

8972PX

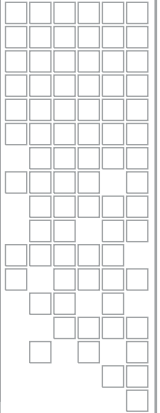
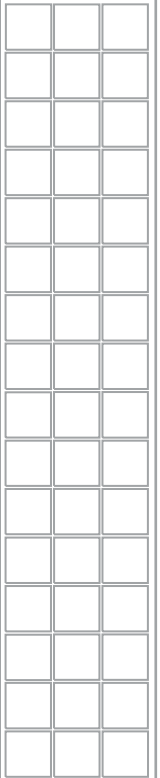
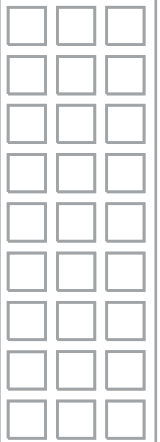
HD/SD/ASI PROTECTION SWITCH

Release Notes



SOFTWARE VERSION 1.1.0

071862400
NOVEMBER 2007



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Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

FAQ Database — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

Software Downloads — Download software updates, drivers, and patches.



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For further information on the Grass Valley product take back system please contact Grass Valley at + 800 80 80 20 20 or +33 1 48 25 20 20 from most other countries. In the U.S. and Canada please call 800-547-8949 or 530-478-4148, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.thomsongrassvalley.com/environment



Contents

- 8972PX Protection Switch
Module Release Notes** 5
- Introduction 5
- 8972PX Version 1.1.0 Software Overview 5
- Version 1.1.0 Major Enhancements 5
- Version 1.1.0 Resolved Software Issues 6
- SNMP Management 6
- System Config Web Page 10
- Software Updating 11
- Using NetConfig to Update Software 11
- NetConfig Update Procedure 12
- Updating Software with a MicroSD Card 15
- MicroSD Card Update Procedure 16

8972PX Protection Switch Module Release Notes

Introduction

These release notes provide important information on the latest release of the 8972PX Protection Switch module. This release provides major enhancements from the previous software version 1.0.2.

These release notes contain the following sections:

- 8972PX 1.1.0 Software Overview
 - Version 1.1.0 Major Enhancements ([page 5](#))
 - Version 1.1.0 Resolved Software Issues ([page 6](#))
- Software Updating Procedures ([page 11](#))

8972PX Version 1.1.0 Software Overview

The major enhancements for the 8972PX module from version 1.0.2 are summarized below. Refer to the page link for detailed information.

Version 1.1.0 Major Enhancements

- Two additional read/write SNMP commands (input selection and mode of operation) have been added with this release. Using this new SNMP functionality requires an 8900NET module in the GeckoFlex frame running version 4.2.0 software and use of the version 2.0.0 MIB ([page 6](#)), and
- A new control has been added to the System Config web pages to set the packet length of the DVB/ASI input stream to 188 or 204 bytes on the System Config web page ([page 10](#)).

Version 1.1.0 Resolved Software Issues

The following software issues have been resolved in this release:

- The minimum GPI contact closure time has been reduced and fixed.

SNMP Management

In addition to the standard 8900 module SNMP monitoring reporting, the 8972PX module allows two read/write parameters to manage the input selection (Input Select) and module mode of operation (Switchback Strategy) through the SNMP interface. The 8972PX module must be in a GeckoFlex frame with an 8900NET module running software version 4.2.0 or later, and the MIB (Management Information Base) version 2.0.0 must be used.

The MIB is available from the Thomson Grass Valley ftp site at this location:

<ftp://ftp.Thomsongrassvalley.com/modular/MIB/v2.0.0>

Using Additional SNMP Commands

To select the program input, use this parameter

(mcmFssInputSelect, OID 1.3.6.1.4.1.4947.2.3.2.1.2.4.1.8.slot#)

- input-primary (1)
- input-secondary (2)
- input-alternate (3)

To select the mode of operation, use this parameter:

(mcmFssSwitchbackStrategy, OID 1.3.6.1.4.1.4947.2.3.2.1.2.4.1.73.slot#)

- maintain-stability (1)
- maintain-primary (2)
- manual (3)

Note the following about using these commands:

- Setting the Program Input via SNMP (set mcmFssInputSelect) is equivalent to forcing the input with NetConfig.
- Reading the Program Input via SNMP (get mcmFssInputSelect) is just receiving information about the current input.
- Setting the Switch Mode via SNMP (set mcmFssSwitchBack-Strategy) is equivalent to forcing the Switch Mode with NetConfig.
- Reading the Switch Mode via SNMP (get mcmFssSwitchBack-Strategy) is just receiving information about the current Switch Mode.

Note These two parameters behave the same with SNMP as for NetConfig or using the Newton Control Panel. In particular, if a specific input is forced, the module mode of operation becomes Manual.

For help in locating these MIB commands, the Input Select command is highlighted in the tree in [Figure 1 on page 8](#) and the Switchback Strategy is highlighted the tree in [Figure 2 on page 9](#).

Figure 1. Input Select MIB Location

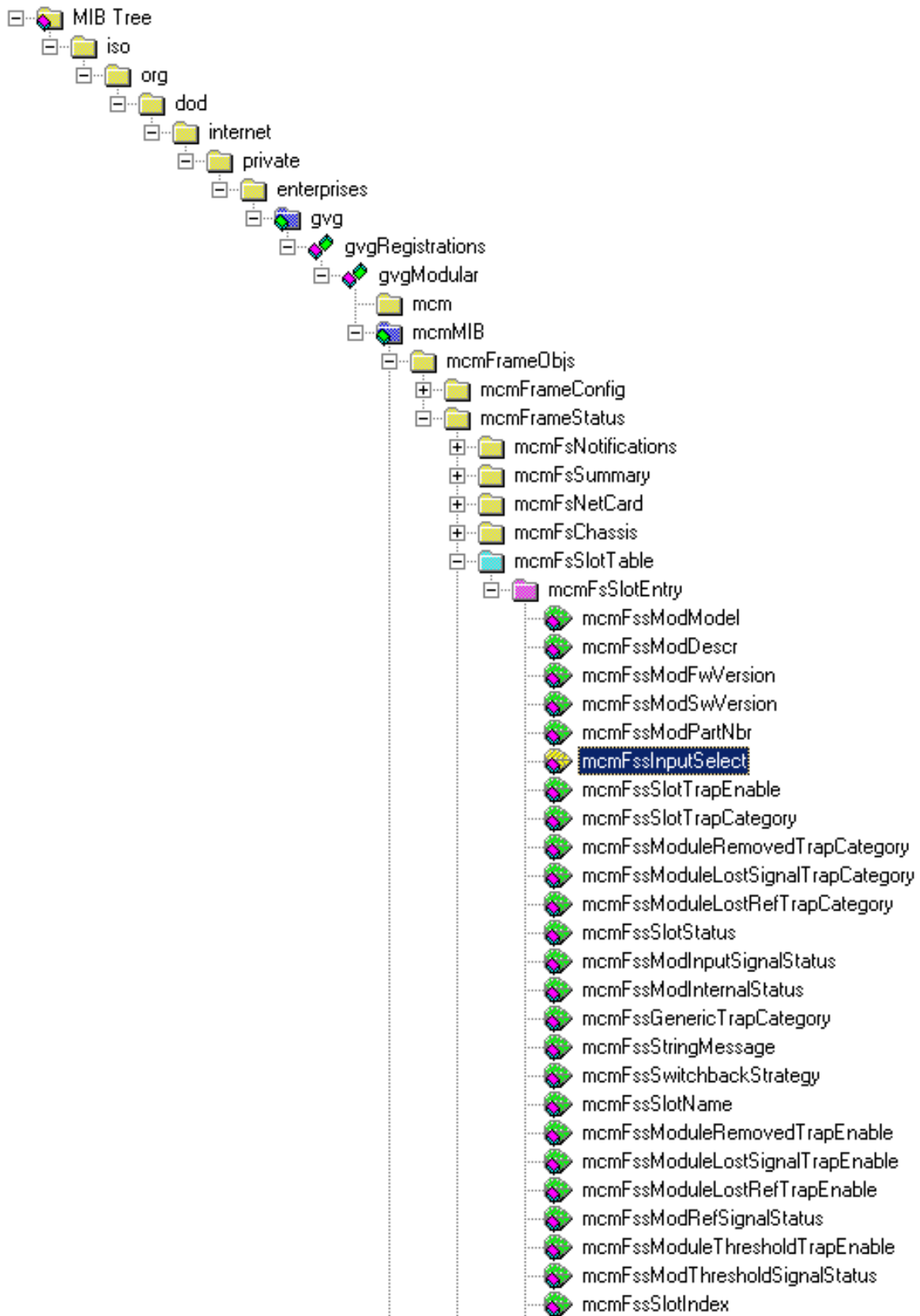
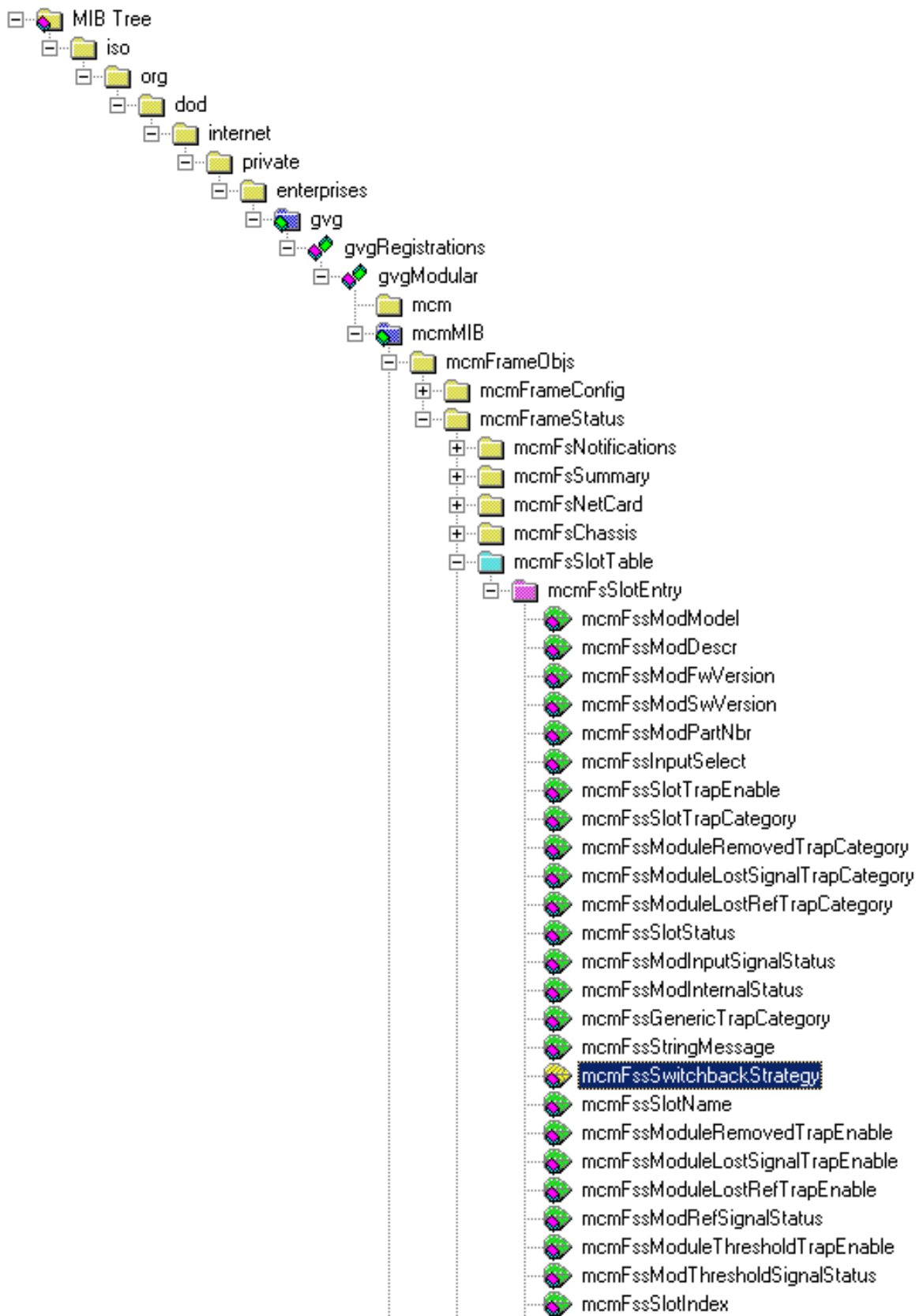


Figure 2. Switchback Strategy MIB Location



System Config Web Page

[7 8972PX](#)

[Status](#)

[I/O Config](#)

Use this link

[System Config](#)

[HD/SD Criteria](#)

[DVB/ASI Criteria](#)

[Output Control](#)

[User Settings](#)

[Slot Config](#)

The System Config web page (Figure 3) now has a control for selecting the DVB/ASI packet length (in bytes) as 188 or 204. The module will default to 188 bytes.

Figure 3. System Config Web Page

System Config

Model: 8972PX Description: HD/SD/ASI Protection Switch
Frame Location: not assigned , Slot: 1

Primary Input:	Present	Status:	Good	Standard:	480i/59.94
Secondary Input:	Present	Status:	Good	Standard:	720p/59.94
Alternate Input:	Present	Status:	Good	Standard:	1080i/59.94
Program Output:	Primary Input : Primary In			Standard:	480i/59.94
Backup Candidate:	Secondary Input : Secondary In			Standard:	720p/59.94

Input Standard Selection

Input Standard
Auto

- Auto
- DVB/ASI
- HD 1080i/59.94
- HD 720p/59.94
- HD 1080i/50
- HD 720p/50
- SD 480i/59.94
- SD 576i/50

Bypass Mode

Bypass Mode Control

Passive Bypass Only Active Processing Enabled

Alternate Input Usage in Autonomous Switch Mode

Use Alternate Input Disable Enable

DVB/ASI Packet Length

Packet Length (in Bytes) 188 204

Defaults

Software Updating

There are two methods to update software: the Grass Valley PC application NetConfig (available from the Thomson Grass Valley web site free of charge) or using a microSD card (requires purchase of microSD card and adapter and USB card reader). Software loading times are somewhat shorter using the microSD method and multiple module type software update files can be loaded onto the microSD card for easy updating.

After this new version of software is installed using either method, you will need to recall factory default values to the module using the **Set Factory Defaults** and the **Set Factory Names** buttons on the User Settings web page. This will update the module with any new parameters that have been added.

This will also require reconfiguration of the module parameters. Saved User files can no longer be loaded to the module due to the revised software structure for the new functionality. If you have configurations you would like to save, write them down or take screen shots of the you want to reload before loading the new software.

Using NetConfig to Update Software

The NetConfig networking application is a highly versatile tool for both software updating and accessing modular products on the network to view status and set module parameters. If you do not have NetConfig or the latest version (2.0.8), you can download it free of charge from the Thomson Grass Valley ftp site at this URL:

<ftp://ftp.thomsongrassvalley.com/router/NetConfig/Version 2.0.8/>

1. Right-click on the latest NetConfig link to download the zipped file to the C:\temp folder or other convenient location on your PC.
2. Extract the zipped files onto your local drive:
3. Double-click on the NetConfig.EXE file to install NetConfig.

Note Installing NetConfig into the default location given in the install script (C:\Programs\Grass Valley Group) is recommended for future NetConfig and module software updates.

NetConfig Update Procedure

To update with NetConfig you must have the following:

- PC with NetConfig Networking application installed (version 2.0.8 is the latest version available),
- IP connection between the GeckoFlex frame and your PC, and
- 8900NET module in the GeckoFlex frame with software 4.2.0 or later.

Follow the steps below to update the modules with NetConfig:

1. Locate the 8972PX module software on the Thomson Grass Valley ftp site at this URL:

<ftp://ftp.thomsongrassvalley.com/modular/8900/8972PX/v1.1.0>

2. On your local C:\ drive, locate the NetConfig program directory. This directory is normally in the default location in C:\Program Files\Grass Valley Group\NetConfig.

If you have installed NetConfig in another location, find the location of the NetConfig directory by right-clicking on the NetConfig shortcut. Select **Properties** and note the location in the **Start In** field.

3. To update the 8972PX modules, copy the .fld and .sw2 files listed below into the main NetConfig directory from the ftp site.

- 8972PX_v1.1.0.sw2
- 8972PX_v1.1.0.fld

4. In the main NetConfig directory, locate a folder named **modular**. If this folder does not exist, create a folder called **modular** in the main NetConfig directory.

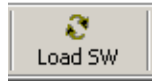
5. Move the .fld file listed above in the main NetConfig directory into this **modular** directory.

6. Verify that the 8972PX_v1.1.0.sw2 is in the main NetConfig directory (not in the **modular** directory).

Note NetConfig reads each .sw2 file in its main directory and navigates to the directory given in these files to find the .fld files available. There may be a number of .sw2 and .fld files in your NetConfig directory for other modular products. These will not interfere with the update.

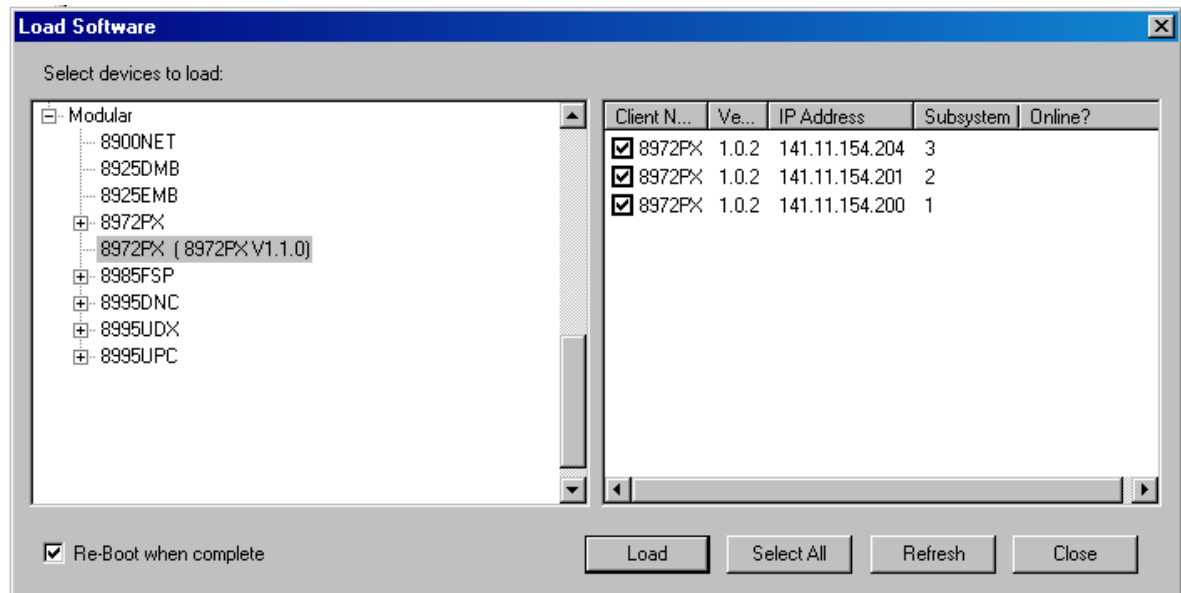
7. Open NetConfig by double clicking on the NetConfig icon.

Note If you have not used NetConfig before, refer to the *NetConfig Instruction Manual* included during installation in the main NetConfig directory in PDF format (NetConfig.pdf).



8. Click on the **Load SW** button on the top of the NetConfig toolbar.
9. Open the **modular** directory by selecting the +. You should see the 8972PX selections (as well as other .sw2 files you may have in your modular directory).
10. Open the 8972PX directory by selecting the +.
11. Select the **8972PX (8972PX V1.1.0)** directory to highlight it.
12. This will bring up all of the 8972PX modules on your network on the right side of the screen as shown in [Figure 4](#).

Figure 4. NetConfig Load Software Screen



13. Check the 8972PX module checkboxes you wish to update in the Client Name list. You may update all devices at once if desired by clicking on the **Select All** button at the bottom of the screen. This will check all the modules. Or you may only check the corresponding checkbox only next to the specific modules you need to update.
14. Check the **Re-Boot when complete** checkbox in the lower left corner of the Load Software screen.
15. Select the **Load** button to update all selected modules.

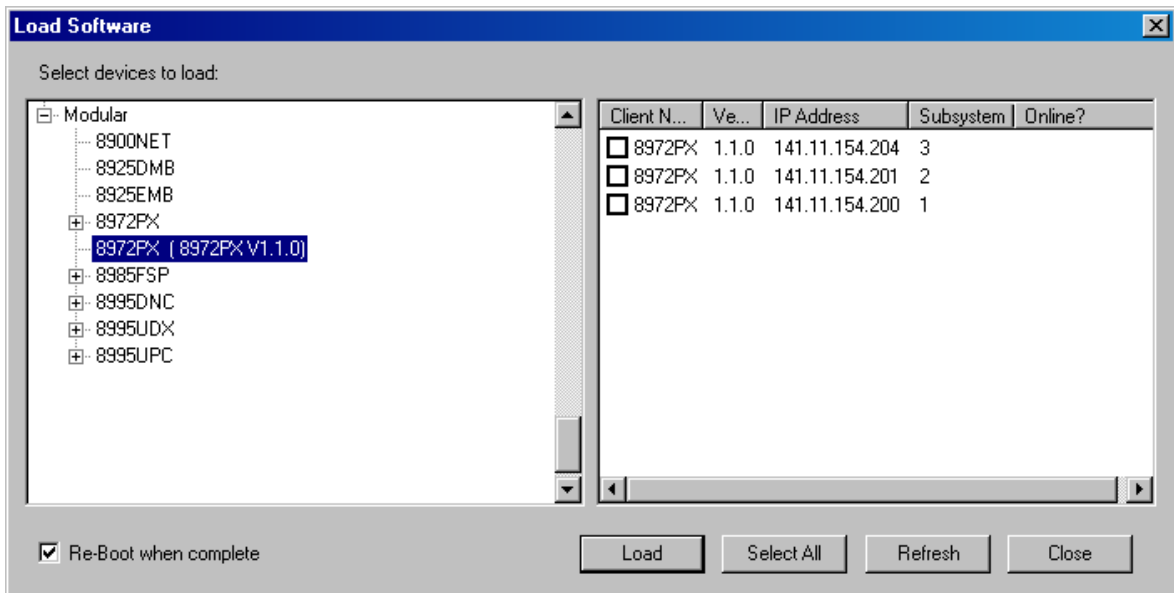
16. If the upload has been successful, a pop-up screen similar to the one shown in [Figure 5](#) will appear.

Figure 5. Load Successful Popup



17. When the software update has finished, check that the software version for each module in the Client Name list is at version 2.0.0 as shown in [Figure 6](#).

Figure 6. Updated Software Version Shown in NetConfig



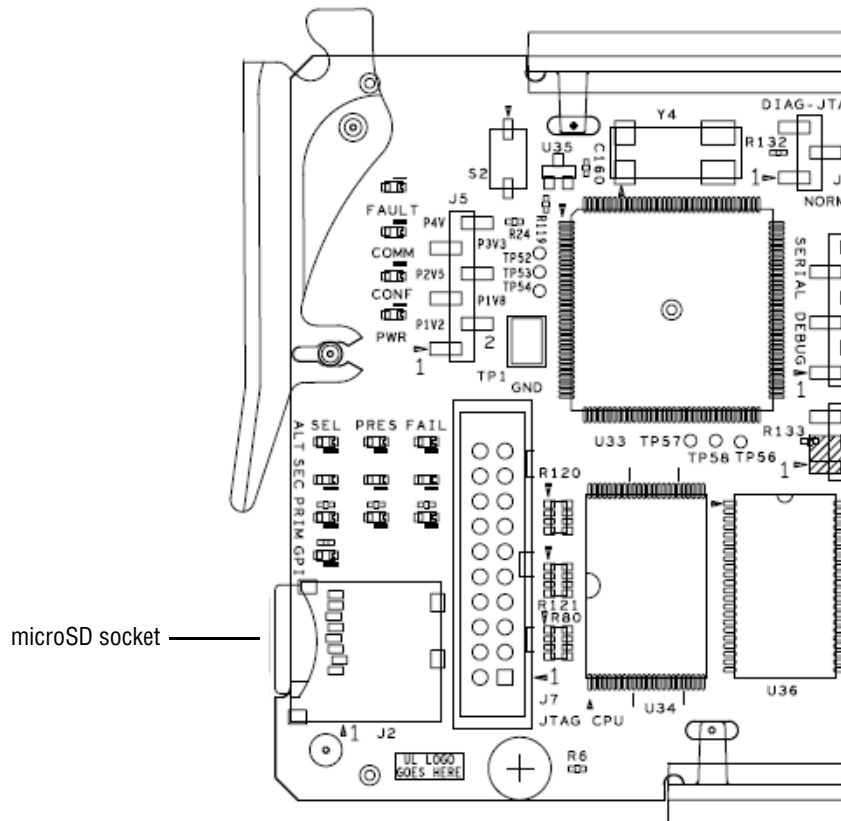
18. Check the Status web page on the main module for the correct software version ([Figure 10 on page 19](#)).
19. Verify proper operation of the module.
20. Now link to the User Settings web page and select the **Set Factory Defaults** and **Set Factory Names** button. This will return the module to the factory default values and update the module with the new parameters for this release.

Updating Software with a MicroSD Card

The 8972PX modules have been equipped with a microSD socket (J2) located on the front of the module to accept a microSD flash memory card for updating software (Figure 7). Using this method requires the purchase of microSD hardware by the customer.

The microSD is a standard flash memory card format commonly used in cell phone and digital cameras for storage. The benefit of this socket is to save time in loading software to modules and ease of software upload.

Figure 7. MicroSD Socket

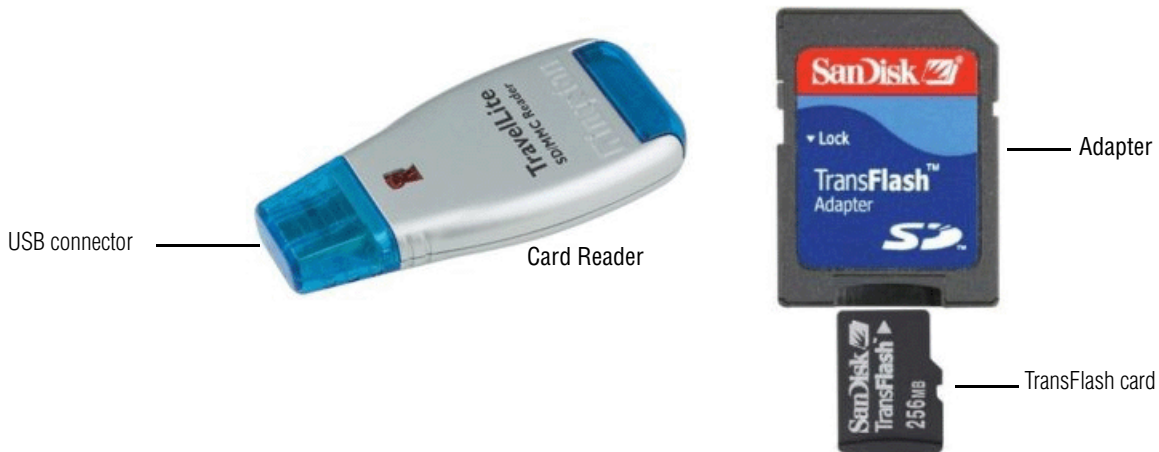


The required components for doing this method are the following:

- USB SD/MMC card reader for connecting to a PC to load the .upd software file onto the microSD card in the adapter. Any type of card reader can be used. (A Kingston TravelLite FCR-HS2MMC/SD shown at the left of Figure 8 is used for this example.)
- Any TransFlash card with at least 256Mb of memory and an adapter for inserting the TransFlash card into the card reader (The SanDisk 256MB SDSDQ-256-A10M shown on the right in Figure 8 is used for this example.)

The devices shown here are only examples of the devices needed to transfer and upload the .upd type software files to update your 8972PX software. You may use any devices that meet the descriptions given above.

Figure 8. MicroSD Devices (Examples Only)



MicroSD Card Update Procedure

Follow the steps below to update your software:

Note Use standard anti-static precautions when handling these devices.

1. Locate the module software for the 8972PX update on the Thomson Grass Valley ftp site at this URL:

<ftp://ftp.thomsongrassvalley.com/modular/8900/8972PX/v1.1.0>

1. In the 8972PX/v1.1.0 module folder, find the .upd files for this update as listed below:
 - 8972PX_v1.1.0.upd
2. Copy the appropriate .upd file for the modules you wish to update into a folder on your PC desktop.

3. Slide the TransFlash card into the TransFlash adapter as shown in [Figure 8 on page 16](#).
4. On the wide end of the card reader, pull the blue cover out then snap the cover up.
5. Insert the adapter into the card reader with the adapter label facing up and snap the blue cover back into place.
6. Remove the cover from the USB connector end of the card reader and attach the USB card reader to a USB port on your PC.
7. Browse to this card reader drive device on your PC and copy the .upd files provided to the card reader drive.
8. On the card reader drive, remove any previous update files for 8972PX software. The 8972PX_v1.1.0.upd should be the only 8972PX file.

Note You may have a number of different .upd files on the flash card but you may not have two of the same module type files (8972PX_1.0.2.upd and 8972PX_1.1.0.upd for example).

9. Remove the card reader from the PC USB port.
10. Remove the adapter from the card reader.
11. Carefully remove the TransFlash card from the adapter, pull the 8972PX module out of the frame and place the SD card into the socket on the front of the module so the label side is to the outside as shown in [Figure 9 on page 18](#).
12. Insert the module back into the frame to reboot and start the update process.

Note If the module does not recognize the microSD card or does not reboot, use the NetConfig method described in [Using NetConfig to Update Software on page 11](#).

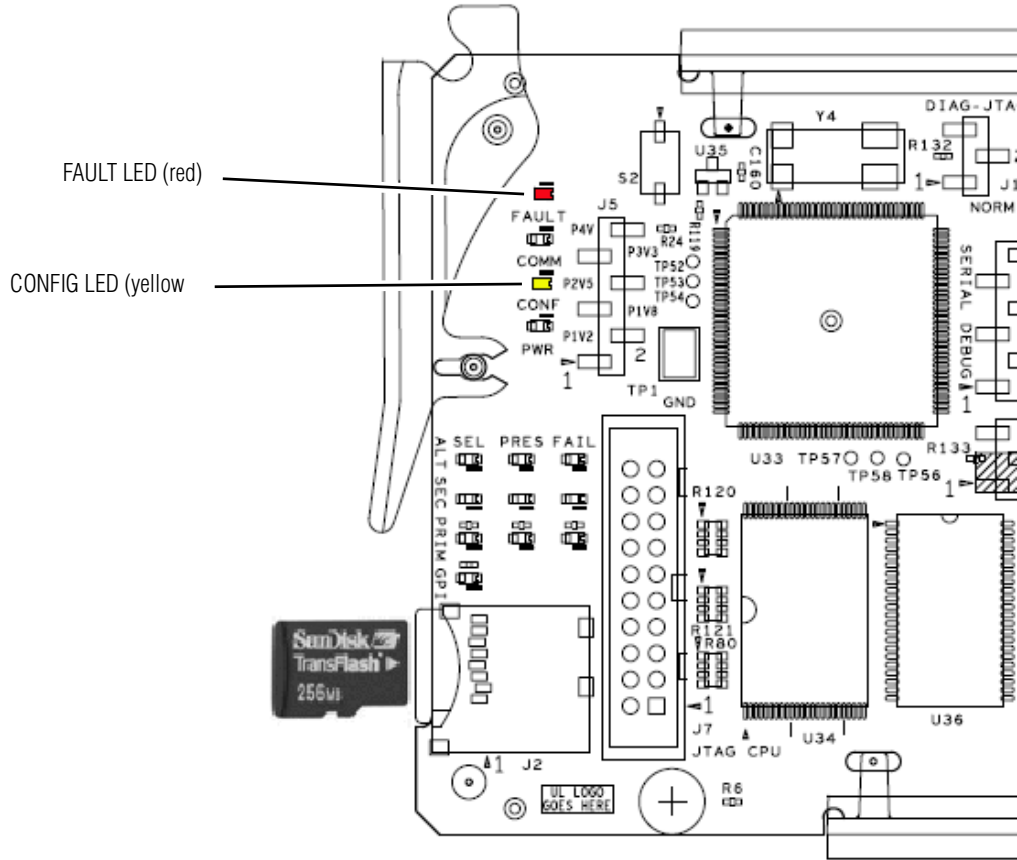
During the module reboot, when a card is inserted in the socket, the application will not be loaded to the module. The module will search the card for the correct file types and device class information and load these into the onboard flash memory. This process is automatic and requires no action on your part.

While the boot code is loading the update, the Config LED ([Figure 9 on page 18](#)) on the module will indicate the progress. If the Config LED is lit, the boot code is currently writing the update to flash.

If the FAULT LED begins flashing ([Figure 9 on page 18](#)), a failure to update has occurred. A failure to update can occur when the microSD card cannot be read, no .upd files are found for the module's device class, or multiple files are found for the same module type.

When the Config LED goes off, the update is complete. Remove the module, remove the microSD card, and reinstall the module to return to normal operation.

Figure 9. Insert TransFlash Card into Module Socket



13. Once the module has rebooted completely and the Config LED is off, check that the Status web page is similar to the one shown in [Figure 10 on page 19](#) and verify module operation.
14. Once software is updated, you will need to update the module by selecting the **Set Factory Defaults** and **Set Factory Names** buttons on the User Settings web page.

Figure 10. Status Web Page

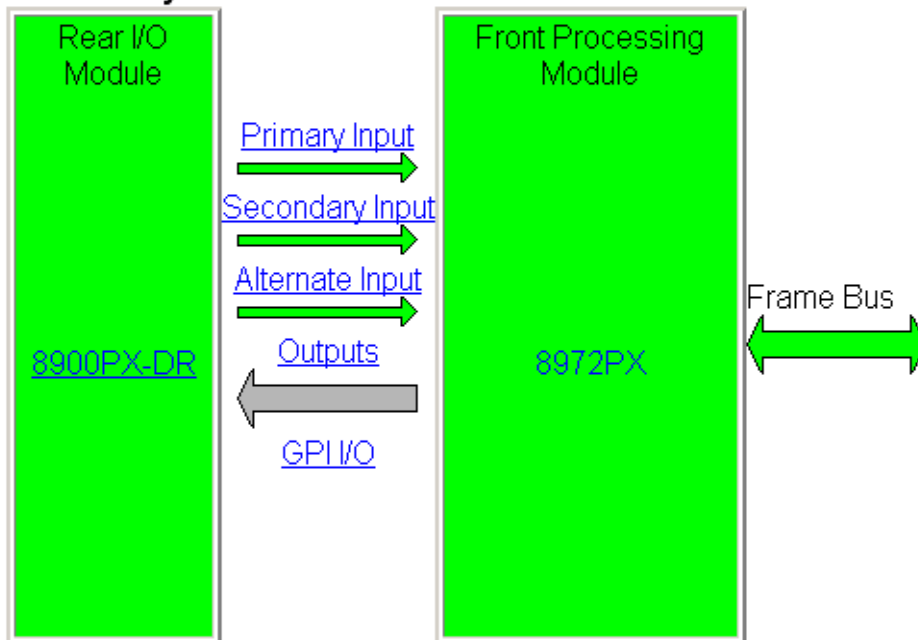


Model: [8972PX](#) Description: [HD/SD/ASI Protection Switch](#)

Frame Location: [not assigned](#) , Slot: 1

Primary Input:	Present	Status:	Good	Standard:	480i/59.94
Secondary Input:	Present	Status:	Good	Standard:	720p/59.94
Alternate Input:	Present	Status:	Good	Standard:	1080i/59.94
Program Output:	Primary Input : Primary In			Standard:	480i/59.94
Backup Candidate:	Secondary Input : Secondary In			Standard:	720p/59.94

Module Physical Structure



Status:

Front Module: [PASS](#)

Rear Module: [PASS](#)

Update successful

Front Module:

Part Number: [771-0324-00](#)
 Serial Number: [RN0710295748AA](#)
 Hardware Revision: [00](#)
 Firmware Version: [1.0.1](#)
 Software Version: [1.1.0](#)
 Boot Version: [1.2.0](#)
 Asset Tag:

