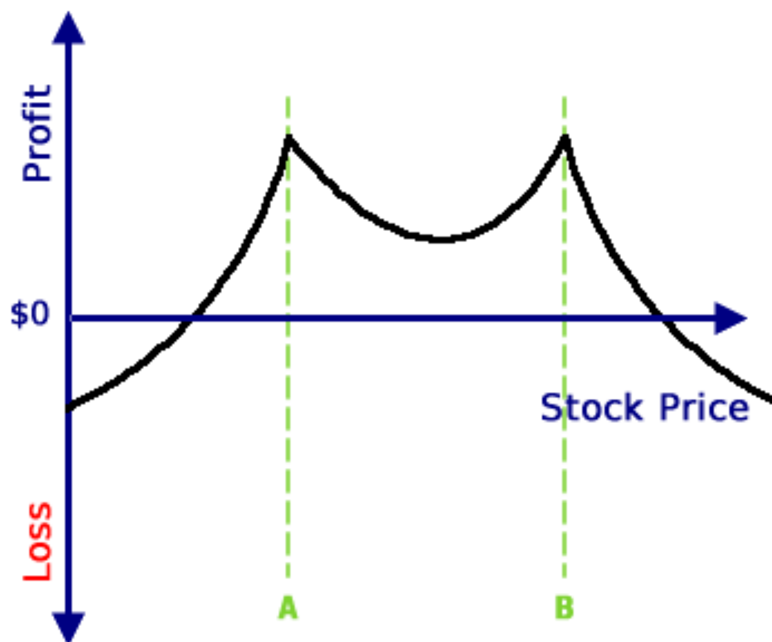
Double Diagonal

Definition

The *Double Diagonal* spread uses both calls and puts to create two diagonals. Use front month options for the short strikes, and back month options for the long strikes. The *Double Diagonal* is generally a Vega Positive trade, meaning it will benefit from increasing volatility during the course of the trade. However, it can be modified to be Vega Neutral or even Vega Negative depending on your volatility prediction.

For efficient use of margin, the **strike width** (the difference between the strike prices of the shorts and longs) and the number of contracts should be the same on both the call and put side of the trade.

Risk Graph



Suggested Candidates

- Generally choose Indices/ETFs and stocks over $40 in price, and ensure the distance between strikes will allow you to adjust (i.e. roll the short away from the money) and still receive reasonable premium.

Trade Entry

- Put the trade on 30-45 days prior to expiration (40 is a guideline)
- Evaluate the Double Diagonal starting by positioning the short strikes 5 points out of the money and adjust outward until you get 58% PP or better on the expiration graph
- Buy the long calls and puts (ideally one month out) so that the analysis graph does not sag too much in the middle
- Using the lowest point on the sag in the expiration graph, determine the **Potential Profit**
- Divide the **Potential Profit** by the risk (margin requirement for the trade) and ensure at least a 10% yield (15% to 20% is often possible).

Volatile Market Considerations

- A volatile market is defined as a VIX that is in the top 1/3 of the range of the last 6 months.
- Usually it is best to use a wider strike width in a high IV environment and a narrower spread in a low IV environment.

VIPES Guidelines

Volatility - Find candidates with IV in the lower 1/3 to 1/2 of the range over the last 6 months, channeling at least 45 days

Industry - no biotech or "wacko" industries

Price - Look for too much speed/movement in the underlying defined as moving 1 SD or more in the last week, month or 3 months.

- You can also evaluate speed by movement of the price:
  - Last week more than a 5% move in 1 direction
  - Last month more than a 10% move in 1 direction
  - Last 3 months more than a 15% move in 1 direction
  - Last 9 months more than a 25-30% move in 1 direction

Earnings - Do not put on the trade if the short option is in an earnings month

Skew

- Negative Skew > 2 points in an equity , investigate

- **No News** - Check the company website and other news services (Yahoo Finance,Street.com, etc.) for words like merger, takeover, split in the stock, etc. which are VERY bad for Calendars
- Select the best VIPES profile NOT the best yield

Adjustment Points

- 1st 7 days:
  - If the underlying reaches the short strike during the first 7 days, consider taking the trade off and repositioning it
- After 7 days:
  - No later than halfway between the short strike and the break-even for all vehicles except $1 strike vehicles. For $1 strike vehicles use .50 cents beyond the short strike. If you have placed your long strikes out far enough to create a vega-neutral double diagonal (or even vega–negative) then you will want to adjust earlier, near or just past the short strike.

Adjustments

- Roll the ½ the contracts of the short strike on the threatened side further away from the money. Usually this will be one strike only, unless you are in a $1 strike vehicle, then you might roll away 2 or 3 strikes from the money.
  - Consider rolling the opposite side diagonal (all contracts) closer the money if the expiration graph sags too much after the adjustment. Generally choose a strike that is about the same distance from the current underlying price that you were at the onset of the trade.
- Use caution when rolling less than 12 days remaining to expiration.

Trade Exit

- **Target Profit:** Exit the trade when the position profit reaches 60% to 70% of the **Potential Profit**

For example, if you can make a maximum of $500 at expiration in the middle of the graph, then use $500 x 70% = $350 as your initial profit target. This may need to be adjusted during the trade as the expiration graph changes to 70% of the current graph.

- **Maximum Loss:** Exit the trade if your loss exceeds 90% to 100% of the **Potential Profit**
- **Expiration:** Exit the trade by Monday of expiration week in any case.

Advanced/Other

Using Strike Width to Control VEGA

- **Considerations in a higher volatility market:** Although the double diagonal is naturally a vega positive trade, you can change the vega of the trade by widening the strike width by positioning the long calls and puts further out of the money. Widening the strike width affects the trade in several ways:
  - The wider the strike width, the more vega neutral (or negative) the Double Diagonal becomes
    - Placing the longs further out of the money will reduce the vega, and if you put them far enough out, it will result in a vega negative Double Diagonal.
  - Widening the strike width will reduce the sag in the middle of the expiration graph
  - Widening the strike width will cause the margin used by the trade to be larger
  - Widening the strike width will reduce the debit required to place the trade, and if the longs are placed far enough OTM, the trade can be placed for a credit
  - The wider the strike width, the less protection the longs give you, causing the curve of the T+0 graph to be steeper (i.e. you lose money faster as the price approaches the expiration break-even). In this case, you should consider adjusting earlier (closer to the short strike).