

# Key Level Breakout — Single Symbol

---

Overlay indicator for US equities (NYSE/NASDAQ) that detects four types of price action setups at key intraday levels: breakouts (continuation through a level), reversals (rejection off a level zone), reclaims (reversal after a failed breakout), and retests (pullback to a broken level that holds). Monitors Premarket High/Low, Yesterday High/Low, Last Week High/Low, and Opening Range Breakout High/Low — each toggleable independently.

All signals evaluate on confirmed signal-timeframe candle closes (default 5m) to avoid noise, while the chart can run on any lower timeframe (e.g. 1m) for detail. Breakouts require above-average volume (directional 2-bar lookback) and ATR-buffered level clearance. Level zones use wick-to-body ranges from daily/weekly candle data (or ATR-derived width for PM/ORB), visualized as shaded bands when level lines are enabled. Per-level retest tracking monitors each broken level independently after a breakout, recording bar count and price action quality (volume multiple + close position %) on the retest candle. Labels use line breaks to separate level names, quality metrics, and retest lines for readability. A Retest-Only Mode suppresses breakout labels entirely, showing only retest entries — useful for traders who use the breakout as confirmation but trade the retest.

## Features

- **Green labels** (bullish) / **Red labels** (bearish) with dynamic text (e.g. "PM H 2.1x", "Yest L 1.8x")
- **Volume Confirmation** — filter breakouts by above-average volume with directional 2-bar lookback (toggleable, on by default)
- **ATR Buffer Zone** — require wick beyond level  $\pm$  X% of daily ATR and close beyond raw level (toggleable, on by default)
- **Close Position %** — shows where the close landed within the bar's range (e.g. <sup>^</sup>78 = 78% toward the high = strong buying pressure)
- **Post-Breakout Confirmation** — monitors chart-TF bars after breakout for follow-through (✓), retest-and-hold (↺✓), or failure (✗)
- **Conviction coloring** — label opacity scales with volume ratio (faded = barely passed, bright = strong conviction)
- **Confluence merging** — when multiple levels break on the same bar, labels and alerts merge (e.g. "PM H + Yest H 2.1x") with a larger label size
- **Reversal setups** — detects rejection off level zones (wick enters zone, close rejects); bullish at LOW levels (blue), bearish at HIGH levels (orange)
- **Reclaim setups** — context-enriched reversal when a prior breakout was invalidated (false breakout → rejection); labeled with  $\sim$  prefix
- **Level zones** — wick-to-body zones for daily/weekly levels (candle body data), ATR-derived for PM/ORB (toggleable)
- **Setup time window** — configurable active window for reversal/reclaim signals (default 9:30-11:30 ET)
- **Zone band visualization** — Shaded bands between wick and body edge for each level when level lines are on; wide band = strong rejection zone
- **Per-level retest tracking** — Each broken level is tracked independently for retests with bar count and PA quality (e.g.  $\propto^3$  ORB H 2.1x <sup>^</sup>85)

- **Retest-Only Mode** — Suppress breakout labels (small gray dot); only retest signals fire their own labels and alerts
- **Optional level lines** — Horizontal lines for all active levels (off by default to reduce clutter)
- **Once Per Breakout** — One signal per level, re-arms after invalidation (on by default); turn off for backtesting
- **alert() calls** — One merged alert per direction per bar (e.g. "Bullish breakout: PM H + Yest H")
- **7 alertcondition() entries** — "Any Bullish/Bearish Breakout", "Any Breakout", "Any Bullish/Bearish Reversal", "Any Reversal", "Any Setup" for filtering in TradingView's alert dropdown

## Setup

1. Open TradingView Pine Editor, paste `KeyLevelBreakout.pine`, click **Add to chart** (works on any timeframe  $\leq$  the Signal Timeframe — e.g. 1m chart with 5m signals)
2. Enable **Extended Trading Hours** in chart settings (required for premarket levels)
3. Set up alerts:
  - **Quick (recommended)**: Add one alert → Condition: `Key Level Breakout` → `Any alert() function call` — covers all levels, one toggle to switch on/off
  - **Granular**: Use `alertcondition()` entries from the dropdown — "Any Bullish", "Any Bearish", or "Any Breakout"
  - Visual markers (labels) always appear on the chart regardless of alert setup — alerts and visuals fire from the same signals

## Inputs

Input	Default	Group	Description
Premarket High/Low	On	Level Toggles	Track and alert on premarket levels
Yesterday High/Low	On	Level Toggles	Track and alert on previous day levels
Last Week High/Low	On	Level Toggles	Track and alert on previous week levels
ORB High/Low	On	Level Toggles	Track and alert on opening range levels
Once Per Breakout	On	Signals	One signal per level; re-arms after invalidation
Signal Timeframe	5 (5m)	Signals	Timeframe for breakout evaluation — signals only fire on closed bars of this TF
Show Level Lines	Off	Visuals	Plot horizontal lines for active levels
Fade Old Labels	On	Visuals	Gray out labels older than N bars from chart edge — toggle off for historical analysis

Input	Default	Group	Description
Fade After (bars)	100	Visuals	Age threshold for fading (100 bars $\approx$ one session on 5m chart)
Require Above-Avg Volume	On	Filters	Gate breakouts on above-average volume (directional 2-bar lookback: borrows prior bar volume only if same direction)
Volume Baseline	Signal TF SMA	Filters	Compare against signal-TF SMA (granular) or daily average (stable)
Volume Multiplier	1.5	Filters	How many times above average volume is required (e.g. 1.5 = 150%)
Volume SMA Length	20	Filters	Lookback period for the volume moving average
Use ATR Buffer	On	Filters	Require wick beyond level $\pm$ X% of daily ATR(14) and close beyond raw level
Breakout Buffer (% of ATR)	5.0	Filters	How far past the level the wick must push to trigger a breakout (close only needs to hold above raw level)
Re-arm Buffer (% of ATR)	3.0	Filters	How far back through the level price must close to re-arm the signal
Show Close Position %	On	Quality	Display where the close landed within the bar's range (0-100%)
Post-Breakout Confirmation	On	Confirmation	Monitor chart-TF bars after breakout for follow-through or failure
Confirmation Window	10	Confirmation	How many chart bars to monitor (e.g. 10 bars = 10 min on 1m chart)
Retest-Only Mode	Off	Signals	Suppress breakout labels; only fire retest labels and alerts
Show Reversal Setups	On	Setups	Enable reversal signal detection at level zones
Show Reclaim Setups	On	Setups	Enable reclaim labeling (reversal after failed breakout)
Setup Active Window (ET)	0930-1130	Setups	Time window for reversal/reclaim signals (ET format)
Use Level Zones	On	Zones	Use wick-to-body zones instead of single-price levels
Zone Width for PM/ORB	3.0	Zones	ATR% zone width for levels without candle body data
PM H/L Reversal/Reclaim	On	Rev/Recl Toggles	Enable reversal/reclaim at premarket levels

Input	Default	Group	Description
Yest H/L Reversal/Reclaim	On	Rev/Recl Toggles	Enable reversal/reclaim at yesterday levels
Week H/L Reversal/Reclaim	On	Rev/Recl Toggles	Enable reversal/reclaim at weekly levels
ORB H/L Reversal/Reclaim	On	Rev/Recl Toggles	Enable reversal/reclaim at opening range levels

## Once Per Breakout (Invalidation Logic)

When enabled (default), each level fires **one signal** then stays suppressed until **invalidated**:

- Bullish breakout above PM High fires — suppressed while price holds above
- Price closes back below PM High minus the re-arm buffer (on a signal-TF bar) — **invalidated** (re-armed)
- Next bullish close above PM High plus the breakout buffer — fires again

Each level is tracked independently — a suppressed PM High does not block a subsequent Yesterday High breakout. All flags reset at each regular session open. Turn **off** to fire on every qualifying cross (useful for backtesting).

## Signal Timeframe

The **Signal Timeframe** input (default: 5m) controls which candle closes are evaluated for breakouts. This lets you view a lower timeframe chart (e.g. 1m) for more detail while only triggering signals on completed 5m candles.

- **Chart on 5m, Signal TF = 5m**: Markers appear directly on the breakout candle
- **Chart on 1m, Signal TF = 5m**: Markers appear on the last 1m candle of the 5m period (where the 5m bar closed) — only one signal per 5m bar, not on every 1m candle
- **Chart timeframe must be ≤ Signal Timeframe** (e.g. 1m or 3m chart with 5m signals works; 15m chart with 5m signals does not)

Level tracking (premarket, ORB) still uses chart-native data for maximum granularity.

## Post-Breakout Confirmation & Retest Tracking

When enabled (default), the indicator tracks retests **per level** after a breakout. Each broken level (e.g. PM H, Yest H) is monitored independently.

**Retest detection:** After a breakout, if price dips back to within the re-arm buffer of a specific broken level and closes on the breakout side, that level's retest is recorded. Each retest line shows:

- 🟡 + superscript bar count (bars since breakout)
- Level name
- Volume multiple and close position % of the retest candle

**Label format with line breaks:**

```
ORB H + Yest H
1.8x ^82
☺3 ORB H 2.1x ^85
☺7 Yest H 1.4x ^71
```

**Failure:** If price closes back through the most conservative level beyond the re-arm buffer, the label is updated with ✗ and grayed out.

**Auto-promotion:** If a new breakout fires while a previous one is being monitored, the previous one gets a ✓ line (it survived).

**Monitoring window:** Retest tracking runs for the configured number of chart bars (default: 10), then stops.

**Retest-Only Mode:** When `i_retestOnly` is ON:

- Breakout labels are suppressed (replaced by small gray dots)
- Retest signals create their own labels at the retest bar
- Only retest alerts fire; breakout alerts are suppressed
- Reversal/reclaim labels are unchanged

## Reversal & Reclaim Setups

When enabled, the indicator detects two additional setup types at level zones:

**Reversal (~ prefix):** A single-bar rejection pattern. The signal-TF bar's wick enters the level zone, but the close rejects back outside. Bullish reversals fire at LOW levels (e.g., ~ Yest L), bearish at HIGH levels (e.g., ~ Yest H). Labels are blue (bull) and orange (bear).

**Reclaim (~ prefix):** A reversal that occurs after a prior breakout at the same level was invalidated. For example: price breaks above Yesterday High, falls back below (invalidated), then a bearish reversal fires at Yesterday High — labeled as ~ Yest H instead of ~ Yest H. This "false breakout → rejection" pattern often carries stronger conviction.

**Level Zones:** Each level is treated as a range (body edge to wick edge) rather than a single price:

- **Daily/Weekly levels:** Zone from candle body edge (`max(open, close)` for highs, `min(open, close)` for lows) to the wick (high/low)
- **PM/ORB levels:** Zone derived from ATR (configurable width, default 3%)
- When zones are disabled, all levels collapse back to single-price lines

Reversal/reclaim signals respect all existing filters (volume, Once Per Breakout) and only fire within the Setup Active Window (default 9:30-11:30 ET). Breakout signals continue to fire all session regardless of this window.

When a new reversal/reclaim fires at a level that already had a prior reversal/reclaim signal, the prior label is grayed out (superseded by the newer signal with more context).

## Zone Band Visualization

When **Show Level Lines** and **Use Level Zones** are both ON, shaded bands are drawn between the wick line and the body edge for each level. The band width carries information:

- **Daily/Weekly levels:** Band width varies based on actual candle body-to-wick distance — a wide band means a long wick (strong rejection)
- **PM/ORB levels:** Uniform width derived from ATR (no single candle to reference)

Colors match the level type: orange (PM), blue (Yesterday), purple (Weekly), teal (ORB) at 85% transparency.

## Setup Direction Reference

Four setup types, each with a clear directional rule:

Setup	At HIGH level (resistance)	At LOW level (support)	Rule
<b>Breakout</b>	Bullish break above → LONG	Bearish break below → SHORT	Trade the break
<b>Reversal</b> ~	Bearish rejection down → SHORT	Bullish rejection up → LONG	Fade the approach
<b>Reclaim</b> ~~	Bearish rejection after failed bull break → SHORT	Bullish rejection after failed bear break → LONG	Fade the trapped side
<b>Retest</b> o✓	Pullback to level, held above → confirms LONG	Bounce to level, held below → confirms SHORT	Confirms original break

**Breakout example (Yest H = \$150):** Price closes above \$150 on a green candle with volume → LONG.

Yest H

2.1x ^78

**Reversal example (Yest H = \$150):** Price wicks into \$150 zone from below, closes back below on a red candle → SHORT.

~ Yest H

1.8x v82

**Reclaim example (Yest H = \$150):** Earlier bullish breakout above \$150 failed. Price approaches again, wicks in, closes back below → SHORT.

~~ Yest H

2.3x v85

**Retest example (Yest H + ORB H = \$150):** Confluent bullish breakout. 3 bars later, ORB H retested and held. 7 bars later, Yest H retested and held.

ORB H + Yest H  
1.8x ^82  
☞<sup>3</sup> ORB H 2.1x ^85  
☞<sup>7</sup> Yest H 1.4x ^71

**Failed example:** Price closed back through the level → label grayed out.

Yest H  
1.8x ^82  
x

**Retest-Only Mode:** Breakout becomes gray • dot. Retest fires its own label:

☞<sup>3</sup> ORB H  
2.1x ^85

Visual Reference

<u>AT HIGH LEVELS (resistance)</u>	<u>AT LOW LEVELS (support)</u>
<p>BREAKOUT Price breaks ABOVE ▲ LONG (green label)</p> <div><p>Yest H 2.1x ^78</p></div>	<p>BREAKOUT Price breaks BELOW ▼ SHORT (red label)</p> <div><p>Yest L 1.8x v72</p></div>
<p>REVERSAL ~ Wick enters zone, close rejects ▼ SHORT (orange label)</p> <div><p>~ Yest H 1.8x v82</p></div>	<p>REVERSAL ~ Wick enters zone, close rejects ▲ LONG (blue label)</p> <div><p>~ Yest L 2.0x ^75</p></div>
<p>RECLAIM ~~ Prior break FAILED, now rejecting ▼ SHORT (orange, brighter)</p> <div><p>~~ Yest H 2.3x v85</p></div>	<p>RECLAIM ~~ Prior break FAILED, now rejecting ▲ LONG (blue, brighter)</p> <div><p>~~ Yest L 2.5x ^80</p></div>
RETEST ☞	RETEST ☞

Pullback to level, held  
▲ confirms LONG

Yest H  
2.1x ^78  
☞<sup>3</sup> Yest H 1.9x ^80

FAILED x  
Closed back through level  
Label grayed out

Yest H  
2.1x ^78  
x

Bounce to level, held  
▼ confirms SHORT

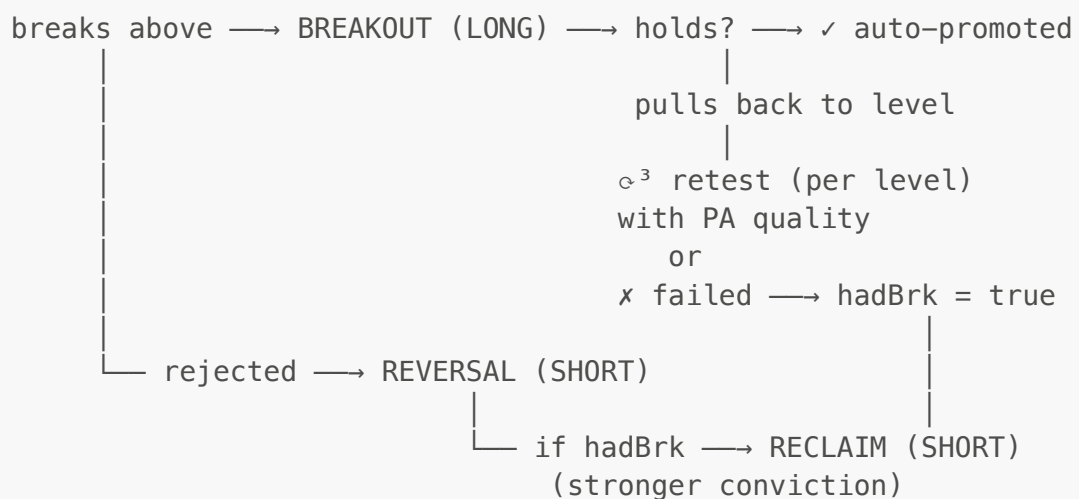
Yest L  
1.8x v72  
☞<sup>3</sup> Yest L 1.7x v78

FAILED x  
Closed back through level  
Label grayed out

Yest L  
1.8x v72  
x

## Flow at a HIGH Level

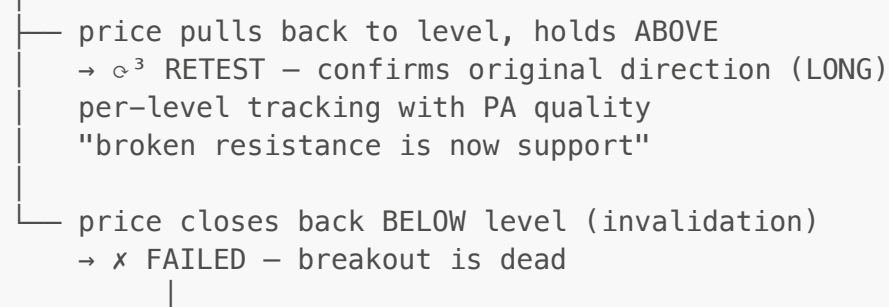
Price at HIGH level (e.g. Yest H):



## Retest vs Reclaim



Both happen after a breakout — the difference is whether it held or failed:

Breakout fires (e.g. bull break above Yest H)






└ price approaches level again, rejected  
→ ~~ RECLAIM – opposite direction (SHORT)  
"breakout was a trap, fade it"

	Retest 	Reclaim 
Breakout outcome	Held (successful)	Failed (invalidated)
Direction	Same as breakout	Opposite to breakout
What it means	Level flipped role (resistance → support)	Trapped participants, fade them
Tracking	Per-level with bar count + PA quality	New label at reclaim bar
Visually	Appended as lines on breakout label	Creates a new label

These are **mutually exclusive** — at the same level, you either get a retest (breakout worked) or eventually a reclaim (breakout failed). Never both.

## Alert Messages

When using **Any alert() function call**, messages are merged per direction per bar:

- **Bullish breakout:** PM H 1.8x ^82 — single level (suppressed in Retest-Only Mode)
- **Bearish breakout:** Yest L 1.5x v78 — single level (suppressed in Retest-Only Mode)
- **Bullish breakout:** PM H + Yest H 2.1x ^82 — confluent (multiple levels on same bar)
- **Retest:** <sup>3</sup> ORB H 2.1x ^85 — retest detected (fires in both modes)
- **Failed:** ORB H + Yest H — price closed back through level

For directional filtering, use **alertcondition()** entries from the dropdown — "Any Bullish Breakout", "Any Bearish Breakout", or "Any Breakout".

## Updating

Edit the script in Pine Editor and click **Save** — all charts using the indicator update automatically. Don't click "Add to chart" again (that creates a duplicate).

## Changelog

- **v1.8** — Zone Band Visualization + Per-Level Retest + Retest-Only Mode: shaded fill bands between wick and body-edge plots for all 8 levels (gated by Show Level Lines + Use Level Zones); per-level retest tracking with independent monitoring of each broken level, superscript bar count, and PA quality metrics on retest candle (volume + close position %); label format upgraded to line breaks (level names / quality / retest lines); Retest-Only Mode toggle suppresses breakout labels and alerts, fires own retest labels; breakout alert suppression in retest-only mode
- **v1.7** — Reversal + Reclaim + Zones: wick-to-body zone detection for all levels (D/W from candle body, PM/ORB from ATR); reversal signals at level zones (~ prefix, blue/orange labels); reclaim signals when prior breakout invalidated (~~ prefix); configurable setup time window (default 9:30-11:30 ET); per-level reversal/reclaim toggles; 4 new alert conditions (Any Bullish/Bearish Reversal, Any Reversal, Any Setup)

- **v1.6** — Directional volume + close position + post-breakout confirmation: volume borrowing now direction-aware (only borrows prior bar if same-direction momentum); ATR buffer uses wick for push, close for hold; close position % shows buying/selling pressure in labels; post-breakout monitoring on chart TF with follow-through (✓), retest (↩✓), and failure (✗) markers plus confirmation alerts
- **v1.5** — Fix cross-detection bug: 2-bar lookback prevents missed breakouts when a bearish candle crosses the level before a bullish confirmation (e.g., TSLA ORB High). Removed per-level alertcondition entries (duplicate alerts with "Any alert()" function call")
- **v1.4** — Volume Confirmation filter (toggleable, Signal TF SMA or Daily Average baseline, multiplier in labels, conviction coloring), ATR Buffer Zone (separate breakout/re-arm buffers as % of daily ATR), confluence merging (combined labels + alerts when multiple levels break same bar), fade old labels (toggle for clean chart vs analysis mode), labels replace plotshape for dynamic text
- **v1.3** — Invalidation-based signal logic: re-arms after price closes back through the level (replaces first-cross-only-per-day)
- **v1.2** — Signal Timeframe input: view 1m charts while only triggering on 5m closes; marker placed on last candle of signal-TF period
- **v1.1** — Added `alert()` calls for single-alert setup (one alert covers all levels)
- **v1.0** — Initial release: 4 level types, toggleable pairs, first-cross-only, visual markers, 11 alert conditions