PROEA LAB · CHEAT SHEET · CHECKED 29 OCTOBER 2026

The Turtle and Donchian breakout

A 20/10 Donchian channel breakout on one page: the four rules, the channel, Wilder's ATR, the 2 × ATR stop and the size that goes with it, the original Turtle lengths, and what none of it promises. In our words, with the sources' own words in quotes.

The four rules

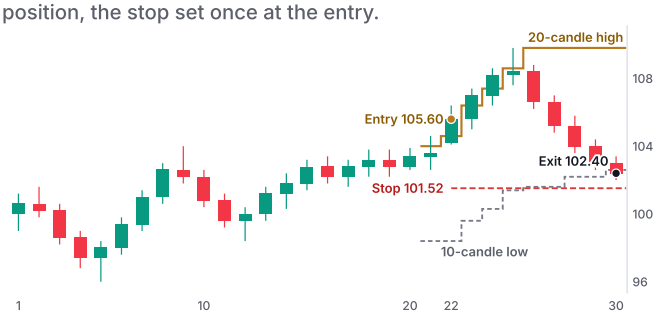
01 Close above the 20-candle high

02 Stop 2 × ATR below

03 No target: let it run

04 Out on a 10-candle low

As the Breakaway Desk Premium page states them: long only, one position, the stop set once at the entry.



The explainer's 30 illustrative candles, made up to show the arithmetic: entry 105.60 on candle 22, stop 101.52, exit 102.40 on candle 30, −0.78R before costs. Not a market and not a result.

The Donchian channel

Line	Over the previous N candles (the current one left out)
Upper	the highest high
Lower	the lowest low
Middle	(upper + lower) ÷ 2
N	20 by default: "20 is the Default" (TradingView)

A breakout is a close above the upper line as it stood before the candle: the line can't include the candle that breaks it.

ATR, Wilder's

True range	the greatest of high − low, |high − previous close|, |low − previous close|
First ATR(20)	the average of the first 20 true ranges
Then	ATR = (prior ATR × 19 + TR) ÷ 20

The Turtle rules' N is the same: "N = (19 × PDN + TR) / 20".

The stop and the size

Stop (long)	entry − 2 × ATR(20), set once
Risk per unit	2 × ATR = 1R
Position size	risk ÷ (2 × ATR), for linear contracts

Example: a $10,000 account risking 1% is $100. On a linear (USDT-margined) BTC perpetual with an ATR(20) of $1,250, the stop is 2 × $1,250 = $2,500 away, so the size is $100 ÷ $2,500 = 0.04 BTC. Check: 0.04 × $2,500 = $100. Round down to the lot step. A linear contract's profit is size × price move; inverse contracts size differently. For your own market: proea.app/en/tools/turtle-position-size-calculator

The original Turtle lengths

	System 1	System 2
Entry	"a 20-day breakout"	"a 55-day breakout"
Exit (long)	"a 10 day low"	"a 20 day low"
Filter	skipped after a winning breakout, with a 55-day "Failsafe Breakout"	"All breakouts for System 2 would be taken"

Both: "Unit = 1% of Account / (N × Dollars per Point)", stops "2 N below the entry for long positions", units added "at ½ N intervals", up to 4 units in one market. The Turtles entered "when the price exceeded by a single tick" the 20- or 55-day high or low, during the day, without waiting for the close. Their unit is the sizing line above at 2% risk: 1% ÷ N = 2% ÷ 2N.

What this doesn't promise. These are rules, not a forecast. The Turtle rules themselves say "most of the trades that the Turtles made resulted in losses"; nothing on this page says the rule will make money on your market. Write your lengths down and test them before you trade them. Our pre-registered test of the 20/10 rule on six crypto perpetuals, with its sample, costs and deepest fall: proea.app/en/blog/does-turtle-trading-still-work

Read it in full

The formula, the worked example, the drill and the Turtle rules: proea.app/en/blog/donchian-channel-strategy
The rule on six crypto perpetuals at 4 hours, one alert for all six: proea.app/en/premium-vault/breakaway-desk

Channel: TradingView's Donchian Channels (DC) help and StockCharts' Price Channels. ATR: StockCharts' Average True Range. Turtle lengths, N, units and stops: "The Original Turtle Trading Rules" PDF on the Original Turtles site (tradingblox.com/originalturtles), which prints no author or year on the pages we read. All read 29 October 2026. Our summary. Educational, not financial advice. © ProEA Lab · proea.app