

Fidelity Active Trader Pro Directed Trading User Agreement

Important: Using Fidelity's directed trading functionality is subject to this Fidelity Active Trader Pro® Directed Trading User Agreement (the 'Directed Trading User Agreement'). By using the directed trading functionality, you indicate your acceptance of the Directed Trading User Agreement (which includes the Terms and Conditions below) and acknowledge and accept the risks set forth herein.

Definition of Directed Trading through a Market Center. Directed Trading through Fidelity Active Trader Pro allows you to view the top 25 book of bid/ask quotes, with size, from Market Centers and populate an order window by selecting a bid or an offer and sending an order directly to a specific Market Center for potential execution. Directed Trading should not be confused with Extended Hours trading through Fidelity.com. Please refer to Terms and Conditions in this Agreement for specific trading requirements related to Directed Trading because they will differ in certain areas from Extended Hours trading. The eligible Market Centers in Directed Trading include NYSE Arca (ARCX), Investors Exchange (IEX), Nasdaq (XNMS), and NYSE (XYNS). Market Center venues are subject to change at any time without notice.

In addition to sending orders directly to a Market Center, you may direct your order using one of Fidelity's intelligent order routers – Volume Weighted Average Price (VWAP), Target Volume (TVOL), Fidelity Dynamic Liquidity Management (FDLM).

Volume Weighted Average Price (VWAP) strategy trades along with volume throughout the day, tracking the average price over the specified time interval. When you elect to direct an order using VWAP, the order will be placed as "Not-Held". A Not-Held order gives Fidelity time and price discretion to execute an order without being held to the security's current quote. This discretion gives Fidelity the ability acting as your agent to execute the order using proprietary volume forecasting methods for determining order placement. The volume weighted average price (VWAP) algorithm is a Not-Held order that will attempt to trade proportionately to the market over the specified trading horizon. Users will see executions spaced throughout the life of the order until it's completed.

Target Volume (TVOL) strategy is based on a percentage participation rate. When you elect to direct an order using TVOL, the order will be placed as "Not-Held". A "Not-Held" order gives Fidelity time and price discretion to execute an order without being held to the security's current quote. This discretion gives Fidelity the ability acting as your agent to execute the order by forecasting and trading along with market volume at the targeted rate. TVOL tracks volume in the consolidated market and will increase and decrease volume as market conditions warrant. The target volume algorithm will participate in the market as a Not-Held order at a specified rate of either 5%, 10%, or 20%.

Fidelity Dynamic Liquidity Management SM (FDLM) is Fidelity Capital Markets proprietary intelligent order router which provides access to displayed liquidity through Electronic Communications Network (also known as ECNs, electronic systems that automatically match buyers and sellers) and Exchanges as well as non-displayed liquidity through ECNs and Exchanges and Alternative Trading Systems (ATs, also known as "dark pools") and other off-exchange market centers.

Fidelity does not have a best execution obligation for your order when you choose to use Directed Trading to route an order to a particular Market Center. The quote displayed on the order preview screen is not necessarily indicative of the quote at the Market Center you selected. Market and marketable limit orders may be canceled if the Market Center you selected cannot execute at the

National Best Bid and Offer (NBBO) that is displayed on the Trade Preview screen. This may be magnified in volatile markets.

Directed Trading may pose certain risks which may be greater than if orders are routed through Fidelity's proprietary order routing system, which you hereby acknowledge and accept. Some of these risks include: 1. Order Verification. Because speed to market is essential in a Directed Trading application, the Trade Verification screen has been removed from the order entry process in Directed Trading. Pressing Place Trade on the Directed Trading screen will send your order to the selected routing destination. By accepting the Directed Trading User Agreement you acknowledge that you are asking Fidelity to eliminate your ability to review orders on a separate screen before they are sent to: 1) A Market Center for execution which, as used in Fidelity's Directed Trading functionality, refers to one or more electronic communications networks (ECNs) or Exchanges to which you may direct an order for display and execution) or 2) Fidelity (Auto) for execution (The Auto routing option means Fidelity will route your order through its proprietary order routing infrastructure for execution). You understand that you will only be able to use the order entry fields in the Trade Window to ensure you have input your order correctly. You understand that by choosing this option, you may increase the risk that you send orders to purchase and sell securities that differ from the orders you intended to send. You agree to accept this risk and acknowledge that Fidelity assumes no responsibility for any errors caused by you choosing to use this functionality and/or you failing to adequately review your orders.

Any "Attention" or warning messages that Fidelity would normally present on the Trade Verification page will only be presented after your order has been confirmed in Directed Trading. These include, but are not limited to, warnings about another open order for a security you have placed an order for and attempts to buy non-marginable securities on margin.

2. Lack of Liquidity. Liquidity generally refers to the level of trading activity and the volume of securities available in the market to be traded. In general, the greater the liquidity in a security, the greater the chance an order will be executed. There may be a lack of liquidity (buyers and sellers) when directing an order to a specific Market Center, which may prevent your order from being executed, in whole or in part, or from receiving as favorable a price as you might receive when Fidelity routes your order through Auto during standard market hours. In addition, "All or None" is not an eligible trade condition for directed orders, so directed orders may receive partial execution.

3. Price Volatility . Price volatility generally refers to the speed and size of changes in the price of a security. There may be more price volatility in the Market Centers, which may prevent your order from being executed, in whole or in part, during standard market hours.

4. Access to Other Markets and Market Information. The Directed Trading window in Active Trader Pro provides a streaming real-time quote window that lists the Last Trade, Change, Bid, Bid Size, Ask, Ask Size and cumulative Volume for an individual security. This quote reflects the consolidated National Best Bid and Offer (NBBO) for the security selected during standard trading hours, but is not necessarily indicative of the Best Bid or Offer on the eligible Market Center you select. Depending on the Market Center you choose to route your order, if the market center cannot execute your order within the NBBO, all or part of your order could be directed to another venue for execution at the market center's discretion. Alternatively, if you select the Auto routing option, Fidelity will route your order through its proprietary order routing infrastructure for execution.

5. Price Variance. Orders entered through Directed Trading are eligible for execution during standard and extended market hours). Market prices in electronic marketplaces are generally based on the supply and demand created by other buyers and sellers who have directed orders or have orders directed for them to that Market Center. Therefore, execution prices of securities transactions with a Market Center may not necessarily match pricing available in a standard trading session or within another Market Center. You might pay more or receive less than you would when compared to trades routed to a destination that may provide execution at or within the quoted NBBO during standard market hours. However, you will not receive an execution price that is worse than your established limit price.

6. Time and Price Priority of Orders. Time and Price Priority of Orders. Orders directed to a Market Center for execution are generally handled in the order in which they were received at each price level. Therefore, orders routed to a specific Market Center by other investors before your order may match an existing order you were attempting to match, thereby removing that order from the Market Center order book. Similarly, your order may not be first in line to be executed if a matching order comes into the Market Center. This may prevent your order from being executed in whole or in part or from receiving as favorable a price as you might receive if your order was not directed to a Market Center. Again, you will not receive an execution price that is worse than your established limit price.

Reserve orders - The price and time priority of Reserve Limit orders is different from that of standard limit orders. Displayed orders at a given price always take precedence in execution over quantities in reserve in a Reserve Limit order. This means that Displayed orders from other customers at the same price as your order which arrive at the Market Center after your Reserve limit order will execute after your displayed quantity but before any of your reserve quantity executes.

Non-Display orders - The price and time priority of Non-Display orders is different from that of standard limit orders. Displayed orders at a given price always take precedence in execution over orders that are not displayed. This means that displayed orders from other customers at the same price as your order which arrive at the Market Center after your Non-Display order will execute before your Non-Display order.

Volume Weighted Average Price (VWAP) – Since the VWAP algorithm attempts to trade proportionately to the market over the specified trading horizon, users will see executions spaced throughout the life of the Not-Held order until it's completed. The number of trades experienced is directly related to the size of your order; larger orders will have a higher frequency of trades. General trading patterns will result in your order trading at a higher frequency towards the end of the trading session.

Target Volume (TVOL) – Since the TVOL algorithm participates in the market at a specified rate (either 5%, 10%, or 20%), the duration of the order is directly related to how active the stock is. An active stock, a stock that trades frequently and at high volumes, will trade faster than an order for a stock that is less active. These Not-Held orders will only complete if enough market volume has been observed.

Fidelity Dynamic Liquidity Management SM (FDLM) - FDLM combines historical and real-time market data with market microstructure tactics and leverages financial engineering to produce increased potential for price improvement and liquidity enhancement. Orders routed through FDLM will only execute within the National Best Bid and Offer (NBBO), providing price improvement opportunities through non-displayed liquidity pools and external ATs ("dark pools").

7. Communication Delays. Delays or failure in communications due to high volume of orders or communications, or other computer system problems, or other causes, may cause delays in, or prevent access to current information or execution of your order. Only if you have selected the Auto routing option within Directed Trading would Fidelity look to redirect your order due to a communication or system problem. We will make every effort to provide timely order status detail if your order has been cancelled and will generate error messages at the time of order entry in the event we are aware of a communication or system problem with a specific Market Center. This is intended to give you the option of reentering your order and directing it to another Market Center or selecting Auto.

8. Short Sales Through Directed Trading. Short Sales through Directed Trading are available for execution from 8:00 a.m. to 8:00 p.m. ET on regular (non-early close) trading days. Hours for Short Sales and available routes are subject to change without notice.

9. Ability to Override Certain Order Entry Edits. Fidelity has implemented several order entry edits for our customers' protection. However, one of these edits has prevented customers from entering orders outside of regular market hours (9:30 a.m. – 4:00 p.m. ET Monday – Friday except market holidays) to buy a stock above or sell a stock below the last trade price during regular market hours. This situation most frequently occurs when specific new information relevant to a given stock (e.g. earnings announcements or takeovers) is distributed outside of regular market hours. In order to allow you to enter these orders, Directed Trading will, in these instances, open up an "Order Entry Error" window explaining the situation. You may then check a box that allows you to acknowledge and accept the risk of sending this order to the market. You can then send the order to the Market Center of your choice. Be advised that other order entry edits are still in place that may still prevent this order from being accepted by Fidelity. Also, please note that this order entry edit override is only available outside of regular market hours.

10. Availability. The Directed Trading application is currently available for order entry and execution from 7:00 a.m. to 8:00 p.m. Eastern time, Monday - Friday except for market holidays (subject to change by Fidelity at any time without notice). Unlike Extended Hours trading through Fidelity.com, the Directed Trading application is a continuous session with multiple Market Center destinations to choose from depending on security type.

Terms and Conditions

Trading through Fidelity Active Trader Pro's Directed Trading application is subject to the terms and conditions ("Terms") and policies set forth by Fidelity and is subject to change without notice. By using the Directed Trading application, you acknowledge your understanding of the risks set forth above and your agreement to the Terms set forth below.

1. Fidelity reserves the right not to accept an order through Directed Trading at its discretion. Fidelity will notify you with an alert, if enabled, to any change in order status. It is your responsibility to monitor your orders for execution or cancellation status.

2. Each available Market Center reserves the right not to accept an order at its discretion. Fidelity will notify you with an alert, if enabled, to any change in order status. It is your responsibility to monitor your orders for execution or cancellation status.

3. Fidelity strongly recommends use of a broadband connection when accessing Fidelity Active Trader Pro and the Directed Trading application. Failure to use a broadband connection could negatively impact your ability to view streaming market data, enter timely orders, and/or match orders through the Directed Trading application.

4. As stated previously, by directing your order to a specific Market Center for execution, Fidelity will not take into consideration all of the factors it considers when it routes an order for you. These factors, which are designed to result in favorable transaction processing, include size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and reduced execution costs through price concessions from the Market Centers. You also understand that communication line problems and/or system problems either at or between the Market Center to which your order was directed and/or Fidelity, may prevent the submission of your order and result in the cancellation of your order. Fidelity will not redirect your directed order to another Market Center or through our proprietary order routing system in the event of communication line or system problems.

5. The following Market Centers are currently available to direct orders to through the Directed Trading application: NYSE Arca – ARCX, Nasdaq – XNMS, NYSE – XNYS, Investors Exchange – IEX

The following route choices are currently available: Fidelity's proprietary order router – AUTO, Fidelity Dynamic Liquidity Management SM – FDLM, Volume Weighted Average Price – VWAP, Target Volume – TVOL05, TVOL10, TVOL20

Available Market Centers are subject to change without notice.

6. If Auto route is selected, the order will route through Fidelity's proprietary order routing infrastructure. When selecting Auto, you have all available order entry options available to you that are not available when routing directly to a Market Center (such as stop orders, GTC orders, etc.). Auto is only available from 9:30 a.m. - 4:00 p.m. ET on the Directed Trading ticket. Orders routed with an Auto designation will not be eligible for execution outside of standard market hours (9:30 a.m. to 4:00 p.m. ET). If you are entering an order with Auto as the routing destination, but the order is not submitted prior to 4:00 p.m. ET, the cursor will default back to the Route field and you will need to select a different Market Center to process the order.

7. The Directed Trading application is currently available for order entry and execution from 7:00 a.m. to 8:00 p.m. Eastern time, Monday - Friday except for market holidays (subject to change by Fidelity at any time without notice). The NYSE Exchange – XNYS and Investors Exchange – IEX routing destinations are only available during standard market hours (9:30 a.m. to 4:00 p.m. ET). Any orders routed to these destinations prior to 9:30 a.m. ET are queued until market open at 9:30 a.m. ET and are held by the relevant Exchange specialist. NYSE Arca – ARCX and Nasdaq – XNMS are available from 7:00 a.m. ET to 8:00 p.m. ET. Volume Weighted Average Price (VWAP) is available from 9:30 a.m. – 4:00 p.m. ET. Target Volume (TVOL) is available from 9:30 a.m. – 4:00 p.m. ET. Fidelity Dynamic Liquidity Management SM (FDLM) is available from 8:00 a.m. – 6:00 p.m. ET. Unlike Extended Hours trading through Fidelity.com, the Directed Trading application is a continuous session with multiple Market Center destinations to choose from depending on security being traded. Hours of operation and / or availability of Market Centers are subject to change without notice.

8. NMS exchange-listed securities are the only securities available for routing to a Market Center in Directed Trading. Each Market Center defines which equities are eligible for trading, and these securities may change daily, or throughout a given trading day, based on market conditions, trading halts in a security, or other factors. Orders for securities that are not eligible for trading will be rejected and the order will be cancelled.

In addition, Fidelity will only accept and route orders to the New York Stock Exchange (NYSE) for stocks with a primary listing on the NYSE. In addition, Fidelity will only accept and route orders for National Market System (NMS) securities and dually listed NYSE securities to NYSE Arca – ARCX, Investors Exchange – IEX, Nasdaq – XNMS, and NYSE – XNYS. Intelligent order routers Volume Weighted Average Price – VWAP, Target Volume (TVOL), Fidelity Dynamic Liquidity Management SM (FDLM), are available for securities that have a primary listing on any National Market System market center. Available Market Centers are subject to change at any time.

9. Fidelity will accept Buy, Buy to Cover, Sell and Sell Short limit orders when routing to a Market Center through the Directed Trading application. Order types accepted include Market, Limit, Reserve Limit, and Non-Display orders. In addition, Directed Trading accepts Pegged Orders which may be combined with some of the previously listed order types. Also, the Directed Trading application accepts Trailing Stop Limit orders that may be routed to the different Market Centers. Not all Market Centers accept all order types.

10. You may not trade against an order entered by you. In other words, you may not buy securities you offered for sale, and vice versa. Orders entered in this manner are subject to possible cancellation and your account is subject to restriction.

11. The minimum order size for Volume Weighted Average Price (VWAP) and Target Volume (TVOL) is 1,000 shares. Fidelity Dynamic Liquidity Management SM (FDLM) has a 100 share minimum. Fractional share and notional dollar orders are not available for directed trading.

12. Fidelity and Market Centers also reserves the right to limit maximum sizes for orders sent to any Market Center. Please note that sending large orders to a Market Center may cause market prices to move adversely to your order. Acceptance of large orders is at the discretion of the individual Market Center and is subject to change without notice.

13. Eligible Time in Force (TIF) indicators are Day, 9:28 a.m., Day+, Fill or Kill (FOK) and Immediate or Cancel (IOC). TIF indicators for Trailing Stop Limit orders are, Day or GTC. Eligible Time in Force (TIF) indicators vary by Market Center. Day+ orders entered after 9:27:59 a.m. ET are not eligible for execution until after 9:30:00 a.m. ET.

14. Orders will default to a trade type of Cash if the account is only a cash account. If margin is available on the account, Margin will be the default trade type. Buy to Cover and Sell Short orders will default to a Short trade type.

15. Attempts to cancel and replace orders are performed on a best-efforts basis. There is no guarantee that an open order can be canceled and replaced, in whole or in part. In addition, there may be a delay in canceling and replacing orders for Market Centers that route orders to other Market Centers. While your order is at another Market Center, it may not be possible to cancel the open order, and you may

have to wait to be able to cancel or replace. New orders and cancels entered between 9:25:00 a.m. ET and 9:30 a.m. ET are processed on a best-efforts basis.

16. Fidelity is not liable for delays in the transmission or processing of orders due to a breakdown or failure of transmission, communication or data processing facilities, actions or inactions taken by the Market Centers, or any other cause beyond our reasonable control.

17. Transactions are subject to the applicable rules and regulations of the self-regulatory organizations and governmental authorities.

18. If you elected to set a Default Account for Trading and/or Display Account Nicknames on the Trade Preferences screen, those selections will also apply to Directed Trading. If you elected to view Account Nickname rather than account number in the trade ticket(s), you understand that you will not view the account number prior to submitting a trade through the Directed Trading screen. Please exercise diligence to ensure all trades are executed in the account in which you intended.

19. Shares available to short ("Shortable" shares) - When you select the trade action of Sell Short in Directed Trading quote the hours of 8:00 am and 8:00 pm ET on regular trading days, you will be shown the number of shares available to sell short when you request a quote for a given security. This number is provided for information only. Fidelity does not guarantee that when you try to place an order to sell short, shares will be available at that time to allow you to sell short.

20. Active Trader Pro Directed Trading supports the sending of Pegged orders. With a pegged order, you specify your maximum (minimum) limit price for a buy (sell) order. However, when the Market Center posts that order, they will display it with a limit price equal to the National Best Bid for a Buy or Buy to Cover order or the National Best Offer for a Sell order. Pegged orders are not available on Sell Short orders and are available only from 9:30 a.m. – 4:00 p.m. ET, Monday through Friday except market holidays.

The displayed price for your pegged order will move as the Best Bid or Offer moves in the national market. You will not, however, execute a trade at a price worse than your stated maximum or minimum limit price. Pegging slow moving stocks is not advisable. It will be readily apparent to market participants watching the quotes that you have entered a pegged order, and you may lose any advantage that you may have obtained by entering a pegged order.

21. Directed Trading Trailing Stop Limit orders sent to Market Centers may only be entered as Day orders. Trailing Stop orders may only be triggered during regular market hours, (9:30 a.m. – 4:00 p.m., Monday through Friday except market holidays). Trailing Stop Limit orders, when triggered, will be sent to the chosen Market Center as a Day Limit orders eligible for execution until 4:00 pm ET on the date the order is triggered. Once triggered, Trailing Stop Limit orders directed to Market Centers will be canceled at the end of the trading day if not filled.

22. Market orders sent to Directed Trading Market Centers may not execute at the same price as they would if sent to Fidelity (Auto). Different Market Centers have different rules for and approaches to price and liquidity improvement and this may impact your execution price. Fidelity has no control over the executions at a specific Market Center, but Market Centers must adhere to the applicable regulations. To see the historical execution quality of a given Market Center, you can review their SEC

Rule 605 reports which provide standardized metrics of execution quality. These reports are generally available on the Market Centers' web sites.

23. Orders directed to an exchange, ECN, ATS, or to any other market center using Directed Trading – including the use of smart router or intelligent order routers through Directed Trading, are treated differently than orders sent to Fidelity (Auto) for execution. All Directed Trading orders, with the exception of the Auto route, are not subject to any execution guarantee that Fidelity may provide to customers routing via Auto.

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