

pipware.com dashboard
Instruction Manual

Market	GMT	Time	Open	Close	MN	WK	YD	TD	Dir	TF	Bars	Pips	CI	Cd	Sx	Fx	TF	GU	1,61418
NZ-Australia	13	2010.01.04 09:53	19:00	04:00	67	52	39	0	↓	M1	0	11	●●●●●	●●●●●	●●●●●	●●●●●	M1	SP	9.0
Japan	9	2010.01.04 05:53	23:00	08:00	102	70	98	0	↓	M5	1	36	●●●●●	●●●●●	●●●●●	●●●●●	M5	PTO	0
Hong Kong	8	2010.01.04 04:53	00:00	09:00	114	83	104	0	↓	M15	0	50	●●●●●	●●●●●	●●●●●	●●●●●	M15	PTMA20	30
Europe	1	2010.01.03 21:53	07:00	16:00	142	152	128	0	↑	M30	22	22	●●●●●	●●●●●	●●●●●	●●●●●	M30	PTFL	1
United Kingdom	0	2010.01.03 20:53	08:00	17:00	133	153	128	0	↑	H1	27	96	●●●●●	●●●●●	●●●●●	●●●●●	H1	PTFH	50
United States	-5	2010.01.03 15:53	13:00	22:00	98	115	96	0	↑	H4	6	312	●●●●●	●●●●●	●●●●●	●●●●●	H4	PLSW	49
Morning	13	2010.01.04 09:53	19:00	23:00	43	38	22	0	↓	DAY	34	268	●●●●●	●●●●●	●●●●●	●●●●●	DAY		
Afternoon	13	2010.01.04 09:53	23:00	05:00	58	41	39	0	↑	WEEK	7	436	●●●●●	●●●●●	●●●●●	●●●●●	WEEK		
Evening	13	2010.01.04 09:53	05:00	10:00	114	73	82	0	↓	MONTH	6	900	●●●●●	●●●●●	●●●●●	●●●●●	MONTH		
Night	13	2010.01.04 09:53	10:00	19:00	117	144	114	0											
pipware.com (v3.0)					184	183	188	0											

Version 3.0

Introduction

Even though this indicator has been named a 'dashboard', it is much more than that. Hopefully you won't become too overwhelmed with the astounding number of possibilities I offer here.

Rows and Columns are totally configurable ... even the market hours rows!

Market	GMT	Time	Open	Close	MN	WK	YD	TD	Dir TF	Bars Pips	CI	Cd	Sx	Fx	TF	GU	1.61418
NZ-Australia	13	2010.01.04 09:53	19:00	04:00	67	52	39	0	↓ M1	0 11	●	●	●	●	M1	SP	9.0
Japan	9	2010.01.04 05:53	23:00	08:00	102	70	98	0	↓ M5	1 36	●	●	●	●	M5	PTO	0
Hong Kong	8	2010.01.04 04:53	00:00	09:00	114	83	104	0	↓ M15	0 50	●	●	●	●	M15	PTSMA20	30
Europe	1	2010.01.03 21:53	07:00	16:00	142	152	128	0	↑ M30	22 22	●	●	●	●	M30	PTFL	1
United Kingdom	0	2010.01.03 20:53	08:00	17:00	133	153	128	0	↑ H1	27 96	●	●	●	●	H1	PTFH	50
United States	-5	2010.01.03 15:53	13:00	22:00	98	115	96	0	↑ H4	6 312	●	●	●	●	H4	PLSW	49
Morning	13	2010.01.04 09:53	19:00	23:00	43	38	22	0	↓ DAY	34 268	●	●	●	●	DAY		
Afternoon	13	2010.01.04 09:53	23:00	05:00	58	41	39	0	↑ WEEK	7 436	●	●	●	●	WEEK		
Evening	13	2010.01.04 09:53	05:00	10:00	114	73	82	0	↓ MONTH	6 900	●	●	●	●	MONTH		
Night	13	2010.01.04 09:53	10:00	19:00	117	144	114	0									
pipware.com (v3.0)					184	183	188	0									

Dashboard at its largest size

Market	Time	MN	WK	YD	TD	Dir TF	CI	Cd	Sx	Fx	TF	EU	1.43060
Tokyo	2010.01.04 06:21	83	74	104	0	↑ M15	●	●	●	●	M1	SP	8.3
London	2010.01.03 21:21	100	93	123	0	↓ H1	●	●	●	●	M5	PTO	14306
New York	2010.01.03 16:21	84	82	102	0	↑ H4	●	●	●	●	M15	PTSMA20	43
pipware.com (v3.0)					135	113	137	0	↑ DAY			PTFL	-4
												PTFH	51
												PLSW	55

Dashboard with fewer rows/columns and different Hours settings

There are four sections to the dashboard:

- Market Hours
- Fractals (Bill Williams)
- THV (CobraForex)
- Summary

Market	GMT	Time	Open	Close	MN	WK	YD	TD	Dir TF	Bars Pips	CI	Cd	Sx	Fx	TF	GU	1.61418
NZ-Australia	13	2010.01.04 10:33	19:00	04:00	62	53	48	0	↓ M1	0 28	●	●	●	●	M1	SP	9.0
Japan	9	2010.01.04 06:33	23:00	08:00	83	74	104	0	↓ M5	0 31	●	●	●	●	M5	PTO	0
Hong Kong	8	2010.01.04 05:33	00:00	09:00	83	74	88	0	↑ M15	5 4	●	●	●	●	M15	PTSMA20	7
Europe	1	2010.01.03 22:33	07:00	16:00	105	96	123	0	↓ M30	9 51	●	●	●	●	M30	PTFL	2
United Kingdom	0	2010.01.03 21:33	08:00	17:00	100	93	123	0	↓ H1	3 133	●	●	●	●	H1	PTFH	11
United States	-5	2010.01.03 16:33	13:00	22:00	84	82	102	0	↑ H4	5 35	●	●	●	●	H4	PLSW	9
Morning	13	2010.01.04 10:33	19:00	23:00	35	32	21	0	↑ DAY	3 89	●	●	●	●	DAY		
Afternoon	13	2010.01.04 10:33	23:00	05:00	54	44	36	0	↓ WEEK	3 838	●	●	●	●	WEEK		
Evening	13	2010.01.04 10:33	05:00	10:00	70	62	76	0	↑ MONTH	4 1850	●	●	●	●	MONTH		
Night	13	2010.01.04 10:33	10:00	19:00	100	91	117	0									
pipware.com (v3.0)					140	115	137	0									

Hours

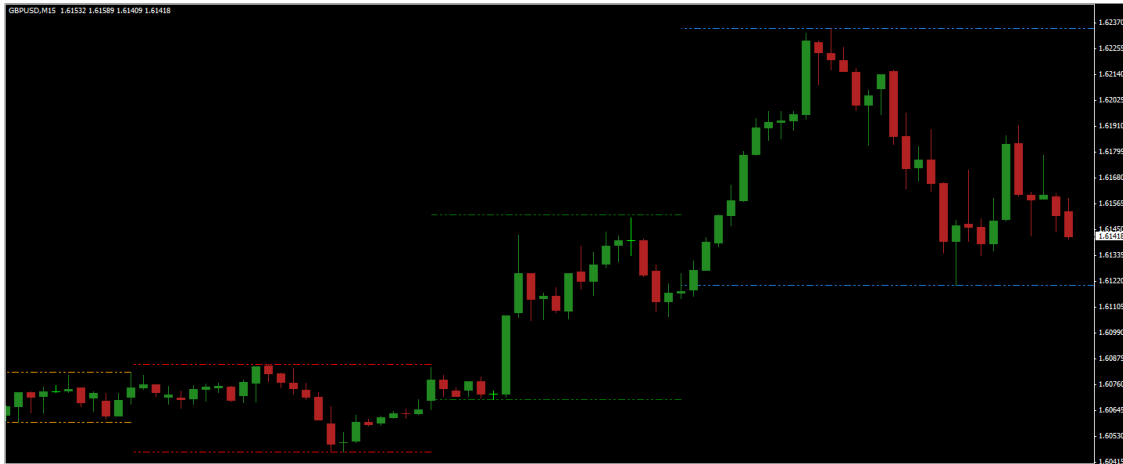
Fractals

THV

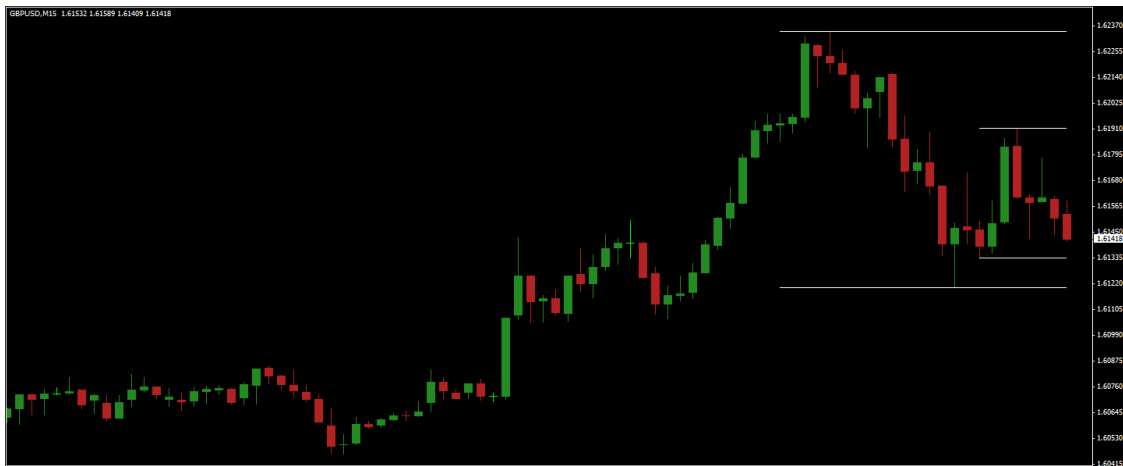
Summary

pipware.com dashboard

The dashboard can also be configured to display information on the main chart window.



Market Hours



H4 and H1 Candle Lines



Support and Resistance Lines

pipware.com dashboard



Fractals



Fractal Support and Resistance Lines



Fractal Breakout Arrows

Settings

The dashboard has a huge number of settings. Fortunately, we have chosen a parameter naming format that will help you find what you want to change.

Every setting is 'grouped' into categories. We'll use the system settings as an example

 pw.system.TextColor	 DimGray
 pw.system.BackColor	 Black

Note that the 'TextColor' and 'BackColor' are prefixed with the category they belong to.









Here's the list of settings categories:

pw.dash	miscellaneous dashboard settings
pw.datetime	time zone settings
pw.diagnostics	display of diagnostic information
pw.fractals	fractal settings
pw.hours	market hours settings
pw.system	global indicator settings
pw.thv	thv settings
pw.thv.trix	thv trix settings

Quick Start

The dashboard already comes preconfigured with many template examples and there is only one setting that needs adjusted ie the time zone of your broker.

Find this setting (pw.datetime.BrokerTimeZone) and adjust it to the hour offset of your broker from GMT.

 pw.system.TextColor	 DimGray
 pw.system.BackColor	 Black
 pw.datetime.Note01	## B R O K E R ##
 pw.datetime.Note02	## Valid Time Zone values: ##
 pw.datetime.Note03	## -13 to 13 (UTC/GMT) ##
 pw.datetime.BrokerTimeZone	0

See next page to determine how to calculate your broker time zone.

pipware.com dashboard

How to determine your broker time zone

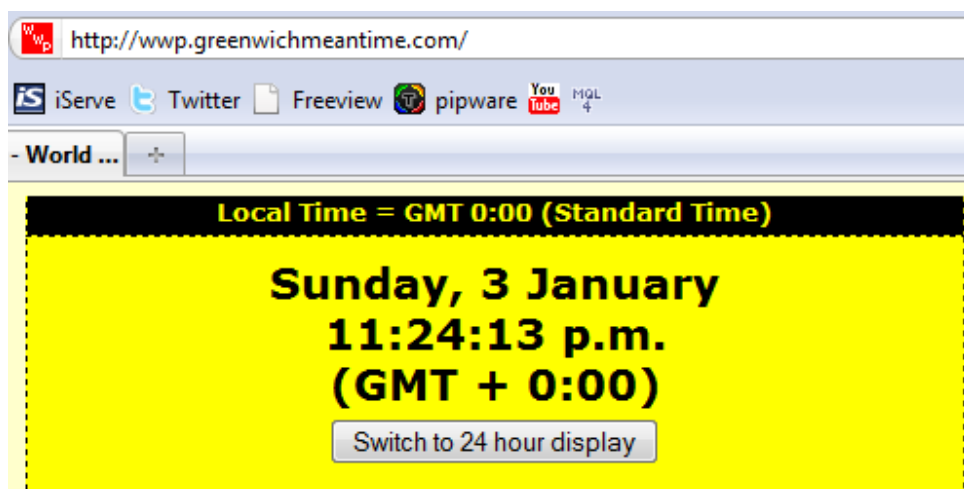
Market Watch: 18:23:32		
Symbol	Bid	Ask
GBPUSD	1.6142	1.6147
EURUSD	1.4328	1.4331
USDJPY	92.76	92.80
USDCHF	1.0345	1.0349

In metatrader 4, open the 'Market Watch' Window (shortcut CTRL-M).

Note the time displayed at the top of this window. This is your broker time.

IMPORTANT: Your broker must be open i.e. receiving ticks when you do this.

Go to the <http://wgp.greenwichmeantime.com/> and note the time there.



Now calculate the difference in hours between the two times. In the example shown, the difference could be +19 hrs or -5 hrs. Because GMT offsets are +/- 12 hrs (except NZ in daylight saving = +13 hrs), it should be clear that the value we require is -5 hrs.

Broker Settings

pw.datetime.BrokerStartDay	Sun
pw.datetime.BrokerStartHour	22

The time you consider is the start of the trading week for your broker

pw.datetime.BrokerEndDay	Fri
pw.datetime.BrokerEndHour	22

The time you consider is the end of the trading week for your broker

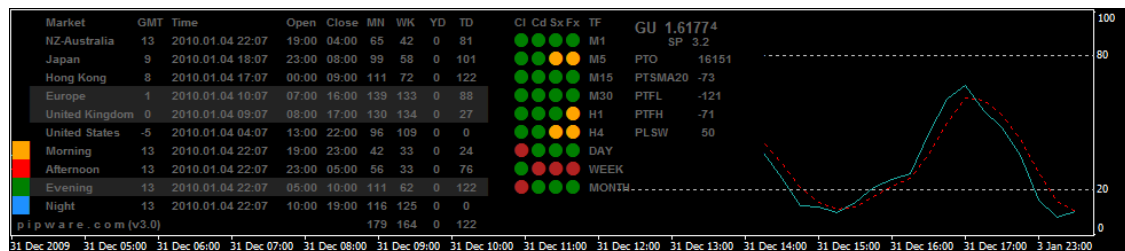
pipware.com dashboard

Miscellaneous Settings

123 pw.dash.Window	1
--------------------	---

Window where the dashboard should appear.

IMPORTANT: If you use the default of '1' for this setting, you need to have an indicator already in window position 1. I personally use a schoastics set to 8,3,3. The dashboard draws over top of this indicator and I can see the last part of the schoastics to the right



123 pw.dash.X	0
123 pw.dash.Y	0

Position of the dashboard from Top-Left of the window (pixels)

pw.dash.H4LinesOn	false
pw.dash.H4LinesColor	<input type="checkbox"/> White

Display lines for the last H4 candle on the main chart in the color you choose

pw.dash.H1LinesOn	false
pw.dash.H1LinesColor	<input type="checkbox"/> White

Display lines for the last H1 candle on the main chart in the color you choose

pw.diagnostics.Debug_Panel_On	false
-------------------------------	-------

Display dashboard diagnostics information on the main chart

Market Hours

There is no official open or close time for the forex market since there's no central exchange. Every broker sets their own market hours. Usually, a broker has an arrangement with one or more banks to provide the ability for a trader to trade. For the purposes of this discussion, traders can be one of two types ... institutional or retail.

Institutional traders are the 'big guys' and provide most of the market liquidity. Market liquidity is the ability of a currency to be bought/sold without causing a significant movement. When liquidity is low egg news time etc, spreads widen. Institutional traders account for 90-95% of the market volume. Some of these guys can still trade in the weekends.

Retail traders are the likes of you and me. We have brokers that typically allow us to trade from Monday NZ open (GMT+0 Sunday 22:00) through to Friday USA close (GMT+0 Friday 22:00).

Each 'day' of forex trading starts with the opening of the Australasia area, followed by Asia, then Europe and lastly America. The terms open and close should be used quite loosely. We typically refer to a regions market being 'open' when it's likely that the institutional traders in that region are active i.e. banking business hours.

Because the largest volume of transactions occur during London business hours, many traders consider a forex day to be a 24 hour period starting and finishing at midnight GMT+0 i.e. London time zone midnight to midnight.

The information traders generally want to know is when a particular 'market' is active and how much that market has moved today compared to a typical days move. A typical trading day is usually broken down into three main sessions i.e. **Asian**, **European** and **US**.

The pipware dashboard can be configured with a maximum of 10 sessions to cover a 24 hr period.

Market	Time	MN	WK	YD	TD
Tokyo	2010.01.04 06:21	83	74	104	0
London	2010.01.03 21:21	100	93	123	0
New York	2010.01.03 16:21	84	82	102	0
pipware.com (v3.0)		135	113	137	0

This picture shows three sessions configured with names Tokyo, London and New York. The time zone for each session has been configured for the city represented. This is why the time is displayed correctly for each city.

Market	GMT	Time	Open	Close	MN	WK	YD	TD
AZ Australia	13	2010.01.04 10:33	19:00	04:00	62	53	48	0
Japan	9	2010.01.04 06:33	23:00	08:00	83	74	104	0
Hong Kong	8	2010.01.04 05:33	05:00	05:00	83	74	88	0
Europe	1	2010.01.03 22:33	07:00	16:00	105	96	123	0
United Kingdom	0	2010.01.03 21:33	08:00	17:00	100	93	123	0
United States	-5	2010.01.03 16:33	13:00	22:00	84	82	102	0
Morning	13	2010.01.04 10:33	19:00	23:00	35	32	21	0
Afternoon	13	2010.01.04 10:33	23:00	05:00	64	44	36	0
Evening	13	2010.01.04 10:33	05:00	10:00	70	62	76	0
Night	13	2010.01.04 10:33	10:00	19:00	100	91	117	0
pipware.com (v3.0)					140	115	137	0

To the left is a much fuller example configured for 6 market sessions and 4 personal sessions. As you will see, the names and times are fully customizable.

The columns MN, WK, YD and TD show the daily range in pips (max – min) for each session Month (30 days), Week (5 days), Yesterday and Today respectively.

pipware.com dashboard

	Market	GMT	Time	Open	Close	Month	Week	Yesterday	Today
	NZ-Australia	13	2010.01.04 10:33	19:00	04:00	62	53	48	0
	Japan	9	2010.01.04 06:33	23:00	08:00	83	74	104	0
	Hong Kong	8	2010.01.04 05:33	00:00	09:00	83	74	88	0
	Europe	1	2010.01.03 22:33	07:00	16:00	105	96	123	0
	United Kingdom	0	2010.01.03 21:33	08:00	17:00	100	93	123	0
	United States	-5	2010.01.03 16:33	13:00	22:00	84	82	102	0
	Morning	13	2010.01.04 10:33	19:00	23:00	35	32	21	0
	Afternoon	13	2010.01.04 10:33	23:00	05:00	54	44	36	0
	Evening	13	2010.01.04 10:33	05:00	10:00	70	62	76	0
	Night	13	2010.01.04 10:33	10:00	19:00	100	91	117	0
	pipware.com (v3.0)					140	115	137	0


Columns

Color	the color used when showing the row data on the main chart
Label	text to give meaning to what each row represents
GMT	the time zone of the row
Time	time in the time zone represented by the row
Open	time this row opens ... displayed in either local or broker time
Close	time this row closes ... displayed in either local or broker time
Month	average daily pip range of the row over the last 30 trading days
Week	average daily pip range of the row over the last 5 trading days
Yesterday	pip range of the row during yesterday
Today	pip range of the row today

Rows

Heading	heading of each column
Rows	session data configured using 'groups' (explained below)
Totals	daily pip ranges from the open of first row to the close of the last row

pipware.com dashboard


 pw.hours.DashOn	true
---	------

Display hours section of dashboard (true/false)

 pw.hours.HighlightOn	true
 pw.hours.HighlightColor	35,35,35












Highlight any 'open' markets with this color

NZ-Australia	13	2010.01.04 17:08	19:00	04:00	65	42	0	81
Japan	9	2010.01.04 13:08	23:00	08:00	99	58	0	76
Hong Kong	8	2010.01.04 12:08	00:00	09:00	111	72	0	51
Europe	1	2010.01.04 05:08	07:00	16:00	139	133	0	0
United Kingdom	0	2010.01.04 04:08	08:00	17:00	130	134	0	0
United States	-5	2010.01.03 23:08	13:00	22:00	96	109	0	0

 pw.hours.LinesOn	true
--	------

Displays the hours lines on the main chart



 pw.hours.Note05	## Columns On/Off? ##
 pw.hours.ColColorOn	true
 pw.hours.ColLabelOn	true
 pw.hours.ColGMTOn	true
 pw.hours.ColTimeOn	true
 pw.hours.ColOpenOn	true
 pw.hours.ColCloseOn	true
 pw.hours.ColMonthOn	true
 pw.hours.ColWeekOn	true
 pw.hours.ColYesterdayOn	true
 pw.hours.ColTodayOn	true

Enables the display of each column

pipware.com dashboard

ab	pw.hours.Note06	## Column Headings ##
ab	pw.hours.ColColorLabel	
ab	pw.hours.ColLabelLabel	Market
ab	pw.hours.ColGMTLabel	GMT
ab	pw.hours.ColTimeLabel	Time
ab	pw.hours.ColOpenLabel	Open
ab	pw.hours.ColCloseLabel	Close
ab	pw.hours.ColMonthLabel	MN
ab	pw.hours.ColWeekLabel	WK
ab	pw.hours.ColYesterdayLabel	YD
ab	pw.hours.ColTodayLabel	TD

Text for each column heading

ab	pw.hours.Note07	## Column Widths ##
ab	pw.hours.Note08	## Use 0 for Default Width##
123	pw.hours.ColColorWidth	0
123	pw.hours.ColLabelWidth	0
123	pw.hours.ColGMTWidth	0
123	pw.hours.ColTimeWidth	0
123	pw.hours.ColOpenWidth	0
123	pw.hours.ColCloseWidth	0
123	pw.hours.ColMonthWidth	0
123	pw.hours.ColWeekWidth	0
123	pw.hours.ColYesterdayWidth	0
123	pw.hours.ColTodayWidth	0



Adjustment of column widths (pixels)

ab	pw.hours.Note09	## G R O U P S ##
ab	pw.hours.Note10	## HR must be in the ##
ab	pw.hours.Note11	## time zone of group ##
ab	pw.hours.Note12	## ----- ##

There are ten possible groups that can be displayed. The groups that are set to on will be displayed in the rows of the hours section of the dash. Note that there is not necessarily a one to one relationship between group number and dash row number i.e. if group one is set to off, group two will be displayed in row 1 of the dash.

The following example of Group 01 is for New Zealand which is GMT+13 and has business hours of 8am to 5pm. Group one only will be explained as groups 2-10 are done exactly the same except with values for different markets.

pipware.com dashboard

 pw.hours.Note13	## G01 ##
 pw.hours.G01On	true

Set true to display this group/session in a row of the dashboard.

 pw.hours.G01LinesOn	true
---	------


Determines whether this markets session lines will be displayed on the main chart

 pw.hours.G01Color	 Yellow
---	--


Color of the lines displayed on the main chart

 pw.hours.G01Label	NZ-Australia
---	--------------

Text to display i.e. name of market session

 pw.hours.G01GMT	13
---	----

Time Zone of this session

 pw.hours.G01OpenHR	8
--	---

Open time of this session (in the same time zone as above). 8 am is a typical business hours start

 pw.hours.G01CloseHR	17
---	----

Close hour of this session (in the same time zone as this session)

Understanding Time

The market hours section of the dashboard requires a reasonable understanding of time zones. Local Time and Broker Time should be fully understood.

Local Time: the official time of where you are i.e. the time on your computer clock. Can be expressed as UTC/GMT +/- hrs

Broker Time: the time of your metatrader platform (may or may not be the same as your local time). Can be expressed as UTC/GMT +/- hrs

What follows is a detailed explanation of local time, time zones (GMT/UTC), daylight saving and broker time.

Feel free to skip this section if you are reasonably familiar with these.

Local Time

“Local Time” is the official time in your local region. At this very instant, the local time for Christchurch, New Zealand and New York, USA are as follows:

Christchurch: 20 December 2009 12:24
New York: 19 December 2009 18:24

We can easily determine that 1) Christchurch is 18 hours ahead of New York, 2) its Sunday afternoon in Christchurch and Saturday evening in New York.

Because the official time in Christchurch is different from the official time in New York, the two cities are considered to be in different “time zones”. A **time zone** is a region of the earth within which the same local (official) time is observed.

Example: Wellington, New Zealand: is typically GMT/UTC + 12 except during daylight saving (then it is GMT/UTC +13). DST begins at 02:00 NZST on the last Sunday in September each year, and ends at 03:00 NZDT (or 02:00 NZST as defined in the Time Act 1974) on the first Sunday in April.

Example: New York, USA: is typically GMT/UTC -5 except during daylight saving (when it is GMT/UTC - 4). DST starts on the second Sunday of March, which is three or four weeks earlier than in the past, and it ends on the first Sunday of November, one week later than in years past.

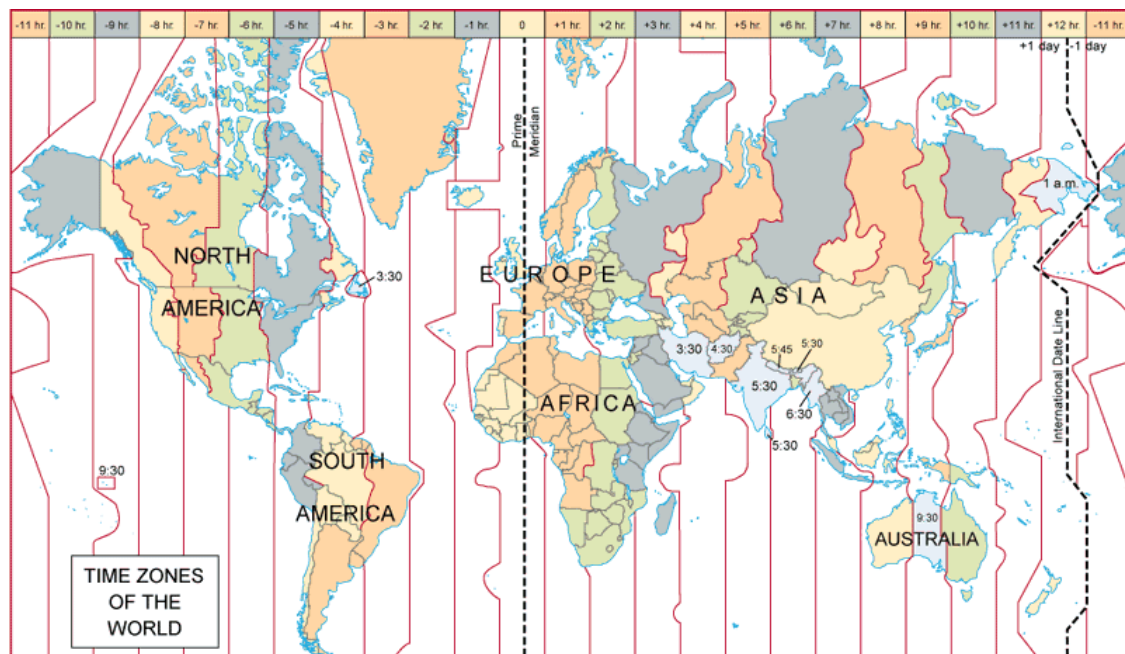
History of Time Zones (GMT, UTC)

Before the adoption of time zones, people used local solar time. Originally this was by using sundials, and later kept by mechanical clocks. The use of local solar time became increasingly awkward as railways and telecommunications improved. Clocks differed between places by an amount corresponding to the difference in their geographical longitude, which was usually not a convenient number.

Because each day of 24 hrs corresponds to one complete revolution of the earth, it made sense to divide the earth longitudinally into 24 vertical segments. Local time within each of the 24 segments would be +/- 12 hours from a nominated prime meridian (0 degrees longitude).

Prior to 1884, some countries utilized local “prime meridians” to establish their map coordinate systems within their country and around the world. By 1884, the Greenwich Meridian, based at the Royal Observatory, Greenwich, was used by over two-thirds of all ships as the reference meridian (0 degrees) on their maps. In October of that year, 41 delegates from 25 nations met in Washington, D.C., USA, for the International Meridian Conference. This conference selected the Greenwich Meridian as the official Prime Meridian due to its popularity.

Greenwich Mean Time (GMT) is the time at this official prime meridian. Any local time for any region in the world can be calculated by which of the 24 segments that region is located. With Greenwich located in the center, each region would be a maximum of +/- 12 hours from GMT. Each vertical “segment” may have irregular lines so that whole territories can be included.



The International Date Line (IDL) is an imaginary line opposite the Prime Meridian. The date changes as one travels east or west across it. It mostly corresponds to the time zone boundary separating -12 and +12 hours from GMT. Crossing the IDL travelling east results in a day or 24 hours being subtracted, and crossing west results in a day being added.

Until fairly recently, time zones were based on Greenwich Mean Time (GMT, also called UT1), the mean solar time at longitude 0° (the Prime Meridian). But as a mean solar time, GMT is defined by the rotation of the Earth, which is **not** a constant rate.

pipware.com dashboard

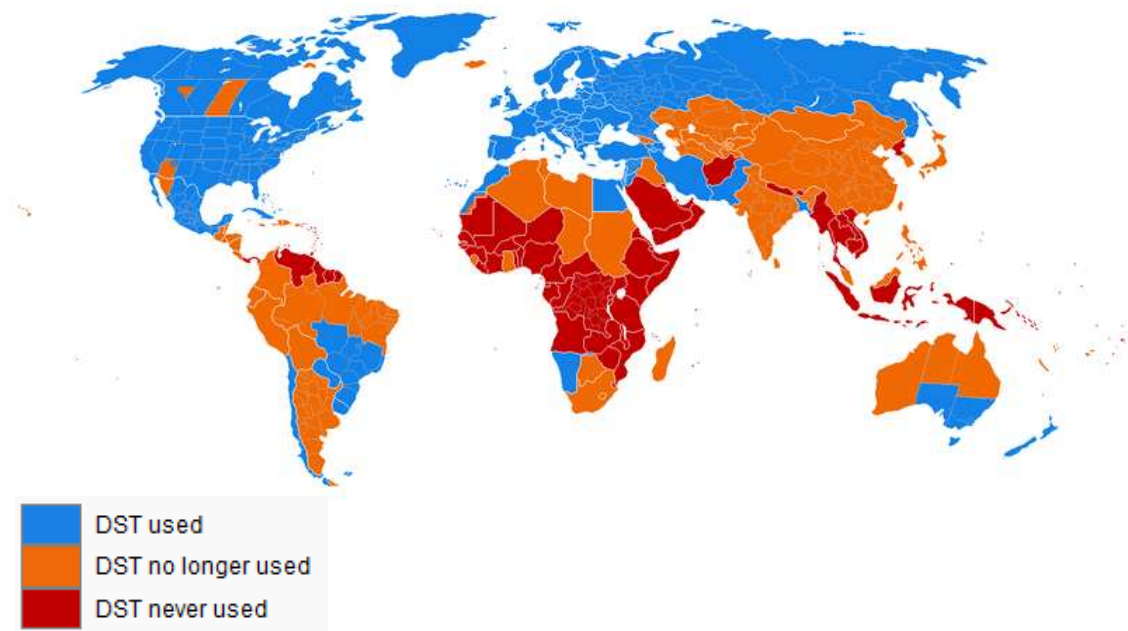
Coordinated Universal Time (UTC) is a time standard based on International Atomic Time (TAI) with leap seconds added at irregular intervals to compensate for the Earth's slowing rotation. The difference between UTC and UT1 (GMT) is not allowed to exceed 0.9 seconds. UTC replaced GMT as the basis for the main reference time scale or civil time in various regions on 1 January 1972.

In casual use, when fractions of a second are not important, Greenwich Mean Time (GMT) can be considered equivalent to UTC. Owing to the ambiguity as to whether UTC or UT1 is meant, GMT is generally avoided in technical contexts.

To confuse matters further, due to daylight saving time, UTC is the local time at the Royal Observatory, Greenwich only between 01:00 UTC on the last Sunday in October and 01:00 UTC on the last Sunday in March. For the rest of the year, local time there is UTC+1, known in the United Kingdom as British Summer Time (BST).

Daylight Saving Time

Many countries, or even parts of countries, adopt daylight saving time (also known as "Summer Time") during part of the year. This typically involves advancing clocks by an hour near the start of spring and adjusting back in autumn ("spring" forward, "fall" back). Some countries also use backward daylight saving over the winter period. Most countries around the equator do not observe daylight saving time, since the seasonal difference in sunlight is minimal.



pipware.com dashboard

Broker Time

Sometimes, the broker you choose will run its trading platform at a different time to your local time. This can cause a lot of confusion, particularly when there is no way to adjust the time zone of the trading system to match your own **local time**.

By way of example, my local time is New Zealand but my metatrader platform is United Kingdom time. So right now, it's 18:50 local time (New Zealand) and my platform is 05:50. Currently, UK is UTC+0 and NZ time is UTC+13.

NOTE: Comparing your metatrader charts with other traders may give you quite a surprise. If your broker time is UTC+0 but the comparison is being made to a platform where the broker is UTC+2, any candle charts of timeframes greater than H1 will look completely different!

For this reason, and also because most people consider a trading day to start at London Midnight, we often use metatrader from brokers that have a platform time (broker time) of London Time (currently UTC+0).

Your platform may only progress in time when your broker is open for trading. My current platform starts operating on Sundays at 22:00 (GMT+0) and stops on Fridays at 22:00 (GMT+0). For example, it's Sunday evening here in NZ 19:13 (GMT+13). Because my platform is UK, I would expect it to be displaying Sunday 06:13 (GMT+0). But while my broker is closed the time is 'stuck' at 21:59 on Friday (GMT+0). It will 'jump' to 22:00 Sunday when my broker opens.

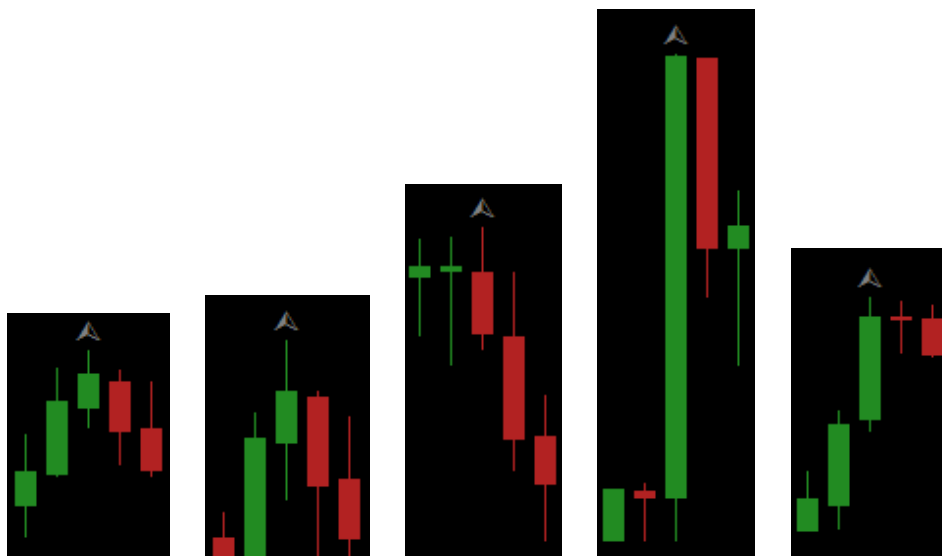
Fractals – Bill Williams

Fractals are one of five indicators of Bill Williams' trading system. These five indicators are built into the metatrader platform. You can find them from the top menu:

Insert -> Indicators -> Bill Williams

Upper Fractals

A five bar pattern where the high of the middle bar (bar 3) is higher than the highs of the other 4 bars (bars 1,2 & 4,5). Examples:



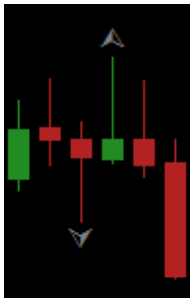
Lower Fractals

A five bar pattern where the low of the middle bar (bar 3) is lower than the lows of the other 4 bars (bars 1,2 & 4,5). Examples:





Fractals – Upper/Lower Together






Lower and Upper Fractals can share candles

Fractals are considered a 'lagging' indicator. This is because the fractal can't be confirmed until the fifth bar is complete. It is common to draw a fractal as soon as the fifth bar opens but delete it if the candle closes in a way that nullifies the pattern.

pipware.com dashboard

The pipware dashboard has its own code for fractals and represents them as open circles. You turn them on/off with the following setting:

 pw.fractals.AlertsOn	false
 pw.fractals.FractalsOn	true
 pw.fractals.DotsOn	false



pipware.com dashboard

Fractals – What use are they?

Support and Resistance Fractals occur where price changes direction. This means they often occur at Support and Resistance levels.

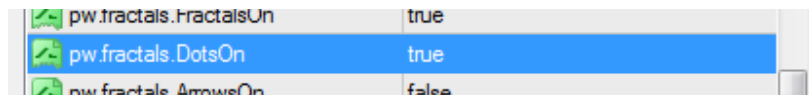
Trend Direction Because fractals occur at lows and highs, they are useful for determining the current trend i.e. is price making “higher highs” or “lower lows”.

Note: In the following discussion **a higher high and lower low refers to the fractals and not individual candles**.

Support and Resistance

If a horizontal line is drawn from a fractal until the next fractal (of the same type e.g. upper/lower), this could be a valuable support and resistance line for future use. The pipware dashboard can show these lines (as dots).

Turn this feature on using the following setting:






Note that the ‘dots’ of the first fractal end on the first bar after the next fractal occurs. Also, the first dot appears on the second bar after a fractal (bar 5 of the fractal pattern).

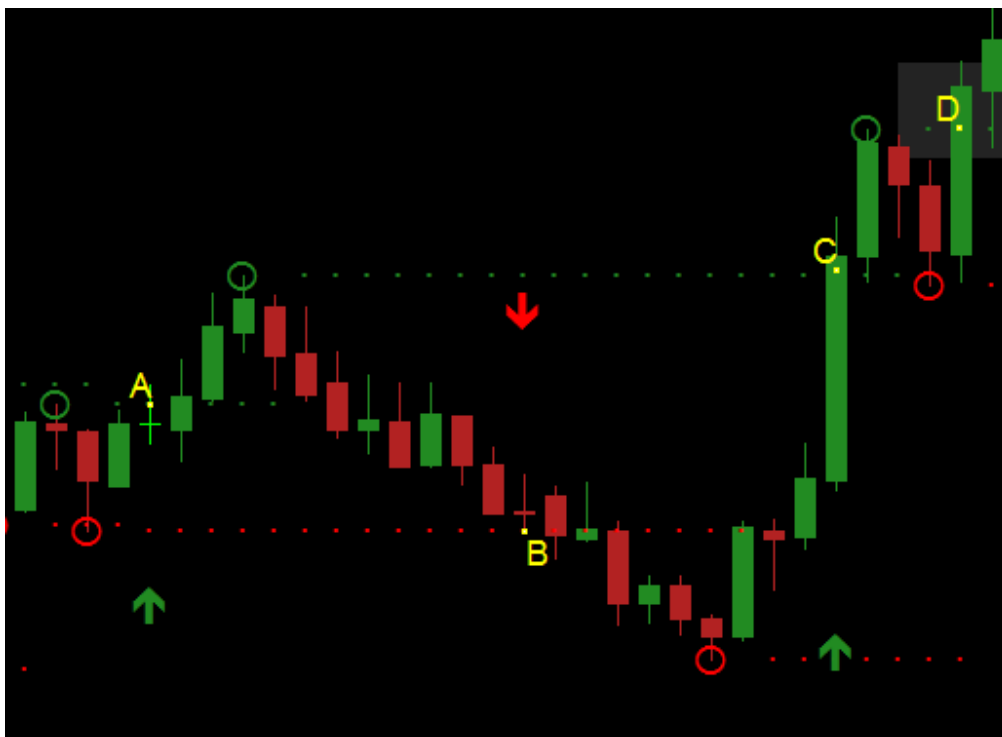
This concept is important. Please understand it. The pipware dashboard combines this with the trend breakout discussion (next) to provide its support and resistance lines.

pipware.com dashboard

Trend Direction

Bill Williams put forward the idea of fractals being 'broken' as an indication of trend direction. The pipware dashboard can display arrows showing when the current "fractal trend" has been broken. Turn this feature on with the following setting

 pw.fractals.DotsOn	true
 pw.fractals.ArrowsOn	true
 pw.fractals.SRLinesOn	false



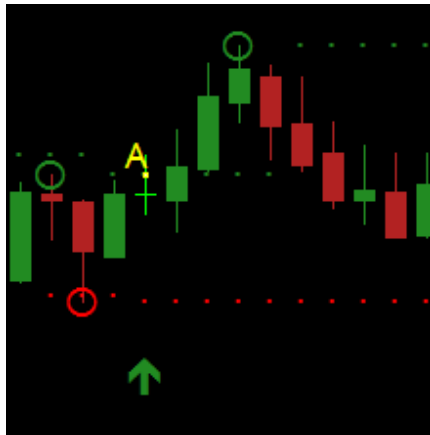
The arrows show the bars where a 'reversal' of trend has occurred. Green indicating that the trend has changed to Bullish and red that the trend has changed to bearish.

When this is put in context with all the other timeframes of the same symbol, we have a very reliable indicator of price action.

First, let me explain this example and then we will build up to how we can use all this for trading.

pipware.com dashboard

Let's follow the above picture from start to finish to better understand what determines the arrows appearing.

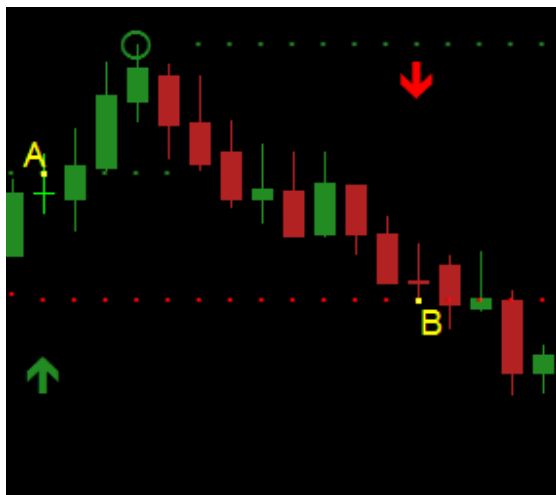


Please accept that price action was considered bearish prior to this snap shot.

As price was falling, it made lower lows and lower highs i.e. down trend. Each time a new high or low fractal pattern formed, a new support and resistance lines were created (the dots).

Because price was bearish, any break of the previous upper fractal (resistance line dots) is considered a reversal. This caused the green arrow to be drawn under the candle and trend is now considered bullish.

Price remains bullish until the latest lower fractal is broken.

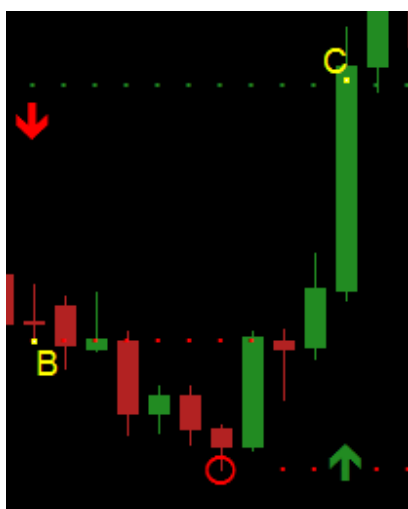


From point 'A', price action was bullish for a few bars and then a new upper fractal was formed.

Trend was still considered bullish as that fractal was considered a 'higher high'. Price will continue to be bullish until a 'lower low' occurs.

This occurs at point 'B'. Clearly, if the previous fractal (last 'low') is broken, we have made a lower low. Trend must now be bearish.

The red arrow is drawn to show the candle that created the lower low.



The down trend continues until the next fractal and then heads up.

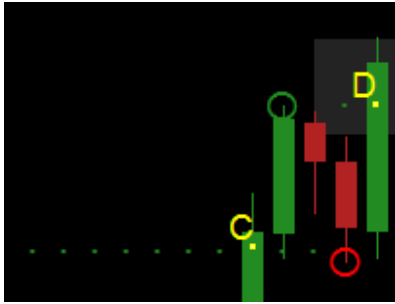
Remember, trend became bearish because the last break at point 'B' created a lower low. Trend can't be considered bullish again until a higher high is made i.e. a break of the last fractal high.

The previous upper fractal got broken at point 'C'. A green arrow appears below this candle because a reversal has occurred.

Trend direction is now considered bullish again.

I think you are starting to get the idea now?

pipware.com dashboard



At point 'C', trend became Bullish. Price continues upward and makes a higher high (new upper fractal green circle) so still bullish.

Price moves downward and forms a lower fractal (red circle). Note that this low did not break the previous low fractal so trend is still considered bullish.

Price then breaks the last upper fractal. This could be confusing? Well ... trend was already bullish so breaking of this fractal just confirmed the original direction. No arrow is

drawn in this instance.

Fractals – Putting it all Together

The above example was for a single timeframe. Imagine how cluttered it would be if I added the circles, dots and arrows for other time frames. The chart would be impossible to read. Typically you would only enable circles, dots and arrows for your own educational purposes.

Typically we are only interested in the very latest upper and lower fractal for each timeframe we monitor. Let's look at just two time frames and see how we can visualize them together.



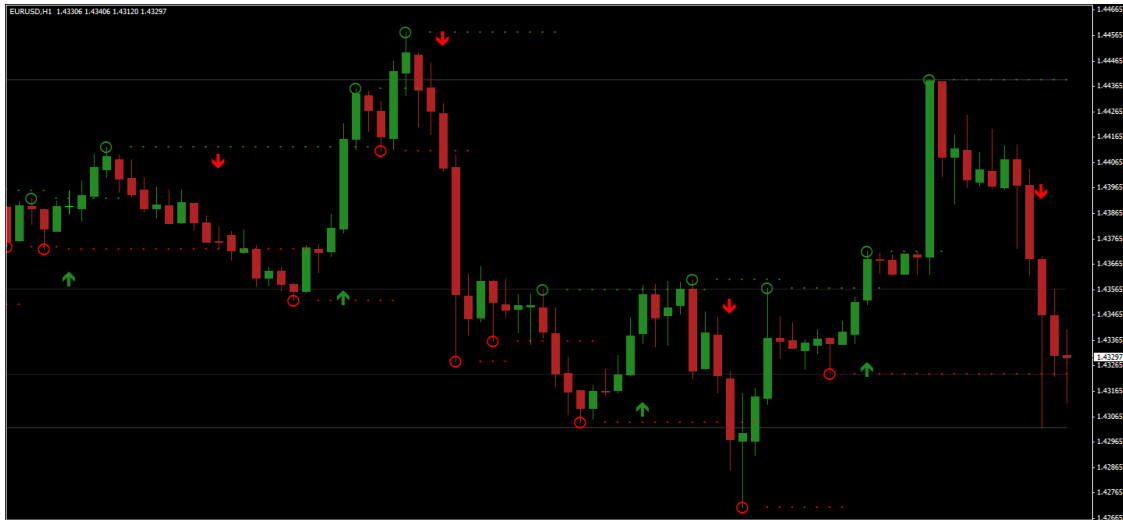
H1



M15

pipware.com dashboard

If we draw a horizontal line for the last fractals for both time frames we can see them on all time frames.



H1 showing H1 and M15 Lines



M15 showing H1 and M15 Lines

pipware.com dashboard

Now let's remove the circles, dots and arrows and add some more time frames lines.



M15 with M5, M15, M30, H1, H4, D1 fractal lines

What about the arrows? How will you know the current fractal trend direction? This indicator has two ways of showing this information.



First, let's look at an example of the M15 chart. Arrows are set to on and we're only showing the M15 lines.

If you look closely, you will notice that the support line is thicker than the resistance line.

Here's the way this works. Thin lines are drawn in the direction of the current trend. Thick lines are in the opposite direction.

If price breaks a thin line, the fractal trend direction remains the same i.e. no new arrow drawn.

If price breaks a thick line, then we have a reversal and a new arrow will be drawn in the opposite direction.

The dashboard area also shows a summary of direction as well (rectangle in drawing below).

Market	GMT	Time	Open	Close	MN	WK	YD	TD	Dir	TF	Bars	Pips	CI	Cd	Sx	Fx	TF	EU	1.43297
Morning	13	2010.01.04 08:08	19:00	23:00	35	37	17	26	↑	M1	10	2	●	●	●	●	M1	SP	2.9
Afternoon	13	2010.01.04 08:08	23:00	05:00	56	43	22	45	↑	M5	0	18	●	●	●	●	M5	PTO	0
Evening	13	2010.01.04 08:08	05:00	10:00	73	45	66	37	↑	M15	4	28	●	●	●	●	M15	PTMA20	24
Night	13	2010.01.04 08:08	10:00	19:00	83	89	130	90	↓	H1	2	109	●	●	●	●	H1	PTFL	-28
									↑	H4	4	59	●	●	●	●	H4	PTFH	27
									↑	DAY	2	113	●	●	●	●	DAY	PLSW	55


pipware.com dashboard

Dir	TF	Bars	Pips
↑	M1	10	2
↑	M5	0	18
↑	M15	4	28
↓	H1	2	109
↑	H4	4	59
↑	DAY	2	113


Dir column shows the most recent arrow that exists on that timeframe i.e. current trend direction via fractal analysis.

Bars column shows the number of bars since the last fractal trend reversal occurred. Our M15 example (see above) has 4 bars since green arrow.

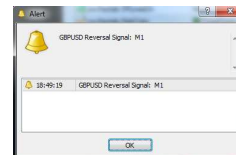
Pips column shows the number of pips until the next reversal will occur i.e. distance to the 'thick' SR line for that timeframe.


 pw.fractals.DashOn	true
--	------

Determines whether fractal information is displayed on the dashboard

 pw.fractals.AlertsOn	true
--	------

Global setting for disabling all timeframe fractal alerts



 pw.fractals.FractalsOn	false
---	-------


Whether fractal circles are displayed



 pw.fractals.DotsOn	true
--	------

Whether fractal lines (dots are displayed)



 pw.fractals.ArrowsOn	true
--	------




Whether fractal breakout arrows should be displayed



 pw.fractals.SRLinesOn	true
---	------





Global setting for disabling all timeframes S/R lines





 pw.fractals.HighColor	ForestGreen
 pw.fractals.LowColor	Red
 pw.fractals.LineColor	35,35,35

Upper Fractals/Dots, Lower Fractals/Dots and Support and Resistance line colors.





pipware.com dashboard

	pw.fractals.ColTimeFrameOn	true
	pw.fractals.ColArrowOn	true
	pw.fractals.ColBarCountOn	true
	pw.fractals.ColPipsOn	true










Enable the display of each of the dashboard columns for fractals

	pw.fractals.ColTimeFrameLabel	TF
	pw.fractals.ColArrowLabel	Dir
	pw.fractals.ColBarCountLabel	Bars
	pw.fractals.ColPipsLabel	Pips







Text to be displayed for the heading of each column

	pw.fractals.ColTimeFrameWidth	0
	pw.fractals.ColArrowWidth	0
	pw.fractals.ColBarCountWidth	0
	pw.fractals.ColPipsWidth	0




Column width adjustments (pixels). Leave as 0 for default size

	pw.fractals.M1RowOn	true
	pw.fractals.M5RowOn	true
	pw.fractals.M15RowOn	true
	pw.fractals.M30RowOn	true
	pw.fractals.H1RowOn	true
	pw.fractals.H4RowOn	true
	pw.fractals.D1RowOn	true
	pw.fractals.W1RowOn	true
	pw.fractals.MN1RowOn	true










Determines which timeframes will be displayed on the dash

	pw.fractals.M1SRLinesOn	false
	pw.fractals.M5SRLinesOn	false
	pw.fractals.M15SRLinesOn	true
	pw.fractals.M30SRLinesOn	false
	pw.fractals.H1SRLinesOn	true
	pw.fractals.H4SRLinesOn	true

pipware.com dashboard

 pw.fractals.D1SRLinesOn	true
 pw.fractals.W1SRLinesOn	true
 pw.fractals.MN1SRLinesOn	true

Determines which timeframes support and resistance lines will be displayed. Note that the global setting 'pw.fractals.SRLinesOn' must be set to 'true'.

 pw.fractals.M1AlertOn	false
 pw.fractals.M5AlertOn	true
 pw.fractals.M15AlertOn	true
 pw.fractals.M30AlertOn	true
 pw.fractals.H1AlertOn	true
 pw.fractals.H4AlertOn	true
 pw.fractals.D1AlertOn	true
 pw.fractals.W1AlertOn	true
 pw.fractals.MN1AlertOn	true

Determines which timeframes will generate an alert when a fractal reversal occurs. Note that the global setting 'pw.fractals.AlertsOn' must be set to 'true'.

THV by CobraForex

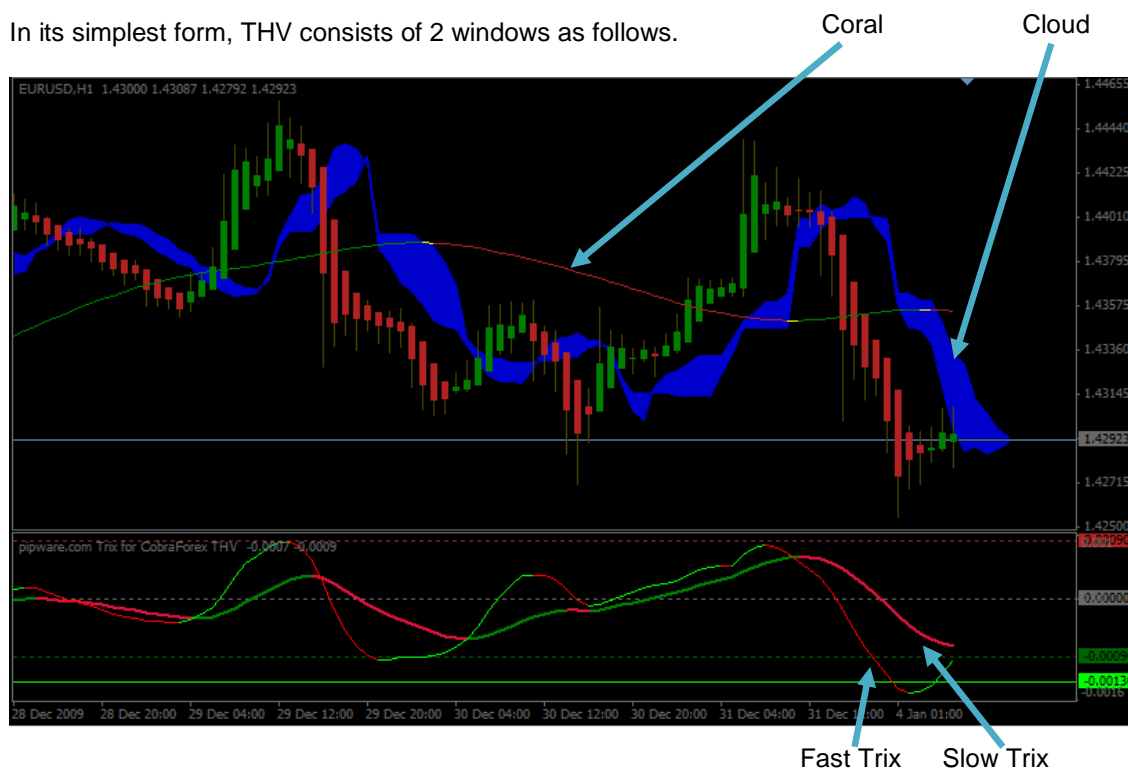
Even though I have been involved in Forex trading for 5 years, I didn't become profitable until I got involved with the THV thread (created by CobraForex) at [forexfactory.com](http://www.forexfactory.com/showthread.php?t=127271). I am incredibly thankful for all the people of that thread that have invested in my development (especially Cobra).

THV is a system that CobraForex originally learnt from Turhovach (another forex factory user). Cobra and the THV team have refined this system to something very useful to forex traders.

Note that all THV software is free and there are plenty of indicators available on the THV thread at forex factory (<http://www.forexfactory.com/showthread.php?t=127271>). I have included THV in this dashboard because I use it (both thv and the dashboard) for my own trading. Also, there are many thv thread subscribers that have purchased the pipware dashboard and would appreciate THV being available on it.

Understanding THV

In its simplest form, THV consists of 2 windows as follows.



The main chart has Heikin Ashi Candles overlaid with a 'Coral' (Triple Exponential Moving Average) and an 'Ichimoku' Cloud.

The bottom indicator window consists of two Triple Exponential Moving Averages called the Fast Trix and the Slow Trix.

There are specific rules for long and short trade entries.

pipware.com dashboard

THV Long Trade Entry Rules

- price is above the coral
- price closes above the cloud
- fast trix is above zero
- fast trix has crossed above the slow trix
- both fast and slow trix are green

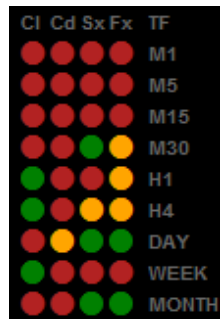
THV Short Trade Entry Rules

- price is below the coral
- price closes below the cloud
- fast trix is below zero
- fast trix has crossed below the slow trix
- both fast and slow trix are red

IMPORTANT: Just blindly following these rules is not how to use them. They are an addition to good understanding of current support and resistance levels i.e. they help you get the optimum entry and exit for whatever analysis strategy you use. In my case, I use the fractal breakout strategy with THV.

There is a great indicator for daily pivot points included with the system. It is free and the best pivot indicator I have seen.

THV on the Dashboard




The dash can be configured to show all timeframes of MT4 (as shown in the picture). I personally use only M1, M5 and M15.

Each column represents the rules being met for short or long trading opportunities.

Red=short,
Green=Long
Yellow=Neither.

CI (Coral)	Red	price below coral
	Green	price above coral
	Yellow	price on coral
Cd (Cloud)	Red	price below cloud
	Green	price above cloud
	Yellow	price in the cloud
Sx (Slow Trix)	Red	Slow Trix is Red (sloping down)
	Green	Slow Trix is Green (sloping up)
	Yellow	Slow Trix is Flat
Fx (Fast Trix)	Red	Fast Trix is Red (sloping down), below slow trix and below zero
	Green	Fast Trix is Green (sloping up), above slow trix and above zero
	Yellow	Neither Red or Green rules are valid




pipware.com dashboard

 pw.thv.trix.IsGoldOil	false
---	-------






Set this to true if the chart is gold or oil

 pw.thv.IndicatorOn	false
--	-------






Enables the display of the THV section of the dashboard

 pw.thv.BullColor	Green
 pw.thv.BearColor	FireBrick
 pw.thv.FlatColor	Orange






Colors of the THV lamps

 pw.thv.ColTimeFrameOn	true
 pw.thv.ColCoralOn	true
 pw.thv.ColCloudOn	true
 pw.thv.ColSlow TrixOn	true
 pw.thv.ColFast TrixOn	true

Turn columns on/off










 pw.thv.ColTimeFrameLabel	TF
 pw.thv.ColCoralLabel	Cl
 pw.thv.ColCloudLabel	Cd
 pw.thv.ColSlow TrixLabel	Sx
 pw.thv.ColFast TrixLabel	Fx

Text to display for column headings

 pw.thv.ColTimeFrameWidth	0
 pw.thv.ColCoralWidth	0
 pw.thv.ColCloudWidth	0
 pw.thv.ColSlow TrixWidth	0
 pw.thv.ColFast TrixWidth	0

Width of columns (pixels). Set to 0 for default widths

pipware.com dashboard

 pw.thv.M1RowOn	true
 pw.thv.M5RowOn	true
 pw.thv.M15RowOn	true
 pw.thv.M30RowOn	true
 pw.thv.H1RowOn	true
 pw.thv.H4RowOn	true
 pw.thv.D1RowOn	true
 pw.thv.W1RowOn	true
 pw.thv.MN1RowOn	true

Enable timeframes you want to appear