

FOR METATRADER 5

CSI_PRO_COMPLETE_MANUAL_MT5_Version.pdf

FrontierAlgo

Professional-Grade Trading System

METATRADER 5 EDITION

CSI Pro Complete Owner's Manual

Confluence Signal Intelligence System

NEED HELP? Start with Our 24/7 AI Chatbot!

Your first stop for any question: <https://frontieralgo.com/csi/support.html>

Our AI chatbot is trained on all CSI Pro documentation and can answer most questions instantly - no waiting required. Simply describe what you need help with, and get answers in seconds.

For complex issues requiring human assistance, email support is also available via the support page.

Important: This manual explains how CSI Pro functions as an analytical tool. Nothing contained herein constitutes investment advice, trading recommendations, or solicitation to buy or sell any financial instrument. CSI Pro is not a registered investment advisor, broker-dealer, or financial planner. All trading involves substantial risk of loss; only trade with capital you can afford to lose. Past indicator performance does not guarantee future results. You are solely responsible for your own trading decisions. By using CSI Pro, you acknowledge and accept these terms.

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1. Welcome to CSI Pro

Congratulations on your purchase of CSI Pro - the Confluence Signal Intelligence trading system. You now have access to a professional-grade analytical tool that brings institutional-level technology to your MetaTrader 5 charts.

This manual is designed to take you from complete beginner to confident CSI Pro user. We explain every feature, every setting, and every concept in plain English. No prior experience with trading indicators is required.

What You Have Purchased

Your CSI Pro license includes three separate indicators that work together as a complete system:

Indicator	What It Does	Where It Appears
CSI_Pro	The main decision-maker. Generates BUY and SELL signals, displays trend lines, and shows a 21-metric dashboard.	On your price chart (overlay)
CSI_Pro_CEI	Cycle Exhaustion Index. Tells you when a price move is running out of energy and likely to reverse.	Separate pane below chart
CSI_Pro_PRG	Price Range Gauge. Measures how "stretched" price is and calculates reversal probability.	Separate pane below chart

What Makes CSI Pro Different

Most trading indicators give you a signal and leave you guessing: "Is this a good signal or a bad one?" CSI Pro solves this problem by telling you exactly how much analytical evidence supports each signal.

Think of it like a panel of expert analysts voting on each trade:

- When **most experts agree**, you see a HIGH confidence signal
- When **several experts agree**, you see a MEDIUM confidence signal
- When **fewer experts agree**, you see a LOW confidence signal (hidden by default)

This simple classification system helps you quickly identify the highest-quality setups on your charts.

What You Can Expect From CSI Pro

Here's what CSI Pro delivers:

- CSI Pro identifies moments of strong technical agreement across 12 independent analytical factors
- The confidence rating tells you exactly how many factors support each signal
- You get institutional-level analysis synthesized into clear, actionable insights
- The system integrates seamlessly with your existing risk management approach

Who CSI Pro Is For

CSI Pro is designed for traders at all experience levels who:

- Want a systematic approach to identifying trading opportunities
- Appreciate having multiple perspectives synthesized into clear signals
- Practice proper risk management

If you are unfamiliar with chart reading basics or placing trades, refer to MetaTrader 5's built-in documentation for guidance, then return here. You can also ask our 24/7 AI chatbot at frontieralgo.com/csi/support.html to explain any concepts you encounter.

How to Use This Manual

We recommend reading this manual in order the first time through. Each section builds on the previous one. After that, use the Table of Contents to jump to specific topics as needed.

Look for these special boxes throughout the manual:

Blue boxes contain helpful tips and additional information.

Yellow boxes contain important warnings and things to watch out for.

Green boxes contain examples and step-by-step instructions.

Red boxes contain critical information about risk and disclaimers.

Don't Be Overwhelmed - This Is Easier Than It Looks

This documentation is comprehensive by design - it covers every feature, setting, and concept so you have a complete reference. But here is the truth: **CSI Pro is remarkably simple to use in practice.**

When you look at your charts, you will see clear BUY and SELL signals with confidence ratings. That is really all you need to get started.

Your 24/7 AI Chatbot is Ready to Help - Start Here First!

Before searching through this manual, try our AI chatbot at <https://frontieralgo.com/csi/support.html> - it can instantly:

- Answer any question about what you see on your charts
- Explain indicators and signals in plain English
- Help you understand settings and features
- Guide you through any confusion in real-time
- Walk you through installation and setup step-by-step

You do not need to memorize this manual. Use it as a reference when needed, and let the AI chatbot help you learn as you go. It is available 24/7 and responds in seconds - no waiting for email replies. Many traders find they only need the first few sections to start using CSI Pro effectively.

2. What CSI Pro Does For You

Before diving into technical details, let us explain what CSI Pro actually does in plain language and how it helps your trading.

The Problem CSI Pro Solves

Most traders face these common frustrations:

1. Conflicting Signals

You add multiple indicators to your chart, and one says BUY while another says SELL. Which do you trust? You end up paralyzed, watching opportunities pass by while you second-guess yourself.

2. Signal Quality Mystery

A signal appears on your chart, but you have no idea if it is a strong setup or a weak one. Should you take it with full size? Reduce your position? Skip it entirely? The indicator does not tell you.

3. Repainting Nightmares

You see a perfect signal, enter the trade, and then watch in horror as the signal disappears or changes. The indicator "repainted" - it showed you something that did not actually exist at the time.

4. Information Overload

Your chart looks like a rainbow of lines, arrows, and numbers. You cannot focus on price action because there is too much visual noise. Analysis paralysis sets in.

How CSI Pro Solves These Problems

Problem: Conflicting Signals

Solution: CSI Pro runs 4 different AI models and checks 12 independent technical factors. Instead of showing you conflicting opinions, it counts how many agree and gives you one clear signal with a confidence rating.

Problem: Signal Quality Mystery

Solution: Every signal is labeled HIGH, MEDIUM, or LOW based on how many analytical factors support it. You instantly know the quality of each setup.

Problem: Repainting

Solution: CSI Pro includes a "Wait for Bar Close" setting (enabled by default) that ensures signals only appear after a candle closes. Signals never disappear or change once they lock in.

Problem: Information Overload

Solution: CSI Pro synthesizes everything into clean, clear visuals. The complex analysis happens behind the scenes. You see simple arrows with confidence labels, plus an optional dashboard showing all the details if you want them.

The CSI Pro Advantage: Confluence

What is Confluence?

Confluence means multiple independent factors pointing in the same direction at the same time. In trading, confluence increases the significance of a signal because you are not relying on just one indicator - you have multiple pieces of evidence supporting the same conclusion.

CSI Pro is built around the concept of confluence. Here is how it works:

1. **Primary Trigger:** The Fisher Transform reaches an extreme level and begins to reverse
2. **Evidence Gathering:** CSI Pro immediately checks 12 different technical factors
3. **Counting Agreement:** It counts how many factors support the trade direction
4. **Classification:** Based on the count, it labels the signal HIGH, MEDIUM, or LOW
5. **Display:** You see a clear arrow with the confidence level right on your chart

This entire process happens in milliseconds. You get the benefit of 12-factor analysis without doing any of the work yourself.

How CSI Pro Fits Into Your Trading

CSI Pro is a powerful analytical partner designed to enhance your trading decisions:

- **It identifies high-probability opportunities.** By analyzing 12 independent factors, CSI Pro highlights setups where multiple technical conditions align.
- **It grades every signal for confidence.** You always know whether a setup has strong or moderate technical backing before you act.
- **It works alongside your risk management.** CSI Pro provides the analysis; you apply it within your proven risk framework.
- **It empowers your decision-making.** The indicator synthesizes complex data into clear insights, letting you make informed final calls.
- **It complements your market knowledge.** Combined with your understanding of market context, CSI Pro becomes even more effective.

The Technology Inside

Under the hood, CSI Pro uses several sophisticated technologies:

Technology	What It Does (Plain English)
K-Nearest Neighbors (KNN)	Looks at current market conditions and finds similar patterns from history to see what happened next
Gradient Boosting	Uses multiple "mini-analyzers" where each one learns from the mistakes of the previous one
Neural Network	Weighs different inputs based on their historical importance
Ensemble Voting	Combines all models into a committee that votes on market direction
Hidden Markov Model	Detects the current market "regime" (trending up, trending down, or neutral)
Kernel Regression	Creates a statistically smoothed trend line that filters out noise

You do not need to understand how these technologies work to use CSI Pro effectively. We explain them in more detail in Section 9 for those who are curious.

3. The Triple Confirmation Methodology

CSI Pro is not just one indicator - it is a complete three-indicator system designed to work together. This section explains the Triple Confirmation methodology and why it matters.

The Three Components

Component 1: CSI_Pro (The Decision Maker)

The main CSI_Pro indicator sits on your price chart and does the heavy lifting:

- Generates BUY and SELL signals
- Classifies signals as HIGH, MEDIUM, or LOW confidence
- Displays trend lines (EMAs) so you can see the direction of the market
- Shows a 21-metric dashboard with real-time market analysis
- Runs all 4 AI models and calculates the evidence score

Think of it as: Your primary signal source that tells you WHAT to potentially do (buy or sell) and HOW STRONG the setup is.

Component 2: CSI_Pro_CEI (The Timing Tool)

The Cycle Exhaustion Index (CEI) appears in a separate pane below your chart:

- Measures whether a price move is losing momentum
- Identifies when trends are "exhausted" and likely to reverse
- Shows reversal signals when momentum shifts
- Ranges from -1 to +1, with extreme readings in the configured exhaustion zones

Think of it as: Your timing tool that tells you WHEN a move is running out of steam.

Component 3: CSI_Pro_PRG (The Probability Gauge)

The Price Range Gauge (PRG) also appears in a separate pane:

- Measures how "stretched" price is from its normal range
- Uses three different time periods for confirmation
- Shows HP (High Probability) signals when reversal conditions are strongest

- Displays confluence markers when all gauges agree

Think of it as: A rubber band meter that shows when price has stretched too far and may snap back.

Why Three Indicators?

Using all three indicators together provides multiple layers of confirmation:

Layer	Indicator	Question It Answers
1	CSI_Pro	"Is this a valid signal with enough evidence behind it?"
2	CSI_Pro_CEI	"Is the current trend exhausted and ready to reverse?"
3	CSI_Pro_PRG	"Is price stretched to an extreme that tends to revert?"

When all three agree, you have maximum confluence - the highest quality setup the system can identify.

The Grade A+ Setup

The ideal CSI Pro setup occurs when:

Grade A+ Setup Checklist:

1. **CSI_Pro generates a signal** - A BUY or SELL arrow appears with HIGH or MEDIUM confidence
2. **CEI confirms exhaustion** - The CEI is in the opposite exhaustion zone (for a BUY, ideally CEI would be in the lower exhaustion zone)
3. **PRG shows extreme** - The PRG shows HP signal or deeply overbought/oversold reading
4. **Higher timeframes align** - The MTF Alignment shows agreement with your signal direction

When all four conditions are met, you have the strongest possible technical setup.

Trade Quality Grading

Based on how many confirmations you have, trades can be graded:

Grade	Requirements	Suggested Approach
A+	All 3 indicators + higher timeframes + market structure	Some traders use full position size (per individual risk rules)
A	All 3 indicators agree	Some traders consider full position size
B+	CSI_Pro signal + one other indicator confirms	Some traders consider 75% position
B	CSI_Pro HIGH confidence only	Some traders consider 50% position
C	CSI_Pro MEDIUM confidence only	Some traders consider 25% position or skip
F	CSI_Pro LOW or no signal	Many traders would skip this setup

Note: This grading system is a framework for consideration, not a trading recommendation. Position sizing decisions are personal and may be based on individual risk management approaches. It is generally advisable to avoid risking more than you can comfortably afford to lose on any single trade.

When Indicators Disagree

Sometimes the three indicators will not all agree. Here is how to interpret mixed signals:

CSI_Pro says BUY, but CEI is neutral:

The signal may be valid, but you do not have exhaustion confirmation. The trend might continue rather than reverse. Some traders might consider reduced size or tighter stops in this scenario.

CSI_Pro says BUY, but PRG is neutral:

Price is not at an extreme. The signal may work, but you are not catching a stretched rubber band. Less urgency.

CEI and PRG agree, but no CSI_Pro signal:

Conditions are becoming favorable, but the primary trigger has not fired. Wait for the CSI_Pro signal before acting.

All three show conflicting directions:

Mixed market conditions. The safest approach is to wait for clearer alignment.

4. Access and Account Setup

CSI Pro is licensed to specific MetaTrader 5 account numbers. This section explains how to submit your account number and verify your access.

Before You Begin: Verify Your Access

To use CSI Pro, you must submit your MT5 account number so we can grant access. If you have not done this yet, please complete this step first to activate your indicators.

Did you submit your MT5 Account Number?

After purchasing CSI Pro, you should have received a thank-you email directing you to submit your platform username or account number. If you skipped this step, visit the thank-you page link in your purchase confirmation email to complete the process.

How to Find Your MT5 Account Number

Your MT5 account number is the number you use to log into your trading account. Here is how to find it:

Step-by-Step Instructions:

1. Open MetaTrader 5 on your computer
2. In the top menu bar, click **File**
3. Select **Login to Trade Account** from the dropdown menu
4. Look at the **Login** field - this number is your MT5 Account Number
5. Copy this number exactly (including any leading zeros)

Alternative Method: You can also find your account number in the **Navigator** panel (Ctrl+N) under **Accounts**. Your logged-in account number appears there.

Submitting Your Account Number

If you have not yet submitted your account number:

1. Check your email for your CSI Pro purchase confirmation
2. Click the thank-you page link in that email
3. Select MetaTrader 5 as your platform
4. Enter your MT5 account number exactly as it appears in MT5
5. Submit the form

Access Timing

After submitting your account number:

- Access is typically granted within **24 hours**
- You will receive an email confirmation when access is activated
- The email will include download links for the indicator files

If You Already Have Access

If you have already received your indicator files and confirmation email, you can proceed directly to the Installation Guide in the next section.

Using Multiple Accounts

Your CSI Pro license can be used on multiple MT5 accounts that you personally own. If you need to add additional account numbers:

1. Visit our 24/7 AI chatbot at frontieralgo.com/csi/support.html
2. Tell the AI chatbot you need to add another account number - it will guide you through the process instantly
3. Provide your purchase details and the new account number

Troubleshooting Access Issues

Issue	Solution
Never received confirmation email	Check spam/junk folders. Use our AI chatbot at frontieralgo.com/csi/support.html for immediate help.
Submitted wrong account number	Use our AI chatbot at frontieralgo.com/csi/support.html with the correct number for update.
Indicator shows authorization error	Verify you are logged into the authorized account. Use our AI chatbot at frontieralgo.com/csi/support.html if issue persists.
Changed brokers or accounts	Use our AI chatbot at frontieralgo.com/csi/support.html to add the new account number.

5. Installation Guide

This section provides step-by-step instructions for installing CSI Pro on your MetaTrader 5 platform.

Required Files

You should have received three indicator files (either .mq5 source files or .ex5 compiled files):

- **CSI_Pro.ex5** (or CSI_Pro.mq5) - Main indicator
- **CSI_Pro_CEI.ex5** (or CSI_Pro_CEI.mq5) - Cycle Exhaustion Index
- **CSI_Pro_PRG.ex5** (or CSI_Pro_PRG.mq5) - Price Range Gauge

File Types: .ex5 files are compiled and ready to use. .mq5 files are source code that MetaTrader 5 will compile automatically. Either type works.

Step 1: Download and Extract Files

1. Download the CSI Pro ZIP file from your confirmation email or the downloads page
2. Right-click the ZIP file and select **Extract All**
3. Choose a location you can easily find (like your Desktop or Downloads folder)
4. Verify you see all three indicator files after extraction

Step 2: Open MetaTrader 5 Data Folder

1. Open MetaTrader 5
2. In the top menu bar, click **File**
3. Select **Open Data Folder**
4. A Windows Explorer window will open showing your MT5 data location

Step 3: Navigate to Indicators Folder

1. In the data folder window, double-click **MQL5**
2. Double-click **Indicators**

3. This is where CSI Pro files need to go

Full Path Example:

```
C:\Users\YourName\AppData\Roaming\MetaQuotes\Terminal\ABC123...\MQL5\Indicators\
```

Step 4: Copy Indicator Files

1. Go back to where you extracted the CSI Pro files
2. Select all three indicator files (CSI_Pro, CSI_Pro_CEI, CSI_Pro_PRG)
3. Right-click and select **Copy** (or press Ctrl+C)
4. Go back to the Indicators folder window
5. Right-click in the folder and select **Paste** (or press Ctrl+V)

Step 5: Refresh MetaTrader 5 Navigator

1. Return to MetaTrader 5
2. Press **Ctrl+N** to open the Navigator panel (if not already open)
3. In the Navigator panel, find **Indicators**
4. Right-click on **Indicators**
5. Select **Refresh**

Step 6: Verify Installation

After refreshing, expand the Indicators section in the Navigator panel. You should see:

- CSI_Pro
- CSI_Pro_CEI
- CSI_Pro_PRG

If you see these three indicators, installation was successful!

Step 7: Add Indicators to Chart

To add CSI Pro to a chart:

1. Open a chart of any symbol you want to analyze

2. In the Navigator panel, find **CSI_Pro**
3. Double-click on it (or drag it onto the chart)
4. An input settings dialog will appear
5. Click **OK** to accept default settings (recommended for first use)
6. Repeat for CSI_Pro_CEI and CSI_Pro_PRG

Recommended Chart Layout

For the best experience, set up your chart with all three indicators:

Chart Area	Indicator	What You See
Main chart (price area)	CSI_Pro	Signal arrows, EMA lines, dashboard
First subchart (below main)	CSI_Pro_CEI	Cycle exhaustion oscillator
Second subchart (bottom)	CSI_Pro_PRG	Price range gauge with HP signals

Resizing Subcharts: You can drag the borders between chart panes to resize them. Make the main price chart larger and give CEI and PRG enough room to be readable.

Saving Your Template

After setting up all three indicators, save the layout as a template so you can quickly apply it to other charts:

1. Right-click anywhere on the chart
2. Select **Template**
3. Select **Save Template**
4. Name it something like "CSI Pro Full Setup"
5. Click **Save**

Now you can apply this template to any chart by right-clicking, selecting Template, and choosing your saved template.

6. The Three Display Modes

CSI Pro for MetaTrader 5 offers three different display modes that change how visual elements appear on your chart. Understanding these modes helps you customize the indicator to your preferences.

What Are Display Modes?

Display modes control the visual presentation of CSI Pro without changing its underlying calculations or signals. They affect things like colors, line styles, and visual emphasis.

Mode A: Standard Display

Mode A is the default display setting that balances information with visual clarity.

- **Signal arrows:** Standard size with clear labels
- **Trend lines:** All three EMAs visible (20, 50, 200)
- **Dashboard:** Full 21-metric display
- **Background:** Subtle shading based on market regime

Best for: Most users, especially when learning the system.

Mode B: Enhanced Visibility

Mode B increases visual prominence of key elements.

- **Signal arrows:** Larger and more prominent
- **Trend lines:** Thicker lines for better visibility
- **Dashboard:** Slightly larger text
- **Background:** More pronounced color zones

Best for: Traders who want signals to stand out more, or those using larger monitors.

Mode C: Minimal Display

Mode C reduces visual clutter for a cleaner chart.

- **Signal arrows:** Standard size, simplified labels

- **Trend lines:** Optional (can be hidden)
- **Dashboard:** Compact version with key metrics only
- **Background:** Minimal or no shading

Best for: Experienced traders who want less visual noise, or those with smaller screens.

How to Change Display Modes

To change the display mode:

1. Right-click on the CSI_Pro indicator line or label
2. Select **Properties** (or double-click the indicator in Navigator after adding)
3. Find the display-related settings in the Inputs tab
4. Adjust settings like `Display_ShowSignalLabels` , `Display_ShowBackgroundShading` , etc.
5. Click **OK** to apply changes

Applying Multiple Modes

You can customize individual display elements to create your own hybrid mode:

Setting	What It Controls
<code>Display_ShowSignalLabels</code>	Whether text labels appear next to arrows
<code>Display_ShowBackgroundShading</code>	Whether the background changes color
<code>Display_ShowInfoPanel</code>	Whether the dashboard appears
<code>Display_ShowTrendLines</code>	Whether EMA trend lines appear
<code>Display_MaxLabelsOnChart</code>	How many historical labels to show

Pro Tip: Start with all display options enabled (Mode A) while learning. Once you are comfortable, gradually turn off elements you do not need to create a cleaner workspace.

7. Your First Launch - What to Expect

When you first load CSI Pro on a chart, here is what you should see and what to expect.

Initial Loading Time

When CSI Pro first loads on a chart, it needs time to:

- Load historical price data for pattern analysis
- Calculate all technical indicators (Fisher, RSI, Stochastic RSI, etc.)
- Run the machine learning models across the history
- Generate all historical signals

Expected loading time: 5-15 seconds depending on your computer speed and the amount of historical data.

Performance Mode: If loading is too slow, you can enable `AI_PerformanceMode` in settings. This skips ML calculations on older bars, making loading faster while keeping recent signals accurate.

What You Should See

After loading completes, you should see:

On the Main Price Chart:

- **Signal arrows** - Green up arrows for BUY signals, red down arrows for SELL signals
- **Signal labels** - Text showing "BUY HIGH", "SELL MEDIUM", etc.
- **Three EMA lines** - Blue (EMA 20), Orange (EMA 50), Purple (EMA 200)
- **Adaptive trend line** - Changes color based on trend direction
- **Dashboard** - Panel in the upper right showing 21 metrics

In the CEI Subchart:

- **Oscillator line** - Ranging between -1 and +1
- **Exhaustion zone lines** - Mark the exhaustion threshold boundaries

- **Extreme zone lines** - Mark the extreme reversal threshold boundaries
- **Reversal markers** - "REV" labels when reversals are detected

In the PRG Subchart:

- **Fast gauge line** - Primary signal source
- **Slow gauge line** - Confirmation layer
- **Zone boundary lines** - Overbought and oversold levels
- **HP markers** - High Probability signals when conditions are strongest

If Something Looks Wrong

What You See	Likely Cause	Solution
No signals at all	Not enough data loaded	Wait longer or reduce lookback settings
Dashboard shows "Loading"	Still calculating	Wait a few more seconds, click on chart
Authorization error	Account not registered	Submit your account number (see Section 4)
Indicator not visible	Wrong chart type	Use candlestick or bar chart (not line chart)
Only a few signals	Low timeframe with Signal_HideWeakSignals on	Normal - fewer HIGH/MEDIUM signals on lower timeframes

Normal Signal Frequency

How many signals should you expect? This varies by timeframe and market conditions:

Timeframe	Typical Signal Frequency
M5 (5-minute)	Multiple per day, but many may be MEDIUM
M15 (15-minute)	Several per day
H1 (1-hour)	A few per day to a few per week
H4 (4-hour)	A few per week
D1 (Daily)	A few per month

Remember: Fewer signals is not a problem - it often means the indicator is being selective. Quality over quantity is the CSI Pro philosophy.

Practice Period Recommendation

Before using CSI Pro for live trading, many traders find it helpful to:

- Spend at least 1-2 weeks observing signals in real-time
- Use a demo account to practice entries and exits
- Study past signals to understand how they performed
- Familiarize yourself with all three indicators
- Develop your own rules for which signals you will take

8. Understanding the Dashboard

The CSI Pro dashboard is a real-time information panel that appears in the upper right corner of your chart. It displays 21 metrics organized into categories. This section explains every metric and, more importantly, how to USE this information.

Dashboard Overview

The dashboard is organized into logical groups:

- **Rows 1-3:** Market State (What kind of market are we in?)
- **Rows 4-6:** Oscillator Readings (Are we overbought or oversold?)
- **Rows 7-10:** AI/ML Model Outputs (What do the AI models think?)
- **Rows 11-13:** Sub-Indicator Status (CEI, PRG, MRO readings)
- **Rows 14-17:** Signal Analysis (What signals are active?)
- **Rows 18-21:** Trend and Volatility (What is the bigger picture?)

Dashboard Color Coding

Colors in the dashboard follow a consistent logic:

Color	Meaning	What It Suggests
Green	Bullish or Oversold	Conditions may favor buying
Red	Bearish or Overbought	Conditions may favor selling
Gold/Yellow	Strong trend or Extreme reading	Significant condition detected
Gray	Neutral	No clear directional bias
Orange	High Volatility	Markets are moving fast, use caution

Market State Metrics (Rows 1-3)

Row 1: Regime

What is a Market Regime?

A **regime** is the overall character of the market right now. Is it trending strongly? Moving sideways? Highly volatile? The regime helps you understand what type of trading approach might work best.

Possible Values:

- **Strong Uptrend (Green):** Price is consistently moving higher. Trend-following approaches may work well in this environment. Counter-trend signals may carry additional considerations.
- **Strong Downtrend (Red):** Price is consistently moving lower. Trend-following short approaches may work well in this environment. Counter-trend buys may carry additional considerations.
- **High Volatility (Orange):** Price is making big swings in both directions. Some traders consider wider stops and smaller positions in this environment.
- **Range (Gray):** Price is moving sideways. Reversal signals at range extremes may be worth consideration. Trend-following in the middle of ranges is generally less reliable.

How to use it: Consider matching your trading approach to the regime. In Strong Uptrend, some traders focus more on BUY signals. In Range markets, signals at support/resistance levels may be of interest.

Row 2: HMM State

What is HMM?

Hidden Markov Model (HMM) is a statistical method that tries to detect the "hidden" state of the market based on observable data (price returns and volatility). Think of it as asking: "If I cannot directly see whether the market is bullish or bearish, what can I infer from how it is behaving?"

Possible Values:

- **BULL (Green):** HMM detects bullish characteristics (positive returns, reasonable volatility)
- **BEAR (Red):** HMM detects bearish characteristics (negative returns, often higher volatility)

- **NEUTRAL (Gray):** HMM cannot determine a clear state (returns are mixed)

How to use it: HMM State adds another confirmation layer. A BUY signal is stronger when HMM shows BULL. A SELL signal is stronger when HMM shows BEAR.

Row 3: ADX

What is ADX?

Average Directional Index (ADX) measures trend strength - NOT direction. A high ADX means the market is trending strongly (could be up OR down). A low ADX means the market is choppy or ranging.

Reading ADX:

- **Below 25 (Gray):** Weak trend or no trend. Market is ranging. Trend-following signals may whipsaw.
- **Above 25 (Gold):** Strong trend present. Trend-following signals are more reliable.
- **Above 40:** Very strong trend. Be cautious about counter-trend signals.

How to use it: When ADX is above 25, trust the trend. When ADX is below 25, look for range-bound opportunities at support/resistance.

Oscillator Readings (Rows 4-6)

Row 4: Fisher

What is the Fisher Transform?

The **Fisher Transform** converts price data into a form that makes extreme readings more visible. It "amplifies" the extremes, making it easier to spot when price has moved too far too fast.

Reading Fisher:

- **Above extreme threshold (Red):** Overbought - price may be stretched too high
- **Below extreme threshold (Green):** Oversold - price may be stretched too low
- **Between thresholds (Gray):** Normal range

How to use it: The Fisher Transform is the primary trigger for CSI Pro signals. When it reaches an extreme and begins to reverse, that is when signals fire.

Row 5: RSI

What is RSI?

Relative Strength Index (RSI) measures the speed and magnitude of recent price changes on a scale of 0 to 100. It helps identify overbought and oversold conditions.

Reading RSI:

- **Above 70 (Red):** Overbought - buying pressure may be exhausting
- **Below 30 (Green):** Oversold - selling pressure may be exhausting
- **Between 30-70 (Gray):** Neutral zone

How to use it: RSI adds confirmation to signals. A BUY signal is stronger when RSI is in the oversold zone. A SELL signal is stronger when RSI is overbought.

Row 6: StochRSI

What is Stochastic RSI?

Stochastic RSI applies the Stochastic formula to RSI values instead of price. It creates a faster-moving oscillator that reaches extremes more often than regular RSI. The display shows two values: %K (fast line) and %D (signal line).

Reading StochRSI:

- **Above 80 (Red):** Overbought zone
- **Below 20 (Green):** Oversold zone
- **%K crossing %D:** Potential momentum shift

How to use it: StochRSI is more sensitive than RSI. It helps with timing - when both RSI and StochRSI agree, the signal is stronger.

AI/ML Model Outputs (Rows 7-10)

These rows show what each of CSI Pro's four AI models is predicting. Values are shown as percentages:

- **Above 55% (Green):** Model is bullish
- **Below 45% (Red):** Model is bearish
- **45-55% (Gray):** Model is neutral

Row 7: KNN

K-Nearest Neighbors pattern matching result. Higher percentage = more historical patterns suggest upward movement.

Row 8: GradBoost

Gradient Boosting classifier result. Higher percentage = the iterative model favors upward movement.

Row 9: Neural Net

Neural Network (perceptron) result. Higher percentage = weighted inputs suggest upward movement.

Row 10: Ensemble

Combined vote from all models. This is the most important ML reading because it synthesizes all model opinions.

How to use ML outputs: When all four models agree (all green or all red), you have strong ML consensus. When they disagree, the signal is less reliable from an ML perspective.

Sub-Indicator Status (Rows 11-13)

Row 11: CEI

Shows the Cycle Exhaustion Index value and status:

- **OB (Red):** Overbought/upper exhaustion zone
- **OS (Green):** Oversold/lower exhaustion zone
- **N (Gray):** Neutral (between exhaustion zones)

Row 12: PRG

Shows the Price Range Gauge value and status (same OB/OS/N coding).

Row 13: MRO

Shows the Momentum Regime Oscillator value and status (same OB/OS/N coding).

How to use sub-indicator status: For BUY signals, you want to see OS (oversold) on these indicators. For SELL signals, you want to see OB (overbought). When all three show the same extreme, reversal probability is elevated.

Signal Analysis (Rows 14-17)

Row 14: Divergence

Reserved for divergence detection (currently displays "NONE"). Future updates may activate this feature.

Row 15: Evidence

Shows the count of bullish factors (^) versus bearish factors (v). For example: "4^ / 2v" means 4 factors are bullish and 2 are bearish.

How to use it: This is the raw evidence count. The side with more factors is currently dominant. A big difference (like 6^ / 1v) indicates strong directional bias.

Row 16: Bull Signal

If a bullish signal is active, shows its classification (HIGH, MEDIUM, or LOW) and evidence count.

Row 17: Bear Signal

If a bearish signal is active, shows its classification and evidence count.

Trend and Volatility (Rows 18-21)

Row 18: MTF Align

What is Multi-Timeframe Alignment?

MTF Alignment checks higher timeframes (by default, H1 and H4) to see if they agree with your signal direction. Trading WITH higher timeframe trends is generally safer than trading against them.

Possible Values:

- **BULLISH + (Green):** Higher timeframes are bullish - supports BUY signals
- **BEARISH + (Red):** Higher timeframes are bearish - supports SELL signals
- **MIXED (Gray):** Higher timeframes conflict - be more cautious

Row 19: Kernel

Shows the direction of the Kernel Regression trend line:

- **UP ^ (Green):** Kernel trend is rising
- **DOWN v (Red):** Kernel trend is falling
- **FLAT - (Gray):** Kernel trend is horizontal

Row 20: AdapTrend

Shows the direction of the Adaptive Trend overlay:

- **UP ^ (Green):** Adaptive trend is bullish
- **DOWN v (Red):** Adaptive trend is bearish

Row 21: Vol Regime

Shows the current volatility classification:

- **HIGH (Orange):** Volatility is elevated. Larger price swings are common. Some traders consider smaller positions or wider stops in this environment.
- **NORMAL (Gray):** Volatility is average. Standard trading conditions.
- **LOW (Blue):** Volatility is compressed. Breakouts may be coming. Smaller stops may work.

Using the Dashboard Effectively

Quick Dashboard Assessment (Before Taking a Signal):

1. **Check Regime and ADX:** What kind of market is this?
2. **Check Oscillators:** Are they confirming the signal direction?
3. **Check ML Models:** Do they mostly agree?
4. **Check Sub-Indicators:** Are CEI/PRG/MRO at extremes supporting the signal?
5. **Check Evidence:** How many factors support vs. oppose?
6. **Check MTF Align:** Do higher timeframes agree?
7. **Check Vol Regime:** Should you adjust position size for volatility?

The dashboard gives you everything you need to make an informed decision about signal quality. With practice, you can scan all 21 metrics in just a few seconds.

9. The 4 AI Models Explained

CSI Pro uses four different artificial intelligence models to analyze market conditions. Each model takes a different approach, and together they provide a more robust analysis than any single model could. This section explains each model in plain English.

Note: You do not need to understand the technical details of these models to use CSI Pro effectively. This section is for traders who want to understand what is happening "under the hood."

Why Four Models Instead of One?

Imagine you are trying to predict the weather. You could:

- Ask one meteorologist for their opinion
- Or ask four different meteorologists who use different methods

If all four meteorologists agree it will rain, you have much more confidence than if only one says so. This is the same principle behind CSI Pro's multi-model approach.

Each model has different strengths and weaknesses. By combining them, we get a more balanced view of market conditions.

Model 1: K-Nearest Neighbors (KNN)

KNN in Plain English

K-Nearest Neighbors works like this: "Show me what the market looks like right now, and I will find similar-looking situations from the past. Then I will tell you what usually happened next."

How It Works:

1. CSI Pro looks at the current market conditions (Fisher level, RSI, Stochastic RSI, CCI, ADX)
2. It searches through historical data to find the 8 most similar situations (the "K" in KNN refers to this number)
3. It checks what happened after each of those historical situations

4. If most of them went up, KNN votes bullish. If most went down, KNN votes bearish.

Analogy:

KNN is like a historian who says: "I have seen this situation before. Based on what happened those times, here is what I expect."

What the Dashboard Shows:

The KNN row shows a percentage. Above 55% means KNN is bullish. Below 45% means bearish. Between 45-55% is neutral.

Model 2: Gradient Boosting

Gradient Boosting in Plain English

Gradient Boosting uses multiple simple decision-makers (called "trees") where each one learns from the mistakes of the previous one. The final answer comes from combining all their opinions.

How It Works:

1. The first "tree" makes a prediction based on RSI
2. The second "tree" looks at where the first was wrong and focuses on those cases, adding Fisher Transform analysis
3. The third "tree" corrects remaining errors using Stochastic RSI
4. This continues for 5 trees total
5. The final prediction combines all trees, weighted by how accurate each one was

Analogy:

Gradient Boosting is like a team of analysts where each person reviews the previous person's work and fixes their mistakes. The team keeps improving until they cannot find any more errors to fix.

What the Dashboard Shows:

The GradBoost row shows the combined output of all decision trees, converted to a percentage.

Model 3: Neural Network (Perceptron)

Neural Network in Plain English

A **Neural Network** assigns importance weights to different inputs, then combines them to make a decision. The weights were learned from historical data to optimize prediction accuracy.

How It Works:

1. The model receives 5 inputs: RSI, Fisher, Stochastic RSI, ADX, and CCI
2. Each input is multiplied by a weight that represents its importance
3. The weighted inputs are added together
4. The result goes through a "sigmoid" function that converts it to a probability between 0 and 1

Analogy:

The Neural Network is like a judge who has learned which factors matter most. It gives more weight to the evidence that has historically been most predictive.

What the Dashboard Shows:

The Neural Net row shows the output probability as a percentage.

Model 4: Ensemble Voting

Ensemble Voting in Plain English

Ensemble Voting combines opinions from multiple indicators using a weighted voting system. Each indicator gets to vote, but some votes count more than others based on historical reliability.

How It Works:

1. Multiple indicators each cast a vote (bullish, bearish, or neutral)
2. Each input is weighted based on historical importance - factors contribute proportionally to signal strength
3. The weighted votes are tallied to produce a final consensus score

Analogy:

Ensemble Voting is like a board of directors where each member has a different number of shares. The final decision reflects the weighted opinion of all members.

What the Dashboard Shows:

The Ensemble row shows the weighted consensus score as a percentage. This is often considered the most important ML reading because it synthesizes multiple perspectives.

How the Models Work Together

When generating signals, CSI Pro considers all four models:

Scenario	What It Means	Implication
All 4 models green (bullish)	Strong ML consensus for upward movement	Adds significant evidence to BUY signals
All 4 models red (bearish)	Strong ML consensus for downward movement	Adds significant evidence to SELL signals
Mixed (some green, some red)	Models disagree on direction	ML evidence is inconclusive
All 4 models gray (neutral)	No clear pattern detected	ML provides no directional bias

Pro Tip: When all four AI models agree strongly (all above 60% or all below 40%), pay extra attention to signals in that direction. Full AI consensus is relatively rare and often significant.

10. The Evidence Factors

Every CSI Pro signal is classified based on how many "evidence factors" support it. This section explains each factor, what triggers it, and how it contributes to signal quality.

How Evidence Counting Works

When the Fisher Transform triggers a potential signal, CSI Pro immediately checks 12 independent factors. Each factor that confirms the signal direction adds to the evidence count:

- **HIGH confidence:** Multiple factors show strong agreement
- **MEDIUM confidence:** Several factors agree
- **LOW confidence:** Limited factor agreement (hidden by default)

The 12 Evidence Factors

Factor 1: Fisher Transform Extreme

What it checks: Is the Fisher Transform in an extreme zone and turning around?

Bullish trigger: Fisher in oversold extreme zone and starting to rise

Bearish trigger: Fisher in overbought extreme zone and starting to fall

Why it matters: The Fisher Transform is the primary signal trigger. When it reaches an extreme and reverses, it suggests price may have moved too far and could snap back.

Factor 2: RSI Confirmation

What it checks: Is RSI in an overbought or oversold zone?

Bullish trigger: RSI below 30 (oversold)

Bearish trigger: RSI above 70 (overbought)

Why it matters: RSI is one of the most widely-used momentum indicators. When it agrees with the Fisher Transform, you have two independent momentum measures pointing the same direction.

Factor 3: Stochastic RSI Confirmation

What it checks: Is Stochastic RSI at an extreme?

Bullish trigger: StochRSI below 20 (oversold)

Bearish trigger: StochRSI above 80 (overbought)

Why it matters: StochRSI is more sensitive than regular RSI, reaching extremes more often. This provides a faster-responding momentum confirmation.

Factor 4: CEI Exhaustion Zone

What it checks: Is the Cycle Exhaustion Index showing momentum exhaustion?

Bullish trigger: CEI in lower exhaustion zone (bearish momentum exhausted)

Bearish trigger: CEI in upper exhaustion zone (bullish momentum exhausted)

Why it matters: When momentum is exhausted, the current trend is running out of energy. This increases the probability of a reversal.

Factor 5: PRG Extreme Zone

What it checks: Is the Price Range Gauge at an extreme?

Bullish trigger: PRG in oversold zone (price stretched too low)

Bearish trigger: PRG in overbought zone (price stretched too high)

Why it matters: PRG measures how far price has stretched from its normal range. Like a rubber band, stretched prices tend to snap back.

Factor 6: MRO Extreme Zone

What it checks: Is the Momentum Regime Oscillator at an extreme?

Bullish trigger: MRO in oversold zone

Bearish trigger: MRO in overbought zone

Why it matters: MRO provides an additional momentum perspective that adapts to market conditions.

Factor 7: Multi-Timeframe Alignment

What it checks: Do higher timeframes (H1 and H4) agree with the signal direction?

Bullish trigger: Higher timeframes show bullish structure

Bearish trigger: Higher timeframes show bearish structure

Why it matters: Trading with the larger trend is generally safer than fighting it. Signals aligned with higher timeframes have the wind at their back.

Factor 8: Market Structure

What it checks: Is the current market structure bullish or bearish?

Bullish trigger: Price making higher highs and higher lows

Bearish trigger: Price making lower highs and lower lows

Why it matters: Market structure reflects the underlying trend. Signals that align with structure are more likely to be continuation moves rather than failed reversals.

Factor 9: Adaptive Trend Direction

What it checks: Which direction is the adaptive trend line pointing?

Bullish trigger: Adaptive trend line is rising

Bearish trigger: Adaptive trend line is falling

Why it matters: The adaptive trend adjusts its sensitivity based on market conditions, providing a filtered view of the underlying trend.

Factor 10: ML Directional Score

What it checks: What is the combined AI model consensus?

Bullish trigger: Ensemble score above 55%

Bearish trigger: Ensemble score below 45%

Why it matters: When the machine learning models agree on direction, it adds pattern-based confirmation to the signal.

Factor 11: Volume Surge

What it checks: Is there a significant increase in volume supporting the move?

Bullish trigger: Volume surge with bullish price action

Bearish trigger: Volume surge with bearish price action

Why it matters: High volume confirms conviction. Reversals on high volume are more significant than those on low volume.

Factor 12: HMM Regime State

What it checks: What regime has the Hidden Markov Model detected?

Bullish trigger: HMM shows BULL state

Bearish trigger: HMM shows BEAR state

Why it matters: The HMM provides a statistical classification of the current market regime, adding another independent perspective.

How Factors Combine

Example: A HIGH Confidence BUY Signal

The Fisher Transform drops into the oversold extreme zone and begins to rise. CSI Pro checks all factors and finds:

- Factor 1 (Fisher Extreme): YES - Fisher in oversold zone turning up
- Factor 2 (RSI): YES - RSI at 28 (oversold)
- Factor 3 (StochRSI): YES - StochRSI at 15 (oversold)
- Factor 4 (CEI): YES - CEI in exhaustion zone
- Factor 5 (PRG): YES - PRG showing oversold
- Factor 6 (MRO): NO - MRO neutral
- Factor 7 (MTF): YES - Higher timeframes bullish
- Factor 8 (Structure): NO - Structure unclear
- Factor 9 (Adaptive Trend): NO - Still falling
- Factor 10 (ML Score): YES - Ensemble at 62%
- Factor 11 (Volume): NO - Normal volume
- Factor 12 (HMM): YES - HMM shows BULL

Result: Strong bullish factor agreement - This generates a HIGH confidence BUY signal.

Why Some Factors Matter More

While all factors contribute equally to the count, some combinations are particularly meaningful:

- **All oscillators agree (Fisher + RSI + StochRSI):** Strong momentum confirmation
- **CEI + PRG both at extremes:** Double exhaustion confirmation
- **MTF + Structure aligned:** Trend confirmation from multiple perspectives
- **ML Score + HMM agree:** AI/statistical consensus

11. Reading Buy and Sell Signals

This section explains how to interpret CSI Pro signals, what the confidence levels really mean, and how to decide which signals to act on.

Signal Appearance

CSI Pro signals appear as arrows on your price chart:

Signal Type	Arrow	Position	Label Color
BUY HIGH	Green up arrow	Below the candle	Gold
BUY MEDIUM	Green up arrow	Below the candle	Green
BUY LOW	Light green up arrow	Below the candle	Muted green (hidden by default)
SELL HIGH	Red down arrow	Above the candle	Gold
SELL MEDIUM	Red down arrow	Above the candle	Red
SELL LOW	Light red down arrow	Above the candle	Muted red (hidden by default)

Understanding Confidence Levels

Understanding Confidence Levels: Confidence ratings reflect how many analytical factors align in the same direction.

A HIGH confidence signal indicates strong technical agreement across multiple independent measures. This gives you the analytical foundation to make informed decisions within your trading plan.

HIGH Confidence

What it means: Multiple independent analytical factors are pointing in the same direction. The technical picture is clear with deep confluence.

What to do:

- These are your highest-quality setups from a technical perspective
- Some traders consider full position size (per individual risk rules)

- Still use proper stop losses - nothing is guaranteed
- Check the dashboard for additional context

MEDIUM Confidence

What it means: Several factors support the signal direction. There is moderate technical agreement, but not as strong as HIGH signals.

What to do:

- These signals are still valid but have less technical backing
- Consider reduced position size
- Look for additional confirmation from CEI or PRG
- Be more selective about which MEDIUM signals you take

LOW Confidence

What it means: Limited factor agreement supports the signal. The technical picture is unclear or mixed.

What to do:

- Hidden by default for a reason - minimal technical support
- Generally best to skip these signals
- If you enable them, use very small positions and tight stops

The Gold Label: What It Means

Both HIGH confidence BUY and HIGH confidence SELL signals display with a gold label. This visual cue instantly tells you this is a maximum-confluence signal.

When you see a gold label, it means:

- Multiple evidence factors show strong agreement
- This is the highest quality signal the system can generate
- Multiple independent analysis methods have reached the same conclusion

When to Take a Signal

Signal Decision Framework:

Before taking any signal, ask yourself these questions:

1. **Is it HIGH or MEDIUM confidence?** (Skip LOW signals)
2. **Does CEI confirm exhaustion?** (Check the CEI indicator)
3. **Does PRG support the direction?** (Check for HP signals or extremes)
4. **Do higher timeframes agree?** (Check MTF Align in dashboard)
5. **What is the market regime?** (Check if conditions favor this type of trade)
6. **Does this fit my trading plan?** (Only you can answer this)

When to Skip a Signal

Consider passing on a signal when:

- **It is a LOW confidence signal** - Not enough technical support
- **CEI is in the wrong zone** - If you are getting a BUY signal but CEI shows upper exhaustion, the timing may be off
- **Higher timeframes conflict** - Trading against the larger trend may carry additional considerations
- **High volatility regime** - Signals may be less reliable when markets are whipsawing
- **Multiple signals in quick succession** - May indicate choppy conditions
- **You are uncertain** - When in doubt, stay out

Signal Timing: Wait for Bar Close

By default, CSI Pro uses the "Wait for Bar Close" setting. This means:

- Signals only appear AFTER the candle closes
- During a candle's formation, no new signals will appear
- Once a signal appears, it never disappears or changes (non-repainting)

Keep Wait for Bar Close enabled! Disabling this setting allows signals to appear during bar formation, but they may disappear if conditions change. This creates repainting behavior that can be misleading.

Signal Spacing

The `Signal_MinimumBarSpacing` setting prevents signal clustering. This means:

- After a BUY signal, the next BUY signal cannot appear for the configured minimum bar spacing
- After a SELL signal, the next SELL signal cannot appear for the configured minimum bar spacing
- A SELL can appear immediately after a BUY (and vice versa)

This spacing ensures you focus on distinct setups rather than getting bombarded with repeated signals during the same move.

12. Trade Quality Grading System

CSI Pro provides a framework for grading trade quality based on how many confirmations you have across all three indicators. This helps you decide position sizing and selectivity.

The Grading Scale

Grade	Requirements	Description
A+	<ul style="list-style-type: none">• CSI_Pro: HIGH confidence signal• CEI: In exhaustion zone confirming direction• PRG: HP signal or extreme reading• MTF: Higher timeframes aligned• Structure: Market structure supports direction	The best possible setup. All systems agree. Maximum confluence.
A	<ul style="list-style-type: none">• CSI_Pro: HIGH confidence signal• CEI: In exhaustion zone• PRG: Supports direction	Excellent setup. All three indicators agree.
B+	<ul style="list-style-type: none">• CSI_Pro: HIGH or MEDIUM signal• One of: CEI exhaustion OR PRG HP signal	Good setup. Main signal plus one confirmation layer.
B	<ul style="list-style-type: none">• CSI_Pro: HIGH confidence only• CEI and PRG neutral or mixed	Decent setup. Strong main signal but limited confirmation.
C	<ul style="list-style-type: none">• CSI_Pro: MEDIUM confidence only• No CEI or PRG confirmation	Marginal setup. Consider skipping or minimal position.
F	<ul style="list-style-type: none">• CSI_Pro: LOW confidence or no signal	No trade. Insufficient technical support.

Position Sizing Suggestions

Based on the grade, here is one possible approach to position sizing:

Grade	Suggested Position	Notes
A+ or A	100% of your normal size	Your highest conviction trades
B+	75% of normal size	Good but not perfect
B	50% of normal size	Reduced exposure for reduced confidence
C	25% or skip	Only take if other personal analysis supports
F	0% (no trade)	Wait for better setup

Important: These are suggestions for consideration, not trading recommendations. Position sizing decisions are personal and may be based on your individual risk management approach. It is generally advisable to avoid risking more than you can comfortably afford to lose on any single trade, regardless of grade.

Quick Grading Checklist

When a signal appears, quickly run through this checklist:

- CSI_Pro signal: HIGH, MEDIUM, or LOW?
- CEI: In exhaustion zone supporting direction?
- PRG: Showing HP signal or extreme?
- Dashboard MTF: Higher timeframes aligned?
- Dashboard Regime: Does market type suit this signal?

Count your confirmations and assign a grade. Then decide if and how much to trade.

13. CEI - Cycle Exhaustion Index

The Cycle Exhaustion Index (CEI) is one of CSI Pro's two confirmation indicators. It appears in a separate pane below your main chart and helps you identify when price moves are running out of energy.

What is Exhaustion?

Exhaustion in Plain English

Exhaustion occurs when a price move has used up most of its energy. Think of a car running out of gas - it can still coast for a while, but eventually it must stop. In markets, exhaustion means the current trend is losing momentum and may be ready to reverse.

How CEI Works

The CEI combines three components to detect exhaustion:

1. **Price Position:** Where is current price within its recent range?
2. **Momentum:** How fast is price moving and is it slowing down?
3. **Cycle Wave:** Where are we in the typical market cycle?

These components are combined into a single oscillator that ranges from -1 to +1.

Reading the CEI Display

The Main CEI Line

The CEI appears as a line oscillating between -1 and +1:

- **Green when positive:** Upward momentum present
- **Red when negative:** Downward momentum present

Zone Lines

Horizontal lines mark important levels:

Zone	Name	Meaning
Upper Extreme	Upper Extreme Zone	Severe bullish exhaustion - high reversal potential
Upper Exhaustion	Upper Exhaustion Zone	Bullish momentum depleting
Center	Neutral	No directional exhaustion
Lower Exhaustion	Lower Exhaustion Zone	Bearish momentum depleting
Lower Extreme	Lower Extreme Zone	Severe bearish exhaustion - high reversal potential

Zone Entry Markers (Yellow)

When CEI enters an exhaustion zone, a yellow dot appears. This alerts you that momentum is becoming stretched.

REV Signals

The most important CEI signals are the REV (reversal) markers:

- **REV UP (Green):** CEI was in lower exhaustion zone and has turned up. Bearish momentum has exhausted and may reverse to bullish.
- **REV DOWN (Red):** CEI was in upper exhaustion zone and has turned down. Bullish momentum has exhausted and may reverse to bearish.

Using CEI with CSI_Pro Signals

Ideal CEI Confirmation:

For BUY signals: Ideally, CEI would be in the lower exhaustion zone or showing REV UP

For SELL signals: Ideally, CEI would be in the upper exhaustion zone or showing REV DOWN

When CEI Does NOT Confirm

If CSI_Pro generates a BUY signal but CEI is neutral (between exhaustion zones):

- The signal is still valid, but you lack exhaustion confirmation
- The current move may not be exhausted yet
- Consider waiting for CEI to reach exhaustion before acting

- Or take the signal with reduced size

Conflicting Readings

If CSI_Pro generates a BUY signal but CEI is in the UPPER exhaustion zone:

- This is a conflicting signal
- CEI suggests bullish momentum is exhausting, not bearish
- The BUY signal may be fighting the current exhaustion state
- Consider skipping this signal

CEI Settings Reference

Default values can be viewed in MT5's indicator properties dialog. The following settings are customizable:

Setting	What It Does	When to Change
<code>CycleLength</code>	Base period for cycle detection	Lower for faster response, higher for smoother
<code>ExhaustionDetectionPeriod</code>	Lookback for momentum analysis	Rarely needs changing
<code>SmoothingAmount</code>	How much to smooth the CEI line	Increase if too choppy, decrease for faster response
<code>UpperExhaustionLevel</code>	Upper exhaustion zone boundary	Lower for more zone entries, higher for fewer
<code>LowerExhaustionLevel</code>	Lower exhaustion zone boundary	Same as above (keep symmetric)
<code>ExtremeZoneThreshold</code>	Extreme zone boundary	Rarely needs changing
<code>ShowReversalSignals</code>	Display REV UP/DOWN markers	Set false if you find them distracting
<code>EnableAlerts</code>	Sound alerts on reversals	Set false to disable audio alerts

14. PRG - Price Range Gauge

The Price Range Gauge (PRG) is CSI Pro's other confirmation indicator. It measures how "stretched" price is from its normal range and calculates the probability of a reversal.

The Rubber Band Analogy

PRG in Plain English

Think of price like a rubber band. When you stretch a rubber band far from its resting position, it has a tendency to snap back. The further you stretch it, the stronger the force pulling it back.

PRG measures this "stretch" in price. When price has moved far from its normal range, the PRG shows extreme readings, suggesting the rubber band may be about to snap back.

The Three Gauges

PRG uses three different time periods to measure stretch:

Gauge	Purpose
Fast (Primary)	Most sensitive, responds quickly to price changes
Slow (Secondary)	Confirmation layer, filters noise
Tertiary	Background context, shows longer-term stretch

When all three gauges agree, you have the strongest PRG signal.

Reading the PRG Display

Gauge Lines

The main PRG displays as oscillating lines:

- **Primary gauge (thicker line):** Your main signal source
- **Secondary gauge (thinner line):** Confirmation layer

Zone Boundaries

Horizontal lines mark overbought and oversold zones:

- **Above upper zone:** Overbought - price stretched high
- **Below lower zone:** Oversold - price stretched low

HP (High Probability) Signals

The most important PRG signals are HP markers:

- **HP BUY:** Multiple gauges in oversold zone, turning up. High probability of upward reversion.
- **HP SELL:** Multiple gauges in overbought zone, turning down. High probability of downward reversion.

Understanding HP Signals: "High Probability" reflects the statistical tendency for prices at extremes to revert toward their mean. HP signals indicate conditions where this reversion tendency is strongest, providing valuable context for your trading decisions.

Confluence Markers (Yellow Dots)

Yellow dots appear when multiple gauges agree they are at the same extreme. This indicates strong confluence within the PRG system itself.

Diamond Markers

Diamond shapes indicate full alignment across all gauge periods:

- **Cyan diamonds:** Full bullish alignment (all gauges oversold and turning up)
- **Orange diamonds:** Full bearish alignment (all gauges overbought and turning down)

Using PRG with CSI_Pro Signals

Ideal PRG Confirmation:

For BUY signals: Ideally, PRG would be in oversold zone, showing HP BUY or diamond marker

For SELL signals: Ideally, PRG would be in overbought zone, showing HP SELL or diamond marker

PRG Without HP Signal

If PRG is at an extreme but no HP signal has appeared:

- The gauges may not have fully turned yet
- The CSI_Pro signal is still valid, but PRG confirmation is partial
- Consider whether the primary gauge is beginning to turn

PRG Neutral

If PRG is in the middle range (between zones):

- Price is not stretched to an extreme
- The signal may work, but you are not catching a rubber band snap
- Less urgency - the reversion pressure is lower

PRG Settings Reference

Default values can be viewed in MT5's indicator properties dialog. The following settings are customizable:

Setting	What It Does	When to Change
<code>FastGaugePeriod</code>	Primary gauge lookback	Lower for faster response, higher for smoother
<code>SlowGaugePeriod</code>	Secondary gauge lookback	Should be about 2x the fast period
<code>GaugeSmoothing</code>	Smoothing factor	Increase if too choppy
<code>OverboughtOversoldLevel</code>	Zone boundary threshold	Lower for more zone entries, higher for fewer
<code>ReversalDetectionSensitivity</code>	How sensitive HP detection is	Higher for more HP signals, lower for fewer
<code>MinimumProbabilityForHPSignal</code>	Minimum statistical threshold for HP	Higher for stricter HP signals
<code>RequireMultiGaugeConfirmation</code>	Require multiple gauges to agree	Set false for more HP signals (less filtered)
<code>EnableAlerts</code>	Sound alerts on HP signals	Set false to disable audio alerts

15. MRO - Momentum Regime Oscillator

The Momentum Regime Oscillator (MRO) is built into the main CSI_Pro indicator and provides an additional momentum perspective. It appears in the dashboard as row 13.

What Makes MRO Different

While RSI and Stochastic RSI measure momentum in fixed ways, MRO adapts to current market conditions:

- **Adaptive smoothing:** Uses market efficiency to adjust how much smoothing is applied
- **Volume-weighted:** Incorporates volume into momentum calculations
- **Dynamic bands:** Overbought/oversold levels adjust based on recent volatility

Reading MRO in the Dashboard

MRO appears in row 13 of the dashboard with a value and status:

Display	Meaning	Implication
OB (Red)	Overbought zone	Momentum stretched high, supports SELL signals
OS (Green)	Oversold zone	Momentum stretched low, supports BUY signals
N (Gray)	Neutral zone	No extreme reading, MRO provides no confirmation

MRO as a Confirmation Factor

MRO is one of the 12 evidence factors counted when generating signals. When MRO is at an extreme supporting your signal direction, it adds to the evidence count and increases signal confidence.

MRO vs RSI

How is MRO different from RSI?

Aspect	RSI	MRO
Calculation basis	Fixed period (14 bars)	Adaptive based on efficiency
Volume	Ignores volume	Volume-weighted
Overbought/Oversold	Fixed at 70/30	Dynamic based on volatility
Response speed	Consistent	Faster in trending markets, slower in choppy

MRO provides an independent perspective that can confirm or conflict with RSI. When both agree, you have stronger momentum confirmation.

MRO Settings

MRO settings are found in the main CSI_Pro indicator inputs. Default values can be viewed in MT5's indicator properties dialog:

Setting	What It Does
MRO_Enable	Enable/disable MRO calculations
MRO_MomentumPeriod	Base momentum lookback period
MRO_SmoothingPeriod	Smoothing applied to output
MRO_EfficiencyLookback	Period for efficiency calculation
MRO_OverboughtOversoldWidth	Band width multiplier for zones

16. Using All Three Indicators Together

This section provides practical guidance on combining CSI_Pro, CEI, and PRG for maximum analytical power.

The Confirmation Workflow

Step-by-Step Signal Assessment:

1. **Wait for CSI_Pro signal** - This is the primary trigger. Many traders wait for a signal before considering action.
2. **Check signal confidence** - Is it HIGH or MEDIUM? (Skip LOW signals)
3. **Check CEI** - Is it in exhaustion zone supporting the signal direction?
4. **Check PRG** - Is it at an extreme or showing HP signal?
5. **Check dashboard** - What does MTF, Regime, and Vol Regime tell you?
6. **Assign grade** - Based on confirmations, grade the setup A+ to F
7. **Decide** - Trade, skip, or reduce size based on grade

Example: Maximum Confluence Setup

Scenario: EURUSD 1-Hour Chart

CSI_Pro shows: BUY HIGH signal (gold label), strong factor agreement

Dashboard shows:

- Regime: Range
- RSI: 27 (oversold, green)
- StochRSI: 12/18 (oversold, green)
- All ML models: Green (bullish consensus)
- MTF Align: BULLISH +

CEI shows: In lower exhaustion zone

PRG shows: HP BUY signal, diamond marker visible

Assessment: This is a Grade A+ setup. All three indicators confirm. Higher timeframes agree. Multiple ML models agree. This is the highest quality setup possible.

Example: Partial Confirmation Setup

Scenario: GBPUSD 15-Minute Chart

CSI_Pro shows: SELL MEDIUM signal, 4 evidence factors

Dashboard shows:

- Regime: Strong Uptrend (warning - counter-trend signal)
- RSI: 72 (overbought, red)
- ML models: Mixed (2 red, 2 gray)
- MTF Align: BULLISH + (warning - against signal)

CEI shows: Approaching but not in exhaustion zone

PRG shows: In overbought zone but no HP signal yet

Assessment: This is a Grade C setup at best. The signal is counter-trend (against higher timeframes). CEI is not yet confirming exhaustion. PRG is stretched but not fully reversing. Consider skipping or waiting for more confirmation.

When to Wait for Better Alignment

Sometimes patience pays off. Consider waiting when:

- **CEI is close to exhaustion zone but not quite there:** Wait for it to enter the zone
- **PRG is stretched but no HP signal:** Wait for the gauges to turn
- **MTF is mixed:** Wait for higher timeframes to align
- **Signal is MEDIUM but could become HIGH:** Watch for more factors to align

Trading Different Market Conditions

Strong Trending Markets (ADX > 25)

- Trend-following signals (with the trend) are higher probability
- Counter-trend signals require extra caution
- CEI exhaustion may be reached less often
- Consider smaller positions on counter-trend signals

Range-Bound Markets (ADX < 25)

- Reversal signals at range boundaries work well
- Both CEI and PRG are more likely to reach extremes
- Look for signals near visible support/resistance
- Exercise caution with signals in the middle of the range

High Volatility Regimes

- Signals may be less reliable due to whipsawing
- Price can extend further before reversing
- Some traders consider wider stops and smaller positions
- Wait for higher confidence signals only

Optimal Timeframes

CSI Pro's default Multi-Timeframe settings (H1 and H4) suggest the system is optimized for:

Chart Timeframe	Suitability	Notes
M5 (5-minute)	Good for scalping	More signals but lower quality average
M15 (15-minute)	Excellent	Good balance of frequency and quality
M30 (30-minute)	Excellent	Sweet spot for many traders
H1 (1-hour)	Excellent	Higher quality signals, lower frequency
H4 (4-hour)	Good for swing trading	Adjust MTF settings to D1/W1
D1 (Daily)	Good for position trading	Very few signals, adjust MTF settings

17. Complete Settings Reference

This section documents every CSI Pro setting with detailed explanations of what happens when you change them. Default values can be viewed in MT5's indicator properties dialog.

CSI_Pro Main Indicator Settings

Signal Quality and Timing

Setting	What It Does	Trade-offs
<code>Signal_MinimumBarSpacing</code>	Minimum bars between same-direction signals	Lower = more signals but possible clustering. Higher = fewer, more distinct signals.
<code>Signal_WaitForBarClose</code>	Only signal after bar closes	Keep ON for non-repainting. OFF allows mid-bar signals but they may disappear.
<code>Signal_HideWeakSignals</code>	Hide LOW confidence signals	Keep ON for cleaner charts. OFF to see all signals including weak ones.
<code>Signal_HighEvidenceThreshold</code>	Minimum factors for HIGH classification	Higher = stricter HIGH signals. Lower = more HIGH signals.
<code>Signal_MediumEvidenceThreshold</code>	Minimum factors for MEDIUM classification	Higher = stricter MEDIUM. Lower = more MEDIUM, fewer LOW.

Display Options

Setting	What It Does
<code>Display_ShowSignalLabels</code>	Show text labels next to arrows
<code>Display_ShowBackgroundShading</code>	Color the background based on regime
<code>Display_ShowInfoPanel</code>	Show the 21-metric dashboard
<code>Display_ShowTrendLines</code>	Show EMA trend lines
<code>Display_ShowSupportResistance</code>	Show detected S/R zones
<code>Display_MaxLabelsOnChart</code>	Maximum historical labels to display

Oscillator Settings

Setting	What It Does
<code>RSI_Period</code>	RSI calculation period
<code>RSI_OverboughtLevel</code>	RSI overbought threshold
<code>RSI_OversoldLevel</code>	RSI oversold threshold
<code>StochasticRSI_Period</code>	Stochastic RSI lookback
<code>StochasticRSI_FastLineSmoothing</code>	%K smoothing
<code>StochasticRSI_SlowLineSmoothing</code>	%D smoothing
<code>Fisher_Period</code>	Fisher Transform lookback
<code>Fisher_ExtremeLevel</code>	Fisher extreme zone threshold

Multi-Timeframe Settings

Setting	What It Does
<code>MTF_EnableConfirmation</code>	Enable higher timeframe checking
<code>MTF_HigherTimeframe1</code>	First higher timeframe for confirmation
<code>MTF_HigherTimeframe2</code>	Second higher timeframe for confirmation

AI/ML Settings

Setting	What It Does
<code>ML_PatternLookback</code>	Bars used for pattern recognition
<code>ML_SimilarPatternsCount</code>	K value for KNN (neighbors to check)
<code>AI_EnableKernelSmoothing</code>	Enable kernel regression trend
<code>AI_EnableMarkovRegimes</code>	Enable HMM regime detection
<code>AI_EnableEnsembleVoting</code>	Enable ensemble voting system
<code>AI_EnableNeuralNetwork</code>	Enable neural network layer
<code>AI_PerformanceMode</code>	Skip ML on older bars (faster loading)

Additional Customizable Parameter Groups

The following parameter groups are also available in the indicator settings. Access them through MT5's indicator properties dialog:

- **MACD 3D Settings:** Controls for the 3D trend analysis visualization, including period adjustments and sensitivity parameters
- **Color Customization:** All indicator colors are fully adjustable - customize signal arrows, dashboard elements, zone fills, and trend lines to match your chart preferences
- **AI/ML Toggles:** Each AI model (KNN, Kernel Regression, HMM, Neural Network, Ensemble) can be individually enabled or disabled for performance tuning or experimentation
- **Alert Configuration:** Fine-tune which signal types trigger alerts and how notifications are delivered

Recommended Settings for Different Styles

Conservative Trader

- Increase `Signal_HighEvidenceThreshold` above default
- Increase `Signal_MediumEvidenceThreshold` above default
- Increase `Signal_MinimumBarSpacing` above default

Fewer signals, higher quality only.

Active Trader

- Keep all platform defaults

Balanced approach for most traders.

Aggressive Trader

- Set `Signal_HideWeakSignals` to false
- Decrease `Signal_MinimumBarSpacing` below default

More signals including LOW confidence. Careful risk management may be particularly important.

18. Setting Up Alerts

CSI Pro can alert you when signals appear, so you do not have to watch charts constantly.

Alert Types

CSI_Pro Alerts

Alert Message	When It Fires
CSI Pro: HIGH BUY Signal!	HIGH confidence BUY signal generated
CSI Pro: MEDIUM BUY Signal!	MEDIUM confidence BUY signal generated
CSI Pro: HIGH SELL Signal!	HIGH confidence SELL signal generated
CSI Pro: MEDIUM SELL Signal!	MEDIUM confidence SELL signal generated

CEI Alerts

Alert Message	When It Fires
CEI: BULLISH REVERSAL	CEI turns up from lower exhaustion zone
CEI: BEARISH REVERSAL	CEI turns down from upper exhaustion zone

PRG Alerts

Alert Message	When It Fires
PRG High Probability BUY Signal!	HP BUY conditions met
PRG High Probability SELL Signal!	HP SELL conditions met

Enabling and Disabling Alerts

Each indicator has an alert enable/disable setting:

- **CSI_Pro:** Alerts are enabled by default
- **CEI:** `EnableAlerts` setting (enabled by default)

- **PRG:** `EnableAlerts` setting (enabled by default)

Verifying Alerts Work

1. Right-click on the indicator in the chart
2. Select **Properties**
3. Go to the **Common** tab
4. Ensure **Allow Alerts** is checked
5. Click OK

Viewing Alert History

Past alerts appear in the **Experts** tab at the bottom of MetaTrader 5. Click on the Experts tab to see all recent indicator alerts and messages.

Push Notifications (Mobile)

To receive alerts on your mobile device:

1. Install the MetaTrader 5 mobile app on your phone
2. In the mobile app, go to Settings and find your MetaQuotes ID
3. In desktop MT5, go to Tools > Options > Notifications
4. Enter your MetaQuotes ID
5. Enable "Allow Push notifications"

Email Alerts

To receive email alerts:

1. In MT5, go to Tools > Options > Email
 2. Configure your SMTP server settings
 3. Send a test email to verify
 4. Once configured, MT5 can email you when alerts fire
-

19. Best Practices

These recommendations are based on experience with CSI Pro and general trading principles.

Do These Things

Consider Starting with Defaults

CSI Pro ships with optimized settings. Many traders use them for at least 2-4 weeks before making changes. This can help you understand how the system behaves before customizing.

Use All Three Indicators

CEI and PRG provide valuable confirmation. Many traders find it helpful to check them even when CSI_Pro has given a signal.

Check the Dashboard Before Acting

Take 5 seconds to scan the dashboard. It tells you the full story behind the signal.

Maintain a Trading Journal

Record your signals, grades, and outcomes. Over time, you will learn which setups work best for your style.

Practice Risk Management

No indicator replaces proper position sizing and stop losses. Define your risk before entering any trade.

Consider Demo Trading First

Many traders find it helpful to spend 1-2 weeks on a demo account before risking real money. This can help you get comfortable with the signals and workflow.

Things to Be Mindful Of

Over-Optimization

Endlessly tweaking settings to "perfect" historical performance can be counterproductive. What worked in the past may not work in the future.

Taking Every Signal

Many traders find that being selective works well for them. Focusing on higher-quality setups (Grade A or better) is a common approach.

Ignoring Market Context

A signal is just one piece of information. Consider news events, market regime, and overall conditions.

Disabling Wait for Bar Close

Many traders prefer to keep this enabled. Seeing signals that later disappear can be confusing and may affect entry timing.

Expecting Perfection

Even HIGH confidence signals involve risk and may not always result in profitable trades. Trading involves inherent uncertainty, so proper risk management is essential for long-term success.

Suggested Workflow

1. **Start of Session:** Check higher timeframe charts for overall market direction
2. **Monitor Charts:** Watch for CSI_Pro signals on your trading timeframe
3. **Signal Appears:** Check confidence level (HIGH or MEDIUM?)
4. **Check CEI:** Is it in exhaustion zone supporting the signal?
5. **Check PRG:** Is it showing HP or at an extreme?
6. **Check Dashboard:** MTF alignment? Regime? Volatility?
7. **Assign Grade:** A+ through F
8. **Decide:** Trade, reduce size, or skip based on grade
9. **Execute:** Consider your stop loss placement and position size according to your risk approach
10. **Record:** Log the trade in your journal

Common Beginner Mistakes

Mistake	Why It Is a Problem	Solution
Trading every signal	Leads to overtrading and lower win rate	Many traders find being selective, focusing on Grade A setups, works well
Ignoring higher timeframes	Fighting the larger trend reduces success	Check MTF Align before every trade
No stop loss	One bad trade can wipe out many good ones	Many traders find stop losses helpful for risk management
Position too large	Emotional decisions when too much is at stake	Some traders prefer risking 1-2% per trade as a guideline
Changing settings after losses	Leads to curve-fitting and worse performance	Stick with settings for at least a month
Blaming the indicator	Indicators provide information, not guarantees	Focus on your decision-making process

20. Troubleshooting

This section addresses common issues and their solutions.

Installation Issues

Problem	Cause	Solution
Indicators not in Navigator	Files in wrong folder or not refreshed	Verify files are in MQL5/Indicators. Right-click Indicators, select Refresh. Restart MT5 if needed.
Compilation errors	Outdated MT5 version	Update MetaTrader 5 to latest version. Help > Check for Updates.
Authorization error	Account not registered	Submit your MT5 account number via the thank-you page or support page.

Display Issues

Problem	Cause	Solution
Dashboard shows "Loading"	Still calculating or needs refresh	Wait a few seconds. Click on chart. Press F5 to refresh.
No signals visible	Not enough data or all signals are LOW	Wait for more bars to load. Try setting Signal_HideWeakSignals to false temporarily.
Dashboard not visible	Display_ShowInfoPanel is false	Open indicator properties and set Display_ShowInfoPanel to true.
Chart looks cluttered	Too many labels or elements	Reduce Display_MaxLabelsOnChart. Disable some display options.

Signal Issues

Problem	Cause	Solution
Signals appearing then disappearing	Wait for Bar Close is disabled	Enable <code>Signal_WaitForBarClose</code> (set to true).
Too many signals	Low minimum bar spacing	Increase <code>Signal_MinimumBarSpacing</code> .
Too few signals	High thresholds or hiding weak signals	Set <code>Signal_HideWeakSignals</code> to false. Lower evidence thresholds.
Signals seem wrong	Signals are probabilistic, not guaranteed	This is normal. High-quality signals indicate strong technical alignment, but trading always involves uncertainty. Focus on your process and risk management.

Performance Issues

Problem	Cause	Solution
Chart loads slowly	ML calculations on large history	Enable <code>AI_PerformanceMode</code> . Reduce <code>ML_HistoryBarsToLoad</code> .
MT5 running slow	Too many charts with indicators	Reduce number of charts. Close unused charts.
High CPU usage	Real-time calculations	Enable <code>AI_PerformanceMode</code> . Disable unused AI components.

Alert Issues

Problem	Cause	Solution
No sound alerts	Alerts disabled in properties	Right-click indicator > Properties > Common > Enable "Allow Alerts".
No push notifications	MetaQuotes ID not configured	Configure MetaQuotes ID in Tools > Options > Notifications.
Alerts not in Experts tab	Wrong tab selected	Click on Experts tab at bottom of MT5 (not Alerts or Journal).

Getting Help

If your issue is not listed above, start with our 24/7 AI chatbot:

1. **Visit our AI chatbot first:** frontieralgo.com/csi/support.html
2. Describe your issue to the AI chatbot - it can solve most problems instantly and is available around the clock
3. If the AI chatbot cannot resolve your issue, email support via the support page with:
 - Your MT5 account number
 - Screenshot of the issue
 - Steps to reproduce the problem

21. Glossary of Terms

Quick reference for terms used throughout this manual.

Term	Definition
ADX	Average Directional Index. Measures trend strength (not direction). Above 25 = strong trend.
CEI	Cycle Exhaustion Index. CSI Pro indicator that detects when trends are losing momentum.
Confluence	Multiple independent factors agreeing on the same direction.
EMA	Exponential Moving Average. A type of moving average that gives more weight to recent prices.
Ensemble	A voting system that combines multiple models to reach a consensus.
Evidence Factor	One of 12 independent analytical components that CSI Pro synthesizes to identify high-quality trading opportunities.
Exhaustion	When a price trend is running out of energy and may reverse.
Fisher Transform	Oscillator that amplifies extreme price movements. Primary trigger for CSI Pro signals.
Gradient Boosting	ML technique using multiple decision trees where each corrects the previous one's errors.
HMM	Hidden Markov Model. Statistical method to detect market regime (bull/bear/neutral).
HP Signal	High Probability signal from PRG when reversal conditions are strongest.
Kernel Regression	Statistical smoothing technique that creates a noise-filtered trend line.
KNN	K-Nearest Neighbors. ML technique that finds similar historical patterns.
MRO	Momentum Regime Oscillator. Adaptive momentum indicator in CSI Pro.
MTF	Multi-Timeframe. Analysis that considers higher timeframes for confirmation.
Neural Network	ML model that weighs inputs based on learned importance values.
Non-Repainting	Signals that never disappear or change once they appear.
Overbought	Condition where buying pressure may be exhausting. Often precedes pullbacks.
Oversold	Condition where selling pressure may be exhausting. Often precedes bounces.

Term	Definition
PRG	Price Range Gauge. CSI Pro indicator measuring price stretch from normal range.
Regime	The current character of the market (trending, ranging, volatile).
RSI	Relative Strength Index. Momentum oscillator measuring speed of price changes.
Stochastic RSI	Faster-moving version of RSI that applies stochastic formula to RSI values.

22. Risk Disclosure

Please read this section carefully. By using CSI Pro, you acknowledge understanding and accepting these risks.

Trading Risk

Trading financial instruments involves substantial risk of loss. You may lose some or all of your investment. Past performance of any trading strategy or indicator does not guarantee future results.

CSI Pro Is Not Financial Advice

CSI Pro is an analytical tool that synthesizes technical information. It is NOT:

- Investment advice
- A recommendation to buy or sell any security
- A guarantee of profit or trading success
- A prediction of future price movement

Understanding Confidence Levels

Confidence ratings reflect analytical agreement:

- A HIGH confidence signal means strong factor agreement on direction
- Confidence measures how many technical factors align, helping you prioritize setups
- Use confidence levels alongside your overall trading plan and risk management
- Higher confidence signals indicate stronger technical alignment

Your Responsibility

By using CSI Pro, you accept that:

- All trading decisions are your own
- You are solely responsible for your trading outcomes
- It is advisable to only trade with capital you can afford to lose

- Proper risk management is an important consideration for all traders
- Testing on a demo account before trading live may help you learn the system

What CSI Pro Provides

CSI Pro is designed to:

- Provide analytical signals based on multiple technical factors
- Help you identify potential trading opportunities
- Give you confidence ratings showing factor alignment
- Support your trading analysis (we continually work to improve the product)

Getting Started

Before trading, consider your financial situation and goals. If you have questions about whether trading is right for you, a qualified financial advisor can provide personalized guidance.

Complete Legal Disclaimers

For complete Risk Disclosures, Terms of Use, Privacy Policy, and other legal documents, please visit:

<https://frontieralgo.com/disclaimers.html>

By using CSI Pro, you acknowledge that you have read, understood, and agree to all terms and conditions, including the complete risk disclosures available at the link above.

FrontierAlgo

Professional-Grade Trading System

CSI_Pro | CSI_Pro_CEI | CSI_Pro_PRG

FrontierAlgo.com

Trading involves substantial risk of loss and is not suitable for all investors. Past performance is not indicative of future results. CSI Pro is an analytical tool and does not provide trading advice. All trading decisions are your sole responsibility.

For complete disclaimers, visit: frontieralgo.com/disclaimers.html