

Xitron Panther Plugin Manual

For use in configuring and using the Xitron Panther plugin

November 29, 2000

Overview

Xitron's plugin for the Panther series family of imagesetters uses standard SCSI interface cards. As shipped from Xitron, the kit consists of an Adaptec SCSI adapter and a wide to narrow SCSI cable. Currently supported models are the Panther Pro, Panther Pro 36, Panther Plus 36, Panther Pro 46, Panther Plus 46, Panther Plus 52 and the Panther Pro 62.

Plugins

Plugins for the Xitron Navigator RIP are Win32 dynamic link libraries. Plugins act as device drivers for the Navigator and completely control all actions of an output device for the RIP. This includes checking statuses, device setup, imaging of data and advancing and cutting material. The plugin relays to the RIP all the physical characteristics of an engine such as supported resolutions and imageable area.

When the RIP has a page to image on an output device it loads the Panther plugin and begins a series of steps to begin output. The RIP first gives the plugin a chance to initialize the engine and check that it is ready. Assuming it is, it begins to read bitmap data off disk (or render the data in "Single/If" mode) into the Printer Buffer, telling the plugin where the data is in memory. When the RIP 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 RIP, which then refills the memory. This continues until all of the data has been output. The RIP then tells the plugin that the job is over and waits for the plugin to indicate that the recorder has finished. This process happens for each page output to an engine.

Selecting a device for Output

To direct the Rip's output to a specific device, "Page Setup Manager" is used to create and modify page setups. A "Page setup" is a group of settings describing the configuration of the Rip. There can be many page setups in a fully configured rip, one for each "input" to the rip (be it an AppleTalk device, Spool folder, etc.). Select "Page Setup Manager" from the "Xitron Rip" menu item on the main menu bar of the rip. The following dialog will appear:

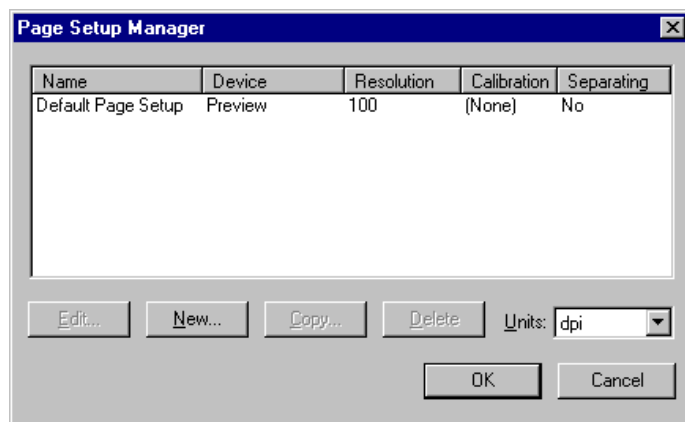


Figure 1 Page Setup Manager

Click on the “New” button to create a new page setup and the following dialog will appear:

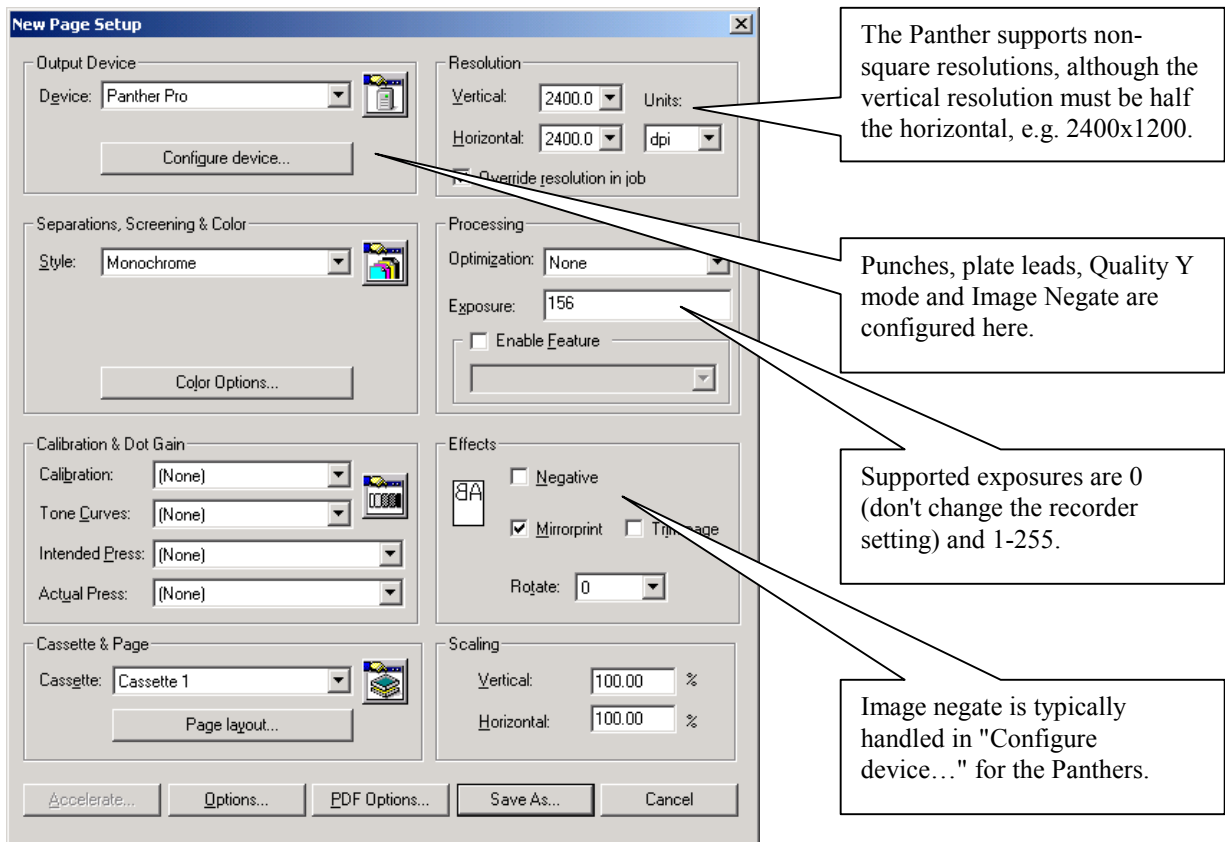


Figure 2 Page Setup Dialog

Use the pull down list box labeled “Output device:” to select the appropriate device. Highlights for configuring the Panther imagesetters are labeled above.

For more information on the other settings on this dialog, refer to the Navigator NT Rip manual.

Additional configuration available through “Configure Device”

The push button labeled “Configure Device” in the above dialog is used to access parameters that are specific to the Panther plugin. Clicking on this button will produce one of the following dialogs, depending on whether your Panther has punches installed:

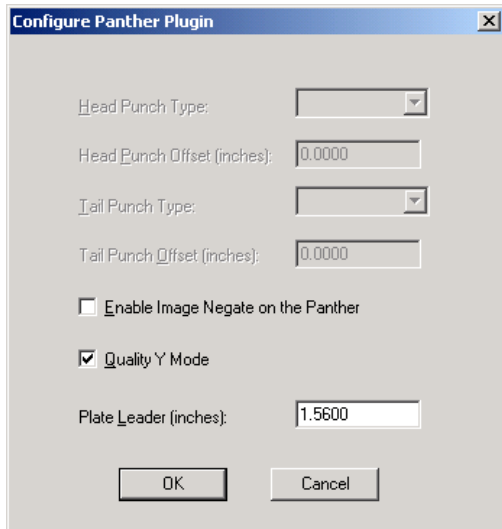


Figure 3 Configure device... for a Panther with no punches.

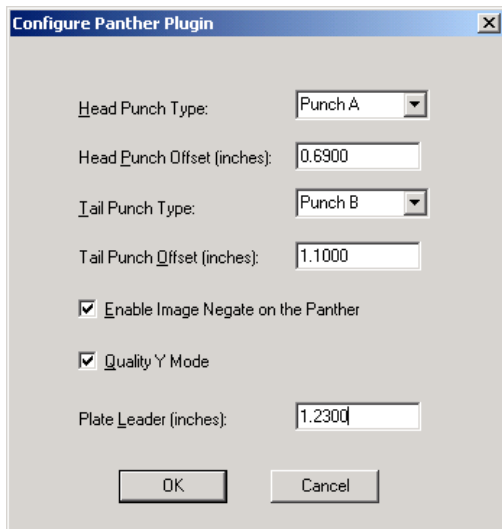


Figure 4 Configure device... for a Panther with punches.

From this dialog box you may configure the following options:

- Head/Tail Punch Type: Select the type of punches installed on your Panther, if you want the material punched. Selecting “None” will disable the punch at that station.
- Head Punch Offset: Enter the length in inches of the punch from the leading edge of the material.
- Tail Punch Offset: Enter the length in inches of the punch to the trailing edge of the material.
- Enable Image Negate on the Panther: Checking this box enables image negate on the Panther. This is recommended over Image Negate in Page Setup since the Panther does a better job of burning out the media.
- Enable Image Negate on the Panther: Checking this box enables image negate on the Panther. This is recommended over Image Negate in Page Setup since the Panther does a better job of burning out the media
- Quality Y Mode: This enables a special mode on the Panther for Y resolutions of 1800 dpi and below, where scanlines are doubled.
- Plate Leader: Enter the amount of extra media to be fed before each image on the Panther.

Attaching the Panther recorder to the Navigator Rip

In order for the Navigator RIP to find the Panther on the SCSI bus, it should be powered on before the RIP PC is powered on. Both the PC and the recorder should be powered off when connecting the SCSI cable. In the BIOS scan for the SCSI adapter, you should see the Panther device. When NT boots, the Xitron SCSI class driver, XiScsiClass.sys, also needs to find the Panther on the SCSI bus. If the Xitron SCSI class driver finds the device, it outputs a system message, which can be viewed using “Event Viewer”.

SCSI Drivers

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 in your machine. Drivers for most major cards, including the Adaptec 2940-UW that Xitron ships, can be found on the Windows NT CD. You usually also download the latest drivers from the manufacturers’ web site. The Adaptec web site can be found at <http://www.adaptec.com>.

To check on or install the drivers go to the “SCSI Adapter” applet in Control Panel. From this you can tell if a driver is already loaded. The following is a screen shot of the applet which displays the Adaptec interface card that NT has identified. This does not necessarily mean that a driver is installed.

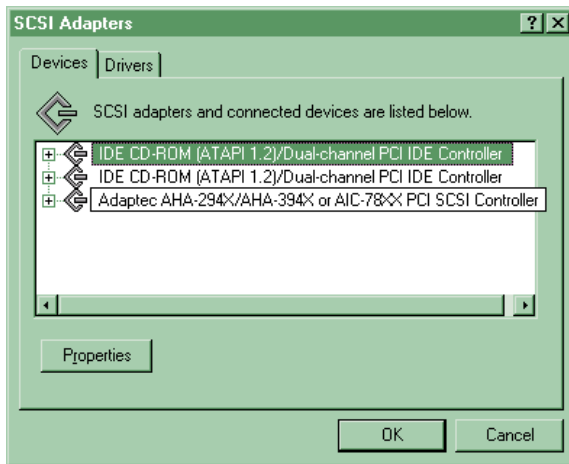


Figure 5 Windows NT SCSI Adapters applet

To check the driver, click on the “drivers” property tab. The applet will now display:

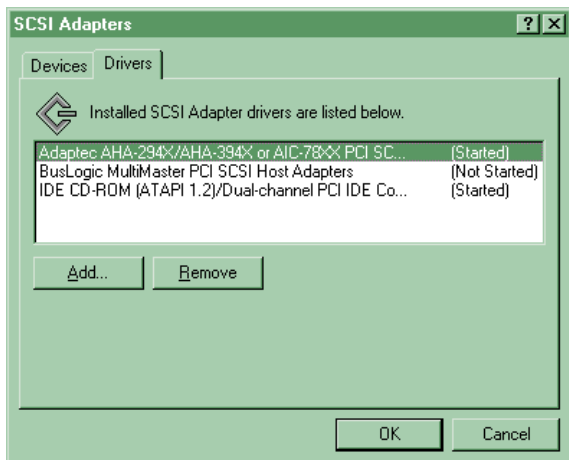


Figure 6 Adding or checking a SCSI adapter driver

The first line here shows that the Adaptec driver is installed and started. If a driver is not installed, click on the “Add...” button. From the “Install Driver” dialog you can select the manufacturers board and the driver for that board. The following screen shot shows the selection for the Adaptec 2940 that Xitron ships with the Panther RIP kit.

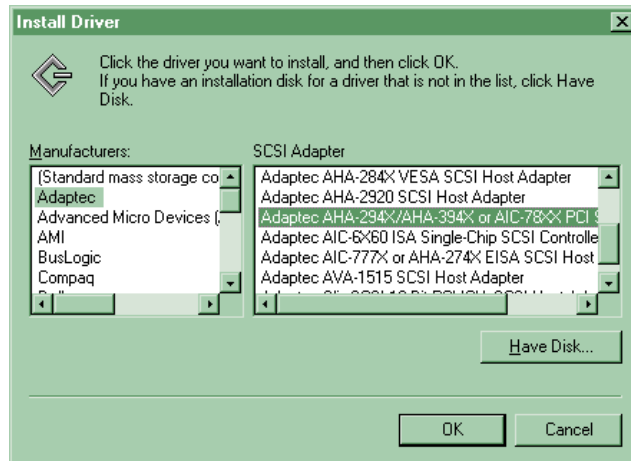


Figure 7 Installing an additional driver

Error Messages

This table contains the list of error messages that are unique to the Panther plugin. The first column is the short message that appears in the Output Controller and the second column is the long string which appears in the System Monitor window at debug levels above zero.

Errors Reported by the Panther

The first table contains message generated as a result of error codes returned by the Panther.

Short Message	Long Message
Misc Fail	The Panther reports the error code 1, "Misc Fail".
Quit Error	The Panther reports the error code 2, "Quit Error".
Operation Cont.	The Panther reports the error code 3, "Operation Continue".
Fifo Empty	The Panther reports the error code 4, "Fifo Empty".
No page to reimage	The Panther reports the error code 5, "No page to reimage".
Touch memory	The Panther reports the error code 6, "Touch memory".
Polygon	The Panther reports the error code 16, "Polygon".
No EOS	The Panther reports the error code 17, "No end of scan"
Media Jam	The Panther reports the error code 32, "Media Jam"
Media Out	The Panther reports the error code 33, "Media Out"
No Takeup	The Panther reports the error code 34, "No Takeup"
Cover Open	The Panther reports the error code 35, "Cover Open"
Door Open	The Panther reports the error code 36, "Door Open"
Cutdone pending	The Panther reports the error code 37, "Cutdone pending".
Cutter jam	The Panther reports the error code 38, "Cutter Jam".
No OLP	The Panther reports the error code 39, "No online processor".
No smart cassette	The Panther reports the error code 40, "No smart cassette".

Short Message	Long Message
Not Ready	Waiting on the Panther to become idle.
Unimplemented	Unimplemented Error Handler.
Offline	The Panther is offline at the keypad.
Local Error	The Panther is reporting: "Local Error".

Errors Generated by the Plugin

The second table contains message generated as a result of an error detected by the plugin itself. These are typically configuration errors.

Short Message	Long Message
Bad resolution	You have selected an unsupported resolution on the Panther
Bad exposure	The exposure value for this job is invalid; Range is 0-255
No Driver	The required SCSI Class driver is not present or not started.
Quality Y error	The Quality Y mode is not valid for Y resolution over 1800.
Half Y res error	In Half Y mode, the X resolution is not twice the Y resolution.
Resolution mismatch	The X resolution does not match the Y resolution, and Half Y is enabled.
Quality Y error	Quality Y mode invalid at 1800x1800 dpi.