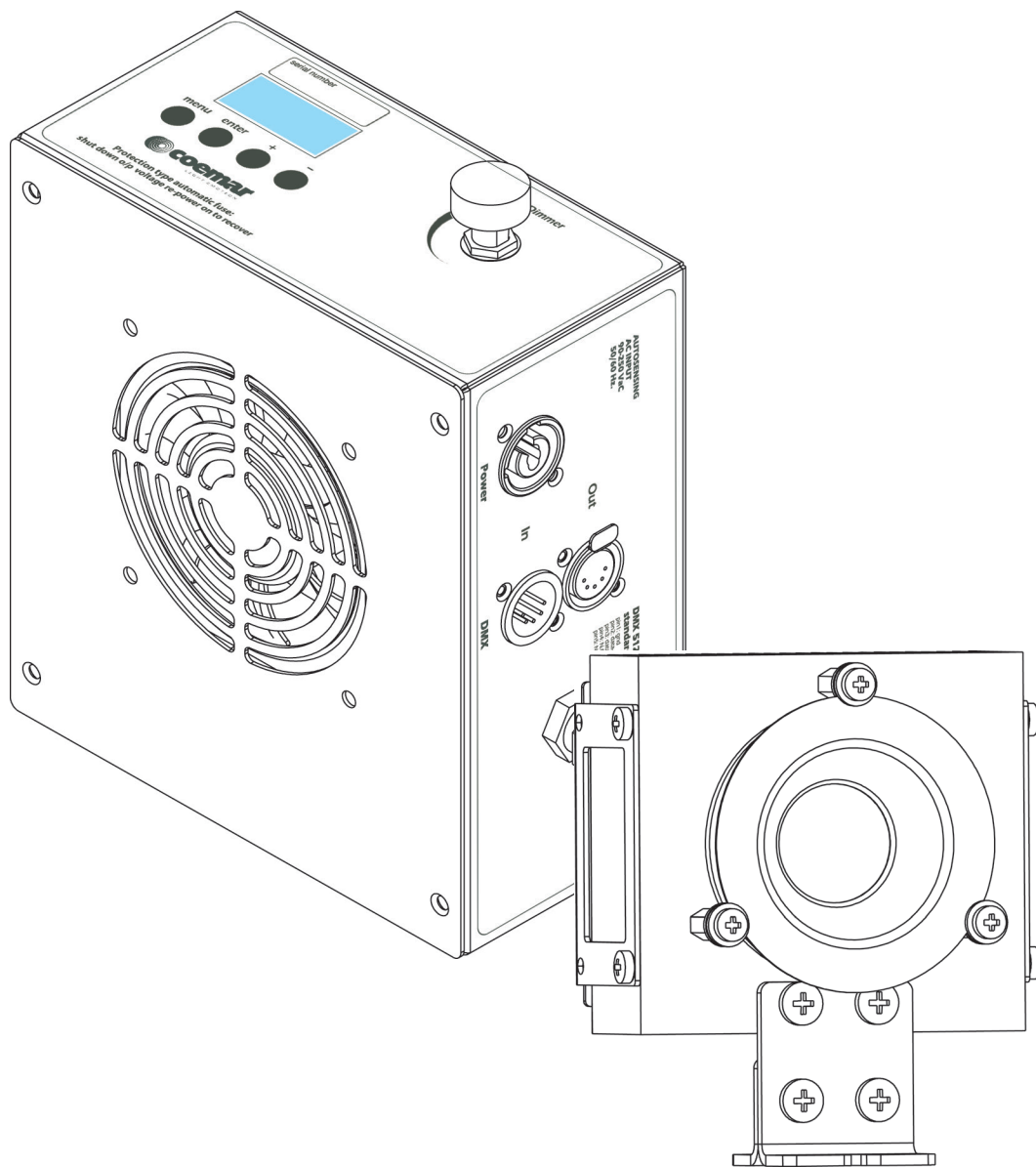


ReLite Led Kit DIM



ReLite Led Kit DIM

Serial Number:

.....

Purchase date:

.....

Dealer:

.....

Address:

.....

Suburb:

.....

Country:

.....

Phone / Fax:

.....

Please note in the space provided above the relative service information of the model and the retailer from whom you purchased your **ReLite Led Kit DIM**: this information will assist us in providing spare parts, repairs or in answering any technical enquiries with the utmost speed and accuracy.

WARNING: the security of the fixture is granted only if these instructions are strictly followed; therefore it is absolutely necessary to keep this manual.

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Congratulations on having purchased a **Coemar** product. You have assured yourself of a fixture of the highest quality, both in componentry and in the technology used. We renew our invitation to you to complete the service information on the previous page, to expedite any request for service information or spares (in case of problems encountered either during, or subsequent to, installation). This information will assist in providing prompt and accurate advice from your **Coemar** service centre. Following the instructions and procedures outlined in this manual will ensure the maximum efficiency of this product for years to come.

1. Packaging and transportation

1.1 Packaging

Open the packaging and make sure that no part of the equipment has suffered any damage during the transportation. In case of damage to the fixture, contact your carrier and your supplier immediately by telephone, fax or e-mail, and inform them you will formally notify them in writing through registered letter.

Packing list

Make sure the packaging contains:

- 1 ReLite Box**
- 1 ReLite Led Group**
- 1 Instruction manual**

1.2 Transportation

The **ReLite Led Kit DIM** must be transported exclusively in its original packaging.

2. General information

2.1 Important Safety information

Fire prevention:



1. Never locate the fixture on any flammable surface.
2. Minimum distance from flammable materials: 0,5 m.
3. Minimum distance from the closet illuminable surface: 0,5 m.
4. Replace any blown or damaged fuse only with those of identical values. Refer to the schematic diagram if there is any doubt.
5. Connect the projector, where the **ReLite Led Kit DIM** is installed, to mains power protected by a thermal magnetic circuit breaker.

Prevention from electric shock:



1. Presence of high voltage inside of the fixture. Insulate the fixture from mains supply before opening or performing any function which involves touching the inside of the fixture, including lamp replacement.
2. For the connection to the mains, adhere strictly to the guidelines outlined in this manual.

3. The level of technology of **ReLite Led Kit DIM** requires the use of specialised personnel for all service applications; refer all work to your authorised **Coemar** service centre.
4. A good earth connection is essential for the proper functioning of the projector. Never connect the fixture if there is no earth connection.
5. Mains cables must not come into contact with other cables.
6. Do not operate the projector with wet hands or in an area where water is present.
7. The fixture must never be located in an exposed position, or in areas of extreme humidity.

Safety:



1. The external surfaces of the unit, at various points, may reach 60°C. Never handle the unit until at least 10 minutes have elapsed since the LED was turned off.
2. Never install the fixture in an enclosed area lacking sufficient air flow; the room temperature must not exceed 45°C.
3. The projector contains electronic and electrical components which must under no circumstances be in contact with water, oil or any other liquid. Failure to do so will compromise the proper functioning of the projector.

2.2 Warranty conditions

1. The fixture is under warranty for 24 months from the purchase date against factory defections.
2. Damage ought to unskillfulness, inappropriate use, or lack of suggested maintenance are excluded from the warranty.
3. Warranty expires when the projector is opened by unauthorized personnel.
4. Warranty doesn't include the replacement of the fixture.
5. Serial number and model of the fixture are necessary to retrieve informations and assistance from the dealer.

2.3 EC norms

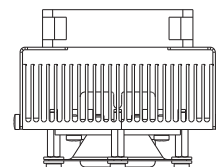
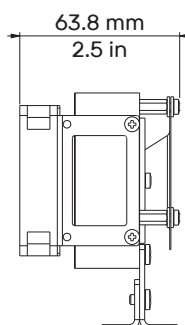
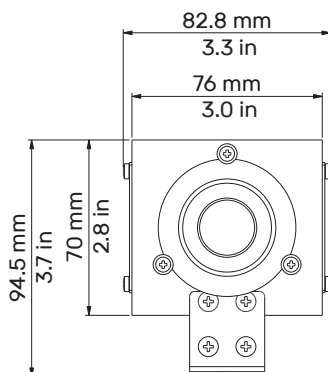
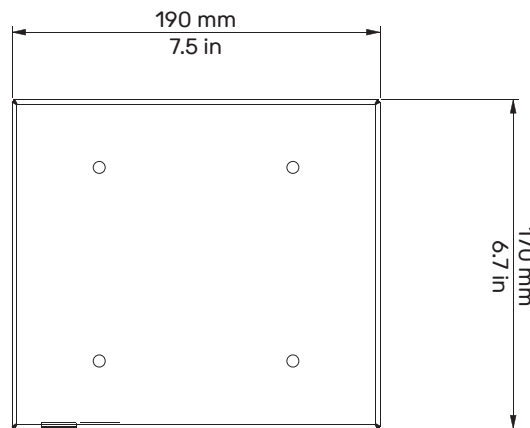
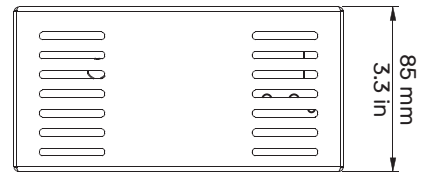
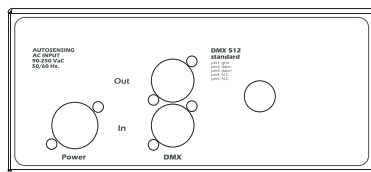
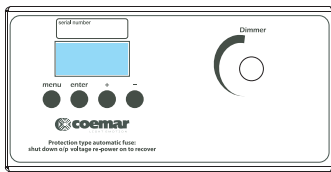
The projector meets all fundamental applicable EC requirements.

3. Product specifications

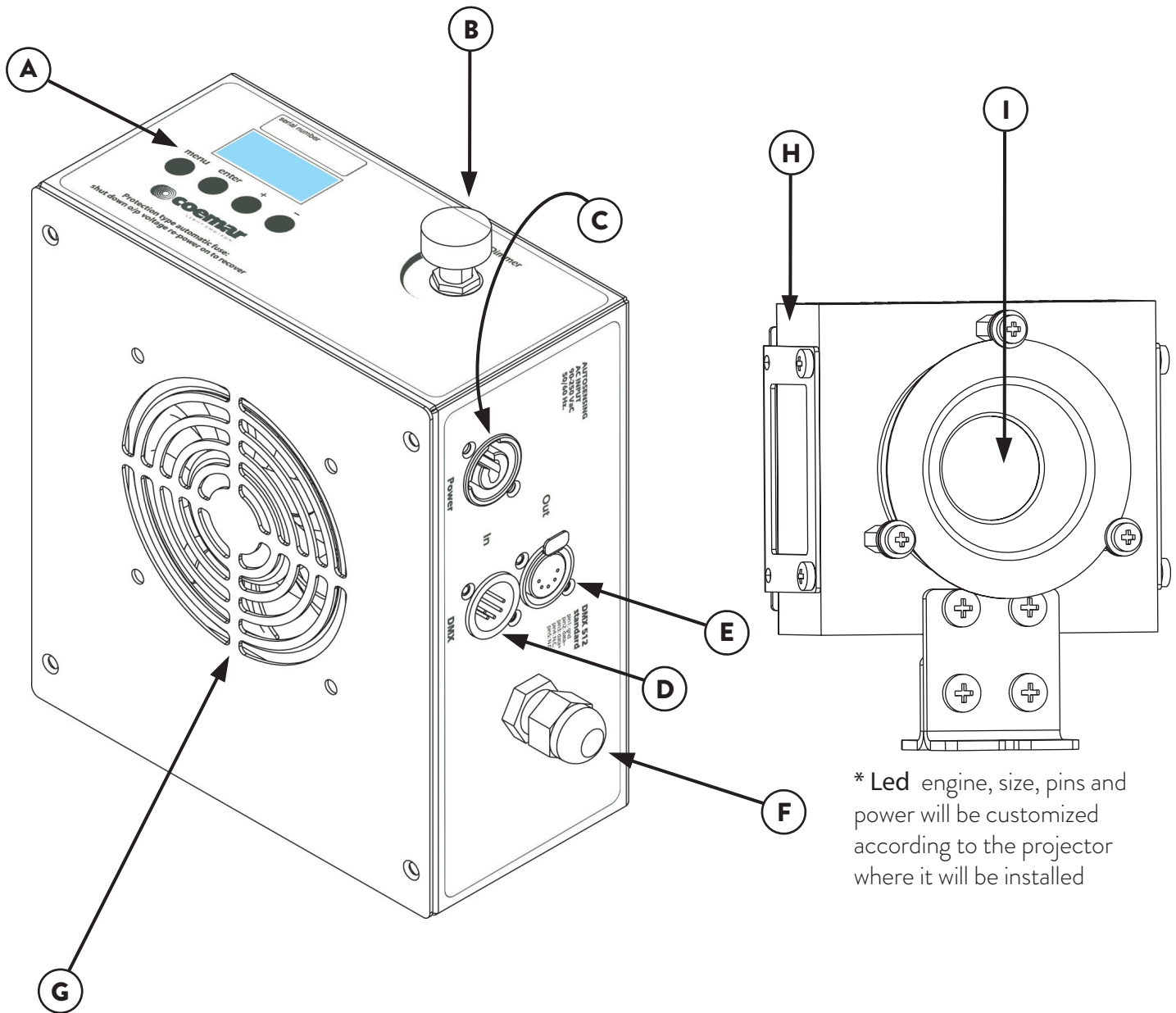
3.1 Technical characteristics

Power supply	90-250 V ac, auto-sensing, 50/60 Hz
Maximum current	Depending on the LED module and the size/model of the fixture
Power factor	Cosφ > 0.7
Max power consumption	Depending on the LED module and the size/model of the fixture
Color temperature	Tungsten: 3200 K - Daylight: 5600 K
Color Rendering Index (CRI)	90 or > 95
Weight	ReLite Box: 2.2 Kg (4.85 lbs) ReLite Led Group 0.32 Kg (0.71 lbs)
Operating Ta range (°C/F)	-20 to 45°C (-4 to 113° F), two thermal protection at 95° C / 203° F (LED) and 85°/185°F (Board)
Connectors	G22, GX9.5, GY9.5, G38 (depending on the projector in which is mounted)
IP rating	20

3.2 Dimensions



3.3 ReLite Led Kit DIM's main components



* Led engine, size, pins and power will be customized according to the projector where it will be installed

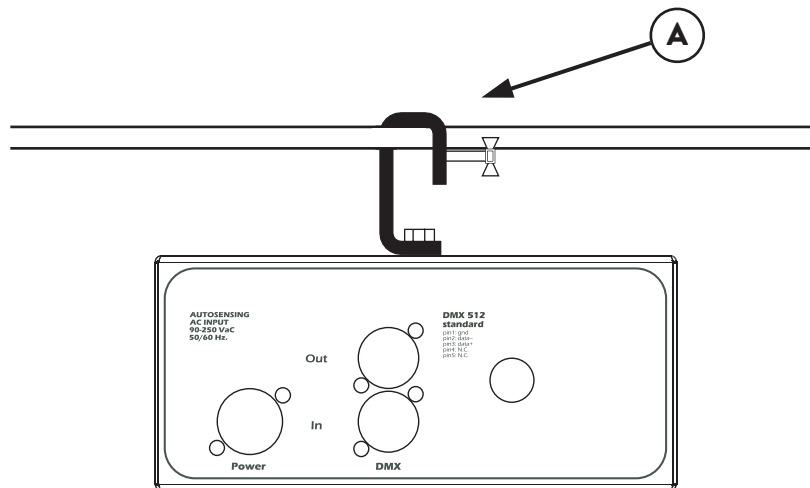
Components description	
A	Display panel
B	Potentiometer Knob
C	PowerCon In
D	DMX In
E	DMX Out
F	Skintop
G	Fan
H	Heatsink
I	LED

4. Installation

4.1 Mechanical installation

With **ReLite Led Kit DIM** will be possible to give new life to your projector, simply replacing the old lamp with the **ReLite Led Group**.

The **ReLite Led Box** can be fixed wherever you want through the fixing plates present on the box (A).



Warning!!

Always ensure that your support structure and fixing (bolts, clamps, etc...) are rated to support the weight of the fixture.

5. Powering up

5.1 Operating voltage and frequency

The unit may operate at voltage ranges from 90 to 250 V at a frequency of 50 or 60 Hz. It is not needed to effect any setup procedures: **ReLite Led Kit DIM** will automatically adjust its operation to suit any frequency or voltage within this range.

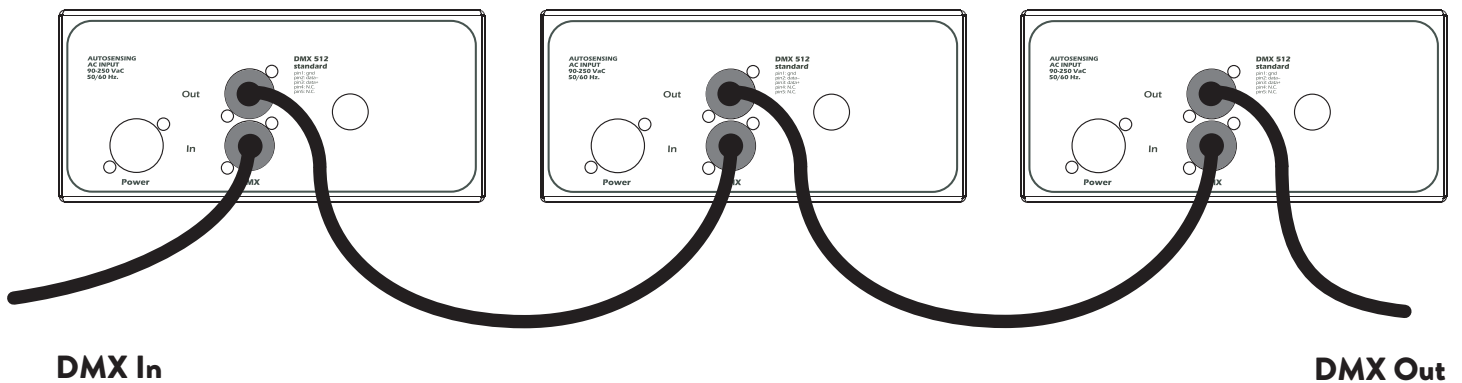
Warning!!

A minimum voltage of 100Vac is suggested, at 90Vac there could be a very slight derating of the output current (absolutely imperceptible) due to the lowering of the mains voltage curvature, but this does not cause problems.

6. Control signal connections

6.1 Control signal connection by XLR5 plugs

The digital control signal is transmitted to the projector via a two pole cable screened in according to the International standards for DMX 512 data transmission. The connection must be serial, using connectors XLR5 male and female located on the back of **ReLite Led Kit DIM** labelled DMX512 IN e OUT.



DMX In

DMX Out

Warning!

Make sure that screening and conductors are not in contact one another or with the metal housing of the connector.
Pin#1 and housing must never be connected to the power supply unit.

6.2 Power Supply from standard Dimmer

The **ReLite Led Kit DIM** can be also dimmed from traditional TRIAC or IGBT dimmers.

Linear dimming from 1% to 100% (stability of the fixture is guaranteed starting from 10/15 % of the dimmer channel depending on the installation conditions)

Warning!!

The use of a thermal/magnetic circuit breaker is recommended. Strict adherence to regulatory norms is strongly recommended.

Ensure that the mains characteristics are within the recommended range for the use of **ReLite Led Kit DIM**.

All connections should be carried out by a suitably qualified personnel.

7. Turning the ReLite Led Kit DIM on

After having followed the preceding steps described, proceed with the power supply and turn on the projector connecting it to the mains power. Once you had connected the projector, use the potentiometer knob to regulate the luminous flux.

The software version installed on the internal microprocessors will be shown on the display, suddenly it will show the current DMX addressing. If the address blinks, it means that the DMX signal has not been received. Check the connection cable and the mixer functioning.

7.1 DMX address of the unit

Each projector can use 5 channels for its complete operation and is controlled by a DMX 512 signal.

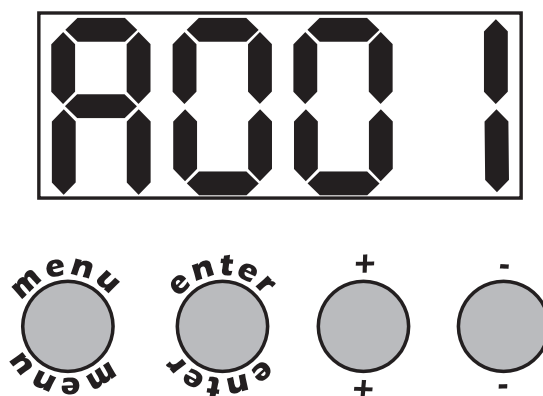
DMX addressing

When powered up initially, each projector will show “A001”, which indicates that the fixture will start responding from the first DMX channel; **ReLite Led Kit DIM** also uses 5 DMX channels, which means that it will respond to the commands from channel 1 to channel 5 of your DMX 512 controller. Accordingly a second unit should be addressed as A006, a third one as A011 and so on. The operation must be carried out on every **ReLite Led Kit DIM** which has an address different from A001.

Altering the DMX address:

1. Press the + or – button until the display shows the required DMX address. The digits on the display will blink to indicate that the variation has not been registered.
2. Press the enter key to confirm your selection. The digits on the display panel will cease to blink and the projector will now respond to the new address.

Note: by holding the + or – button down the scrolling will be faster; thus allowing a faster selection



Warning!

If you alter the DMX address with no DMX signal connected, the digits on the display panel will continue to flash even after you have pressed ENTER button to confirm the address.

8. DMX chart

8.1. DMX chart 5 channels

channel	function	type of control	effect	decimal	percentage
1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0 - 255	0% - 100%
2	spare channel	step	no effect	0 - 255	0% - 100%
3	dimmer fine	proportional	fine dimmer control 16 bit	0 - 255	0% - 100%
4	strobe	step	no effect	0 - 9	0% - 4%
		proportional	variable speed strobe effect, from slow to fast	10 - 57	4% - 22%
		step	stop strobe	58 - 59	23% - 23%
		proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60 - 108	24% - 42%
		step	stop strobe	109 - 110	43% - 43%
		proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from slow to fast)	111 - 159	44% - 62%
		step	stop strobe	160 - 161	63% - 63%
		proportional	random strobe effect with variable speed from slow to fast	162 - 207	64% - 81%
		step	stop strobe	208 - 209	82% - 82%
		proportional	random strobe effect with variable speed from slow to fast	210 - 255	82% - 100%
5	special functions	step	park, no effect	0 - 9	0% - 4%
			640 Hz	10 - 84	4% - 33%
			fan at low-noise speed (4.5 V)	85 - 96	33% - 38%
			fan at auto-silent speed (from 81° C to 85° C - from 4.5 V to 9 V)	97 - 108	38% - 42%
		proportional	fan speed control from minimum to maximum (from 4.5 V to 12.5 V)	109 - 120	43% - 47%
		step	fan at maximum speed	121 - 133	47% - 52%
			enables the automatic display blackout	134 - 185	53% - 73%
			disables the automatic display blackout	186 - 199	73% - 78%
			LED control frequency tuning 1000 Hz	200 - 223	78% - 87%
			LED control frequency tuning 1500 Hz	224 - 255	88% - 100%

9. Display panel functions

9.1 Quick guide to menu

To access the functions menus just press the MENU button. Then press + or – buttons to scroll the pages and press the ENTER button to access to any other function.

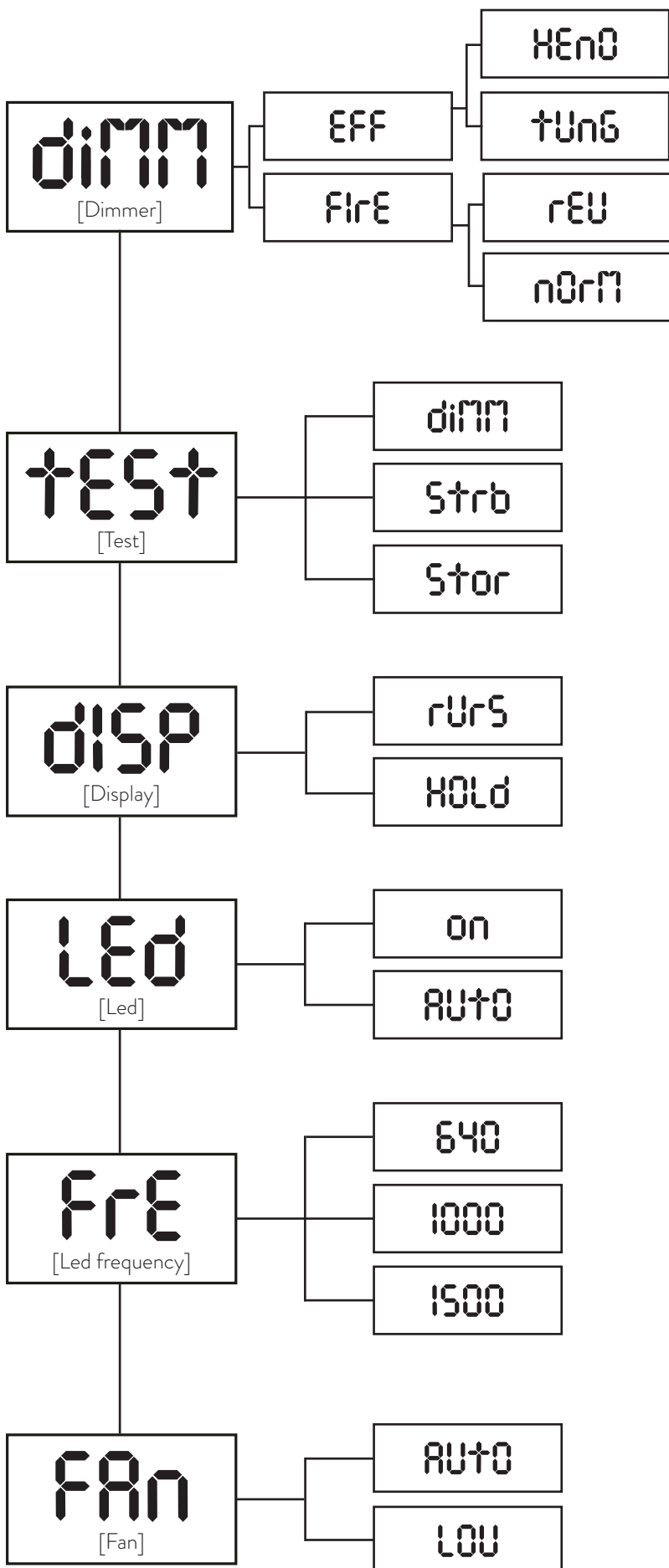
By suitably using all the functions of **ReLite Led Kit DIM**, which can be activated through its display panel, it is possible to change some of the parameters and to add some functions. Changing the preset settings made by **Coemar** can vary the functions of the projector so that it will respond differently to the controller; therefore carefully read about the functions described here before carrying out any possible selection.

9.2 Rapid count

Through the display panel of **ReLite Led Kit DIM** it is possible to quickly change the various numbers displayed for the different functions in the following 3 manners:

1. Pressing the + or – buttons will cause the count to be quicker.
2. Pressing first + and then – and then holding them down simultaneously will cause the numbers to jump to the highest value.
3. Pressing first – and then + and then holding them down simultaneously will cause the number to jump to the lowest value.

9.3 Main functions menu



Dimmer:

Choose the type of dimmer curve:

- **Xeno:** quick curve;
- **Tungsten:** mimics the slow dimming curve of tungsten lamps;
- **Reverse:** inversion phase of the Dimmer Power Unit;
- **Normal:** forward phase of the Dimmer Power Unit.

Test:

Allows to manually set the DMX channels controlled by a DMX console:

- **Dimmer:** sets the luminous intensity;
- **Strobe:** manually sets the strobe DMX channel;
- **Store:** stores the modifications that will be set at the next times the fixture will be turned on.

Display:

It allows to turn 180° the reading of the display. HOLD locks the keys. Press any key for 5" to unlock.

Led:

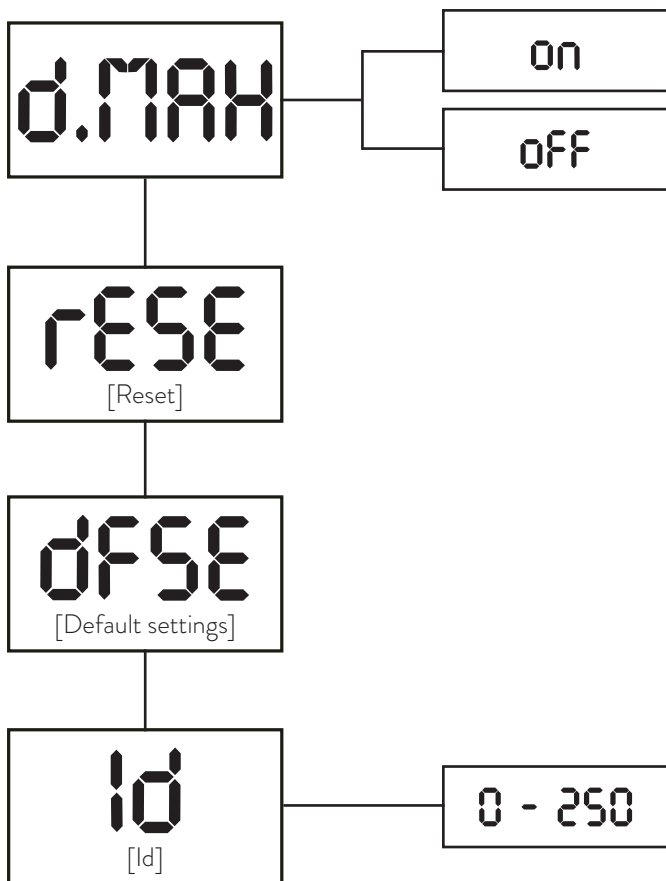
AUTO allows to turn off the display after 6 seconds.

LED Frequency:

It allows to set the flickering frequency to 640, 1.000 or 1.500 Hz (NOTE: DMX signal has priority over this setting on the display)

Fan Speed:

- **Auto:** under this setting the fan speed varies based on the overall temperature of the fixture to guarantee the maximum output possible;
- **Low noise:** this setting will keep the speed of the fan at the minimum level while the light output will decrease in case of overheat.



d.MAX:

Disables the adjusting of the leds setting them at maximum output.

Reset:

It permits the reset of the unit. Keeping pressed ENTER and MENU at the turning on of the unit It allows to access ALIG features.

Default settings:

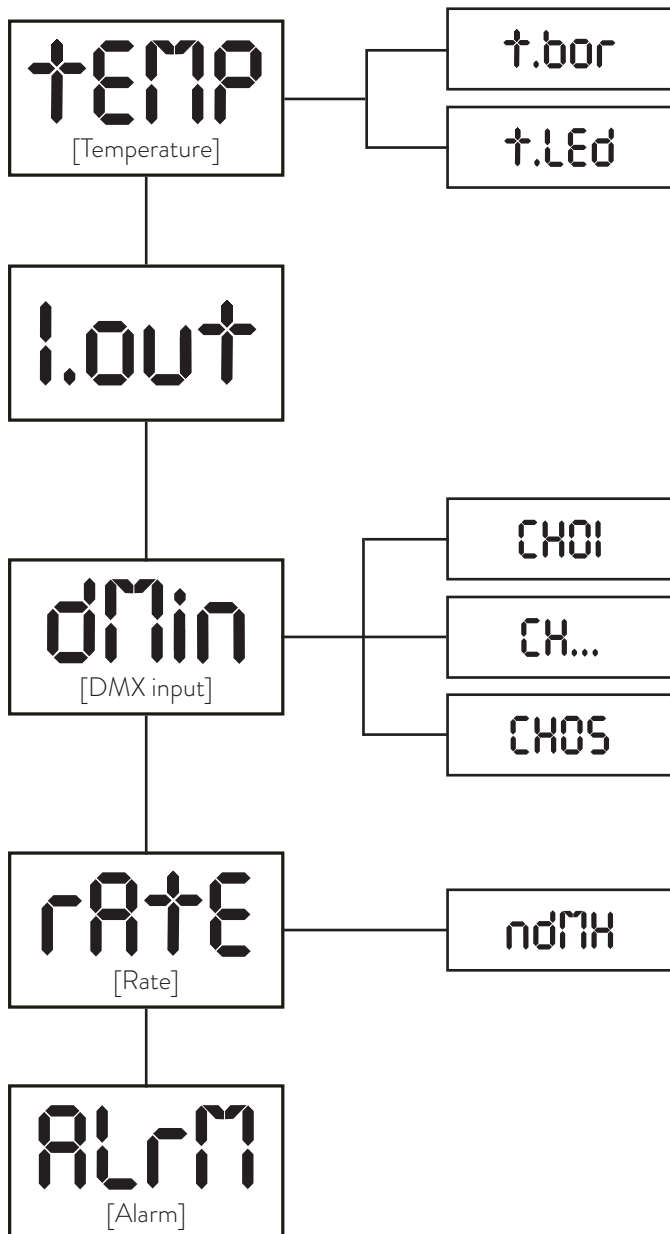
Restores all the settings to default value except for led settings, hour and DMX address.

Id:

It allows to set the ID number of the unit by + and – keys; “enter” key to confirm.

Note: the ID is the identifier of the projector that must be set other than 0 and it is used exclusively for updating the projector and as a replica of the display on your PC. The interface with the PC is only possible with DR1 Plus.

9.4 Measures menu (MEAS)



Temperature:

Shows the current temperature values:

- **LED:** shows the LED module temperature;
- **Board:** shows the electronic board temperature.

I.out:

shows the current output of the LED.

DMX Input:

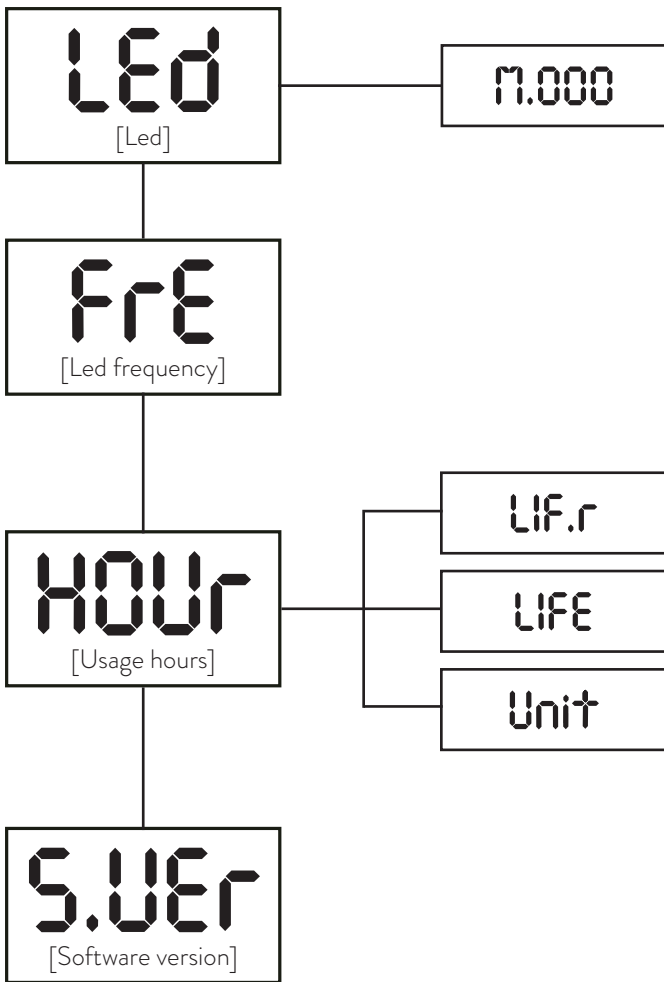
Shows the value of the DMX channels received by the fixture on every channel that the fixture occupies on the line.

Rate:

Shows the refresh rate of the DMX signal sent by the console.

Alarm:

This menu shows the alarm statuses if there is any.



LED:

Shows the percentage value of the LED status.

LED frequency:

Shows the operating frequency of the LED.

Usage hours:

Shows the hour counter of the fixture:

- **Unit:** shows the overall hours of life of the fixture;
- **LED life:** shows the overall LED module life;
- **LED life reset:** shows the overall LED module life currently installed;

Note: this items can be reset in case of LED module replacement.

Software version:

Shows the software version currently installed in the fixture.

9.5 Special functions of the fixture

Storing the DMX signal

To use the fixture without an active DMX console it is possible to store the DMX settings in two ways:

- Through the **TEST** menu;
- Disconnecting the DMX signal when the fixture is on. When the signal is unconnected the fixtures stores the signal;

Automatic fan standby

To decrease the noise and the power consumption the cooling fan turns off after 10 minutes of fixture inactivity.

9.6 Error messages

If a malfunction occurs, **ReLite Led Kit DIM** has a self-diagnostic system that will show the error message on the display. The following table will explain in detail the most common errors. If, despite of suggested intervention, the problem persists, call the **Coemar** Service Center.

Error code	Description
DTERR [Data Error]	Data error Initial data loading has failed the projector loaded the default data settings: restart the fixture again, and if the error persists contact the Coemar assistance center.
ADERR [Address Error]	Address error The projector does not receive all channels of DMX needs to function properly. Check the DMX address indicated on the display and the number of channels generated by the mixer control. We recall in this connection that some controllers do not generate all the 512 channels.

10. Spare parts

All **ReLite Led Kit DIM**'s spare parts are available from your Coemar service centers. Specifying in detail the projector model and the replacement part requested, will help the service center to serve you in the best way.

11. Maintenance

11.1 Periodic cleaning

Cleaning of the unit

Use a soft brush or a common vacuum cleaner or a source of compressed air for removing dust. For the cleaning of the housing use a soft cloth and a non-aggressive cleaner. Check that the fan and heat exchanger must be perfectly clean.

11.2 Periodic controls

Mechanical components

Check the correct working of the mechanical parts and, if needed, replace them. Make sure the projector is not mechanically damaged. If necessary, replace the worn parts.

12. F.A.Q. and answers

The following list shows common issues that may be simply solved. If issues persist, the unit must be repaired by qualified personnel or just contact your **Coemar** service near you.

Question	Possible solution
ReLite Led Kit DIM does not emit light	Projector not powered: <ul style="list-style-type: none">• Make sure the power cord is plugged in or test the input voltage in the projector in which ReLite Led Kit DIM is installed;• Make sure the ReLite Led Kit DIM is well inserted into the socket.

13. Usage warnings

1. Linear dimming from 1 % to 100 %. We guarantee the stability of the fixture starting from 10/15 % of the dimmer channel (depending on the installation conditions).
2. If only few **ReLite Led Kit DIM** are connected to a power unit of a certain size (2000 W), an additional component called **dump load resistor** is required, which will charge extra watt to activate the triacs. This device will be inserted into the power cord, dissipating the watt needed to ensure the ignition. If more **ReLite Led Kit DIM** are powered on the same line, the same effect as the **dump load resistor** will be obtained.
3. Never supply **ReLite Led Kit DIM** with a voltage higher than **240 V**.

User notes

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Information on disposal of the equipment

The equipment at the end of its useful life must be disposed of at an appropriate recycling center for waste electrical and electronic equipment. The treatment and disposal of environmentally friendly, helps prevent potential negative environmental and health and promote the reuse and / or recycling of materials making up the equipment. Illegal disposal by the user includes the application of administrative sanctions provided by law.



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