
Thunder Strobe 60

Powerful, pixel-mapping strobe based on LED technology



This Product Manual contains Important Information about the safe installation and use of this product. Please read and follow these instructions carefully and keep this manual in a safe place for the future reference.

User manual

Please read the instructions carefully before use

SAFETY PRECAUTIONS

This fixture is a sophisticated piece of electronic equipment.

To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Manufacturer is not responsible for injuries and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/ or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.



THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/ OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/ OR REPAIRS.



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!
NEVER OPEN THIS FIXTURE WHILE IN USE!
UNPLUG POWER BEFORE SERVICING FIXTURE!
NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**



ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/ OR ELECTRICAL SHORT CIRCUIT.



**MINIMUM DISTANCE TO OBJECTS/SURFACES
MUST BE 3.3 FEET (1 METER)
MAXIMUM TEMP OF EXTERNAL SURFACE 185° F (85° C)
MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER)**

SAFETY PRECAUTIONS

- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- DO NOT shake fixture, and avoid brute force when installing and/or operating fixture.
- DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Allow approx.6" (15cm) between fixture and other devices or a wall for proper cooling.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years .
- use the original packaging and materials to transport the fixture in for service.

MAINTENANCE GUIDELINES



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners .

MAINTENANCE

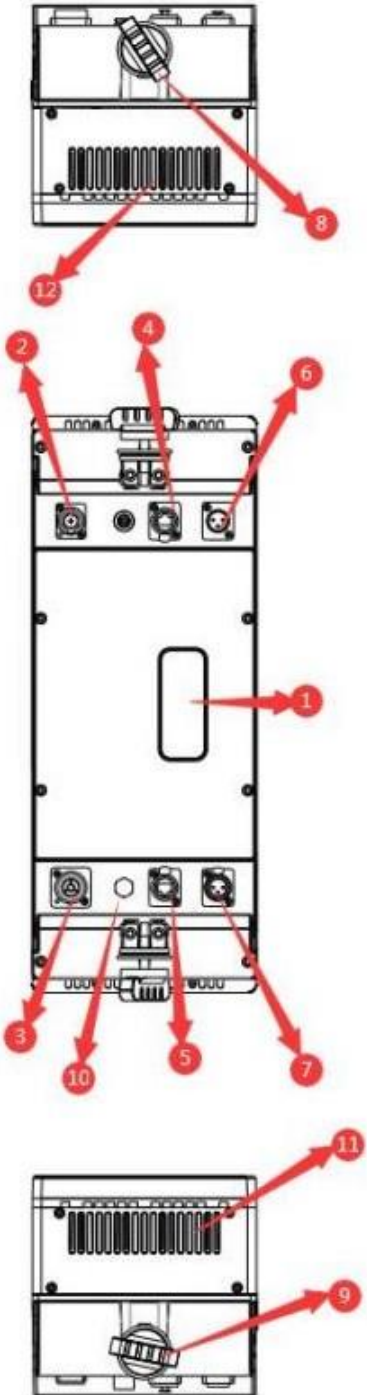
Regular inspections are recommended to ensure proper function and extended life.

There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized our service technician. If you need any spare parts, please order genuine parts from your local dealer.

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments. **NEVER** remove the ground prong from the power cable.

OVERVIEW



- 1. LCD Display
- 2. IP65 Power-Con IN
- 3. IP65 Power-Con OUT
- 4. IP65 RJ45 IN
- 5. IP65 RJ45 OUT
- 6. IP65 DMX 3PIN IN
- 7. IP65 DMX 3PIN OUT
- 8. KNOB FOR A SIDE
- 9. KNOW FOR B SIDE
- 10. Valve
- 11. Air Outlet for A side
- 12. Air Outlet for B side



INSTALLATION GUIDELINES

FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.



MINIMUM DISTANCE TO SURFACES/OBJECTS IS 3.3 FEET (1 METER).



**MINIMUM DISTANCE TO FLAMMABLE MATERIALS IS 1.6 FEET (0.5 METER).
EXTERNAL SURFACE CAN REACH TEMPERATURES OF 185° F (85° C).**

DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

Overhead rigging requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Fixture ambient operating temperature range is -4° to 113°F (-20° to 45°C). Do not operate the fixture when the ambient temperature falls outside of this range.

Fixture(s) should be installed away from walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.

NEVER stand directly below the fixture(s) when rigging, removing, or servicing.

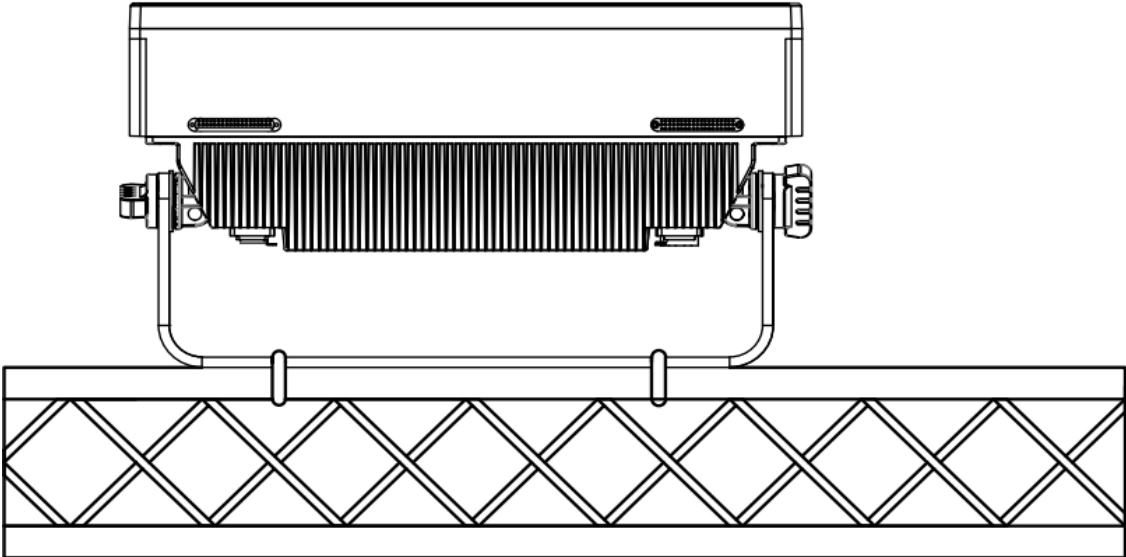
Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

Allow approximately 15 minutes for the fixture to cool down before serving.

INSTALLATION GUIDELINES

OMEGA BRACKET INSTALLATION

Insert the Omega Brackets into the matching holes on the bottom of the fixture. Secure the Omega Brackets to the fixture by turning each quick-lock fastener $\frac{1}{4}$ turn clockwise . **Always check to make sure that each fastener is completely locked.** Omega brackets can be installed as illustrated below:





CLAMP INSTALLATION

When mounting the fixture to a truss, be sure to secure appropriately rated professional grade rigging clamps to the included Omega Brackets using an M10 screw fitted through the center hole of the Omega Brackets. This fixture requires the installation of two Omega brackets and two clamps for secure truss mounting. The fixture also provides built-in rigging points for a SAFETY CABLE. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

SAFETY CABLE:

ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

INSTALLATION GUIDELINES



POWER AND DATA CABLES

TO MAINTAIN THE IP65 RATING INTEGRITY OF THE FIXTURE, ALL CABLES MUST BE RUN TOWARDS THE GROUND IN ORDER TO PREVENT WATER ACCUMULATION AROUND THE CONNECTIONS.

RJ45 DATA CABLES



THE INCLUDED RJ45 DATA CABLE IS FOR FIXTURE TO FIXTURE INTERCONNECTIONS ONLY! THE RJ45 CABLE CONNECTORS MAY NOT BE COMPATIBLE WITH OTHER RJ45 OR ETHERNET TYPE CONNECTORS.

INSTALLATION GUIDELINES

POWER AND DATA CONNECTIONS

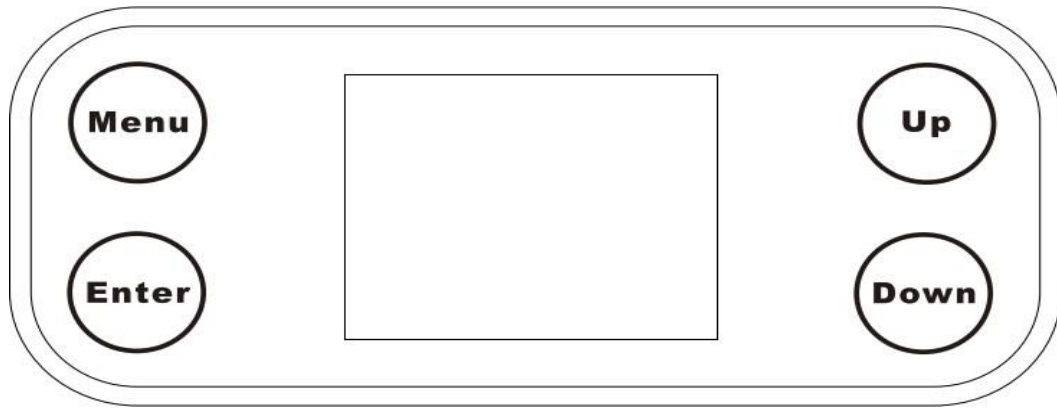


ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) IN ORDER TO PREVENT WATER CORROSION AND/ OR ELECTRICAL SHORT CIRCUIT.



TO MAINTAIN IP65 RATING INTEGRITY AND PREVENT WATER FROM ENTERING THE FIXTURE, SEAL ALL UNUSED CONNECTION RUBBER CAPS.

SYSTEM MENU



| UP | DOWN | ENTER | MENU |
|--|--|--|--|
| Increase the displayed value or pass it to the previous item in the menu | Reduce the displayed value or pass it to the next item in the menu | Confirms the displayed values, activate the displayed functions, or enters a continuous menu | Scroll through the main menu or return to the options in the previous menu |

| Main Menu | Sub Menu | Option/Value |
|------------------|-----------------------|-----------------------------------|
| CONNECT | DMX Address | 001-512 |
| | DMX Mode | 4CH-A,4CH-B,12CH,15CH,44CH,244CH |
| | Ethernet | IP configuration |
| | Universe | Changes Art-Net universe |
| SETUP | White Balance | R,G,B,W 0-255 |
| | Dimmer mode | Off, Dimmer 1, Dimmer 2, Dimmer 3 |
| | Signal Hold | BLACKOUT |
| | | HOLD |
| Clr Working time | Working time cleaning | |
| STAND ALONE | Normal | Stand alone off |
| | Sequence | SHOW 01-05 |
| | Static | Fixed/Manual Color |
| Lock Screen | No | Locks screen |
| | Yes | |
| Working time | | Show Working Time |

LIGHTING CONSOLE PATCHING GUIDELINES

The product is a versatile luminaire allowing it to produce multiple unique lighting effects typically not found in a single lighting fixture. The DMX layout is designed to offer a variety of options for controlling fixture.

The fixture contains 150x 1,5W RGB pixel cells, and 150x5W White cells. For ease of use the DMX layout is arranged to allow lighting consoles to separate the fixture into multiple segments or parts. It is especially important to arrange the fixture in such segments or parts when using the fixture in the full extended 244 channel DMX mode. For simple programming, reduced DMX channel modes can be used. However, for easy recall of interesting pixel animations, fixture contain FX systems.

DMX CHART 4CH Mode(RGBW)

| Channel | Value | Function | Description |
|---------|-------|----------|---------------|
| 1CH | 0-255 | RED | Dark to light |
| 2CH | 0-255 | GREEN | Dark to light |
| 3CH | 0-255 | BLUE | Dark to light |
| 4CH | 0-255 | WHITE | Dark to light |

4CH Mode(STROBE)

| Channel | Value | Function | Description |
|---------|-------|-----------------|-------------|
| 1CH | 0-255 | FLASH INTENSITY | |
| 2CH | 0-255 | FLASH DURATION | |
| 3CH | 0-255 | FLASH RATE | |
| 4CH | 0-255 | EFFECTS | |

12CH Mode

| Channel | Value | Function | Description |
|---------|---------|---------------|---|
| 1CH | 0-255 | MASTER DIMMER | Dark to light |
| 2CH | 0-255 | FLASH TIME | 15-990ms |
| 3CH | 0-10 | STROBE FREQ | No Function |
| | 11-255 | | Strobe S>F |
| 4CH | 0-10 | STROBE TYPE | Static |
| | 11-45 | | No effect |
| | 46-80 | | Ramp up |
| | 81-115 | | Ramp down |
| | 116-150 | | Ramp up-down |
| | 151-185 | | Random |
| | 186-220 | | Lighting |
| | 221-255 | | Spikes |
| 5CH | 0-255 | RED | Dark to light |
| 6CH | 0-255 | GREEN | Dark to light |
| 7CH | 0-255 | BLUE | Dark to light |
| 8CH | 0-255 | WHITE | Dark to light |
| 9CH | 0-255 | MACRO EFF1 | 10 build-in effects,the last one is AUTO running |
| 10CH | 0-255 | MACRO EFF2 | 10 build-in effects,the last one is AUTO running |
| 11CH | 0-255 | MACRO COLOR | Red, green, blue, white, cyan, yellow, purple, pink |
| 12CH | 0-255 | MACRO SPEED | Speed S>F |

15CH Mode

| Channel | Value | Function | Description |
|---------|---------|-----------|----------------|
| 1CH | 0-255 | FG DIMMER | Dark to light |
| 2CH | 0-30 | FG STROBE | Closed |
| | 31-100 | | Strobe S>F |
| | 101-130 | | Open |
| | 131-200 | | Rnd strobe S>F |
| | 201-255 | | Open |
| 3CH | 0-255 | FG RED | Dark to light |
| 4CH | 0-255 | FG GREEN | Dark to light |
| 5CH | 0-255 | FG BLUE | Dark to light |
| 6CH | 0-255 | FG WHITE | Dark to light |
| 7CH | 0-255 | BG DIMMER | Dark to light |
| 8CH | 0-30 | BG STROBE | Closed |
| | 31-100 | | Strobe S>F |

| | | | |
|---------|---------|-------------|----------------|
| | 101-130 | | Open |
| | 131-200 | | Rnd Strobe S>F |
| | 201-255 | | Open |
| 9CH | 0-255 | BG RED | Dark to light |
| 10CH | 0-255 | BG GREEN | Dark to light |
| 11CH | 0-255 | BG BLUE | Dark to light |
| 12CH | 0-255 | BG WHITE | Dark to light |
| 13CH | 0-10 | AUTO FX | No FX |
| | 11-15 | | FX1 |
| | 16-20 | | FX2 |
| | 21-25 | | FX3 |
| | 26-30 | | FX4 |
| | 31-35 | | FX5 |
| | 36-40 | | FX6 |
| | 41-45 | | FX7 |
| | 46-50 | | FX8 |
| | 51-55 | | FX9 |
| | 56-60 | | FX10 |
| | 61-65 | | FX11 |
| | 66-70 | | FX12 |
| | 71-75 | | FX13 |
| | 76-80 | | FX14 |
| | 81-85 | | FX15 |
| | 86-90 | | FX16 |
| | 91-95 | | FX17 |
| | 96-100 | | FX18 |
| | 101-105 | | FX19 |
| | 106-110 | | FX20 |
| | 111-115 | | FX21 |
| | 116-120 | | FX22 |
| 121-125 | FX23 | | |
| | 126-205 | | Reserved |
| | 206-255 | | Random Pixel |
| 14CH | 0-50 | FX SPEED | Index |
| | 51-255 | | Speed S>F |
| 15CH | 0-51 | DIMMER MODE | Menu Set |
| | 52-101 | | Mode Off |
| | 102-152 | | Mode 1 |
| | 153-203 | | Mode 2 |
| | 204-255 | | Mode 3 |

44CH Mode

| Channel | Value | Function | Description |
|---------|-------|-------------|---------------|
| 1CH | 0-255 | DIMMER | Dark to light |
| 2CH | 0-255 | STROBE TIME | 15-990ms |
| 3CH | 0-10 | STROBE FREQ | No Function |

| | | | |
|--------|---------|--|------------------|
| | 11-255 | | Strobe S>F |
| 4CH | 0-10 | STROBE TYPE | Static |
| | 11-45 | | No effect |
| | 46-80 | | Ramp up |
| | 81-115 | | Ramp down |
| | 116-150 | | Ramp up-down |
| | 151-185 | | Random |
| | 186-220 | | Lighting |
| | 221-255 | | Spikes |
| 5-44CH | 0-255 | All LEDS divided into 10 Pixels Segments | R/G/B/W IN ORDER |

The pixels are arranged in a grid pattern as illustrated below:

| | | | | |
|----------|----------|----------|----------|-----------|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |

244CH Mode

| | | | |
|---------|---------|--|------------------|
| 1CH | 0-255 | DIMMER | Dark to light |
| 2CH | 0-255 | STROBE TIME | 15-990ms |
| 3CH | 0-10 | STROBE FREQ | No Function |
| | 11-255 | | Strobe S>F |
| 4CH | 0-10 | STROBE TYPE | Static |
| | 11-45 | | No effect |
| | 46-80 | | Ramp up |
| | 81-115 | | Ramp down |
| | 116-150 | | Ramp up-down |
| | 151-185 | | Random |
| | 186-220 | | Lighting |
| | 221-255 | | Spikes |
| 5-244CH | 0-255 | All LEDS divided into 60 Pixels Segments | R/G/B/W IN ORDER |

The pixels are arranged in a grid pattern as illustrated below:

| | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |

SPECIFICATIONS

LIGHT SOURCE

- Source: 480Pcs*1.5W RGB SMD5050 +480PCS 0.5W White Color SMD5050 LED
- CT: Full ON 6300K
- CRI: up to 85Ra
- Luminous Flux: (Strobe) 230k lm, (Static ON) 50'638lm
- Lux: (Strobe) 6335 lux @3m (Static ON) 3200lux @3m
- Source Life Expectancy: >30.000 h

OPTICS

- Beam Angle: 60° (with optional lenses mounted)
- Field Angle: 120°

DYNAMIC EFFECTS

- Rotating Gobos: Dynamic Patterns with speed and rotation control
- Pixel Patterns: Pre-programmed dynamic and static patterns
- FX Generator: Adjustable foreground/background color, index, speed, direction
- Static Color Mode: Selection of static color
- Manual Color Mode: Manual adjustment of dimmer and strobe
- Auto Mode: Built-in programs with execution speed adjustment

BODY

- Body: Sturdy die-cast aluminium body conceived for long-time durability
- Body Color: Black

CONTROL

- Protocols: DMX512, RDM, Art-Net

- Pixel Control: 60 controllable sections
- RDM: RDM ready for fixture remote monitor and settings
- Display: Black TFT touch display
- Firmware Upgrade: Yes, via RJ45 Cable.
- DMX Channel: 4CH-A/4CH-B/12CH/15CH/44CH/244CH

ELECTRONICS

- Dimmer: Linear 0~100% electronic dimmer
- Dimmer Curves: 4 Different dimming curves available
- Strobe/Shutter: 1-30 Hz, electronic
- Operating Temperature: -10° ~+45°

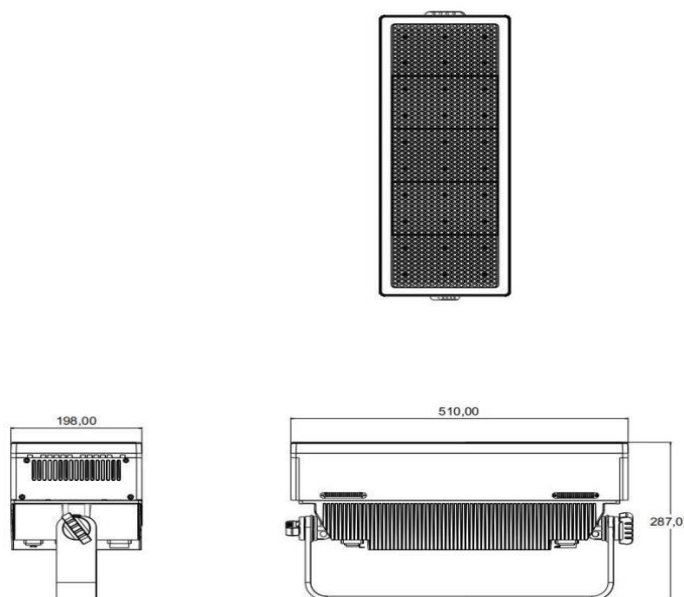
ELECTRICAL

- Power Supply: 100-240V – 50/60Hz
- Power Consumption (at 230V): Strobe 1850W (peak) - Static 950W
- Output (at 230V): 2 units on a single power line 5

PHYSICAL

- Cooling: Forced air with low noise fan
- Suspension And Fixing: Hanging bracket for floor positioning with “Quick-Lock” system
- Signal Connection: 5p in/out, RJ45 in/out
- Power Connection: Seetronic PowerCon TRUE1 IP65 in/out
- IP: 65 for outdoor events
- Dimensions (WxHxD): 510x287x198mm
- Weight: 14kg

DIMENSIONAL DRAWINGS:



WARNING!



Manufacturer reserves the right to introduce modifications in products without prior notice submitted to the User.