

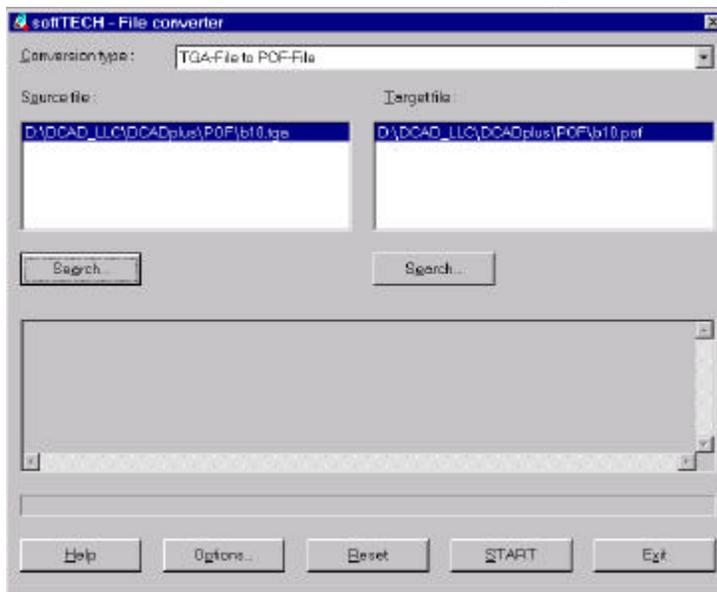
## Importing Bitmaps into DataCAD Plus and Working with Images

You can use bitmap graphics created with other software in DataCAD Plus. To do this, you may need to convert the bitmaps before you can import them into DataCAD Plus.

### Converting Bitmaps

Your bitmap must be in either .TGA or .PCX format.

1. Open the program SWCONV.EXE located in the DCAD\_LLC\DCADplus\BIN folder. The File converter dialog box appears.



2. Click on the drop-down arrow following the Conversion Type field and select TGA-File to POF-File (if you have a .TGA file) or PCX-File to POF-File (if you have a .PCX file).
3. Select the Search... button under the Source File list box and locate the bitmap file. Select all the image files you want to convert.

---

You can convert several files from several folders at a time as long as all files have the same extension (.TGA or .PCX).

---

When you add a file to the Source list, a Target file with the same directory path (folder) and name appears with a .POF extension. If this is OK, go to step 5. If you want to change the Target file directory or name, go to step 4.

4. Click the Search... button under the Target File list box and locate the folder where you want to save the .POF file(s).

---

If you are converting several files from different folders, you can save all the .POF files into one folder. To do this, change the target folder of one file and select Yes when the File converter programs asks "Do you want the path to be used for all target files?"

---

5. Click START to convert the file(s). The lower box tracks the conversion process for each source file. At the end, the message "Conversion finished!" appears.
6. Select Exit to leave the File converter program. Then confirm your decision by clicking on Yes.

## Importing Bitmaps into DataCAD Plus

1. Open your DataCAD Plus program.
2. Choose Import from the File pull-down menu. A submenu is displayed.
3. Choose Image from the Import submenu. The LoadImg menu appears.
4. Activate the toggle switches that you want to use with the image:
  - PixImg – displays pixel images
  - withPAL - imports the color palette associated with the POF image; if you do not select this option, DataCAD Plus will substitute its own colors
  - PixScale – correctly scales the image
5. Click on PixImg 1. You can load up to four images at a time by using PixImg1 through PixImg4.
6. Locate the POF file(s) you converted and click on the filename of the image you want to import. Your cursor changes to an open box.

---

If you stored the converted POF file(s) in the same directory as your DataCAD Plus drawing, a list of filenames appears. Select NewPath if you stored the converted POF file(s) in another directory.

If you do not want the image to retain its original background color, activate Transpar before you click the mouse button.

---

7. Position the cursor where you want the image to appear on your screen and click. The bitmap appears.

## Working with the Imported Image

Once the bitmap image is on your drawing screen, you may want to rescale (resize), move, or trace it.

### Rescaling the Imported Image

To correctly scale an inserted pixel image with at least one straight line:

1. Press [Alt] + [N] to go to the File I/O menu and select LoadImg if that menu is not already displayed.
2. Make sure that PixScale is activated.
3. Select the option Clibrate. You are prompted to "Define first calibration point."
4. Click at the end of a line in the bitmap for the first calibration point.
5. Define this point with an X and Y coordinate of 0. You are now prompted to "Define second calibration point."
6. Click on the other end point of the line segment in the bitmap and enter a value for the X and Y coordinates.

---

If you know the length of this line based on information supplied with the bitmap itself (for example, you may have imported an image that is 13 feet wide), insert that value as the X coordinate and 0 as the Y coordinate. If you want to supply your own values instead, enter those as the second calibration point's X and Y coordinates. For example, if you want the image to be 22 feet long in the X direction, enter 22 for the X coordinate and 0 for the Y coordinate and the bitmap will be calibrated accordingly.

---

7. Press [Alt] + [X] to go to the Measures menu.
8. Select PntToPnt. You are prompted “Select first point of distance to measure.”
9. Click on one end of the line you want to measure. The prompt “Select second point of distance to measure” appears.
10. Click on the other end of the line. The measurement appears in the Infobar.

### **Moving the Imported Image**

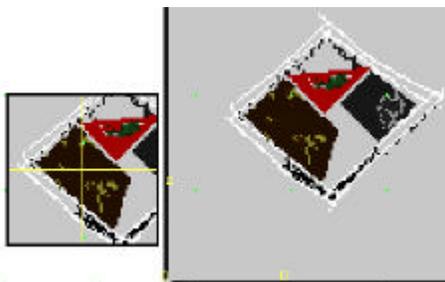
Use the Move option to move a POF image around on the screen:

1. Press [Alt] + [N] to go to the File I/O menu and select LoadImg if that menu is not already displayed.
2. Select Move from the LoadImg menu.
3. Select the POF image by clicking on it.
4. Move your cursor (which changes into a box once you are outside the image's boundaries) and click when it is positioned where you want it. The image appears in its new location.

### **Tracing DataCAD Plus Entities Over the POF Image**

To trace DataCADplus entities over the POF image:

1. Press [/] to go to the Zoom menu.
2. Activate POFCursor.
3. Activate PixWndw. This displays an enlarged window of the POF image when your cursor is over it. This helps you trace DataCAD entities over the POF image.
4. Activate DefPWndw to define the size and position of the pixel window.
5. Define the pixel window by selecting the first corner (e.g., upper left), dragging your cursor, and clicking on the second corner (e.g., lower right) of the rectangular window.
6. Right-click to exit from the pixel window definition.
7. Select ZoomFact to set the enlargement factor of the pixel window.
8. Type a number to indicate the enlargement factor in the entry field and press [Enter]. The pixel window appears. You can use this to trace over the image.



*Pixel Window shown on left*

### **Saving POF Images**

To save a POF image that you imported into your DataCAD Plus drawing:

1. Press [Alt] + [N] to go to the File I/O menu and select LoadImg if that menu is not already displayed.
2. Select SaveConf. The prompt “Enter name of the background file to be saved” appears with the name of the current drawing in the input box.
3. Press [Enter] to save the POF image with that drawing.

### **Reloading POF Images**

1. Open a new drawing in DataCAD Plus.
2. Press [Alt] + [N] to go to the File I/O menu and select LoadImg if that menu is not already displayed.
3. Select LoadConf to reload POF images that you inserted in your DataCAD Plus drawing.
4. Choose the file that contains the image you want to load. The POF image appears in your new drawing.