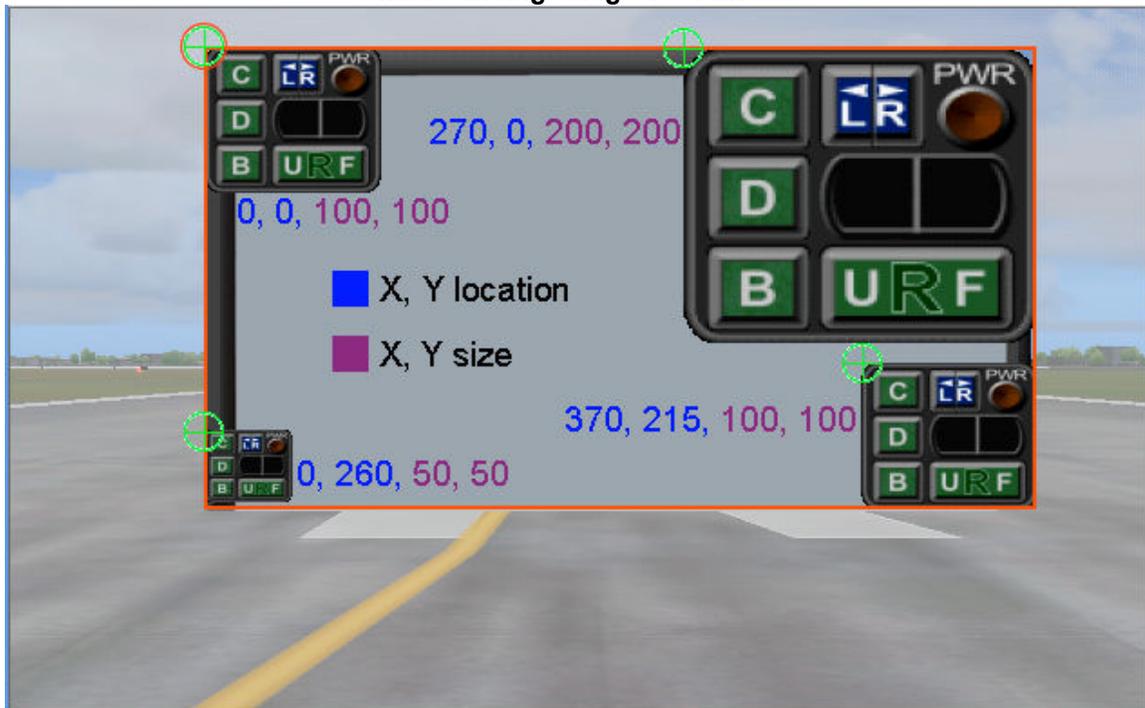


Understanding Gauge Coordinates



The image above shows a demonstration panel for a FS2004 aircraft. The bitmap has been outlined in red to show its perimeter more clearly. The panel has been moved to the center of the Flight Simulator screen and reduced in size for easier viewing.

All gauges were removed from the panel except a demonstration gauge. This gauge has been installed into all four corners of the panel. It is shown in three different sizes.

The origin of the panel (X=0, Y=0) is located at the top, left corner of the PANEL bitmap. That corner is circled in red in the illustration above.

Gauges also have an origin. It too is located at the top, left corner of each GAUGE bitmap. Those corners are circled in green in the illustration above. The origin of one gauge is located at the origin of the panel. The location of that gauge shows a value of X=0, Y=0.

The X, Y coordinates that determine the position of the gauge relative to the origin of the panel bitmap are shown in blue. The X-coordinate is shown first, followed by the Y-coordinate.

The X, Y coordinates that determine the size of the gauge are shown in purple. The X-coordinate is shown first, followed by the Y-coordinate.

Location coordinates are determined by trial and error. Size coordinates are determined the same way. Trial values are typed in the **panel.cfg** file of the desired aircraft. For example,

```
gauge06=PatGauV1!PatGauV1, 20, 60, 100, 100
```

The gauge sequence is shown in yellow. These are consecutive numbers beginning at gauge00 and continuing to gaugeXX. When installing a new gauge, you must continue the sequence by choosing the next available number shown in the **panel.cfg** file. These are normally listed under [Window 00]. This is the window that will display the panel bitmap when FS2004 is running. In the illustration above, Window 00 has been outlined in red. It is completely filled by the panel bitmap. There can be multiple windows open in FS at the same time. Each will have its own unique number and may display other bitmaps such as a compass or engine control.

The name of the **.cab** file for this gauge is shown in red. This is a compressed format and normally will be used as downloaded. This file is placed in the **Gauges** folder within Flight Simulator. This file contains the XML code and images that make up the gauge.

The XML file name is shown in cyan. This is the program that is responsible for operating the gauge. It is given a unique name by the author of the gauge.

The dark blue numbers are location coordinates. See illustration above.

The purple numbers are size coordinates. See illustration above.