dr1+ *plus*

DISPLAY REPLICATOR INTERFACE

USER MANUAL

coemar

Index

ENGLISH

Congratulations on having purchased a Coemar product. You can be assured that you have a device of the highest quality, both in componentry and in the technology used. Following the instructions and procedures outlined in this manual will ensure the maximum efficiency of this product for years to come.

Warranty conditions
1. The fixture is guaranteed for a period of 12 months from the date of purchase against manufacturing or materials defects.
2. Warranty does not extend to damage caused by inappropriate usage or use by inexperienced operators.
3. Warranty is immediately void if the device has been operated or dismantled by unauthorized personnel.
4. Warranty does not extend to fixture replacement.
5. The serial number of the projector is required for any advice or service from your authorized Coemar service centre.

CE norms
This device meets or exceeds all applicable CE requirements.

1.Packaging and transportation

1.1 Packaging
Open the packaging and ensure that no part of the equipment has suffered damage during transit. In case of damage to the equipment, contact your carrier immediately by telephone or fax, following this with formal notification in writing.

Packing List
Make sure the packaging contains:
- 1 **DR1+** unit
- 1 1,8 m USB 2.0 cable.
- This user manual.
- The CD-ROM containing drivers and "DR1+ LITE INTERFACE" software.

2.General information

Connected to a DMX512 network, the **DR1+** allows access to all control panels of every Coemar product equipped with LCD or 7 segment display.
DR1+ is a device designed for technicians to operate simoultaneously with the show programmer without the need to operate directly on the single fixture, but remote controlling all the functions of the units.
DR1+ stops the need to change the DMX addresses directly on the fixture (avoiding the technicians to climb on the hanging structures), allows the reading of the lamp's life, the use of master and slave settings and any of the other function accessible through the display panel.
DR1+ allows update the softwares on the Coemar fixtures.

When used with fixtures without display panel, the **DR1+** allows to operate on them as if they were equipped with a 7 bars display, accessing to all advanced functions.

3. Hardware requirements and software installation

> **IMPORTANT !**
> **In order to let the DR1+ to work correctly, it is essential that every device of the connected network has its own ID number. For more info, read the ID setting chapter on the fixture's manual.**

System minimum requirements:
- Microsoft Windows™ XP SP2 or higher, Windows 7™
- Microsoft Windows™ Installer 3.1 (included in the installation package).
- Microsoft .NET Framework™ version 2.0 (x86) (included in the installation package).
- Pentium processor or equivalent (1 GHz or higher).
- 512 Mb Ram
- USB 2.0 full speed.
- Graphics: 800x600, 256 colors (minimum); 1024x768, 32 bit or higher (recommended).

DR1+ LITE INTERFACE software installation
- Before connecting **DR1+** to PC through USB, **DR1+Lite Interface** (included in the USB) needs to be installed.
- Insert the USB key in your computer, and start the installation; follow the guided procedure and when it ends connect the DR1+ to the PC with the USB cable provided. The system will automatically detect the new connected device.
- If problems are encountered, you may need to install drivers manually:
  in order to do so, open the control panel to "Device and Printers"
  - open DR1 Plus USB Device
  - in "Hardware" click Property
  - click to "Change settings"
  - in "Driver" click update Driver
  - choose to find driver on PC
  - choose the path of the folder

C: ⟹ Program (X86) ⟹ Coemar Lighting Emotion ⟹ DR1+ Lite Interface ⟹ Driver 64 BIT

Note:
In order to use DR1+ with laptop PC, it must be ensured that the system can guarantee the whole USB 2.0 power without limitations. If, during the running of the application an abnormal slowdown of the performance is noticeable or if the application does not start, it's recommended to put a generic self powered USB2.0 HUB between the PC and the DR1+.

Installation on MAC OS X™ can be done through Windows™ OS emulation. In this case, make sure to guarantee best performance to the Windows™ OS.
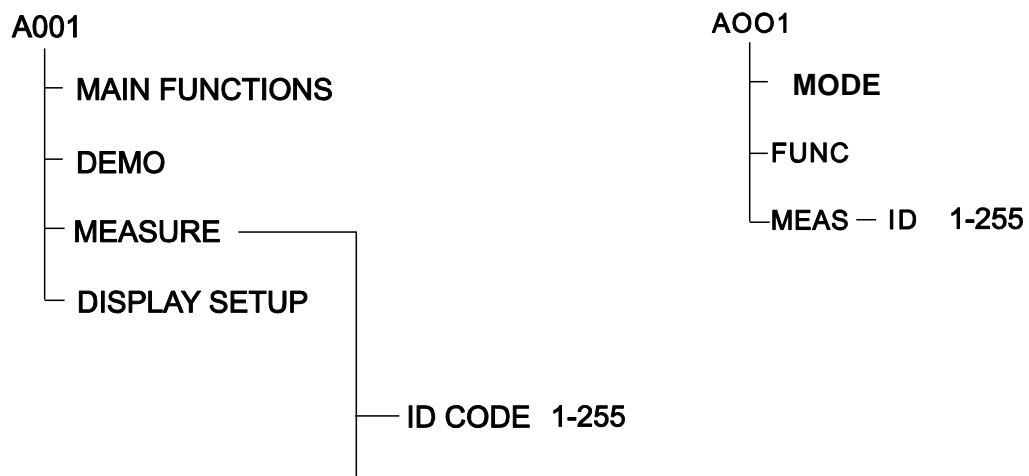
4.Control signal connection

Connect your DMX controller to DR1+ DMX in, DMX OUT to DMX512 network and USB connector to PC.

DMX 512 line

DMX OUT

DMX IN

USB2.0

PC

DMX CONTROLLER
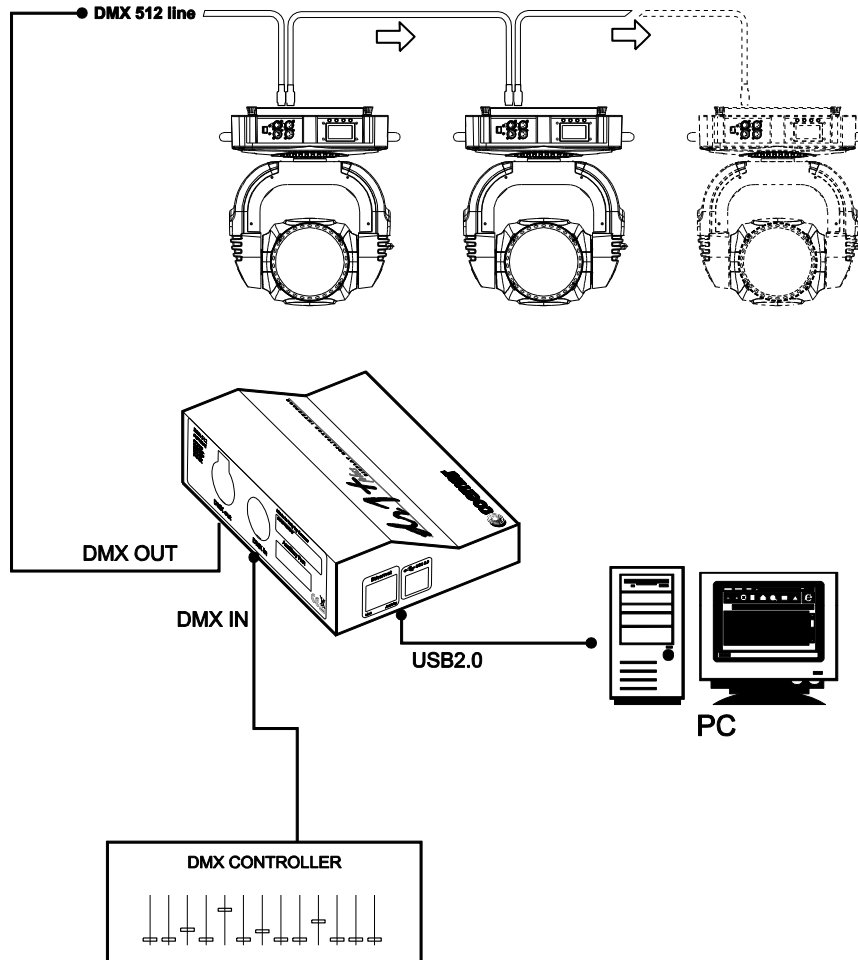
It is possible to connect all **Coemar** devices, only if each device has its own ID number and is equipped with DMX and/or Artnet connector.

The following diagram describes how to reach the ID settings on the fixtures equipped with LCD and 7 segment display panels.

A001

    MAIN FUNCTIONS

    DEMO

    MEASURE

    DISPLAY SETUP

    ID CODE 1-255

AOO1

    MODE
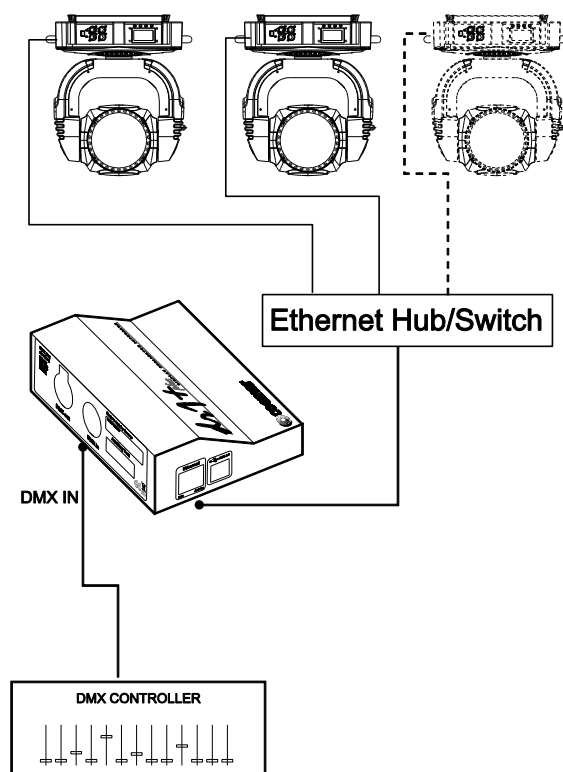
    FUNC

    MEAS — ID   1-255

DR1+ behaves also as a converter, if it's intended to use an Artnet controller in a network which does not have this technology.

Artnet to DMX configuration
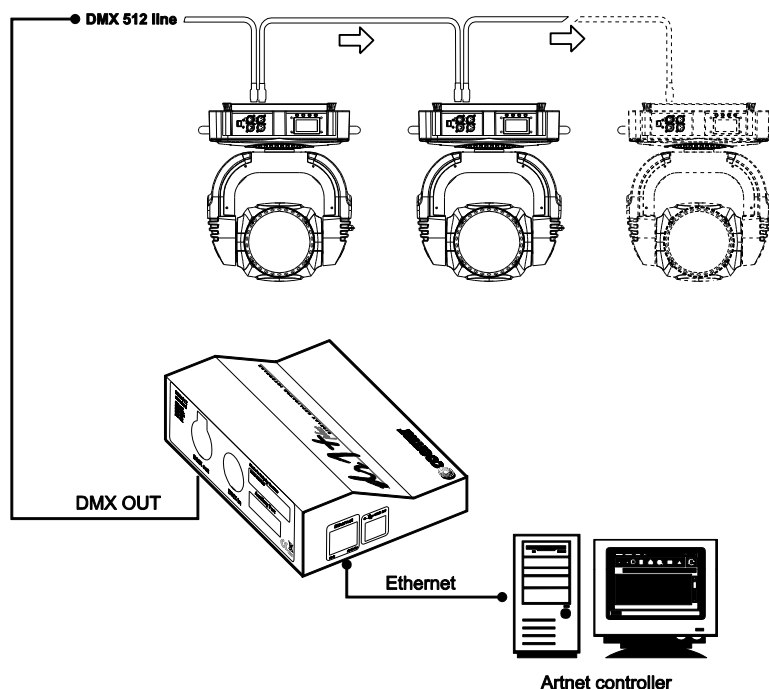
DMX to Artnet configuration (under development)

5. DR1+ Lite Interface

5.1 Starting the application

With **DR1+** connected to the PC and to the network it's time to start the application and work with **DR1+** .
Clicking on the "DR1+ Lite Interface" icon that you will now find on your Desktop, the main window of the application will perform a search of all devices present in the DMX network; this can be ended in every moment pushing the "esc" key.
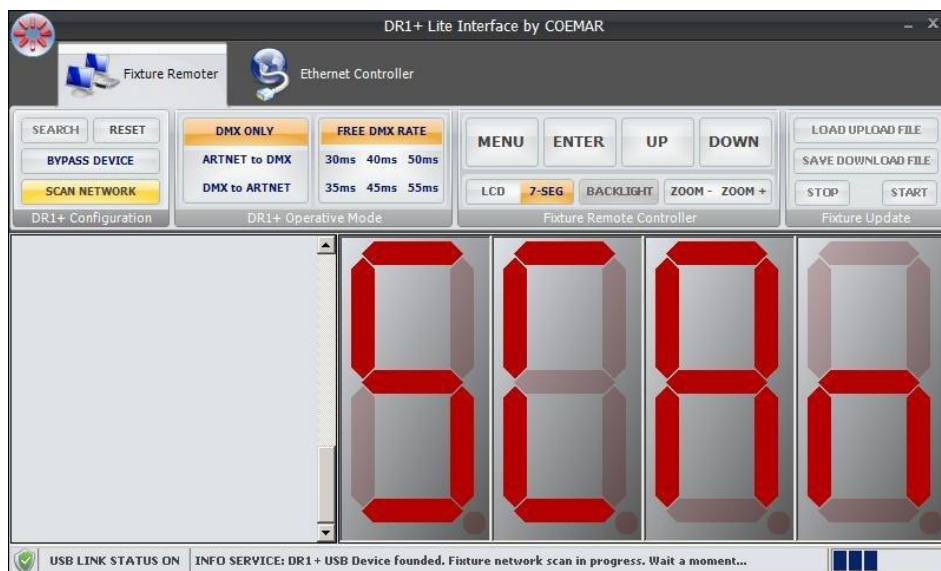
Once the scanning is finished, in the side list will show all the fixtures present in your DMX network as shown below:
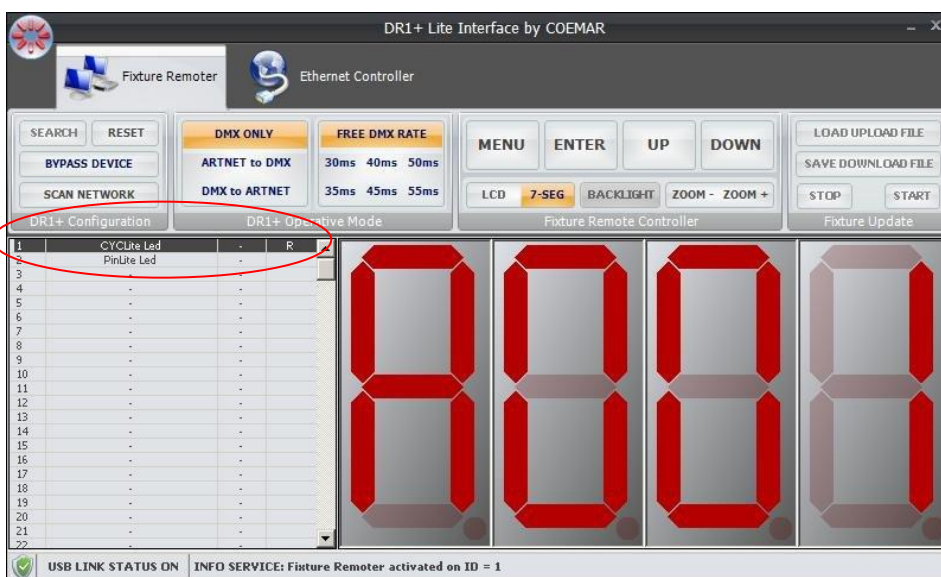
The application informs you that on the network, at address A001, there are currently 2 fixtures:
ID1=Cyc Lite Led
ID2=Pin Lite Led

5.2 Interface description

DR1+ Configuration-;
see **chapter 5.6**

DR1+ Operative Mode-;
see **chapter 5.5**

Fixture Update
see **chapter 5.8**

DR1+-Mode
see **chapter 5.10**

Fixture Remote Controller-
see **chapter 5.4**

Devices list-
see **chapter 5.7**

Status bar-
see **chapter 5.9**

Display
see **chapter 5.3**

ENGLISH
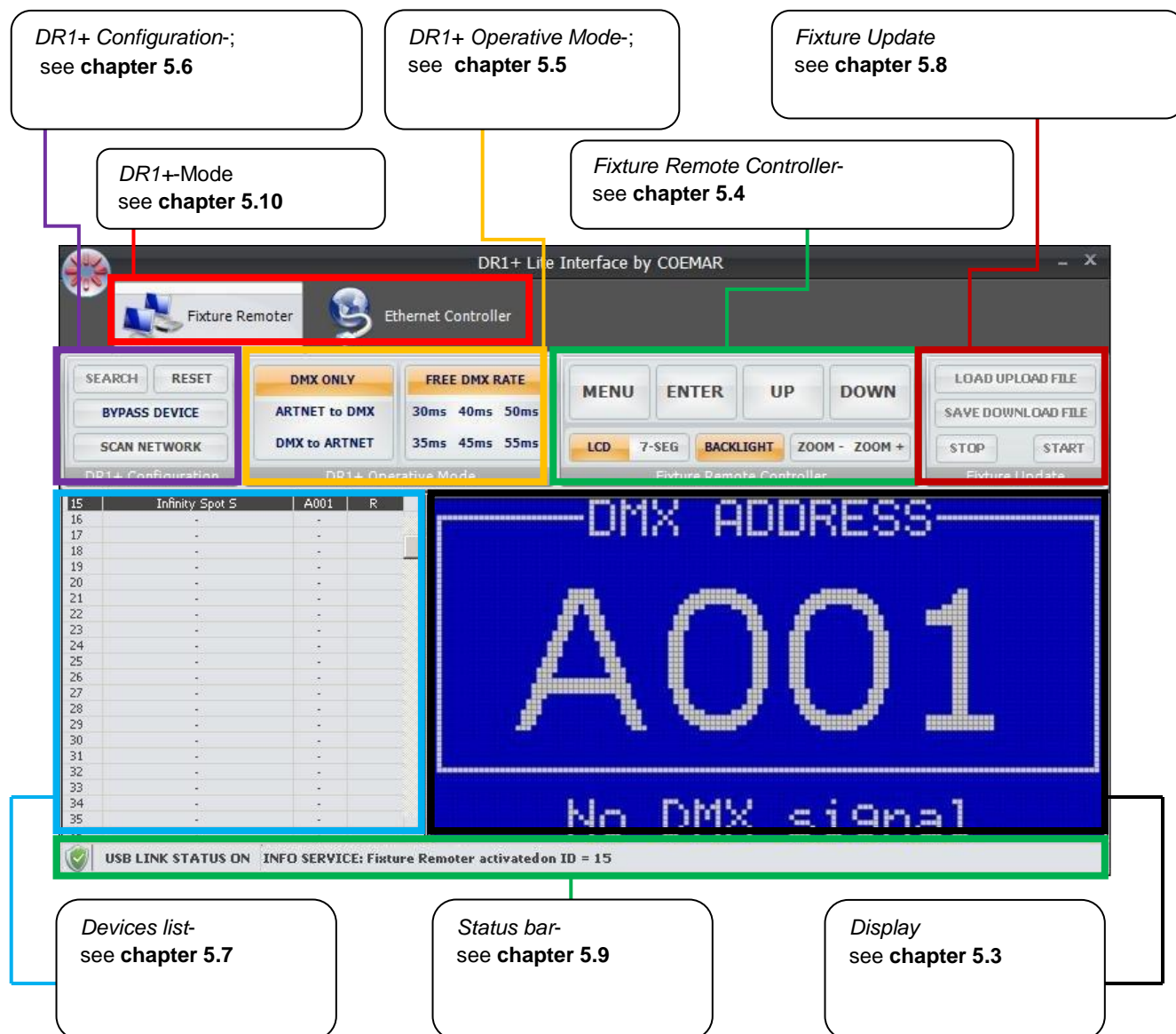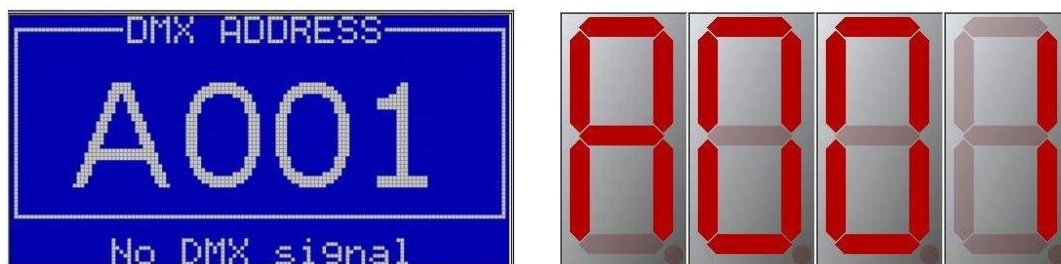
5.3 Display

It shows the emulation of the display panel mounted on the fixture selected; by using the four buttons (chapter 5.6) the emulation of the display will show all the pages of the menu as facing the real display.
DR1+ emulates Infinity series displays and all the other 7 segment displays mounted on the rest of Coemar fixtures.
Also, note that a 7 segment display will be shown for the fixtures that are not equipped with any display, allowing an easiest functions access.

5.4 Fixture Remote Controller

This panel emulate the display panel of each fixture present in the network. Fixtures not equipped with any display will be emulated through a 7 segment display.

MENU / ENTER / UP / DOWN - emulate the four keys present on every Coemar fixture equipped with display panel.
Keyboard shortcuts can also be used: "Q", "W","E","R". Mouse also can be used : Right button =MENU, Left button=ENTER, Mouse wheel= UP or DOWN.
BACKLIGHT – it disables (only in the application) the back light of the LCD display.
ZOOM-/ZOOM+ - it allows to zoom in or out the display window.

5.5 DR1+ Operative Mode

This section lets you choose to use **DR1+**:
- only through DMX512 protocol (**DMX ONLY)** choosing the desired DMX rate (FREE, 30ms, 40ms, etc..).
- through an Artnet controller in a DMX512 network (**ARTNET TO DMX**)
- through a DMX 512 controller in an Artnet network (**DMX TO ARTNET**) (under development).

5.6 DR1+ Configuration

SEARCH – allows to look for USB devices connected to PC.
RESET – this function resets the list of devices connected.
BYPASS DEVICE – temporarily bypasses DR1+ and allows DMX bridging. Press the "Esc" button to reactivate the device.
SCAN NETWORK – scans all devices present in the network.

5.7 Devices list

After SCAN NETWORK or SEARCH have been launched, all devices present in the network are listed by ID.
The first column on the left shows the ID of each device, the second one shows the name of the device, the third one shows the address, while the fourth column shows the status of the device that can be:

R – remote mode: the display of the device selected is reproduced or emulated on DR1 Lite Interface and allows the navigation of the menu.
U – upload mode: the device selected is ready for upload.
D – download mode: the selected device is ready to tranfer the software on the PC.
One of the most important peculiarities of **DR1+** that makes it a powerful management system, it's the possibility to operate simoultaneously on more devices. For example, you can perform software uploads/downaloads simoultaneously on more LED devices, or turn lamps on on one or more fixtures, saving time and work.
To select multiple devices, as per any Windows application, keep the "Shift" or "Ctrl" buttons pressed and choose the devices from the list with the mouse.

ENGLISH

By clicking on one device with the mouse's right button, a new menu shortcut will be shown:

|		
Sort fixtures	**By ID**	It groups devices by ID
	By Type	It groups devices by type
	By DMX address	It groups devices by address
Select Previous		It selects the previous device on the list
Select Next		It selects the next device on the list
Special Selection	**Same type**	It selects devices of the same type
	Same Master version	It selects devices with the same master software version
	Same Slave version	It selects devices with the same slave software version
Send command	**To remote fixture**	It sends commands only to the selected device
	To all fixtures	It sends commands to all devices
	Visual Search	It briefly moves pan and tilt (on moving heads fixtures) or makes fixtures to produce a flash (on LED fixtures) on the selected devices in order to phisically identify which fixtures we are operating on. The same function is obtained by double clicking on the device in the list
	LED SERIES	It sends dedicated commands to LED devices (the sub-menu will show the most used commands present in the menu of the device without operating with buttons "menu, enter, up, down")
	INFINITY Series	It sends dedicated commands to INFINITY series devices (the sub-menu will show the most used commands present in the menu of the device without operating with buttons "menu, enter, up, down")
Upload firmware	**Master**	It arms the fixture to receive the master software (Master LCD in case of LCD equipped fixtures)
	Slave	It arms the fixture to receive the slave software (Slave Motors in case of LCD equipped fixtures)
Download firmware	**Master**	It arms the fixture to transfer on the PC's hard disk its master software (Master LCD in case of LCD equipped fixtures).
	Slave	It arms the fixture to transfer on the PC's hard disk its slave software (Slave Motors in case of LCD equipped fixtures).

5.8 Fixture Update

This panel allows to transfer the software to and from the fixtures:

LOAD UPLOAD FILE – It transfers the software from the PC to the selected fixtures on the list: during the software upload, the "U" letter will appear on the right column on the first fixture selected in the list.

How to upload software on the fixtures:

- select one or more fixtures on the list
- right click on the selected fixtures and choose UPLOAD FIRMWARE/MASTER (or SLAVE)
- the fixtures are now awaiting for the file and on the display you will see a 60" countdown
- within 60" click on the LOAD UPLOAD FILE icon, choose the file to be uploaded, and press START. The display will show numbers scrolling while the status bar will constantly inform you about the ongoing operation. The file will be one by one automatically uploaded on the fixtures.
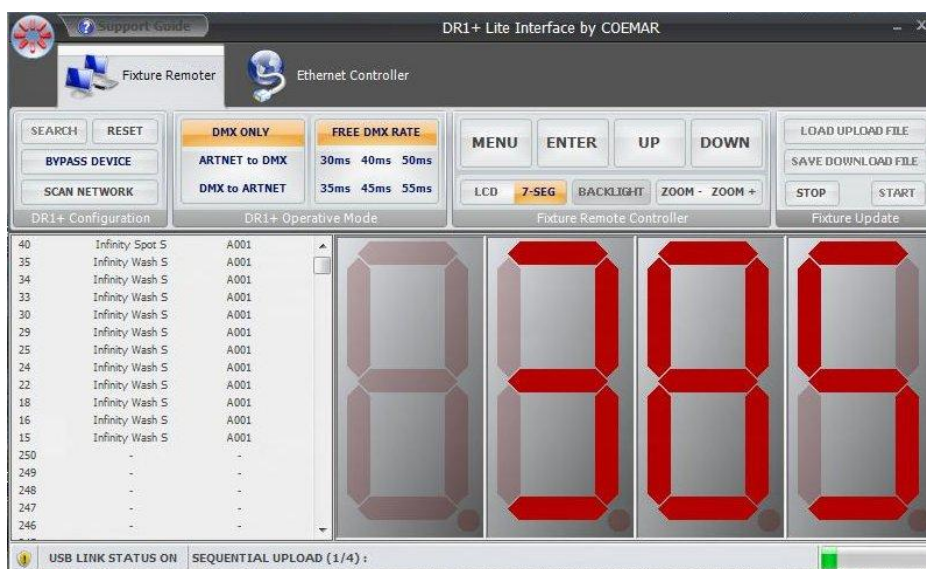
- At the end of the procedure the application may show a log file to show eventual problems occurred during the transfer:

In the example shown above, one of the 4 fixtures encountered a problem during the upload, and the application highlights it by using the red colour. Close the information windows pressing the "esc" button.

If a lot of fixtures are present on your network, it may be useful to highlight and sort all the fixtures that can have been gone into trouble while uploading, by using the function SELECTION/UPLOAD FAILED. In order to do this right click on an active fixture (recognizable through the "R" letter on the right side) and click on UPLOAD SELECTED FIXTURES.

SAVE DOWNLOAD FILE – It transfers the software to the PC from the fixtures selected on the list:
during the download, the "D" letter will appear on the right column on the first fixture selected in the list.
This operation is similar to the upload procedure: select one or more fixtures from the list;

First method
Right click on the fixtures and chose DOWNLOAD FIRMWARE/MASTER (or SLAVE)
1. on the interface click on "**SAVE DOWNLOAD FILE**" and save it in a folder;
2. by clicking on the "**START**" a number in the interface will be appeared which will increase quickly and a window will be shown automatically then click everywhere on the window;
3. Now your file is saved in the folder which you had chosen before.

Second method
1. select the **"MENU"** button which is on the interface;
2. Click the "**UP**" botton until the "**FUnC**" appears; and then click "**ENTER**";
3. afterwards, click on "**UP**" botton to reach the "**rESE**", and then press the "**W**" and "**Q**" bottons on the keyborad at the same time to see the "**ALIG**";
4. by clicking "**UP**" botton, go to the "**dULd**" and select "**ENTER**" to see the "**SUrE**";
5. after seeing the "**SUrE**", click the "**ENTER**" to start the countdown;
6. on the interface click on "**SAVE DOWNLOAD FILE**" and save it in a folder;
7. by clicking on the "**START**" a number in the interface will be appeared which will increase quickly and a window will be shown automatically then click everywhere on the window;
8. Now your file is saved in the folder which you had chosen before.

5.9 Status bar

USB LINK STATUS ON   INFO SERVICE: Fixture Remoter activated on ID = 15
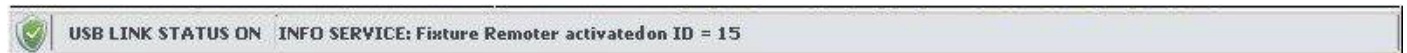
The Status bar constantly informs the user about the system status: in particular, the left side indicates, using a green shield, the correct USB connection between DR1+ and PC. If problems occure, a red shield indicates the lack of connection.
On the right side, all messages and eventual problems found on the network are shown.

5.10 DR1+ Mode

Fixture Remoter   Ethernet Controller

DR1+ allows, besides the functions described, to control devices through the Artnet protocol using an RJ45 connector mounted on Artnet-ready fixtures. You can open the Artnet panel clicking on ARTNET TO DMX or DMX TO ARTNET and ETHERNET CONTROLLER buttons.

IP Address:	2	97	245	95	○ Default IP	READ		SubNet	-	Universe	READ
Subnet Mask:	255	0	0	0	⦿ Custom IP	PROGRAM	ARTnet UNIVERSE:	0	-	0	PROGRAM
MAC Address:	00 : 25 : 4F : B4 : F5 : 5F										
Ethernet Address Settings							ARTnet Settings			

It is possible to insert custom or default IP addresses and all Artnet parameters of DR1+.

6. Troubleshooting

- **The application crashes**: close the application and restart it. Eventually restart the PC.

- **DR1+ does not detect the devices in the network**: Press RESET button, then SEARCH.

- **DR1+ has not been detected by the PC**: unplug the USB cable from the device or from the PC and then connect it again.

If any other problem occurre, or if the problems mentioned above persist despite carrying out the suggested procedures, contact your Coemar Service Centre.

CE

Coemar S.p.A.

Coemar si riserva il diritto di apportare modifiche senza preavviso
Coemar reserves the right to effect modifications without notice.