

# Help for Chart Utilities

## Macros for Creating Summary Worksheets



Used together, these three buttons are useful when you have similar groups of charts on multiple worksheets, and you want to combine them into one set of charts. In Xlrotor this might be a set of different imbalance response cases, with the results of each case on its own worksheet, and you want to overlay the results of multiple cases onto one set of charts. The name on each worksheet tab is used as the legend entry for the data from that sheet (a tricky formula is entered in cell A2 of each worksheet to accomplish this). If you later change the sheet tab names, the chart legends will update automatically.



**Create Summary Wks:** Copy all the charts on the current sheet to a new worksheet in a grid format. You will be prompted to specify the number of columns. This macro also gives you the option to delete all but the first data series from each copied chart, and make the legend entry for the remaining data series be linked to the name of the worksheet where it came from.

Note that this macro can also set up a group of charts for printing hardcopies in a multi-column grid.



**Add Current Wks:** Copy the 1st chart series of each chart on the current worksheet to charts on the preceding worksheet (i.e., to the first worksheet to the left).



**Delete one chart series:** Delete one data series from a group of selected charts on the current worksheet. You'll be prompted for which series to delete. If no charts are selected when the button is clicked, all charts on the sheet will be selected, and then you will be asked which series to delete. So this command can be used to quickly select all charts on a worksheet.



### ***Chart Cursor Mode ...is either “on” or “off”.***

- Zoom & Pan With the Mouse or keyboard
- Versatile Cursor Readout using the Mouse
- Copy/Paste for Points and Axis Scales
- Label points with values & digitize point values to worksheet cells

**To start cursor mode, first select a chart, then Click the Initialize button** 

You can tell if the chart has entered cursor mode by looking at the Excel statusbar..

**To stop cursor mode, do any of the following:**

- a) Click the button in the Ribbon again.
- b) Press Escape until the status bar display returns to normal, or
- c) Deselect the chart, for example by clicking anywhere outside the chart.

## Using Cursor mode

When editing a chart in Excel, it is possible to have nothing selected inside the chart, or select one chart series, or select one point on a chart series.

### ***Cursor Readout in the Status Bar.***

- a) **Free Mode** - If neither a Series nor single data point is selected, read out the location of the mouse pointer in chart units (see note below about precision errors).
- b) **Series Mode** - With a Series selected, readout the coordinates of a tracking crosshair cursor that stays on the series. This feature works with both straight lines between points and Excel's smooth curve option.
- c) **Point Mode** - With a single data point selected, readout the xy values of the data point.

You can also use the keyboard to move from point to point along the selected series. Pressing one of the following keys will do this, and will switch from **Series Mode** to **Point Mode** if necessary.

<b>Left/Right arrow keys</b>	move one point at a time.
<b>Shift+Left/Right</b>	moves 3 points at a time
<b>Shift+Control+Left/Right</b>	moves 10 points at a time
<b>Shift+Alt+Left/Right</b>	moves 30 points at a time
<b>Home/End</b>	moves to the first/last points of the series
<b>Control+Left/Right</b>	moves to the next peak

### ***Zoom/Pan Scale Control***

- a) **Zoom** – Click the mouse with Control held down to start drawing a "Zoom" rectangle, release the control key, click again when done sizing (in Excel 2007 only, press the Escape key to stop resizing the rectangle). Click on the rectangle with the left mouse button to show a popup menu with zoom commands, or press escape to cancel. To move or resize the rectangle after it is drawn, first right-click on it, then left-click on it.
- b) **Pan** - Click the mouse once with Alt held down to start panning mode with the mouse. Click again to accept the pan, or press escape to cancel the pan. Panning can also be done using the combination Control-arrow keys (Control plus up/down/left/right arrow keys).
- c) **Control-A** will autoscale either one or both axes, depending on what's selected.
- d) **Control-Z** will undo the last zoom or pan scale operation.
- e) **Z** and **z** will zoom in an out 50%, centered at the mouse pointer.

### ***Copy/Paste***

#### **Copy** (Control-C)

- a) xy coordinates which are currently displayed in the statusbar (copied as text, x tab y).
- b) All scale properties of the currently selected axis.
- c) All scale properties of both axes whenever the PlotArea is selected.

#### **Paste** (Control-V)

- a) paste xy coordinates as text in standard clipboard fashion.
- b) when a single axis is selected and a single axis is on the clipboard, paste it.
- c) when a single axis is selected but both x and y axes are on the clipboard, paste whichever matches the selection.
- d) when the PlotArea is selected and a single axis is on the clipboard, paste it onto both axes.
- e) when the PlotArea is selected and both x and y axes are on the clipboard, paste both (x to x, y to y).

Note: Axis properties consist of values for max & min for major & minor, and their autoscale settings.

Note: this uses the windows clipboard for points, but its own internal clipboard for axis scales.

Note: You can use the Copy/Paste feature to copy axis scales from one chart to another chart.

## Labeling or Digitizing Chart Points

- a) **Control-L** for labeling or digitizing points.
- Point Mode** - this hotkey will label the point first with its y value, then its x value, and then both x,y values (i.e. like a toggle)
- Free Mode** - the x,y coordinates of the mouse will be placed in worksheet cells at the cell location indicated in the statusbar. The starting cell will be whatever worksheet cell was selected prior to entering cursor mode.
- Series Mode** - the x,y coordinates of the crosshair will be placed in worksheet cells at the cell location indicated in the statusbar.
- b) **Control-D** will clear the cell contents of the last digitized point.

**Note about precision errors** in mouse cursor coordinate readouts. Mouse resolution is always limited to the number of pixels used to display the chart. This places a limit on precision. Also, as strange as it may seem, it is not always possible to determine at exactly which pixels the chart axes are displayed. Most of the time it is correct, but being 1 pixel off is not uncommon, and being off by more than one pixel can also happen. This is due to limitations in Excel. Check the accuracy of the mouse cursor by positioning the mouse over each of the axes, and inspect the values displayed in the statusbar.



## Set Chart Series Properties

- Edit chart series formats for all series in one or more charts
- Square up x and y axes (i.e. so a circle looks like a circle)

This button displays a dialog for changing several chart formatting properties for one or more selected charts.

In addition, if the Shift key is held down when the  button is clicked, the scaling properties of the Y axis are adjusted to make the X and Y axes have equal scales (so circle looks like a circle). This is done separately for each chart which is selected, and no dialog box is displayed.

