

Harmonic Oscillator Settings Guide

Complete Configuration Reference for Signal Pilot's Momentum Voting System

What Is the Harmonic Oscillator?

The Harmonic Oscillator is Signal Pilot's advanced momentum indicator that combines multiple oscillator inputs into a single "voting" system. Instead of watching 5 different indicators, you get one unified momentum read.

Core Components

COMPONENT	WHAT IT MEASURES	WEIGHT
RSI	Relative strength (overbought/oversold)	Configurable
Stochastic	Price position within range	Configurable
CCI	Price deviation from mean	Configurable
Williams %R	Closing price vs. high-low range	Configurable
MFI	Money flow (volume-weighted RSI)	Configurable

Default Settings

Oscillator Lengths

OSCILLATOR	DEFAULT LENGTH	RANGE	NOTES
RSI	14	7-21	Standard period
Stochastic K	14	7-21	%K period
Stochastic D	3	3-5	%D smoothing
CCI	20	14-30	Commodity Channel Index
Williams %R	14	7-21	Williams Percent Range
MFI	14	10-20	Money Flow Index

Voting Thresholds

SETTING	DEFAULT	PURPOSE
Bullish Threshold	70	Level above which oscillator votes bullish
Bearish Threshold	30	Level below which oscillator votes bearish
Strong Threshold	80/20	Extreme levels for strong signals

Settings Panel Breakdown

Section 1: Display Options

SETTING	OPTIONS	RECOMMENDED
Show Histogram	On/Off	On
Show Signal Line	On/Off	On
Show Vote Count	On/Off	On
Show Divergence	On/Off	On

Section 2: Oscillator Weights

Each oscillator can be weighted 0-100%

Example configurations:

Conservative (equal weight):

RSI: 20% | Stoch: 20% | CCI: 20% | W%R: 20% | MFI: 20%

RSI-Heavy:

RSI: 40% | Stoch: 15% | CCI: 15% | W%R: 15% | MFI: 15%

Volume-Focused:

RSI: 15% | Stoch: 15% | CCI: 15% | W%R: 15% | MFI: 40%

Section 3: Sensitivity

SENSITIVITY	VOTES REQUIRED	BEST FOR
Hair Trigger	2 of 5	Scalping, early signals
Normal	3 of 5	Standard trading
Rock Solid	4 of 5	Position trading, high conviction

Preset Configurations

Preset 1: Scalping (Fast)

```
RSI Length: 7
Stochastic K: 9
CCI: 14
Williams %R: 9
MFI: 10
Sensitivity: Hair Trigger
```

Use case: 1m-15m charts, quick entries/exits

Preset 2: Day Trading (Standard)

```
RSI Length: 14
Stochastic K: 14
CCI: 20
Williams %R: 14
MFI: 14
Sensitivity: Normal
```

Use case: 15m-1H charts, intraday setups

Preset 3: Swing Trading (Slow)

```
RSI Length: 21
Stochastic K: 21
CCI: 30
Williams %R: 21
MFI: 20
Sensitivity: Rock Solid
```

Use case: 4H-Daily charts, multi-day holds

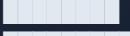
Preset 4: Crypto Volatile

```
RSI Length: 10  
Stochastic K: 10  
CCI: 14  
Williams %R: 10  
MFI: 10  
Sensitivity: Normal  
Weight MFI: 30% (higher for volume focus)
```

Use case: BTC, ETH, high-volatility assets

Reading the Display

The Histogram

Strong Bullish:		(Green, tall)
Bullish:		(Green, medium)
Neutral:		(Gray)
Bearish:		(Red, medium)
Strong Bearish:		(Red, tall)

COLOR	MEANING
Bright Green	4-5 oscillators voting bullish
Light Green	3 oscillators voting bullish
Gray	Split vote (2-3 each side)
Light Red	3 oscillators voting bearish
Bright Red	4-5 oscillators voting bearish

The Signal Line

- **Above zero:** Bullish momentum bias

- **Below zero:** Bearish momentum bias
- **Crossing zero:** Momentum shift

Vote Count Display

```
[5/0] = All 5 bullish (very strong)
[4/1] = 4 bullish, 1 bearish (strong)
[3/2] = 3 bullish, 2 bearish (moderate)
[2/3] = 2 bullish, 3 bearish (moderate bearish)
[1/4] = 1 bullish, 4 bearish (strong bearish)
[0/5] = All 5 bearish (very strong)
```

Divergence Detection

Bullish Divergence

```
Price:      \     Lower low
           /     Higher low
Harmonic:  / \
```

Setting: Divergence Lookback = 5-20 bars (default: 14)

Bearish Divergence

```
Price:      /     Higher high
           / \   Lower high
Harmonic:  / \
```

Combining with Pentarch

PENTARCH SIGNAL	HARMONIC CONFIRMATION
TD	Harmonic at extreme low, divergence forming
IGN	Harmonic crossing above zero, vote count improving
WRN	Harmonic at extreme high, divergence forming
CAP	Harmonic 5/0 bullish (exhaustion)
BDN	Harmonic crossing below zero, vote count declining

Timeframe Recommendations

TIMEFRAME	RSI	STOCH	CCI	SETTINGS PROFILE
1m-5m	7	9	14	Scalping
15m-1H	14	14	20	Day Trading
4H-Daily	21	21	30	Swing Trading
Weekly+	14	14	20	Position (standard works)

Common Issues & Solutions

ISSUE	CAUSE	SOLUTION
Too many signals	Sensitivity too high	Increase to Normal/Rock Solid
Missing moves	Sensitivity too low	Decrease to Hair Trigger
Choppy readings	Too short lengths	Increase oscillator lengths
Lagging signals	Too long lengths	Decrease oscillator lengths
False divergences	Lookback too short	Increase divergence lookback

Advanced: Custom Weighting Strategies

Trend Following Weight

When trend trading, weight momentum oscillators higher:

RSI: 35%
Stochastic: 25%
CCI: 20%
Williams %R: 10%
MFI: 10%

Mean Reversion Weight

When range trading, weight range oscillators higher:

RSI: 15%
Stochastic: 35%
CCI: 15%
Williams %R: 25%
MFI: 10%

Volume Confirmation Weight

When volume matters (breakouts, news):

RSI: 15%
Stochastic: 15%
CCI: 15%
Williams %R: 15%
MFI: 40%

Quick Settings Checklist

Before Trading Session

- [] Correct timeframe selected
- [] Oscillator lengths match trading style
- [] Sensitivity appropriate for market conditions
- [] Divergence detection on/off as needed
- [] Vote count display enabled

Weekly Review

- [] Are signals too frequent/rare? Adjust sensitivity
- [] Are signals early/late? Adjust lengths
- [] Is one oscillator dominating? Check weights
- [] Are divergences accurate? Adjust lookback

Non-Repainting Guarantee

- All oscillator calculations use closed bar data only
- Vote counts lock in on bar close
- Histogram and signal line do not recalculate

- What you see is permanent once bar closes
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