



SX48 “Change IP Address” Procedure

Introduction

The following procedure outlines how to change the IP address on a SX48 I/O box

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 required command to the SX48**

Configuring the SX48 currently requires wading through a library of Hex coded commands and value strings, and firing each one with correct syntax into the SX48 unit via Telnet.

Tables for the full range of command strings are available from FairlightAU, but the command for changing the IP address is as below

Telnet "Change IP Address" command:

set 1001 aabbccdd

where

set = SX48 recognized command to change a given parameter

1 = write the following parameter data

001 = parameter "SX48 IP address"

(These 2 commands are ganged together to form "1001")

aabbccdd = IP address in Hex

IE

Target IP address = 192.168.3.254
(IE NOT 253 as per default)

Convert the target IP address to Hex

= c0.a8.03.fe

(NOTE: Lower case appears to be most reliable to the SX48!)

remove the IP address "dots"
= c0a803fe

Therefore, the code to change the SX48 IP address to 192.168.3.254

set 1001 c0a803fe

- **Power Cycle the SX48**

At this point, the SX48 hasn't yet "remembered" the new IP address.

Turn the SX48 OFF via the MAINS SWITCH at rear left of the chassis.

DO NOT use the front panel "Power Switch", as this will "dump" the new IP address out of the SX48.

Because the SX48 has terminated the Telnet connection, TeraTerm will automatically close itself. This makes a good indicator of the "shutdown state" of the SX48.

- **Confirm SX48 New IP address**

Once TeraTerm has exited, turn the SX48 unit back ON.

If all is well, the front panel 3 digit display should now be showing the last portion of the new IP address.

Regards,
FairlightAU