

## Chapter III-3 — Drawing

the object and displays the Properties dialog. Use this to set the numeric coordinates for an object to bring it back onscreen. Or you can cancel out of the dialog and then press Delete to remove the object. Retrieve works on controls as well as drawing objects.

The Grid submenu provides options for controlling the grid. See **Drawing Grid** on page III-66 for details.

## Drawing Grid

You can display a grid and force objects to snap to the grid, it is visible or not. You do this using the Mover pop-up menu Grid submenu.

The default grid is in inches with 8 subdivisions. The grid origin is the top-left corner of the window or subwindow. Use the **ToolsGrid** to set grid properties. You can independently specify the X and Y grids and set the origin, major grid spacing, and number of subdivisions.

When grid snap is on, you can turn it off temporarily by engaging Caps Lock.

When dragging an object, the corner nearest to where you clicked to start dragging the object is the corner that will be snapped to the grid. You can also snap existing objects to the grid by selecting the Align to Grid from the Mover popup menu.

### Set Grid from Selection

If a single object is selected, Set Grid from Selection will set the grid origin at the top left corner of the object. If two objects are selected, the origin will be set to the top left corner of the first object and the major grid spacing will be defined by the distance to the top left corner of the second object. If either the horizontal or vertical separation is small then a uniform (equal X and Y) grid is defined by the larger distance. Otherwise the horizontal and vertical grids are set from the corresponding distances.

### Grid Style Function

The Style Function submenu allows you use to create a style function or to run one that you previously created. Style functions are created in the main procedure window with names like *MyGridStyle00*. You can edit these to provide more meaningful names.

## Drawing Coordinate Systems

A unique feature of Igor's drawing tools is the ability to choose different coordinate systems. You can choose different systems on an object-by-object basis and for X and Y independently. This capability is mainly for use in graphs to allow your drawings to adjust to changes in window size or to changes in axis scaling.

You specify the coordinate system using pop-up menus found in the drawing Modify dialogs. The available coordinate systems are:

- Absolute
- Relative
- Plot Relative
- Axis Relative
- Axis

### Absolute

In absolute mode, coordinates are measured in points, or **Control Panel Units** for control panels, relative to the top-left corner of the window. Positive x is toward the right and positive y is toward the bottom. In this mode the position and size of objects are unaffected by changes in window size. This is the default and recommended mode in page layouts and control panels.

If you shrink a window, it is possible that some objects will be left behind and may find themselves outside of the window (offscreen). In addition, if you copy an object with absolute coordinates from one window