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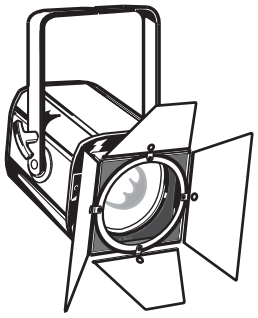
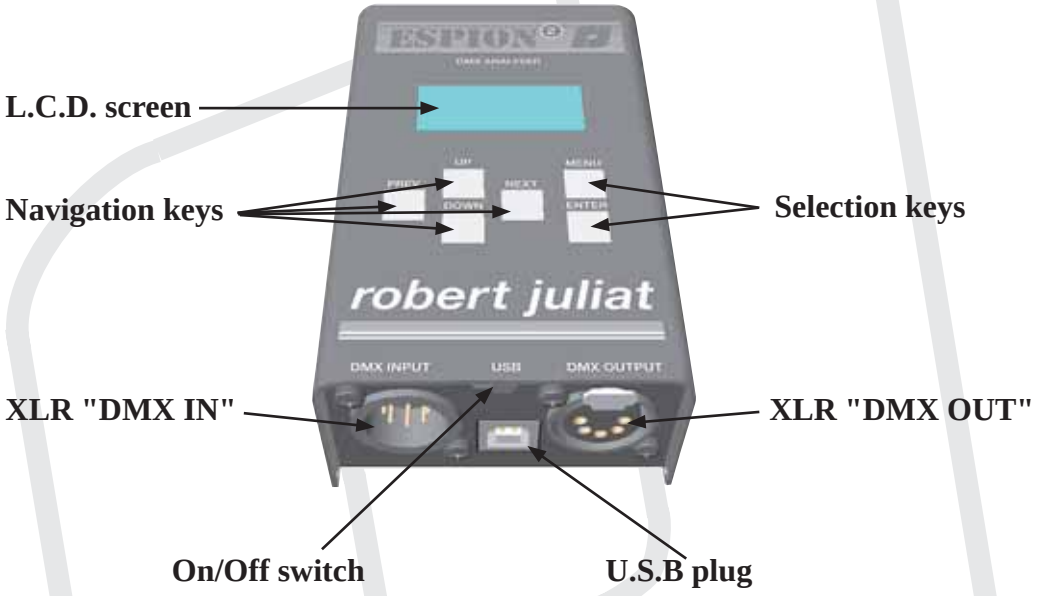


ESPION 2

Enhanced user's manual for V1.04 Firmware



Introduction

ESPION 2 is made with a USB connexion, it allows it a direct link to a Windows XP Computer.
It also provide power to the ESPION 2 when connected, and so, do not use it own batteries.
The main On/Off switch select where the power come from (batteries or USB).

For the USB connexion, a little software is under working, for the moment it gives you the opportunity to drive the ESPION 2 DMX frame (Cue sheet, DMX in/DMX out information, manual pots).

We need to have your feed back about it, that's why, for download the software package, we ask you to give us your name, address, and ESPION 2 serial number.

Feel free to give us your request : **espion2@robertjuliat.fr**

Main Menu

Select one of the following operations

1) View DMX input
2) Rig Check
3) Send DMX Output
4) Test Fixture
5) Regenerate DMX
6) Cable Test
7) Input Analyze
8) Test Line Out
9) Setup

Key	Function
Menu	No function
Enter	Select current operation
Next	Next menu item
Prev	Previous menu item
Up	Next menu item
Down	Previous menu item

1 - View DMX input

This operation will show the DMX input values. If the DMX is not present, the input screen will show: "no DMX on input".
If it detects a valid DMX, the ESPION 2 will show the DMX values in five different modes:

- 8 bar charts are shown on the bottom line
- 16 bar charts are shown on the bottom line
- 24 bar charts are shown on the bottom line
- 2 decimal values are shown (0-255) on the bottom line
- 3 percentage values are shown (0-99, FF) FF means 100%, on the bottom line

The top line shows the first and last DMX address examined.
In the Decimal and Percentage modes, a little sign ("d" or "%") appears at the end of the top line.

Key	Function
Menu	Back to main menu
Enter	Select next view mode
Next	Next channel page (page is the number of channels shown)
Prev	Previous channel page (page is the number of channels shown)
Up	Next channel
Down	Previous channel

2 - Rig Check

This operation sends out one DMX channel with an adjustable value. It can be used for quickly stepping through the DMX channels (RigCheck).

The Display shows the current channel and selected level.

Key	Function
Menu	Back to main menu
Enter	Toggle level. If the level is a value above zero, the level will become zero. Otherwise the level will become 100% (255)
Next	Next channel. Hold for quick stepping
Prev	Previous channel. Hold for quick stepping
Up	Adjust the level up. Hold for quick adjustment
Down	Adjust the level down. Hold for quick adjustment

3 - Send DMX Output

This operation can be used to send out a full DMX's scene, an empty, an existing one or a capture of the DMX input. This DMX scene can also be stored.
The screen shows the following options:

- Edit
- Clear, set all channels to 0
- Capture, take a DMX input snapshot
- Memory A-J
- Store A-J

Key	Function
Menu	Back to main menu
Enter	Select the current option and go to the Edit menu
Next	Next option
Prev	Previous option
Up	Next option
Down	Previous option

3.1 - Edit DMX scene

Here is the place where you can prepare a memory to record, or just prepare a light balance.

Key	Function
Menu	Back to previous menu
Enter	Toggle level. If the level is a value above zero, the level will become zero. Otherwise the level will become 100% (255)
Next	Next channel. Hold for quick stepping
Prev	Previous channel. Hold for quick stepping
Up	Adjust the level up. Hold for quick adjustment
Down	Adjust the level down. Hold for quick adjustment

3.2 - Store memory

When you have captured, edited, modified or made the light balance you needed, you can store it in one of the ten memories available (A to J).
To store the selected memory press ENTER, if you don't want to store, press MENU.

Between two Lighting desk light balance, you have to Capture the DMX in before record your new memory.

4 - Test Fixture

With this operation, it is easy to control a fixture (multi channel unit like a moving head).
The display's top line shows the current manufacturer and the bottom line shows the current fixture type.

Key	Function
Menu	Back to main menu
Enter	Select current Manufacturer/Fixture and go to the next menu (channel select, 4.1)
Next	Next fixture type of the same manufacturer
Prev	Previous fixture type of the same manufacturer
Up	Next Manufacturer
Down	Previous Manufacturer

4.1 - Fixture Channel select

You just have to select the Fixture's address.
When it's done, the DMX output sends the default values of the selected fixture type.
The default values are:

- Dimmer at full
- Shutter is open
- Color is white
- No Gobo / no Effect
- Pan / Tilt 50% / 50%

It is now easy to step through the fixtures on a DMX line to quickly check them. Like what the RigCheck is for dimmer channels.

Key	Function
Menu	Back to fixture select menu (4)
Enter	Lock the start address and go to the fixture control menu (4.2)
Next	Next fixture. Start address is adjusted by the number of channels used by the fixture
Prev	Previous fixture. Start address is adjusted by the number of channels used by the fixture
Up	Increment the start address by 1
Down	Decrement the start address by 1

4.2 - Fixture Control

In this menu you can select the fixture operation.

- Control (parameters)
- Run Macro
- Multiple Fixtures

Key	Function
Menu	Back to channel select menu (4.1)
Enter	Select the current option and goto the Edit menu
Next	Next option
Prev	Previous option
Up	Next option
Down	Previous option

4.3 - Fixture Parameter Control

In this menu you can adjust Fixture's parameters.
The top line gives the parameter name and the bottom line gives the channel number and value (in decimal).

Key	Function
Menu	Back to fixture control menu (4.2)
Enter	Set parameter to default value
Next	Next parameter
Prev	Previous parameter
Up	Adjust value up
Down	Adjust value down

4.4 - Fixture Run Macro

For easier control, some Macro can be executed (if some are present in the library for the library for this fixture's type). A macro is a multi-step sequence that can be used for Lamp On / Reset events.

Key	Function
Menu	Back to fixture control menu (4.2)
Enter	Run selected macro
Next	Next macro
Prev	Previous macro
Up	Next macro
Down	Previous macro

4.5 Multiple fixtures

You can control at the same time identical fixtures with a different DMX address. The top line gives the number of fixtures to control. The bottom line gives the DMX Channel step between two fixtures.
(ex : Align=20 : the first fixture start at channel 1, the second at channel 21,…).

Key	**Function**
Menu	Back to previous menu
Enter	Set parameter to default value
Next	Increment the DMX Channel step
Prev	Increment the DMX Channel step
Up	Increment the fixture number
Down	Decrement the fixture number

5 - Regenerate DMX

This operation is used to regenerate the DMX from the input to the output. Errors are removed and the frame rate can be adjusted. Also a softpatch can be set.

DMX in and out are terminated by a 120 Ohms resistor.

Options are:

- Activate, start the regenerator and softpatch
- Edit Patch
- Clear Patch, set the softpatch 1 to 1

5.1 - Regenerate Active

The display shows the DMX input status and output frame rate.
This function will help you to connect some old DMX devices, which may have a lower processor.

Key	Function
Menu	Back to previous menu
Enter	-
Next	-
Prev	-
Up	Adjust frame rate up. Maximum of 40 Hz
Down	Adjust frame rate down. Minimum of 25 Hz

5.2 - Edit soft patch

The display shows the selected output channels and the connected input channels.

Key	Function
Menu	Back to previous menu
Enter	Store the settings and go back to previous menu
Next	Select the next output channel
Prev	Select the previous output channel
Up	Change the connected input channel up
Down	Change the connected input channel down

To activate the Softpach, you have to run the Regenerate function.

6 - Cable Test

Connect a cable between input and output. The cable test will check the cable (except pin 1 continuity). The display will indicate the cable status.

- Cable pin 2 & 3 inverted.
- Pin 2 open / pin 3 open.
- Pin 2 / 3 connected to pin 1.
- Pin 2 & 3 connected together.

Press MENU go back the Main menu.

7 - Input Test

This operation shows the DMX input information.

- DMX status and channel count.
- Start code.
- Rate in (Hz), shows minimum and maximum value.
- Frame in (mS), shows minimum and maximum value.
- Break length (μS) , shows minimum and maximum value.
- Mark After Break length (μS) , shows minimum and maximum value.

Key	Function
Menu	Back to main menu
Enter	Reset minimum and maximum values
Next	Next option
Prev	Prev option
Up	Next option
Down	Prev option

8 - Output Test

Check if the DMX output is terminated / open or is overloaded / short-circuited.

Press MENU to go back the main menu.

9 Dip-Switch

This tool is made to help you to configure the old dimmers rack using dip switch to set the DMX address (1, 2, 4, 8, 16, .., 128, 256).
You just have to indicate the address you want to reach, the ESPION 2 will give you the switches to put on.

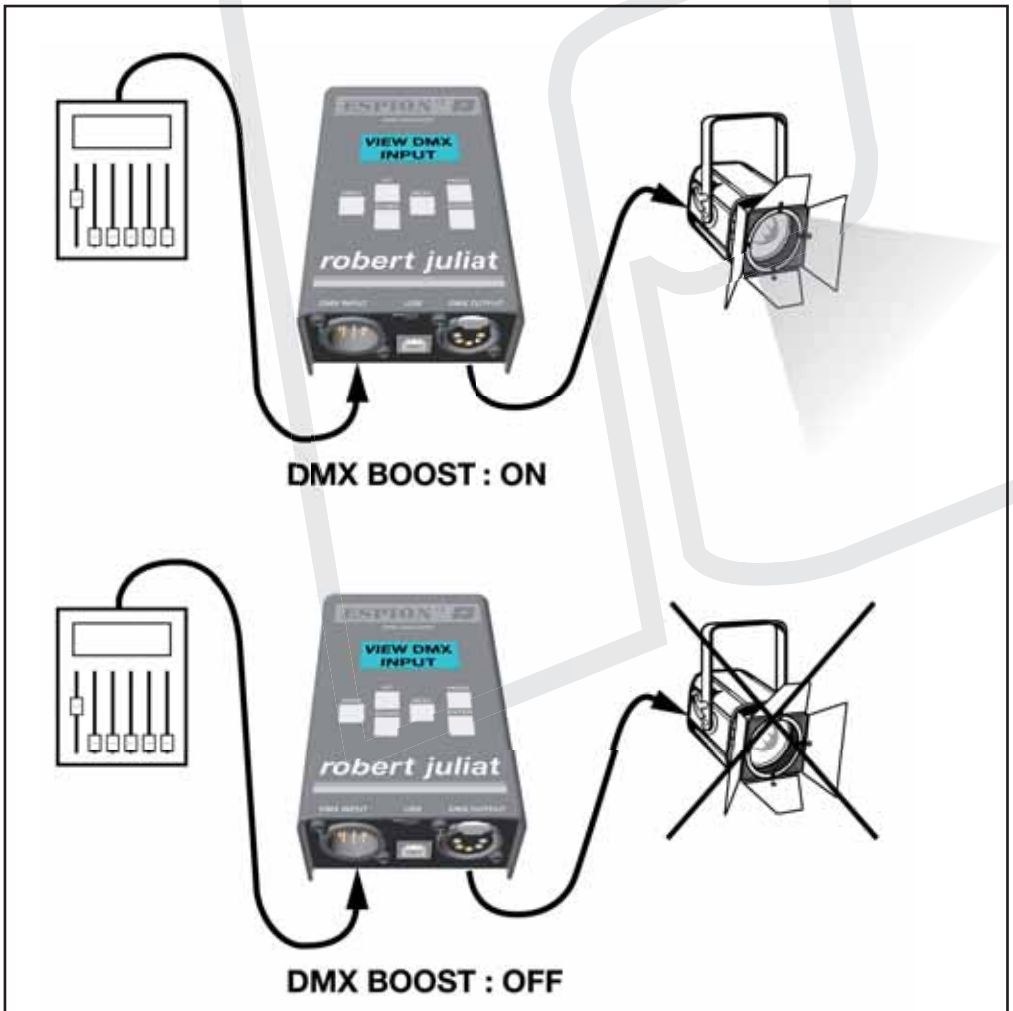
Key	Function
Menu	Back to main menu
Enter	-
Next	Address up
Prev	Address down
Up	Address up
Down	Address down

10 Setup

In this menu you can adjust operational values.
Options are:

- "Battery", gives information (%) about battery's life.
- "Language", (French / English).
- "BacklOff", gives the time after the backlight will go off (10sec-10min).
- "BacklLev", you can choose the backlight level (25% to full).
- "DMX BOOST", you can regenerate the DMX from the input to the output while using the functions 1, 2 and 4 (diagram 1, below).
- "ESPION 2 v#.##" shows the actually ESPION 2 software version.

Key	Function
Menu	Back to main menu
Enter	Store value
Next	Next option
Prev	Prev option
Up	Adjust value up
Down	Adjust value down



1. DMX BOOST OPTION EXAMPLE