

# How to Trade S&P 500 Using Mean Reversion - RSI Indicator -

## **INTRODUCTION:**

Let me introduce you to a very reliable way to trade the S&P 500. It's very simple, consisting of just 2 rules. Trades have historically been around 85% accurate. Losing trades occurring just 15% of the time.

The strategy is purely mechanical and quantifiable. With just 2 rules to enter trades it makes placing trades extremely simple.

I take no credit for the original idea of this strategy. All credit goes to Larry Connors and Cesar Alvarez. However I have personally done much testing and trading with their strategy. I have put together this report from my own research and testing results in the hope that you can get value from it too.

As a disclaimer I am not suggesting you go out and trade the exact strategy I am about to show you. It is a very good demonstration of how to use ideas to build your own trading strategy upon. The ideas are absolutely solid however I have not mentioned a stop loss which I believe to be a vital component to any trading strategy.

The results you see are from testing 10 units of the S&P 500 CFD provided by Oanda. However you can expect similar performance from other instruments like the e mini future. The period tested is over 13 years from 1/1/2005 through to 31/12/2017.

I have used Multicharts. It's the trading software of my choice and I have coded the rules to the strategy to provide the back test results.

## **STRATEGY RULES:**

We will be looking at Daily charts for this strategy. Use RSI (Relative Strength Index) but change the period from default 14 to a much shorter 2 period.

Add a 200 day moving average onto the price chart. Simple or Exponential doesn't make too much difference. Also add a 10 period moving average (this one is used for exits)

This is a Long Only strategy. We are only looking for Buy signals.

## **ENTRY RULES:**

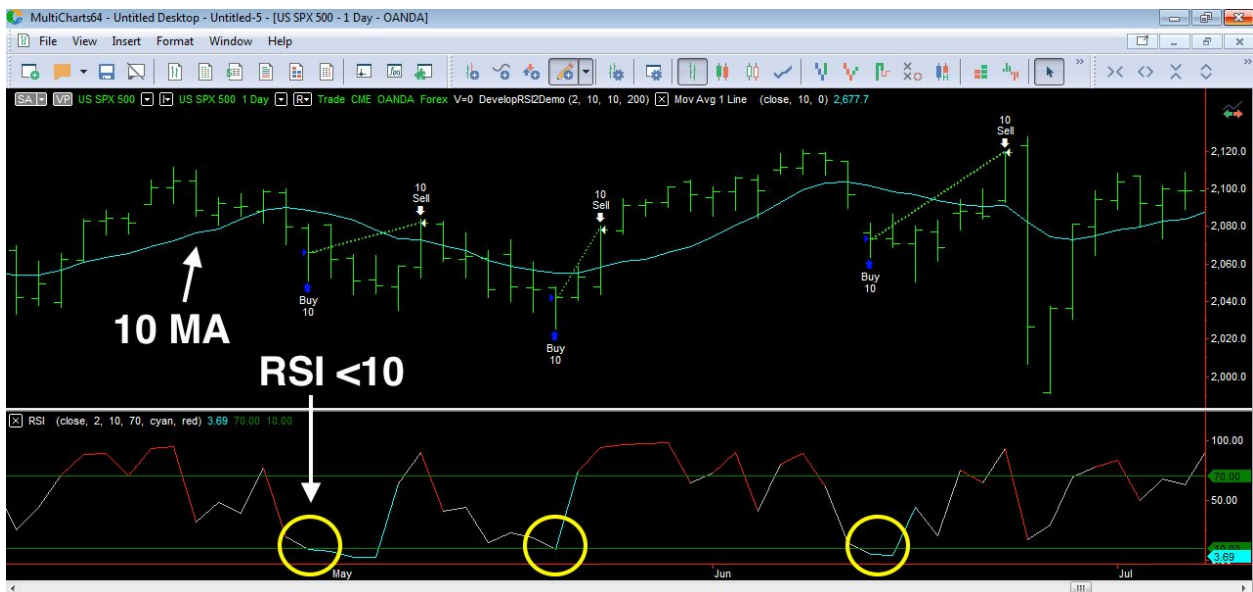
1. The S&P 500 Closes above its 200 day Moving Average (shows an uptrend)
2. The 2 Period RSI of the S&P 500 closes below 10 (short term pullback)
3. Buy the S&P 500 on the close

## **EXIT RULES:**

1. Sell Long position when the S&P 500 closes above its 10 day Moving Average

It's that simple. Very easy to see on the charts too.

Below you can see a screenshot showing the price chart with RSI2 indicator below. The cyan line is the 10 period MA. The yellow circles show Entry signals when RSI closed under 10. The blue arrows show the entry to the trade and the white "sell" arrow show the exit when price close above 10 period Moving Average.



## **PERFORMANCE:**

Let's look at some numbers to give you an idea of the signals this strategy generates so you can decide whether it's something you can use in your trading portfolio.

Over the 13 years tested from 2005 - 2017:

PERCENTAGE WINNERS	85.53 %
AVERAGE NUMBER TRADES PER YEAR	6
AVERAGE TRADE HOLDING TIME	5 DAYS

You already know that part of the entry criteria is that the market price is above its 200 day moving average. This is to make sure we are buying only in a longer term uptrend or bull market.

So the AVERAGE TRADES PER YEAR figure isn't quite what it seems. In 2008 when the market was in a bear market and trading below its 200 MA there were 0 trades taken. However in 2012 there were 11 trades taken, well above its average.

## EQUITY CURVE:



The equity curve needs no real explanation. It shows the account value as each trade is taken. And it's a pretty good looking curve too! The green dots on many of the trades show when a new account equity high is made - the more the better!

## **TOTAL TRADE ANALYSIS:**

<b>Total Trade Analysis</b>			
	<b>All Trades</b>	<b>Long Trades</b>	<b>Short Trades</b>
Total # of Trades	76	76	0
Total # of Open Trades	1	1	0
Number Winning Trades	65	65	0
Number Losing Trades	11	11	0
Percent Profitable	85.53%	85.53%	0%
Avg Trade (win loss)	\$153.24	\$153.24	n/a
Average Winning Trade	\$225.57	\$225.57	n/a
Average Losing Trade	(\$274.18)	(\$274.18)	n/a
Ratio Avg Win / Avg Loss	(0.82)	(0.82)	n/a
Largest Winning Trade	\$685.00	\$685.00	n/a
Largest Losing Trade	(\$1,309.00)	(\$1,309.00)	n/a
Avg # Bars in Trades	5.6	5.6	n/a
Avg # Bars in Winning Trades	4.6	4.6	n/a
Avg # Bars in Losing Trades	11.6	11.6	n/a
Avg # Bars Between Trades	n/a	n/a	n/a
Avg # Bars Between Winning Trades	37.1	37.1	n/a
Avg # Bars Between Losing Trades	234.5	234.5	n/a

Above shows the Total Trade Analysis from the report in Multicharts. The Average Trade value shows that over all the trades taken, on average each trade made \$153.24 which equates to 15.3 points of the S&P 500 CFD tested.

The # Bars is actually # Days because this strategy was tested on a Daily chart.

## ANNUAL PERIOD ANALYSIS:

Annual Period Analysis						
Period	Profit		Gross Profit	Gross Loss	# Trades	% Profitable
	\$	%				
2017	\$1,933.00	1.76%	\$1,933.00	\$0.00	9	88.89%
2016	\$1,724.00	1.6%	\$1,827.00	(\$103.00)	9	88.89%
2015	\$914.00	0.85%	\$1,174.00	(\$260.00)	8	87.5%
2014	\$1,143.00	1.08%	\$1,143.00	\$0.00	5	100%
2013	\$1,644.00	1.58%	\$1,654.00	(\$10.00)	6	83.33%
2012	\$1,265.00	1.23%	\$1,595.00	(\$330.00)	11	81.82%
2011	\$26.00	0.03%	\$1,371.00	(\$1,345.00)	8	62.5%
2010	\$242.00	0.24%	\$663.00	(\$421.00)	4	50%
2009	\$919.00	0.9%	\$919.00	\$0.00	4	100%
2008	\$0.00	0%	\$0.00	\$0.00	0	0%
2007	\$609.00	0.6%	\$1,155.00	(\$546.00)	6	66.67%
2006	\$1,227.00	1.23%	\$1,331.00	(\$104.00)	9	88.89%
2005	\$0.00	0%	\$0.00	\$0.00	1	0%

The above analysis is quite self explanatory. It shows the trades from each of the 13 years. Pleasingly, there were no losing years.

## **MODIFICATIONS TO THE RULES:**

The rules to the strategy are not rigid. That being said, I encourage only taking long trades when the price is above the 200 MA.

I have done a considerable amount of testing and altering to the rules. But there are always trade offs. You can adjust the entry criteria by having using a different RSI level.

## **EXAMPLES:**

- Only take trades when RSI closes below 5. You would get a fewer trades but they would be more profitable trades.
- Adjust the exit. Try using a 5 period moving average rather than a 10. You will be exiting trades faster.
- You can also use different exits. Using RSI2 for the exit works very well too. Rather than using a moving average, use a level of RSI2. Exit when RSI closes above 70. This is a level which can also be adjusted. Try levels between 60 and 95.

I encourage you to try for yourself. Back test different variations and see which works best for you.

## **CONCLUSION:**

I have shown you a simple strategy with a few simple rules. Some of the best trading strategies are surprisingly quite simple.

Thanks goes to Larry and Cesar for their research and development into applying RSI to the chart of the S&P 500 and offering an effective method to trade it.

But remember, there are no stop losses used in my (or Larry's) testing. When doing your own testing and trading make sure you have proper money management rules in place.

## **FURTHER READING:**

For more articles and videos please visit my website at [www.thetransparenttrader.com](http://www.thetransparenttrader.com)