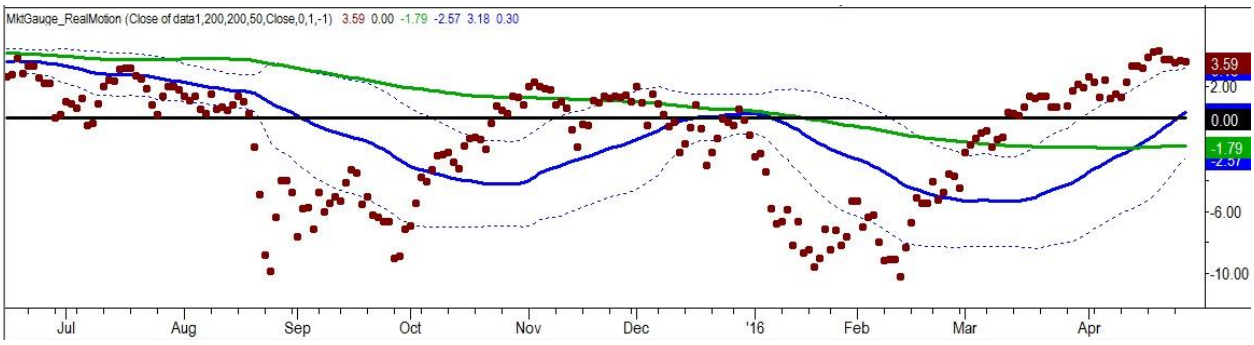
MARKETGAUGE

Description and Calculation of MarketGauge RealMotion Indicators

This document will outline the overall features and generic calculations required to recreate the results on any trading platform with the ability to create custom indicators.

The Indicator:



The indicator can be applied to price data series for any timeframe (Minutes/hours/days/weeks/months). It should be plotted in its own separate draw space (typically below the price data series). All moving averages are simple moving averages.

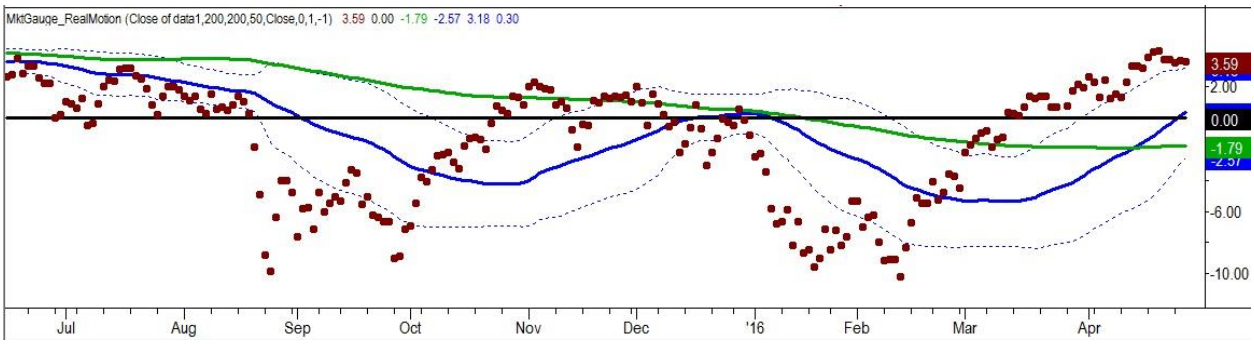
Inputs:

Primary_Average = set to default of 200
RealMotionAverageSlow = set to default of 200
RealMotionAverageFast = set to default of 50
NumDevsUp = set to default of 1 (upper Bollinger band)
NumDevsDn = set to default of -1 (lower Bollinger Band)

Variables:

RealMotion, SlowRealMotion , FastRealMotion, PrimaryAveragePlot, fSDev, fLowerBand, fUpperBand

Calculation and Plot Display:



The **black zero line** is simply a permanent fixed line at zero value.

The **brown dots** are created from the "RealMotion" variable. They are calculated through two steps:

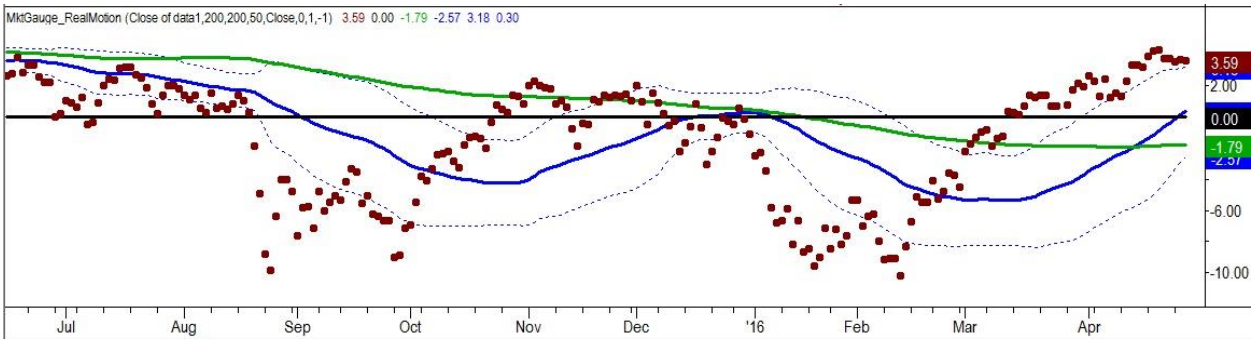
PrimaryAveragePlot = Average (of price data series, with length "Primary_Average")
The default is: PrimaryAveragePlot = Average (200 days of closing prices)

RealMotion = ((price data series / PrimaryAveragePlot) – 1) * 100)
The default is:
RealMotion = ((closing price / 200-day moving average) – 1) * 100)

The **brown dots** are a dot plot of the individual values of the RealMotion variable. Essentially, they divide the equity price by the moving average of that price (here 200 period). We then subtract one and multiply that value by 100. This centers the indicator at zero (when price = moving average then RealMotion will equal zero). Furthermore, by multiplying by 100 we make it so that when RealMotion = 5.0 we can say that the price is 5% greater than the reference moving average.

The **green line** is created by the SlowRealMotion variable. Here is how it is calculated:
SlowRealMotion = Average of (RealMotion , with a length of RealMotionAverageSlow)

The default is:
SlowRealMotion = Average of (RealMotion over 200 periods)



The **blue line** is created by the FastRealMotion variable. Here is how it is calculated:

FastRealMotion = Average of (RealMotion , with a length of RealMotionAverageFast)

The default is:
FastRealMotion = Average of (RealMotion over 50 periods)

Finally, we create **Bollinger bands** around the blue line. Here is typically how a Bollinger band is created:

fSDev = the Standard Deviation of (RealMotion as the data source, RealMotionAverageFast as the length of data to use).

The default is:
fSDev = the Standard Deviation of (RealMotion, 50).

To create upper band for the fast blue line use:

fUpperBand = (FastRealMotion + NumDevsUp * fSDEV)

To create upper band for the fast blue line use:

fLowerBand = (FastRealMotion + NumDevsDn * fSDEV)

Depending on your trading platform, the steps required to recreate and plot these calculations will vary.

The final display workspace could look similar to this:

We have a price data series in the upper section show three moving averages:
Green = 200 day/period **Blue =50 day/period** **Magenta = 10 day/period**

In addition we plotted **Bollinger Bands** around the price data (in **red**) using standard 20 length and 2 standard deviations above and below.

In the lower window we plotted the MarketGauge RealMotion indicator with the default settings described in this document.

If you have additional questions, please contact us via email, chat or phone.

http://www.marketgauge.com/
Phone: 888-241-3060
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If you have Tradestation or a supported platform, you can download the installation files and instructions on our website. We have provided this same Tradestation code because you may find the full example code helpful.

Sample Tradestation Easy Language Code:

```
Inputs:
DataSeries1( Close of data1 ),  Primary_Average( 200 ),
RealMotionAverageSlow(200), RealMotionAverageFast(50),
Price( Close), Flatline(0), NumDevsUp( 1 ), NumDevsDn( -1 );

Variables:
Line(0), SlowRealMotion(0), FastRealMotion(0), PrimaryAveragePlot(0), fSDev(0),
fLowerBand(0), fUpperBand(0), RealMotion(0);

{Calculate RealMotion}
Line = flatline;
PrimaryAveragePlot = AverageFC ( price, Primary_Average ) ;
RealMotion = (((DataSeries1 / (PrimaryAveragePlot)) -1)*100);

{Calculate Displayed Averages}
SlowRealMotion = AverageFC ( RealMotion, RealMotionAverageSlow ) ;
FastRealMotion = AverageFC ( RealMotion, RealMotionAverageFast ) ;

{Calculate Bollinger Bands on Real Motion Fast MA}
fSDev = StandardDev ( RealMotion, RealMotionAverageFast, 1 ) ;
fUpperBand = FastRealMotion + NumDevsUp * fSDev ;
fLowerBand = FastRealMotion + NumDevsDn * fSDev ;

{Plots}
Plot1 ( RealMotion, "Real Motion" ) ;
Plot2 (line, "Zero");
Plot3 (SlowRealMotion, "RM Slow");
Plot4( FastRealMotion, "RM Fast");
Plot5 (fLowerBand, "FastLower");
Plot6 (fUpperBand, "FastUpper");
```