



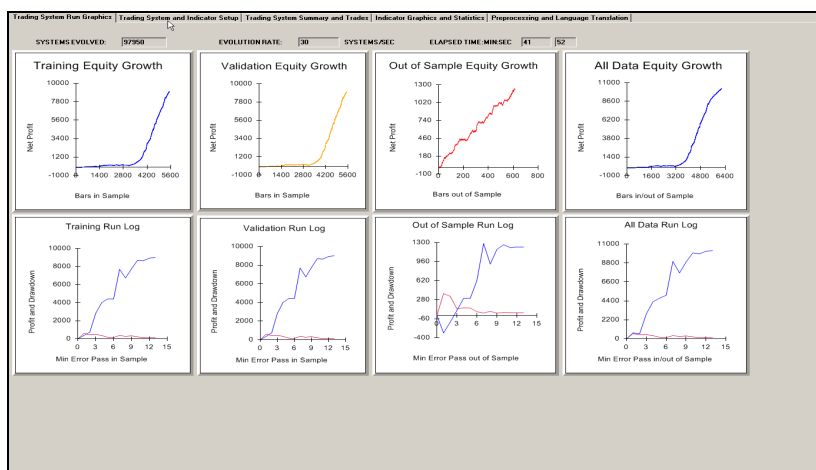
Phone: 1-408-356-1800

Web: [www.TradingSystemLab.com](http://www.TradingSystemLab.com)

## TSL TRADING SYSTEM DESCRIPTION S&P CASH INDEX TSL\_SPX\_1.1

The TSL\_SPX\_1.1 Trading System is an active overnight Trading System that trades the S&P 500 Cash Index. This trading system was designed and created by TSL's computer algorithm, directed by human input. The only human supplied elements were the data inputs and the general type of trading system entry signals employed, in this case, a short-term breakout type system. This system is available only for the TradeStation platform, however the trading signal market orders may be manually entered verses automatically.

This system trades long and short and will hold trades overnight. Orders are entered and exited in a stop. This system trades on daily bars. A protective stop is employed but rarely hit. The following figure shows the evolutionary path this trading system took during its machine creation. All results do not include any slippage and commission. The prominence of the out of sample performance evident at the minimum error pass cycles is indicative that the evolutionary algorithm proceeded down a robust path. The forward walk is approximately 2.5 years in length and the trade to input ratio is approximately 620:1. Trade to parameter ratios in excess of 200:1 with commensurate in sample and out of sample performance is generally indicative that a curve fit trading system is unlikely to have evolved during the machine learning process.



**TSL\_SPX\_1.1\_LongOnly. Typical Evolutionary Path**  
Note: Full report available at: [www.TradingSystemLab.com](http://www.TradingSystemLab.com)

**SPX CASH INDEX TSL\_SPX\_1.1  
SYSTEM SPECIFICS**

<b>Entry Type System:</b>	<b>Short Term Breakout</b>
<b>Trade to Parameter Ratio:</b>	<b>Over 620:1</b>
<b>Protective Stops:</b>	<b>Adaptive Volatility</b>
<b>Development Data Size:</b>	<b>Approximately 25 years</b>
<b>Bar Interval:</b>	<b>Daily</b>
<b>Hold Duration:</b>	<b>Overnight</b>
<b>TSL Data Set used:</b>	<b>Proprietary</b>
<b>TSL Fitness Function:</b>	<b>Proprietary</b>
<b>Out of Sample Period:</b>	<b>10% typical</b>
<b>Walk Forward Duration:</b>	<b>Approximately 2.5 years</b>
<b>Machine Created on:</b>	<b>7/2006</b>
<b>Example Orders:</b>	

**Entry orders show up in print log**  
**Exits show up in Trade Manager**  
**Example Entries: Go Long tomorrow at open plus 1.0 Stop**

Display: <input type="button" value="Table View"/>			
<b>TradeStation Performance Summary</b>			<input type="button" value="Expand"/>
<b>All Trades</b>			
Total Net Profit	\$10,258.95	Profit Factor	2.29
Gross Profit	\$18,190.26	Gross Loss	(\$7,931.31)
Total Number of Trades	3735	Percent Profitable	58.42%
Winning Trades	2182	Losing Trades	1546
Even Trades	7		
Avg. Trade Net Profit	\$2.75	Ratio Avg. Win:Avg. Loss	1.62
Avg. Winning Trade	\$8.34	Avg. Losing Trade	(\$5.13)
Largest Winning Trade	\$99.23	Largest Losing Trade	(\$48.72)
Max. Consecutive Winning Trades	18	Max. Consecutive Losing Trades	9
Avg. Bars in Winning Trades	2.65	Avg. Bars in Losing Trades	2.69
Avg. Bars in Total Trades	2.67		
Max. Shares/Contracts Held	1	Account Size Required	\$120.98
Return on Initial Capital	10.26%	Annual Rate of Return	0.39%
Return Retracement Ratio	0.05	RINA Index	1900.22
Trading Period	24 Yrs, 9 Mths, 6 Dys	Percent of Time in the Market	99.66%
Max. Equity Run-up	\$10,355.67		
<b>Max. Drawdown (Intra-day Peak to Valley)</b>		<b>Max. Drawdown (Trade Close to Trade Close)</b>	
Value	(\$135.71)	Value	(\$120.98)
Net Profit as % of Drawdown	7559.47%	Net Profit as % of Drawdown	8479.87%
Max. Trade Drawdown	(\$52.10)		

**TSL\_SPX\_1.1. Trading System Summary**  
**Results are shown in S&P points (SPX Index points)**

**HYPOTHETICAL PERFORMANCE RESULTS HAVE MANY INHERENT LIMITATIONS, SOME OF WHICH ARE DESCRIBED BELOW. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN. IN FACT, THERE ARE FREQUENTLY SHARP DIFFERENCES BETWEEN HYPOTHETICAL PERFORMANCE RESULTS AND THE ACTUAL RESULTS ACHIEVED BY ANY PARTICULAR TRADING PROGRAM.**

**ONE OF THE LIMITATIONS OF HYPOTHETICAL PERFORMANCE RESULTS IS THAT THEY ARE GENERALLY PREPARED WITH THE BENEFIT OF HINDSIGHT. IN ADDITION, HYPOTHETICAL TRADING DOES NOT INVOLVE FINANCIAL RISK, AND NO HYPOTHETICAL TRADING RECORD CAN COMPLETELY ACCOUNT FOR THE IMPACT OF FINANCIAL RISK IN ACTUAL TRADING. FOR EXAMPLE, THE ABILITY TO WITHSTAND LOSSES OR TO ADHERE TO A PARTICULAR TRADING PROGRAM IN SPITE OF TRADING LOSSES ARE MATERIAL POINTS WHICH CAN ALSO ADVERSELY AFFECT ACTUAL TRADING RESULTS. THERE ARE NUMEROUS OTHER FACTORS RELATED TO THE MARKETS IN GENERAL OR TO THE IMPLEMENTATION OF ANY SPECIFIC TRADING PROGRAM WHICH CANNOT BE FULLY ACCOUNTED FOR IN THE PREPARATION OF HYPOTHETICAL PERFORMANCE RESULTS AND ALL OF WHICH CAN ADVERSELY AFFECT ACTUAL TRADING RESULTS.**