Operational Manual

PRO-1002 - 32 x 32 Video, Stereo Audio and IR Switch

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For your safety please read the following text carefully.
This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-amp fuse is fitted in this plug. Should the fuse require changing, please ensure that the replacement fuse has a 5-amp rating and is approved by ASTA or BSI to BS1362.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you loose the fuse cover the plug must not be used until a replacement cover is found.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET, THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY TO PREVENT ELECTRIC SHOCK IF IT SHOULD BE INSERTED IN ANY 13 AMP SOCKET.

WARNING: THIS APPLIANCE MUST BE EARTHED

IMPORTANT: Wires in the mains lead are coloured in accordance with the following code.

Green and Yellow	Earth
Blue	Neutral
Brown	Live

As the colours of the wire in the mains lead of this appliance may not correspond with the markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured GREEN AND YELLOW must be connected to the terminal marked E or coloured green or green and yellow.

The wire which is coloured BLUE must be connected to the terminal marked N or coloured black

The wire which is coloured BROWN must be connected to the terminal marked L or coloured red.

WARNING

The power source voltage of this unit is marked on the rear of the unit. Plug the unit only in to an outlet with the proper voltage.
To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.
When you operate this equipment, the outlet should be near the equipment and should be easily accessible.

SERIAL NUMBER

The serial number of this unit can be found on the rear of the unit. For your convenience, note the number below, and retain this manual along with you proof of purchase to serve as a permanent record of your purchase and for future reference.

Model Number --------- ----------

Serial Number ---------- ----------

Dealer---------- ----------

Date of purchase ------- ----------

Notes:

CONTENTS

PRO-1002 - 32 x 32 Video, Stereo Audio and IR Switch

The PRO-1002 series may be installed with or without the rack mounting ears supplied. The chassis design offers a choice of space saving alternatives. It is recommended that the chassis has at least 1RU space above and below for ventilation purposes. It is also recommended that the chassis be installed close to the signal source devices to minimise the length of signal interconnection cables.

Once mounted and secured in your chosen location power should be applied via the IEC mains lead provided. When the unit is first switch on the LED indicators on the front of the unit will flash once before the green LED stabilises to indicate each port has 12V power. The orange LED's will illuminate one at a time starting with port one. The internal microprocessor will check each port before applying IR sensing data in order to protect the circuit.

Video and audio cables should now be connected to the thirty two inputs provided at the rear of the chassis. The chassis has a built in video level clamping circuit to ensure all signals switched are 1V p-p. In some cases the video output signal from third party product can be as high as 3.5 volts which can cause video distortion when connected to the chassis. Symptoms of the cause will be bright and washed out video signals on the individual inputs.

It is recommended that a small monitor be placed near to the chassis during and after installation to perform local testing of both signal inputs and RJ45 outputs. The entire installation can be commissioned locally by using a PRO-6001 or PRO-6004 receiver and a Scion remote control handset. This local commissioning will reduce time when deploying the receiver units throughout the premises.

The chassis provides thirty two IR interface connectors on the rear panel for controlling external equipment such as DVD,VCR and Satellite decoders. Each 3.5mm connector mounted on the rear relates to the number input at the rear of the chassis. For example: A satellite decoder connected to video input (1) should have the IR emitter connector to the socket below video port (1). This will ensure that when any of the 32 ports selects input (1) the infra-red handset will only control the device connected to input (1). See fig. 2 on page 7.

If the system installation includes software management a serial cable is required between the PC serial port and the serial input located at the rear of the chassis. Ensure that the cable is connected to the serial input and is secured firmly before trying to operate the server software provided. See page 10 for further information.

On Screen Display
The factory default setting for this function is Channel 1, Channel 2, etc. These characters can be changed by the server software. Changing the source names in the software will also affect the on screen display.

PRO-1002 Connections

	PRO-1002 32 x 32	**NON-LOOPED INPUTS**
01	Mains Power Input	Filtered and fused three pin IEC socket
02	RS232 Interface (IN)	9 Way D Connector Socket
03	RS232 Interface (OUT)	9 Way D Connector Plug
04	Video Inputs	32 x RCA Phono Sockets
05	Left Audio Inputs	32 x RCA Phono Sockets
06	Right Audio Inputs	32 x RCA Phono Sockets
07	UTP Line Output	32 x 8 Pin RJ45 Data Connectors
08	LED Indicators	Green (power) - Orange (Data)

Table. 1

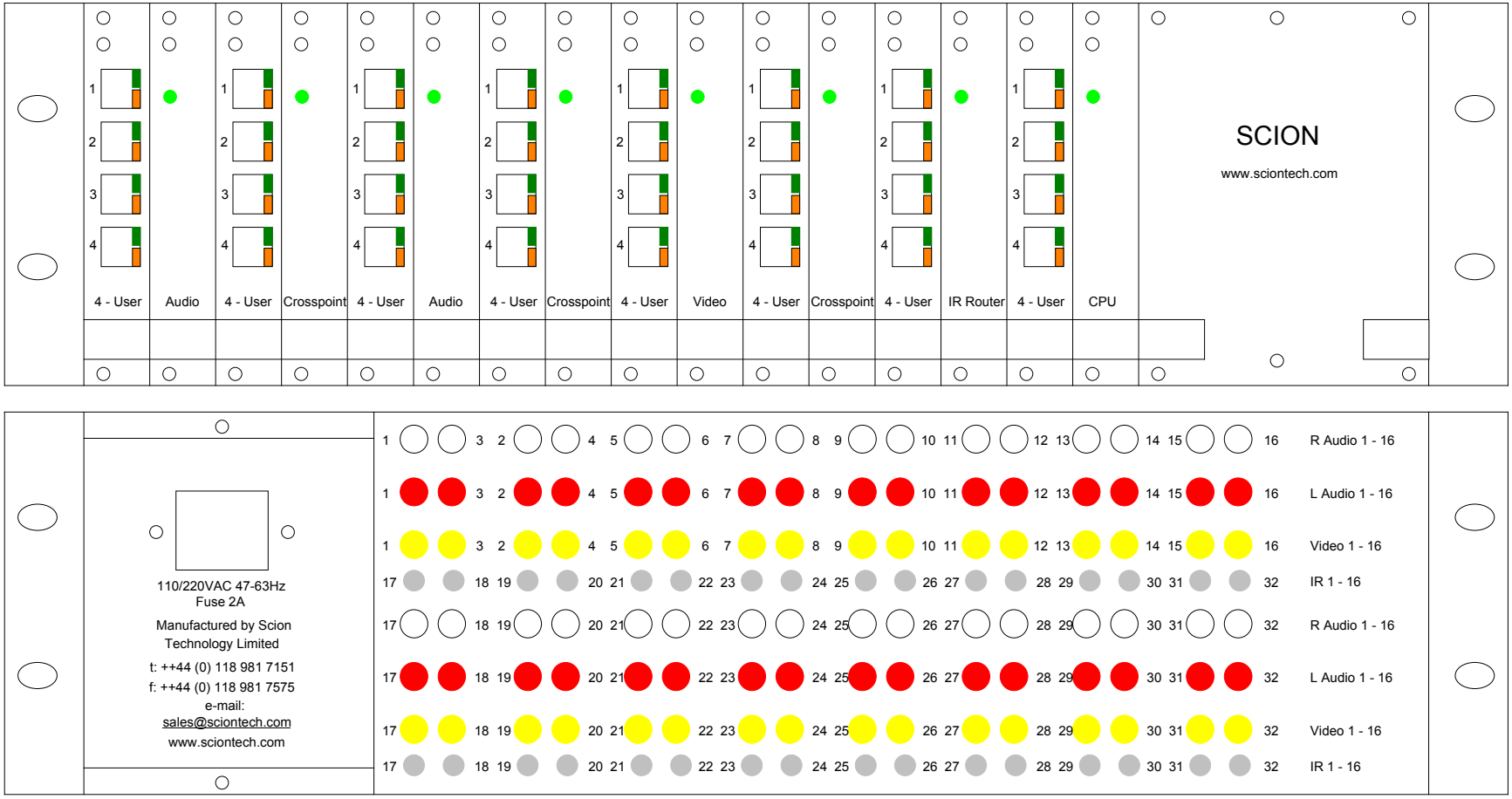
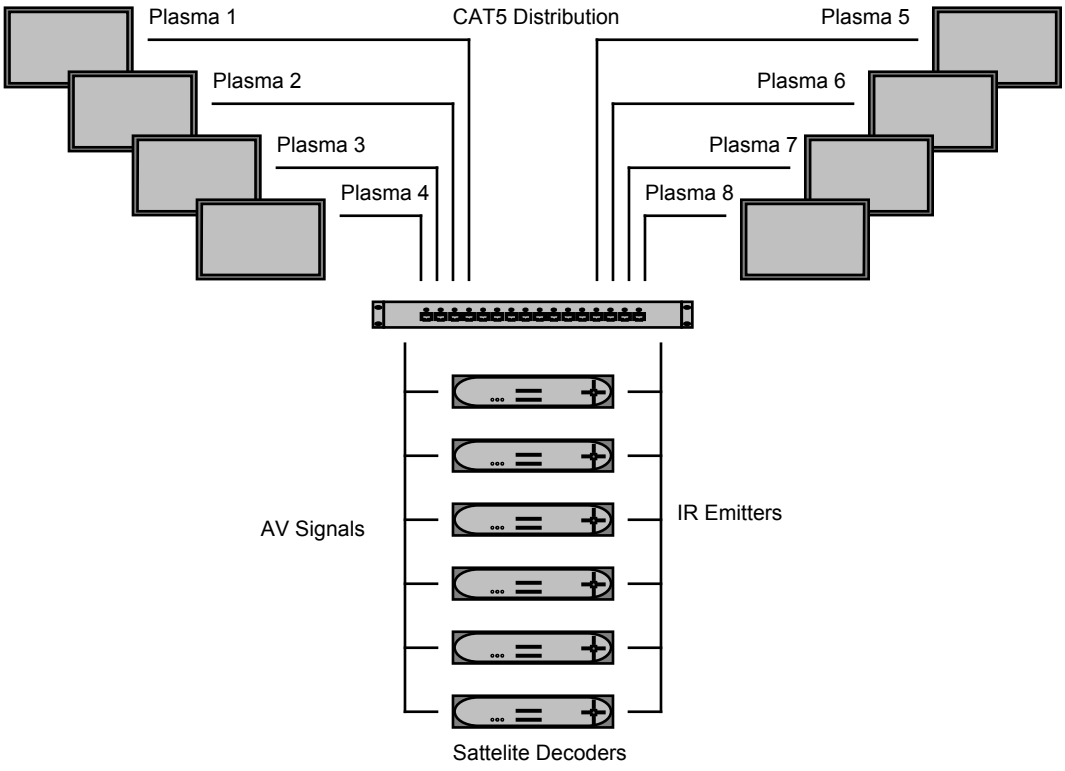

1
2
3
4
4 - User
Audio
4 - User
Crosspoint
4 - User
Audio
4 - User
Crosspoint
4 - User
Video
4 - User
Crosspoint
4 - User
IR Router
4 - User
CPU
SCION
www.sciontech.com
110/220VAC 47-63Hz
Fuse 2A
Manufactured by Scion
Technology Limited
t: ++44 (0) 118 981 7151
f: ++44 (0) 118 981 7575
e-mail:
sales@sciontech.com
www.sciontech.com
1 3 2 4 5 6 7 8 9 10 11 12 13 14 15 16
R Audio 1 - 16
L Audio 1 - 16
Video 1 - 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
IR 1 - 16
R Audio 1 - 16
L Audio 1 - 16
Video 1 - 16
IR 1 - 16

Fig.01



Typical Installation - Fig. 2

RJ45 Plug	Wire Colour	Signal
Pin 1	White / Orange	Left Audio -
Pin 2	Orange / White	Left Audio +
Pin 3	White / Green	Right Audio -
Pin 4	Blue / White	Video +
Pin 5	White / Blue	Video -
Pin 6	Green / White	Right Audio +
Pin 7	White / Brown	-12V
Pin 8	Brown / White	+12V and IR data

Table 2.

USER INTERFACE RECEIVER

Channel selection can be carried out by either the server software located on a central PC or by individual IR control at the receiving end. A choice of two receivers can be used both providing IR control.

1	PRO-6001	Scart to RJ45 Receiver (TFT and Television Connection)
2	PRO-6004	RCA Phono to RJ45 (LCD and Plasma Connection)

Table. 3

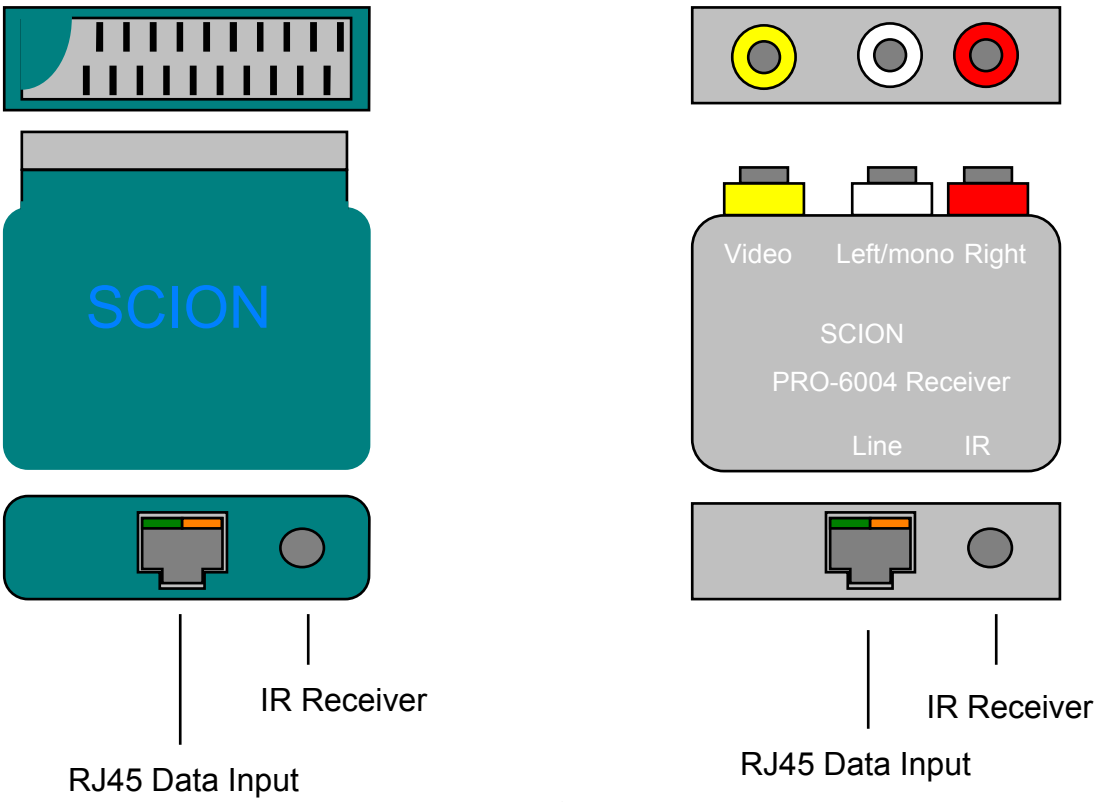
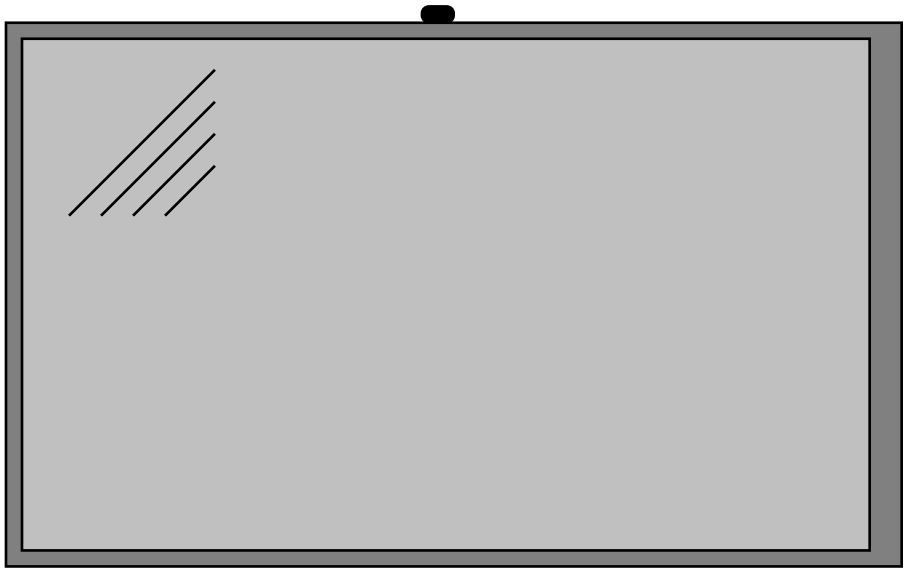


Fig. 03

The RJ45 LED indicators illuminate once connection is made indicating 12v power received. Unlike the chassis, the orange indicator only indicates power not IR data received.

When choosing your location for the IR receiver, be aware that Plasma screens and energy saving bulbs do radiate ultra-violet light and in some cases can interfere with the IR receiver. Whilst measures have been taken to prevent this from happening, data will

be constantly received by the chassis processor causing the individual port to appear locked (no IR control). Re-locate the IR receiver until the IR frees up. See fig. 04 for example receiver installation.



Plasma Screen Installation

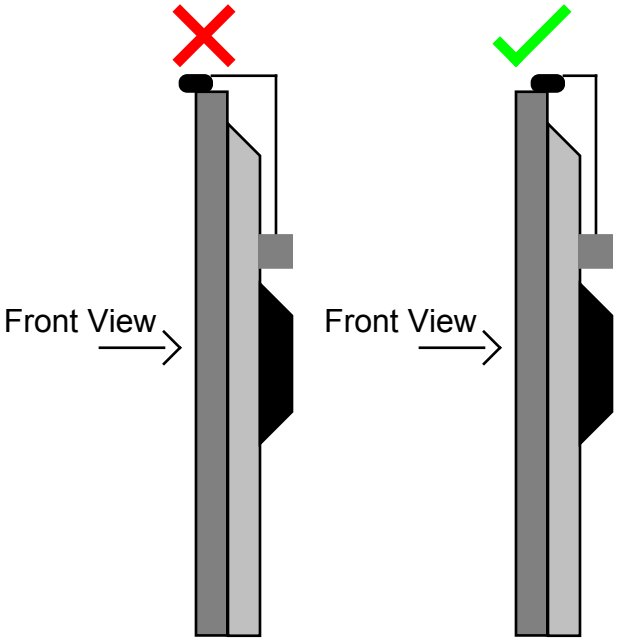


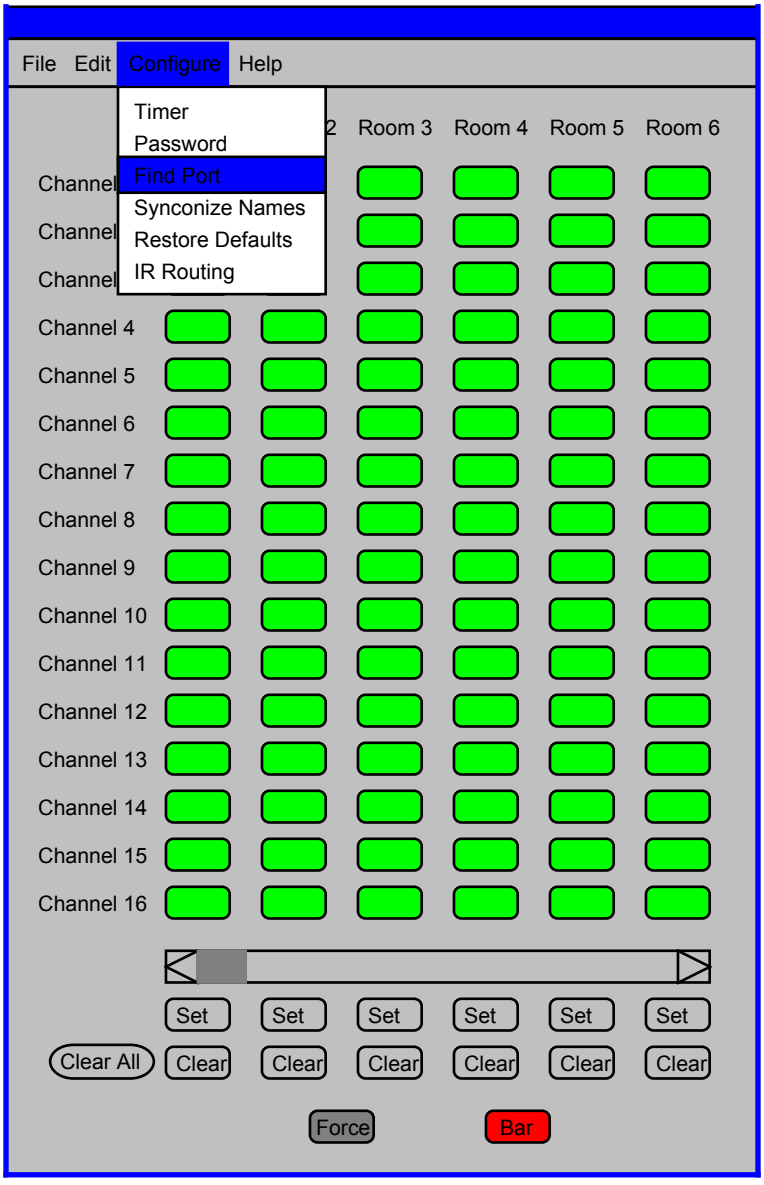
Fig. 04

SOFTWARE

Selecting the Serial Port

When the program is started, the software automatically detects which serial port the control unit is connected to. The control unit needs to be connected up and switched on in order for it to be detected. If the control unit cannot be detected, a message box is displayed allowing the user to either close the program or continue working off line. Off-line working enables all features to be used, except that the settings are not communicated to the control unit.

If subsequently, the control unit is connected, communications can be established by selecting the Find Port option from the Configure menu. The current settings will then be uploaded to the control unit.



Selection Buttons

If the "Bar" mode is selected, ("Bar" button Red), click the "Bar" button to highlight it (bright red). Click on one of the selection buttons to allow or deny the viewer identified by the name at the head of the column, access to the TV or video channel identified to the left of the row.
Clicking on the button will cause it to change colour between red and green.
A Green button indicates that the viewer has access to the channel; a Red button indicates that the user is denied access to the channel.

If the viewer is currently switched to that channel, his screen will go blank.

If "Force" mode is selected, ("Force" button Orange"), click the "Force" button to highlight it (Yellow).
Click on one of the selection buttons to immediately switch the viewer identified by the name at the head of the column, to the TV or video channel identified to the left of the row.
Clicking on the button will cause it to change colour from blue to Orange, and all other buttons in the same column to blue.

An orange button indicates that the viewer is switched to that channel.
If the viewer is currently barred from that channel the button will remain blue, and no change will occur.

The Clear Buttons

To deny a viewer access to all channels (Bar mode) or prevent a user from being switched to a specified channel (Force mode), click on the Clear button below the selection buttons for that viewer.
All the selection buttons for that user will turn red (Bar mode) or blue (Force mode), indicating the action taken.

The Clear All Button

To bar all channels to all viewers (Bar mode) or prevent all users from being switched to a specified channel (Force mode), click on the Clear All button. All buttons will turn red (Bar mode) or blue (Force mode) indicating the action taken.

The Set Buttons

To allow a viewer access to all channels, click on the Set button below the selection buttons for that viewer. All the selection buttons for that viewer will turn green indicating the action taken.
These buttons are not available in "Force" mode.

Saving a configuration

To save the current settings for the channel and location names, the channels each viewer is switched to and has access to, and the time at which all channels will be barred to all viewers, go to the File menu and click Save. The configuration file will be saved under its current filename.
If no configuration file is currently open, the Save As dialog box will be opened.

Channel Names

To edit the name of a channel given at the left of the window, from the Edit menu, click Source Names.
A list of all the channel names will appear.
Highlight the channel name you wish to change, and click once more. Type in the desired name and press enter.
When you have changed all the names you wish, click Ok.

Room Names

To edit the name of a room given at the top of the window, from the Edit menu, click Room Names.
A list of all the room names will appear.
Highlight the room name you wish to change, and click once more. Type in the desired name and press enter.
When you have changed all the names you wish, click Ok.

Cut Copy and Paste

The Cut Copy and Paste options from the Edit menu may be used to modify the configuration.
To copy a viewer's settings to another viewer, click on either the Bar button or Force button to highlight it. If the desired mode was not previously selected (indicated by a grey button) you will need to click the button twice. click on the Room name of the viewer you wish to copy. From the Edit menu, click Copy. Click on the Room name of the viewer you wish to copy the settings to, then, from the Edit menu, click Paste.

The Bar or Force button will revert to its un-highlighted state.
to copy the same settings to another viewer, click the "Force" or "Bar" button to highlight it then click another room name and click Paste
To copy the settings to all viewers, select Paste To All from the Edit menu instead of Paste..
Selecting Cut instead of Copy will cause the selected viewer to be denied access to all channels (Bar mode) or disable forcing to a specified channel (Force mode) , but allowing his previous settings to be pasted to other viewers.

To copy the settings for a channel to another channel, (available in Bar mode only), click on the Bar button to highlight it then click on the channel name you wish to copy. From the Edit menu, click Copy. Click on the channel name you wish to copy the settings to, then, from the Edit menu, click Paste.
To copy the same settings to another channel, click the Bar button to highlight it then click another channel name and click Paste
To copy the settings to all channels, select Paste To All from the Edit menu instead of Paste.

Selecting Cut instead of Copy will cause all viewers to be denied access to the selected channel but allowing its previous settings to be pasted to other channels.

Specifications

PRO-1000 32 x 32 Video, Stereo Audio and IR Switch

Input			Output		
Video	Bandwidth	15MHz	Video	Bandwidth	15MHz
	Signal Level	1V p-p @ 75 ohm		Signal	1V p-p Balanced
	Format	PAL/SECAM/NTSC		Connector	RJ45
	Connector	16 x RCA Phono Socket	Audio	Signal	0dB Balanced
Audio	Bandwidth	20KHz		Connector	RJ45
	Signal Level	0dB	Power	12V d.c	Pins 7 & 8
	Impedance	10K ohms		IR	Balanced Signal
	Connector	32 x RCA Phono Socket			
Power			Unit		
Voltage	90-230V	IEC 3 Pin Plug	Height	1RU	
	Fuse	1amp A/S	Width	447mm	
	Frequency	50/60KHz	Depth	313mm	
			Weight	2.5kg	

PRO-6001 - RJ45 to Scart Receiver

Input Signals	Balanced Video / Audio / IR	Impedance 100 ohms
Output Signals	Video	1V p-p (Scart Plug)
	Audio	0dB (Scart Plug)
	IR	36KHz (3.5mm Jack Socket)
Unit	Height	21mm
	Width	56mm
	Depth	57mm

Note: 12V applied to Pin 8 of Scart connector.

PRO-6004 - RJ45 to RCA Phono Receiver

Input Signals	Balanced Video / Audio / IR	Impedance 100 ohms
Output Signals	Video	1V p-p (RCA Phono)
	Audio	0dB (RCA Phono)
	IR	36KHz (3.5mm Jack Socket)
Unit	Height	25mm
	Width	60mm
	Depth	65mm

Troubleshooting

Green / Orange LED's not illuminating on chassis	Ensure mains plug is secure both ends and check fuse in 3 pin plug and IEC socket.
Green / Orange LED's not illuminating on Receiver	Check both ends of CAT5 cable are connected and that it is wired to T568A Standard. Table (1)
No Video / Audio	Make sure the appropriate input is selected and that the RCA phono plug is secure. If server software is in use, ensure output is not barred.
No IR Control	Locate the faulty port and check that orange LED is not flashing. If it is, check CAT5 cable connections.
IR slow or not responding	Ensure that the IR receiver is not effected by Plasma light or energy saving bulbs.

Technical support for this and other Scion Technology products can be obtained from your local dealer or by contacting Scion Technology directly.

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