

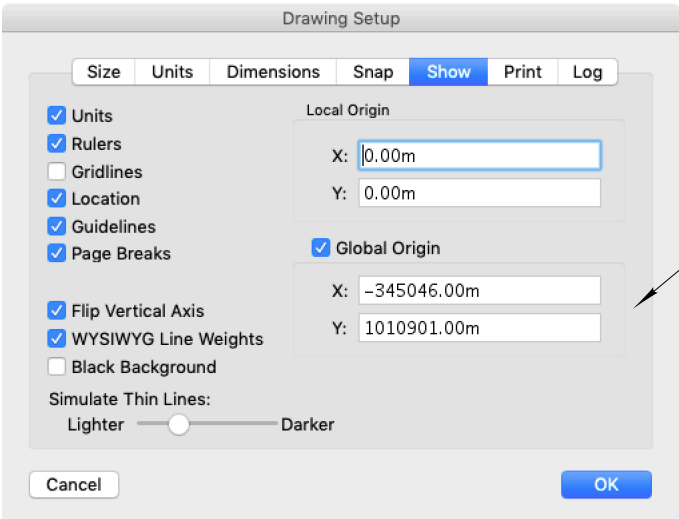
HOW TO SET A DRAWING ORIGIN TO USE GLOBAL COORDINATES
(British Coordinates system)

Drawing origin 0,0
x axis is +ve up
y axis is +ve **down**.
For global coordinates y axis needs to be +ve towards north so use 'flip vertical axis' in Drawing Setup dialog.
[Great Britain uses the Ordnance Survey Grid with an origin that puts the whole of Great Britain east and north of the 0,0 origin point. This makes all coordinates +ve.]

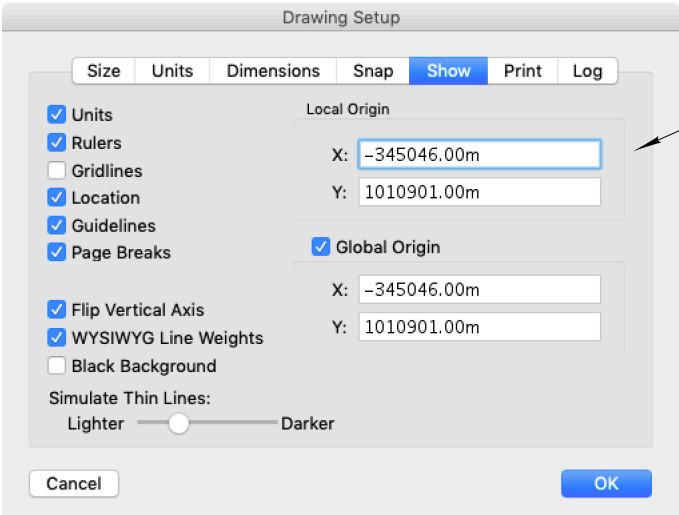
To allow PowerCADD to display the correct coordinates in the example the x-value has to be adjusted by -60m and the y-value has to be adjusted by +20m. So the values to be input in the Global origin boxes are:
GX= X1-X2 (eg **345046**)
GY= Y1+Y2 (eg **1010901**)
These values are applied to all points on the drawing to give the real Global coordinates.
[See note below about the x value input as a -ve figure.]

Actual Global Origin Location.
[in the UK this is off the Cornish coast]

Point on a feature with known Global Coordinate (e.g. **345106,1010881**)
[In Great Britain we use Eastings (x coordinate) and Northings (y coordinate) measured in metres.]
These coordinates come from actual GPS survey data and are cartesian coordinates (the y coordinate is +ve for up)



The Global Origin is the offset values from the Local Origin so you need to find what the offset is from the top left corner of the drawing you're working in to the 0,0 Global Origin. (see above)
The vertical axis is normally down but is now flipped because the y-axis needs to be up for the cartesian coordinates system.
However, the Global origin values are set using the normal drawing coordinates system so the offset is a positive number. (This is what makes setting Global origin so confusing.)
The x axis is same in both systems (left to right) so the x value is negative. Inputting the values in this way gives correct output in the Edit Window.



If you change the Local Origin to the same values as the Global Origin you can use the WildTools Dimension Point tool to mark off the Global coordinates on the drawing.

