

# AutoCAD 14/15 and AutoCAD LT 97/98 for Windows

## Printer Setup

- Open AutoCAD or AutoCAD LT. Click CANCEL if the Start Up window appears.
- Click File, then Printer Setup, then New, and then System Printer ADI 4.3. Type in a printer name in the Add a description box (M-360 for example) and click OK.
- In the AutoCAD System Printer Configuration dialog box Deselect all three check boxes, Default to Control Panel Settings, Allow Dithered Output, and Update Pen Table on Device Change, and then click OK. Type "N" and press ENTER when AutoCAD asks if you want to change anything. Click OK to finish the printer setup.

## Pen Assignments

It is recommended that line and text color be set to any of seven colors within the ULS Printer Driver (black, red, green, yellow, blue, cyan, and magenta). These colors correspond to the AutoCAD standard colors assigned to pens 1 through 7. Colors can easily be changed or checked using the **DDMODIFY** command. AutoCAD White color corresponds to ULS Black color. **Any other colors may cause errors during engraving/cutting.** If other pen colors are used, the ULS printer driver will try to match the color that most resembles the pen color used, although some colors may not be recognized at all. It is also necessary to check (and possibly modify) pen widths within the Pen Parameters settings window. From the Print/Plot Configuration window select PEN ASSIGNMENTS. Set pen widths to 0.001 inches for vector output or above 0.008 for raster output.

## Printing Files

The ULS Printer Driver can be accessed through the PRINT command. Select Device and Default Selection and select the printer that was just set up. Select CHANGE, under Device Requirements, and then Properties. The only way to consistently print properly is to access the ULS Print Driver every time you print a file, even if you do not change any settings, and click OK when exiting.

For output viewing and proper printing, select WINDOW, type in the coordinates of the maximum engraving field and click OK. Since AutoCAD cannot plot the entire field, the field size will be smaller by 0.07" in both X and Y axis. This is normal and not adjustable. To preview the file, click "FULL" and then click "PREVIEW" before clicking "OK".

Sometimes, objects moved from outside the printable area into the printable area will not print correctly. If objects are moved, the first step when running into printing problems is to see the full print preview of the file. If there are printing problems, generally it is due to objects outside of the printing area. This problem can be identified by picking the print window coordinates (using PICK, after clicking on the Window box) and by drawing a box around the objects that are to be printed, then looking at the actual coordinates that AutoCAD has chosen for the print window. Likely, the print window coordinates will be well outside maximum engraving area. If this occurs, the file will need to be printed by picking the window rather than typing in the desired window coordinates. Drawing a box on another layer, the size of the maximum engraving area, which is set to be "unprintable" at a size of 31.93 x 17.93 (or 23.93 x 11.93) and selecting the lower left and upper right endpoints during the Pick Window routine is commonly done to properly place graphics on the laser cutting/engraving area.

## Troubleshooting

- Set all lines to one of the standard (pens 1 through 7) colors. Always check pen width in pen assignments.
- Locate lines to within the engraving field area (ex: 24 x 12 inch area).
- AutoCAD origin (0,0) is lower left corner of machine.
- Set print area to print Window of appropriate size (ex: 24 x 12 inches).
- Set the ULS Print Driver print area to match the AutoCAD print Window area.
- Always preview print as full preview.
- Make sure scaling is set 1=1.
- Keep in mind that lines will be cut in the order that they are drawn. If objects are copied, then drawing order is randomized.
- Draw objects as POLYLINES for best results!