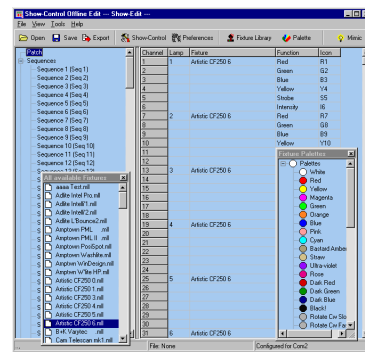


Show-Control



Artistic Licence Engineering Ltd

Firmware Version V1.9 Manual Revision V1.7

**A R T I S T I C L I C E N C E
P R O D U C T
R E G I S T R A T I O N F O R M**

Product: Show-Control

Version No.

Serial No.

Date Purchased:

Supplier:

Name:

Company Name:

Address:

Email:

Post/Zip Code:

Phone No.

Comments:

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I N T R O D U C T I O N

QUICK START

Welcome to the Show-Control manual. Show-Control is a sophisticated controller for up to sixty DMX512 channels. Applications include the control of Moving Lights, Colour Scrollers and Dimmers.

Users who are already familiar with Scroll-Control should find that a scan of the Control Surface section is sufficient to get started.

Show-Control is able to connect to a PC for remote programming. The separate Show-Edit system provides a visual representation of channels and memories as well as transmitting live data via Show-Control. This allows the operator to program live at the PC.

Show-Edit is also provided with an extensive personality library for Moving Lamps. This allows Show-Edit to control Moving Lamps in addition to dimmer channels and other DMX512 devices.

The personality library is fully user editable and is also compatible with the sister product Micro-Scope 3.

Please remember to return your product registration card, so that we can keep you informed of new developments.



SHOW- CONTROL FEATURES

Show-Control provides the following features:

- Controls 60 Latest Takes Precedence DMX512 channels
- 250 Memories
- 40 Sequences
- 4000 Steps
- Snapshot DMX512 from a lighting console
- Programmable step or fade times
- Alphanumeric channel names
- External trigger from analogue lighting console or contact closure
- DMX512 triggered playback
- Rechargeable battery powered
- Remote PC programming
- Numerous 'Run' modes

SHOW-EDIT FEATURES

Show-Edit provides the following features:

- Fader based visual user interface
 - Hard disc storage of multiple shows
 - Moving lamp personality library
 - Lamp personality editor
 - Edit all memories, sequence and times
 - Enter alphanumeric channel names
 - Set password operations
-

T H E C O N T R O L S U R F A C E

OVERVIEW The six front panel buttons operate Show-Control. The buttons function as follows:

MENU

The MENU key is used to select the operating mode of Show-Control. Pressing MENU once will display the currently selected mode. The LEFT and RIGHT cursor keys are then used to select a new operating mode. Pressing MENU a second time completes the process.

GO!

When in the Playback Menu, the GO! Key is used to start or stop the current playback sequence. In other menus, GO! is used as an editing key.

LEFT RIGHT

When Show-Control is displaying a MENU, the LEFT & RIGHT keys are used to move through the menu options.

Otherwise, the LEFT & RIGHT keys are used to move the cursor in the display window.

UP DOWN

The UP and DOWN cursor keys are used to increment or decrement the data displayed at the cursor position.

MENUS

Upon entering MENU mode, five different operating modes may be selected (using the LEFT & RIGHT cursor keys). These are:

PLAYBACK SEQUENCE: XX 1	Select a Sequence to playback. Display progress of the Sequence playing back.
ADJUST GRAND MASTER: XXX 2	Set the Grand Master level. This controls the overall level of intensity channels.
EDIT SEQUENCE: XX	Edit the Sequence list. Assign Memories to Sequence steps and set Fade or Wait times.
EDIT MEMORY: YYY 4	Edit the channel levels contained within Memories.
SNAPSHOT MEMORY: YYY 5	Record received DMX512 into Memories.
EDIT MODE: BLIND 6	Define whether Edit Memory and Edit Sequence affect the output.

T H E M E N U S

PLAYBACK SEQUENCE

The PLAYBACK SEQUENCE Menu is used to select a sequence for playback and then view it's progress.

The Menu display allows the Sequence number to be selected using the UP & DOWN cursors. Pressing the MENU key displays the settings for the current step.

Pressing the GO! key will (re) start the sequence from step 1.

A sequence will continue independent of whether it is displayed on the LCD.

The PLAYBACK SEQUENCE display is similar to the EDIT SEQUENCE.

The LEFT & RIGHT cursor keys are used to playback the sequence in manual mode. The RIGHT key initiates the fade of a single step and then holds on 'Wait For Go' (WFG). The LEFT key snaps back to the previous step and holds on WFG.

The Go key is used to pause and continue the sequence.

Once the PLAYBACK SEQUENCE is selected and running it is not necessary to remain in the menu.

The current running sequence is shown by an asterisk next to the sequence number in the PLAYBACK SEQUENCE Menu.

If the selected sequence is not set to loop at the end, the PLAYBACK SEQUENCE Menu will reappear upon completion of the sequence.

**PLAYBACK
*! SEQ 1**

SEQ	STP	CUE	FADE
1	1	1	20.0

GRAND MASTER

The ADJUST GRAND MASTER Menu is used to change the value of the Grand Master 'Fader'. The Grand-Master value ranges from 0 (Off) to 255 (Full). It operates as a scaling value for any channels set to 'G-M' in the CHANNEL TYPES (S3) Menu.

This feature gives Show-Control the ability to control moving lamps. The intensity channels are set to 'G-M' so that the Grand-Master can control overall intensity. Other attribute channels such as pan and tilt will not be affected by the Grand Master.

The UP & DOWN cursor keys adjust the Grand-Master level. The GO! key toggles between the selected level and zero, providing a 'Black Out' function. (V1.4 and later).

**ADJUST GRAND
MASTER: XXX**

EDIT SEQUENCE

The EDIT SEQUENCE Menu is used to assign memories and step/fade times to a sequence.

A total of ten sequences are available. The Menu display allows the Sequence number to be selected using the UP & DOWN cursors. Pressing the MENU key displays the settings for the first step of this sequence.

The EDIT SEQUENCE display shows the currently selected sequence, the current step number, the memory assigned

to this step and the wait or fade time *before* execution of this step. The LEFT & RIGHT cursors are used to select between the three data entry fields.

**EDIT
SEQUENCE:1**

SEQ	STP	MEM	FaDE
1	1	1	20.0

STEP FIELD

The Current Step Number is adjusted by the UP & DOWN cursor keys.

A total of 100 steps are available in each sequence.

As the Current Step Number is adjusted, the Memory Number and Time fields change to show the setting of each step.

The GO key is used to access the edit menu. Once in the EDIT Menu, the following three function may be selected by using the UP & DOWN cursor keys followed by the GO key to execute the command.

INSERT DELETE

The Insert function, makes a copy of the current step and inserts it before the current step.

The Delete function deletes the current step and then moves all the following steps down to fill the gap.

**SELECT OPERATION
INSERT?**

AUTO-COMplete

The Auto-Complete function is used to complete the remainder of a sequence based on the settings of the currently selected step. This function significantly reduces the typing required to enter a sequence. Operation is as follows:

- The sequence is automatically completed based on the settings of the current step.
- Show-Control automatically enters all of the steps up to the maximum unused in this sequence.
- The new step times are all set to the same value as the current step.
- The new Memory values are set to automatically increment from the Memory value set in the current step.
- The final step of the sequence is set to loop back to the beginning of the current sequence.
- This is a very powerful editing mode as it allows the user to enter just the first step of a sequence.

MEMORY FIELD

The Memory assigned to the Current Step is adjusted by the UP & DOWN cursor keys. Any of the 250 Memories may be used. Memories may be used many times in different places in the Sequence.

When the cursor is in the Memory field, the GO key acts as a shortcut and increments the Memory number by 20.

TIME FIELD

The Time assigned to the Current Step is adjusted by the UP & DOWN cursor keys. The assigned time may be either a WAIT or FADE time. The Wait Time is the time delay before execution of the current step. The Fade time is the duration of move fade from previous to current step.

The range of Fade or Wait times is:

- 0.1s to 10s in 0.1s increments
- 10.5s to 30s in 0.5s increments
- 31s to 60s in 1s increments
- 65s to 300s in 5s increments

The UP & DOWN cursor keys are used to scroll through all Fade times and then all Wait times. Longer Wait Times can be programmed by using two steps, the first having an empty memory. When the cursor is in the Time field, the GO key acts as a shortcut to cycle through the timing options of:

- Fade Time
 - Wait Time
 - Loop to Sequence
 - Wait for Go (WFG)
-

WFG

The Wait Time field is also used to select Wait for Go (WFG). This option is selected with the DOWN cursor when the Fade Time is 00.0. When the sequence is executed, all WFG steps will wait for either the GO! button or an external trigger before the step executes.

SEQ	STP	MEM	FaDE
1	1	1	WFG

LINKING

All sequences may be programmed to link back to themselves, or any other

SEQ	STP	LOOP TO
1	57	SEQ1

sequence, upon completion. This option is also selected in the Wait Time field. The DOWN cursor scrolls through the available options below WFG. Holding down the LEFT and RIGHT cursor keys is a short cut for the above.

EDIT MEMORY

The EDIT MEMORY Menu is used to select the level of each channel.

EDIT
MEMORY: xx

The Memory number is selected using the UP & DOWN cursor keys. Pressing the MENU key displays the channel levels for this memory.

The Memory display shows the Memory number (below the word MEM) and the settings for three consecutive

MEM	1	2	3
6	1

channels. The channel numbers are displayed on the top line with levels in the range 0 to 254 on the bottom line. The channel numbers can optionally be displayed as a three character alphanumeric if this feature is selected in Show-Edit.

The LEFT & RIGHT cursors are used to select the channel number. The display will change from channels 1,2,3 to 4,5,6 ... 58,59,60 as the cursor moves off the screen.

The UP & DOWN cursors are used to select the level of each channel. Values in the range 0 to 254 can be entered. A channel may be assigned to "No Change" (...) within a Memory.

This value is selected by using the DOWN key when the channel level is set to '0'. "No Change" is displayed as two dots.

The GO! key toggles between maximum level and "No Change".

SNAPSHOT MEMORY

This menu is used to record received DMX512 into a Memory. Press the MENU key to access this mode.

Show-Control immediately switches to the DMX512 loop through mode so that received DMX512 is re-transmitted to the output.

The Memory number is selected using the UP & DOWN cursor keys.

To record, press the Go key.

Once Show-Control has recorded the Memory, the Memory number is automatically incremented.

To record into the next consecutive Memory number, simply press the Go key again. To leave this mode, press MENU.

**SNAPSHOT
cue**

**SNAP CUE: 12
PRESS GO**

**SNAP CUE: 13
AGAIN? PRESS GO**

LIVE/BLIND

It is possible to use EDIT MEMORY in either LIVE or BLIND mode. In BLIND mode

the Memory being edited does not affect the DMX512 output. In LIVE mode the Memory being edited is immediately output to DMX512.

The UP & DOWN cursor keys are used to select between Live and Blind mode. The GO! key also toggles between the two options.

**EDITMODE:
LIVE**

T H E S E T U P M E N U S

SETUP MENU

The Setup Menu is entered by powering on Show-Control whilst holding down the MENU key.

If the current Password setup disallows access to the Setup Menu, you will be asked to enter the Password.

Eight different operating modes may be selected. These are:

PASSWORD: PLAY S1	Allows menus to be disabled from user access.
AUTORUN on POWER UP S2	Selects how Show-Edit should behave when powered on.
CHANNEL TYPES S3	Sets whether individual channels are controlled by the Grand-Master level.
CHANNEL NAMES S4	Allows the entry of three character names to be displayed instead of channel numbers.
BACKLIGHT IS ENABLED S5	Allows the LCD backlight to be enabled or disabled.
REMOTE TRIGGER S6	Defines the operation of remote contact closure triggering.
CLEAR THE SHOW S7	Allows the entire show to be cleared prior to programming.
TALK TO SHOW-EDIT S8	Start communications with the PC program Show-Edit.

**SETUP
PASSWORD
(S1)**

Show-Control is provided with a PASSWORD Menu which allows access to be limited.

Five password options are available:

NONE:

No password action, user has access to all menus including the setup menu.

This is the factory default setting.

EDIT:

User access is allowed to all main menus, but the setup menu requires password for access.

PLAY:

User access is limited to the Playback Sequence Menu. The user is allowed to select sequences and playback. No access to the programming menus is allowed. The setup menu requires password for access.

ALL:

User has no control over the product. The product displays sequence playback status, but allows no user input unless the password is entered.

The setup menu requires password for access.

Remote control of Show-Control does operate, so this mode is suggested when it is necessary to ensure that on-site 'tampering' cannot occur!

LOCAL:

Local control allows the user access to sequence playback and the Grand Master.

When running in local mode, the UP and DOWN cursor keys are used to select the Grand Master level. As the key is pressed, the Grand Master level display is shown for approximately one second. The LEFT and RIGHT cursor keys select and start the next consecutive sequence.

The UP and DOWN cursor keys are used to select from the four different password modes.

The password is shown in the rear of the manual on a single page that can be removed if desired.

<p>PASSWORD: ALL</p>

AUTORUN (S2)

The AUTORUN menu is used to select how Show-Control should behave when it is next powered on. This feature allows the user to set the product to run automatically the desired show each time the 'venue' is powered on.

**AUTORUN ON
POWER ON**

The options are:

SEQ Show-Control automatically starts the specified sequence. The factory default is SEQ 1.

MEM Show-Control automatically outputs the specified memory.

NONE Zero level DMX512 is output.

Press the MENU key to edit this Setting. The UP and DOWN cursor keys are used to select between the four options

**AUTORUN:
SEQ 9**

detailed above. The LEFT and RIGHT keys are used to select between fields for setting the memory or sequence number. Press the MENU key a second time to conclude programming.

CHANNEL TYPES (S3)

The CHANNEL TYPES menu is used to select which channels are controlled by the Grand Master value.

**CHANNEL
NAMES**

This feature is particularly useful when working with moving lamps as it allows the intensity channels to be controlled by the Grand-Master, without affecting attribute channels such as Pan & Tilt.

Press the MENU key to access this mode.

CHAN	1	2	3
TYPE	G-M	---	G-M

The top line of the display shows the numeric channel number, whilst the bottom line shows the selected mode.

The symbol 'G-M' shows that the channel is controlled by the Grand-Master. (Factory Default).

The symbol '---' indicates that the Grand-Master has no control over this channel.

The LEFT and RIGHT cursor keys select the channel, whilst the UP and DOWN keys toggle between the two values.

Press the MENU key a second time to conclude programming.

**CHANNEL
NAMES (S4)**

The CHANNEL NAMES menu is used to set three character names or mnemonics for each channel. This feature is particularly useful when working with moving lamps as it allows the lamp number and channel function to be described. This is further enhanced by eight icons that represent standard moving lamp attributes such as Pan & Tilt.

**CHANNEL
NAMES**

Press the MENU key to access this mode.

**CHAN 1 2 3
NAME ABC DEF GHI**

The top line of the display shows the numeric channel number, whilst the bottom line shows the current mnemonic. The factory default sets the mnemonics to simple channel numbers.

The LEFT and RIGHT cursor keys select each character of the mnemonic in turn. The UP and DOWN keys select all possible values for each character.

Pressing the GO! key resets the selected field to a simple number. Press the MENU key a second time to conclude programming.

**ENABLE
BACKLIGHT
(S5)**

The BACKLIGHT menu is used to enable or disable the display backlight. The Backlight operates as follows:

**BACKLIGHT IS
ENABLED**

DISABLE:

The backlight is off giving the longest possible battery life.

ENABLE:

When external power is connected, the backlight is on in all modes.

When operating on battery power the backlight is normally on, but powers down after one minute of inactivity. The next key press will re-enable the backlight.

The GO! key is used to enable or disable the backlight selection.

**REMOTE
TRIGGER (S6)**

The REMOTE TRIGGER Menu is used to select between the options of Contact Closure or DMX512 remote triggering.

**BACKLIGHT IS
ENABLED**

The operation is as follows:

10V: A trigger is generated when a 5-10V (PP9 battery) is applied across pins 4 & 5 of the DMX512 input connector. (Pin 4 positive). A pulse of 1-2 seconds releases any pending Wait for Go (WFG) allowing the next fade to start. A pulse of 3 seconds or longer resets the current sequence to the beginning.

DMX: Show-Control can be remote controlled by a DMX512 input. The command protocol is listed in the rear of this manual.

**CLEAR THE
SHOW (S7)**

This menu is used to clear all data from Show-Control. Settings will revert to the factory defaults.

**CLEAR
THE SHOW?**

When the 'ENTER CODE' message appears, hold down all four cursor keys to continue.

**ENTER
THE CODE**

The process of clearing the data takes approximately 5 seconds. Do not switch off Show-Control while the 'PLEASE WAIT' message is displayed.

**PLEASE
WAIT**

**TALK TO
SHOW-EDIT
(S8)**

The TALK menu is used to start communication with the PC Show-Edit Software.

**TALK TO
SHOW-EDIT**

Enter this mode prior to pressing the Download button on Show-Edit. Show-Control displays:

**WAITING FOR
SHOW-EDIT**

When the Show-Edit Download button is pressed, Show-Control displays:

**SHOW-EDIT
IS THINKING**

When the transfer starts, Show-Control displays:

**PRogramming
DATA BLOCK**

When Show-Edit has finished sending data, the following message is displayed:

**TRANSFER DONE
PRESS MENU**

This mode also allows Show-Edit to output real time DMX512 data. This allows Show-Edit to be used as an on-line editor prior to downloading the show.

**receiving
LIVE DATA**

EXTERNAL CONNECTIONS

POWER SUPPLY

Show-Control has an internal Ni-Cd rechargeable battery which provides a life of about 30 hours between recharges (this is reduced to 15 hours when the backlight is used continuously). The external 9 Volt DC power supply is used to power and recharge Show-Control.

As with all Ni-Cd battery products, the best battery life is obtained by completely discharging Show-Control prior to recharging. The power switch is used to switch off Show-Control, battery charging will continue if the power connector is plugged in.

Show-Control contains a sophisticated battery manager, which regulates battery charging. A full charge is obtained in three hours, after which the external power supply is used solely to power Show-Control.

Battery power is most useful for programming. If the unit is required to start running on power up, it is best to disconnect the internal battery.

This is achieved by removing the four external screws and then disconnecting the internal two pin battery connector.

POWER IN

PIN	FUNCTION
Centre	+9VDC @ 300 mA
Skirt	GROUND

XLR PIN DATA

RECEIVE (MALE 5 PIN XLR)

Pin 1	Screen
Pin 2	DMX Receive Signal-
Pin 3	DMX Receive Signal+
Pin 4	External Trigger +10VDC
Pin 5	External Trigger Ground

TRANSMIT (FEMALE 5 PIN XLR)

Pin 1	Screen
Pin 2	DMX Transmit Signal-
Pin 3	DMX Transmit Signal+
Pin 4	NC
Pin 5	NC

The Trigger and PC-Link features of Show-Control use pins 4 & 5 which are undefined by the DMX512 protocol. These pins may be disconnected internally should this conflict with your DMX512 implementation.

DMX512 TRIGGER PROTOCOL

Show-Control provides the facility of triggering sequences via received DMX512 data. This allows Show-Control to be integrated with external sensors such as beam breakers and proximity switches.

The sister product 'Common-Sense' provides a library of trigger events compatible with Show-Control.

DMX Triggering operates as follows:

DMX512 Slot	Name	Description
Start Code	-	Always = 0x18
1	Signature 1	Always = 0xaa
2	Signature 2	Always = 0x01
3	Mode	No Action = 0x00 Start Current Sequence = 0x01 Reset Current Sequence to start = 0x02 Release WFG = 0x03 Snap Start Sequence YY = 0x04 Start Sequence YY at the end of current fade = 0x05 Snap Start Mem YY = 0x06 Grand Master value YY = 0x07
4	Mem /Sequence /Grand Mast	YY = Mem Number in range 1-250 YY = Sequence Number in range 1-40 YY = Grand Master in range 0-255
5	Signature 3	Always = 0x00

SHOW - EDIT

OVERVIEW Show-Edit is a Windows application that provides the following functionality:

- Provides an on-line editor that allows live programming of moving lamps.
- Provides an off-line editor allowing all Show-Control Memories, Sequences and configuration data to be programmed in a console style format.
- Provides a Moving Lamp personality editor.
- Provides file compatibility with other Artistic Licence products.

Show-Edit is compatible with Windows 95, 98, ME, NT5, 2000 & XP.

INSTALL

Show-Edit is installed as follows:

- Insert the CD and select the 'Enter CD' option.
- Click the 'Software' button, followed by the 'Show-Edit' button.
- Select the 'Run this program from it's current location' option and press 'OK'.
- Dependent upon your computer setup, you may see a security warning. Click on the 'Yes' button to continue.
- The Install Shield program will start and guide you through the remaining steps of the installation procedure.

HARDWARE

Show-Edit requires the following minimum specification to run:

- Pentium at 133mhz or higher PC Compatible.
- Windows operating system.
- Mouse.
- VGA 640 x 480 or better.
- 10 MByte Hard disc space.
- 32 MByte ram.
- Serial (RS232) port with 9 pin connection.

COMMS

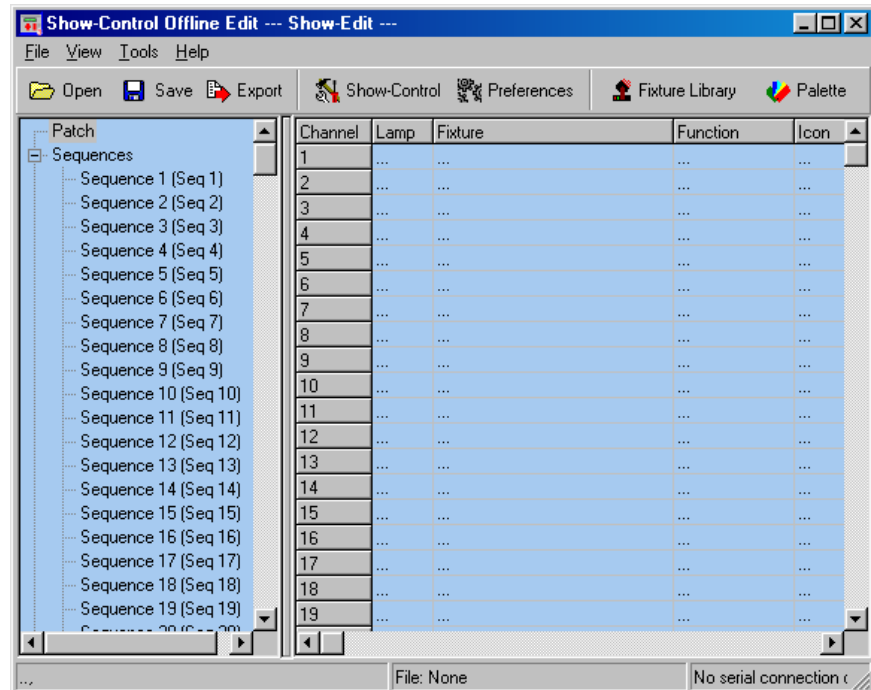
Show-Edit communicates with the Show-Control via the RS232 interface of the PC. Show-Edit can access either COM1 or COM2. An XLR5F to 9 pin DB cable is provided with Show-Edit. The cable contains the RS232 to RS485 conversion electronics required for communications between the PC and Show-Control.

MAIN SCREEN

Show-Edit displays the following screen when started.

The left panel of the screen displays the information store. This lists all the data that will be downloaded to Show-Control. This is referred to as the Show Panel.

The right panel is used to display the spreadsheet or fader style information for editing presets and lamp personalities. This is referred to as the Edit Panel.

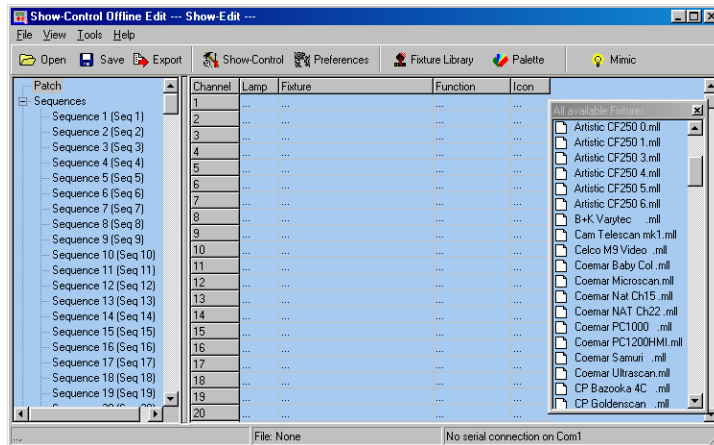


SETTING THE PATCH

The patch is used to select the DMX512 channel allocation for all lamps to be controlled. Lamps can be multi-channel moving lamps or single channel dimmers.

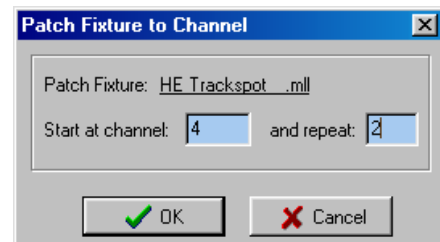
Select Patch in the Show Panel. The patch spreadsheet is then displayed in the Edit Panel.

Click the Fixture Library button at the top of the screen. The palette of available fixtures is then displayed:

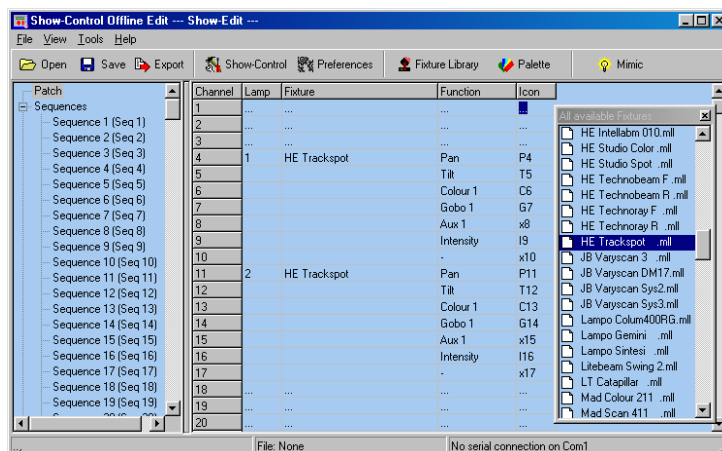


Select the required lamp from the palette and drag in onto the required start channel of the patch.

A dialogue is displayed which confirms the start channel and the number of lamps to be patched.



The example shown will patch two High End Trackspots starting at channel 4. The resulting patch is shown below:



PATCH COLUMNS

The columns of the Patch display provide the following information:

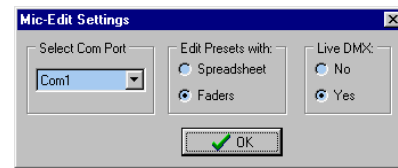
Column	Name	Purpose
1	Channel	Lists the DMX512 channel number from 1 to 60
2	Lamp	The number of the moving lamp. Show-Edit generates this automatically, numbering lamp 1 as the lowest DMX channel value.
3	Fixture	The text name of the moving lamp. This corresponds to the name in the Fixture Library Palette.
4	Function	Describes the lamp function controlled by this channel.
5	Icon	Shows a three character mnemonic that represents the channel function and channel number. This is displayed when editing memories on Show-Control.

DELETING A LAMP

To delete a lamp from the patch, simply right click on the lamp. A popup menu is displayed offering this option.

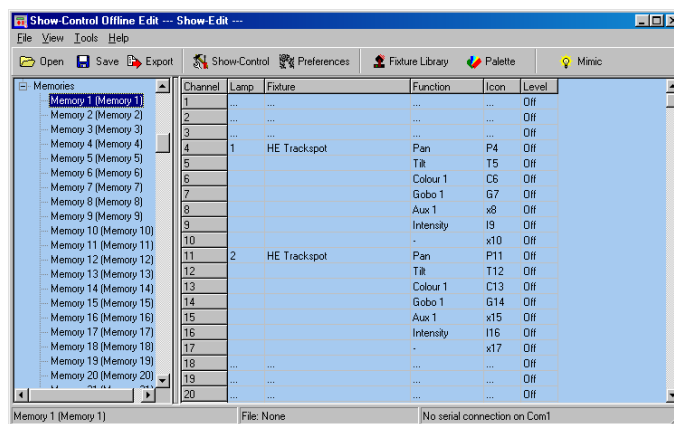
EDITING MEMORIES

To edit a memory, select the required memory in the Show Panel. Depending upon the setting in the Preferences menu, the Edit Panel will display either a spreadsheet or an array of faders.



EDITING MEMORIES BY SPREADSHEET

When editing memories in spreadsheet mode, the Edit Panel displays as shown below:



MEMORY COLUMNS

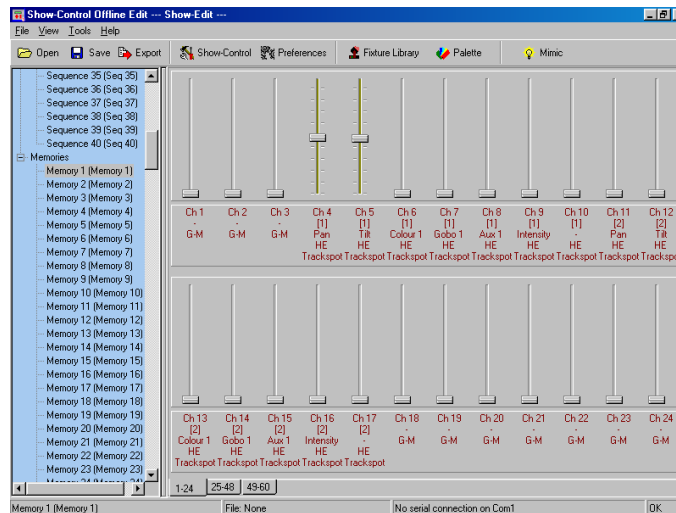
The columns of the Memory spreadsheet are identical to those displayed in Patch mode, with the exception of column 6.

Column	Name	Purpose
1	Channel	Lists the DMX512 channel number from 1 to 60
2	Lamp	The number of the moving lamp. Show-Edit generates this automatically, numbering lamp 1 as the lowest DMX channel value.
3	Fixture	The text name of the moving lamp. This corresponds to the name in the Fixture Library Palette.
4	Function	Describes the lamp function controlled by this channel.
5	Icon	Shows a three character mnemonic that represents the channel function and channel number. This is displayed when editing memories on Show-Control.

6	Level	The level of this channel in this memory. The level can range from 0 to 255 or off.
---	-------	---

EDITING MEMORIES BY FADER

When editing memories in fader mode, the Edit Panel displays as shown below:



FADER ROWS

Each channel of each moving lamp or dimmer is displayed as a fader. Below each fader, a 5 line text display describes the function:

Row	Name	Purpose
1	Channel	The Channel number ranging from 1 to 60.
2	Lamp	The Lamp Number ranging from 1 to 60. Channels that are not patched do not have a lamp number but can still be programmed.
3	Function	A text description of the lamp attribute controlled by this fader. If the channel is not patched, 'G-M' is displayed indicating that the channel is controlled by the Show-Control Grand Master fader.
4/5	Name	The name of the moving lamp.

**SETTING
LEVELS**

Dragging the fader knob with the mouse sets fader levels. When the level of a fader is set to any value in the range 0 to 255, 10% tick marks are displayed next to the fader track. The absence of tick marks indicates that the channel is off (i.e. excluded from this memory).

**EDITING
LEVELS**

Right clicking on any fader produces a popup menu. The popup menu provides numerous memory editing functions as detailed in the table below.

The fader that is right clicked is described as the selected channel in the table below:

Entry	Name	Purpose
1	Exclude channel from this memory	Selected channel is set to Off in this memory
2	Exclude fixture from this memory	If the selected channel is part of a moving lamp, all channels in the lamp are set to Off in this memory.
3	Exclude INTENSITY channels of this fixture	If the selected channel is part of a moving lamp and it is an intensity (dimmer) channel, all intensity channels of the lamp are set to Off in this memory.
4	Exclude POSITION channels of this fixture	If the selected channel is part of a moving lamp and it is a position (pan or tilt) channel, all position channels of the lamp are set to Off in this memory.
5	Exclude COLOUR channels of this fixture	If the selected channel is part of a moving lamp and it is a colour channel, all colour channels of the lamp are set to Off in this memory.
6	Exclude BEAM channels of this fixture	If the selected channel is part of a moving lamp and it is a beam (iris, gobo, prism) channel, all beam channels of the lamp are set to Off in this memory.

Entry	Name	Purpose
7	Exclude CONTROL channels of this fixture	If the selected channel is part of a moving lamp and it is a control (lamp strike etc.) channel, all control channels of the lamp are set to Off in this memory.
8	Exclude all INTENSITY channels from memory	If the selected channel is part of a moving lamp and it is an intensity channel, all intensity channels in this memory are set to Off.
9	Exclude all POSITION channels from memory	If the selected channel is part of a moving lamp and it is a position channel, all position channels in this memory are set to Off.
10	Exclude all COLOUR channels from memory	If the selected channel is part of a moving lamp and it is a colour channel, all colour channels in this memory are set to Off.
11	Exclude all BEAM channels from memory	If the selected channel is part of a moving lamp and it is a beam channel, all beam channels in this memory are set to Off.
12	Exclude all CONTROL channels from memory	If the selected channel is part of a moving lamp and it is a control channel, all control channels in this memory are set to Off.
13	Clear memory to zero	Sets all channels to zero level.
14	Clear memory to off	Sets all channels to Off (i.e. excluded from this memory).
15	Remove fixture from patch	Removes this fixture from the patch.

USING PALETTES

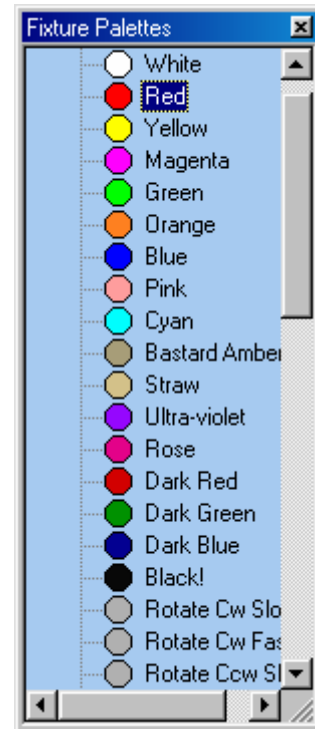
To display the palette, click on the Palette button at the top of the screen. The Palette contains 50 entries that contain settings for every attribute of every fixture.

These values are defined in the Fixture Editor.

For ease of use, the palette entries are coded by colour, but they are equally valid for use with position and beam attributes.

The palette can be used in both spreadsheet and fader view of a memory.

Simply drag the required palette entry and drop it on the required fixture. The cursor changes to a hand icon with a small moving lamp icon.



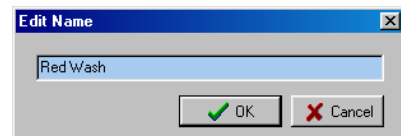
The entire fixture changes to represent the levels contained in the palette. This drag and drop function can be further modified by combination of the Shift, Ctrl and Alt keys as detailed in the table below.

Hold Key	Cursor	Dropping on Channel Type	Result
None	Moving Lamp Icon	All	Entire fixture is set to the level contained in the palette.
Shift	Fader Icon	All	Only the channel that is dropped upon will change to the palette value.
Ctrl	Light Bulb	Intensity	All intensity channels within the fixture change to the levels contained within the palette.
	Arrows	Position	All intensity channels within the fixture change to the levels contained within the palette.
	Colour Wheel	Colour	All intensity channels within the fixture change to the levels contained within the palette.

Hold Key	Cursor	Dropping on Channel Type	Result
Ctrl cont	Diamond Gobo	Beam	All intensity channels within the fixture change to the levels contained within the palette.
	Hammer	Control	All intensity channels within the fixture change to the levels contained within the palette.
Alt	Multiple Lamps	All	Sets all patched fixtures to the levels contained in the palette.

**EDITING
MEMORY
LEGENDS**

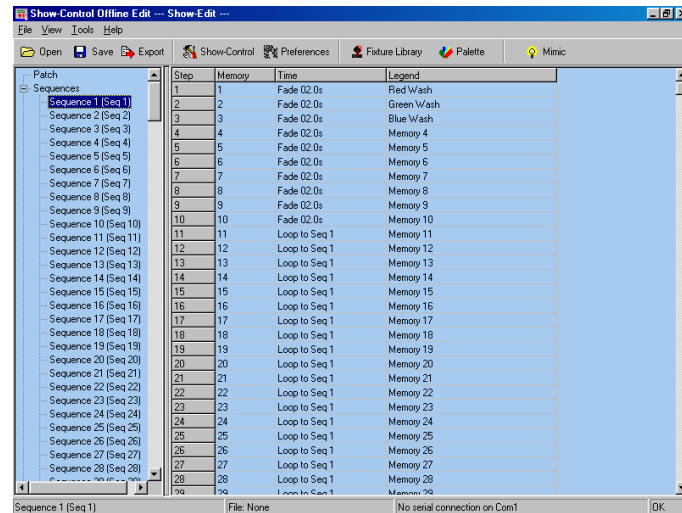
The name or legend of each memory can be changed by right clicking on the required memory in the Show Panel.



SEQUENCE

To edit a Sequence, select the required Sequence in the Show Panel.

A spreadsheet is displayed as shown below:



SEQUENCE COLUMNS

The columns of the Sequence spreadsheet function as shown in the table below:

Column	Name	Purpose
1	Step	Sequences contain 100 steps that can each contain a Memory.
2	Memory	The number of the Memory assigned to this step.
3	Time	The fade or wait time of this step.
4	Legend	The name or legend of the Memory assigned to this step.

SEQUENCE EDITING

By default, each sequence is set up as a 10 step sequence with consecutive memory number.

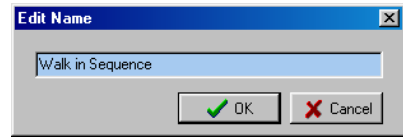
To edit the memory assigned to a step, simply type a new number in the Memory column. The legend will update to confirm the change.

TIME EDITING

The time field provides a pull down list that contains all the available time and control options.

**EDITING
SEQUENCE
LEGENDS**

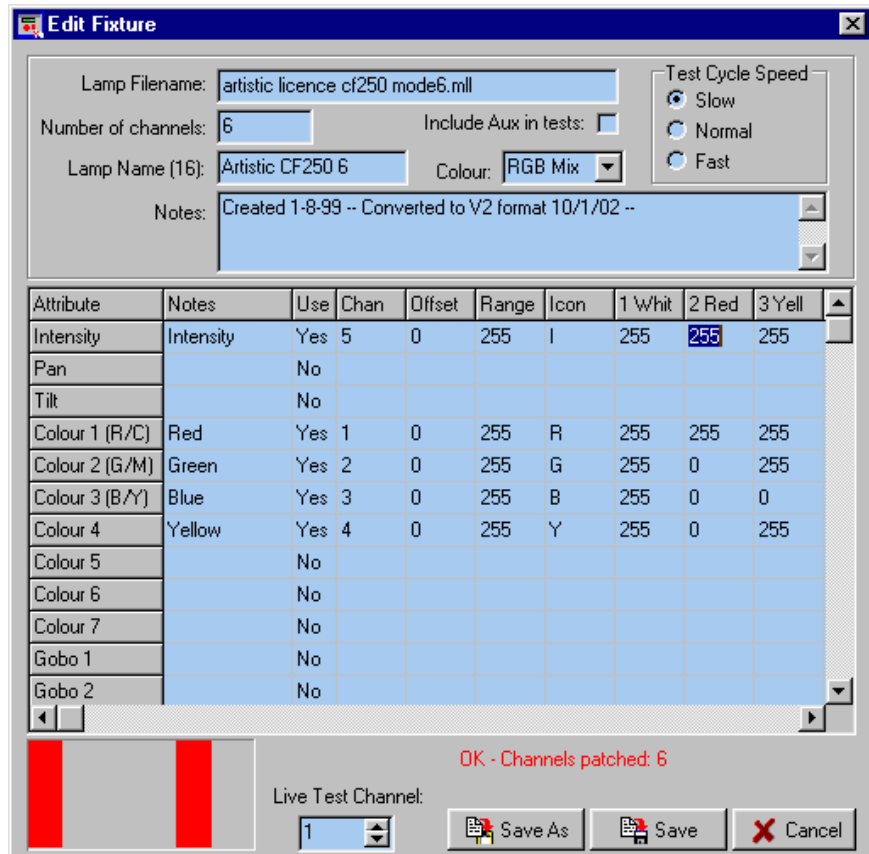
The name or legend of each Sequence can be changed by right clicking on the required Sequence in the Show Panel.



EDITING FIXTURES

To edit a fixture personality, double click on a fixture entry in the Fixture Palette.

The following dialogue is displayed (this example is the Artistic Licence Colour-Fill CF250 mode 6).



SPREAD SHEET

The spreadsheet displayed allows each of the possible fixture attributes to be controlled. Each attribute (pan, tilt etc.) contains the settings detailed below:

Column	Name	Function Result
1	Attribute	Defines the fixture channel type.
2	Notes	This field is simply for your information; it is not downloaded to the Show-Control.
3	Use	Set to Yes if this channel function is active.

Column	Name	Function Result																						
4	Chan	This is the channel address for this lamp attribute. Numbering is in the range 1 to 38.																						
5	Offset	This is the minimum value of data that is valid for this attribute. Normally this is zero, however some fixtures (the MadScan for example) mix attributes on a single channel. If intensity is controlled over the range 128 to 255, you must enter a value of 128 in this field.																						
6	Range	This is the range of values of data that is valid for this attribute. Normally this is 255, however some lamps (the MadScan for example) mix attributes on a single channel. If intensity is controlled over the range 128 to 255, you must enter a value of 127 in this field.																						
7	Icon	This is a single letter used as an abbreviation to describe the channel attribute. The following are the default abbreviations:																						
		<table border="1"> <thead> <tr> <th>Abbreviation</th> <th>Attribute</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>Pan</td> </tr> <tr> <td>T</td> <td>Tilt</td> </tr> <tr> <td>R</td> <td>Red</td> </tr> <tr> <td>G</td> <td>Green</td> </tr> <tr> <td>B</td> <td>Blue</td> </tr> <tr> <td>C</td> <td>Colour</td> </tr> <tr> <td>g</td> <td>Gobo</td> </tr> <tr> <td>I</td> <td>Intensity</td> </tr> <tr> <td>i</td> <td>Iris</td> </tr> <tr> <td>p</td> <td>Prism</td> </tr> </tbody> </table>	Abbreviation	Attribute	P	Pan	T	Tilt	R	Red	G	Green	B	Blue	C	Colour	g	Gobo	I	Intensity	i	Iris	p	Prism
		Abbreviation	Attribute																					
		P	Pan																					
		T	Tilt																					
		R	Red																					
		G	Green																					
		B	Blue																					
		C	Colour																					
		g	Gobo																					
		I	Intensity																					
i	Iris																							
p	Prism																							
8-58	Palette	This is the default data value for each attribute of each palette.																						

HEADER

The header to the spreadsheet allows overall configuration of the fixture:

Field	Function
Lamp Filename	The name of the file that contains this fixture personality.
Number of Channels	Used to enter the total number of channels required by this fixture.
Lamp Name	This is the 16 character name of the fixture.
Colour	Defines whether the fixture uses red, green, blue or cyan, magenta, yellow colour mixing.
Include Aux In Test	This field is for file compatibility with Micro-Scope 3a.
Test Cycle Speed	This field is for file compatibility with Micro-Scope 3a.
Notes	This field is provided to document revisions to the personality.

FOOTER

The footer to the spreadsheet provides two additional controls:

Field	Function
Graph	The graph shows the level of each consecutive fixture channel for the selected palette. It also changes colour to reflect the colour assigned to the palette.
Live Test Channel	This defines the DMX512 channel to use for live testing the fixture data. If a fixture is available, this greatly simplifies the task of data entry.
Warning Display	<p>The Warning Display provides help with entry of complex lamps. Show-Edit analyses the data as you enter it, and checks for any possible problems. The display options are:</p> <p>Error: Channel x is duplicated: This means that you have entered identical channel numbers for two or more lamp functions.</p> <p>Error: There are x channels over patched: This means that you have entered a channel number that exceeds the number in 'Number of Channels'.</p> <p>Error: There are x functions over patched: This means that you have entered more lamp functions than the number in 'Number of Channels'.</p> <p>Warning: There are x functions unpatched: This means that you have entered less lamp functions than the number in 'Number of Channels'. Unpatched functions transmit with a zero channel level. This is therefore a warning not an error. On complex lamps, you will regularly see this message.</p> <p>OK: X channels patched: This message simply confirms that all is well.</p>

FINISHING EDITING

To finish the editing there are three options:

Save As: Allows the edited personality to be saved as a new personality. This is useful when entering a new mode for a fixture as only the differences need be entered.

Save: Simply saves the edited personality.

Cancel: Drops any changes made during the editing session.

EDITING SHOW- CONTROL CONFIG

The Show-Control configuration dialogue is displayed by clicking the Show-Control button at the top of the screen.

Three tab pages are available that allow editing of all Show-Control configuration items.



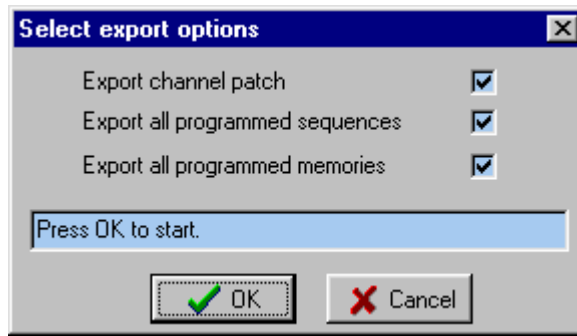
MENU

The main menu functions can also be accessed from the button panel at the top of the screen. The main functions are:

- Open:** Used to load a file from disc into Show-Edit.
- Save:** Used to save a file from Show-Edit to disc.
- Import:** Used to read an USITT ASCII text format file.
- Export:** Used to send data from Show-Edit to Show-Control.
- Configuration:** Used to set Show-Control configuration options.

EXPORT

Export sends data from Show-Edit to the Show-Control. Lamp Personality and Text Notes are not sent to the Show-Control, so you should save your show to disc as well as exporting. Ensure that Show-Control is switched on, connected to the PC Com port and displaying **'Waiting for Show-Edit to talk'**. Once the Export key is pressed, the following is displayed:



The Export Dialogue allows the user to select which of the three types of data should be exported. The configuration data is always exported.

Select the relevant types and then click the OK key.

Show-Edit will then export the data. The export process may take up to two minutes. When the Export process finishes, press the Show-Control MENU key to return Show-Control to the Setup Menu. Should Show-Control display an error at any point, cancel the Export and start the process again.

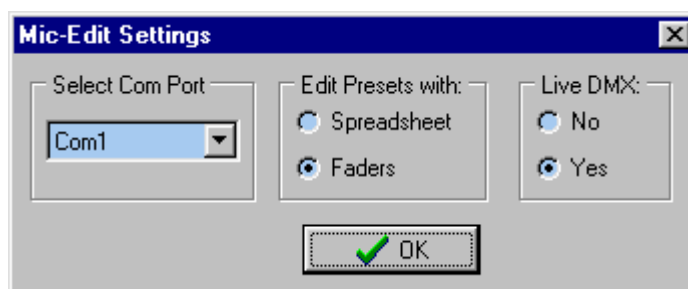
LIVE EDITING

Show-Control is able to send live DMX512 data via Show-Control when editing.

This allows the show to be programmed visually with the aid of the actual lighting rig.

To use this feature, ensure that Show-Control is in 'Talk to Show-Edit' mode.

The Setting dialogue allows this feature to be enabled and also the PC Com port to be selected:



USITT ASCII IMPORT

Show-Edit allows the import of USITT ASCII text files. This is an international standard designed to allow lighting data to be transferred between differing manufacturers.

Show-Edit implements the following subset of commands:

- CLEAR ALL: All memories will be cleared to zero channel levels. If this command is removed, the import will effectively merge data into the existing show.
 - CUE: Cue numbers are not used, the data is simply loaded to the next consecutive memory number. The cue is automatically assigned to the next available sequence step.
 - TEXT: The text field is loaded into the memory's legend.
 - UP: The up fade. The up fade is assigned to the sequences step fade time. If the fade time is larger than Show-Control's limit, additional wait steps are inserted to match the time.
 - FOLLOWON: The follow on time is used to insert additional wait steps in the sequence.
 - LINK: The link cue number is used to define the step of sequence to which the end of the last sequence will link. This allows the import of shows that have an initialisation section followed by a continuous loop.
-

P A S S W O R D P R O T E C T I O N

PASSWORD The password to gain entry to protected menus is a five button sequence.

Power on the Show-Control with the MENU key held down. Release the MENU key as soon as the Copyright message is displayed.

Show-Control will display 'PASSWORD REQUIRED'.

Press the following keys in sequence:

- MENU
- UP
- LEFT
- DOWN
- RIGHT

The Password menu will then be displayed, allowing the current level of protection to be changed.

NB: Installers, please remove this page from the manual after show commissioning.

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