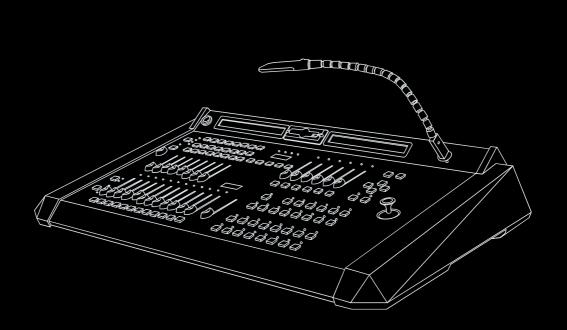
WORK



GALAXYUser Manual



Introduction	1
Safety Rules	1
Notice Information	2
Specifications	3
Getting Acquainted	4
Principle Features	4
Basic Control Parts	
Setup Menu Field	7
Internal Library	7
Create New Fixture	7
Total DMX Channel	8
LCD Effect Label	8
Internal Patch	9
Pan/ Tilt Patch	
Hard/ Soft Cross	
Fixture Name	
Reset/ Lamp Values	
Dip-Switch Configuration	
Control Type	
Dimmer Patch	
Edit Existing Fixture	15
Delete Fixture	16
Patch	18
MIDI Channel	2 1
Strobe Type	21
Gooseneck Dimmer	22

View Free Memory	23
Send Data File	23
Load Data File	25
Update Software	26
Save to Card	
Load from Card	28
Record Functions	30
Recording Shows	30
Active Effects	31
Edit Steps	32
Step's Time	33
Recording Chases	34
Recording Scenes	35
Playback Mode	36
Playing Scenes/ Chases/ Shows	36
Multi Playback	
Strobe Light Programs	38
Choose Fixtures	39
Select a Fixture	39
Group of fixtures	39
Utility Controls	40
Times	40
Copy	
Reset	
Lamp	
MIDI Implementation	42

Introduction

Notice Information

Keep dry

This product is not waterproof, and may malfunction if exposed to high levels of humidity. Rusting of the internal mechanism can cause irreparable damage.

Do not drop

This product may malfunction if subjected to strong shocks or vibration.

Keep away from strong magnetic fields

Do not use or place this device in vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charges or the magnetic fields produces by equipment such as radio transmitters could interfere with the display or affect the product's internal circuitry.

Cleaning

Due to fog residue, smoke, and dust cleaning the exterior of the case may become necessary. Use normal glass cleaner and soft cloth to wipe down the outside casing.

CF cards

Memory card may become hot during use. Observe due caution when removing memory cards from this device.

Copyright Notice

No part of the manual included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without authorized written permission.

Introduction

Welcome!

You made the right decision by choosing this sophisticated and intelligent product. Every unit has been thoroughly tested and carefully packed before shipment. Unpack the shipping carton carefully, saving the carton and all packing materials for possible later use.

Check carefully for sure your product is not damaged and all accessories not missing. If your product appears to be damaged or missing, please do use it and contact your local distributor immediately.

Please read this manual carefully and thoroughly, as it gives important information regarding safety, use and maintenance. Keep this manual with the unit for possible future reference.

Safety Rules

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet matches that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been damaged.
- Turn off immediately in the event of malfunction. Should you notice smoke or an unusual smell coming from the equipment, please discontinue using it and disconnect from the power immediately.
- Do not open the unit there are no user serviceable parts inside.
- Do not dismantle or modify the unit, as this voids all warranties.
- Do not attempt repairs. Repairs by unqualified people could cause damage or faulty operation. Contact your local authorized service center.

Specification

Model: GALAXY

Power Requirement: AC 230V/ AC 120V

Housing: Sheet metal with epoxy powder finish

LCD: 2x40 characters

DMX Channels 512 max., Configurable for intelligent

fixtures, traditional pars and DMX strobes

Compact Flash Card: 32 MB

DJ Lamp: USB connector, 5V/1W gooseneck light

Inputs/Outputs DMX OUT:

3-pin Neutrik chassis connector

MIDI IN/THRU/OUT:

Standard 5-pin DIN connector

RS-232 Port: DB9 connector

Audio IN:

1/4" unbalanced stereo jack

Audio trigger: Built-in microphone or line in

Overall Dimensions: 650x400x115mm Weight: Approx. 8.3 Kg

Getting acquainted

Principle Features

- 512 DMX channels (24 channels for pars, 8 channels for strobes and up to 36 channels per fixture)
- 20 preset Strobe programs & 48 programmable scenes
- 48 freely programmable shows for the fix tures, each with a maximum of 48 steps
- 48 freely programmable chases for the pars, each with a maximum of 48 steps
- Internal Library is editable for up to 256 fix tures
- Free access of CF card(32MB) to exchange the data files, including the library, memory and setup
- The data files can be downloaded or uploaded to a PC
- The software can be updated with new versions
- Audio input and built- in microphone for music sync. Functions
- USB socket for DJ lamp(5V, 1W)
- Joystickfor Pan/ Tilt adjustment of fixtures
- Blackout & grand master
- Two LCD displays, 40x2 characters each & two 4-digit LED display
- Four 3-pin female XLR sockets for 512 DMX channels output
- MIDI In/Thru/Out connectors

Getting acquainted

Basic Control Parts

Fixture

This button allows you to choose fixtures for manual control. Group function is enabled when the Fixture button is pressed down.

Number Fixtures 1-16

These 16 buttons are used to enable or disable the fixtures in the patch.

Joystick

This joystick is used to control the Pan or Tilt movement of the fixtures.

Pan/Tilt

These two buttons are used to enable or disable the Pan or Tilt control of joystick.

Setup

This button is used to access setup menu.

Record

This button is used to access recording menu.

Cursor Buttons(UP, DOWN, LEFT and RIGHT)

These four buttons are used together for menu settings.

Function Faders (1-6)

These six faders play the same roles as the Cursor buttons do.

Right/Left Arrow Select

These two buttons navigate you through all the dialog boxes appeared in the LCD.

Dimmer Faders (1-12)

These 12 faders, in combination with the Channel button, can be used to control the 24 individual channels of the lightings

Getting acquainted

Basic Control Parts

Flash Buttons

These 12 buttons are used to bring an individual channel to full intensity. They also are used in combination with the Flash Page button, to select the scene or the step number of the chases or shows. "Latch" can be enabled when the buttons are pressed down for 2 seconds.

Flash Page

In combination with the Flash buttons, this button is used to page through four pages of 12 scenes, 12 steps of the chases or shows.

Channel button

This button is used to select the channels between two page, the first 1-12 channels, and the second 13-24 channels.

Dimmer Master Fader

This fader is used to proportionally change the overall intensities of the 24 channels.

Grand Master Fader

This fader is used to proportionally change the overall console output except that the flash button is enabled.

Preset Faders (1-8)

These 8 faders are used to proportionally change the preset output level.

Blackout

This button is used to enable or disable the overall console output in all instances.

Audio Button

This button is used to enable or disable audio synchronized control of the selected scenes, chases, shows and the strobe programs..

Switch the power on, this unit will access Fixture mode automatically(The fixture LED light up). To access Setup menu, simply press the Setup button in Fixture mode. The Setup LED blinks briefly and the right LCD appears a Setup menu dialog box.

The Setup menu contains 11 options, including Internal Library, Patch, MIDI Channel, Strobe Type, Gooseneck Dimmer, View Free Memory, Send Data File, Load Data File, Update Software, Save to Card and Load from Card.

Internal Library

In Setup menu, the flashing the characters in the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [Internal Library].



Press right arrow Select button to access the menu of Internal Library, the Internal Library menu consists of three(3) items, including Create New Fixture, Edit Existing Fixture and Delete Fixture.

Create New Fixture

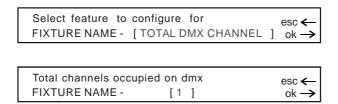
In Internal Library menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [CREATE NEW FIXTURE].

```
Select ITEM [CREATE NEW FIXTURE]
```

The Create New Fixture menu allows you to create any new fixture and its configurations to add into the library (The library can hold a maximum of 255 types of fixtures). The Create New Fixture contains options for fixture configurations, including Total DMX Channel, LCD Effect Label, Internal Patch, Pan/ Tilt Patch, Hard/ Soft Cross, Fixture Name, Reset/ Lamp Values, Dip-Switch Configuration, Control Type and Dimmer Patch.

Total DMX Channel

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [TOTAL DMX CHANNEL]. Pressing right arrow Select button gives access to setting and pressing left arrow button allows you to go back the previous menu.



This menu allows you to determine how many channels your new fixture uses. You are empowered to set a scope ranging between 1 and 36. You can adjust the value in the bracket using the Cursor UP/DOWN buttons or F5 fader. The choice is confirmed by pressing the right arrow Select button.

LCD Effect Label

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [LCD EFFECT LABEL].



This menu allows you to give a definition list of the commands required by the new fixture to be written on the LCD. Pressing right arrow Select button gives access to setting and pressing left arrow button allows you to go back to previous menu. A dialog box appears in the LCD.



The flashing character(s) in the bracket reminds you to make a setting for the number of pages required to view the fixture's effect on the LCD. The scope ranges between 1 and 5. You can adjust the value using Cursor UP/DOWN buttons or F5 fader.

Confirm your setting by pressing the right arrow button, a dialog box appears in the LCD.



Each page contains 6 character strings, and each character string consists of a maximum of 6 letters. The Cursor UP/DOWN buttons are used to scroll through the set of characters available, LEFT/RIGHT buttons to pass from letter to letter. To enter a letter one by one, you can use the F1 fader in combination with the Cursor LEFT/RIGHT so that you can give new effects. There is a dictionary built into the memory, the faders can be used to scroll through the letters. In the case:

```
Enter the string for effects more<->
COLOR GOBOS G. ROT PRISM SHUTT DIMMR P1
```

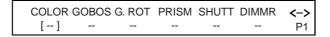
Pressing the right arrow Select button gives access to page 2 and the left arrow returns to the previous menu. Storage is automatic.

Internal Patch

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [INTERNAL PATCH].

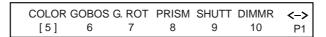


Press right arrow button, a warning message appears, reminding you not to reuse one same DMX channel. "ok" confirms, the effect string created in the LCD Effect Label will reappear.



This menu allows you to assign patching effects to fixture's DMX channels. Use the Cursor UP/DOWN buttons to set the value, LEFT/RIGHT to pass from effect to effect. You can also use F1-F6 buttons to set the values.

In the case:



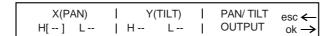
Pressing the right arrow Select button gives access to page 2 and the left arrow returns to the previous menu. Storage is automatic.

Pan/ Tilt Patch

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [PAN/TILT PATCH].



Press right arrow button, a warning message appears, reminding you that every X or Y channel be unique. "ok" confirms, a dialog box will appear.



This menu allows you to assign patching Pan/Tilt function to fixture's DMX channels. Most fixtures allow both 8 and 16 bit control, some only 8 bit. In 16 bit mode, the Pan movement requires two channels, so does the Tilt movement. In 8 bit mode, just one channel is used for Pan or Tilt, so only high position is set. Use the Cursor UP/DOWN buttons to set the value, LEFT/RIGHT to pass from effect to effect. You can also use F1-F4 buttons to set the values.

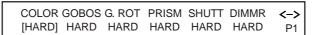
Pressing the right arrow Select button confirms your setting.

Hard/ Soft Patch

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [HARD/ SOFT CROSS].

```
Select feature to configure for esc \leftarrow FIXTURE NAME - [HARD/SOFT CROSS] ok \rightarrow
```

"Ok" confirms, the effect string created in the LCD Effect Label will reappear.



This menu is used to set the speed at which the fixture passes from one effect to another. "Hard" implies the highest speed(fade time disabled), "Soft" refers to the set speed(fade time enabled). Use the Cursor UP/DOWN buttons to select between hard and soft, LEFT/RIGHT to pass from effect to effect.

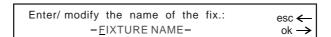
Pressing the right arrow Select button gives access to page 2 and the left arrow returns to the previous menu. Storage is automatic.

Fixture Name

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [FIXTURE NAME].



Pressing right arrow Select button gives access to setting, a dialog box appears.

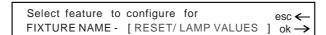


This menu is used to name new fixtures. The Cursor UP/DOWN buttons are used to scroll through the characters available in the dictionary built in to the memory, LEFT/RIGHT buttons to pass from letter to letter. You can also use F4 fader to select the desired characters.

Pressing right arrow Select button confirms your new fixture name.

Reset/Lamp Values

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [RESET/ LAMP VALUES].



Press right arrow button, a warning message appears, reminding you not to reuse one same DMX channel for different effects. "ok" confirms, a dialog box will appear.



This menu allows you to obtain Remote Reset and Remote lamp on/off functions if it has this fixture. These settings will be used for the Reset and Lamp functions. Use the Cursor UP/DOWN buttons to set the value, LEFT/RIGHT to pass from element to element. You can also use F1-F6 faders in combination with LEFT/RIGHTto set the values. Reset and Lamp can use identical or different channels.

In the case:



These settings indicate that the Remote Reset channel operates on channel 12. Press right arrow button to confirm your settings.

Dip-Switch Configuration

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [DIP-SWITCH CONFIG.].

```
Select feature to configure for esc ← FIXTURE NAME - [ DIP-SWITCH CONFIG. ] ok →
```

"Ok" confirms, a dialog box will appear.

```
ENTER THE DIP-SWITCH CONFIGURATION esc \leftarrow n.dip = [-] 1st channel = - = - ok \rightarrow
```

This menu is used to select the addressing system that different manufacturers use. Use the Cursor UP/DOWN buttons to select the value, LEFT /RIGHT to pass from parameter to parameter.

Press the right arrow button to confirm your setting.

Control Type

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [CONTROL TYPE].

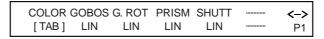


"Ok" confirms, the effect string created in the LCD Effect Label will reappear.



This menu allows you to select channel effects control mode. The types of control available are Linear(LIN) and Tabular(TAB): the former provides proportional control, the latter enables to recall the preset values quickly. Use the Cursor UP/DOWN buttons to select between LIN and TAB, LEFT/RIGHT to pass from effect to effect.

In the case:



These settings indicate that tabular control will only be used for the color channel.

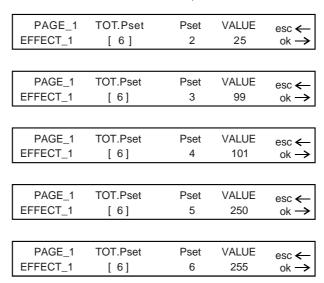
To set the table's parameters, press the Function button corresponding to COLOR, a dialog box will appear.



TOT.Pset refers to the number of parameters to be entered in the table(maximum 50), Pset indicates the no. of current parameter. In the case:



Use the Cursor UP/DOWN buttons to set the value, LEFT/RIGHT to pass from element to element. You can also use the faders of F3, F5 and F6 to set the value.



Pressing the right arrow button to confirms these settings and returns to the effect string dialog box.

Dimmer Patch

In Create New Fixture menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [DIMMER PATCH].



Press right arrow button, a warning message appears, reminding you not to reuse the identical channels occupied by X(Pan), Y(Tilt), Reset or Lamp . "ok" confirms, a dialog box will appear.



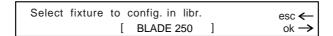
Use the Cursor UP/DOWN buttons or F5 fader to scroll to the channel you want to regard as dimmer channel. Press the right arrow Select button to confirm this setting.

Edit Existing Fixture

In Internal Library menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [EDIT EXISTING FIXTURE].

```
Select ITEM [EDIT EXISTING FIXTURE]
```

To access this menu, press the right arrow Select button and a dialog box will appear.



Use Cursor UP/DOWN buttons or F4 fader to scroll to the fixture required to be modified. Once the fixture is selected, pressing the right arrow button(ok) will give access to the settings and pressing left arrow button(esc) will go back.

This menu allows you to modify the parameters of fixtures already in the library. The procedure is the same as that for creating a new fixture.

Delete Fixture

In Internal Library menu, use Cursor UP/DOWN buttons or F5 fader to scroll to [DELETE FIXTURE].

Press the right arrow Select button to access this menu, a dialog box appears as follow:



Use Cursor UP/DOWN buttons or F4 fader to scroll to the fixture to be deleted. Once the fixture is selected, press the right arrow button(ok), a dialog box appears.



If you are sure of your selection, press "yes" to delete this fixture. Pressing the left arrow button allows to re-enter this menu, "no" (F6 button) returns to the previous menu.

Hint! - About error messages

If the procedures hereinbefore for creating a new fixture are carried out successfully, no particular message will appear and you can continue your configurations. If any mistakes are made or any steps omitted when creating new fixtures, a dialog box will appear as follow:



Press the left arrow Select button to review all the parameters and correct any wrong data, press the right arrow button to give up all the settings you've done before.

When changes are made to a fixture that already exist in the library, a dialog box like this will appear.



Press the right arrow Select button(yes) to confirm the modifications to the existing fixture, F6 button(no) to return to the previous menu and the left arrow button(quit) to re-enter parameter modification menu.

The library can contain a maximum of 256 fixtures. When there are 256 fixture in the library and you try to add new fixtures, a reminder message will appear.



Pressing the right arrow button(ok) switches off the error message.

If you want to delete the fixture that has been patched, a reminder message will appear.



Pressing the right arrow button(ok) switches off the error message.

When there is no fixture in the library and you try to delete a fixture, a reminder message will appear.



Pressing the right arrow button(ok) switches off the error message.

Patch

In Setup menu, the flashing characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [PATCH].

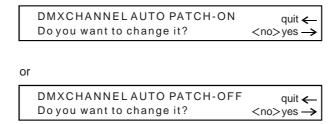


Pressing right arrow Select button gives access to this setting, a dialog box appears, requiring you to select AUTO(ON) or MANUAL(OFF) for patching.



Use the Cursor UP/DOWN or F5 fader to select between Auto Patch(ON) and Manual Patch(OFF). In Auto Patch mode, DMX channels 1-479 are assigned to the fixtures, 480-503 to the Pars, 504-511 to the Strobes and 512 to the Smoke machine. In Manual Patch mode, all DMX channels are at your disposal.

Change ON to OFF or OFF to ON, a dialog box will appear.



Press the right arrow Select button(yes) to confirm the change to the patch mode and access this patching setting, F6 button(no) to return to the previous menu and the left arrow button(quit) to re-enter parameter modification menu.

This GALAXY has 512 DMX channels for up to 44 units, including 16 fixtures, 24 pars and 4 strobes. To control the 44 units, it is necessary to carry out patching procedure.

Fixture Patch

Use the Cursor UP/DOWN buttons or F5 fader to scroll to [FIXTURE PATCH].

$$\begin{array}{c} \mathsf{DMX}\,\mathsf{CHANNELAUTO}\,\mathsf{PATCH-ON} & \mathsf{esc} \longleftarrow \\ \mathsf{Select} & \longrightarrow [\mathsf{FIXTURE}\,\mathsf{PATCH} &] & \mathsf{ok} \longrightarrow \end{array}$$

Pressing the right arrow button gives access to this setting, a dialog box appears.

We recommend you to use Fixture 1-16 buttons when assigning the fixtures and F2 fader to select the type of fixture available in the library. Pressing the button(F4 button) corresponding to deletes what has been previously set. In Auto Patch mode, the DMX channels assigned to the fixture will be created automatically. In Manual Patch mode, use the Cursor buttons to assign the parameters, take care not to overlap the address patch for the fixtures so that you can escape from mishmash.

In the above case, fixture 1 is a YPOC 250. This YPOC 250 requires 14 DMX channels, whose starting address is 1. This line at the low right corner indicates dip-switch configuration has been omitted during fixture setup procedure. If dip-switches are available for the fixture, ten small squares indicating dip-switches will appear instead of the line at the low right corner.

Par Patch

Use the Cursor UP/DOWN buttons or F5 fader to scroll to [PAR PATCH].



Pressing the right arrow button gives access to this setting, a dialog box appears.



In Auto Patch mode, DMX channel 480-503 will be automatically assigned to the pars. In Manual Patch mode, use the Cursor UP/DOWN buttons or F2 fader to set the value for the starting channel of the pars, "ok" confirms your setting. There are always 24 channels for the pars.

Strobe Patch

Use the Cursor UP/DOWN buttons or F5 fader to scroll to [STROBE PATCH].



Pressing the right arrow button gives access to this setting, a dialog box appears.



In Auto Patch mode, DMX channel 504-511 will be automatically assigned to the pars. In Manual Patch mode, use the Cursor UP/DOWN buttons or F2 fader to set the value for the starting channel of the strobes, "ok" confirms your setting.

There are always 8 channels for the strobes, 2 channels per strobe.

Smoke Patch

Use the Cursor UP/DOWN buttons or F5 fader to scroll to [SMOKE PATCH].



Pressing the right arrow button gives access to this setting, a dialog box appears.

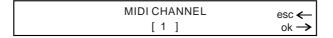


In Auto Patch mode, DMX channel 512 will be automatically assigned to the pars. In Manual Patch mode, use the Cursor UP/DOWN buttons or F2 fader to select any channel for the fog machine, "ok" confirms your setting.

MIDI Channel

In Setup menu, the flashing characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [MIDI CHANNEL].

Pressing right arrow Select button gives access to this setting, a dialog box appears.



Use the Cursor UP/DOWN buttons or F4 fader to set a value between 1 and 16 for MIDI channel. "Ok" confirms your setting, "esc" (left arrow button) aborts this setting.

Strobe Type

In Setup menu, the flashing characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [STROBE TYPE].

```
CONFIGURATION & SETUP MENU esc \leftarrow
SELECT \longrightarrow [STROBE TYPE ] ok \rightarrow
```

Pressing right arrow Select button gives access to this setting, a dialog box appears.



There are two options for strobe type, including SPQ-2 and BIG FLASH 1500 DMX. Use the Cursor UP/DOWN buttons or F4 fader to select the strobe type you need. "Ok" confirms your setting, "esc" (left arrow button) aborts this setting.

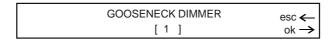
To adapt to this controller, you will have to do some extra settings on the strobes. For the SPQ-2, be sure to select a matching DMX address and switch function dip-switch 1, 2 on and the other two off. For the other one, be sure that it is in DMX pack mode.

Gooseneck Dimmer

In Setup menu, the flashing characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [GOOSENECK DIMMER].

CONFIGURATION & SETUP MENU
$$\operatorname{esc} \leftarrow$$
 SELECT \longrightarrow [GOOSENECK NECK] $\operatorname{ok} \rightarrow$

Pressing right arrow Select button gives access to this setting, a dialog box appears.



Use the Cursor UP/DOWN buttons or F4 fader to set a value between 0 and 16 for dimming of the USB DJ lamp. 0 will give zero output(off), 16 will give full output (maximum dimming). "Ok" confirms your setting, "esc" (left arrow button) aborts this setting.

View Free Memory

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [VIEW FREE MEMORY].



Pressing right arrow Select button gives access to this setting, a dialog box appears.

This menu is used to check how much memory is available for new fixtures and recording of the scenes, chases and shows. In this case, we can get acquainted with that there are 122 fixtures available for adding to the library, 48 shows, 48 chases and 48 scenes available for recording. "Ok" or "esc" leaves this menu.

Send Data File

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [SEND DATA FILE].



Pressing right arrow Select button gives access to this setting, a dialog box appears.



This menu allows you to send the library, memory and setup to a PC(personal computer) as backup via the RS-232 port. Use the Cursor UP/DOWN buttons or F4 fader to select the item you want to send. Before you can press the right arrow button to commence sending, be sure that the connection between this unit and the PC has been established successfully and that Windows configuration has been completed properly. It will take you about five(5) minutes to send the library file, 12 minutes to send the memory file and some seconds to send the setup file.

Help - RS-232 connection and Windows Configuration

To connect to a PC, you will need a serial lap link cable available at any computer store. A standard RS-232 cable will not work. Connect the RS-232 port on GALAXY to one of the Serial "com" ports on your PC.

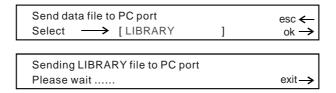
You will need a PC running Windows 95/ 98 or higher to connect to GALAXY. Windows comes with an accessory called Hyper Terminal that can communicate with GALAXY via one of the "COM" ports on your PC. Determine which of your "COM" ports is available. COM 1 is generally used for the mouse so it is always advisable to connect your GALAXY to COM 2 on your PC.

You must first configure Hyper Terminal to work with GALAXY. Start the Hyper Terminal program by clicking on "Start" in Windows then "Programs" then "Accessories" then "Hyper Terminal" then "Hypertrm". If for some reasons Hyper Terminal is not installed on your version of Windows, install it from your Windows CD. Go to the control panel, select Add/Remove Programs, select Windows Setup, and then select Communication. Follow the instructions to complete the installation.

Once the Hyper Terminal Program is getting started, you will be asked to choose a name and an icon. Name it GALAXY then pick any icon then click OK. Go to the next dialog box "Connect to" and choose "Direct to COM 2". Ignore the telephone number and other settings in this box then click OK. In the next dialog box, set bits per second to 38400, data bits to 8, parity to none, stop bits to 1, flow control to none, then click OK. You will access Hyper Terminal desktop. Click File menu in the upper left corner of the desktop, then "Properties", then select the "settings" tab. From the settings tab click "ASCII Setup". In the next dialog box, leave all settings deselect, then OK. Close Hyper Terminal and you will be prompted to save this Hyper Terminal setup. Click YES to save it then you will have a program labeled "GALAXY.ht". You may want to make a shortcut on your desktop if you plan to use your PC with GALAXY often. From this point on, whenever necessary, you can just click GALAXY.ht icon to invoke the GALAXY Hyper Terminal configuration quickly.

Once configured, you can use Hyper Terminal to send the GALAXY data file and save it on your hard disk. Connect to your PC as described hereinbefore. Next call the version of Hyper Terminal that you created for GALAXY. Click on "Transfer" on the top menu bar and select "Capture Text". A dialog box will appear allowing you to select a folder and name for the data file you send. Use a name like "GALAXYlib.txt". Be sure to give a new file name that is not available in this folder, because the data sent from GALAXY will not be overwritten the old and instead be added to the existed file. Click "Start" and Hyper Terminal is now ready to receive the file from GALAXY.

Go to the menu setting on GALAXY, select the item you want to send, press "ok" to start the transmission from GALAXY, waiting information appears in the LCD.



During the course of transmission, it is always advisable not to discontinue it unless necessary, as such discontinuity may cause unnecessary trouble. The LCD will give prompt information when completion. "Ok" or "esc" leaves this menu.

After the file has ben sent, you can either close Hyper Terminal or return to the "capture text" pull down menu and select "stop", the file will automatically be saved.

Load Data File

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [LOAD DATA FILE].



Pressing right arrow Select button gives access to this setting, a dialog box appears.



This menu allows you to download the library, memory and setup from your PC via the RS-232 port. Use the Cursor UP/DOWN buttons or F4 fader to select the file item you want . Once the item is selected, press "ok" and a dialog box will appear. This GALAXY is now ready to receive the file from your PC.



Next call the version of Hyper Terminal that you created for GALAXY. Click on "Transfer" on the top menu bar and select "Send Text File". A dialog box will appears allowing you to select the text file that you made when you make backup copies of your GALAXY. Find the drive and folder where you created the file if it is not in the current window, select the file and click on "Open". Hyper Terminal will begin to transmit the file. After the file has been sent, the prompt information will appear in the LCD.



"Ok" or "esc" leaves this menu. If any errors have been detected, error information will appear in the LCD. Check your connections and try again. It will take you about five(5) minutes to receive library file from your PC, ten minutes memory file and some seconds setup file.

Update Software

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [UPDATE SOFTWARE].



Pressing right arrow Select button gives access to this setting, waiting information will appear in the LCD.

```
Updating software
Please wait ..... exit→
```

GALAXY is now ready to receive the file from your PC. Next call the version of Hyper Terminal that you created for GALAXY. Click on "Transfer" on the top menu bar and select "Send Text File". A dialog box will appear allowing you to select the text file we provided (We will provide you the higher version software in Text type file). Find the drive and folder where the file is located, select the file and click on "Open". Hyper Terminal will begin to transmit the file. It will take about two minutes to transfer the file. After the file has been sent, GALAXY will reboot its system and get started with its procedures. If any errors have been detected, GALAXY will give error information. Check your connections and try again.

Save to Card

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [SAVE TO CARD].

CONFIGURATION & SETUP MENU
$$esc \leftarrow$$

SELECT \longrightarrow [SAVE TO CARD] ok \rightarrow

Pressing right arrow Select button gives access to this setting, a dialog box appears.

SAVE TO CARD MENU esc
$$\leftarrow$$
 Select \longrightarrow [4] - Fcc-2lib ok \rightarrow

This menu allows you to make backup copies of your library, memory and setup using CF(32 MB Compact Flash) card. Use the F3 fader to select the sector between 1 and 15 for the CF card, F5 fader to name this sector. The Cursor LEFT/RIGHT buttons can be used to pass from function to function, UP/DOWN buttons to set the values.

"Ok" confirms to access this setting, a dialog box appears.



Use F4 faderr or Cursor UP/DOWN buttons to select library, memory or setup, "ok" confirms and the display will prompt you that it is proceeding.

Save LIBRARY from Console to Card Please wait

If The CF card is not inserted or not properly inserted, you will be prompted by this information in the LCD.



You will be prompted when completion. "Ok" or "esc" returns to previous dialog box.



Load From Card

In Setup menu, the flashing the characters inside the brackets will remind you to select the item you want to work on. Use Cursor UP/DOWN buttons or F4 fader to scroll to [LOAD FROM CARD].



Pressing right arrow Select button confirms to access this setting, a dialog box appears.

```
Select \longrightarrow [4] — Fcc-2lib esc \longleftrightarrow ok \Longrightarrow
```

This menu allows you to restore the library, memory and setup of GALAXY from the CF card. Use the F3 fader or Cursor UP/DOWN buttons to select the sector from the CF card, "ok" gives access to this setting, a dialog box will appear in the LCD.



Use F4 fader or Cursor UP/DOWN buttons to select library, memory or setup, "ok" confirms and the display will prompt you that it is proceeding. Be careful the existed file will be overwritten by the new file from CF card.

If The CF card is not inserted or not properly inserted, you will be prompted by this information in the LCD.

NO CARD!	esc ←
PLEASE INSERT CARD AND RET	•

The CF card should be first written by your GALAXY before you can load the files. If not doing so, error message will appear and prompt you using another card.

CARD DATA ERROR!	PLEASE INSERT ANOTHER	esc ←
CARD AND RETRY.		ok →

You will be prompted when completion. "Ok" or "esc" returns to previous dialog box.



This section detailed the procedure for creating scenes, chases and shows. You will learn how to start the recording, how to create or save a show for selected fixtures or effects, how to create chase and edit steps, etc.

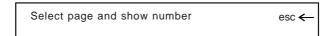
To start recording, simply click the Record button, its LED will blink rapidly, and you will be asked to select what to record by the prompt in the display. Within this chapter, we mean the right LCD when referring to the LCD.



There are three options you can select to record, including show, chase and scene.

Recording Shows

There are total 48 shows available for the fixtures, each with a maximum of 48 steps. In Record mode, press "Show", its LED will light up, you are prompted to select the page and show, the page LED will light indicating the current show page.



Use the Page and Flash 1-12 buttons to select the show number, a dialog box appears.

SHOW	STEPS	esc ←
01	[]	edit →

Use the F2 fader or Cursor UP/DOWM buttons to select the step. A maximum of 48 can be selected. Press the right arrow Select button to access edit menu, a dialog box will appear.



Edit menu contains three options, including Active Effects, Edit Steps and Step's time.

Active Effects

In Edit menu, use the F4 fader or Cursor UP/DOWN buttons to select [ACTIVE EFFECTS].



Pressing the right arrow button gives access to this setting. If you have not yet assign a fixture to be subject to the show, you will be required to select active fixtures or effects.

```
SELECT FIXTURE Select active fixtures/effects
```

Use the Fixture 1-16 buttons to choose the fixture that has been patched in setup procedure, its LED blinks briefly indicating it is enabled to be subject to the show. You may select several fixtures at a time, however, only the latest one, whose LED blinks, is active for the show(it is different from Group described hereinafter). Use F 1-6 buttons and Pan, Tilt buttons to enable the effects(corresponding to the DMX channels you assigned in Internal Patch) display in the LCD, their LEDs will light up.

COLOR GOBOS G.ROT PRISM SHUTT DIMMR Select active fixtures/effects

You can select several fixtures at one time to make a group. Up to 6 groups can be created. Keep pressing the Fixture button, select the group using F 1-6 buttons corresponding to the group numbers in the display, its LED lights up. Next select several equal fixtures, their LEDs will blink simultaneously indicating they are in the identical group and are active for the show.

```
Select other fixtures to make a group
GPR1 GPR2 GPR3 GPR4 GPR5 GPR6
```

Always remember the fixture you selected must be the same, or you will be prompted due to selecting different fixtures.

Different fixture: no effect controls
Select active fixtures/effects

Once this procedure is finished, press the left arrow button to return to the Edit menu.

Edit Steps

In Edit menu, use the F4 fader or Cursor UP/DOWN buttons to scroll to [EDIT STEPS].



Pressing the right arrow button gives access to this setting. You will be required to select a fixture when no fixture is selected. Use the Fixture 1-16 buttons to select the fixture, remember that the latest one is only active for this setting. Group function is as well available for this setting.



Use the Faders 1-6 and joystick(Pan and Tilt LEDs light up) to set the values, you can also use the Cursor buttons for your setting when any of the Function 1-6 buttons is enabled.

A dialog box appears when the Store button is pressed. Keep pressing the Store button, select the target step using the Page and Flash 1-12 buttons to store the new step.

Select destination step

Pressing down the Step button allows you to direct call or edit steps, a dialog box prompt you to select the step you want to edit.

Select step to edit

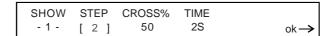
Us Page and Flash 1-12 buttons to modify this step and then store it to replace the old one or as a new step. When this procedure is finished, press the left arrow button to return to the Edit menu.

Step's Time

In Edit menu, use the F4 fader or Cursor UP/DOWN buttons to scroll to [STEP'S TIME].



Pressing the right arrow button gives access to this setting, a dialog box appears.



This function allows you to set the duration time(Time) and running time(Cross%) for each step in a Show. Use the Faders 2-4 or Cursor buttons to set the value. Step indicates the current step number, which ranges between 1 and 48. Time ranges between 0 and 1 minute and 39.9 seconds. Cross ranges between 0 and 100%.

You can set several fixtures at one time with the same parameters using Group of Steps. Keep pressing the Step button, select several steps(indicated by the LEDs) using Page and Flash 1-12 buttons.



Set the values as the way described hereinbefore. "Ok" confirms and returns to the Edit menu.

When you have finished recording, press the left arrow button to leave this menu, you will be prompted to press enter to store what you have record.

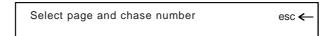


Press the ENTER button, all the changes to this show will be stored into the memory.

Pressing the F6 button corresponding to <ESC> on the display will abort this recording, the left arrow button(quit) will re-enter this menu.

Recording Chases

There are total 48 chase available for the pars. In Record mode, press "Chase", its LED will light up, you are prompted to select the page and chase, the page LED will light indicating the current chase page.



A dialog box will appear when you select a chase using the Page and Flash 1-12 buttons. "Esc" will leave this menu.



This menu allows you to set the step length, set a common Cross% and Time for the chase, and edit the steps as well. Use the F 2, F4 and F 5 faders or Cursor buttons to set the values for Step(0-48), Cross%(0-100%) and Time(0 to 1 minute and 39.9 seconds).

Next, you can edit the steps from step 1. Use the Channel and Flash 1-12 faders to create a step(scene), press the Store button to add the step into the current chase. Proceed in the same way until all steps required have been stored.

Pressing down the Step button allows you to quick access the step. Keep pressing the Step button, use the Page and Flash 1-12 buttons to select the step to be edited.

Once the chase has been completed, press "ok" to confirm your changes to the chase and return to the menu.

Now you can choose to continue recording chase or press "esc' to leave this menu.

Recording Scenes

A dialog box will appear when you select a scene using the Page and Flash 1-12 buttons. "Esc" will leave this menu.



This menu allows you to create scenes of lighting and set the time it takes for each scene to fade in. You can set the time, that ranges between 0 and 1 minute and 39.9 seconds, using the F 2 fader or Cursor UP/DOWN buttons.

Use the Channel button and Flash 1-12 faders to create a scene of lighting. Next press the Store button to store this scene into memory. "Ok" confirms the changes to the scene and returns to the menu.

Proceed in the same way for each scene required.

Once the scenes have been completed, simply press "esc" to leave this menu.

Playback Mode

This section outlines how to choose, play and pause the scenes, chases and shows you have created in previous chapter.

A scene is a recording of selected channel levels of lighting, a chase is a sequence of steps(scenes), providing some changes at a preprogrammed speed for traditional pars, and a show is a sequence of scenes for the effects control of the intelligent fixtures.

Within this chapter, we refer to the left LCD, which gives real-time display of the current playback state, when the LCD is mentioned.

The following options are available in the LCD:

Option	Meaning
En	Abbreviation for enter
Ch	Abbreviation for choose
Go & 01-48	Playback & step 01-48
Pu & 01-48	Pause & step 01-48
SH & 01-48	Abbreviation for show 01-48
CA & 01-48	Abbreviation for chase 01-48
SC & 01-48	Abbreviation for scene 01-48

Playing Scenes/Chases/Shows

Press the Choose button to call choose mode, "Ch" appears in the bottom row of the display. Use the Go/Pause buttons to scroll to the scene, chase or show. Next press the Choose button to call enter mode, "En" indicates this selection.

In Enter mode, pressing the Go button allows you to play it back, and the Pause button to pause its playing.

Playback Mode

Multi Playback

There are 32 preset available for 4 pages, each per 8 presets. Such an arrangement of preset is a great convenience that allows you to play multiple presets. You can call and play Up to 4 scenes, 4 chases and 4 shows at one time.

When several shows are selected, LTP (Latest Take Precedence) is used to control the fixtures if there is some overlap.

 SH01
 CA48
 SC01
 SC48
 SH20
 SH48
 CA37
 CA48

 En01
 Ch01
 Go01
 Go48
 Pu01
 Pu48
 Ch01
 En01

Strobe Light Programs

There are total 20 programs you can use to control up to 4 strobe lights. The Menu button can be used to scroll through the Program, Speed and Dimmer menu settings.

In Program menu, use the UP/DOWN buttons to select any one of the 20 programs. In Speed menu, use the UP/DOWN buttons to set the value for the speed at which the chase of the programs will run. A value of 01 will give you the slowest speed and 99 will give the fastest speed. In Dimmer menu, use the UP/DOWN buttons to change the light intensity. A value 01 gives the lowest output and 99 gives full intensity.

The Full On button is used to bring the overall output to full intensity. This function is enabled when the Full On button is pressed down, and disabled when set free. Pressing the Stand By button gives access to Stand By mode. A second pressing will leave this function.

When both Full On and Stand By are enabled, Full On takes priority of Stand By.

Choose Fixtures

This GALAXY can control 16 fixtures you have assigned in Fixture Patch menu. The fixture will have access to direct control of fixture channels, and as well respond to the shows, which gives us great flexibility.

Select a Fixture

In Fixture mode(fixture LED lights up), select the button(from fixtures 1 to 16) corresponding to the fixture you have assigned in fixture patch menu, the top right LCD will indicate the effects it contains and the values. If no fixture type has been assigned to a fixture number, it cannot be selected.

Use the F 1-6 faders to set the values for the effects. The two Select buttons(right and left arrow) allow to scroll the pages of the fixture's effects in group of 6 at a time. When Pan and Tilt are lit, the joystick can be used to control the X(Pan) and Y(Tilt) movements. Pressing one of the F 1-6 buttons allows you to use the Cursor buttons for the settings of the effects according to the setting in Control type menu.

	COLOR	GOBOS	G.ROT	PRISM	SHUTT	DIMMR	0
l	0	120	0	0	0	255	999

Group of Fixtures

Group of fixtures is enabled when the Fixture button is pressed down. You can select several fixtures at one time to make a group. Up to 6 groups can be created. a dialog box will appear when the Fixture button is pressed down.

Select other fixtures to make a group GPR1 GPR2 GPR3 GPR4 GPR5 GPR6

Choose Fixtures

Press one of the F 1-6 buttons corresponding to the group numbers in the display to select the group number when the Fixture button is pressed down. Next select several equal fixtures, their LEDs will blink simultaneously indicating they are in the identical group.

In Fixture mode, to recall a existed group, simply press the F button corresponding to the group required.

To remove the fixtures from a group, you can press the Fixture 1-16 buttons required to extinguish the LEDs when the group is active.

Utility Controls

Times

This function allows you to multiply the fade-in and fade-out speed set in Recording. As a result, you can enhance or attenuate the speed for the presets being played. In Fixture mode, a dialog box will appear and the Times LED will flicker briefly when the Times button is pressed.



In this operating mode, select Show, Chase or Scene mode using the Show, Chase or Scene button. As is explained hereinbefore, you can play 4 shows, 4 chase and 4 scenes at a time. The one with two star characters is ready to be set. Use the Cursor LEFT/RIGHT buttons to pass from element to element, then use the F 5 fader or Cursor UP/DOWN buttons to set the value for the current element. The speed multiplying factor ranges between 25% and 400%. "Ok" confirms this setting and leaves this menu, and "esc" leaves with the settings unchanged.

In this mode, you can direct access a certain step of the chase or show using the Flash 1-12 buttons in combination with the Flash Page button.

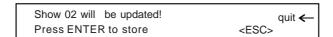
Utility Controls

Copy

Pressing the Copy button gives access to Copy function, its LED flickers briefly and a dialog box appears in the right LCD.



The Show, Chase or Scene button can result in copying show, chase or scene. Use the F 3, 4 faders or the Cursor buttons to select the source and target elements. Press"ok", a warning message will appear in the LCD.



Press the ENTER button to confirm this copy and save it into the memory. Pressing the F6 button corresponding to <ESC> on the display will leave this setting unchanged, the left arrow button(quit) will re-enter this menu.

Reset

This function allows you to carry out Reset function using this GALAXY instead of your fixtures. Pressing the Reset button gives access to the Reset function, its LED flickers briefly and a dialog box appears.



Press the Fixture 1-16 buttons, the reset function on the selected fixture will be carried out. Before you can carry out this function, you must give a Reset/Lamp setting in the fixture library.

Utility Controls

Lamp

This function allows to switch on or off the lamp on the fixture. Pressing the Lamp button gives access to the Lamp function, its LED flickers briefly and a dialog box appears.

To switch on or off the lamp, you will have to press down the Fixture 1-16 buttons for several seconds. Its LED lights up indicating the lamp is lit, its LED goes out indicating the lamp is off. Before you can carry out this function, you must give a Reset/Lamp setting in the fixture library.

MIDI Implementation

To activate MIDI operation, you must first select a MIDI channel identical to that of the MIDI keyboard or sequencer.

The GALAXY will send and receive MIDI program changes according to the following table:

NOTE	FUNCTION
0-47(00H-2FH)	SHOW 01-48
48-95(30H-5FH)	CHASE 01-48
96-115(60H-73H)	SCENE 01-20
116-125(74H-7DH)	STROBE PROGRAM 01-10
126(7EH)	SMOKE
127(7FH)	BLACKOUT

