

Accelerator Oscillator Saucer Signal

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Momentum / Acceleration

TIMEFRAME

M15 – H1

WEBSITE

www.algobot.live

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Overview

Accelerator Oscillator Saucer Signal trades Bill Williams' **Accelerator Oscillator (AC)** using its authentic “saucer” entry — not a plain zero-line cross. The Awesome Oscillator (AO) measures momentum; the Accelerator measures the *change* in that momentum, so it turns before AO does and reveals whether momentum is speeding up or slowing down.

Because acceleration leads price, the saucer flags a fresh burst of momentum earlier than a value-based or zero-cross system. The strategy pairs this early read with Bill Williams' deliberately asymmetric bar count — two confirming bars when AC already agrees with the trade, three when it does not — so the counter-trend reads that normally cost the most in whipsaw are held to a stricter standard.

The EA acts once per closed bar on the primary chart timeframe, holds a single position at a time per magic number, and manages every exit with an ATR-based stop-loss and a fixed reward-to-risk take-profit. It is best suited to momentum-driven FX majors (e.g. EUR/USD, GBP/USD) and indices on **M15–H1**.

How It Works

The Accelerator Oscillator

The indicator is built in two stages from the median price of each bar, $(\text{High} + \text{Low}) / 2$:

```
AO = SMA(median, FastAo) - SMA(median, SlowAo)
AC = AO - SMA(AO, AcSignal)
```

AO is the classic Awesome Oscillator: the gap between a fast and a slow simple moving average of median price. AC subtracts a short moving average of AO from AO itself, isolating the *rate of change* of momentum. A rising AC means momentum is accelerating; a falling AC means it is decelerating — regardless of whether price is still moving in the same direction.

Entry Logic — the Saucer

All signals are evaluated on closed bars, where AC_0 is the latest closed bar and AC_1 , AC_2 , AC_3 are progressively older bars. The rule is fully symmetric between longs and shorts, and asymmetric only with respect to which side of zero AC sits on:

- **Long — above-zero saucer:** $AC_0 > 0$ and $AC_0 > AC_1 > AC_2$ — two rising bars, momentum re-accelerating *with* the trend.
- **Long — below-zero saucer:** $AC_0 < 0$ and $AC_0 > AC_1 > AC_2 > AC_3$ — three rising bars, an early acceleration turn confirmed before the zero line is even reclaimed.
- **Short — below-zero saucer:** $AC_0 < 0$ and $AC_0 < AC_1 < AC_2$ — two falling bars, with-trend.
- **Short — above-zero saucer:** $AC_0 > 0$ and $AC_0 < AC_1 < AC_2 < AC_3$ — three falling bars, early turn.

Why two bars vs. three? When AC is already on the side of the trade, only **two** consecutive same-direction bars are required — momentum is simply re-accelerating with the move. When AC is against the trade, a deeper **three-bar** saucer is demanded. That extra bar is the whipsaw filter for the counter-trend case, where early acceleration reads are noisiest.

Exit Logic — Stop-Loss & Take-Profit

There is no trailing stop, breakeven move, or time-based exit — each trade is fully bracketed at entry and left to resolve at one of two levels:

- **Stop-loss:** placed just beyond the signal bar's extreme by an ATR multiple. For longs, $SL = \text{signalBar.Low} - \text{AtrStop} \times \text{ATR}$; for shorts, $SL = \text{signalBar.High} + \text{AtrStop} \times \text{ATR}$.
- **Take-profit:** a fixed reward-to-risk multiple of the measured stop distance. With risk as the entry-to-stop distance, $TP = \text{entry} \pm \text{RewardRisk} \times \text{risk}$.

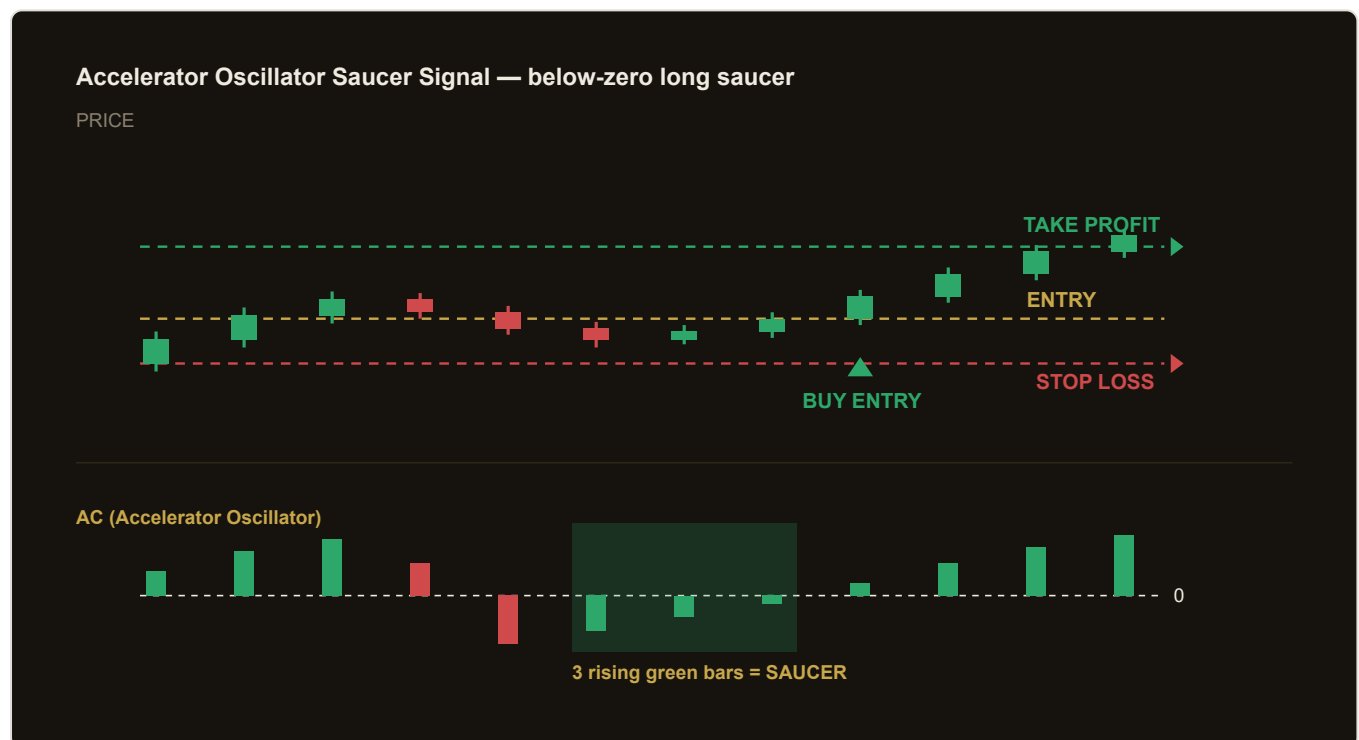
ATR is computed over `AtrPeriod` bars, so the stop automatically widens in volatile conditions and tightens in quiet ones.

Trade & Execution Filters

- **One position per magic:** a new signal is ignored while a position tagged with the EA's `Magic` number is already open. The SL/TP bracket manages the exit.
- **Spread filter:** fills are skipped when the current spread exceeds `MaxSpreadPts`, keeping executions realistic.
- **Bar-close execution:** the logic runs only on the first tick of a freshly closed bar, so signals never repaint within a forming bar.

Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



Illustrative example only. Actual market behaviour varies.

Reading the chart

Price pulls back while AC dips below zero. Over three successive bars the histogram rises toward zero ($AC_0 > AC_1 > AC_2 > AC_3$, all below zero) — the below-zero long saucer. The EA buys at the open of the next bar, sets the stop just below the signal bar's low (offset by $AtrStop \times ATR$), and targets `RewardRisk` times that distance. Momentum accelerates, AC crosses above zero, and price runs into the take-profit.

Parameters

Parameter	Default	Description
FastAo	5	Fast median-price SMA period for the Awesome Oscillator (range 3–15).
SlowAo	34	Slow median-price SMA period for the Awesome Oscillator (range 20–60).
AcSignal	5	SMA period applied to AO to derive the Accelerator: $AC = AO - SMA(AO, AcSignal)$ (range 3–15).
AtrPeriod	14	ATR lookback used to size the stop distance (range 5–50).
AtrStop	1.20	ATR multiple placed beyond the signal bar's extreme for the stop-loss (range 0.30–4.00).
RewardRisk	1.60	Fixed reward-to-risk ratio for the take-profit (range 0.50–4.00).
MaxSpreadPts	100	Maximum spread in points allowed to accept a fill (range 5–400).
Lots	0.10	Fixed trade volume in lots (range 0.01–1.00).
Magic	52171	Magic number identifying the EA's positions; one position is held per magic (range 0–9,999,999).

Recommended Settings

The defaults reflect Bill Williams' canonical **5/34/5** Accelerator configuration and are a sound starting point. Adjust with the market and timeframe in mind:

- **Symbol & timeframe:** momentum-driven FX majors (EUR/USD, GBP/USD) and indices on **M15–H1**. Lower timeframes generate more saucers but more noise.
- **AtrStop:** raise toward **1.5–2.0** on volatile instruments to avoid premature stop-outs; lower it for tighter risk on quieter pairs.
- **RewardRisk:** keep at or above **1.5** so winners outweigh the whipsaw cost inherent in early acceleration reads.
- **MaxSpreadPts:** tune to your broker — tighten it on major pairs and widen it for wider-spread indices so valid signals are not skipped.
- **Lots:** size so a single stop-out risks only a small, fixed fraction of account equity.

Tip: Always validate any parameter change in the MT5 Strategy Tester on several years of quality tick data *before* risking live capital. The saucer count (2 vs. 3 bars) is fixed in the logic; you tune sensitivity through the AO/AC periods, the stop, and the reward-to-risk ratio.

How to Install on MetaTrader 5

- 1 Copy `AcceleratorOscillatorSaucerSignal.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

Risk Warning

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