

# Spread Scanner Guide

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# Introduction

**Spread Scanner** can be used to build a stock spread, strangle, or, basically, any two-leg option strategy with one underlying. It gives an ability to search underlying names within some standard index or group, or within custom groups. You can scan for trading opportunities using criteria based on price and implied volatility of real market contracts and on specific indicators like Call/Put volume and Relative volatility. One of the service's features is an ability to automatically create delta-neutral strategies, or strategies with user defined delta.

Spread Scanner application introduces some default search profiles that can be applied to create most popular combinations, like Long Calendar Spread or Short Strangle. You can analyze the result set of trading opportunities using a large historical [Volatility.com](http://Volatility.com) database. Detailed information about the strategy is available both in graphical and tabular formats.

The simulation feature is available in Spread Scanner - you can run the Risk scenario and see the spread value change with the time and underlying price.

## Structure of this document

The document structure is as follows: first, the strategies covered by the service are described in [The strategies coverage](#) section. Immediately below, you can find the description of the service interface and some features in [Spread Scanner interface](#) and [Template profiles](#) sections.

## The strategies coverage

**Spread Scanner** covers the following strategies:

- 1) Vertical spreads - when you buy and sell options with same expiry and type (call or put), but of different strikes; one option bought, the other sold
- 2) Calendar spreads - type and strikes are same, expiries different; one option bought, the other sold
- 3) Diagonal spreads - only type the same, strikes and expiries different; one option bought, the other sold
- 4) Strangles - both options are either bought or sold, one being Call and the other Put; both of the same expiry
- 5) Straddles - same as Strangles, Call and Put have the same strike additionally
- 6) Synthetic futures positions - Call is bought and Put is sold, or vice versa; the same expiry for both
- 7) Basically, any strategy, consisting of two option legs having the same underlying and number of contracts

The following strategies are **not** covered by Spread **Scanner**:

- 1) One-leg strategies, like Naked Put Write or Long Call
- 2) The strategies, which include trading of the underlying, like Covered Call Write or Protective Put Purchase
- 3) Ratio spreads and back spreads with different number of contracts in legs
- 4) Multi-leg strategies with number of legs more than two, like Butterfly or Albatross
- 5) Strategies, including options on different underlyings

For strategies like Naked Put Write or Covered Call Write you may use our other service - the **Strategist Scanner**.

## Spread Scanner interface

The **Spread Scanner** allows you to specify the parameters of both strategy legs and define a filter for searching the best candidates for the strategy. The historical and current relevant data, presented in charts and grids, should help you to select the most attractive stocks from the proposed list.

**Note:** The Spread Scanner uses end of day data.

The interface includes [Profile pane](#), [Position Selection](#), [Stock Selection](#), [Position Criteria](#) panes and [Result section](#).

You can either use standard [Template profiles](#) or specify your own parameters of a strategy. All your settings entered in **Selection pane** can be saved in the profile for further using.

## Using the Spread Scanner

This section briefly discusses a common scheme of using the Spread Scanner.

**To search the candidates for a strategy:**

1. Select a Profile in the [Profile pane](#).
2. If necessary, make changes in the [Position Selection](#), [Stock Selection](#) or [Position Criteria](#).
3. Set a number of stocks you want to see in the [Results pane](#). To do this select a value from the **Show Top** drop-down list. Available values are 5, 10, 15, 20, 50, or 100.
4. Click on the **Search** button to see the [Results](#) of searching.

When the stocks are found you can see more details and charts in the [Details](#) sheet.

## Profile pane

This pane allows you to select the Template profile from the list of profiles, create, edit and delete your custom profiles.



**To create a new Profile:**

1. Click on the  **New** button on the profile page. The **Profile** page will be open. The **Profile** page allows to specify which columns you want to see on the [Results](#) pane and [Details](#) sheet, the type of sorting applied to the columns, position parameters, search criteria and default charts.

**Save & Search**

Profile name:  Current Profile:   Load  Documentation

Scanner page settings	Details page settings
<p>Available columns:</p> <ul style="list-style-type: none"><li>Exchange</li><li>Parkinson HV</li><li>High IVX</li><li>High IVX date</li><li>High IVX/HV</li><li>High IVX/HV date</li><li>Low IVX/HV</li><li>Low IVX/HV date</li><li>IVX X Percentile</li><li>IVX Y Percentile</li></ul>	<p>Available columns:</p> <ul style="list-style-type: none"><li></li></ul>
<p>Selected columns:</p> <ul style="list-style-type: none"><li>Symbol</li><li>IVX HiLow indicator (asc)</li><li>IVX/HV</li><li>Stock price</li><li>IVX</li><li>Low IVX</li><li>Low IVX date</li><li>HV</li><li>Spread IV ratio</li><li>Spread IV difference</li></ul>	<p>Selected columns:</p> <ul style="list-style-type: none"><li>Symbol</li><li>Exchange</li><li>Stock price</li><li>IVX</li><li>HV</li><li>IVX/HV</li><li>Parkinson HV</li><li>High IVX</li><li>High IVX date</li><li>Low IVX</li></ul>
<p>Sort: <input type="text" value="None"/> </p>	

**Spread charts \***

<input checked="" type="checkbox"/> IV Index and HV	<input checked="" type="checkbox"/> Buy Contract IV, Sell Contract IV historical	<input checked="" type="checkbox"/> Contract IV time skew	<input checked="" type="checkbox"/> Buy Contract IV / Sell Contract IV historical
<input checked="" type="checkbox"/> Stock Price	<input checked="" type="checkbox"/> IV Index/HV	<input checked="" type="checkbox"/> Contract IV price skew	<input checked="" type="checkbox"/> Buy Contract IV - Sell Contract IV historical

\* - Charts will be displayed only if you subscribed to Spread Charts service.

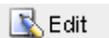
2. Enter a profile name in the **Profile Name** field.
3. Select the fields that you want to see in the **Results** pane. To do this, use the **Scanner page settings** pane on the **Profile** page. Learn more about available columns at [Details](#) sheet description. You can specify the sort order by clicking on the appropriate column in "Selected columns" field, selecting the sort type in "Sort" dropdown selector and then clicking  button.
4. Select the fields that you want to see in the **Stock Summary** pane on the [Details](#) sheet. To do this use the **Details page settings** pane on the **Profile** page. Learn more about available columns at [Details](#) sheet description.
5. Check the charts in the **Spread Charts** pane that you want to see in the [Details](#) pane. Learn more about available columns at [Charts](#) sheet description
6. Set the parameters of the strategy in the [Position Selection](#), [Stock selection](#), [Position Criteria](#) and [Additional Parameters](#) panes.
7. Click on the **Save&Search** button.

If you want to use your custom profile, select a name of profile from the list of custom profiles.  
If you want to use a Template profile, select a name of profile from the list of Template profiles.

**To delete a custom profile:**

1. Select a profile name from the list of custom profiles.
2. Click on the button .

**To edit a custom profile:**

1. Select a profile name from the list of custom profiles.
2. Click on the button .

## Position Selection pane

The **Position Selection** pane allows user to specify the following parameters for each of the two strategy's legs:

- type of the option (call or put)
- direction (buy or sell)
- expiration month
- moneyness value
- price range

Position selection	
<b>Leg 1</b> <input checked="" type="radio"/> Buy <input type="radio"/> Sell	<b>Leg 2</b> <input type="radio"/> Buy <input checked="" type="radio"/> Sell
Type <input type="radio"/> Call <input checked="" type="radio"/> Put	Type <input checked="" type="radio"/> Call <input type="radio"/> Put
Expiration <input type="text" value="Apr04"/>	Expiration <input type="text" value="Dec03"/>
Moneyness <input type="text" value="ATM"/>	<input checked="" type="radio"/> Moneyness <input type="text" value="OTM10%"/> or <input type="radio"/> Position Delta <input type="text"/>
Cost(\$) min: <input type="text"/> max: <input type="text" value="5"/>	Cost(\$) min: <input type="text" value=".5"/> max: <input type="text"/>

**To define each leg parameters:**

1. Activate *Buy* or *Sell* radiobutton to choose the direction of the leg.
2. Activate *Call* or *Put* radiobutton depending on the type of option you want to use.
3. Select the desired expiration month.

4. Specify moneyness.

If you activate the *Position Delta* radiobutton in the Second leg pane, you should specify the moneyness only for the first leg, and the value of the desired Position Delta. The Second leg option then would be found to give the Position Delta value, as close as possible to entered by you. The Moneyness value for the Second leg is ignored in this case. The most common application of this feature is looking for delta-neutral strategies - just activate *Position Delta* radiobutton and enter 0 into *Position Delta* edit field.

5. You can specify the price range for the leg in the *Cost(\$)* field. This is an optional parameter and can be omitted.

## Stock Selection pane

Stock selection pane allows user to specify a stock group in which the best candidates for the strategy would be looked for.

**Stock selection**

Group selection

Relative volatility

IV in 52 wk Range

**Filter by**

Stock price (\$)	min: <input type="text" value="5"/>	max: <input type="text" value="50"/>
Options Volume	min: <input type="text" value="10"/>	max: <input type="text"/>
Options OI	min: <input type="text" value="1000"/>	max: <input type="text"/>
Call/Put Options Volume	min: <input type="text"/>	max: <input type="text" value="2.1"/>

**To define stock parameters:**

1. Select the stocks' universe of your interest. Available stock groups are:

- Top 200 (Option Volume)
- Top 200 (Option Open Interest)
- CAC stocks
- DAX stocks
- DJIA stocks
- MSH stocks
- OEX stocks
- OSX stocks
- SOX stocks
- S&P500 stocks
- NASDAQ 100 stocks

Moreover, you can define you favorite groups, and use them in Spread Scanner.

3. You can specify **Relative volatility** value:

- Any - no filtering by IV Index to HV ratio value (IVX/HV)
- Low - IVX/HV ratio is below 0.85
- Normal - IVX/HV ratio is between 0.85 and 1.15
- High - IVX/HV ratio is above 1.15

This value shows how the implied volatility (on average) is greater than the historical (realized) one. It can serve as an indicator of expected stock variance, high readings mean that the stock is expected to be volatile.

4. **IV in 52 wk Range** parameter has the following values:

- Any - no filtering by IV Index relative position in 52 week range
- Very expensive - IVX 52 wk High/Low range is above 0.8
- Expensive - IVX 52 wk High/Low range is between 0.5 and 0.8
- Cheap - IVX 52 wk High/Low range is between 0.15 and 0.5
- Cheapest - IVX 52 wk High/Low range is below 0.15

This value shows what is the relation of current implied volatility (on average) to the previous maximum and minimum readings, in the last year range. It indicates whether the options are cheap or dear. The reading of 0 corresponds to local minimum of implied volatility for the last year (cheapest options), and 1 - to the local maximum (dearest options).

5. You can also specify additional filter by **Stock price**, to avoid penny or too dear stocks (or to work with such names, on the contrary)
6. The filters by **Option Volume** and **Option OI** allow to select names with options trading liquidly / illiquidly, on average
7. **Call/Put Options Volume** field allows to filter names by their Call/Put volume ratio. This ratio is supposed to be a contrarian indicator of the stock sentiment. High (above 1) readings mean that there are too much calls due to the fact that the stock is overpriced, so it is time to sell the stock (bearish sentiment). The low readings suggest the bullish sentiment, on the contrary.

## Position Criteria pane

Position Criteria pane serves to define additional characteristics of the strategy, namely, strategy cost, difference in implied volatilities between legs, and their ratio. Mind that these values are meaningful for Spread strategies only, basically. It is not common to set such filters for Strangle or Synthetic Futures Strategies (but you can do this, if regard this reasonable). The user can define **Position IV Difference** and/or **Position IV Ratio** ranges and **Position cost \$** range.

The screenshot shows a 'Position Criteria' pane with the following fields and controls:

- Position IV difference** (with a help icon): min: [input] max: [input]
- Position IV ratio** (with a help icon): min: [input] max: [input]
- Logic selection:  And  Or
- Position cost \$**:  Debit  Credit
- Position cost range: min: [input] max: [input]

### To define Position Criteria :

1. Define Position IV Difference range. This figure is calculated as sold Leg IV - bought Leg IV for Spreads, and Leg 1 - IV Leg 2 IV for other strategies.
2. Define Position IV Ratio range. This figure is calculated as sold Leg IV / bought Leg IV for Spreads, and Leg 1 IV / Leg 2 IV for other strategies.
3. You can define the cost of the entire Position. Debit value means initial expenses for the Position building, and Credit value presumes initial positive cashflow.

## Additional Parameters pane

This pane is available only when the user is adding or editing custom profile. The user can define **IV Index and HV Term** and **IV index percentiles**.

The IV Index and HV term (in days) is essential, if you filter stocks by IV Index, HV, or both. Choose it according with your time horizon, or from other appropriate considerations. By default, the value of 30 days is used, being the most liquid term. Mind, that 30 days for IV Index mean 30 calendar days, while for HV it is 30 trading days.

The percentiles are not used in filtering in any way, but allow you to sort the results by IV Index value corresponding to high (X) or low (Y) percentiles.

#### Additional parameters

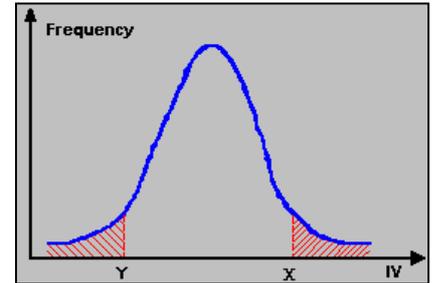
IV Index X percentile

IV Index Y percentile

IV Index and HV term:

#### To define additional parameters:

1. If X percentile is defined as, say, 95% then IVX X Percentile for a stock shows such a value of IV Index that 95% of all IV Index values for this stock observed during last year are below it and correspondingly 5% of IV Index values are greater than this value. To define a percentile use values from the drop-down list. The default is 95%.
2. If Y percentile is defined as, say, 5% then IVX X Percentile for a stock shows such a value of IV Index that 5% of all IV Index values for this stock observed during last year are below it and correspondingly 95% of IV Index values are greater than this value. To define a percentile use values from the drop-down list. The default is 95%.
3. IV Index and HV Term. This value specifies the terms used in relative characteristics of stock parameters, namely "IV in 52 wk range" and "Relative Volatility".



## Results section

When scanning is finished, the **Spread Scanner** shows a list of stocks that satisfy your requirements and you can choose the attractive stocks for the strategy, browsing the detailed data provided by the service.

The columns displayed in the Results pane depend on the profile you use. Available columns are the same as available criteria introduced in the Criteria Area, along with primary exchange and stock price for each symbol.

#### To manage columns shown in the Results pane:

Click on

The profile sheet will be opened. For more information about profiles, see [Profile pane](#).

#### To see the details for a symbol:

Click the button  in the **Details** column. The [Details](#) sheet will be opened in a new window.

## Details

The sheet with details on selected stock can be opened by clicking on the proper  button in the [Results pane](#). The **Details** sheet shows the search criteria, the Stock Summary and Position Information panes and stock charts.

To define default charts and columns that will be displayed on the Details sheet use the Profile page. For more information, see [Profile pane](#).

## Stock Summary

The **Stock Summary** pane shows the stock-related information. The columns that will be shown in the Stock Summary screen can be set for each profile individually. The following table introduces a list of available columns:

Criteria	Definition
Equity Ticker	Abbreviation of the stock 's name
Equity Exchange	The name of the primary stock exchange
Stock price	Close price of the stock
IVX	IV index. The term of IV index depends on the term selected in the IV Index and HV term field.
HV	Close-to-close Historical volatility. Term of volatility depends on the term selected in the IV Index and HV term field.
Relative Volatility (IVX/HV)	The ratio of IV Index to the historical volatility
Parkinson's HV	Historical volatility, calculated by Parkinson's method
52 wk High IVX	The highest value of IV Index observed on the market during last year
52 wk High IVX date	The date when the highest value of IV Index was observed on the market
52 wk Low IVX	The lowest value of IV Index observed on the market during last year
52 wk Low IVX date	The date when the lowest value of IV Index was observed on the market
52 wk Relative Volatility High	The highest ratio of the IV index to the historical volatility that was observed during last year
52 wk Relative Volatility High date	The date when the highest ratio of the IV index to the historical volatility that was observed
52 wk Relative Volatility Low	The lowest ratio of the IV index to the historical volatility that was observed during last year
52 wk Relative Volatility Low date	The day when the lowest ratio of the IV index to historical volatility that was observed.
IVX Hi/Low Indicator	The figure shows the current position of implied volatility index in comparison with one year high/low range.
IVX X percentile	Such value of IV Index that X % of observations are below this point (high percentile)
IVX Y percentile	Such value of IV Index that (100-Y) % of observations are above this point (low percentile)
Option Volume	Options' total close volume
Option OI	Options Open interest
Option Volume call/put	Call / put volume ratio
Proximity to requested position Delta	ABS (Requested Position Delta - Position Delta of actual contracts). Shows how close the Position Delta of selected market contracts to the requested value.

## Position Information

The Position Info pane shows some parameters for each leg that characterize a position. A list of available columns is introduced in the following table.

Criteria	Definition
Leg IV	Implied Volatility of a leg
Leg Price	Price of a leg
Position Price	Price for the position, negative means credit
Position IV difference	Difference between implied volatilities of sold and bought legs, or Leg 1 - Leg 2 if both of them bought / sold
ABS of Position IV difference	Absolute value of Position IV difference
Position IV ratio	The ratio of sold / bought implied volatilities or Leg 1 / Leg 2 if both of them bought / sold
Position Effective IV	Effective implied volatility of a Position (IV of the position itself)
Position IV high	Last year maximum difference between implied volatilities of the legs
Position IV high date	The date of the maximum observed difference
Leg IV at Position IV high	IV of a leg at last year Position IV high date
Stock at Position IV high	Stock price at last year Position IV high date
Position IV Low	Last year minimum difference between implied volatilities of the legs
Position IV Low date	The date of the minimum observed difference
Leg IV at Position IV low	IV of a leg at last year Position IV low date.
Stock at Position IV low	Stock price at last year Position IV low date.
Leg Delta	Delta of the leg, in shares
Position Delta	Position delta, in shares
ABS of Position Delta	Absolute value of Position Delta
Leg Gamma	Leg gamma, sensitivity of Leg Delta to the price of the underlying
Position Gamma	Position gamma, sensitivity of Position Delta to the price of the underlying
Leg Theta	Leg theta, sensitivity of Leg price to time till expiry
Position Theta	Position theta, sensitivity of Position price to time till expiry
Leg Vega	Leg vega, sensitivity of Leg price to volatility
Position Vega	Position vega, sensitivity of Position price to volatility
Position Gamma to Theta ratio	The so-called Alpha for the Position, the ratio of potential profit to time decay

## Charts

The **Details** sheet shows detailed data for stock and each of the options, along with historical charts and current strike and time volatility skew (companion subscription to **Spread Charts** service required for charts). The **Parameters** pane placed near the **Spread Charts** pane enables to set the terms used for IV Index (IVX term), historical volatility (HV term) and moving average (MA term) and the historical period, for which the charts would be drawn.

Additionally, you can change the options for each of the legs right here (mind that this would affect only Charts, not the Position Information pane).

Available charts are:

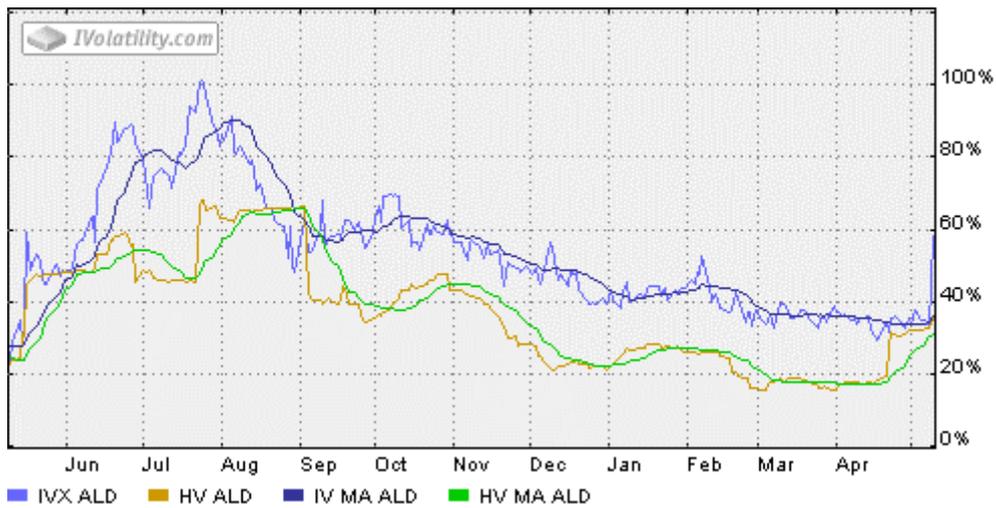
### 1) Stock Price chart

The Stock Price chart shows price of the underlying selected for a strategy.



### 2) IV Index and HV

The IV Index and HV chart shows IV Index, Historical volatility and also moving average of IV Index and Historical Volatility.



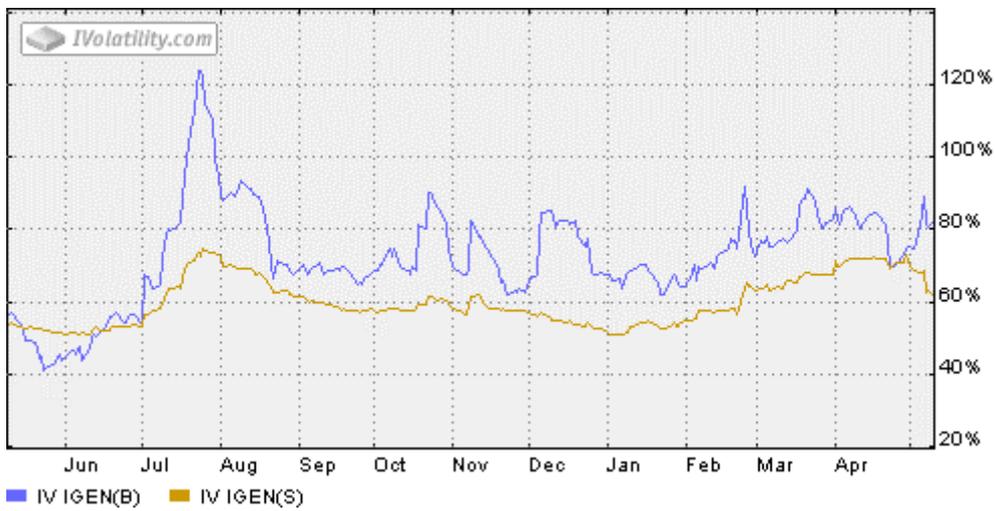
### 3) IV Index/HV

The IV Index/HV chart shows the ratio of the IV Index to the Historical Volatility.



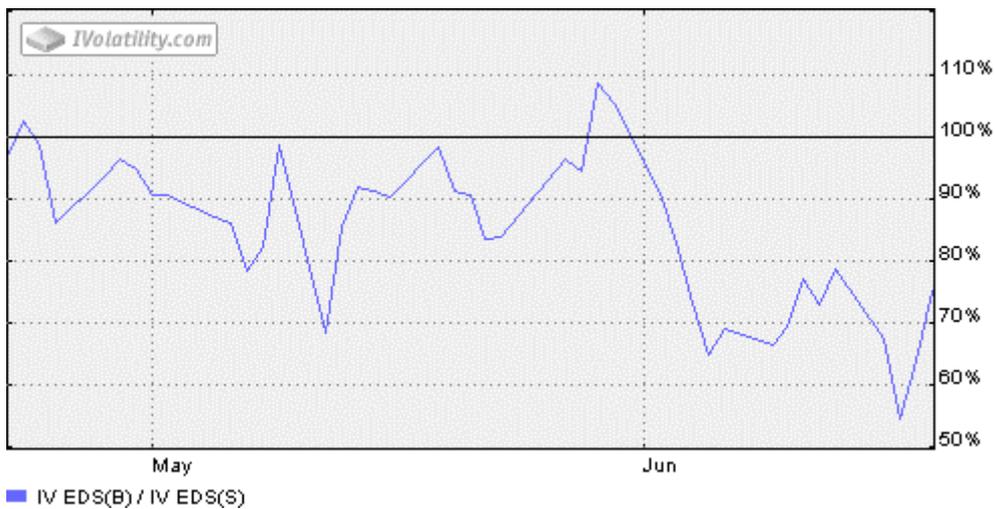
#### 4) IV contract buy, IV contract sell historical

This chart shows IV Indexes for both legs



#### 5) IV Index buy/IV Index sell historical

This chart shows the ratio of IV of bought leg to IV of sold leg - or 1st leg to 2nd if they both bought or sold.



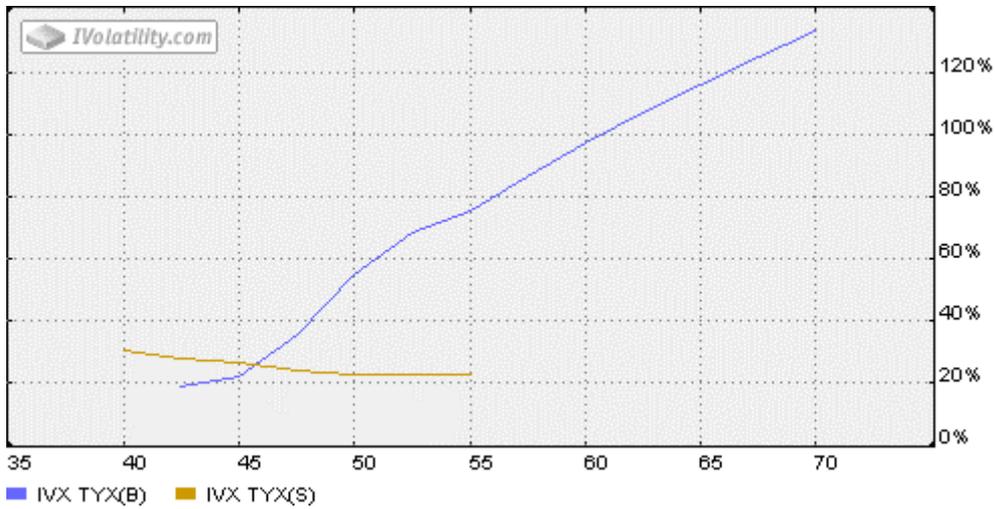
#### 6) Buy Contract IV - Sell Contract IV historical

This chart shows the difference of IV of bought leg - IV index of sold leg - or Leg 1 - Leg 2.



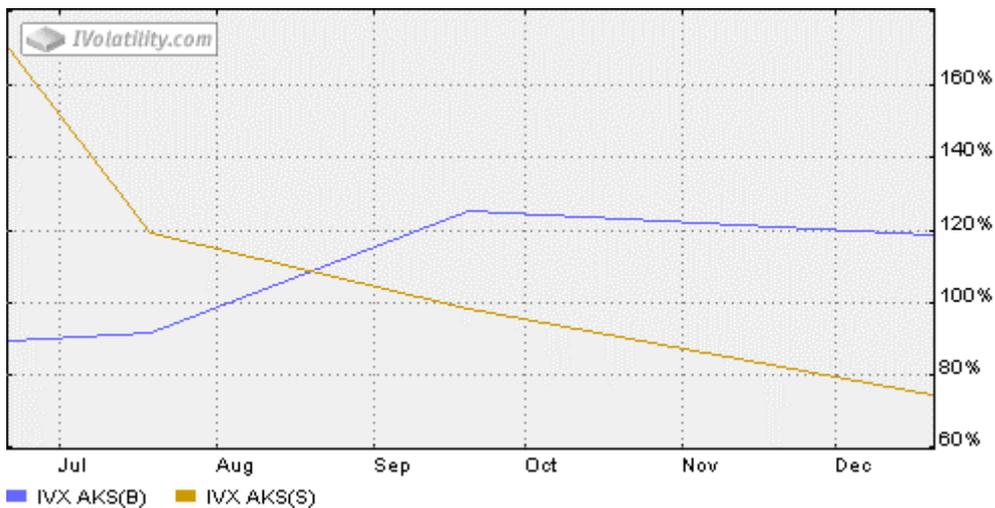
### 7) Contract IV price skew.

This chart shows the implied volatilities of the contracts that have same expiry as the legs.



### 8) Contract IV time skew.

This chart shows the implied volatilities of the contracts that have same strikes as the legs.



The default charts that are shown on the **Details** sheet are set on the profile page. But you can select the charts you want to see and their parameters directly on the **Details** sheet.

## Simulation

You can enter into the simulation area by clicking “Strategy time performance simulation” link on [Details](#) page. This area provides you a possibility to simulate the performance of the selected strategy under various levels of underlying price and time past.

Position information							Today:11/13/2003	
Buy/Sell	Equity symbol	Equity price	Option symbol	Option theo. price	(C) all/ (P) ut	Strike Price	Expiration	Position
B	AMGN:NASDAQ	\$60.28	YA.APL	\$4.1847	P	\$60.00	Apr04	Credit
S	AMGN:NASDAQ	\$60.28	YA.ALM	\$0.5711	C	\$65.00	Dec03	\$3.6136

Leg1 Volatility	<input type="text" value="28.43%"/>
Leg2 Volatility	<input type="text" value="26.53%"/>
Time step (days)	<input type="text" value="10"/>
Underlying price change step (\$)	<input type="text" value="1"/>
<input type="button" value="Go!"/>	

Theo P&L				
Underlying price	Days from now			
	today	10	20	30
-\$3.00	\$1.9034	\$1.8632	\$1.7915	\$1.6759
-\$2.00	\$1.2733	\$1.2624	\$1.2214	\$1.1251
-\$1.00	\$0.6421	\$0.6666	\$0.6683	\$0.6112
\$0.00	\$0.0000	\$0.0636	\$0.1179	\$0.1252
\$1.00	-\$0.6625	-\$0.5591	-\$0.4471	-\$0.3509
\$2.00	-\$1.3530	-\$1.2132	-\$1.0451	-\$0.8455
\$3.00	-\$2.0738	-\$1.9072	-\$1.6944	-\$1.3973

You can see on this pane the basic strategy characteristics (stock symbol, stock price, options, expiry, strike and option price for both legs along with position debit/credit).

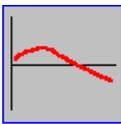
You can change the parameters of the legs’ volatilities, time horizon and swings of underlying price. For example, if you set “time step” =15 days, “underlying price change step” = 2 the result set matrix will have columns of “today”, “15d”, “30d”, “45d” and rows of “-\$6”, “-\$4”, “-\$2”, “\$0”, “\$2”, “\$4”, “\$6”. The cells of the table contain the theoretical profit or loss value for given underlying price and time moment. For example, the cell that is in intersection of column “20” and row “\$1.00” show the profit(loss) for strategy after 20 days provided the price of underlying rise by \$1.00. You can also change the characteristics of implied volatilities for both legs. By default they are fixed on current level.

## Template profiles

The collection of Template profiles allows one to search the best candidates for some most popular option strategies. Template profiles are the suggestions of some variants of criteria that can be used for construction of the strategy. Naturally, these criteria do not provide a 100% profit result, but they may supply reasonable results under definite user's market expectations. The Template profiles include some very basic filters, which may help you to build your own profiles, aiming at higher efficiency.

The thumbnail icon near each Template profile description indicates the profit-loss profile of the strategy at expiry (at the nearest expiry for the strategies with two different expiries)

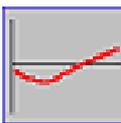
### Long Calendar Spread



This strategy consists in buying the option of a long term expiry (typically about 6 months) and selling the option with the same type and strike with shorter expiry (about a month). It might be profitable if you expect that the market would be quiet in the near term, and volatile in the long one - so that bought option would appreciate in value, and sold - depreciate on the contrary. The short leg could be rolled in time, which makes this strategy quite attractive.

The template profile uses ATM calls for both the legs with expiries of about 1 and 7 months. The additional filters introduced are cheap IV Index position in 52 week range (so that bought option is quite cheap) and low Relative volatility (so that the market in near term is not expected to be very volatile).

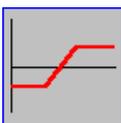
### Short Calendar Spread



This strategy is the reverse of the previous one, [Long Calendar Spread](#). Here, you sell the long expiry, expecting that the market would be quiet, and hedge your risk by buying the short expiry. The volatile market in near term might yield you additional gain on the Buy side, but be cautious, since near expiry options would depreciate fast in the quiet market.

The template profile uses ATM calls again, and settings for IV Index position in 52 week range and Relative volatility are reverse to that of Long Calendar Spread.

### Vertical Bull Spread

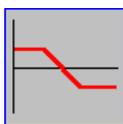


This is a moderately bullish strategy, consisting of buying option, and selling option of the same type and expiry, but with higher strike. It caps the maximum profit, but provides a bit more downside protection, compared with buying of the naked Call (or writing naked Put). The position gains from the moderate rise in the underlying price. One thing to beware is that the short leg might be exercised against you, leaving you with naked bullish position.

The template profile advises to sell ATM call, and buy ITM 20 % one (that is, 20 % in the money Call, with strike about 80 % of the current underlying price). IV Index position in 52 week range is set to Expensive, so that sold leg

would be quite expensive (and the price of the sold leg should not be much affected by this setting, being in the money option)

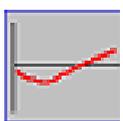
## Vertical Bear Spread



This is a moderately bearish strategy, and is reverse to [Vertical Bull Spread](#) - the higher strike is bought, the lower one - sold. Again, both maximum profit and loss are limited, but the position gains from moderate drop in the underlying price this time.

The template profile advises to buy ATM put, and sell OTM 20 % one (that is, 20 % out of the money Put with strike about 80 % of the current underlying price). IV Index position in 52 week range is set to Cheap, assuring that the bought leg is not that dear.

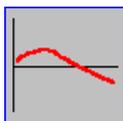
## Diagonal Bull Spread



This strategy is similar to [Short Calendar Spread](#), but has an additional bullish bias, as the sold leg is of higher strike, than the bought one.

Everything said about Short Calendar Spread applies here too, Template profile takes ITM 10% call for bought leg, other parameters being equal.

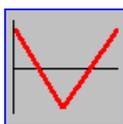
## Diagonal Bear Spread



This strategy is similar to [Long Calendar Spread](#), but has an additional bearish bias, as the sold leg is of lower strike, than the bought one.

Everything said about Long Calendar Spread applies here too, Template profile takes ITM 10% call for sold leg, other parameters being equal.

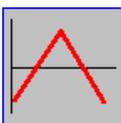
## Long Straddle



This strategy consists of buying both call and put of the same expiry and strike. It is entirely volatility-based strategy, since both rise and drop of the underlying price yield profit. The worst situation for this strategy is when the market is quiet and underlying price is equal or close to options' strike. The strategy is quite expensive, so should be used when you have strong indication of volatile market in the future.

Template profile uses ATM options, with IV Index position in 52 week range set to Cheap, and Relative volatility to High, assuring that the position is not that dear and the large stock movement is expected.

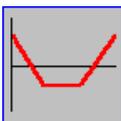
## Short Straddle



The reverse of [Long Straddle](#) - call and put are sold. A very risky strategy, since your risk is unlimited from both sides - large move in the underlying in either direction would lead to substantial loss.

Template profile uses ATM options again, with IV Index position set to Expensive in order to give high profit potential to trade off with high risk. Relative volatility is set to Low level, so that the stock price is expected to be quiet.

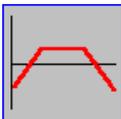
## Long Strangle



This is a generalization of [Long Straddle](#) - here call and put have different strikes. You would need larger market move to gain profit, but the strategy is comparatively cheaper if out of the money options are used.

Template profile uses OTM 15% Call and requires delta-neutrality of the position (that is, call plus put delta equals zero). Other parameters are equal to that of Long Straddle.

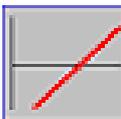
## Short Strangle



The reverse of [Long Strangle](#) strategy, you sell both put and call of different strikes here. This strategy is comparatively less risky than [Short Straddle](#), but the potential gain is less too.

Nearest month is used in the template profile, and options with about 15 % out of the money strikes.

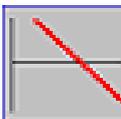
## Long Synthetic



This strategy allows to manufacture the long forward underlying position, using solely options. You buy call and sell put here, with the same expiry, and, commonly strike. If strike is the same, the profit/loss profile is exactly the same as for the futures - potentially unlimited profit on the upside, unlimited loss on the downside.

Template profile uses ATM options and Normal Relative volatility.

## Short Synthetic



This strategy allows to manufacture the short forward underlying position, using solely options. You sell call and buy put here, with the same expiry, and, commonly strike. If strike is the same, the profit/loss profile is exactly the same as for the short forward sale - potentially unlimited profit on the downside, unlimited loss on the upside.

Template profile uses ATM options and Normal Relative volatility.