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# Trading Zero Days to Expiration (ODTE) Options



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## Introduction

Zero Days to Expiration (0DTE) Options are options contracts set to expire at the end of the trading day. This applies to all options contracts, regardless of the date they were issued, whether months or weeks ago.

Traders seeking ODTE options often turn to Weekly options introduced by the CBOE in 2005. Initially, these options expired every Friday, but the exchange expanded to three expirations a week and eventually to five days a week on certain indexes.

Weekly options have characteristics and features similar to standard options, such as pricing, assignment, exercise, rights, and obligations. A noticeable difference between weekly and standard options is that weekly options have a shorter expiration cycle. They share many other characteristics with standard options. For a complete list of available Weeklys, refer to **CBOE Weeklys**.

Due to their short time frame, ODTE options are sometimes traded using credit strategies, capitalizing on positive Theta and time decay. Due to the complex nature of these products, an option level of four or above is required. TradeStation clients with an options trading level of three or less can only use debit strategies when trading ODTE options.



# **Five features of ODTE options**

#### No overnight risk

Trading same-day expirations eliminates the risk of carrying positions overnight.

#### Lower time value can mean lower premiums

ODTE options have lower premiums than options with more time until expiration. Their suitability would depend on your strategy and risk tolerance.

## **Z** Liquidity

Due to their increasing popularity, ODTE options on certain underlying have a lot of trading volume and liquidity.

## Know the outcome quickly

Since options expire on the same trading day, you promptly know the success or failure of your trade.

# 5 Flexible trading

ODTE options allow you to take advantage of short-term price movements or react quickly to news events, offering greater flexibility and customization in trading with leverage.

## **Five concerns for ODTE options**

#### Time decay

With only the same trading day, any time value in ODTE options will decay rapidly. While advantageous when using credit strategies, it poses a challenge for other approaches.

## ) Gamma risk

Shorter expirations are more sensitive to underlying price changes. Minor changes in the underlying price can lead to more significant changes in the option's value.

# 3 Large price movement needed

Debit strategies applied to ODTE options require a substantial price movement within the same trading day, sufficient to cover the cost (premiums) of the position.

## 4 Overtrading

Because there are more option expirations available, there could be the temptation to trade more often. This could result in overtrading, where additional costs are created, and lowerquality option positions are entered.

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#### Active trade management required

Debit spreads traded on ODTE options can be exited before the end-of-day expiration to realize a profit. Credit strategies can profit when allowed to expire out of the money, but implementing a stop loss can be used to manage risk exposure when the trade deviates from expectations.

Market outlook for debit strategies	Anticipating a sharp price move in either direction and/or increased volatility
Position net debit or credit	Debit (premium paid)
Maximum profit	Vertical spreads: Difference in strikes minus the premium paid Long call, straddle, & strangle: Unlimited upward Long put, straddle, & strangle: From the strike price to zero downward
Profits from	The underlying price moving significantly and rapidly
Maximum loss	Premium paid to enter the position, occurs if the options expire worthless
Breakeven	Bullish: the long strike plus the premium paid Bearish: the long strike minus the premium paid
Risk from	The underlying price not moving sufficiently to cover the cost of the position and/or a decline in volatility Overtrading Early assignment on the short leg for spreads

#### Quick reference guide: Debit strategies on ODTE options



## Quick reference guide: Credit strategies on 0DTE options

Market outlook for credit strategies	Bear call spread: Expecting a drop in the underlying price Bull put spread: Awaiting a rise in the underlying price Iron condor/butterfly: Anticipating price to move sideways in a channel and/or a drop in volatility
Position net debit or credit	Credit (premium received)
Strategies available	Bull put spread, bear call spread, iron condor, iron butterfly
Maximum profit	The premium received
Profits from	The short strikes remaining out of the money when the options expire
Maximum loss	Vertical spreads: The difference between the short and long strikes minus the premium received Iron condor & butterfly: The largest spread width (distance between the short strike and long strike), minus the premium received
Breakeven	Bullish: the short strike minus the premium paid Bearish: the short strike plus the premium paid
Risk from	The underlying price moving beyond the breakeven price or an increase in volatility Maximum loss occurs if the underlying price is beyond either long strike at expiration Overtrading

## **Option style**

#### American style options

#### **European style options**

Option buyers/holders have the right to exercise the options at any time up to the expiration. Typically, ETFs and equity options are American style.

These options can only be exercised at the expiration date. The options will be automatically exercised if they expire in the money by at least a penny.



# What happens at expiration?

The outcome at expiration will depend on several factors:

## The type of option being traded.

**a.** Options on equities and ETFs are physically delivered.**b.** Index options are cash-settled.

- $\angle$  Whether it is a call or a put option.
- **3** The moneyness of the option.

## Actions at expiration:

## Long call

**a) In the money:** The option will be automatically exercised if the settlement price is above the strike price by at least \$0.01. For stock and ETF options, the trader must purchase 100 shares per contract at the strike price or liquidate and sell the stock position the next business day. The profit would be credited to the buyer's trading account for cash-settled index options.

**b) At the money or out of the money:** The trader would lose the premium paid for the option.



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# 2 Short call

**a) In the money:** The seller is automatically assigned, and for stock and ETF options, they would have to deliver the 100 shares at the strike price for each contract. For index options, the seller's account would be debited the amount of the loss based on the difference between the settlement price and the strike price.

**b) At the money or out of the money:** The option expires worthless, and the trader keeps the premium received.



# 3 Long put

**a) In the money:** The option will be automatically exercised if the settlement price is below the strike price by at least \$0.01. The trader must sell 100 shares per contract at the strike price for stock and ETF options. With index options, the profit would be credited to the buyer's trading account.

**b) At the money or out of the money:** The trader would lose the premium paid for the option.



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## 4 Short put

a) In the money: The seller is automatically assigned, and for stock and ETF options, they would have to buy 100 shares at the strike price for each contract. With index options, the seller's account would be debited the amount of the loss based on the difference between the settlement price and the strike price.

**b) At the money or out of the money:** The option expires worthless, and the trader keeps the premium received.



# When to use **ODTE** options?

Traders may opt for debit strategies on ODTE options when anticipating a substantial, rapid price movement in the underlying during the day. Additionally, debit strategies on ODTE options can benefit from increased volatility.

Traders with options trading level four or higher can sell credit strategies on an underlying they expect to have little to no price movement or a drop in volatility. Credit vertical spreads can be used when a price move is anticipated and volatility is high and expected to drop.

## Example:

Let's compare ODTE options versus standard options for trading around a market event. We will create a hypothetical situation using the S&P 500 index as the underlying security. We will compare the trades from Pat and Sam, two traders expecting a large price movement down from resistance resulting from an economic announcement in the late afternoon.





Both traders see a resistance level near 4980 to 4983 and are targeting support around 4965. To take advantage of the large, expected price movement, they both place 4980/4965 bear call spreads.

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	Sell		Open		-1		\$SPXW.X	1	4 Feb 24 🚽	4965			Put		×
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Pat traded the spread using ODTE options.

Sam placed the trade with standard SPX options with 29 days to expiration.

Trade													đ	
Spread								Delta	Č.	Theta	Max Pro	fit Max Los	s	
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Sell		Open		-1		\$SPX.X	15	Mar 24		4965		Put		×
Buy		Open		1		\$SPX.X	15	Mar 24		4980		Put		×
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To simplify, we assume both traders were filled at the mid-price shown in the orders. The trades would be exited on the same day once the index dropped to the target of 4965.

With OptionStation Pro, we can use the price slice tool on the analysis page to theorize the potential profit if the index price does reach the target. This only considers price movement and does not reflect changes in volatility or other influences. Looking at Pat's ODTE options spread, there is a theoretical profit of \$498.70.

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	,	Buy		1		\$SPXW.X		14	Feb 24		4980		Put			21.83	%	
		Sell		-1		\$SPXW.X		14	Feb 24		4965		Put			23.48	%	
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Sam, trading standard options spread, shows a theoretical profit of only \$132.56.

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		Side		Qty		Symbol		Exp	piration		Strike		Туре		Volatility		
		Sell		-1		\$SPX.X		15	Mar 24		4965		Put		1	2.09	%
		Buy		1		\$SPX.X		15	Mar 24		4980		Put		1	2.00	%
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Watch Webinar – "LODTE Options – Understanding Inherent Risks and Hedging with Debit Verticals". Learn how to apply vertical debit spread strategies to weekly options



Let's compare and contrast the results.

	Pat	Sam
Strategy used	4980/4965 bear put spread	4980/4965 bear put spread
Options selected	0DTE options	Standard, 29 days to expiration
Cost of options	5.05 x 100 = <mark>\$505</mark>	5.50 x 100 = <mark>\$550</mark>
Max loss	-\$505	-\$550
Max profit	\$995	\$950
Position's Delta at open	-36.37	-3.43
Potential realized profit at 4965	\$498.70	\$132.56
Rate of return	98.8%	24.1%

## **Trade comparison**

Pat received a much higher rate of return than Sam. The costs of entering the trades were very similar. But there is a much higher Delta with the ODTE options. The expiring options also have greater Gamma, and the position would not be affected by much time decay since it was closed the same day before the expiration.

## **Practice:**

Access the TradeStation platform in Simulated Trading mode to practice placing trades on ODTE options without any real money at risk. Through this practice, you can familiarize yourself with analyzing options, implementing strategies, and executing orders.



**Explore Strategies** – Discover options strategies and empower your trading with the knowledge and skills to navigate dynamic market conditions.



# Conclusion

Traders can use ODTE options strategies around specific market events, such as an earnings announcement or news. The shorter duration of these options results in lower premiums when compared to options with more time until expiration, potentially offering greater returns.

Less time before expiration means less time for an underlying security to move in price. Therefore, options sellers could exploit this limited time to manage risk effectively when trying to generate income from collecting premiums. Ultimately, understanding the unique features of Zero Days to Expiration (0DTE) Options can contribute to more informed and potentially profitable trading strategies.



**Review Options Level** – Ready to take your options trading to the next level? Learn about your option level and make sure it's right for you. Boost your trading potential!



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