

# Market Internals Dashboard v3.0

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.

## Metrics Tracked

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

## Understanding Each Metric

UVOL/DVOL % (Up Volume / Down Volume)

**What it is:** The percentage of total NYSE volume that's going into up-ticking stocks vs down-ticking stocks.

**How to read it:**

- > **60%**: Bullish - More volume flowing into stocks moving up
- **55-60%**: Mildly bullish
- **45-55%**: Neutral - Volume balanced
- **40-45%**: Mildly bearish
- < **40%**: Bearish - More volume flowing into stocks moving down

**Intraday use:**

- Early morning UVOL > 65% often predicts bullish trend day
- UVOL < 35% early often predicts bearish trend day
- Reversals: Watch for UVOL crossing 50% midday - potential trend change

**Swing trade use:**

- Strong closes (last 30 min) with UVOL > 65% = bullish continuation likely
  - UVOL diverging from price = warning sign (price up but UVOL falling = weak rally)
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## ADD (Advance/Decline Line - Breadth)

**What it is:** The number of NYSE stocks advancing minus the number declining. Measures market participation.

### How to read it:

- > **1500**: Extreme bullish breadth - very broad rally
- > **500**: Strong bullish breadth
- **100-500**: Mildly bullish
- **-100 to +100**: Neutral/mixed
- **-500 to -100**: Mildly bearish
- < **-500**: Strong bearish breadth
- < **-1500**: Extreme bearish breadth - broad selloff

### Intraday use:

- ADD > 1000 + rising = "melt-up" conditions, don't fade
- ADD < -1000 + falling = "washout" conditions, wait for stabilization
- ADD crossing 0 = potential trend shift

### Swing trade use:

- Sustained ADD > 500 for multiple days = healthy uptrend
  - Price making new highs with ADD falling = bearish divergence (narrow leadership)
  - ADD leading price lower = early warning of weakness
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## TICK (NYSE Tick Index)

**What it is:** Real-time snapshot of stocks upticking minus downticking on the NYSE. Most volatile intraday indicator.

### How to read it:

- > **1000**: Extreme buying pressure (often short-term top)
- **500-1000**: Strong bullish momentum
- **200-500**: Moderate bullish
- **-200 to +200**: Neutral/choppy
- **-500 to -200**: Moderate bearish
- **-1000 to -500**: Strong bearish momentum
- < **-1000**: Extreme selling pressure (often short-term bottom)

### Intraday use (CRITICAL for scalpers):

- TICK crossing +500 = initiate longs or add to position
- TICK crossing -500 = initiate shorts or reduce longs

- **TICK extremes (+/-1000)** = fade the move - often marks 5-15 min reversals
- TICK range matters: If stuck between -200/+200 = choppy, avoid overtrading

**Swing trade use:**

- Less relevant for swing traders
  - But watch close: If TICK ends day < -800 = institutional selling, expect gap down
  - TICK ends day > +800 = institutional buying, expect gap up
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**TRIN (Arms Index / Trading Index)**

**What it is:** Volume-weighted breadth indicator. Ratio of (Declining Issues / Advancing Issues) / (Down Volume / Up Volume).

**How to read it:**

- < **0.5**: Extreme bullish (oversold bounce or strong rally)
- **0.5-0.7**: Strong bullish
- **0.7-0.9**: Mildly bullish
- **0.9-1.1**: Neutral
- **1.1-1.3**: Mildly bearish
- **1.3-2.0**: Strong bearish
- > **2.0**: Extreme bearish (panic selling, potential reversal)

**Intraday use:**

- TRIN < 0.7 in first hour = strong open, likely trend day up
- TRIN > 1.5 in first hour = weak open, likely trend day down
- **TRIN > 2.5** = capitulation, look for reversal longs (V-bottom setup)
- **TRIN < 0.4** = euphoric buying, potential exhaustion top

**Swing trade use:**

- Multiple days of TRIN > 1.5 = market under distribution
  - TRIN < 0.8 for multiple days = market under accumulation
  - TRIN spiking > 3.0 on selloff = washout, potential swing entry
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**NH/NL Ratio (New Highs / New Lows)**

**What it is:** Number of stocks making 52-week highs divided by stocks making 52-week lows.

**How to read it:**

- > **10**: Very strong market breadth - healthy bull market
- **3-10**: Good breadth - normal uptrend
- **1-3**: Neutral to mildly bullish
- **0.5-1**: Balanced
- **0.3-0.5**: Weak breadth - caution
- < **0.3**: Very weak breadth - bear market conditions

**Intraday use:**

- Limited - this is a POSITION/SWING indicator
- Can check at open:  $NH/NL > 5$  = strong overnight strength

**Swing trade use (CRITICAL):**

- **Confirms trend health:** SPY at new highs with  $NH/NL > 5$  = sustainable rally
  - **Spots divergences:** SPY at new highs but  $NH/NL < 2$  = narrow leadership, bearish
  - **Warns of reversals:**  $NH/NL$  dropping below 1.0 while SPY rising = distribution
  - **Finds bottoms:**  $NH/NL > 2$  after being  $< 0.5$  = breadth improving, potential swing long
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## VIX (Volatility Index)

**What it is:** "Fear gauge" - measures expected 30-day volatility based on SPX options pricing.

**How to read it:**

- **< 12:** Extreme complacency - potential top forming
- **12-18:** Low volatility - calm market
- **18-25:** Normal volatility
- **25-35:** Elevated fear - choppy market
- **> 35:** High fear - potential panic, look for reversals

**Intraday use:**

- VIX rising while SPY rising = warning (rally on shaky ground)
- VIX falling while SPY rising = healthy rally
- **VIX spike > 5 points** = major reversal or event, reduce size
- $VIX < 15$  + falling = complacent market, fade extremes

**Swing trade use (CRITICAL):**

- **VIX < 15:** Market complacent, be ready for volatility spike
  - **VIX > 30:** Fear elevated, look for mean reversion swing longs
  - **VIX closing below 20-day MA** after spike = all-clear signal
  - **VIX divergence:** SPY making lower lows but VIX not making higher highs = bullish divergence
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## Cumulative TICK

**What it is:** Running sum of all TICK readings throughout the day. Shows sustained directional pressure.

**How to read it:**

- **Rising:** Sustained buying pressure throughout day
- **Falling:** Sustained selling pressure throughout day
- **Flat:** Choppy, no directional conviction

**Intraday use** (Day trader's secret weapon):

- CumTick trending up all day = stay long, add on dips
  - CumTick trending down all day = stay short/cash, fade rallies
  - **CumTick reversal** (from down to up or vice versa) = major shift, follow new direction
  - CumTick flat + price trending = divergence, expect reversal
- Swing trade use:**
- Less relevant for multi-day holds
  - But strong positive CumTick close = bullish continuation likely next day
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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:**  $NH \div NL$

### Interpretation

NH/NL Ratio	Market Condition
> 10	Very strong breadth (bullish)
> 3	Healthy breadth (bullish)
~1	Balanced market
< 0.5	Weak breadth (bearish)
< 0.3	Very weak breadth (bearish)

### 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

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

Score	Meaning
-1	Strongly bearish

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

Total Score	Scenario
$\geq 3$	STRONG BULLISH
$\geq 1.5$	BULLISH
$\geq 0.5$	lean bull
-0.5 to 0.5	NEUTRAL
$\leq -0.5$	lean bear
$\leq -1.5$	BEARISH
$\leq -3$	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

## Dynamic VIX Thresholds

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

VIX Level	Regime	Multiplier	Effect
< 18	Calm	0.8x	Tighter thresholds

VIX Level	Regime	Multiplier	Effect
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.

## Input Settings

Input	Default	Description
<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
<code>addBullish</code>	500	ADD bullish threshold
<code>addBearish</code>	-500	ADD bearish threshold
<code>addExtremeBull</code>	1500	ADD extreme bullish
<code>addExtremeBear</code>	-1500	ADD extreme bearish

## How to Use

For Intraday Trading (Scalpers & Day Traders)

**Setup:**

- 1. Use **1-5 minute chart** with Market Internals Dashboard
- 2. Watch the main **INTERNALS** label for overall scenario
- 3. Keep **TREND** label visible for individual metric momentum



## Trading Rules:

### LONG ENTRIES - Look for:

- Scenario: BULLISH or STRONG BULLISH
- UVOL > 60%, ADD > 500, TICK > 500
- TRIN < 0.9
- Cumulative TICK trending UP
- **Entry trigger:** Price breaks resistance + all internals aligned
- **Confidence check:** If Confidence > 70%, size up

### SHORT ENTRIES - Look for:

- Scenario: BEARISH or STRONG BEARISH
- UVOL < 40%, ADD < -500, TICK < -500
- TRIN > 1.1
- Cumulative TICK trending DOWN
- **Entry trigger:** Price breaks support + all internals aligned
- **Confidence check:** If Confidence > 70%, size up

### REVERSAL TRADES (Advanced):

- **Bullish reversal:** "REVERSAL UP?" alert + TICK > +1000 (extreme)
  - Wait for TICK to pull back to +300-500, then long
- **Bearish reversal:** "REVERSAL DOWN?" alert + TICK < -1000 (extreme)
  - Wait for TICK to pull back to -300 to -500, then short

### AVOID TRADING WHEN:

- Scenario: NEUTRAL or "lean" (low conviction)
- Confidence < 50%
- TICK range tight (-200 to +200) = choppy conditions
- Internals conflicting (TICK bullish but ADD bearish)

### Intraday Timing:

- **9:35-10:30 AM ET:** If scenario STRONG BULLISH/BEARISH in first 30 min → trend day likely
- **10:30 AM-2:00 PM ET:** If NEUTRAL → range-bound, reduce size
- **2:00-4:00 PM ET:** Watch for divergences - if internals weaken but price still rising → expect reversal

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## For Swing Trading (Multi-Day Holds)

### Setup:

1. Use **daily or 4-hour chart** with Market Internals Dashboard
2. Focus on **NH/NL ratio, VIX, and DIVERGENCE alerts**
3. Less focus on TICK (too noisy for swing trades)

### Swing LONG Setup:

- **Entry conditions:**

- Scenario: BULLISH for 2+ days
- NH/NL > 3 (broad participation)
- VIX < 20 or falling
- No bearish divergence alerts
- ADD positive multiple days
- **Best entry:** After pullback to support with internals still BULLISH
- **Stop loss:** Below key support or if scenario turns BEARISH 2 days straight

### Swing SHORT Setup:

- **Entry conditions:**
  - Scenario: BEARISH for 2+ days
  - NH/NL < 1 (weak breadth)
  - VIX > 25 or rising
  - No bullish divergence alerts
  - ADD negative multiple days
- **Best entry:** After bounce to resistance with internals still BEARISH
- **Stop loss:** Above key resistance or if scenario turns BULLISH 2 days straight

### Divergence-Based Swing Trades (High probability):

#### Bullish Divergence Setup:

- **BULLISH DIVERGENCE!** alert fires
- SPY making lower lows BUT internals improving (scenario turning BULLISH)
- NH/NL starting to rise above 1.0
- VIX spiking but starting to decline
- **Action:** Wait for price to break above recent resistance, then long
- **Target:** Previous swing high
- **Edge:** You're buying when institutions are accumulating but retail is panicking

#### Bearish Divergence Setup:

- **BEARISH DIVERGENCE!** alert fires
- SPY making higher highs BUT internals weakening (scenario turning BEARISH)
- NH/NL falling below 2.0
- VIX starting to rise
- **Action:** Wait for price to break below recent support, then short
- **Target:** Previous swing low
- **Edge:** You're selling when institutions are distributing but retail is euphoric

### VIX-Based Swing Trades:

- **VIX > 35 + "VIX FEAR SPIKE!" alert:** Market panic, look for swing longs on oversold bounces
- **VIX < 15 + "VIX COMPLACENT!" alert:** Market complacency, be ready to take profits or hedge longs

### NH/NL Confirmation for Swing Trades:

- **Strong uptrend:** NH/NL should be > 5. If it drops below 2 while price at highs → EXIT longs

- **Reversal confirmation:** After downtrend, NH/NL crossing above 2 = breadth improving, safe to swing long
  - **Bear market signal:** NH/NL < 0.5 for multiple weeks = avoid longs entirely
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## Key Rules (Both Intraday & Swing)

### ☒ **ALWAYS trade with the scenario**

- BULLISH/STRONG BULLISH = bias long
- BEARISH/STRONG BEARISH = bias short
- NEUTRAL = reduce size or sit out

### ☒ **Use confidence as a sizing guide**

- Confidence > 85% = max size (for your risk tolerance)
- Confidence 70-85% = normal size
- Confidence 50-70% = half size
- Confidence < 50% = no trade or paper trade only

### ☒ **Respect extreme readings**

- TICK > +1000 or < -1000 = don't chase, wait for pullback
- ADD > +1500 or < -1500 = market exhausting, expect mean reversion
- TRIN > 2.5 = panic selling, but wait for stabilization before buying
- VIX spike > 10 points in one session = wait for 1-2 day consolidation

### ☒ **Watch for divergences**

- Price up + internals down = bearish divergence, prepare to exit longs
- Price down + internals up = bullish divergence, prepare to enter longs



### ☒ **Combine with price action**






- Internals tell you WHAT the market wants to do
- Price action tells you WHEN to enter
- Never trade internals alone - use with support/resistance, patterns, etc.

### ☐ **Don't overtrade**

- If scenario flips multiple times in one day = choppy market, reduce trades
  - If TICK range tight all day = low conviction, step aside
  - If confidence keeps dropping below 50% = market uncertain, wait for clarity
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## Color Coding

Color	Meaning
 Cyan	Strong bullish
 Green	Bullish

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