

# Market Internals Dashboard v3.0

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A comprehensive ThinkScript indicator for monitoring market-wide internals with smart scoring, divergence detection, and dynamic VIX-based thresholds.

## Overview

This dashboard aggregates 7 key market internal metrics into a single normalized scoring system to help traders assess overall market health and direction in real-time.

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## Metrics Tracked

Metric	Symbol	What It Measures
<b>UVOL/DVOL %</b>	\$UVOL, \$DVOL	Up volume vs down volume ratio
<b>ADD (Breadth)</b>	\$ADD	NYSE Advancing - Declining issues
<b>TICK</b>	\$TICK	NYSE upticks - downticks
<b>TRIN</b>	\$TRIN	Arms Index (volume-weighted breadth)
<b>NH/NL Ratio</b>	\$NAUH, \$NADL	New 52-week Highs / New 52-week Lows
<b>VIX</b>	\$VIX	Fear/volatility index
<b>Cumulative TICK</b>	Derived	Running sum of TICK readings

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## NH/NL Ratio Explained

The **NH/NL (New Highs/New Lows) ratio** is a market breadth indicator comparing stocks making new 52-week highs versus new 52-week lows.

### What It Measures

- **New Highs (NH):** Stocks hitting their highest price in 52 weeks
- **New Lows (NL):** Stocks hitting their lowest price in 52 weeks
- **Ratio:** NH ÷ NL

### Interpretation

NH/NL Ratio	Market Condition
> 10	Very strong breadth (bullish)
> 3	Healthy breadth (bullish)
~1	Balanced market
< 0.5	Weak breadth (bearish)

## NH/NL Ratio    Market Condition

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< 0.3	Very weak breadth (bearish)
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## Why It Matters

- **Confirms trends:** In a healthy uptrend, more stocks should be making new highs than new lows
- **Spots divergences:** If SPY is rising but NH/NL is falling, the rally may be narrowing (fewer stocks participating)
- **Warns of reversals:** A market making new highs with shrinking NH/NL ratio often precedes corrections

## Platform Availability

- **ThinkOrSwim:** Uses `$NAUH` (NYSE New Highs) and `$NADL` (NYSE New Lows) directly
  - **TradingView:** These symbols aren't available, so the PineScript version uses an ADD-based proxy to estimate breadth strength
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## Labels Explained

### Label 1: INTERNALS (Main Overview)

INTERNALS | BULLISH | Str: 72 | Conf: 85%

- **Scenario:** STRONG BULLISH / BULLISH / lean bull / NEUTRAL / lean bear / BEARISH / STRONG BEARISH
- **Strength (Str):** 0-100 scale (50 = neutral)
- **Confidence (Conf):** How strong the signal is based on score magnitude

### Label 2: TREND

TREND: UP | ADD:+ TICK:+ TRIN:+ VIX:+

- Shows overall trend direction (STRONG UP / UP / FLAT / DOWN / STRONG DOWN)
- Individual metric trends: + (bullish), - (bearish), = (neutral)

### Label 3: METRICS (Raw Values)

UVOL%: 62.5 | ADD: 850 | TICK: 620! | TRIN: 0.78 | NH/NL: 4.2x | VIX: 14.50 (-0.32)

- Shows actual values for each metric
- ! indicates extreme reading

### Label 4: SCORES BREAKDOWN

Scores: VOL:1 ADD:1 TICK:0.5 TRIN:0.5 NH/NL:0.5 VIX:1 = 4.5

- Individual normalized scores (-1 to +1 per metric)
  - Total composite score shown at end
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## Scoring System

Each metric is scored from **-1 to +1**:

Score	Meaning
+1	Strongly bullish
+0.5	Mildly bullish
0	Neutral
-0.5	Mildly bearish
-1	Strongly bearish

**Total Score Range:** -7 to +7

Total Score	Scenario
≥ 3	STRONG BULLISH
≥ 1.5	BULLISH
≥ 0.5	lean bull
-0.5 to 0.5	NEUTRAL
≤ -0.5	lean bear
≤ -1.5	BEARISH
≤ -3	STRONG BEARISH

## Special Signals

### Trading Signals

- **BULLISH SIGNAL!** - All conditions aligned for bullish continuation
- **BEARISH SIGNAL!** - All conditions aligned for bearish continuation
- **REVERSAL UP?** - Potential bullish reversal forming
- **REVERSAL DOWN?** - Potential bearish reversal forming

### Divergence Alerts

- **BULLISH DIVERGENCE!** - Internals bullish while SPY is down (potential bounce)

- **BEARISH DIVERGENCE!** - Internals bearish while SPY is up (potential drop)

## Extreme Zone Alerts

- **TICK EXTREME BULL/BEAR!** - TICK above 1000 or below -1000
  - **ADD EXTREME BULL/BEAR!** - ADD above 1500 or below -1500
  - **TRIN EXTREME BULL/BEAR!** - TRIN below 0.5 or above 2.0
  - **VIX FEAR SPIKE!** - VIX above 35
  - **VIX COMPLACENT!** - VIX below 18
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## Dynamic VIX Thresholds

When `useDynamicThresholds = yes`, thresholds adjust based on VIX regime:

<b>VIX Level</b>	<b>Regime</b>	<b>Multiplier</b>	<b>Effect</b>
< 18	Calm	0.8x	Tighter thresholds
18-25	Normal	1.0x	Standard thresholds
25-35	Elevated	1.3x	Looser thresholds
> 35	Fear	1.6x	Much looser thresholds

This prevents false signals during high volatility periods.

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## Input Settings

<b>Input</b>	<b>Default</b>	<b>Description</b>
<code>showLabels</code>	yes	Display all labels
<code>enableAlerts</code>	yes	Enable audio/popup alerts
<code>lookbackPeriod</code>	10	Bars for trend detection
<code>useDynamicThresholds</code>	yes	VIX-adjusted thresholds
<code>showDivergenceAlerts</code>	yes	Show SPY divergence alerts
<code>vixCalm</code>	18	VIX calm threshold
<code>vixNormal</code>	25	VIX normal threshold
<code>vixElevated</code>	35	VIX elevated threshold
<code>tickBullish</code>	500	TICK bullish threshold
<code>tickBearish</code>	-500	TICK bearish threshold
<code>tickExtremeBull</code>	1000	TICK extreme bullish
<code>tickExtremeBear</code>	-1000	TICK extreme bearish

Input	Default	Description
addBullish	500	ADD bullish threshold
addBearish	-500	ADD bearish threshold
addExtremeBull	1500	ADD extreme bullish
addExtremeBear	-1500	ADD extreme bearish

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## How to Use

### For Scalping / Day Trading

1. Watch the **INTERNAL**s label for overall market posture
2. Trade with the trend when scenario is BULLISH/BEARISH
3. Be cautious when NEUTRAL or lean bull/bear
4. Watch for **REVERSAL** signals for counter-trend opportunities

### For Swing Trading

1. Use **DIVERGENCE** alerts to spot potential reversals
2. Monitor **TREND** label for confirmation
3. Check **Confidence %** - higher = stronger signal

### Key Rules

- **Go long** when BULLISH/STRONG BULLISH with high confidence
  - **Go short** when BEARISH/STRONG BEARISH with high confidence
  - **Be cautious** when NEUTRAL or low confidence
  - **Watch for reversals** on divergence signals
  - **Respect extremes** - often mark short-term tops/bottoms
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## Color Coding

Color	Meaning
● Cyan	Strong bullish
● Green	Bullish
● Light Green	Weak bullish
● Yellow	Neutral
● Pink	Weak bearish
● Red	Bearish
● Magenta	Strong bearish
● Orange	Divergence

Color	Meaning
White	Extreme reading

## Installation

1. Open ThinkOrSwim
2. Go to **Studies** → **Edit Studies**
3. Click **Create** → **thinkScript Editor**
4. Paste the entire `MARKET_INTERNAL.tosts` code
5. Name it "Market Internals Dashboard"
6. Click **OK** and apply to your chart

## Best Practices

1. **Use on 1-5 minute charts** for intraday trading
2. **Combine with price action** - don't trade internals alone
3. **Watch for divergences** at key support/resistance levels
4. **Adjust thresholds** based on your trading style
5. **Paper trade first** to understand the signals

## Changelog

v3.0 (November 30, 2025)

- Added TRIN (Arms Index) tracking
- Added NH/NL (New Highs/New Lows) ratio
- Added true UVOL/DVOL from market data
- Added dynamic VIX-based thresholds
- Added normalized scoring system (-1 to +1)
- Added SPY divergence detection
- Added scores breakdown label
- Improved signal confirmation logic
- Better alert system with confirmation

## Author

Strategy by [@VietRoadie](#) | Enhanced with professional-grade features including dynamic VIX thresholds, normalized scoring, and divergence detection.