

SpotGamma HIRO User Guide

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What is HIRO?

HIRO is SpotGamma's real-time indicator of options hedging pressure. With HIRO, you can quickly see where and how options are driving 400+ US tickers that have significant options trading activity.

HIRO (Hedging Impact of Real-time Options) measures and aggregates the delta notional value from every option trade, estimating the hedging requirement associated with each transaction. This indicates how options flows impact both the direction and magnitude of price action.

There are multiple ways to trade with HIRO, including:

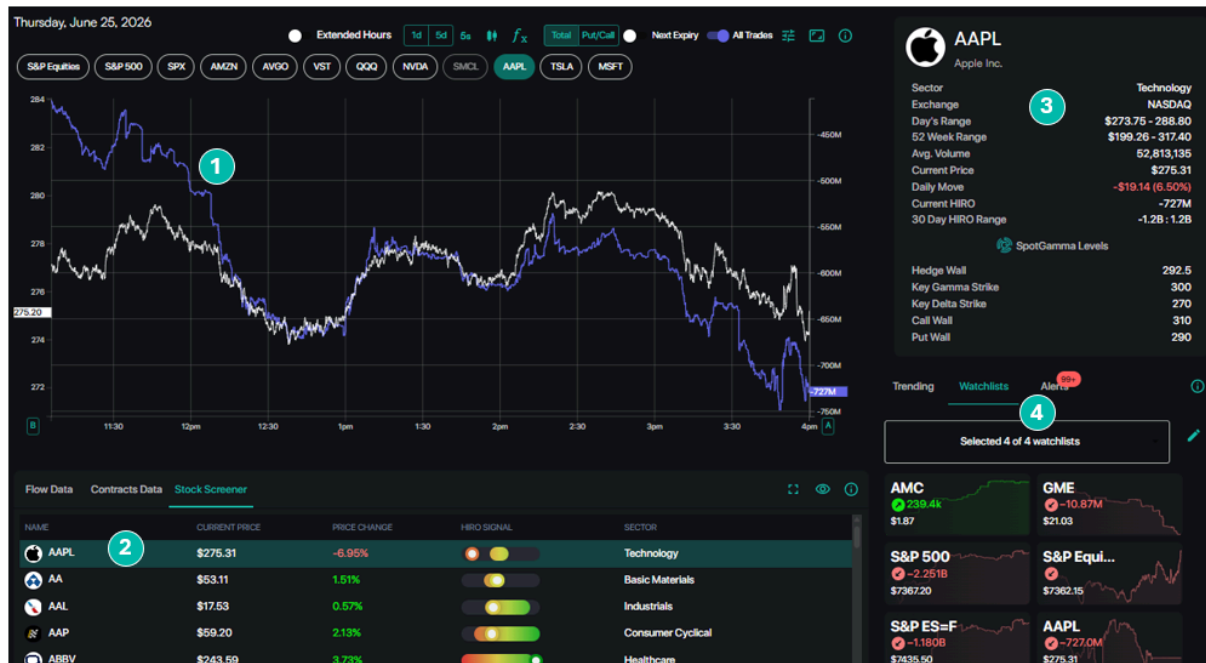
- Tracking Flow Alerts to see when significant buying pressure or selling pressure is taking place
- Watching for the HIRO signal to reverse when price reaches key support and resistance levels
- Trading into sharp directional moves that indicate meaningful options hedging pressure

Ultimately, HIRO is designed to distill millions of data points from across the options market into actionable insights. More details on incorporating HIRO into your trading can be found in the [Trading with HIRO](#) section of this document.

Appendix

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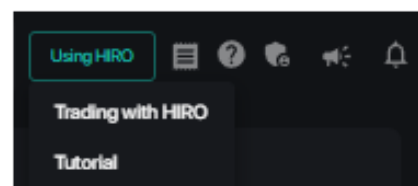
HIRO Page Overview



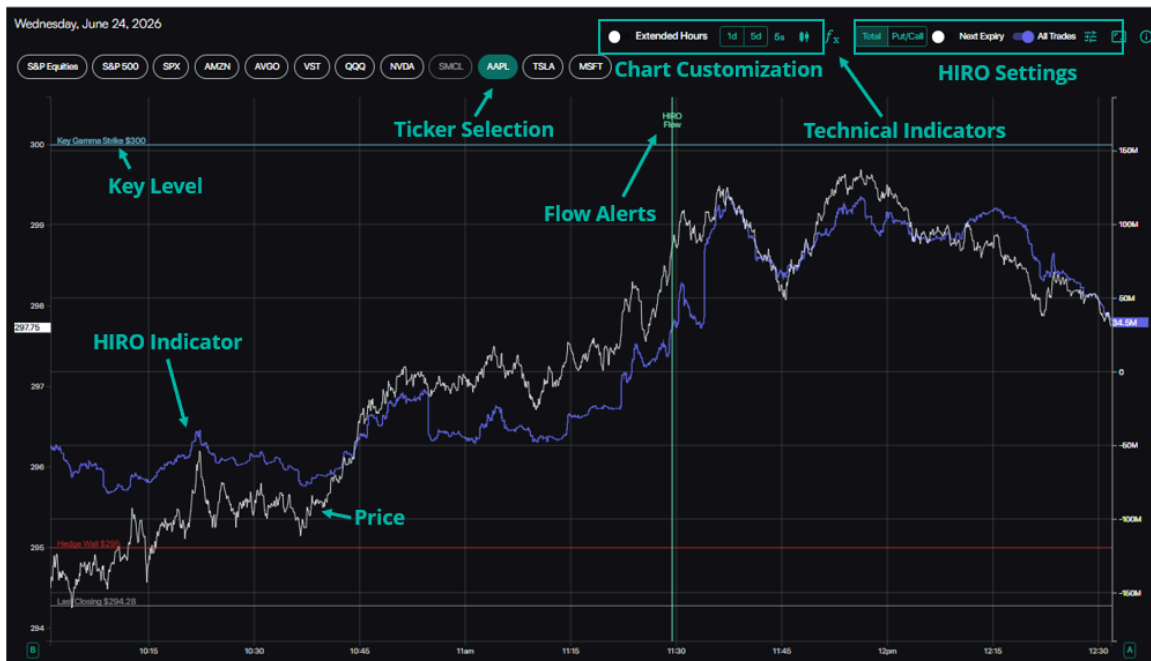
There are four sections within the HIRO page in the SpotGamma dashboard:

1. HIRO Chart: View the **real-time impact** of options hedging pressure for the names you trade, including an assortment of customization for more precise insights and charting capabilities.
2. Stock Screener & Flow Data: See how impactful the HIRO signal is for 400+ US tickers within the **Stock Screener**, or view the **Flow Data** for real-time order flow to confirm your trades.
3. Key Metrics: Learn the most important information about the underlying stock, ETF, or index selected, including information on the **HIRO value** for the selected ticker.
4. Trending, Watchlists, & Alerts: Discover which names are experiencing meaningful HIRO movement, easily pull up the tickers that you follow, and customize the **Flow Alerts** for the names you follow.

Pro Tip: While using HIRO, you can quickly bring up a full tutorial of the HIRO page, plus access our HIRO Checklists & Trading Strategies, in the top right of the page.



HIRO Chart



The HIRO chart contains 6 unique elements designed to optimize your trading:

HIRO Indicator: View the real-time delta notional hedging pressure for US stocks, ETFs, and indices.

HIRO Settings: Adjust how you view the HIRO indicator, from total to puts & calls separately, next expiration flows, and the rolling window that calculates HIRO values.

Ticker Selection: Search for new instruments to view in HIRO, pull the stocks from your watchlist into HIRO, and save the names you trade as tabs at the top.

Technical Indicators: Add technical indicators such as Bollinger Bands or moving averages to either the price candles or to the HIRO indicator.

Chart Customization: Show extended trading hours, adjust the timeframe shown, or change how price and HIRO candles are displayed.

Key Levels: Toggle important levels of support, resistance, and volatility directly onto the chart, including SpotGamma's Call Wall, Put Wall, and Hedge Wall.

Flow Alerts: Receive notifications whenever important flow activity takes place that is likely to drive price action.

HIRO Indicator

HIRO monitors every single options trade taking place in many of the market's most active underlying US stocks, ETFs, and indices. As options trades take place, options dealers must adjust their risk by buying or selling underlying stock.

By applying SpotGamma's proprietary algorithm to each transaction, HIRO translates millions of individual options trades and their estimated impact on the markets into easy-to-read tables and graphs.



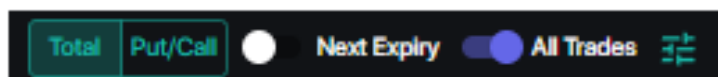
The HIRO indicator is represented by a blue candlestick by default on the HIRO chart. A **negative HIRO value** indicates downward hedging pressure, and a **positive HIRO value** indicates upward hedging pressure. This value is measured in the right y-axis on the HIRO chart.

When hovering over the HIRO chart, you will see crosshairs appear that identify a specific price and time on the chart. In the top left of the chart, you can view the underlying price and the HIRO Indicator value at the selected time. When candlesticks are enabled, you can also see the open, high, low, and close value for the selected candle in the top left of the chart.

Price shows up by default as a white line overlaid against the HIRO indicator. Price is measured in the left y-axis on the chart. Learn more about how price and HIRO interact in the below section covering [Trading with HIRO](#).

HIRO Settings

The top right section of the HIRO chart provides multiple options that allow you to customize how you view the HIRO indicator specifically.

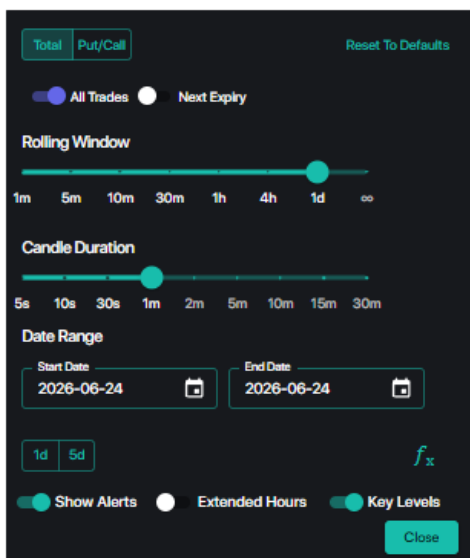


Total: When selected, the **Total** button within the HIRO customization panel shows you the HIRO indicator for all options trades on the chart via a singular indicator that captures the net impact of calls and puts.

Put/Call: The **Put/Call** button within the HIRO customization panel differentiates the put options impact from the call options impact via two unique lines. When selected, the HIRO value for Puts shows up in dark blue, while the HIRO value for Calls shows up in orange.

Next Expiry: When selected, this button adds a green line to the chart that isolates the HIRO value to *only* next expiry options for the ticker selected. These options expire the same day (0DTE), the next Friday, or at a set time once a month.

When selected alongside the **Put/Call** button, the **Next Expiry** view will separate the HIRO indicator for these short-dated trades into both call and put lines.



All Trades: This view captures the projected impact of all options trades within the US options complex for a given security or index. This view uses SpotGamma proprietary logic to filter out some trades that we consider hedged and therefore do not drive the underlying asset.

Settings: Selecting this toggle displays a pop-up window that allows you to adjust all HIRO indicator settings, change your [chart customizations](#), or manage technical indicators that you have added to the chart. There are three additional features that can be accessed within the **Settings** button.

Rolling Window: For advanced use of the HIRO indicator, you can view both the *cumulative* impact of options hedging pressure, as well as the impact of hedging pressure across *shorter timeframes*. By changing the timeframe to shorter durations, you can see more active order flow. With the cumulative lens, you anchor new order flow to the cumulative total, which is often very large.

Date Range: Select two historical dates to view the HIRO chart for that timeframe.

Show Alerts: These flag significant options activity taking place, with a vertical line on the HIRO chart showing the specific time when a [HIRO Flow Alert](#) fires.

Key Levels: Toggle on SpotGamma's [key levels](#) of support, resistance, and volatility directly on the HIRO chart.

Ticker Selection

There are several ways to display a new stock, ETF, or index ticker within the HIRO Chart. The simplest way is to look up an instrument in the search bar at the top of the page.

In the bottom right section of the HIRO page, you can view **Trending** names or pull up relevant stocks from your **Watchlist**. The section below on [Trending, Watchlists, and Alerts](#) covers this in more detail.

For names you would like to view most often in HIRO, you can select **+ Add Tab** in the top right of the chart to create a designated tab for that ticker. These tabs persist at the top of the HIRO chart for ease of reference.



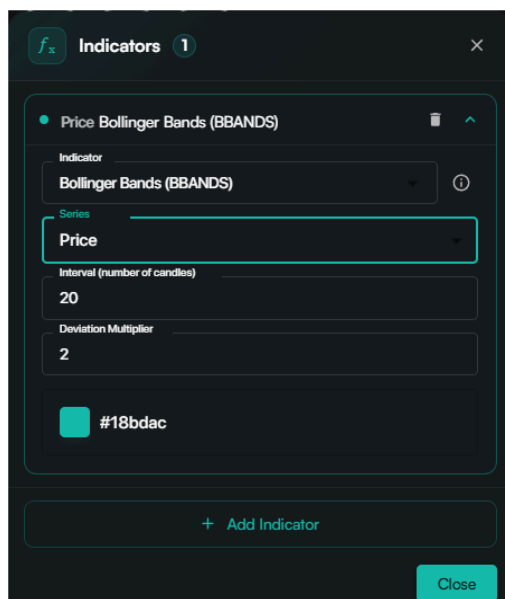
Please note that this is a separate function from your individual watchlists, which can hold many more names than can fit within the Quick-Access bar.

Technical Indicators

Within HIRO, you can add technical indicators to either price or to the HIRO indicator itself. These can be accessed by selecting the **Indicators** button at the top of the chart.



With the Indicators window open, add a new indicator by clicking the **+ Add Indicator** button at the bottom of the window.



Indicator Selection: Select which technical indicator you want to view within the chart. This includes variations of Bollinger Bands, Relative Strength Index (RSI), moving averages, and more. You can also search for the indicator name directly to pull it up.

Series: Select whether you would like to apply the technical indicator to price, or to the HIRO indicator. If the HIRO value is broken out between calls and puts, or between next expiry vs. all expirations, you will be able to add technical indicators to any of the HIRO values on the chart.

Personalization: Individual technical indicators may have additional settings, such as *interval selections* or *multipliers*. All indicators feature pre-populated settings, which you can adjust as desired. Additionally, you can change the indicator coloration at the bottom of the window.

Chart Customization

There are several ways to adjust your view of the HIRO chart. The simplest method to make an adjustment is to use your mouse scroll wheel to zoom in or out of the chart, or click-and-drag within the chart to change the timeframe. You can also manipulate any of the axes to zoom into or out of the chart.

When viewing the HIRO chart, you can lock the y-axes to prevent them from automatically resizing as the timeframe changes. Beneath the right y-axis, select the **A** button to lock the HIRO indicator range. On the left y-axis, you can select the **B** button to similarly lock the price scale.

At the top of the HIRO chart, you can make additional adjustments to your preferred view:

Extended Hours: For indices with pre-market trading, you can toggle Extended Hours to view all pre-market and post-market trading hours, or opt to only view regular trading hours (9:30am to 4:00pm ET).

Timeframe: Choose between a 1-day view or a 5-day view of the HIRO chart.

Candle Duration: The HIRO chart defaults to 1-minute intervals. You can also view alternative durations for HIRO and price candles, ranging from 5-second to 30-minute intervals.

Chart Type: This dropdown allows you to change how the HIRO Indicator and price are displayed. You can select between a simple line chart, a candle chart, or OHLC which displays the open, high, low, and close for a given candlestick.

Chart Sizing: In the top right of the HIRO chart, this button allows you to view the chart in full screen mode. You can also expand the HIRO chart by closing the sidebar or bottom area of the page.

Key Levels

Within SpotGamma's HIRO chart, you can toggle on key levels from the **Settings** window in the top right. These price levels often act as support or resistance, and statistics behind these are available in [SpotGamma's Support Center](#).



Key Gamma Strike: This large gamma strikes contain a significant amount of gamma, often serving as a point of support or resistance.

Hedge Wall: The Hedge Wall serves as a volatility flip line, where stocks above their Hedge Wall are likely to experience lower realized volatility compared to higher realized volatility when below the Hedge Wall.

Call Wall: This defines the upper bound of probable price action due to overhead options-based resistance, based on SpotGamma's Total Open Interest model.

Put Wall: This defines the lower bound of probable price action due to options-based support below, based on SpotGamma's Total Open Interest model.

Flow Alerts

The HIRO Flow Alert flags large option flows in real time to notify you when significant options activity takes place for a name you follow. To add Flow Alerts to the HIRO chart, enable them within the **Settings** button in the top right section.

Using a proprietary SpotGamma model based on the size of hedging impact, HIRO Flow Alerts fire when option flows are most likely to drive the underlying asset price. For each stock, SpotGamma calculates a specific "impact threshold" for the given asset, and alerts the user when this threshold has been breached.



1. Flow Alert: When significant flow occurs, you will see this populate on the HIRO chart at the time the alert fired.
2. Alerts Section: In this section you can find the log of Alerts, including both All alerts and Watchlist alerts.
3. Alert Bell: When an alert fires, you will find the alert bell icon on the top right of the application turns red.

In addition to Flow Alerts, SpotGamma features notifications related to key levels that can be impactful when trading with HIRO: Put Wall Alerts, and Call Wall Alerts.

Call Wall Alerts: The Call Wall is a significant resistance level, based on current open interest. SpotGamma HIRO users can toggle specific alerts to be notified when the **Call Wall is Breached**, or when a name is **Within 1% of its Call Wall**.

Put Wall Alerts: The Put Wall is considered a major support level, based on current open interest. SpotGamma HIRO users can toggle specific alerts to be notified when the **Put Wall is Breached**, or when a name is **Within 1% of its Put Wall**.

For HIRO Flow Alerts, Call Wall Alerts, and Put Wall Alerts, users will see the notification from the **Alert Bell** in the top right of the dashboard, and in the HIRO Alerts section (bottom right corner of the page) if desired.

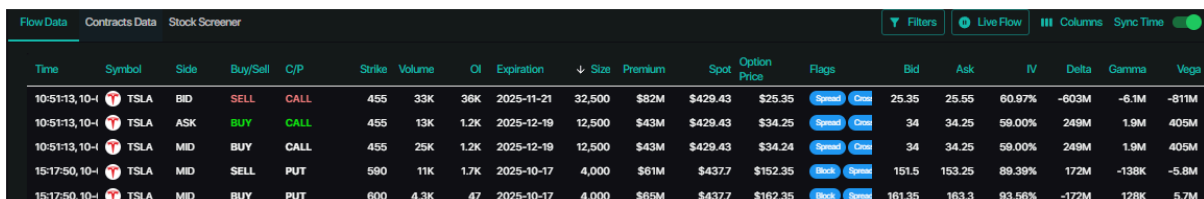
To disable **Alerts**, users can edit directly from within the HIRO page in the bottom right section of the page, as detailed in the [Alerts section below](#).

Flow Data & Stock Screener

Beneath the HIRO chart you can find a table with three separate tabs: **Flow Data** containing real-time options transactions, **Contract Data** summarizing the daily options flow across tickers by strike and expiration, and **Stock Screener** showing daily price changes and the [HIRO signal](#) for the 400+ US stocks, ETFs, and indices.

Flow Data

The **Flow Data** tab provides a real-time feed of options trades showing you key info for each transaction. This data comes directly from [Tape](#), SpotGamma's order flow tool.



Time	Symbol	Side	Buy/Sell	C/P	Strike	Volume	OI	Expiration	Size	Premium	Spot	Option Price	Flags	Bid	Ask	IV	Delta	Gamma	Vega
10:51:13, 10-	TSLA	BID	SELL	CALL	455	33K	36K	2025-11-21	32,500	\$82M	\$429.43	\$25.35	Speed Clear	25.35	25.55	60.97%	-603M	-8.1M	-811M
10:51:13, 10-	TSLA	ASK	BUY	CALL	455	13K	1.2K	2025-12-19	12,500	\$43M	\$429.43	\$34.25	Speed Clear	34	34.25	59.00%	249M	1.9M	405M
10:51:13, 10-	TSLA	MID	BUY	CALL	455	25K	1.2K	2025-12-19	12,500	\$43M	\$429.43	\$34.24	Speed Clear	34	34.25	59.00%	249M	1.9M	405M
15:17:50, 10-	TSLA	MID	SELL	PUT	590	11K	1.7K	2025-10-17	4,000	\$81M	\$437.7	\$152.35	Block Speed	151.5	153.25	89.39%	172M	-138K	-5.8M
15:17:50, 10-	TSLA	MID	BUY	PUT	600	4.3K	47	2025-10-17	4,000	\$65M	\$437.7	\$162.35	Block Speed	161.35	163.3	93.56%	-172M	128K	5.7M

The Flow Data includes important attributes of each options' trade, including the **strike price and expiration**, whether the order was **bought or sold**, and how large the order was in terms of **contract size or premium**.

Flow Data can help identify the sentiment of market participants and can be used to confirm trade ideas from the HIRO signal.

There are three important dimensions to track using the Flow Data:

1. **Direction:** Dominant call buying or put selling can indicate a bullish outlook behind the trade, while put buying or call selling can indicate a bearish outlook.
2. **Conviction:** Options purchased above the ask or sold below the bid, and longer-dated expirations may indicate more certainty behind the trade.
3. **Size:** Orders that are large in size may have a more significant impact on the market, and often do indicate institutional interest in the name.

The Flow Data can be further refined using the customization options at the top of the Flow Data table:



Filters: Shows the order flow just trades matching the criteria you are interested in, allowing you to only see larger orders, calls vs. puts, or trades with a specific expiration.

Live Flow: Pause the real-time flow to examine a specific point in time.

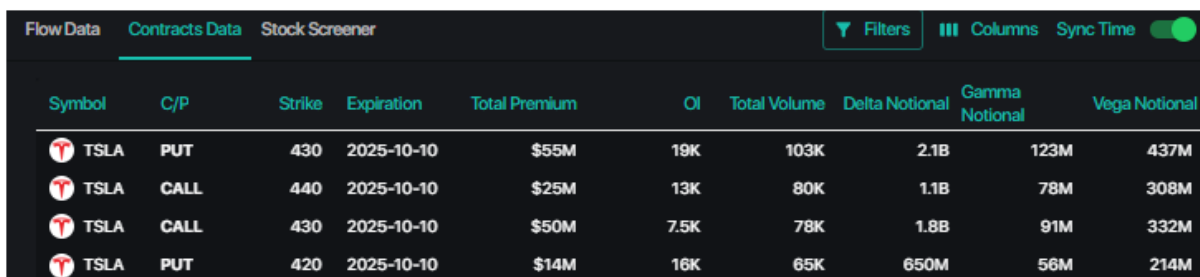
Columns: Customize the data fields you would like to see, including the order they are presented in.

Sync Time: Sync the HIRO chart with the order flow data to only show the time range you are looking at in the above chart.

Maximize: Show the FlowData in full screen within the SpotGamma dashboard.

Contract Data

The **Contract Data** aggregates the flow data from [Tape](#) at the contract-level to show you which strikes and expirations are trading, allowing you to filter and sort by aggregated contract.



Symbol	C/P	Strike	Expiration	Total Premium	OI	Total Volume	Delta Notional	Gamma Notional	Vega Notional
TSLA	PUT	430	2025-10-10	\$55M	19K	103K	2.1B	123M	437M
TSLA	CALL	440	2025-10-10	\$25M	13K	80K	1.1B	78M	308M
TSLA	CALL	430	2025-10-10	\$50M	7.5K	78K	1.8B	91M	332M
TSLA	PUT	420	2025-10-10	\$14M	16K	65K	650M	56M	214M

Contract Data provides contextual information on the specific strikes and expirations that market participants are most actively trading. Sort by options volume, premium, or any of the Greeks to see which specific contracts are driving the market.

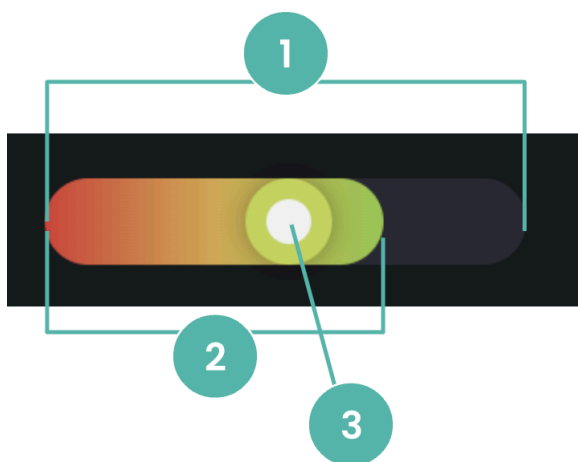
The **Contract Data** tab allows for the same filtering capabilities as **Flow Data**, along with synchronization options with the above HIRO chart.

Stocker Screener

The stock screener shows options hedging activity for 400+ stocks, ETFs, and indices, displaying the HIRO signal gauge as well as price change and sector.

NAME	CURRENT PRICE	PRICE CHANGE	HIRO SIGNAL	SECTOR
DIS	\$81.61	1.34%		Consumer Cyclical
DKNG	\$31.85	1.51%		Consumer Cyclical
DOCU	\$50.15	-7.16%		Technology
DWAC	\$16.82	-3.86%		Financial Services
EBAY	\$43.43	0.69%		Consumer Cyclical
EDU	\$54.35	-0.16%		Consumer Defensive
EEM	\$38.73	0.23%		

The HIRO Signal column features a sliding scale that represents the 30-day range of HIRO for a given stock or index.



1. The full width of the gauge represents the 30-day range of the HIRO signal.

2. The colored segment, ranging from red to green in color, represents the 5-day range of the HIRO signal.

3. The circle plots today's HIRO signal vs. the last 30 day and 5 day range. The circle's color represents today's flow.



Red indicates negative HIRO flow, where traders are selling calls and/or buying puts. A dark red open circle indicates the HIRO signal is near the low of the day.



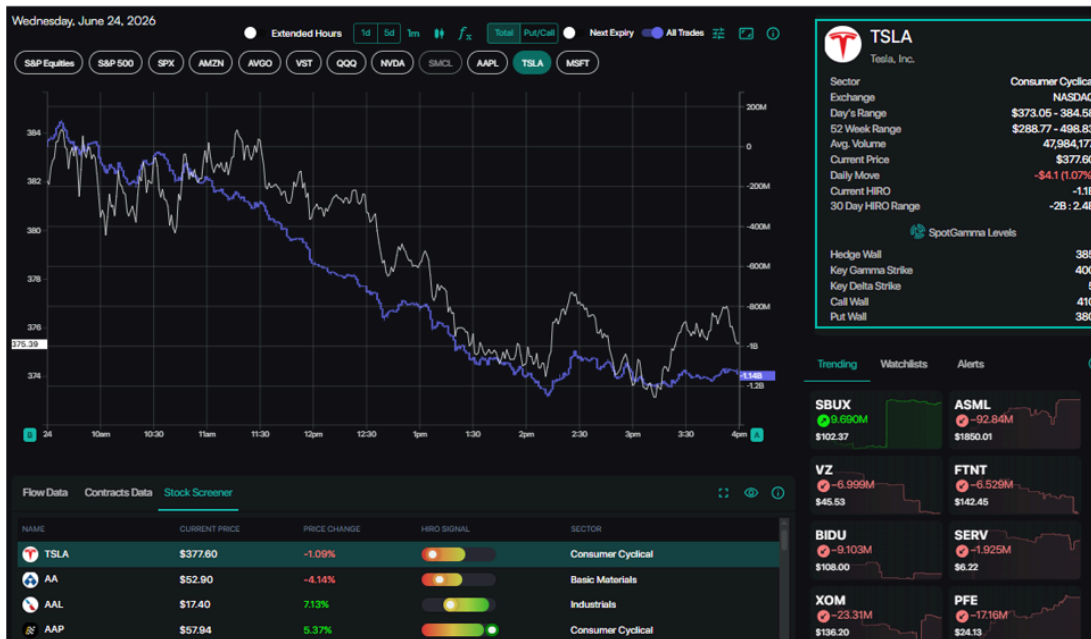
Green indicates positive HIRO flow, where traders are buying calls and/or selling puts. A dark green open circle indicates the HIRO signal is near the high of the day.



Yellow indicates a neutral position, meaning HIRO flow is neither overly positive or negative for the day.

Ticker Metrics

In the upper right corner of the HIRO page you can see important metrics for the underlying ticker, including the sector, exchange, price, and volume. It also includes SpotGamma proprietary levels for that trading day.



TSLA	
Tesla, Inc.	
Sector	Consumer Cyclical
Exchange	NASDAQ
Day's Range	\$246.67 - 256.52
52 Week Range	\$101.81 - 313.80
Avg. Volume	118,996,657
Current Price	\$248.98
Current HIRO	-326M
30 Day HIRO Range	-445M : 437M
SpotGamma Levels	
Hedge Wall	247.5
Key Gamma Strike	250
Key Delta Strike	200
Call Wall	260
Put Wall	240

Current HIRO: This value reflects the daily delta notional hedging pressure for a stock. Negative values indicate current downward hedging pressure, and positive values indicate upward hedging pressure.

30 Day HIRO Range: This shows the range for the HIRO signal over the last 30 days, helping to contextualize how large today's given flow is.

Hedge Wall: This serves as a volatility flip level, as stocks above the Hedge Wall often have lower realized volatility vs. higher volatility when below the Hedge Wall.

Key Gamma Strike: This price can serve as a powerful support or resistance level, showcasing the strike with the largest net gamma.

Call Wall: Key level where significant dealer hedging pressure creates resistance.

Put Wall: Key level where significant dealer hedging pressure creates support.

Trending, Watchlists, & Alerts

The Trending, Watchlist, & Alerts section of the HIRO page is designed to show you the names that matter when trading with HIRO. Across the top, select from either of the three tabs for more information on trading.

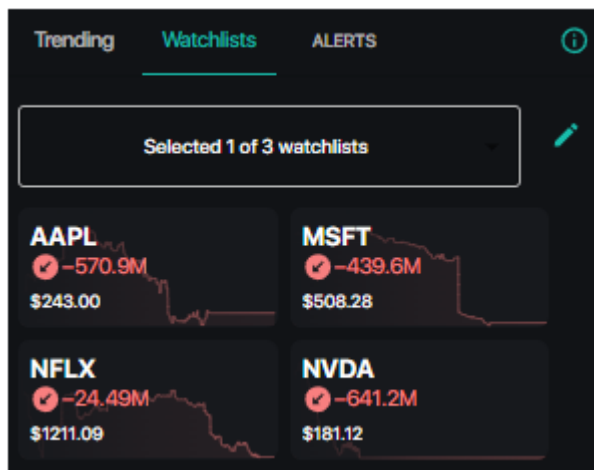
Trending

The **Trending** tab within the HIRO page indicates stocks of material interest, as determined by a proprietary SpotGamma algorithm. This trending signal is specific to each security. For each name selected, you can view a snapshot of the daily performance for the name.



Watchlists

The **Watchlist** tab allows you to quickly view names within your watchlist, or update any of your existing watchlists.



You can select any of your watchlists by clicking the dropdown at the top of the tab.

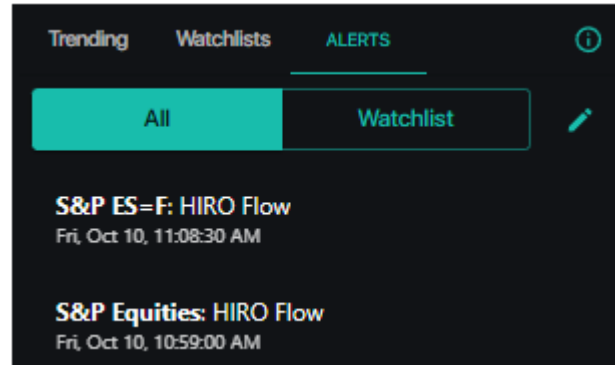
If you would like to edit a watchlist, select the pencil icon to bring up a window letting you customize the names included in your watchlist.

Alerts

The **Alerts** tab in the HIRO page shows you when a HIRO Flow Alert fires, which you can view for *All Tickers* or specifically for the names within your *Watchlist* based on the two buttons at the top of the tab.

Each alert shows you the underlying asset for which the Flow Alert was triggered, as well as the date and time going back ten trading days.

By selecting the Pencil icon in the top right corner, you can change your preferences for both which alerts you would like to see, and determine when you would prefer a sound alert in addition to the dashboard notification.



Trading with HIRO

While there is no one way to trade using HIRO, the following checklist and trading strategies are intended to help you make use of the indicator.

Trading Checklist

Step One: Select the name you want to trade by typing it in the search field.

- If you are looking for a new stock to trade, check the trending list or names that are moving.
- If you are looking for squeeze potential or expensive premium, check out the **Scanners** page for names our metrics have identified as interesting.

Step Two: Watch for when HIRO is nearing a **Call Wall** or **Put Wall**.

- The Call Wall can reveal a line of resistance, and can mark a top if the HIRO indicator line flattens.
- The Put Wall can reveal a line of support, and this indicates a bottom if the HIRO indicator line flattens. Traders often observe strong changes in HIRO behavior at the Put Wall, meaning price action can reverse sharply.

Step Three: Look to see if the flows are short-term or longer dated .

- Toggle the **Next Expiry** flow to assess short-term options buying.
- If the flow is primarily next expiry, the stock's price movement may be less stable and prone to reversal.
- If the flow is primarily longer-dated options, this indicates a higher likelihood of more stable price action.
- When longer dated *short puts* are added in particular, we often see volatility measurably *decrease*, providing positive gamma to the market.
- ODTE positions remain highly volatile as these trades are rapidly opened or closed. Between 2020-2025 ODTE volume grew over 150%.

Step Four: Check for **HIRO Flow Alerts**, which indicate a net change in delta, meaning options hedging activity is switching providing positive pressure to negative pressure.

- When a flow alert goes off, wait for flows to "shut off" and look for reversals.

Step Five: Examine the **HIRO Signal** gauge in the *Stock Screener* table.

- Check the range of HIRO over the last 30 days for any stock. The gray background represents the entire 30 day range, so look for coloration indicating where buying or selling pressure has been for the last 5 days.
- If the bolded circle is towards either the right or left end of the gauge, that indicates HIRO is showing heightened buying or selling pressure compared to the last 30 days. This could indicate an event taking place.
- Tickers like TSLA typically have high options volume each day, but the *impact* of options hedging pressure on TSLA may shift. The **HIRO Signal** gauge shows you the impact of options pressure on each name, relative to historical levels.

HIRO Trading Strategies

Disclaimer. *The below information is intended to describe hypothetical scenarios and should not be considered trading or investment advice.*

Basic: Reversion from HIRO Flows

Condition: Following a HIRO flow alert, which indicates higher options impact (not yet how to trade it) - watch to see if HIRO's momentum continues or flatlines/reverses.

- **If the order flow was correlated with a price *increase*:** Once HIRO flatlines, consider buying a put spread near or at-the-money.
- **If the order flow was correlated with a price *decrease*:** Once HIRO flatlines, consider buying ATM calls or selling an OTM put spread.

Pro Tip: *Equity Hub's [Synthetic OI model](#) may help you define which strikes are most interesting for your expectations of support, resistance, or volatility.*

SpotGamma flow alerts indicate substantial order flow in the underlying ticker. Our analytics indicate that when these flows shut off, the stock reverts back in the previous direction 70% of the time.

For more information, check out our videos on using the HIRO to trade: [HIRO as a Mean Reversion Trading Indicator](#)

Intermediate: Watching HIRO When Price Hits Key Levels

Condition: When there is a flatline in the HIRO indicator at a proprietary SpotGamma resistance or support level, trading opportunities exist to capitalize on a price reversal.

- **If the order flow was correlated with a price increase:** Sell ODTE call spreads above the Call Wall when the stock approaches it, or potentially buy put spreads with your short strike at the Call Wall.
- *NOTE:* By placing your short strike of a put spread at the Call Wall, you add net positive gamma to market maker positioning, and your max profit point at expiry sits at that strike, should price fade back to the Call Wall.
- **If the order flow was correlated with a price decrease:** Sell ODTE put spreads below the Put Wall when the stock approaches it

Pro Tip: Check the difference between short-dated and longer-dated options flows using the Next Expiry toggle at the top of the chart. Major long term options flows are more impactful in the future, while ODTE or next expiry flows generate a larger current dealer hedging impact.

Advanced: Buy ITM spreads after sharp HIRO moves

Condition: When a HIRO Flow Alert fires for a name, watch the live options **Flow Data** beneath the HIRO chart to isolate the largest trade(s) taking place at the same time; if HIRO is moving in the same direction as that trade, this gives confidence that the move may be driving meaningful price action.

In this scenario, one feasible strategy is buying deep in-the-money ODTE spreads:

- **If the price has risen sharply:** Buy an in-the-money put spread
- **If the price has dropped sharply:** Buy an in-the-money call spread

Pro Tip: Configure your alerts to show the stocks, ETFs, or indices you are most interested in to make sure you get notified when major order flow activity occurs in these tickers.

HIRO FAQ

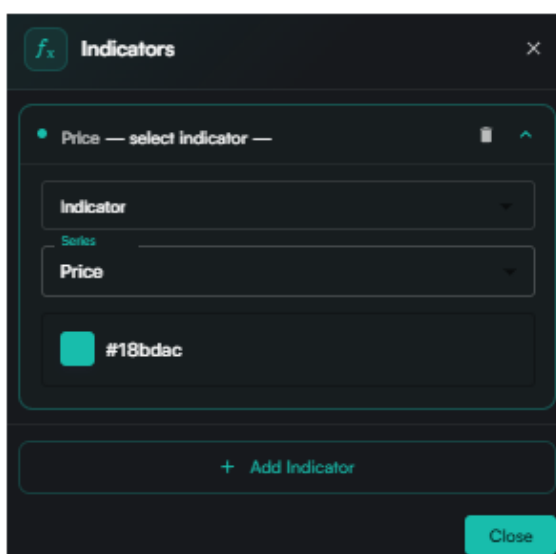
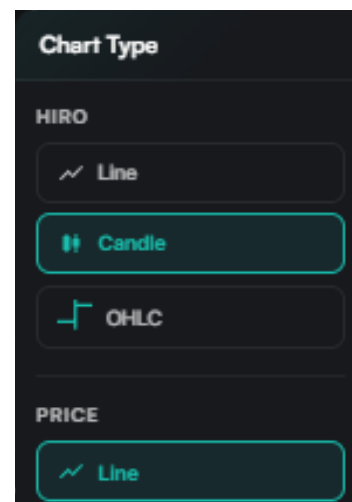
Below are the most frequently asked questions about using HIRO. For any additional questions, email info@spotgamma.com. Subscribers can also engage the traders in our Discord community to see how they leverage HIRO.

What do HIRO Flow Alerts on my chart mean?

Flow Alerts are a signal to “Watch Now”. These alerts fire when option flows are most likely to drive the underlying stock price. If the HIRO Indicator begins heading in a specific direction after a Flow Alert, that means price is likely to follow in the same direction. When the HIRO flow stops shortly after a Flow Alert fires, that can indicate the start of a pending reversal.

How do I toggle HIRO candlesticks ON or OFF?

To toggle HIRO candlesticks on or off, select the *Chart Type* button at the top and center of the HIRO chart. This will open up the selection window that allows you to adjust how both the HIRO Indicator and price are displayed on the chart. As shown in the image to the right, you can choose between a simple line chart, a regular candle chart, or an OHLC (open-high-low-close) style candlestick chart.



How can I add moving averages to the HIRO Indicator itself (NOT the underlying price)?

To add an indicator such as a moving average to the HIRO Indicator value itself, select the *Indicators* button at the top of the HIRO chart. Click on *Add Indicator* at the bottom of the pop-out window, select the indicator you wish to add and then pair it with the the HIRO Indicator.

How do basket instruments like S&P Equities, S&P 500, or Mag7 work within HIRO?

Within HIRO, several groups of tickers are organized into a basket for ease of reference. This allows you to view the cumulative options hedging impact from all names within that basket at once, instead of having to peruse multiple different assets within HIRO.

The **S&P 500** basket aggregates the impact of all options trades for SPX, SPY, /ES futures, and XSP into one HIRO signal. The **S&P Equities** basket similarly summarizes the options impact for all underlying components of the S&P. The **Mag7** basket shows the aggregated HIRO Indicator for the “Magnificent Seven” stocks consisting of AAPL, AMZN, GOOGL, META, MSFT, NVDA, and TSLA.

I accidentally wiped my HIRO Alerts or Key Levels from the chart, how can I add them back?

To re-add HIRO Flow Alerts and Key Levels to the chart, click on the **Settings** button in the top right of the chart. This will bring up the Settings window, where you can make all chart adjustments. At the bottom of this window you will find a *Show Alerts* toggle and a *Key Levels* toggle. Enabling these will display HIRO Flow Alerts and Key Levels on the chart, respectively.

What does it mean if the HIRO Put indicator is rising, or the HIRO Call indicator is falling?

Whenever the HIRO Indicator moves upward, that indicates positive options hedging pressure. Similarly, downward moves in the HIRO Indicator means that there is negative options hedging pressure at that time.

This relationship remains true when HIRO is broken out between Puts and Calls. When the HIRO Call value rises, that means traders are buying calls, and that dealers must hedge upwards by buying the underlying stock. When the HIRO Call value decreases, that indicates traders are selling calls, so dealers must hedge downwards by selling the underlying stock.

When the HIRO Put value decreases, that means traders are buying puts, and dealers must sell the underlying stock to hedge. If the HIRO Put value increases, traders are selling puts, so dealers must instead buy the underlying to hedge.

Key Terms

For more detailed explanations and applications of these terms, please visit the complete [SpotGamma Support Center](#).

Key Gamma Strike

Large gamma strikes contain a significant amount of Gamma. The largest gamma strike appears on index products and is similar to the Key Gamma Strike, which can be found on stocks in HIRO.

Call Wall

The Call Wall is the largest net call gamma. Call Walls are essential in our daily levels analysis. Their main function is that they define the upper bound of the wider probable range. The direction that walls shift overnight is a strong directional signal: up equals bullish and down equals bearish. This is often what we are keeping the closest eye on while waiting for a bullish signal from the market.

Put Wall

The Put Wall is our major support level, which measures the most amount of put gamma. Our data shows that the Put Wall offers strong support, but it is not quite as strong in equivalence as the Call Walls are in being a resistance point. The Put Wall is often a point where buyers will enter the market. It is also a point where put holders are likely to close their positions for a profit.

Hedge Wall

A Hedge Wall can be thought of as the point where realized volatility is expected to start increasing (the expected percentage range over a period of time based on historical prices with 68.3% confidence). Like any other of our major key levels, when Hedge Walls increase it is a bullish sign for the market and it is a bearish signal when they decrease.

ODTE

Zero DTE refers to trading (or analyzing) options on their last day of expiration (opex). DTE means days to expiration, and so “zero DTE options” are simply options on their last day before either expiring worthless or with some value. Zero DTE options have extremely high gamma levels (how quickly the size of an option changes based upon success with direction) and extremely high theta levels (the accelerating pace of the time decay of an option’s price). As long as most

institutional players are short zero DTE options, then this has a stabilizing effect for the market during the day; overnight gaps lack this liquidity protection.

Total Options View

The Total tab within the HIRO settings panel indicates that you will view all options trades on the chart via one line that captures the net put and call impact.

Put/Call View

The Put/Call tab within the HIRO settings panel differentiates the put options impact from the call options impact via two unique lines.

All Trades Filter

This view captures all projected impacts of all options trades within the US options complex for a given security or index. This view does use SpotGamma proprietary logic to filter out some trades that we consider hedged and therefore do not drive the underlying security.

Next Expiry Filter

This view only captures the nearest dated options expiration impact for any underlying security or index. This can be the same day (0DTE), the upcoming Friday, or at a set time once a month.

Realized Volatility

Realized Volatility (RV) shows the actual trading range of how much a stock is moving. It is calculated based on historical movements, and measures the standard deviation, which means about how far it can be expected to move with a 68.3% chance. Another way to look at it is that 68.3% of historical moves would have fallen under what is measured as a standard deviation. RV can be applied to any length of time period, and can also be used as a forecast of future [realized] volatility.

Implied Volatility

Implied volatility (IV) tells us what percentage range the options market is pricing in as a one standard deviation move (68.3% chance) over the next year. For example, if IV is 17%, then it has a one standard deviation's chance (68.3%) of moving 17% either direction in a year. Rather than use historical data to calculate a one standard deviation move, which is what realized volatility does, IV calculates the expected percentage range by how relatively expensive options are. If long options are in demand and trading at a premium, then IV is going to be higher, so the options market will be pricing in a wider percentage range.