

Currency Divergence Indicators with ATR Bands

Based on the system by billbss

Indicator coded by Mark Bass

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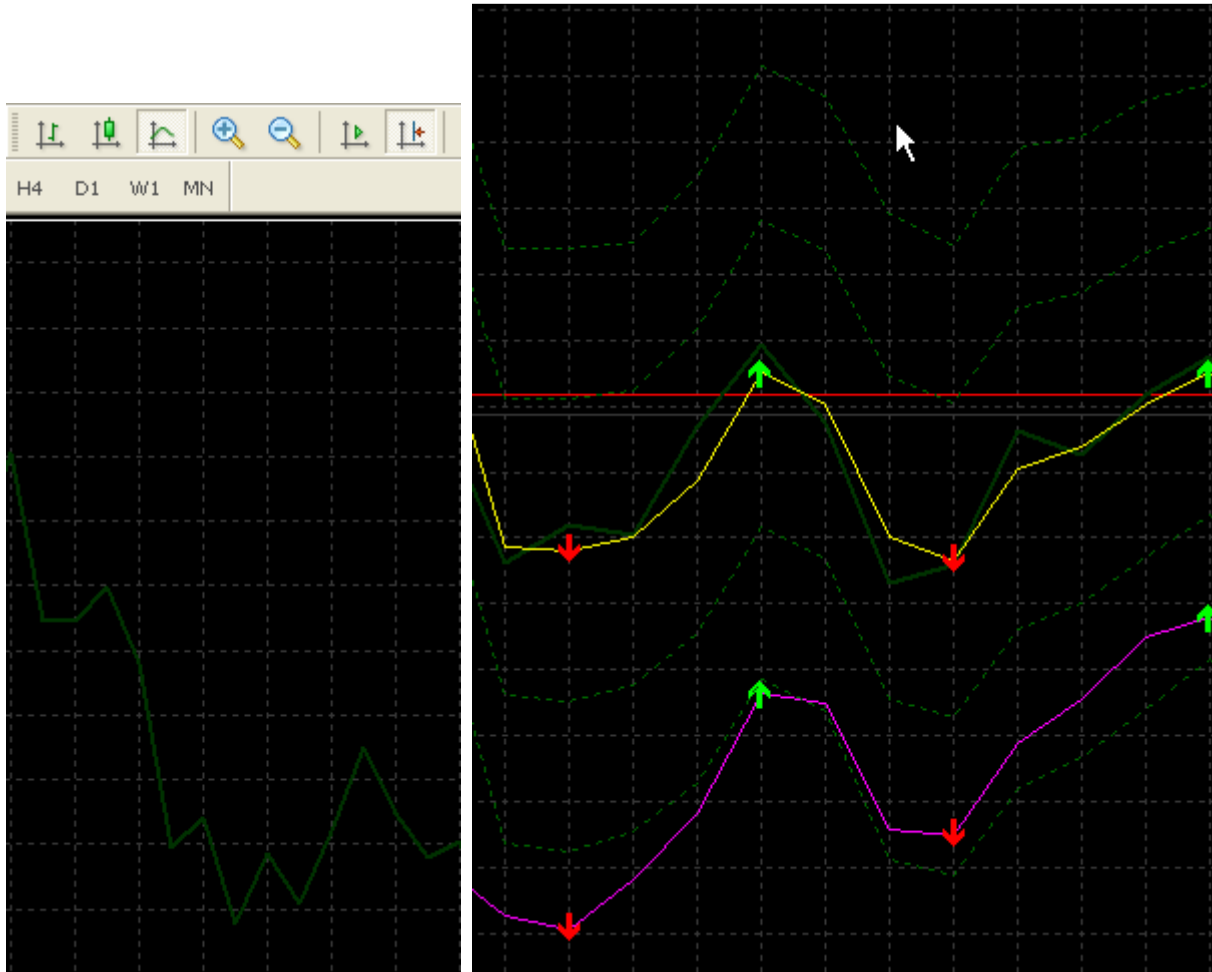
Introduction

The purpose of this indicator is to follow billbss's system exactly as he has described it as of April 17, 2009. The indicator is used in 3 stages:

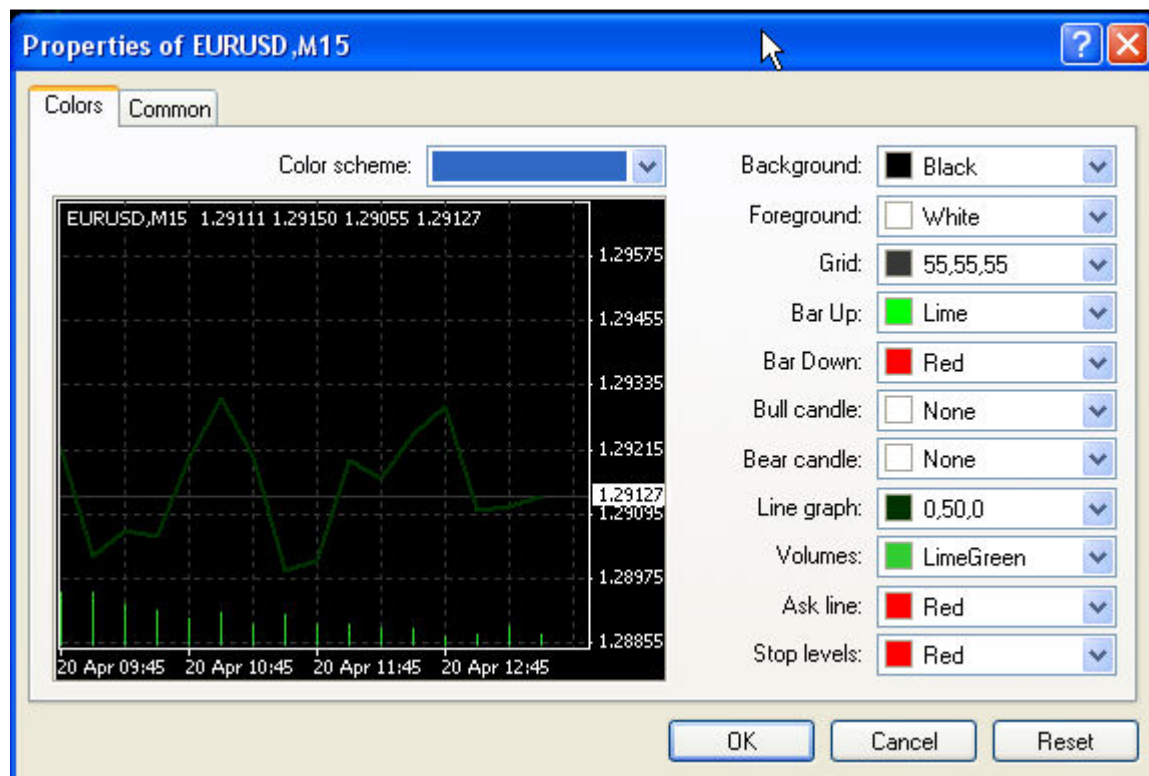
1. Monitor two currencies on one screen looking for divergence in price action
 - 1.1. Price action is monitored with a Simple Moving Average based on Typical price (hi + lo + close) / 3 and a time period of only 1 bar
 - 1.2. Divergence is defined as each pair reaching two clearly defined, simultaneous highs, but one reaching a higher high and the other reaching a lower high. The same is true upside-down for lows.
 - 1.3. It is my understanding that the simultaneous nature of the highs/lows is just as important as the relative heights/lows of each one.
2. Decide when to enter a trade and which pair to enter
 - 2.1. After the second highs/lows are reached and the pairs are moving the same direction we're to enter the pair that did not reach the higher high or lower low. In other words, the weaker pair. In other other words, the pair that just met demonstrated support/resistance.
3. Decide where to set the appropriate stop loss and take profit targets
 - 3.1. Right now I believe this is at ATR 1, but there has been discussion of ATR 2 and 3, so there are two adjustable ATR lines above and 2 below the price action.

Step 1: Activate the Template

Load the template CorrelationV01. It is designed to be used in two view modes. The first mode is as a line graph with the price and grid very dark so they don't become distractions. It will probably look like this the first screen when first activated, and we'll get it to look like the second screen:



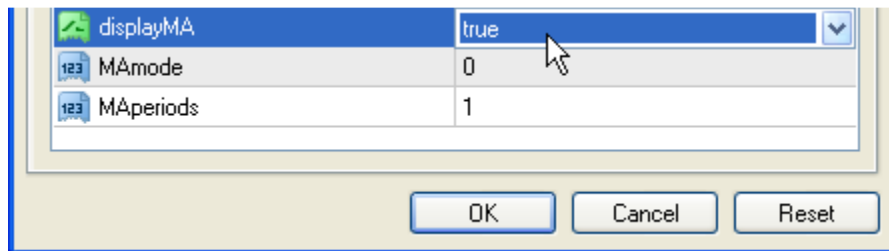
Here are the settings I used to darken both the grid and the price. You'll also see I set the candles to be hollow (None) so when we switch to candle view they're also toned down:



Step 2: Get the 1 SMA showing on the current pair, if you wish

Both indicators are designed to show the 1 SMA Typical on the current pair. You can turn one off, or both off and set your own separately yourself.

We'll start with MultipleCurrenciesV03. Open the indicator settings and set them as follows:

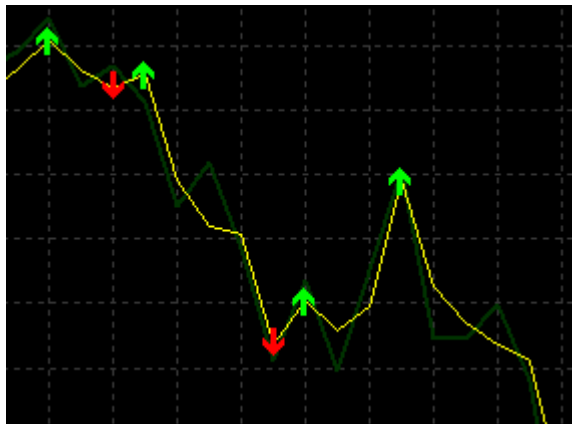


DisplayMA = true if you want to see it, false if you don't

MAmode is the mode code MT4 uses. 0 = SMA, 1 = EMA, 2 = SMMA, 3 = LWMA. We want 0.

MAperiods is the number of bars = 1 for our use.

Now you'll see two lines. Dark line is price, yellow line is the 1 SMA we're watching:



I'll explain the arrows in a minute.

Step 3: Move the other currency pair into view

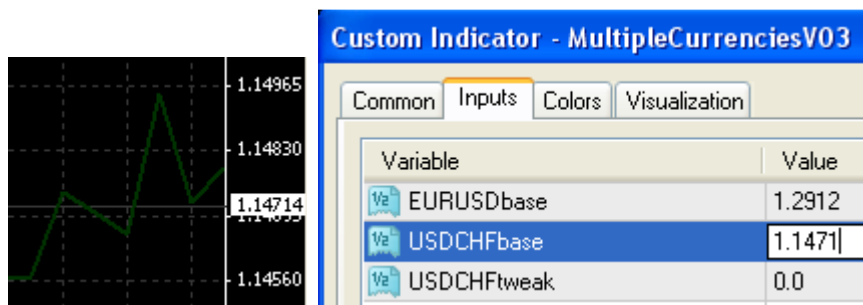
I haven't coded it to automatically move the other pair in place, but I didn't want to delay release any longer. Here's how you do it:

Look at your EURUSD chart and get the general price level lately. In this chart it's 1.2912 or so. Open MultipleCurrenciesV03 again and put that number in the indicator properties EURUSD base.



Please don't blog about how painful that is, because I already know! Lol

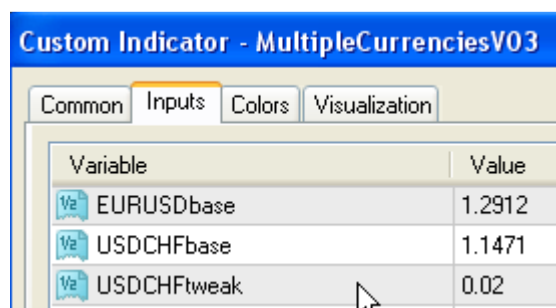
Next, pop open a USDCHF chart, get its general price level lately, and do the same update for USDCHFbase. I'll use 1.1471 from this chart:



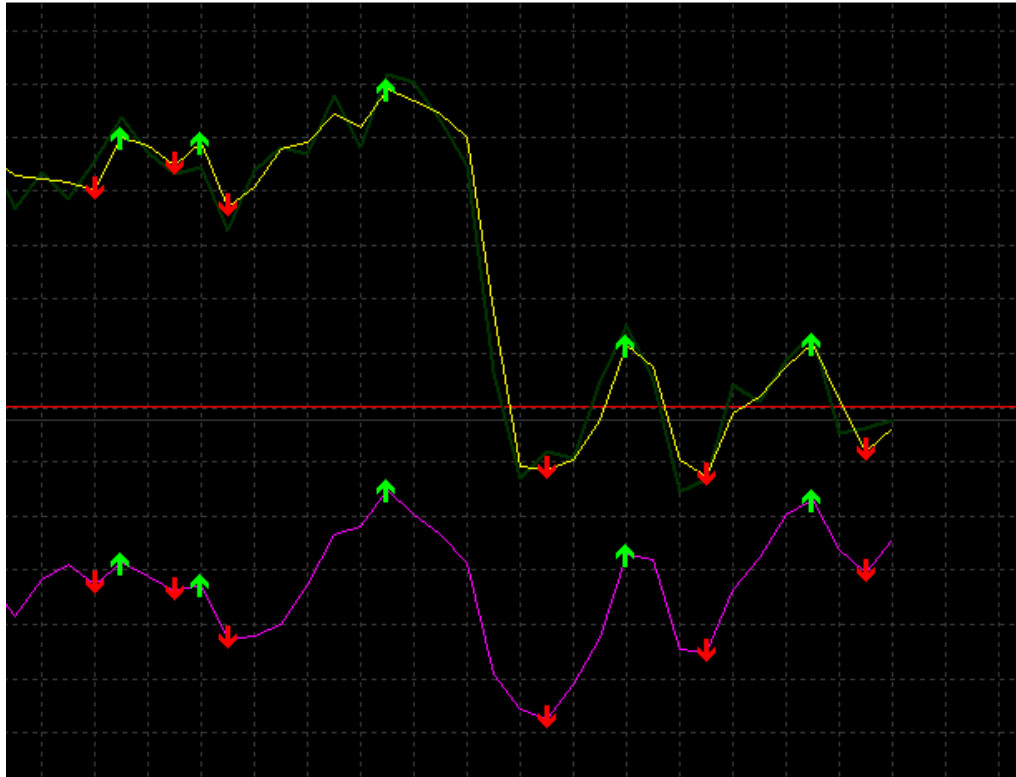
After I close the dialog box the pair will move into view:



It's still not ideal so I use the tweak variable USDCHFtweak. I can see that the price levels are roughly .0200 apart, and USDCHF needs to go up on the screen, so I use positive 0.0200:



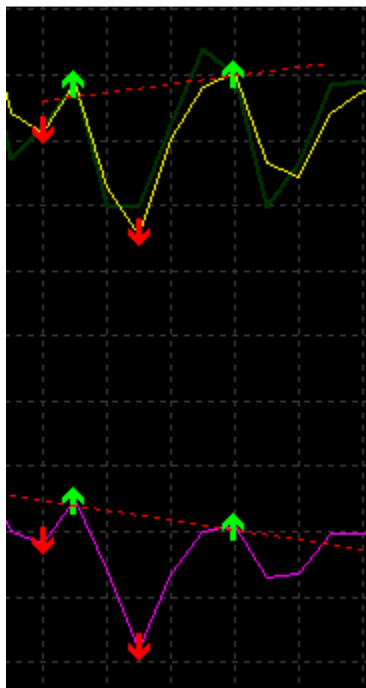
And now the prices are close enough to work with. I've found that these numbers can be left as-is for 2-3 weeks worth of backtesting, depending on monitor size. I'll improve this as soon as I can guys!



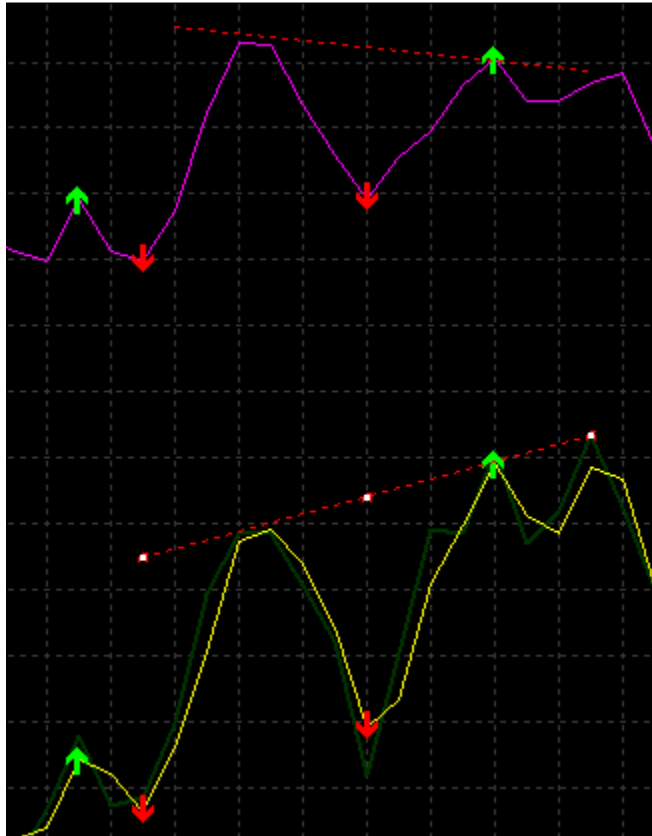
Step 4: Understand the “baby fractal” arrows

We’re watching for peaks and valleys in the 1 SMA’s of both pairs, not in the prices themselves. And, we’re watching, for now at least, peaks and valleys that happen at exactly the same time. Here’s what the arrows are doing:

1. Watch for a high or low in each SMA. A high is any point where the SMA to the left and right is lower than the middle one. The same goes for lows, but upside-down. In that way it’s like a baby fractal, since fractals are based on 5 bars instead of 3.
2. Watch for new highs and lows that happen in both pairs at the same time.
3. Only mark the currencies when the highs/lows happen at the same time in both pairs.
4. All this also means that the indicator will be expected to repaint. Let me restate that: it is expected to repaint! In other words, since you don’t know for sure if it’s a new high or low until the bar is closed, but you need a warning before the bar closes, the most recent arrow might appear/disappear over and over during the current bar until the bar finally closes and the results are known. The arrow will then become permanent.
5. The purpose of the arrows is to help spot divergence, but traders then have to use judgment and look at the chart to verify things. Here is an example of a textbook setup that the arrows reveal:

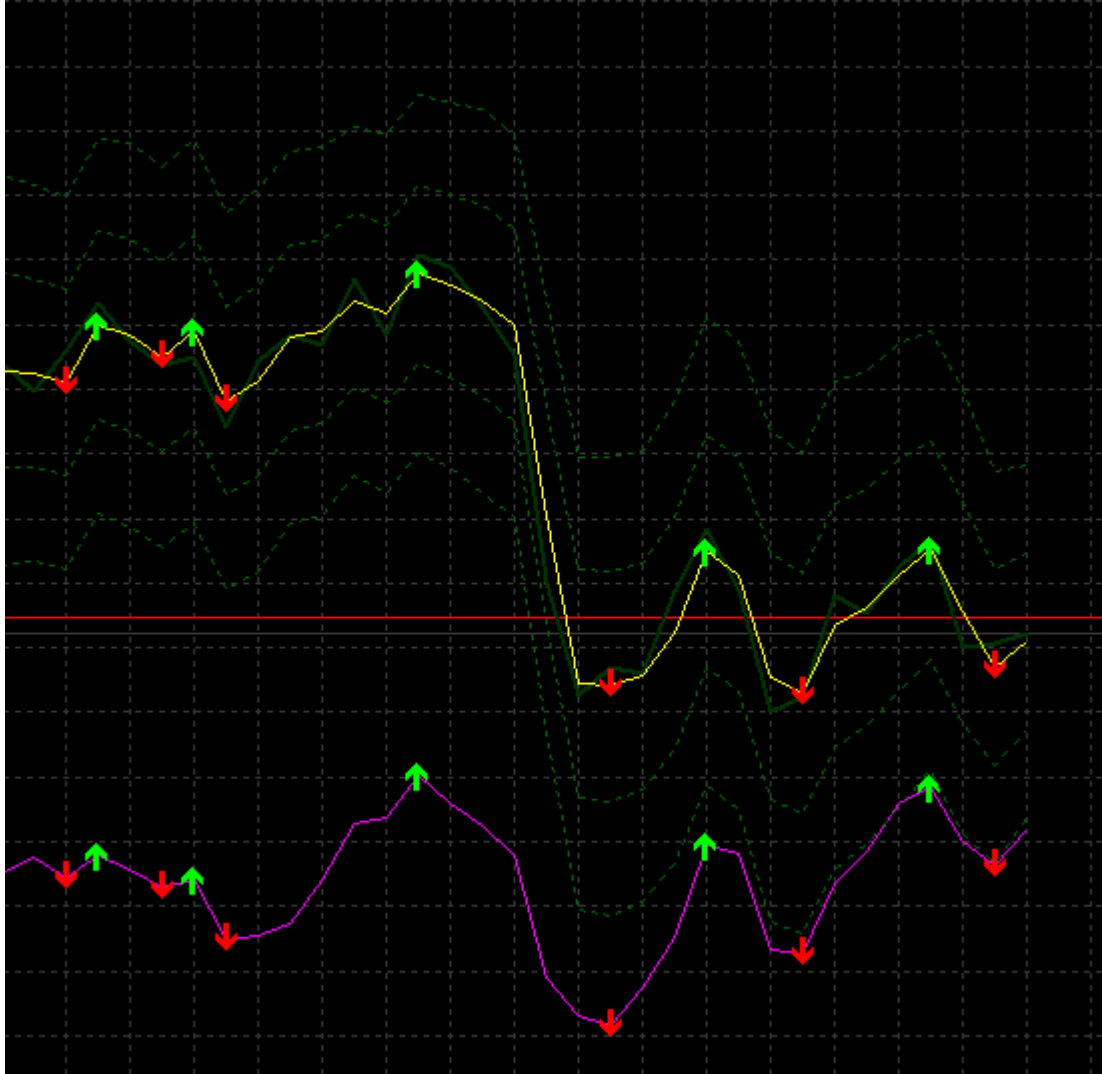


But, please note, other things will not be revealed properly. Here's an example of an almost-textbook trade that the indicator doesn't highlight:



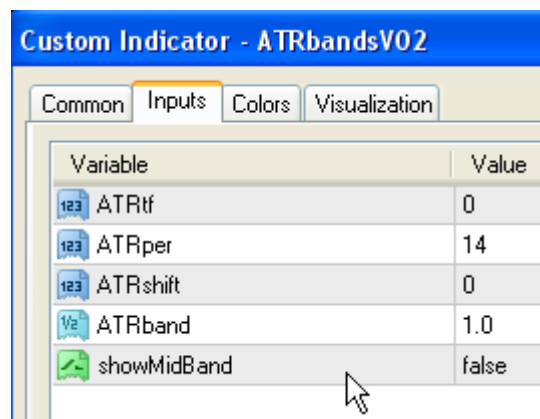
Step 5: Add the ATR bands

I designed the ATR indicator to draw 2 bands above and two below the price action. Here's what it looks like:

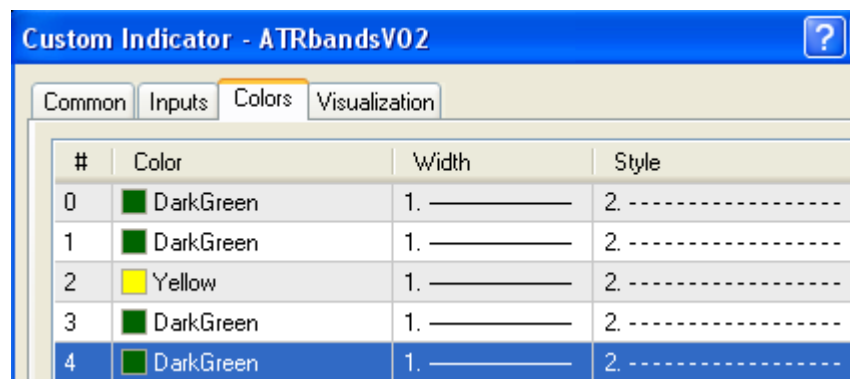


A few notes:

1. The indicator has a centerline true/false setting so you can have it draw the 1 SMA or not. It's the exact same 1 SMA the currency indicator uses, so you only need one indicator to draw it.
2. NOTE though that the 1 SMA is not really the centerline of the ATR channel. The 1 SMA is based on typical price while the ATR is based on close only, since that is when trades are initiated.
3. ATRtf is the time frame to use. 0 = current
4. ATRper is the number of bars. 14 = what billbss uses
5. ATRshift is the amount to shift the bands sideways. 0 = default
6. ATRband = the number of ATR's between each band. I use 1.0 since there are two bands, and one will end up at 1 ATR and the other at 2 ATR.



I like the lines to be dashed but they sometimes start out solid. If you need to change them, you can edit them in the Colors tab for the indicator:



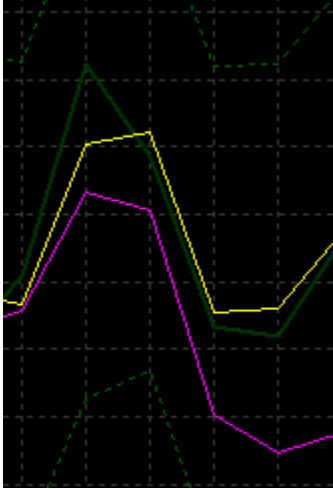
Step 6: Switch to candlesticks when it's time to trade



Happy pipping!

Wish List of Cool Features I Should Add

1. Have the 1 SMA lines automatically move themselves into view
2. Set it so you can use other any two pairs, whether positively or negatively correlated
3. Have the fractals indicate whether they are higher or lower than previous fractals
4. Audio and email alerts
5. Have the fractals detect what I call “flat tops” like this one



6.