## Dashboard

The Dashboard example is similar to the Scoreboard example, except that several additional ways to populate a spreadsheet will be demonstrated. This example has a collection of 12 charts that have the same template applied to each chart. The 12 charts are placed on a stack for the sake of screen management. The stack tabs are color coordinated with the spreadsheet.

Sta	ck								E,	< ? 🗽	<u>)</u> _ 0	
EUR/JPY.D EUR/USD.D GBP/JPY.D GBP/USD.D GER30.D UK100.D UK0i.D US30.D USD/CAD.D USD/JPY.D US0i.D XAU/USD.D							SD.D					
Spre	adsheet 1	Frend Bre	ak	-				()	: M 💵 🗐 🖉	i 🗄 ?	èu - E	- 🔀
	Symbol	Bars	RSI	Ave	Keltner 1	Keltner 2	Stop	Close	Entry	Pips	Spread	
1		2	77.71	125.741	124.376	123.645	127.476		<b>126.356</b>	+ 169	2.4	₽
2	EUR/USD	14	11.99	1.12789	1.14174	1.14776	1.11621	1.12338	<b>1</b> .1306 <sub>9</sub>	73 🗭	2.2	ᠿ
3	GBP/JPY	1	96.46	146.565	142.556	141.343	147.697	144.653	<b>↓</b> 145.898	📌 124	3.7	┡
4	<b>GBP/USD</b>	1	86.84	1.31407	1.28763	1.2777 <sub>2</sub>	1.32965	1.30357	<b>↓</b> 1.3080 <sub>5</sub>	📌 45	2.1	₽
5	GER30	20	96.50	11527.87	11117.72	10975.45	11720.97	11434.41	<b>4</b> 11036.50	398- 👁	0.7	₽
6	UK100	10	77.67	7141.89	7054.67	6991.44	7322.76	7104.55	<b>7161.75</b>	🕈 57	2.5	Ŧ
7	UKOil	8	91.49	65.3925	62.6287	61.1697	68.8151	64.175	<b>₽</b> 64.6850	🕈 1	0.0	₽
8	US30	3	91.08	25672.83	25253.02	24988.39	26375.03	25294.05	<b>₽</b> 25831.50	🕈 537	2.5	₽
9	USD/CAD	4	79.66	1.33385	1.33890	1.3470 <sub>2</sub>	1.30448	1.34269	<b>1</b> .3285 <sub>0</sub>	🕈 142	2.2	<b>1</b>
10	USD/JPY	23	96.50	111.510	111.636	112.145	109.478	110.960	109.872	📌 109	2.1	Î
11	USOil	7	88.76	55.8400	53.0476	51.6200	59.1008		₽55.9550	💼 1	0.0	♣
12	XAU/USD	6	30.80	1293.80	1294.55	1282.77	1344.47	1297.47	<b>↓</b> 1319.62	📌 22	0.3	Ŧ

Let's walk through the construction of this dashboard example.

**Symbols** – Each chart posts its symbol to the spreadsheet because a chart property for Symbol Column has been set to 1. A non-zero value tells the chart which spreadsheet column is to receive the chart's symbol. A non-zero Row value tells the chart which spreadsheet row is to be used by the chart. When Row = 0 the chart defaults to its Alphabetical index order among all open charts. Values of Col = 1 and Row = 0 are set on each of the charts in the Dashboard example.



Spreadsheet Properties 53 Column Titles ? Color Theme h 1 Symbol (12 bold) Save A Font • 2 Bars (bold) Fixed Cells Regular Cells 3 RSI 4 Ave Font Color **Decimal Format** Font Color 5 Keltner 1 0 🊔 Grid Color Grid Color 6 Keltner 2 7 Stop Cell Color Cell Color 8 Close Bands 9 Entry First Band Color 3 🊔 Rows 🗸 Enable Bands 10 Pips [313.]^{74,75,77} 11 Spread [226.1]^ Second Band Color 3 📥 Rows 12 Dir [244\*]{65,68}

Titles – The titles for this example are set on the spreadsheet's property form.

The titles for the columns are entered by typing the text in the Column Titles frame. The entries for columns 1 and 2 include () parenthesis with parameters to set the title's font size and style. The notation added to the titles for columns 10, 11 and 12 will be explained later.

After closing the spreadsheet property form, click the Save button on the spreadsheet toolbar.

**Cell Colors** – A DYO used to color the cells in the Symbol column and the Stack tabs will be discussed next.

Variable [244 Direction Up] is a Boolean flag calculated elsewhere that represents a trade direction. True represents Long and False represents Short. Variable [310 Distance] is calculated elsewhere as the number of bars since the signal bar. These two variables control the background color of the spreadsheet cells in columns 1 and 2, and the Stack tabs.

Cate	gory Va	ariable	Selection #1 & #3	Op. <b>[#]</b>	Selection #2 & #4	Of	fset	Show	Marker	Color	
Actio	on 🔻 O	<b>→</b>	= if #2 oper 0 then Cell( #3, #₄ 🔻	-	True	-	0 🌲	V	•		
¢	f 🗗 🚽 🚔	•	( <mark>1 •</mark>	•	Alphabetical Index	•	0 🊔 )				
Α	Action	if True then Stack	Font Color := Color								
В	Expression	[0] := Not [244 Dir	rection Up]				~		Pain	t	
С	Expression	[0] := ( [310 Distan	[0] := ( [310 Distance] <= 10 ) AND Not [244 Direction Up]						Pain	t	
D	Expression	[0] := ( [310 Distan	[0] := ( [310 Distance] <= 3 ) AND Not [244 Direction Up]						Pain	t	
Ε	Expression	[0] := [244 Direction Up]							Pain	t	
F	Expression	[0] := ( [310 Distan	[0] := ( [310 Distance] <= 10 ) AND [244 Direction Up]						Pain	t	
G	Expression	[0] := ( [310 Distan	[0] := ( [310 Distance] <= 3 ) AND [244 Direction Up]						Pain	t	
Н	Action	if True then Cell( 1, Alphabetical Index ) := "							Pain	t	
Ι	Action	if True then Cell( 2, Alphabetical Index ) := '[310.]^'							Spre	adsh	[310.]
J	Action	if True then Stack Tab Color := Color					1		Pain	t	

A – This statement sets Black as the font color used on the Stack tabs.

- B Initialize the paint color to a light red (pink) when the direction is Down (Short).
- C If the Short signal Distance was within 10 bars, change the paint color to a medium red.

D – If the Short signal Distance was within 3 bars, change the paint color to a solid red.

E – Initialize the paint color to a light green when the direction is Up (Long).

F – If the Long signal Distance was within 10 bars, change the paint color to a medium green.

G– If the Long signal Distance was within 3 bars, change the paint color to a solid green.

H – Now that the paint color has been determined, use it to color a cell in column 1.

I – Use the paint color to color a cell in column 2, and show the value of variable [310] which is the Distance. The value is to be formatted as an integer because a period follows the 310. The value will be centered in the cell because of the ^ alignment character which follows the ending bracket.

J - Use the paint can color to color a Stack tab. The tabs are now a visual indication of which charts have recent trade signals. The darker the color, the more recent the signal. Cells 1 and 2, and the Stack tab are colored the same.

**Cell Matrix** - When working with the spreadsheet cells, a column parameter needs to be provided which is entered in selection field #3. A row parameter needs to be provided which is entered in selection field #4. The row parameter would be the Alphabetical Index selection in the DYO.

Alphabetical Index is automatically set so that the 12 charts each have a unique and sequential index value between 1 and 12.

**Paint Color** – Cell colors and values in columns 3, 4, 5, 6, 7 and 9 were managed by DYOs in a similar manner. The paint color is set by a DYO row's color square when the logic evaluates to True, Show is checked, and a Marker is not selected. Example:

Category	Variable	Selection #1 & #3	Op. [#]	Selection #2 & #4	Offset	Show Marker	Color
Expression •	0 🔻 =	[310 Distance]	<= ▼	3 🗸	0 🊔	▼ -	
♦ :" = :	😽 👘 AND Not 👻 🛛	[244 Direction Up]	•	-	0 🌲	)	

Then the paint color is used to color the spreadsheet cell. The key to painting with the paint color is to have the DYO row's color square set to Black. Example:

Category	Variable	Selection #1 & #3	Op. [#]	Selection #2 & #4	Offset	Show Marker	Color
Action 🔹	0 🗸	= if #2 oper 0 then Cell( #3, #- ▼		True 🔻	0 🌲	▼ -	
♦ :* = =		(2 <del>•</del>	-	Alphabetical Index 🔹	0	) [310.]^	

**Price Fields** – Column 8 in the Dashboard example shows the current price. This happens automatically because the column title is the word 'Close'. The spreadsheet knows which column has the symbol because of the 'Symbol' title. As the current price for a symbol changes, the Close column will display it.

The titles which are connected to quote values for automatic display are:

Open, High, Low, Close, Net, Bid, Ask, and Volume

**Global Variables** – Columns 10, 11 and 12 are examples where a global variable reference may be used in the Column Title entry to automatically display its value.

```
10 Pips [313.]^{74,75,77}
11 Spread [226.1]^
12 Dir [244*]{65,68}
```

Column 11: Title is Spread. Display on each row the chart's global variable [226]. The value is to be formatted with 1 decimal because of the **.1** formatting characters following the 226.

**Alignment** - The [226] value is to be centered in the cell because of the ^ alignment character following the ]. Other alignment characters are < for align left, and > for align right in a spreadsheet cell.

**Markers** – Columns 10 and 12 display markers. The **{ }** braces are used to select markers to be displayed in the cell. The parameters in the braces are marker numbers. See the <u>Markers</u> page at the end of this document for a list of 198 markers.

Column 10: Title is Pips. Display global variable [313] formatted as an integer and centered. The {74,75,77} notation adds a marker from a choice of 3 markers. The 1<sup>st</sup> marker will be drawn when the global variable value is positive. If the value is zero, the 2<sup>nd</sup> marker will be drawn. The 3<sup>rd</sup> marker will be drawn when the value is negative. Marker 74 is the Green Plus. Marker 75 is the Star. Marker 77 is the Eye.

Column 12: Title is Dir. The global variable [244] is formatted as Boolean because of the \* formatting character. Therefore [244\*] returns the words True or False. By adding the marker notation, the Boolean words will be replaced with markers. True will be replaced by the 1<sup>st</sup> marker, and False will be replaced by the 2<sup>nd</sup> marker.

In the example, marker 65 is the Green Up Arrow displayed when the value is True. Marker 68 is the Red Down Arrow displayed when the value is False.

**Studies** – Studies can automatically populate a spreadsheet with their values. Set the Variable index on the study property form to a spread sheet column. The cell color will be set to the study's Marker Color.

This RSI example will display in column 3 with either a light green or light red cell color.

The study Marker, if used, will show in the spreadsheet cell in front of the study value.

The Row is determined by the chart's Row selection on the chart's property form. A Row selection of 0 will use the chart's Alphabetical index.

Show	Color	Style	Marker	Color	Variable
Rising		- •	•		
🗸 RSI Line					3 🌲
Falling		- •	•		

P	Pips						
숥	0						
۲	-74						
$\stackrel{\frown}{\simeq}$	0						
$\stackrel{\frown}{\simeq}$	0						
۵.	438						
÷	34						

Dir