

MACD Indicator

Moving Average Convergence Divergence, Gerald Appel

FORMULA AND SETTINGS

MACD line = 12 EMA - 26 EMA

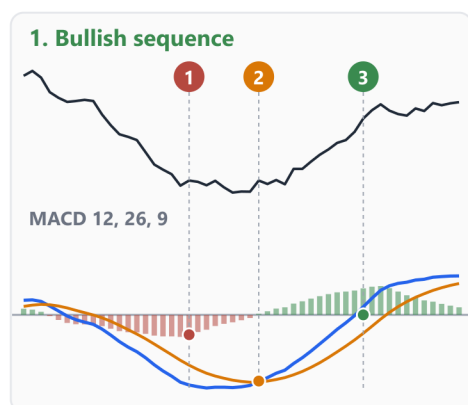
Signal line = 9 EMA of the MACD line

Histogram = MACD line - signal line

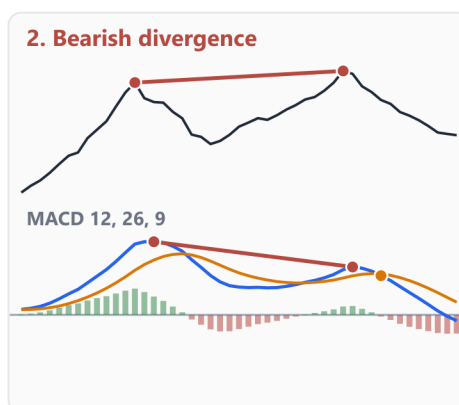
Defaults 12, 26, 9 on closing prices, any timeframe

Scale No fixed range. Values are in price units, so there is no fixed overbought level.

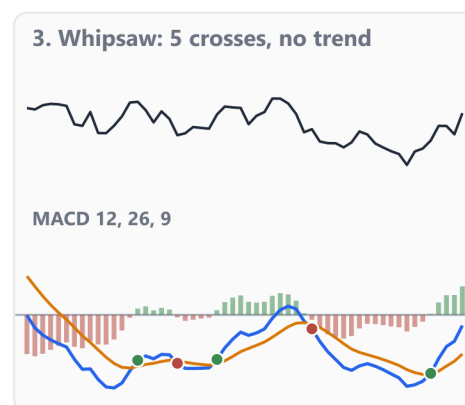
THE SIGNALS ON A CHART



Shrink, signal cross, zero cross



Higher high, lower MACD high



Lots of crosses, price went nowhere

— MACD — Signal — Histogram — Price

SIGNALS AND HOW TO ACT

Signal	What it means	How to act
Histogram shrinks	Momentum fading before the cross	Early warning. Tighten stops, do not enter yet.
MACD crosses above signal	Momentum is turning up	Go long if the trend is up and price confirms.
MACD crosses below signal	Momentum is turning down	Exit longs; short only with the trend.
MACD crosses above zero	12 EMA is now above the 26 EMA	Trend confirmation. Favour longs.
MACD crosses below zero	12 EMA is now below the 26 EMA	Trend confirmation. Favour shorts.
Bullish divergence	Price lower low, MACD higher low	Wait for a price trigger, stop below the low.
Bearish divergence	Price higher high, MACD lower high	Take profit or wait for the cross down.

RULES OF THUMB

- Take bullish crosses above zero in uptrends and bearish crosses below zero in downtrends.
- MACD flat and hugging zero means no trend. Stand aside.
- The histogram turns first, the signal cross comes next, the zero cross comes last.
- Use the higher timeframe MACD for direction and the lower one for timing.
- Size trades from the stop loss, not the signal.

THE 3 MOST COMMON MISTAKES

- Trading every crossover in a sideways market, where the lag produces whipsaw after whipsaw.
- Expecting MACD to call tops and bottoms. It is built from moving averages, so it confirms late.
- Using fixed overbought levels. MACD has no upper or lower bound.