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Before you attempt to price an index option please read and understand the following discussion about each of the six factors required of this pricing model: price of underlying index, strike price, volatility, interest rate, dividend yield and days to expiration (or an expiration date). You must also select either “American-style Exercise” or ”European-style Exercise” at the upper right of the calculator’s interface. To determine the style (type of exercise) of the option you are pricing, contact the exchange on which the option is traded.

How To Use Calculator

When the calculator first opens there are default values in place. To change input values, click on the first value you want to change. When it highlights you may change it, however notice that the output values disappear and the calculate button highlights in red. To change additional input values, move through the fields (boxes) with either the “Enter” key, the “Tab” key or an up or down arrow. (**Note**: you may also use your mouse to move through and change the input value fields, but you must press the Enter key to record each change.) When all changes have been made click on the Calculate button to recalculate and display new theoretical values reflecting the new input.

Price of Index

This is simply the level of the underlying index which can be obtained from either a newspaper (for a closing index price) or most quote services (by using the index's symbol: OEX, SPX, DJX, etc.). Acceptable range of values: 0 - 999.999.

NOTE: For Reduced-value index LEAPS options, the underlying is 1/10 the value of the index on which the options are based. Strike prices are set accordingly. When using this calculator to price one of these options, simply divide the "price of index" you are using by 10 and insert that number into the calculator. For example, if you are pricing an SPX Reduced-value LEAP, and the level of the SPX itself is 615.20, you would insert 61.52.

Strike Price

Type in the strike (or exercise) price of the Call or Put you are attempting to value. Acceptable range of values is 0 - 999.999.

Volatility

For this input, you will need a volatility estimate of the underlying index. For example, to value at-the-money OEX options you can use the CBOE's Volatility Index (ticker symbol VIX) which is a rough estimate of the current implied volatility of a hypothetical at-the-money OEX Call with 30 calendar days to expiration. Alternatively, you may use your own estimation, or the implied volatility of the option you are testing. Enter only a number with up to 1 decimal place (e.g., "24" or "27.6"). Acceptable range of values is 0 - 999.9.

Interest Rate

Use a current “risk-free” interest rate appropriate for the lifetime of the equity option you are valuing. For example, for a one-month option, use a thirty-day rate; for a three-month option, use a ninety-day rate. Many investors use Treasury Bill rates. Enter only a number with up to 2 decimal places (e.g., “5”, “6.5” or “6.25”). Acceptable range of values is 0 - 99.99.

Dividend Yield

You must input an annualized dividend yield for the index of stocks which underlies the option you are trying to value. Enter only a number with up to 2 decimal places (e.g., “3”, “3.5” or “3.25”). Acceptable range of values is 0 - 99.99.

To obtain this value we suggest you:

1) ask your broker.
2) inquire from the organization which created the index (e.g., Standard & Poor’s)
3) check financial publications (e.g., “Wall Street Journal,” “Investor’s Business Daily,” “Barrons,” etc.)
4) check with the CBOE at 1-800-OPTIONS, or the CBOE’s Web site (http://www.cboe.com)

Days To Expiration

Type in the days remaining until the option's expiration day. Include all calendar days (seven days to the week, including holidays), not just business days! Acceptable range of values is 0 - 9999. Alternatively, you can choose a preset month and year for your expiration. This calculator will know how many days until the expiration you have chosen.