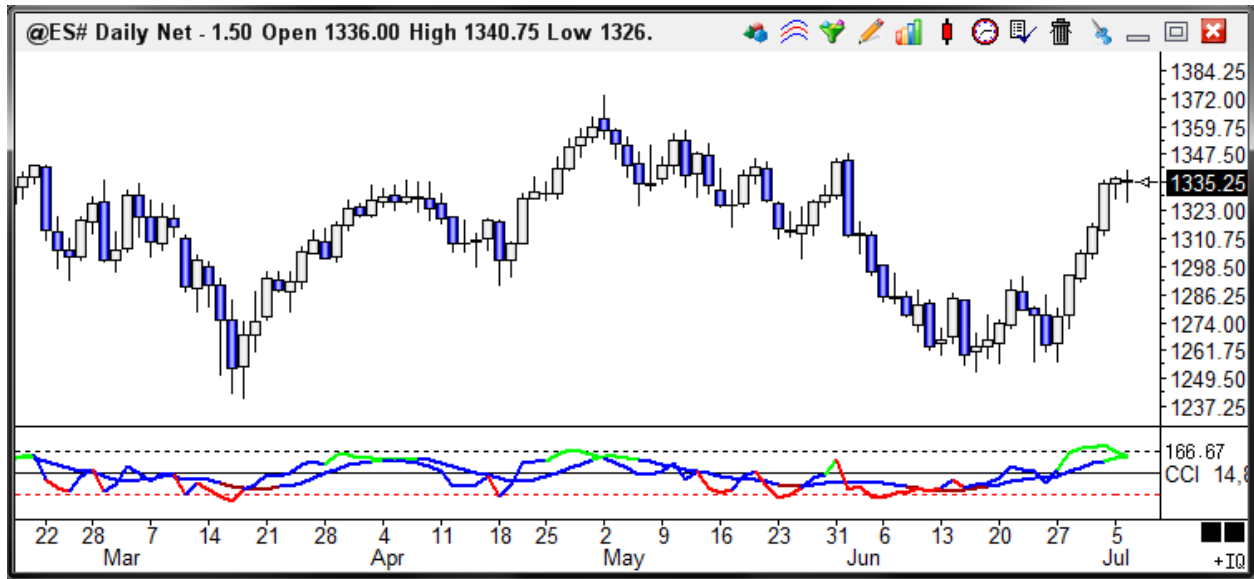# Commodity Channel Index

The Commodity Channel Index (CCI) is a timing study that measures the variation of a symbol's price from its statistical mean. It is most useful for charts that follow a cyclical pattern.


High CCI values indicate that current price levels are higher than normal. Low CCI values indicate that current price levels are lower than normal. Watch for the CCI line and its moving average line to cross. Also watch for divergence between the Price and the CCI. A divergence is usually followed by a correction in the market price.

Properties

Regular Divergence - Place a check mark in the 'Regular Diverge' box to show Divergence Lines on the chart. Regular Divergence occurs at a high point when the Price is moving higher and the CCI is moving lower. Divergence occurs at low points when the Price is moving lower and the CCI is moving higher. The Divergence lines will plot from study peaks. Corresponding Divergence lines will be plotted on the chart bars. The 'Rising…Falling' colors for the CCI line will be used for the Divergence lines. Use the 'Threshold' parameter to filter the number of divergences that occur. If the CCI line is not greater than the 'Threshold' value, then a Divergence will not be triggered.

Hidden Divergence - Place a check mark in the 'Hidden Diverge' box to show Hidden Divergence Lines. Hidden Divergence is the opposite of Regular Divergence. Hidden Divergence occurs at a high point when the Price is moving lower and the CCI is moving higher. Hidden Divergence occurs at low points when the Price is moving higher and the CCI is moving lower. The 'Rising…Falling' colors for the CCI Average line will be used for the Hidden Divergence lines.
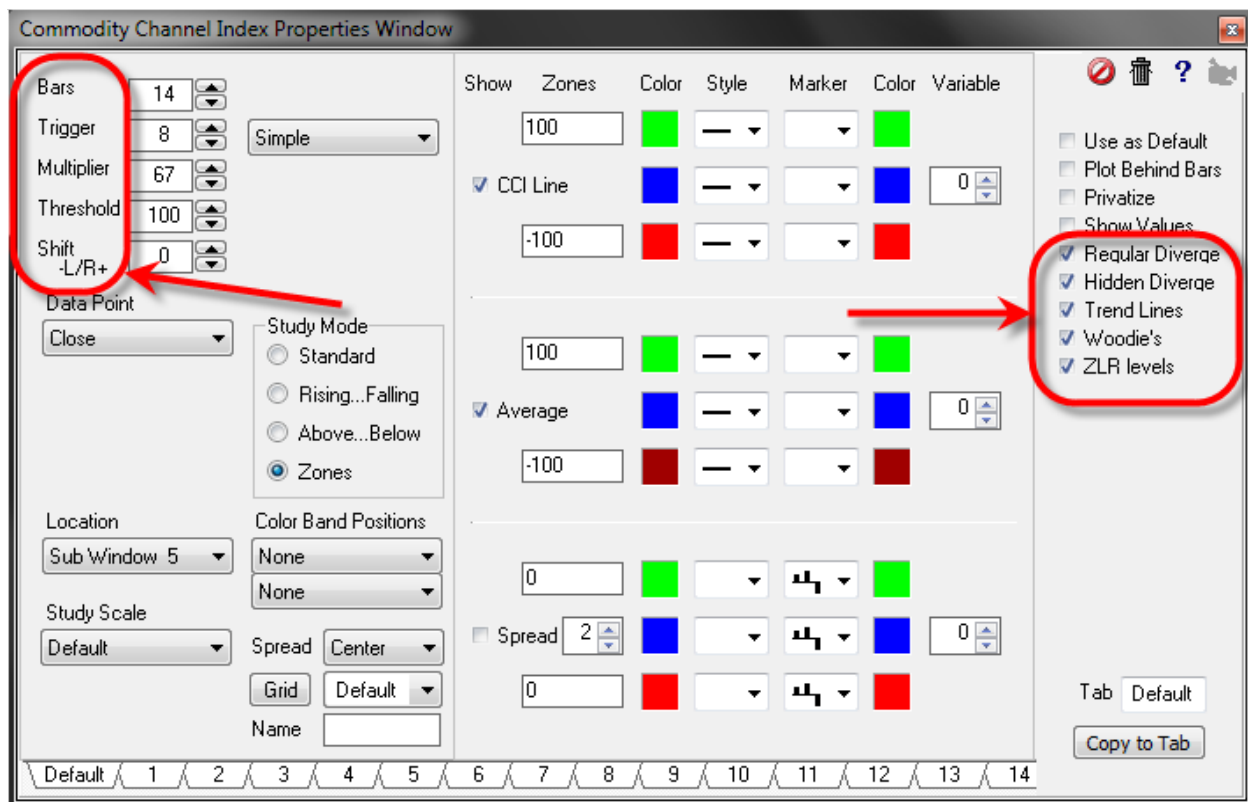
Trend Lines - Place a check mark in the 'Trend Lines' box to display Trend Lines on the CCI study. Trend lines will be automatically plotted from key High and Low swings on the CCI. The 'Rising…Falling' colors for the CCI Spread will be used for the Trend Line colors.

Woodies - Place a check mark in the 'Woodies' box to display the CCI study in a manner similar to that promoted in the Woodies CCI chat group. The colors and style of the study will be drawn differently. The study calculations will still be the same. The 'Average' parameter will change to the 'Trigger' parameter. This parameter is the number of bars used for the Woodie trend coloring. If the 'Trigger' parameter were set to 6, then with fewer than 6 bars the histogram would plot using the Spread Above color. At bar 5, the histogram would plot using the Spread Below color. In an Uptrend at >=6 bars, the histogram would use the Spread Above Marker color, and in a Downtrend, the color will be the Spread Below Marker color.

Bars - Number of periods used in the simple moving average calculation of the CCI.

Average - Specifies the number of periods for the moving average line of the CCI.

Multiplier - Increase or Decrease the CCI multiplier. This will adjust the vertical height of the CCI lines. This value is often set to 150. Lower the multiplier to decrease the height and amplitude of the CCI lines, so that you can view CCI spikes that plot outside the study window.

Threshold - This value is used to filter the Regular and Hidden Divergences. If the CCI line is not greater than this value, then a Divergence will not be shown. A value from 150 to 200 is often used.

Formula

Simple Moving Average = Sum of the last N Prices / N

Mean Deviation = Sum of last (Data Point Price -Average) / N

CCI = 150 x (Data Point Price -Simple Moving Average) / Mean Deviation

Credits

Developed by Donald Lambert