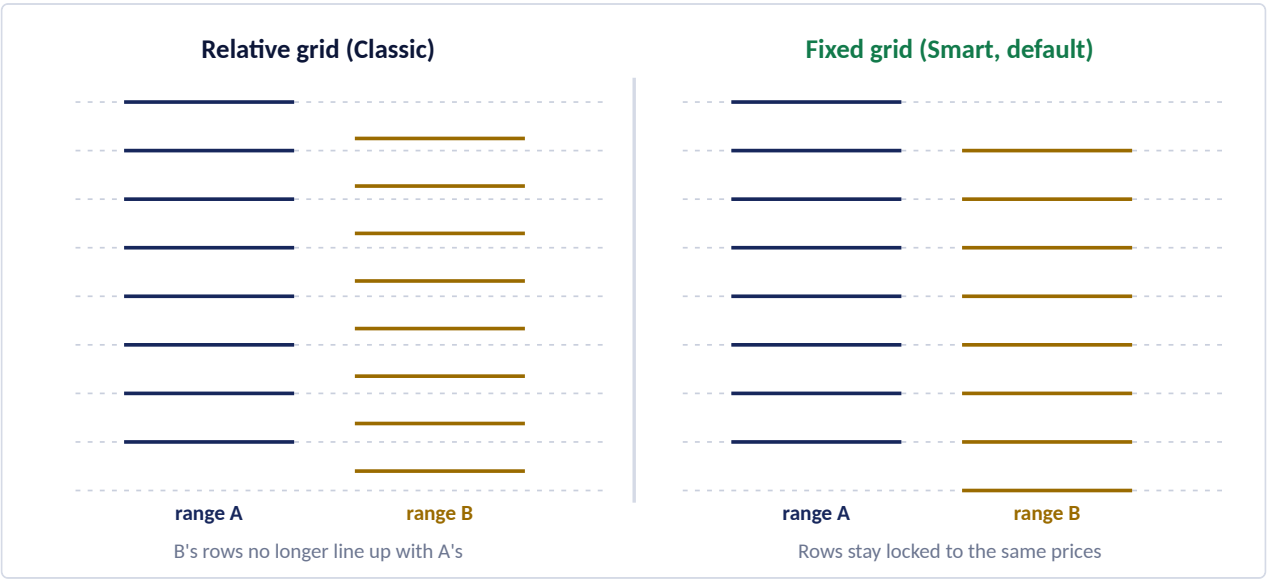


Figure 6.2 — Relative rows shift with the range; fixed rows stay locked to price.

Step 3: finding the POC and the value area

The POC is simply the fullest row. The value area is then grown outwards from it using the standard market-profile method: compare the next row above with the next row below, add the larger one, and repeat until the chosen percentage (70% by default) of total volume is inside.

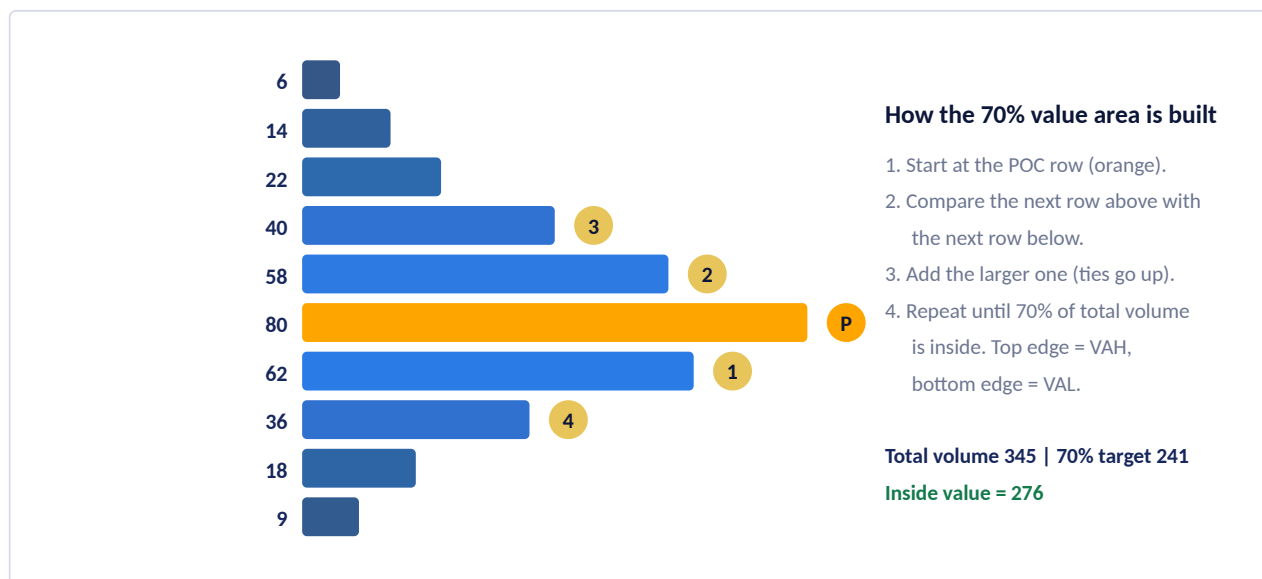


Figure 6.3 — The value area algorithm, step by step.

The POC price is the centre of the POC row. VAH is the top edge of the highest row inside value and VAL is the bottom edge of the lowest row inside value.

Step 4: staying fast while you drag

Technique	What it does for you
Bar data cache	Prices and volumes are copied once and reused. They are refreshed only on a new bar.
Incremental update	When a handle moves a few bars, only the bars entering or leaving the range are added or subtracted.
Object pool	Histogram rows are created once and then moved, resized and recoloured, never deleted and recreated. No flicker.
Frame budget	Redraws are capped at about one every 25 ms during a drag.
Final precision pass	On release, the profile is rebuilt from scratch once so no rounding drift remains.
MT4 history retry	If another timeframe's history is not yet loaded, the indicator retries every 100 ms instead of showing nothing.

KEY POINT

Because the grid is fixed, dragging feels stable: rows do not shimmer and the POC does not flicker between neighbours. If you prefer the classic look with exactly N rows, switch **Row Grid Mode** to Relative (Chapter 7).

Settings: Calculation

Four inputs decide what data is used and how finely it is sliced.

Setting	Default	What it does
Calculation Timeframe	Current	Which timeframe's candles are used to build the profile.
Number of Rows (Precision)	75	How many price rows the range is cut into.
Volume Type (Tick/Real)	Tick Volume	Which volume field is used.
Row Grid Mode	Fixed Grid (Smart)	How row boundaries are placed. See Chapter 6.

Calculation Timeframe

A lower timeframe gives a more accurate split of volume across prices, because each small candle covers a narrower price range. If you choose a timeframe **higher** than the chart, the indicator uses the chart timeframe instead.

Value	Effect	When to use it
Current	Uses the chart's own candles. Fastest, no extra history.	Default. Scalping and most intraday work.
One step lower (H1 chart, M15 data)	Noticeably sharper POC and value edges.	Day trading and swing charts.
Much lower (H4 chart, M1 data)	Finest detail; needs much more history.	Only for short ranges, or with Max bars in chart raised.

Number of Rows (Precision)

Value	Effect	When to use it
30 - 50	Chunky rows, clear zones, very fast.	Higher timeframes, quick overview, slow PCs.
75 (default)	Balanced detail.	Most charts.
100 - 150	Fine detail, exact LVN and HVN edges.	Gold, indices, crypto and wide ranges.
200+	Very thin rows; can look noisy.	Rarely needed. The engine caps the profile at 420 rows.

In Fixed Grid mode the row height is rounded up to a clean tick multiple, so you will usually see between half and the full number you entered. Values below 10 are treated as 10.

Volume Type

MT4 brokers almost always supply tick volume only. If you choose **Real Volume** and the broker has none, the indicator detects the zeros and falls back to tick volume automatically, so the profile is never empty.

Row Grid Mode

Value	Effect	When to use it
Fixed Grid (Smart)	Rows locked to price; stable while dragging; incremental updates.	Default. Best for interactive use.
Relative (Classic)	Always exactly N rows across the range; full rebuild on every change.	When you want the classic look or compare with other profile tools.

Settings: Histogram Display

Make the profile readable on your chart and your screen.

Setting	Default	What it does
Histogram Size	Small	Longest bar = 25%, 50% or 75% of the chart width.
Low Volume Fill Color	C'58,72,104'	Colour of the thinnest rows.
High Volume Fill Color	DodgerBlue	Colour of the heaviest rows.
Volume Gradient Fill	Enable	Blend between the two colours by volume. Disable for one flat colour.
Value Area Tint Color	RoyalBlue	Tint mixed into rows inside the value area.
Highlight Value Area Rows	Enable	Turn the tint on or off.
POC Bar Highlight Color	Orange	Colour of the single busiest row.
Show Histogram	Enable	Disable to keep only the lines (POC / VAH / VAL).



Figure 8.1 — Histogram Size: Small, Medium and Large.

Choosing a size

Value	Effect	When to use it
Small (25%)	Profile stays out of the way of price.	Default. Busy charts, scalping, multiple indicators.
Medium (50%)	Shape and thin zones are easier to read.	Analysis, swing charts, screenshots.
Large (75%)	Maximum detail.	Study sessions or when the range is short.

Colour tips

- On a **light chart background**, choose a lighter Low Volume colour (for example Silver) so thin rows do not look like black bars.
- Keep the POC bar colour different from the High Volume colour so the POC row always stands out.
- Use **Show Histogram = Disable** with the three lines enabled for a clean, levels-only chart.

KEY POINT

The gradient is curved (intensity to the power 0.6) so medium-volume rows are clearly visible, not lost in grey. Heavy zones pop, thin zones fade.

Settings: Level Lines and Value Area

Three lines that turn a histogram into a trading map.

Setting	Default	What it does
Show POC Line	Enable	Full-width line at the POC price.
POC Line Color / Style / Width	Red / Dash / 1	Appearance of the POC line.
Show VAH Line	Disable	Full-width line at the Value Area High.
VAH Line Color / Style / Width	Green / Dot / 1	Appearance of the VAH line.
Show VAL Line	Disable	Full-width line at the Value Area Low.
VAL Line Color / Style / Width	DodgerBlue / Dot / 1	Appearance of the VAL line.
Value Area Percentage	70.0	Share of total volume the value area must contain (0 - 100).

MT4 LINE WIDTH RULE

MetaTrader 4 only draws Dash, Dot and DashDot styles at **width 1**. At width 2 or more the line is always solid. That is why all three line widths default to 1 in this MT4 build. If you prefer a thicker line, choose **Solid** style with width 2.

Value Area Percentage

Value	Effect	When to use it
60 - 65%	Narrow value area; edges sit close to the POC.	Tight ranges, scalping the core.
70% (default)	The industry standard, roughly one standard deviation.	Almost always. Matches most other platforms.
80 - 85%	Wide value area; only the extremes are outside.	Very volatile symbols or long swing ranges.

Recommended line setups

Style	POC	VAH / VAL	Why
Clean intraday	Red Dash 1	Green / Blue Dot 1	Three levels, easy on the eyes.
Bold levels	Red Solid 2	Green / Blue Solid 1	Clear on high-resolution screens.
Levels only	Gold Solid 2	Grey Dot 1	Combine with Show Histogram = Disable.

NOTE

Lines follow the visibility toggle: HIDE VP removes them along with the histogram, and SHOW VP brings them back with the current values.

Settings: Handles, Labels and Interface

Shape the controls around the way you work.

Drag Handles

Setting	Default	What it does
Handle Vertical Position (% of chart)	82	Height of the chevrons, 10 = near the top, 90 = near the bottom.
Handle Accent Color	DodgerBlue	Chevron border and glow at rest and on hover.
Handle Color While Dragging	Gold	Chevron colour during a drag.
Guide Line Color (drag only)	Gold	Colour of the two vertical guide lines shown while dragging.
Show Live Info Box While Dragging	Enable	Turn the floating statistics box on or off.

Move the handles up or down if they cover candles or another indicator's panel. Values outside 10 - 90 are clamped.

Volume Labels

Setting	Default	What it does
Show Volume Numbers on Bars	Disable	Prints each row's volume at the end of the bar.
Volume Label Color	White	Text colour.
Volume Label Font Size	8	Text size in points.
Volume Label Font	Arial	Any font installed in Windows.

Interface and Controls

Setting	Default	What it does
Color Theme	Dark	Look of the buttons, handles and info box. Light suits white chart backgrounds.
Show 3D Chart Control Buttons	Enable	Show RESET VP and HIDE VP in the top-right corner.
Button Text Color	White	Button label colour.
Button Color - State ON	C'60,220,140'	Accent of HIDE VP while the profile is visible.
Button Color - State OFF	C'240,95,95'	Accent of SHOW VP while the profile is hidden.
Auto-Update on New Bar (AUTO mode)	Enable	In AUTO mode, extend the right edge to each new bar.
Show "Upgrade to Pro" Chart Message	Enable	Short PRO (MT5) note shown for about four seconds on load.
Pro Version Link	MQL5 product link	Reference link to the PRO product page.

TIP

Running two copies of the indicator on one chart, for example a session profile and a weekly profile? Disable the buttons on the second copy so they do not sit on top of each other.

Buffers and EA Integration

Turn the levels into rules. Any Expert Advisor can read them.

Buffer	Content	Empty value
0	POC price	EMPTY_VALUE when no profile is ready
1	VAH price	EMPTY_VALUE when no profile is ready
2	VAL price	EMPTY_VALUE when no profile is ready

Every bar of each buffer holds the same value, so you can read shift 0 at any time. The buffers are also visible in the MT4 **Data Window** (Ctrl+D) as POC, VAH and VAL.

```
//--- MT4 EA: read the three levels from Crystal Volume Profile Auto POC
#property strict
string CVP = "Market\\Crystal Volume Profile Auto POC MT4"; // name as shown in Navigator

double CvpLevel(int buffer) // 0 = POC, 1 = VAH, 2 = VAL
{
    double v = iCustom(_Symbol, 0, CVP, buffer, 0); // no inputs passed = default settings
    return (v == EMPTY_VALUE || v <= 0.0) ? 0.0 : v;
}

int OnInit() { return INIT_SUCCEEDED; }
void OnDeinit(const int reason) {}

void OnTick()
{
    double poc = CvpLevel(0), vah = CvpLevel(1), val = CvpLevel(2);
    if(poc == 0.0 || vah == 0.0 || val == 0.0) return; // profile not ready yet

    if(Bid > vah) Comment("Above value | POC ", DoubleToString(poc, _Digits));
    else if(Bid < val) Comment("Below value | POC ", DoubleToString(poc, _Digits));
    else Comment("Inside value | POC ", DoubleToString(poc, _Digits));
}
```

PASSING INPUTS FROM AN EA

MT4's `iCustom()` expects every input in its exact order, **including the separator text inputs**. If you pass only some parameters, the values shift and the indicator receives wrong settings. The safe way is to pass no inputs and use defaults, as in the example.

EA idea	Rule built from the buffers	Why it helps
Value filter	Only take breakout trades when Bid is outside [VAL, VAH]; only take fades inside it.	Matches the strategy to balance or imbalance.
Chop filter	Skip new entries while price is within a few points of the POC.	The POC is where two-sided trade is heaviest.
Reversion target	Use the POC as take-profit for trades entered at VAH or VAL.	A natural, data-driven target.
Stop placement	Put the stop a buffer beyond VAH or VAL for fade trades.	Invalidation is clear when value is rejected.

WHICH RANGE DOES THE EA SEE?

An EA's copy of the indicator runs on its own, separate from the copy you drag on your chart. It starts in AUTO mode from the chart's visible range and extends with each new bar. In a non-visual Strategy Tester run there is no visible range, so it can fall back to the most recent 60 bars. Design EA rules around that behaviour. If you hide the profile with HIDE VP on the same chart the EA runs on, show it again before relying on the buffers.

Trading Playbooks

Six proven volume-profile setups. Each one uses the levels this indicator draws.

Setup 1 — POC magnet (reversion)



Figure 12.1 — Price stretches away from value, then returns to the POC.

Stage	What you are waiting for
Context	A balanced (D-shape) profile and no strong trend on the higher timeframe.
Trigger	Price stalls far from value: rejection wicks, slowing momentum, an LVN or HTF level reached.
Entry	Enter back towards value after the stall; stop beyond the swing extreme.
Target	The POC line. Partial profit at the value edge on the way.

Setup 2 — Value area edge rotation

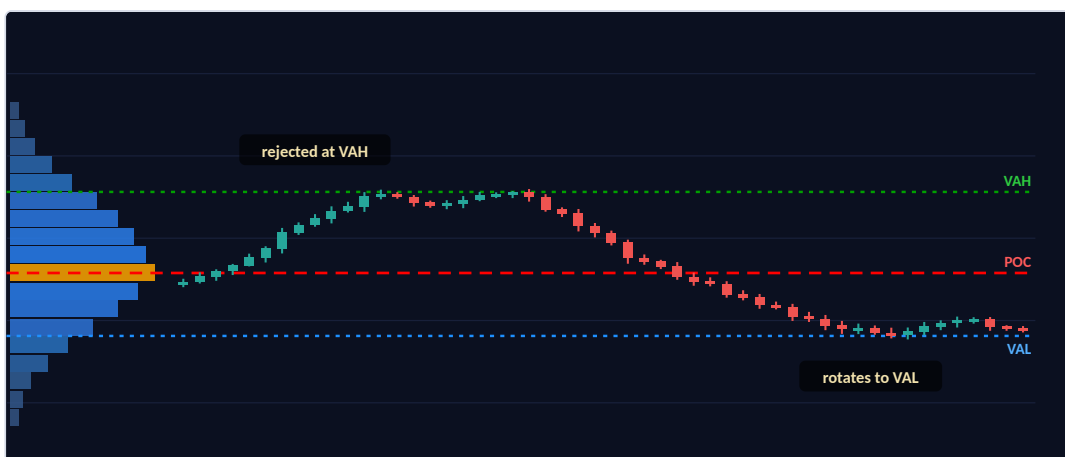


Figure 12.2 — Rejected at VAH, price rotates through the POC to VAL.

Stage	What you are waiting for
Context	Price is inside yesterday's or this session's value area.
Trigger	A test of VAH (or VAL) that fails: rejection candle, price closes back inside.
Entry	Fade the edge; stop just outside the value area.
Target	POC first, then the opposite edge.

Setup 3 — Breakout and acceptance

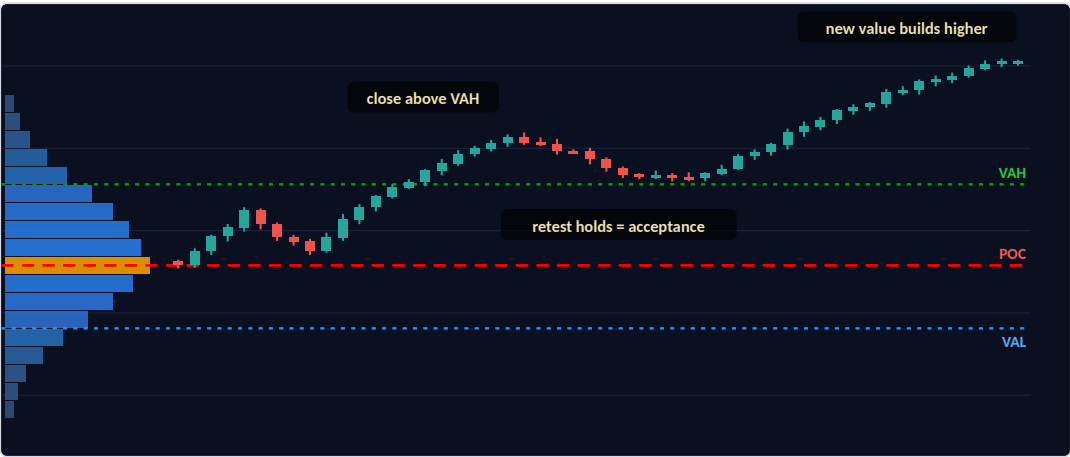


Figure 12.3 — A close above VAH, a retest that holds, and value migrates higher.

Stage	What you are waiting for
Context	Price coils near a value edge; higher-timeframe trend points the same way.
Trigger	A candle closes outside value, then a pullback to VAH (or VAL) holds.
Entry	On the hold of the retest; stop back inside value, below the retest low.
Target	The next HVN, a higher-timeframe POC, or trail as new value builds.

Setup 4 — The value re-entry (80% rule)

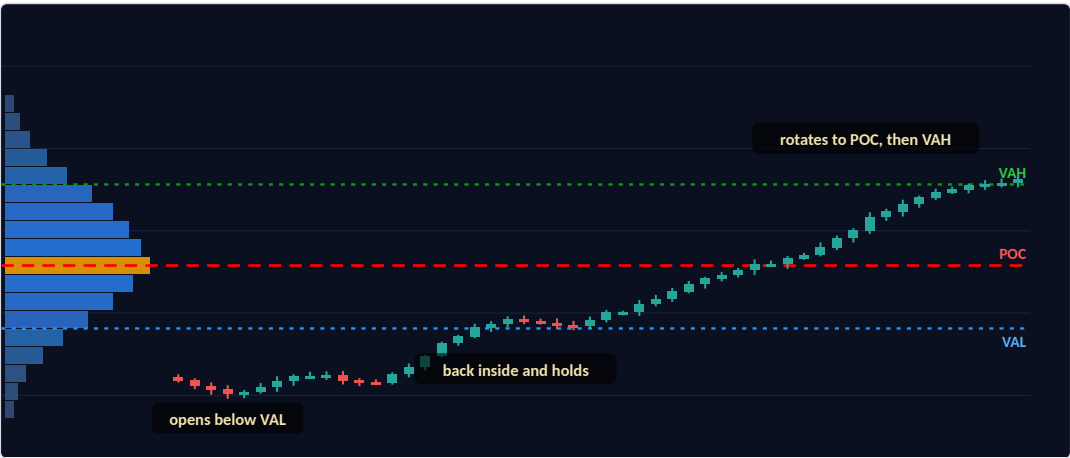


Figure 12.4 — Opens below VAL, is accepted back inside, rotates across value.

Stage	What you are waiting for
Context	The new session opens outside the previous session's value area.
Trigger	Price trades back inside and holds there (classic test: two 30-minute periods).
Entry	In the direction of the rotation; stop back outside the entry edge.
Target	POC first, then the opposite edge of value. The name is a label, not a guaranteed rate.

Setup 5 — Low Volume Node expansion



Figure 12.5 — Price leaves one HVN, crosses the thin LVN quickly, and builds a new HVN.

Stage	What you are waiting for
Context	A double-distribution profile with a clear thin zone between two fat zones.
Trigger	Price breaks out of one HVN and enters the LVN with momentum.
Entry	With the move, early in the LVN; stop back inside the HVN it left.
Target	The far HVN. Do not expect support or resistance inside the LVN itself.

Setup 6 — SMC / ICT confluence



Figure 12.6 — Liquidity is swept below VAL into a bullish order block, then price returns to value.

Stage	What you are waiting for
Context	An order block, FVG or liquidity pool lines up with VAL, VAH, an HVN or the POC.
Trigger	Sweep of the level plus a change of character on your execution timeframe.
Entry	On the CHoCH or the first FVG retest; stop beyond the sweep.
Target	POC, then the opposite value edge. FVGs inside an LVN often fill fast.

Combining profiles

The strongest levels are the ones that several profiles agree on. Attach a second copy of the indicator, disable its buttons, and anchor it to a different range.

Combination	How to set it up	What to look for
Session + previous day	Copy 1 dragged to today's open, copy 2 locked on yesterday's range.	Today's price reacting at yesterday's VAH, VAL or POC.
Swing + session	Copy 1 anchored at the swing low of the trend, copy 2 at the session open.	A session POC forming at the swing profile's HVN.
Week + day	Copy 1 from the weekly open (H1 chart), copy 2 from the daily open (M15 chart).	Weekly value edges as the outer frame for intraday trades.
Multi-timeframe confirmation	Same anchor, calculated on M5 and on H1 data.	A POC that stays in the same place on both is robust.

Risk management with profiles

- Place stops **behind HVNs** (price has to push through heavy trade to reach them) or **beyond LVNs** (once price is through, it tends to keep going).
- Avoid placing stops **inside** a fat HVN where price chops back and forth.
- Size positions from the distance to your stop, not from how good the setup looks. Risk a fixed small percentage per trade.
- When the value area is very narrow, expect a breakout. When it is very wide, expect rotation.

Pre-trade checklist

- Is the profile **anchored** to a meaningful point (session, swing, BOS, news)?
- What is the **shape**: balance (D), P, b or double distribution?
- Is price **inside value** (rotation plays) or **outside value** (breakout and re-entry plays)?
- Where is the nearest **LVN** price could travel through, and the nearest **HVN** where it could stall?
- Does the **higher timeframe** agree with the trade direction?
- Is the stop behind a real level, and is the risk a fixed small percentage of the account?

KEY POINT

A level is an area, not a line. Allow a few points around the POC, VAH and VAL, especially on Gold and indices, and wait for price to show its hand before you commit.

WARNING

No setup works every time. Every playbook here is a framework for decisions, not a guarantee. Test any idea on a demo account first.

Every Market, One Tool

Volume at price is universal. The indicator adapts to each symbol's tick size automatically.

Market	Suggested chart / data	Rows	What to focus on
Forex majors (EURUSD, GBPUSD, USDJPY...)	M15 - H1 chart, M5 data	75 - 100	London and New York build most volume. Anchor at the session open; trade VAH / VAL rotations in Asia.
Forex crosses and exotics	H1 chart, current data	50 - 75	Thinner ticks and wider spreads. Fewer rows, wider stops, trust HVNs more than single rows.
Gold (XAUUSD) and Silver	M5 - M15 chart, M1 data	100 - 150	Large ranges and sharp LVN moves. Fixed Grid keeps rows stable. Watch the New York open.
US indices (US30, US500, NAS100)	M5 - M15 chart	100	Anchor at the 9:30 New York cash open. Overnight gaps often fill towards the prior POC.
European and Asian indices (GER40, UK100, JPN225)	M15 chart	75 - 100	Anchor at their own cash open, not the US open.
Crypto (BTCUSD, ETHUSD)	M15 - H4 chart	100 - 150	Trades 24/7. Anchor at the daily or weekly open; weekend profiles are thin.
Energies (USOIL, UKOIL, NGAS)	M15 - H1 chart	75	Inventory releases create LVN gaps. Respect the prior day's POC.
Stock CFDs	H1 - D1 chart	75	Earnings gaps leave LVNs. Some brokers provide real volume: try Real Volume.

Session anchoring quick reference

Session	Approximate GMT hours	Profile behaviour
Asia (Tokyo / Sydney)	23:00 - 08:00	Often a narrow D-shape. Its edges become London's first targets.
London	07:00 - 16:00	Usually sets the day's direction. Watch the break of Asia's value area.
New York	12:00 - 21:00	Overlaps London until about 16:00, the busiest window of the day.

BROKER SERVER TIME

MT4 shows your broker's server time, not GMT. Check your broker's offset once, then anchor the left handle at the matching candle.

KEY POINT

On every market the logic is the same: fat zones attract and slow price, thin zones repel and speed it up. Only the timeframe and the row count change.

Presets by Trading Style

Start here. Change one thing at a time from these values.

Scalper (M1 - M5)

Setting	Value	Reason
Calculation Timeframe / Rows	Current / 50 - 75	Fast, clean rows on small ranges.
Histogram Size	Small	Keeps price action visible.
VAH / VAL lines	Enable	Edges are the scalping triggers.
Auto-Update	Enable	Profile follows the session as it develops.

Day trader (M15 - M30)

Setting	Value	Reason
Calculation Timeframe / Rows	M5 / 75 - 100	Sharper levels without heavy history needs.
Anchor	Drag the left handle to the session open	A session profile is the day trader's map.
Value Area Percentage	70	Standard edges for the 80% rule and rotations.
Second copy	Locked on the previous day	Yesterday's levels as reference.

Swing trader (H1 - H4)

Setting	Value	Reason
Calculation Timeframe / Rows	M15 or H1 / 100 - 150	Accurate distribution over long ranges.
Histogram Size	Medium	Shape and LVNs are easier to read.
Anchor	Swing low or high of the current leg (LOCKED)	Shows where the trend was built.
Volume Labels	Enable	Compare HVN strength directly.

SMC / ICT trader (any)

Setting	Value	Reason
Rows / Grid	100 / Fixed Grid	Precise edges that line up with order blocks.
Anchor	The BOS or CHoCH swing	Volume behind the new structure.
Lines	POC, VAH, VAL all enabled	Confluence with OBs, FVGs and liquidity pools.

Position trader (D1)

Setting	Value	Reason
Calculation Timeframe / Rows	H4 / 150	Detailed long-term value areas.
Value Area Percentage	70 - 80	Wider value over months of data.
Row Grid Mode	Relative	Exactly N rows across a very wide range.

Go Further: Volume Profile Order Flow PRO

This indicator shows you *WHERE* volume traded. *PRO* shows you *WHO* is winning, bar by bar.

Trade With Delta Flow & 7 Order Flow Engines

Volume Profile Order Flow PRO is the full order-flow suite from Crystal AI Systems. **Available for MetaTrader 5 only.**

Crystal Volume Profile Auto POC gives you a clean, fast, draggable volume profile. When you are ready to read pressure as well as location, PRO adds a complete order-flow workspace on top of the same profile foundation: per-bar delta numbers, a buyer-versus-seller strength oscillator, naked POC tracking, premium 3D session histograms, a statistics dashboard and alerts.

Feature	This indicator (MT4 v3.00)	Order Flow PRO (MT5)
Volume profile with POC, VAH, VAL	Yes, draggable range	Yes, anchored right-edge composite
Value area tint and volume gradient	Yes	Yes
EA buffers	POC, VAH, VAL	VOBS buffers via iCustom()
Per-bar delta footprint	—	Yes
VOBS strength oscillator	—	Yes, separate window
Session histograms (H4 / H8 / H12)	—	Yes, with 3D depth rendering
Naked POC tracker	—	Yes, 1 - 7 days of history
Statistics dashboard	—	Yes, four sections
Alerts: POC touch, VA break, naked POC retest	—	Popup, sound and mobile push
One-click FLOW / SESS / EDGE toggles	—	Yes, remembered per symbol
Visual themes	Dark / Light controls	Six themes including Custom
Platform	MetaTrader 4	MetaTrader 5

Trader	PRO feature you will use most
Scalper	Delta footprint on the live session to confirm who is pushing at POC and value edges.
Day trader	Session histograms and naked POCs as the day's map; alerts so you do not watch all day.
Swing trader	Multi-day naked POCs as targets; VOBS divergence at swing extremes.
EA developer	VOBS buffers readable through iCustom(), fast in the Strategy Tester.

WHY UPGRADE

If you already trade POC and value-area levels with this indicator, PRO answers the next question at those levels: **is the pressure behind this move real, or is it fading?** See it on the product page: <https://www.mql5.com/en/market/product/176084>

Engine 1 — Per-bar delta footprint

Net delta printed directly on the live session's candles: green numbers under bullish bars, red numbers over bearish bars. Several large positive numbers in a row show aggressive buying; a sudden spike followed by a reversal candle warns of a stop run or absorption.

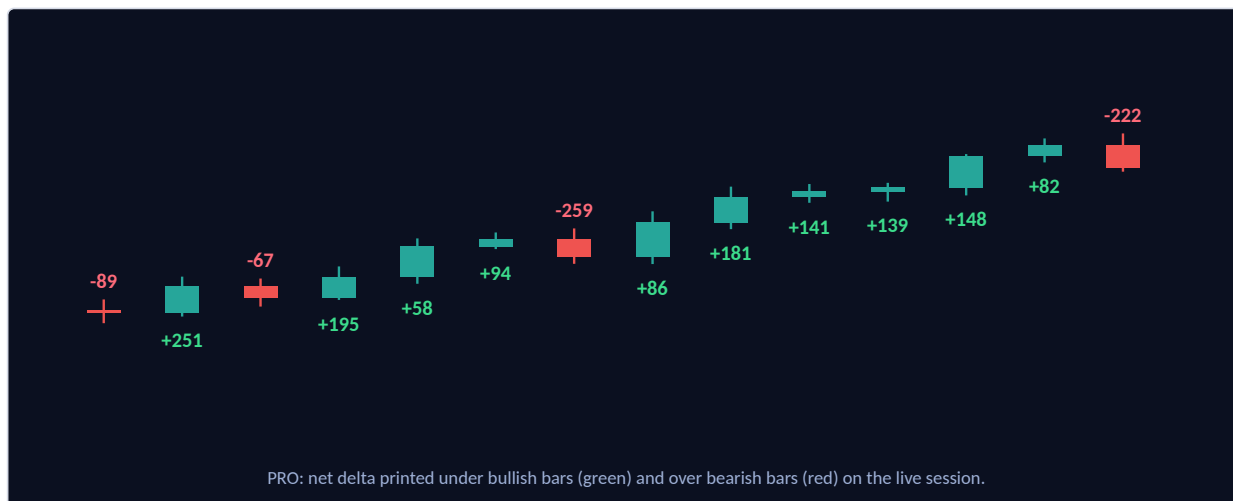


Figure 15.1 — Delta footprint on the running session (PRO, MT5).

Engine 2 — VOBS strength oscillator

The Volume Order Book Strength engine measures the volume-weighted imbalance between buyers and sellers over two lookback windows and grades every bar by intensity. It auto-scales to the visible bars and exposes momentum shifts and divergences that a cumulative delta line hides.

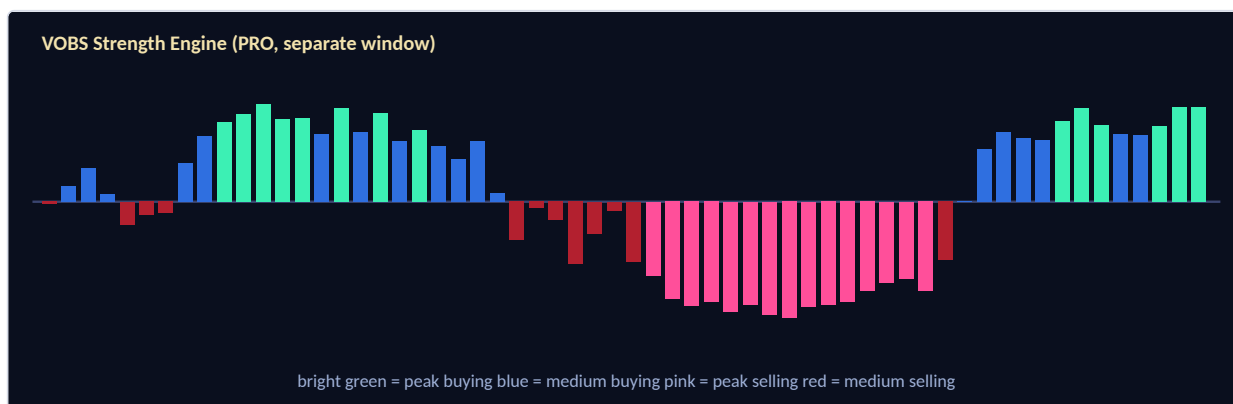


Figure 15.2 — VOBS bars graded by strength (PRO, MT5).

ABOUT DELTA ON FOREX AND CFDs

Spot forex and most CFDs have no central exchange tape. Delta and strength readings are built from the tick data your broker streams, so read them as **pressure**, not as an exchange-reported trade count.

Engine 3 — Naked POC tracker

The POC of each completed day stays on the chart as a gold dotted line until price trades back to it. Untested POCs are levels the market has not revisited yet, and many traders watch them as targets and reaction zones.

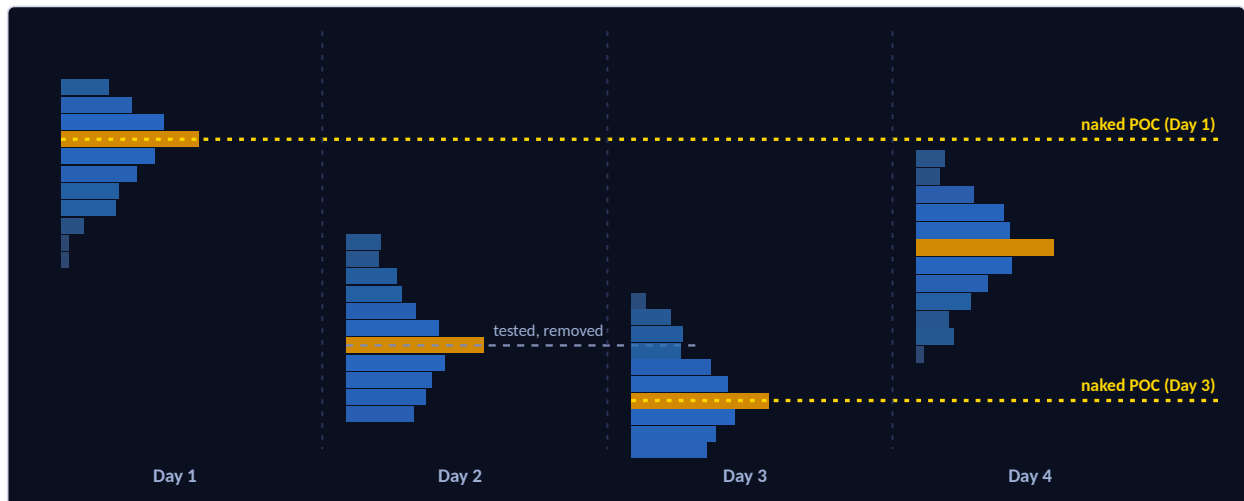


Figure 15.3 — Naked POCs extend until tested, then drop off (PRO, MT5).

Engine 4 — Premium 3D session histograms

Each H4, H8 or H12 session gets its own profile with volume-driven depth: heavier rows extrude further, bullish sessions take cyan-green tones and bearish sessions coral-pink.

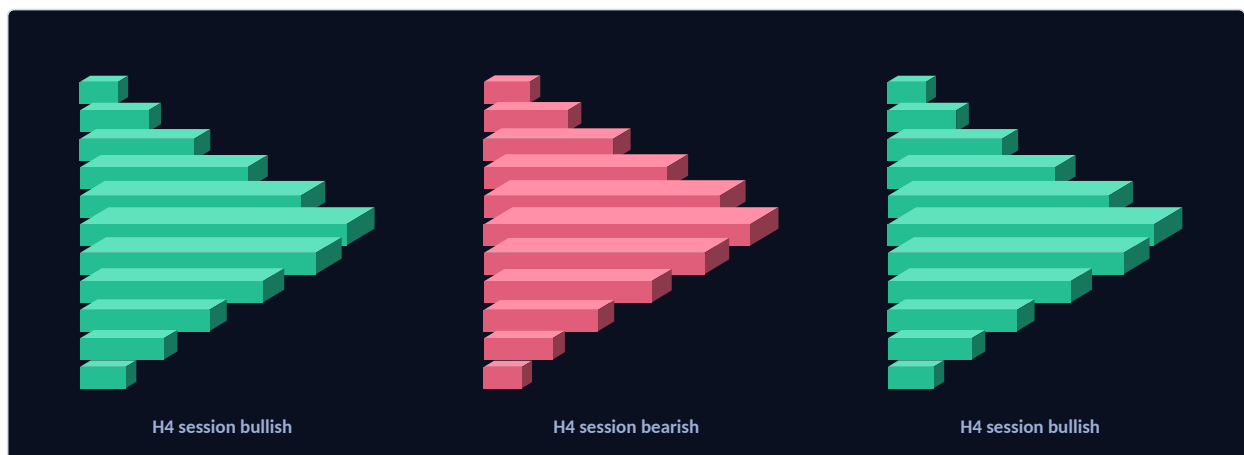


Figure 15.4 — 3D session profiles (PRO, MT5).

Engines 5 - 7 — Dashboard, alerts and tester speed

- **Statistics dashboard:** composite POC / VAH / VAL, live session POC and volume, VOBS reading, naked POC count and spread.
- **Alerts** on POC touch, value area break and naked POC retest, by popup, sound or MetaTrader mobile push, with a cooldown to prevent spam.
- **Strategy Tester optimised:** bulk-array calculations and two-phase rendering so backtests run at broker speed, with VOBS buffers available to EAs.

Volume Profile Order Flow PRO | MetaTrader 5 only

<https://www.mql5.com/en/market/product/176084>

MT4 Platform Notes and Performance

What MetaTrader 4 does differently, and how to keep the indicator light.

MT4 behaviour	What you notice	What to do
Dash and Dot styles only draw at width 1	A width-2 dashed POC line looks solid.	Keep width 1 for dashed or dotted, or use Solid at width 2.
Other timeframes load history on demand	Blank profile for a moment after choosing a lower Calculation Timeframe.	Wait; the indicator retries every 100 ms. Scroll left to force history download if needed.
Brokers supply tick volume only	Real Volume gives the same result as Tick Volume.	Normal. The automatic fallback keeps the profile working.
Max bars in chart limit	Very long ranges with low-timeframe data are cut short.	Raise Tools > Options > Charts > Max bars in chart, or use a higher Calculation Timeframe.
Strategy Tester	Handles and buttons need visual mode to respond.	Use visual mode to study ranges; EAs read buffers in any mode.

Performance tips

- Keep **Number of Rows** at 150 or below for everyday use. Above that you gain little detail and draw more objects.
- Leave **Volume Labels** off unless you are studying the profile; each label is an extra chart object.
- Use **Calculation Timeframe = Current** on slower PCs or VPS machines.
- Keep **Fixed Grid** mode: it updates incrementally while you drag, while Relative mode rebuilds on every move.
- Two copies on one chart are fine. Ten copies on ten charts with M1 data on H4 ranges will be heavy on any terminal.

Recommended MT4 chart settings

Setting	Where	Recommendation
Max bars in chart	Tools > Options > Charts	50,000 or more if you calculate on M1 or M5 data.
Auto Scroll	Chart toolbar	Off while studying an old range; on for live AUTO profiles.
Chart Shift	Chart toolbar	On, so the right handle at the newest bar has space.

Real-time versus backtesting

Environment	Behaviour
Live chart	Full interactivity. AUTO mode extends on each new bar; LOCKED stays fixed.
Visual Strategy Tester	Profile and handles work; useful for replaying how value developed.
Non-visual tester (EA)	No drawing needed; buffers are still calculated for iCustom().

NOTE

Every on-chart object uses the `CVP_` prefix and is hidden from the object list, so the indicator never clashes with your own drawings or other tools.

Troubleshooting

Symptom, cause, fix. Most issues are solved in under a minute.

Symptom	Likely cause	Fix
Nothing appears on the chart	Profile hidden, histogram disabled, or history still loading.	Press SHOW VP; check Show Histogram; wait a moment or scroll left.
Profile blank with a lower Calculation Timeframe	That timeframe's history is not downloaded yet.	Open that timeframe once, or scroll left; raise Max bars in chart.
The profile stopped updating	You dragged a handle, so the range is LOCKED.	Press RESET VP to return to AUTO.
Right edge does not follow new bars	LOCKED mode, or Auto-Update disabled.	Press RESET VP and enable Auto-Update.
I cannot see the handles	A range edge is scrolled off-screen, or the profile is hidden.	Scroll to the range or press RESET VP; adjust Handle Vertical Position.
The chart scrolls instead of the handle moving	The press started outside the chevron.	Press directly on the chevron box, then drag.
POC line is solid, not dashed	MT4 draws dashes only at width 1.	Set POC Line Width to 1.
Rows look too coarse	Few rows, or Fixed Grid rounded the row height up.	Raise Number of Rows, use a lower Calculation Timeframe, or try Relative mode.
Rows look noisy	Too many rows for the range.	Lower Number of Rows to 50 - 75.
Histogram covers the candles	Histogram Size too large.	Choose Small, or switch Show Histogram off and keep the lines.
Buttons overlap another panel	Two tools use the top-right corner.	Disable Show 3D Chart Control Buttons on one copy.
The PRO message appears on load	Show "Upgrade to Pro" Chart Message is enabled.	Set it to Disable.
EA reads 0 or EMPTY_VALUE	Wrong indicator name/path, or profile not ready yet.	Use the exact Navigator name (Market\...); skip the tick while the value is empty.
MT4 and MT5 POC differ slightly	Different broker feeds, tick counts and server times.	Normal. Compare on the same broker and the same anchor times.
Real Volume shows the same as Tick	Your MT4 broker supplies no real volume.	Normal. The indicator falls back to tick volume.

STILL STUCK?

Open the **Experts** and **Journal** tabs in the Terminal window and look for messages from the indicator, then contact support through the product's Comments page with your MT4 build number, symbol, timeframe and a screenshot.

Frequently Asked Questions

The questions traders ask most, answered straight.

Does the indicator repaint?

The profile describes the range you selected. In AUTO mode the right edge grows with each new bar, so the POC can move as new volume arrives, exactly like any developing profile. A LOCKED range never changes.

Why does the POC move while I drag?

Because the data inside the range is changing. That is the point of live dragging: you see the fair price of any range instantly.

Is tick volume good enough?

Yes for profile shape and levels. Studies of liquid forex pairs show very high correlation between hourly tick volume and real traded volume.

Can I use it on any symbol?

Yes. Forex, metals, indices, crypto, energies and stock CFDs. Row height adapts to each symbol's tick size.

Which timeframe is best?

Any. Use M5 - M15 for intraday sessions, H1 - H4 for swings. See Chapters 13 and 14.

Can I run two profiles on one chart?

Yes. Attach a second copy, anchor it differently and disable its buttons.

Does my dragged range survive a timeframe change?

No. A timeframe change always re-anchors to the visible chart in AUTO mode. The HIDE / SHOW state is remembered.

How do I get the old behaviour of a fixed N rows?

Set Row Grid Mode to Relative (Classic).

Can an EA trade the levels?

Yes. Read buffers 0, 1 and 2 with iCustom(). See Chapter 11.

Does it work in the Strategy Tester?

Yes. Use visual mode to drag ranges; EAs can read the buffers in any mode.

Why is the value area not exactly 70%?

Rows are added whole, so the value area holds at least the chosen percentage, usually slightly more.

Does it send alerts?

Not in the MT4 edition. Alerts on POC touch, value area break and naked POC retest are part of Order Flow PRO for MT5.

Is there an MT5 version?

Yes. The free MT5 edition runs the same v3.00 engine, and Order Flow PRO is the full MT5 suite.

Can I remove the PRO message?

Yes. Set Show "Upgrade to Pro" Chart Message to Disable.

Will it slow my terminal?

No with sensible settings. The engine caches data, updates incrementally and reuses its chart objects.

Can I change colours for a white chart?

Yes. Use the Light theme and pick a lighter Low Volume colour (Chapter 8).

Why do handles stay 3 bars apart?

A profile of one or two bars has no meaningful distribution, so a 3-bar minimum is enforced.

Where does the histogram start?

At the left handle, growing to the right, behind the candles.

Can I anchor further back than the screen shows?

Yes. Zoom out or scroll the chart first, then drag the handle. A handle moves only across the visible chart.

What is the VOLUME number in the info box?

The total volume of every row in the range, in the volume type you selected (usually ticks).

Does it need DLLs or an internet connection?

No. It uses only standard MT4 functions and your broker's price history.

Does HIDE VP stop the calculation?

While hidden, the profile is not redrawn on new bars and the buffers keep their last values. Press SHOW VP to bring everything up to date.

What happens over the weekend?

Nothing changes. The profile waits for the next bar.

Can I use it on a VPS?

Yes. It is light enough for a standard trading VPS.

Glossary

Term	Meaning
Acceptance	Price spends time and builds volume at a level; the market agrees it is fair.
Anchor	The bar where the profile range starts (the left handle).
AUTO mode	Range follows the chart: re-anchored on reset, extended on each new bar.
Balance	Two-sided trade inside a range, usually a D-shaped profile.
Buffer	A data series an indicator exposes to EAs and the Data Window.
Calculation Timeframe	The timeframe whose candles are used to build the profile.
Delta	Buying minus selling pressure in a bar (PRO feature).
Fixed Grid	Rows locked to fixed price multiples so they do not move while dragging.
HVN	High Volume Node; a fat zone of heavy trade.
iCustom()	MQL function an EA uses to read another indicator's buffers.
LOCKED mode	Range frozen where you released the handle.
LVN	Low Volume Node; a thin zone price usually crosses quickly.
Naked POC	A past POC price has not traded back to (PRO feature).
POC	Point of Control; the price row with the most volume.
Rejection	Price moves quickly away from a level with little volume built.
Rotation	Price moving from one value edge to the other through the POC.
Tick volume	Number of price changes in a bar; MT4's volume measure.
Value Area	Band around the POC holding 70% (default) of volume.
VAH / VAL	Value Area High and Value Area Low, the edges of value.
VOBS	Volume Order Book Strength oscillator (PRO feature).

Version History, Support and Disclaimer

Version history

Version	Highlights
3.00 (MT4)	Full port of the MT5 v3.00 engine: canvas drag handles with live POC, gold guide lines and info box, smart fixed-price grid, incremental updates, value area with VAH / VAL lines and tint, volume gradient, 3D buttons with LEDs, POC / VAH / VAL buffers, automatic history retry, legacy v1.x object cleanup, two-line PRO note.
1.74 (MT4)	Vertical-line range selection, POC line, Reset and Hide buttons, histogram size options.

Getting help

- Post questions on the product's **Comments** page on MQL5, or send a private message to the author through MQL5. Product page: <https://www.mql5.com/en/market/product/145517>
- Include your MT4 build number, broker, symbol, timeframe, the inputs you changed and a screenshot.
- More Crystal AI Systems tools: <https://www.mql5.com/en/users/jawadtrader22/seller>
- Free MT5 edition: <https://www.mql5.com/en/market/product/136987> Order Flow PRO (MT5): <https://www.mql5.com/en/market/product/176084>

Trading infrastructure (optional)

For uninterrupted EA operation a VPS keeps MT4 running around the clock. Partner links used by Crystal AI Systems: broker [vigco.co/la-com-inv/3j5LdsKA](https://www.vigco.co/la-com-inv/3j5LdsKA) and VPS [myhyonix.com](https://www.myhyonix.com).

Risk disclaimer

Crystal Volume Profile Auto POC is a technical analysis tool. It does not place trades and does not provide trading signals or financial advice. Trading foreign exchange, CFDs, metals, indices and cryptocurrencies on margin carries a high level of risk and may not be suitable for all investors; you can lose more than your initial deposit. Past performance of any method, indicator or example in this guide is not indicative of future results. The examples and figures are illustrations, not trade recommendations. Use proper risk management, test on a demo account first, and trade only with capital you can afford to lose.

Crystal AI Systems · Engineered for traders who demand precision.