SX48 “Manual Patching” Procedure

Introduction

The following procedure outlines the process for manually internally patching the MADI I/O on a SX48 unit. This is particularly important for units with 1.00.50 firmware, which have a known 8 channel “gap” in their default patch mapping

Parts required

- 1 X SX48
- 1 X PC with free 10/100/1000 ethernet network port
- Telnet-capable command line software
  (recommend “TeraTerm”, available from FairlightAU)

Tools required

- 1 X “Crossover” 10/100 network cable
- 1 X network isolated PC or laptop

Procedure

The following procedure requires direct Ethernet network access to the SX48 unit.

The network communication part of the process can be achieved by any PC terminal that can “Ping” the SX48 IP address. However, it WILL require the PC to be on a fixed IP address.

If this will cause significant issues to the wider network, the use of an entirely isolated PC or laptop with a “crossover” network cable, connected directly to the SX48 unit, is advised.

- **Configure the PC network port to a static IP address, with the same primary values as the SX48**

For example, the default IP address for a SX48 is

IP address : 192.168.3.253
Subnet mask : 255.255.255.0

So a working “static address” for a PC being used as a SX48 configuration terminal would be

IP address : 192.168.2.64
Subnet mask : 255.255.255.0

- **“Ping” the SX48**

Using Windows “Command Line” DOS window, “Ping” the current SX48 IP address

(By default, all SX48 units' ship with their IP address set to 192.168.3.253)

If the SX48 connection is successful, we can program it! ☺

- **Telnet into the SX48**

Using either Windows HyperTerminal or TeraTerm, use a telnet window to connect to the SX48 using 192.168.3.253 as the IP address, and 51776 as the Port Number.

If you have obtained TeraTerm from the FairlightAU,
you will also have a "additional" TERATERM.INI file.

This initialisation file has been "tweaked" to automatically give options for the default and most common SX48 IP address/Port Number combinations. Simply replace the "default" TERATERM.INI file in the TeraTerm installation folder,

C:/Program Files/TTERMPRO/TERATERM.INI

With the "custom FairlightAU version", to save having to retype the connection details every time on launch.

- **Send Patching commands to the SX48**

Most of the common SX48 coonfiguration commands are in "plain English".
Commands are noted in "quotation marks", and must be entered with accurate syntax.

Each individual command must be confirmed by hitting the "Enter" key.

"read config"

This command will ask the SX48 to "Burp" out it's current "Config" settings,
(IP address, firmware revision, I/O Card setup/status, etc etc),
AND its current MADI>IIS>MADI patch mapping.

Note the IP address,
And the status of the Patch Mapping.
(Any "SSS" entries in the Patch Map indicate a "NOT patched" connection/channel).

"patch clear"

Clears the entire patch map

"read patch"

Gives a "burp" of the current MADI>IIS>MADI patch mapping.

Note that every patch position should now show "SSS", indicating that the entire patch map has been cleared.

"patch b0 8"

This patches the first bank of 8 MADI INPUT channels

“read patch”

Check to confirm that the first bank has patched correctly

Now, do the following commands in order.

“patch b8 0” (Yes, we already did it, but good practise to do them as a “complete set” of commands!!!)
“patch b1 9”
“patch b2 10”
“patch b3 11”
“patch b4 12”
“patch b5 13”

“read patch”

Confirm that all MADI Inputs 1 – 48 are patched correctly

“patch b8 0”

Patches first bank of 8 IIS signals to the MADI OUTPUT channels

“read patch”

Confirm the first bank of 8 IIS channels has patched correctly

Now, do the following commands in order.

“patch b8 0” (Yes, we already did it, but good practise to do them as a “complete set” of commands!!!)
“patch b9 1”
“patch b10 2”
“patch b11 3”
“patch b12 4”
“patch b13 5”

“read patch”

Confirm that all IIS channels 1 – 48 are patched correctly

Now, here’s the IMPORTANT bit,

“config save”

Saves the changes you have made to the patch mapping.

NB: Forget to do this after a manual “patch mapping” session,
and the next power cycle will LOOSE your hard work!

Regards,
FairlightAU