

EDGE FINDER [Scalping-Algo]

Complete User Guide — All 5 Modules Explained

Quick Setup	Trend Engine	Signal Engine	Div ChoCh	Exit Strategy
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●	Platform	TradingView - Pine Script v6		
●	Shorttitle	EF Scalp		
●	Overlay	Yes — draws directly on price chart		
●	License	Subscriber Use Only		

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- ◆ Edge Finder is a multi-layer confluence indicator. Each module adds an independent signal layer. The strongest setups occur when Trend Engine, Signal Engine, and Divergence ChoCh all fire in the same direction simultaneously.

1 ① QUICK SETUP — PRESETS & SESSION FILTER

The Quick Setup group lets you configure the entire indicator with a single Preset selection, eliminating the need to manually tune individual parameters. Use the Custom preset to unlock full manual control.

Preset	Signal Mode Activated	Best For
3m Scalp	Balanced (score ≥ 5.5)	Default 3-minute scalping on SPY/QQQ/IWM
5m Scalp	Balanced (score ≥ 5.5)	Default 5-minute scalping — same thresholds, cleaner bars
15m Scalp	Balanced (score ≥ 5.5)	Slower 15-minute setups, more selective entries
Conservative	Selective (score ≥ 7.0)	Fewer, higher-quality signals; lower trade frequency
Aggressive	Aggressive (score ≥ 4.0)	More signals; higher frequency; lower win rate threshold
Custom	Manual (your Mode input)	Full manual control of all parameters independently

MARKET HOURS FILTER

When **Market Hours Only** is enabled, all signals are suppressed outside the standard US equity session (9:30 AM – 4:00 PM ET, Mon–Fri). This prevents false signals during pre/after-market low-liquidity periods. Disable only if trading extended hours or non-US instruments.

- RECOMMENDATION: Start with "3m Scalp" or "5m Scalp" presets with Market Hours Only ON. Switch to "Conservative" if your win rate drops below 50%, or "Aggressive" on strong trending days with high ADX readings (> 30).

2 ② TREND DETECTION ENGINE

The Trend Detection module uses a three-condition system: **EMA 9 > EMA 21**, **close > EMA 50**, and **MTF trend aligned** — all three must be true for a confirmed bull trend. The reverse applies for bear trends. This module drives background coloring, the EMA 13 line, and the pullback entry dots.

Setting	Default	Description
Enable Trend Engine	On	Master toggle for all trend detection visuals (background, EMA line, dots).
Background Color	On	Shades chart background green (bull) or red (bear) using your set transparency.
Transparency	90	Background opacity. 90 = very subtle. 70 = more visible. Keep ≥ 85 for clean charts.
EMA 13 Line	On	Plots the EMA 13 colored by trend state: green in bull, red in bear, neutral otherwise.
Entry Dots	On	Draws small dots at pullback entry points (see below). Core discretionary entry trigger.

TREND STATES

State	Condition	Visual
Bull (1)	EMA9 > EMA21 AND close > EMA50 AND MTF bullish	Green background + green EMA13 line
Bear (-1)	EMA9 < EMA21 AND close < EMA50 AND MTF bearish	Red background + red EMA13 line
Neutral (0)	Conditions not met or conflicting	No background + gray EMA13 line

PULLBACK ENTRY DOTS

Dots appear when price pulls back into the EMA 9/21 zone within an established trend and then shows a rejection candle with volume confirmation. This is the highest-probability entry point in the trend-following workflow.

Condition	Bullish Dot Requirement	Bearish Dot Requirement
Trend State	Must be Bull (1)	Must be Bear (-1)
Price Touch	Low touched EMA9 or EMA21	High touched EMA9 or EMA21
Rejection	Close > EMA9, bullish body dominates wick	Close < EMA9, bearish body dominates wick
Stochastic RSI	StochK < 40 and StochK > StochD (crossing up)	StochK > 60 and StochK < StochD (crossing down)
EMA Slope	EMA13 slope positive (rising)	EMA13 slope negative (falling)
Volume	Volume > 80% of 20-bar average	Volume > 80% of 20-bar average

- Entry Dots are the trend-following entry trigger. They are NOT the same as High Confidence signals. Use dots for pullback entries in the direction of the established trend. Avoid dots that fire against the MTF trend direction.

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③ SIGNAL ENGINE — BAR COLORS & SCORES

The Signal Engine calculates a **composite score** for both long and short bias by combining five independent factors. When the score exceeds the **threshold** set by the active Mode, bars are colored accordingly. Scores above the **High Confidence threshold** trigger the premium HC colors.

SCORING SYSTEM — LONG SCORE

Factor	Points	Condition Required
EMA 9 > EMA 21	+1.5	Fast EMA above slow EMA — short-term bullish structure
Close > VWAP	+1.0	Price above Volume-Weighted Average Price — institutional bias up
MACD Histogram > 0	+1.0	MACD histogram positive — momentum expanding to upside
RSI(14) > 50	+1.0	RSI above midpoint — bullish momentum reading
MTF Trend Bullish	+2.0	Higher timeframe EMA21 structure is bullish — the heaviest weight
Maximum Long Score	6.5	All five conditions satisfied simultaneously

Short score uses the mirror conditions: $EMA9 < EMA21$, $close < VWAP$, $MACD < 0$, $RSI < 50$, MTF bearish.

SIGNAL MODES & THRESHOLDS

Mode	Threshold	HC Threshold	Signal Frequency
Aggressive	≥ 4.0	≥ 5.1+	High — fires on 3 of 5 conditions met
Balanced	≥ 5.5	≥ 6.6+	Moderate — 4+ conditions required
Selective	≥ 7.0	≥ 8.1+	Low — near-perfect alignment required
Sniper	≥ 9.0	≥ 10.1+	Very rare — extreme conviction only

HC Threshold = Mode Threshold + Conviction Gap (default 1.1). Increase Conviction Gap to make High Confidence signals rarer and more selective.

BAR COLOR REFERENCE

Bar Color	Signal Type	What It Means
Cyan	HC Bull	High Conviction Long — score ≥ HC threshold AND MTF aligned AND market quality pass
Magenta	HC Bear	High Conviction Short — mirror conditions, maximum confluence
Green	Standard Bull	Score ≥ threshold but below HC level — valid long signal, lower conviction
Red	Standard Bear	Score ≥ threshold but below HC — valid short signal, lower conviction

Gray	Neutral	Score below threshold in both directions — no tradeable bias detected
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MARKET QUALITY GATE (MQG)

All signal colors require passing the **Market Quality Gate** — three conditions that filter out low-quality market conditions:

- › **ADX > 20** — minimum trend strength. Signals suppressed in choppy, sideways markets.
- › **Volume > 70% of 20-bar SMA** — minimum participation. Avoids thin, illiquid bars.
- › **Market Hours filter** — session check (if enabled in Quick Setup).

- ★ **HIGH CONVICTION STRATEGY:** Only trade HC Bull (cyan) and HC Bear (magenta) bars. These require MTF alignment + MQG pass + score above HC threshold — the rarest and most reliable signals the engine produces. Standard green/red bars can be used for scaling in but should not be the primary entry trigger.

4 ④ DIVERGENCE CHOCH REVERSAL SYSTEM

The **Divergence ChoCh** module detects high-probability reversal setups by combining two independent signals: **RSI divergence** on a higher timeframe AND a **Change of Character** (ChoCh) on the local timeframe — confirmed by a volume spike. This is the counter-trend and reversal engine of Edge Finder.

Setting	Default	Description
Enable Div ChoCh	On	Master toggle for the entire divergence system.
HTF Timeframe	15	Timeframe used to detect RSI divergence pivots. Use one step above your chart TF.
RSI Length	14	RSI period for divergence calculation on the HTF.
HTF Pivot Lookback	5	Bars left and right required to confirm an RSI pivot high/low on the HTF.
LTF Pivot Lookback	3	Bars used to identify local swing highs/lows on the chart timeframe for ChoCh detection.
ChoCh Vol Mult	1.2	Volume must exceed this multiple of the 20-bar average for ChoCh confirmation. Increase to 1.5–2.0 for stricter filter.
RSI Extreme Filter	On	When on: bull divergence only valid if prior RSI pivot was below 30 (oversold). Bear div requires prior pivot above 70 (overbought). Significantly improves signal quality.
Show Triangles	On	Displays colored triangles on chart when ChoCh fires (cyan = bullish, magenta = bearish).

HOW DIVERGENCE ChoCh WORKS — STEP BY STEP

01	HTF RSI Divergence	The system scans the HTF chart for RSI divergence. Bullish: price makes a lower low while RSI makes a higher low (hidden reversal signal). Bearish: price makes a higher high while RSI makes a lower high.
02	RSI Extreme Check	If RSI Extreme Filter is ON: bullish divergence is only flagged when the prior RSI pivot was below 30 (genuinely oversold). Bearish divergence requires prior pivot above 70.
03	Local Swing Detection	On the chart timeframe, the system tracks recent pivot highs and lows using the LTF Pivot Lookback setting.
04	Change of Character (ChoCh)	Bullish ChoCh: price crosses above the most recent local swing high. Bearish ChoCh: price crosses below the most recent local swing low. This confirms the reversal has begun.
05	Volume Confirmation	The ChoCh bar must have volume > ChoCh Vol Mult × 20-bar average. This confirms institutional participation behind the breakout.
06	Triangle Printed	All conditions pass → cyan triangle below bar (bullish) or magenta triangle above bar (bearish). The Exit Strategy module also activates SL/TP levels for the ChoCh trade.

- BEST PRACTICE: Use Div ChoCh signals as reversal entry triggers near Key Levels (support/resistance zones). A bullish ChoCh at the previous day low with RSI below 30 on the 15M is one of the highest-probability setups in the entire system.

5 ⑤ EXIT STRATEGY — SL, TP LEVELS & TRAILING STOP

The Exit Strategy module automatically draws **Stop Loss**, **TP1**, **TP2**, and **TP3** levels when a **High Confidence** signal or **Divergence ChoCh** fires. All levels are calculated as ATR(14) multiples from the entry close price. An optional **Trailing Stop** adjusts the SL dynamically as price moves in your favor.

Setting	Default	Description
Enable Exit Strategy	On	Master toggle. When off, no SL/TP lines are drawn.
Stop Loss ATR Mult	1.5	SL = entry ± (ATR × this value). 1.5 = 1.5× current ATR away from entry.
TP1 ATR Mult	1.0	First target. 1:1 risk-reward with default SL = break-even zone.
TP2 ATR Mult	2.0	Second target. 2:1 risk-reward. Close 50% of position here.
TP3 ATR Mult	4.0	Full target. 4:1 risk-reward. Trail stop and let runners reach this level.
Enable Trailing Stop	On	After entry, SL ratchets toward price at ATR Mult distance each bar.
Show Level Labels	On	Displays SL / TP1 / TP2 / TP3 text labels at the right edge of the chart.

ATR-BASED LEVEL CALCULATION

All levels use ATR(14) — the 14-bar Average True Range — as the unit of measurement. This makes the system adaptive: levels automatically widen on volatile days and tighten during low-volatility periods, keeping risk sizing consistent across market conditions.

Level	Long Formula	Short Formula	Default Ratio
SL	Entry − (ATR × 1.5)	Entry + (ATR × 1.5)	—
TP1	Entry + (ATR × 1.0)	Entry − (ATR × 1.0)	0.67:1 R:R
TP2	Entry + (ATR × 2.0)	Entry − (ATR × 2.0)	1.33:1 R:R
TP3	Entry + (ATR × 4.0)	Entry − (ATR × 4.0)	2.67:1 R:R

TRAILING STOP BEHAVIOR

- › **Long trade:** SL moves up each bar to $\max(\text{current SL}, \text{close} - \text{ATR} \times \text{SL Mult})$. SL never moves down.
- › **Short trade:** SL moves down each bar to $\min(\text{current SL}, \text{close} + \text{ATR} \times \text{SL Mult})$. SL never moves up.
- › Trade closes automatically if $\text{low} \leq \text{SL}$ (long) or $\text{high} \geq \text{SL}$ (short).
- › Trade also closes if price reaches TP3 — the full target level.
- › When trade closes, all SL/TP lines are removed from the chart.

POSITION MANAGEMENT STRATEGY

Recommended scaling plan using the three TP levels:

TP Level	Action	Remaining Position
TP1	Close 33% of position	67% still running
TP2	Close another 33%	34% still running — move SL to entry (break-even)
TP3	Close remaining 34%	Trade complete — full target achieved
SL Hit	Exit entire remaining position	Trade closed as a loss

- ATR TUNING: If SL is getting hit too frequently, increase Stop Loss ATR Mult from 1.5 to 2.0. If TP1 is rarely reached, reduce TP1 Mult from 1.0 to 0.7. On low-volatility days (ATR very small), consider reducing SL Mult to avoid wide stops.

6 STYLE SETTINGS

Setting	Default Color	Used For
Bullish	Green #089981	Standard bull bar color, EMA13 in bull trend, entry dot bull
Bearish	Red #F23645	Standard bear bar color, EMA13 in bear trend, SL gradient fill
High Conf Bull	Cyan #00BCD4	HC bull bar color, bullish ChoCh triangle and label
High Conf Bear	Magenta #E207E6	HC bear bar color, bearish ChoCh triangle and label
Neutral	Gray #787B86	No-signal bar color, EMA13 in neutral trend state
Div Bull	Cyan #00BCD4	Bullish divergence ChoCh triangle color (can customize separately)
Div Bear	Magenta #E207E6	Bearish divergence ChoCh triangle color (can customize separately)

All colors are fully customizable. Use the Style Settings group to match your preferred chart theme without affecting any signal logic.

7 ALERTS REFERENCE

Edge Finder fires **four alert types** — all triggered once per bar close. Connect them to Discord webhooks or TradingView notifications for real-time signal delivery.

Alert Type	Trigger	Message
Bullish Entry Dot	Pullback dot on chart (pbLong)	■ Bullish Entry Dot (Pullback) on TICKER
Bearish Entry Dot	Pullback dot on chart (pbShort)	■ Bearish Entry Dot (Pullback) on TICKER
Bull ChoCh Reversal	bullChoch condition met	■ Bullish ChoCh Reversal on TICKER
Bear ChoCh Reversal	bearChoch condition met	■ Bearish ChoCh Reversal on TICKER

- ALERT SETUP: In TradingView click the Bell icon → Create Alert → set Condition to "Edge Finder [Scalping-Algo]" → select the alert type → add your Discord webhook URL under Notifications. Set frequency to "Once Per Bar Close." Repeat for all four alert types.

8 SETTINGS QUICK REFERENCE

Group	Setting	Default	Quick Notes
Quick Setup	Preset	3m Scalp	Changes signal mode across entire indicator
Quick Setup	Market Hours Only	On	9:30 AM – 4:00 PM ET filter
Trend Engine	Enable Trend Engine	On	Master toggle for background/EMA/dots
Trend Engine	Background Color	On	Subtle trend tint on chart background
Trend Engine	Transparency	90	70–99; keep high for clean charts
Trend Engine	EMA 13 Line	On	Colored by trend state
Trend Engine	Entry Dots	On	Pullback entry signals
Signal Engine	Enable Signals	On	Bar color system master toggle
Signal Engine	Mode (Custom only)	Balanced	Aggressive/Balanced/Selective/Sniper
Signal Engine	Conviction Gap	1.1	HC threshold = Mode threshold + this
Div ChoCh	Enable Div ChoCh	On	Divergence + ChoCh reversal system
Div ChoCh	HTF Timeframe	15	Higher TF for RSI divergence detection
Div ChoCh	RSI Length	14	RSI period for divergence
Div ChoCh	HTF Pivot Lookback	5	Pivot confirmation width on HTF
Div ChoCh	LTF Pivot Lookback	3	Local swing detection on chart TF
Div ChoCh	ChoCh Vol Mult	1.2	Volume spike threshold for ChoCh
Div ChoCh	RSI Extreme Filter	On	Div only valid from overbought/oversold
Div ChoCh	Show Triangles	On	ChoCh triangle markers on chart
Exit Strategy	Enable Exit Strategy	On	SL/TP level system toggle
Exit Strategy	Stop Loss ATR Mult	1.5	SL distance in ATR units
Exit Strategy	TP1 ATR Mult	1.0	First target distance
Exit Strategy	TP2 ATR Mult	2.0	Second target distance
Exit Strategy	TP3 ATR Mult	4.0	Full target distance
Exit Strategy	Enable Trailing Stop	On	Dynamic SL ratchets with price
Exit Strategy	Show Level Labels	On	SL/TP text labels on chart

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RECOMMENDED SETUPS**3-MINUTE AGGRESSIVE SCALP — SPY / QQQ**

High-frequency setup. HC signals fire more often. Best during high-ADX trending sessions.

Setting	Value	Reason
Preset	Aggressive	Score ≥ 4.0 — captures early momentum shifts
Market Hours	On	Avoid pre/post market noise on 3M
HTF Timeframe	5	One step above 3M for divergence detection
SL ATR Mult	1.0	Tighter stop matches smaller 3M ATR
TP1 ATR Mult	0.7	Quick first target — 3M bars move fast
TP2 ATR Mult	1.5	Second target with light trailing
TP3 ATR Mult	3.0	Runner target for strong trend days
Trailing Stop	On	Essential on 3M — price can reverse quickly
RSI Extreme Filter	On	Keep on — reduces low-quality ChoCh signals

5-MINUTE BALANCED SCALP — SPY / QQQ / IWM

Default configuration. Best balance of signal quality and frequency.

Setting	Value	Reason
Preset	5m Scalp	Balanced mode — score ≥ 5.5 required
Market Hours	On	RTH only for cleanest 5M data
HTF Timeframe	15	Standard 3 \times multiple above chart TF
SL ATR Mult	1.5 (default)	Gives trade breathing room on 5M
TP1 ATR Mult	1.0 (default)	1:0.67 initial risk-reward
TP2 ATR Mult	2.0 (default)	1:1.33 second target
TP3 ATR Mult	4.0 (default)	1:2.67 full target
Trailing Stop	On	Locks in profits on 5M swing moves
Conviction Gap	1.1 (default)	HC threshold 1.1 points above standard

REVERSAL / MEAN-REVERSION SETUP

Focus entirely on Div ChoCh signals at key levels. Trend engine acts as context filter.

- › Set Preset to **Conservative** — only take signals with highest score.
- › Set **HTF Pivot Lookback** to 7–10 for more mature, reliable RSI pivots.
- › Increase **ChoCh Vol Mult** to 1.5–2.0 — require a strong volume surge on the ChoCh bar.
- › Keep **RSI Extreme Filter** ON — only trade from genuinely oversold/overbought RSI levels.
- › Use Previous Day High/Low and VWAP (from Smart Scalping Signals) as target zones.
- › Look for HC Bear signals OR bearish ChoCh at PDH, PM High, or VWAP resistance.

Edge Finder [Scalping-Algo] is provided for educational and informational purposes only. Past indicator performance on historical bars does not guarantee future results. Always apply proper risk management and position sizing. Trading involves substantial risk.