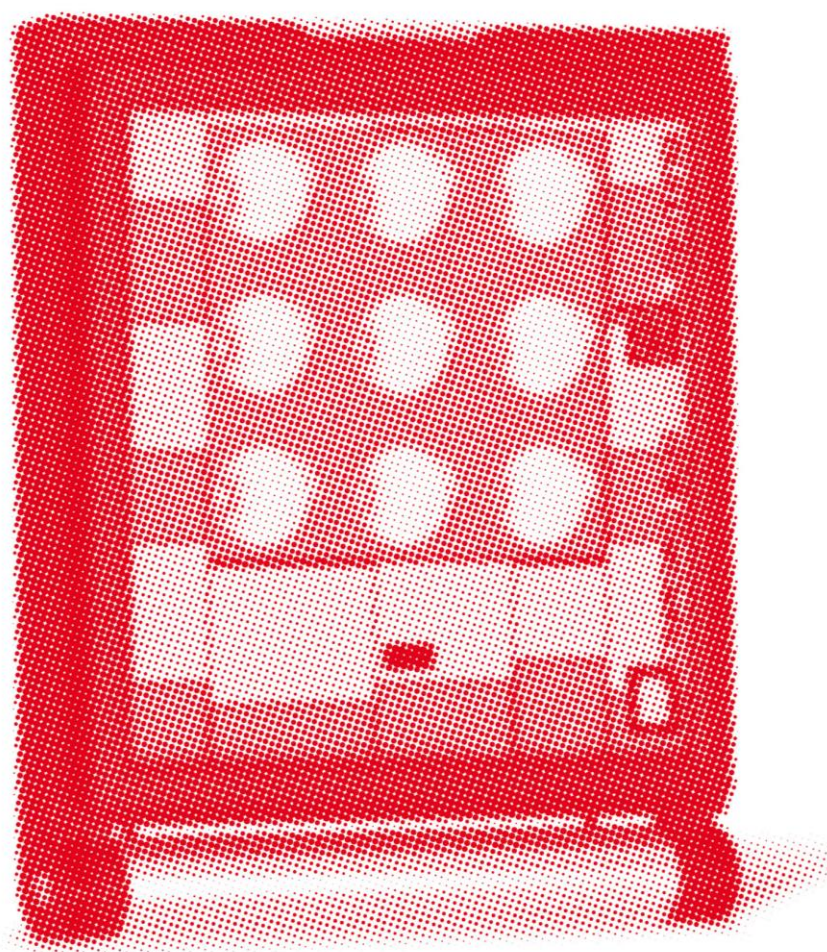




PROFESSIONAL ARCHITECTURAL LED PROJECTOR USER MANUAL



KEEP THIS MANUAL FOR FUTURE NEEDS



GENERAL GUIDELINES

QUADRO Q 300 is a led architectural projector specifically designed for professional use.

It features a compact design, in line with the most contemporary trends. The well defined lines and the flat shape are reminiscent of the high tech world, making this product most suitable for those applications where lighting engineering performance must be accompanied by a strong decorative presence.

QUADRO Q 300 is versatile and functional solution for a wide range of applications that guarantees both high quality performances and energy saving.

It adopts 9 x 30W RGBW high quality LED, with very high brightness and long life.

Versatile with its 3 optional interchangeable optics: 12° / 24° / 38° beam angles.

Suitable for indoor and outdoor use thanks its IP65 protection grade.

Light source:

- Power: 9 X 30W RGBW LED
- Average led life: 50.000 Hours

Specifications:

Color

- RGBW color mixing
- Preset white color temperature steps
- Linear color temperature adjust

Beam angle

- 12°
- 24°
- 38°

Strobe/Dimmer

- Strobe: variable, random, pulse effects
- Dimmer: Linear digital 0-100%
- Flicker free

Cooling

- Overheat protected

Mounting

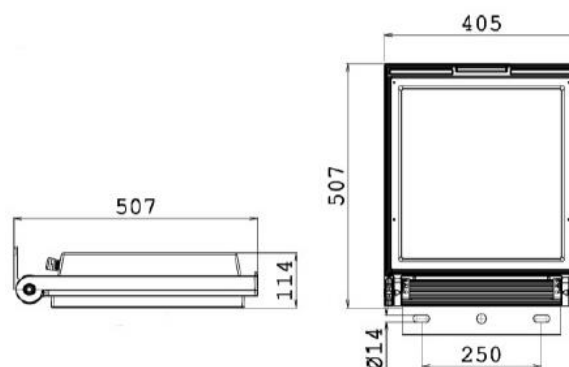
- Adjustable mounting bracket
- Outdoor: IP65 protection

Physical size:

- Attached drawings
- Weight: 13 Kg
- Packing dimension: 56x46x21 cm
- Gross weight: 14 kg

Control protocol and programming:

- USITT Dmx 512/1990
- RDM ready
- Bidirectional communication ready
- 2 Control channel modes: 4/8 channels
- 3 operational modes: DMX-512, Slave, Auto
- LED display for settings
- Remote display functions
- Software upgrade through remote controller



Available colors:

- Black
- Architectural gray
- Other on request

Electrical specification/connections:

- AC power: 100-240V, 50/60HZ
- Max power consumption: 270 W
- Power connection: free wire
- Dmx connection: free wire



Accessories:

- Free wire
- Remote controller
- Accessories can be included in special offer

IMPORTANT SAFETY INFORMATION

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

For safety reason, please be aware that all modifications on the device are forbidden.

Operate the device only after having familiarized with its functions.

Keep away from children and non-professionals.

Do not permit operation by persons not qualified for operating the device.

Most damages are the result of unprofessional operation.

FIRE PREVENTION

Never locate the fixture on any flammable surface.

Minimum distance from flammable material is 1 m.

Minimum distance from the closest illuminable surface is 1 m.

Never project the beam onto combustible substances.

Replace any blown or damaged fuses only with those of identical value.

Connect the projector to mains power, via a thermal magnetic breaker, following the Voltage dates stated in the electrical specification in this manual.

Use appropriate cables considering power consumption and ambient of the installation.

Strict adherence to regulatory norms is strongly recommended.

PREVENTION OF ELECTRIC SHOCK

High voltage is present inside the unit. Isolate the projector from the mains supply prior to performing any function which involves touching the inside of the unit.

The level of technology inherent the QUADRO Q 300 requires the assistance of specialized personnel for all servicing. Please refer to an authorized Red Lighting center.

A good earth connection is essential for proper functioning of the projector.

Never connect the unit without proper earth connection.

PROTECTION AGAINST DIRECT LIGHT RADIATION

Never turn on the unit if lenses or glass lenses protection are damaged or out of the right operating position. Never look directly the leds when they are on.

LEVEL PROTECTION AGAINST THE PENETRATION OF SOLID AND LIQUID MATTER

The projector is classified as an ordinary appliance and its protection level against the penetration of solid and liquid is IP65.

Do not use the device in environments that require the exceeding of the IP 65 protection grade.

INSTALLATION



CAUTION!

Please consider the EN 60598-2-17 and the other respective national norms during the installation. The installation must only be carried out by a qualified person.

Do not shake the device. Avoid vibration and shocks when installing or operating the device.

QUADRO Q 300 may be either floor or ceiling mounted.

The projector must always be installed with bolts, clamps and other tools that are capable of supporting the weight of the unit. Always use a second safety cable or chain to sustain the weight of the unit in case of the failure of the main fixing point. Make sure that the iron cable or chain can bear the weight of the entire unit. The supporting structure must be well sized and approved by an authorized expert.

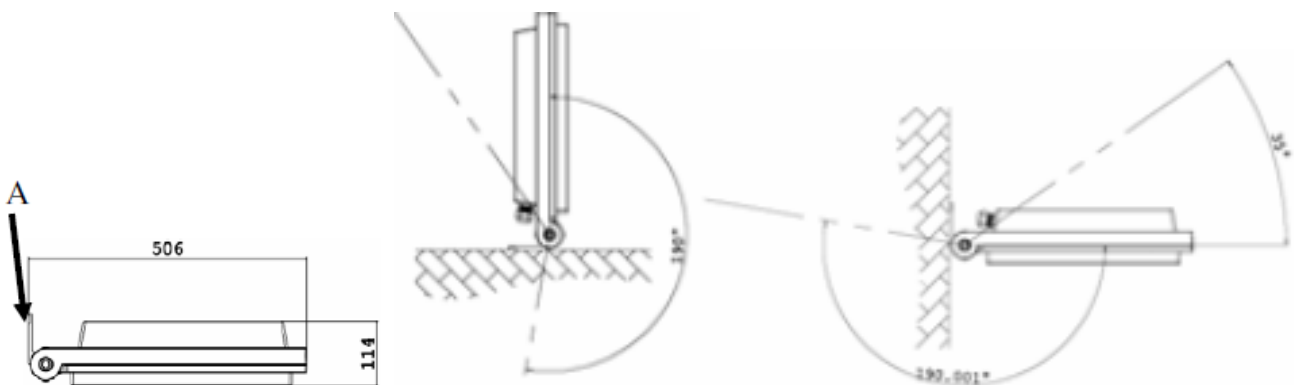
Installation requires extensive experience, including amongst calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device.

The installation must be checked and approved periodically by an authorized expert.

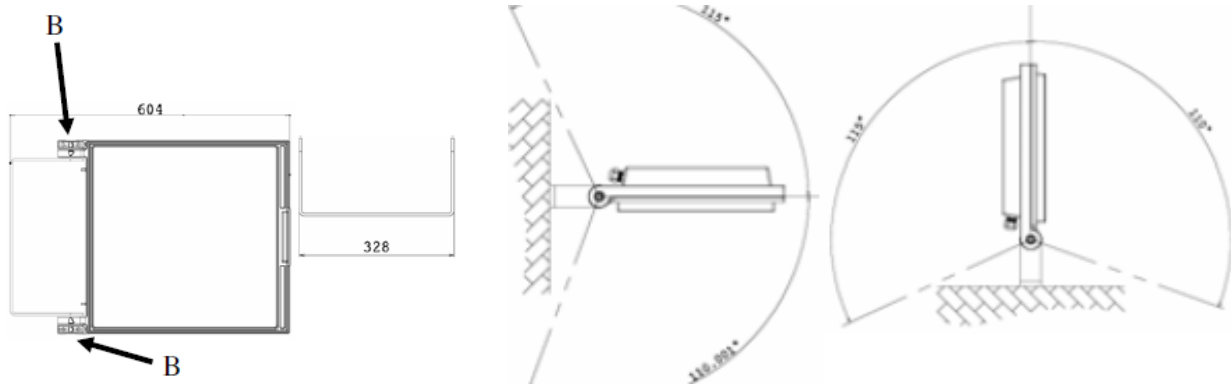
If you lack these qualifications, do not attempt the installation yourself.

Improper installation can result in bodily injury.

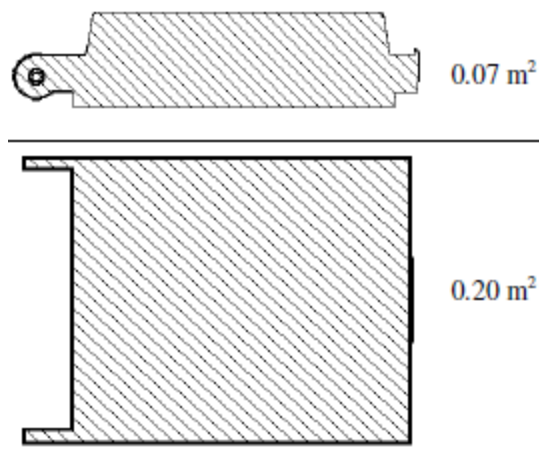
Mounting position with standard A bracket



Mounting position with optional B bracket



Area exposed to the wind



Form factor 1.2

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached operating temperature.

The applicable temperature for the projector is between -10°C to 40°C.
Do not use the fixture under or above this temperature range.

The external surface of the unit, at various points, may reach high heat. Never handle the unit until it's on. Never install the fixture in an enclosed area lacking sufficient airflow.

Do not use the device in environments that require the exceeding of the IP 65 protection grade.
Do not use the device if not well closed and connected by appropriate cabling.

Connect the projector to mains power, via a thermal magnetic circuit breaker, following the Voltage dates stated in the electrical specification in this manual.

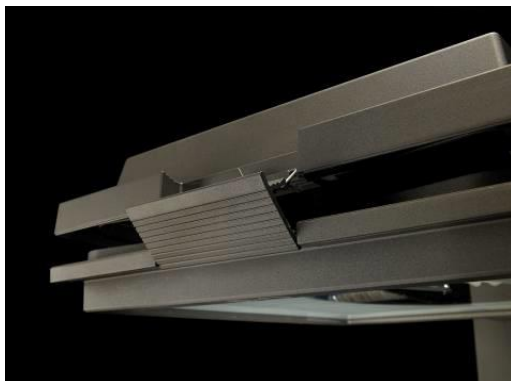
Use appropriate cables considering power consumption and ambient of the installation.
A good earth connection is essential for the safety and correct operation of the projector.
Strict adherence to regulatory norms is strongly recommended.

OPEN THE COVER

It is possible to open the cover for inspection, or for change the optic by the optional lenses sets.

ATTENTION:

Remove mains power prior to accessing the internal of the projector.



To have access to electrical parts, unlock and open the cover. It will open, stopping in vertical position.

WARNING: Do not remove or damage gasket. The gasket must be in perfect condition and located on its position, otherwise the projector could lose the IP65 grade protection.

Red Lighting is not liable for unprofessional behavior and the projector will be out of the warranty.

MAIN AND SIGNAL CONNECTION

To connect the unit to the main line and signal line insert the wires in the cable glands and connect them to the appropriate terminal blocks.

DMX 512

The unit operates using a digital DMX 512 (1990) signal. Connection between the controller and the projector must be carried out using appropriate cables with low capacitance and 120Ω as impedance.

Pin 1 connected to the ground, Pin 2 connected to the DATA-, Pin 3 connected to the DATA+.

Do not connect the cable ground to the plug chassis. The plug housing must be isolated.

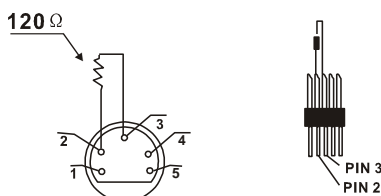
Connect the controller signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on first projector to the DMX IN plug of second one.

By this way, all projectors are cascade connect.



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

Please see illustrations below.



DMX CHANNEL CHART

Dmx channel		Channel function	type of control	effect	decimal range	
4ch	8ch					
	1	master dimmer	proportional	adjust luminous output intensity from 0 to 100%	0	255
	2	dimmer fine	proportional	fine dimmer control 16 bit	0	255
1	3	red	proportional	proportional control of color percentage from 0 to 100%	0	255
2	4	green	proportional	proportional control of color percentage from 0 to 100%	0	255
3	5	blue	proportional	proportional control of color percentage from 0 to 100%	0	255
4	6	white	proportional	proportional control of color percentage from 0 to 100%	0	255
	7	strobe	step	no effect	0	9
			proportional	variable speed strobing effect, from slow to fast	10	57
			step	stop strobe	58	59
			proportional	sequenced pulse effect, slow closing, fast opening (variable speed pulsing, from slow to fast)	60	108
			step	stop strobe	109	110
			proportional	sequenced pulse effect, fast closing, slow opening (variable speed pulsing, from slow to fast)	111	159
			step	stop strobe	160	161
			proportional	random strobe effect with variable speed from slow to fast and synchronised colors	162	207
			step	Stop strobe	208	209
			proportional	random strobe effect with variable speed from slow to fast and non-synchronised colors	210	255
	8	Special functions	step	600 Hz	0	9
				park	10	133
				display OFF	134	185
				display ON	186	199
				led control frequency tuning 1000 Hz	200	205
				led control frequency tuning 1500 Hz	206	211
				led control frequency tuning 2000 Hz	212	217
				led control frequency tuning 2500 Hz	218	223
				led control frequency tuning 3000 Hz	224	229
				led control frequency tuning 3500 Hz	230	235
				led control frequency tuning 4000 Hz	236	241
				led control frequency tuning 4500 Hz	242	247
				led control frequency tuning 5000 Hz	248	255

DISPLAY PANEL FUNCTIONS

By suitably all the functions of QUADRO Q 300, which can be activated through its display panel, it is possible to change some of the parameters and to add some functions.

QUICK GUIDE TO MENU

In order to access the functions, just press the menu button: press the key + or – to scroll pages.

To select the desired function, press enter key.



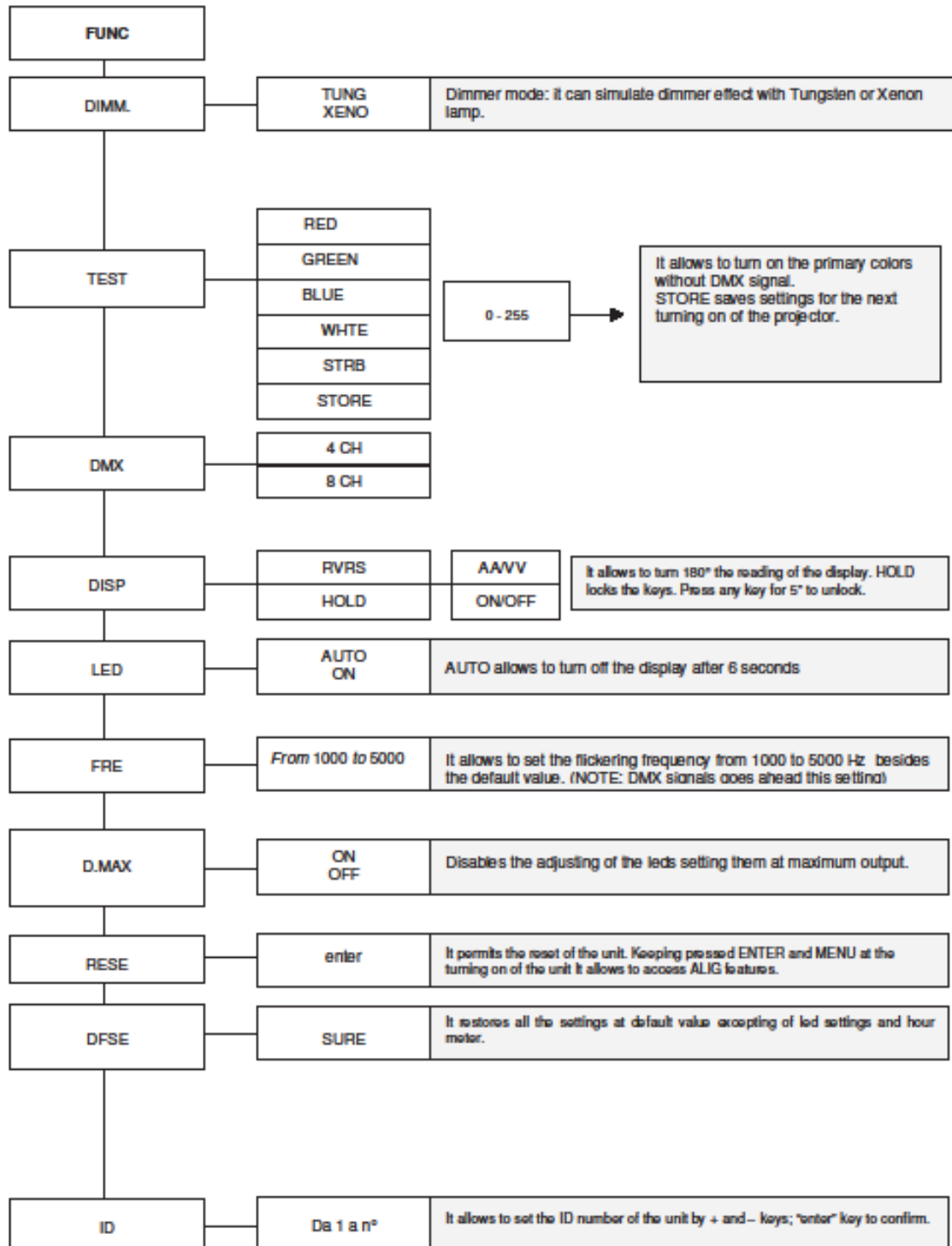
RAPID COUNT

By the display panel of QUADRO Q 300 it is possible to quickly change the various numbers displayed for the different functions in the 3 following 3 manners:

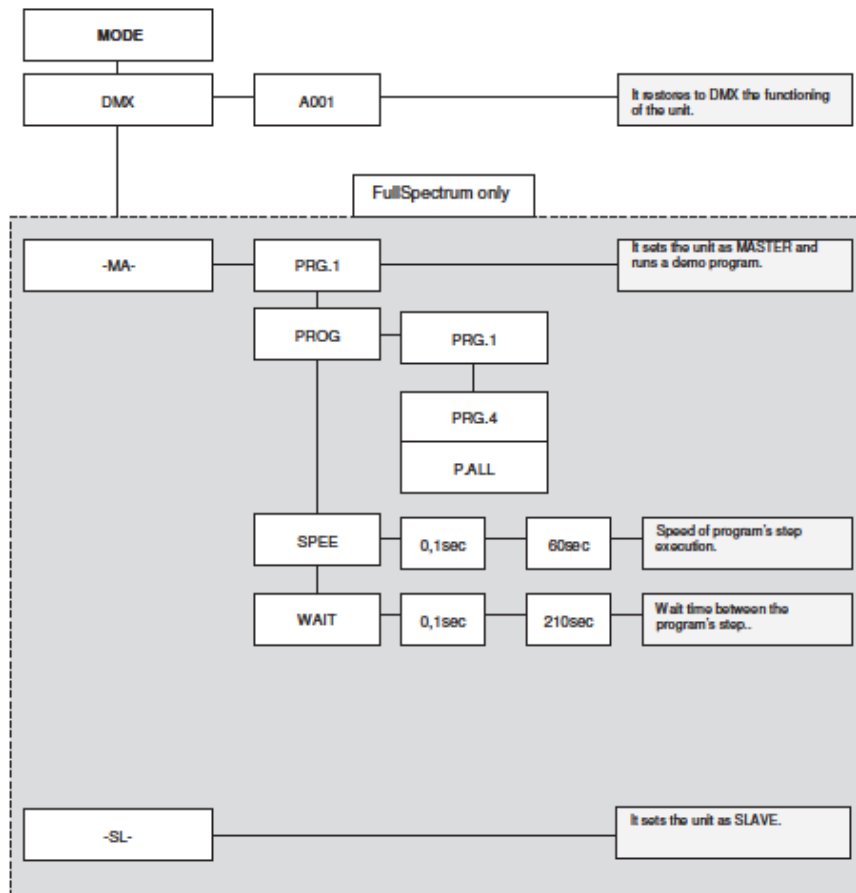
1. Press the + or – buttons will cause the count to be quicker.
2. Pressing first + and then the – and then holding them down simultaneously will cause the numbers to jump to the highest value.
3. Pressing first - and then the + and then holding them down simultaneously will cause the numbers to jump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

MAIN FUNCTION MENU (FUNC)

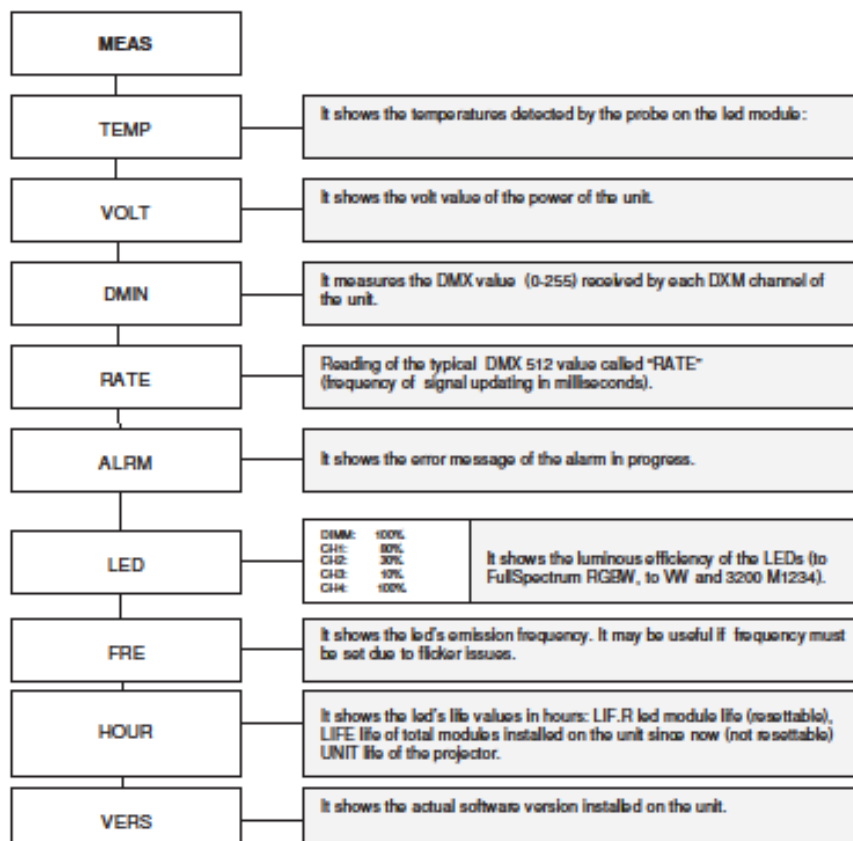
The projectors gives the opportunity to change and customize some functional settings.



USER SETTINGS (MODE) : Operational mode setting.



MEASURES AND TEST (MEAS) : Diagnostic and output parameters can be displayed.



CLEANING AND MAINTENANCE

It is possible to open the cover for inspection, or for change the optical by optional lenses sets. Please refer to chapter “OPEN THE COVER” of this manual.

ATTENTION:

REMOVE MAINS POWER PRIOR TO ACCESSING THE INTERNAL OF THE PROJECTOR.

The dust can reduce the luminous output substantially. Regularly clean the front lenses glass using a soft cotton cloth, damped with a specialist glasses cleaning solution.

Periodically check all mechanical parts and the gasket, replacing them if necessary.

All screws for installing the devices or parts of the device have to be tightly connected and in perfect condition.

There must not be any deformations on the housing, lenses, fixations and installation spots (ceiling, suspension, trussing).

Check all earth connection, main cables and electrical components. Refastening if necessary.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

In order to make the projector in good condition and extend the life time, we suggest a regular inspection.

Should you need any spare parts, please order genuine parts referring to an authorized center.

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R&D LIGHTING S.r.l.

Viale dei Mille 60, 50131 Firenze, Italy

Capitale Sociale € 100.000 i/v - Codice Fiscale / Part. IVA 06209690483

www.red-lighting.com

info@red-lighting.com