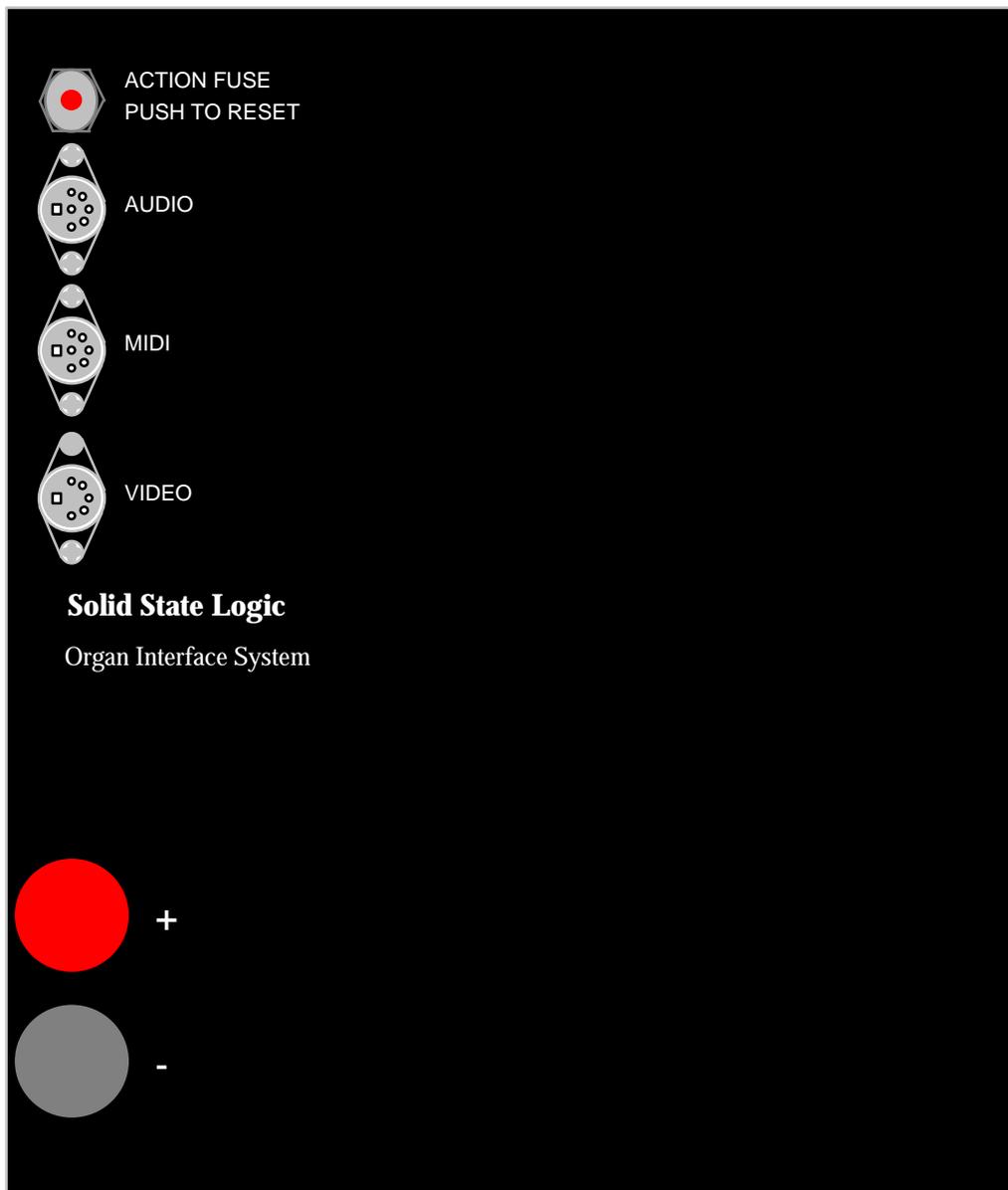


The Solid State Logic Performance Recorder.

Stand Alone Version



Installation & Operating Instructions.

Introduction:

This version of the Performance Recorder is used to record all of the note and stop information within the organ. The system provides an identical reproduction of the original performance on command. This information is recorded on a standard domestic video cassette recorder which is not supplied by Solid State Logic.

The system is contained in a metal and wood rack 330mm high, 280mm or 480mm wide and 282mm deep together with a pinboard and associated ribbon cables. The rack has an indicator to tell you the how the system is working and several sockets to connect the system to the external equipment. The function of these will be explained in detail later.

The Performance Recorder is normally installed in the console where the pinboards can easily be wired to feed note and stop information between the organ and the recorder interface. The video, however, will need to be mounted where the organist can easily gain access the video controls, and also insert and remove tapes.

The system is delivered to you with the following items:

SSL PARTCODE	DESCRIPTION	What it Actually looks like
720446A1 or 720446A2	S/A ORGAN I/F RACK 8 SLOT S/A ORGAN I/F RACK 16 SLOT	A metal rack approx. 330x280x282 mm A metal rack approx. 330x480x282 mm
623090A1	S/A VCR I/F CARD	A circuit board in an anti static bag marked Slot 1
623091A1	S/A ORGAN I/F I/O CARD	Other circuit boards in anti static bags but marked Slot 2, Slot 3, etc.
80CLSTWX	WRISTSTRAP ANTI-STATIC	A small paper bag in the top of the box.
	HANDBOOK PERF REC S/A	This book
32PB05WX	CON DIN 5W TO 4 PHONO	A bag containing a lead.
	PINBOARD FRAME	Connection Pinboard

Connecting the rack to the video recorder.

The Performance Recorder rack must be connected to 3 different pieces of equipment.

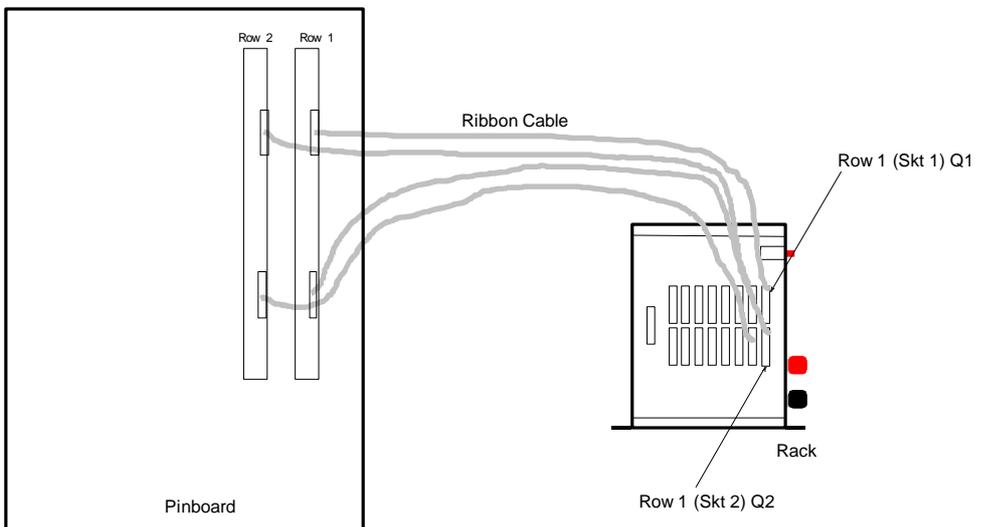
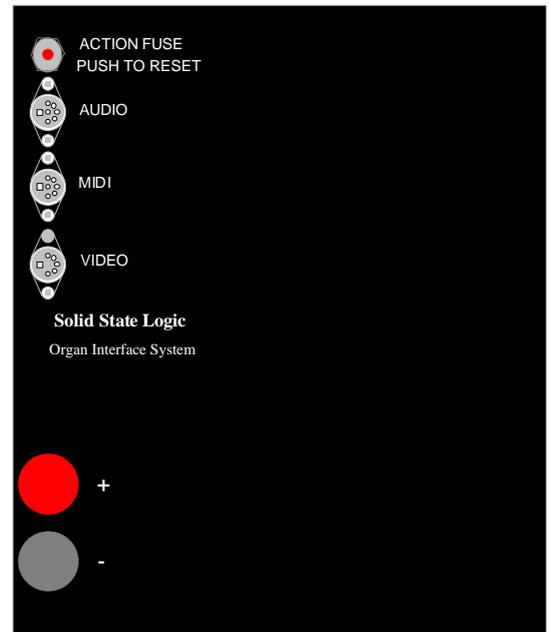
- 1). The video recorder that you have purchased.
- 2). The SSL Pinboard.
- 3). The DC rectifier.

On the side of the rack are a number of connectors and an action fuse. On the back of the rack are 18 connectors for the pinboards and one to extend the system onto another rack, should this be necessary.

The connector marked VIDEO is used to connect to the video recorder using the SSL lead supplied. There is more information on this later in the handbook.

The SSL pinboards are connected to the individual connectors as shown in the diagram below.

The DC rectifier (12-24 Volts) is connected to the large Red and Black terminals on the side of the rack.



Wiring of the Pinboard to the Recorder

The organ will still operate normally if the interface is connected but the video recorder is removed for safe keeping. The picture above shows the key parts in the installation.

Installation:

You will need:

1. A small screwdriver (Phillips type) for the card restraint screws.
2. A video recorder using either PAL (EC) or NTSC (USA) video standards.
3. A 12-24 supply for the Performance Recorder and a mains supply for the VCR.
4. An anti static wrist strap (supplied by SSL in the kit) for handling the circuit boards.

1. Unpacking and Assembly:

Your system may have been stripped for packing if we have decided that the export handlers are likely to damage it in transit. Fortunately re-assembly is quick and simple.

If the system is supplied in a large black static protective bag you may ignore the following instructions, but please take care not to remove the system from it's protective bag until all the packing chips and other static creating materials are safely removed.

Following this simple rule will help ensure your system gives a long and trouble free life, and applies to all electronic equipment.

Remove the rack from it's protective wrapping and remove the two screws that retain the card restraint. The circuit boards fit into the slots as marked (Slot 1 furthest left.)

IMPORTANT NOTE 1: Fit the wrist strap provided by following the instructions printed on the packet. This will prevent any static electricity damaging the electronics before opening the black protective bags and ensure a long reliable life for the system.

Remove the cards one at a time and push into the rack along the slots in the wood until they click into place. The cards will be labelled Slot 1, Slot 2, etc. If the labels have been omitted, the Slot 1 card is fitted with a small coloured setting DIP switch and also a green LED. It may also be identified using the parts list above.

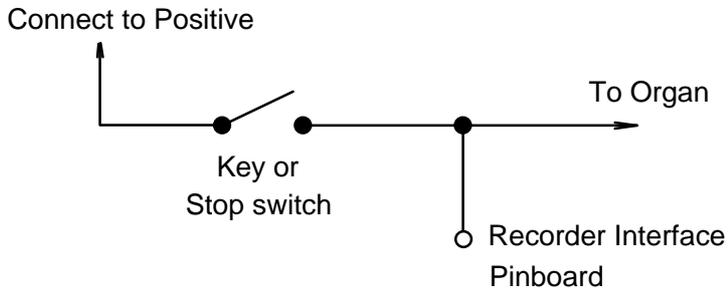
IMPORTANT NOTE 2: The card labelled Slot 1 has a secondary PCB fitted to it. Because of the height of this PCB it can catch on the back of the card in slot 2. Be very careful that this does not happen and cause damage. When inserting or removing cards from slot 1 or slot 2 move the cards slightly apart to prevent binding.

The card restraint may now be replaced. The cards are removed after testing and packed individually to prevent damage during shipping.

IMPORTANT NOTE 3: Never remove or refit the cards with the power switched on.

2. The Pinboard Wiring:

The pinboards are clearly marked by row number and the pins are in groups of six and are also numbered. The system records the information from the pins onto the video when the recorder is in record, and replays it when the video recorder is in replay. Because of this, the system only requires one pin for each function.



All of the pins on the pinboard have the same function, so it is possible to arrange the wiring in any order that suits you best. It will help to trace faults if the wiring is ordered in some logical fashion, however. We would suggest that the notes are wired to the lowest numbered sections of each pinstrip, and then the wiring for the stops to fill in the gaps that remain.

3. Transformer Rectifier:

Each rack has a pair of terminals for connection to the DC power. The power is normally supplied from a DC rectifier and must be between 12 and 24 volts (max).

The red terminal connects to the positive or + on the transformer rectifier and the black terminal to the - or negative. The cables for the rack must be at least 80/0.4mm (80 strand 18-20 AWG) in size, and should be capable of carrying the full load of the console current in certain wiring configurations. If in doubt please contact us for advice.

IMPORTANT NOTE 4: The transformer/rectifier unit must deliver 12-24 volts D.C., noise and ripple free. It must also be capable of supplying the full organ load and still remain noise and ripple free under such conditions. When the full organ load is applied or removed from the unit, the voltage must not fall below 12 volts , or rise above 24 volts.

Action Fuse: The action fuse fitted to the rack will "pop out" if there is a fault on the system which causes an unusually high amount of current to flow. If this should happen, turn off the system and allow approximately 1 minute to cool and then reset it by pushing in the red button until it clicks, then turn the system on again. If the fuse should blow again, then a fault has developed that requires attention.

4. Second Rack (if supplied):

The two racks are connected together using a ribbon cable supplied. The cable connects into Q3 at the top of the circuit board in slot one of the first rack to Q3 on the back of the second rack.

3. Connecting up the video:

- **The Video Recorder:** First check the rear of the video recorder, or read the instruction manual to discover what type of connection is required.

In Europe the recorder may be fitted with a BNC style connector for video and PHONO sockets for the audio. In this case the lead supplied should be plugged in using the colour code below using the adapters supplied. Some systems are fitted with a SCART connector, in which case your local video shop will be able to supply a converter. If you are unable to get this please contact SSL direct.

In the USA the system will be supplied with a lead fitted with 4 RCA PHONO jacks, these should be plugged into the video as shown in the chart below.

Video Cable Connections	
Cable Colour	Name on Back of Video
Yellow	Video Out
Blue	Video In
Red	Audio Out
White	Audio In

The other end of this cable can either plug directly into the Performance Recorder front panel or the length extended using the extension cable supplied. The extension cable may also be fitted inside the console, and by fitting the connector to the console case the second lead may be removed with the video recorder.

Fault finding:

The chart below may help you resolve any initial problems, it is only intended as a guide. You are most welcome to call SSL with any questions.

Playback Video	Green LED Lights	Green "Playback" lamp does not light: Suspect video, possibly the way the recorder is plugged up. Have you found the correct place on the tape? The tape can be played back on an ordinary TV, a multiplex signal will appear as a strange moving pattern of squares. No squares = no recording. Has the system been set for the correct video standard for your recorder?
Whilst playing the Organ from the tape, try playing along on the keys.	The two sounds should be combined.	

Connections to the Video Recorder.

Please cut out this label and stick it to the video recorder for future reference.

Video Cable Connections	
Cable Colour	Name on Back of Video
Yellow	Video Out
Blue	Video In
Red	Audio Out
White	Audio In