

Xitron Plugin Manual



Gretag PlateJet Emerald and PlateJet Sapphire

February 12, 2002

Overview

A Xitron plugin is the sole method of outputting data to an imagesetter or printer from Xitron software. When the Xitron software is launched it scans a directory called "devices" for plugin files. For each plugin it finds, it loads that plugin and begins to query the plugin for a description of the capabilities of the recorders in the family it supports. This includes media widths, resolutions, density ranges, etc. In this manner the plugin configures the RIP to output a bitmap to a recorder in its family.

Plugins for the Xitron software are dynamic link libraries. They act as device drivers for the software and control all actions of an output device. This includes checking device status, device setup, the imaging of data, and advancing and cutting material. The plugin relays to the Xitron software all the physical characteristics of an engine such as supported resolutions and imageable area.

Plugins for use with Windows consist of three software modules. The first is the core plugin that is written specifically for each device. The plugin controls a particular family of recorders and understands the messages and errors. These DLLs consist of 32-bit code and can run under Windows NT and Windows 2000. The second module is a kernel mode device driver. This is the part of the software that communicates with the Xitron interface boards and moves the bitmap data from the PC to the PCI interface board. The third module is a 'helper' DLL that translates calls from the plugin to the Windows device driver.

When a page is sent to an output device to image, the Xitron software loads the correct plugin and begins a series of steps to begin output. First the plugin initializes the engine and checks that it is ready. Assuming it is, it begins to read bitmap data off the hard disk (or renders the data in "Single/If" mode) into the Printer Buffer and tells the plugin where the data is in memory. When the software has filled the printer buffer, the plugin starts the output device. As the output device consumes the data, the plugin relays this information to the software, which then refills the memory. This continues until all of the data has been output. The software then tells the plugin that the job is complete and waits for the plugin to indicate that the recorder has finished. This process is repeated for each page being output to an engine.

Raster Blaster

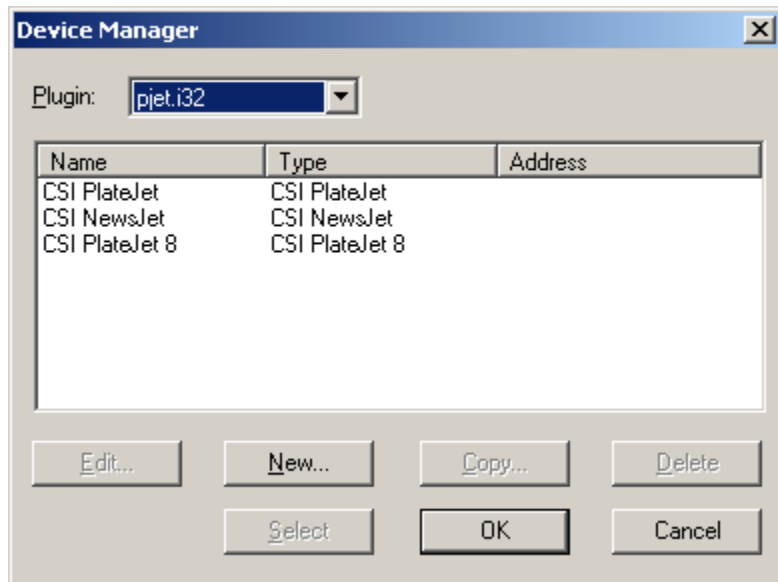
Plugins used by the Xitron Raster Blaster have the same functionality as those for the Xitron Navigator RIP and the same options will be available for configuration. Unless otherwise specified, all the information in this plugin manual will apply. See the Raster Blaster Manual for where to configure plugins in the Raster Blaster.

Configuring Devices

The following section applies only to Navigator RIPs

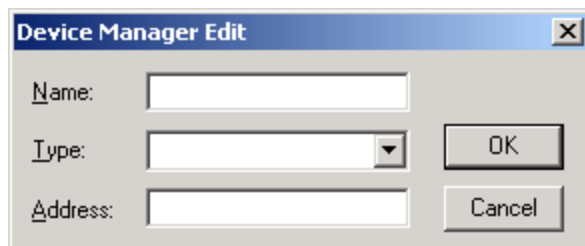
Xitron distributes a separate plugin for each recorder family. This plugin, in conjunction with a SCSI board, has the capability to drive all the devices in a recorder family. More than one plugin can be installed and once and, within a single plugin, more than one engine type can be configured. A plugin must have one device configured before it can be used. Devices are configured using the “Device Manager” which is shown below.

Generally these devices are already configured when the plugin is loaded. In most cases the user will not have to add or configure the devices. The following information about Device Manager is provided for the rare occasion where adding a device becomes necessary.



In the display above, the available PlateJet devices are configured. The Name will appear in the Output device field in the Page Setup dialog box.

To configure a device for a plugin, select it from the listbox labeled “Plugin:”. Click on the “New” button. To edit an existing device, highlight it and click on “Edit” or double click on it in the window. In either case the following dialog box will appear.



Enter the name of the device next to “Name:” as you wish to have it appear in Page Setup. This name is for the users’ benefit so as to remember which device is configured. It can be any string of up to 32 characters. Select the specific recorder from the list box next to “Type:”. Ignore the address field as it is not used. When you have made your selections, press “OK” to keep them or “Cancel” to ignore them.

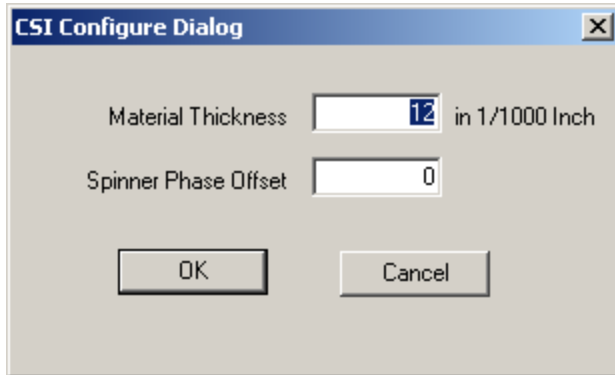
Gretag PlateJet

Xitron supports the following PlateJet recorders: **Note: The PlateJet 8 is driven using the PlateJet plugin.**

- PlateJet Emerald
- PlateJet Sapphire

After installing the Gretag plugin, you will be able to create Page Setups using the plugin. Select the appropriate density and page orientation from the main window of the Page Setup. You should also configure the options specific to the Gretag plugin. Click “Configure Device” under the Device list box. The following dialog box will appear:

For Raster Blaster, see the Raster Blaster manual on *Creating New Devices*.

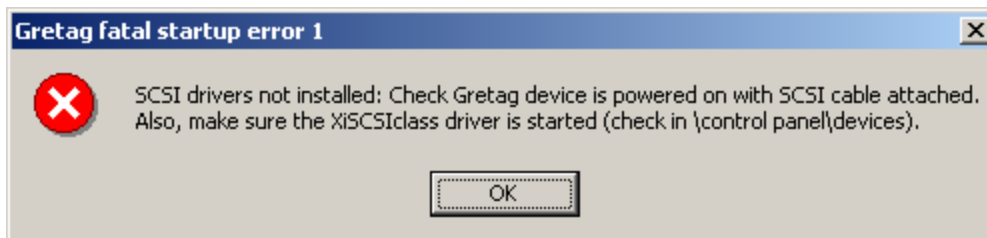


Through this dialog box you can configure the following:

- Material Thickness** This value is entered in 1000ths of an inch
- Spinner Phase Offset** This adjusts the “Spinner Tach Counts”. It should be left at 0 unless a Gretag service engineer suggests otherwise.

Attaching the PlateJet

Both the PC and the PlateJet should be powered off when connecting the SCSI cable. The PlateJet should be powered on before the PC with the Xitron software is powered on so the software will locate it on the SCSI bus. In the BIOS scan for the SCSI adapter, you should see the PlateJet device. On the Adaptec 29160 adapter the “Domain Validation” under Advanced Configuration on the card should be disabled. For more information see the Gretag Service Bulletin PlateJet - #92. When NT boots, the Xitron XCSI class driver, XiScsiClass.sys, also needs to find the PlateJet on the SCSI bus. If the Xitron SCSI class driver finds the device, it outputs two system messages, which can be viewed using “Event Viewer”. If the Xitron software does not locate the device on the SCSI bus, the following error will be generated. **Note: Current versions of Xitron software require a code for SCSI plugins.**



Xitron’s SCSI class driver, XiScsiClass.sys depends on the native NT SCSI port driver. This needs to be installed for the particular adapter you have installed on your machine. Drivers for most major cards, including the Adaptec 29160 that Xitron ships can be found on the Windows installation CD. You can also download the latest drivers from the manufacturer’s web site. The Adaptec web site can be found at www.adaptec.com.

The drivers can be checked or installed from the SCSI Adapter applet in the Control Panel. To check the driver, highlight it and click on the Properties button. This will show whether or not a driver is installed and started. If a driver is not installed, click the “Add...” button. From the Install Drivers” dialog select the manufacturer’s board and the driver for that board.

Connecting SCSI Output Devices to Windows 2000

For some of the SCSI output devices that Xitron drives, Windows 2000 will install a ‘Generic SCSI Printer’ driver. This will prevent the Xitron SCSI class driver from getting access to the output device.

In the normal sequence, the first time that Windows 2000 boots and finds the SCSI device attached, the “New Hardware Wizard” will display a message that new hardware is installed and the user is prompted to reboot. The printer driver must be disabled in the “Device Manager”. Once done, The PC is rebooted and the Xitron SCSI class driver will find the device. For more details see the TechNote *Installing SCSI Printers and Win2K.pdf*.