Matrix Panel 25

CE ▽ ⏚ IP20 LED ⟨---0.2m t_a 40°C t_c 150°C

User Manual

KEEP THIS MANUAL FOR FURTURE NEEDS

1 SAFETY INSTRUCTIONS

CAUTION
Becareful with your operations. With a dangerous voltage you cansuffer a dangerous electric shock when touching wires!

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.

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 room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell or smell may arise. This is a normal process and does not necessary mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this Lumiere is damaged, it shall be exclusively replaced by the manufacturer of his service agent or a similar qualified person in order to avoid a hazard.

2 UNPACKING

Thank you for choosing our Matrix 360. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

The Matrix 360 is made of a new type of high temperature strength of engineering plastic and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and likable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

The Matrix 25 adopts 25PCS CREE XLamp XML 4-IN-1 10W LEDs which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:
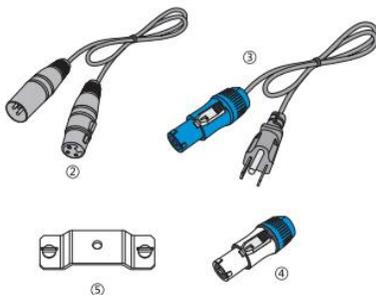
①	Moving Head	1PC
②	Signal Cable	1PC
③	Power Cable	1PC
④	Power Out	1PC
⑤	Omega Clamp	1PC
⑥	Safety Cable	1PC
⑦	User Manual	1PC

3 *FEATURES & SPECIFICATIONS*

Features

- 25PCS CREE XLamp XLM 4-IN-1 10W LEDs
- 50,000 hours lifespan and low power consumption
- 25 pixels (each LED is a pixel), controllable individually
- Outstanding sharp BEAM effect and remarkable wash effect with pure color mixing
- Specific high efficiency 5°optic system
- High light output, 5450 LUX@7M at full RGBW
- Flicker free control, Smooth, fast and precise infinite (continuous) PAN/TILT movement
- Scan position memory, auto re-position after unexpected movement
- High speed strobe effect with 1-25 flashers per second
- 0-100% smooth linear LED dimmer
- Amazing visual effect by pro control,Internal program available
- Default pixel macros effect for easy performance
- 19/23/119 DMX Channels USITT DMX-512
- DMX 512, master-slave and sound activated controllable or auto operation
- Specific computer control software as optional
- High definition blue LCD display
- Efficient low noise fan cooling system
- POWERCON IN/OUT, 3-pin XLR connectors IN/OUT & 5-pin XLR connectors IN/OUT
- Two 1/4 turn fastening Omega Clamps
- Constant temperature readout and management function
- DB rating@1M=54.18dB
- IP 20 protection rating,-35degree to 45 degree ambient temperature

Specifications

Input Voltage: AC90-260V 50/60Hz

LED Quantities: 25PCS CREE XLamp XML 4-IN-1 10W LEDs

Control Signal: DMX 512, master-slave and sound activated or auto operation
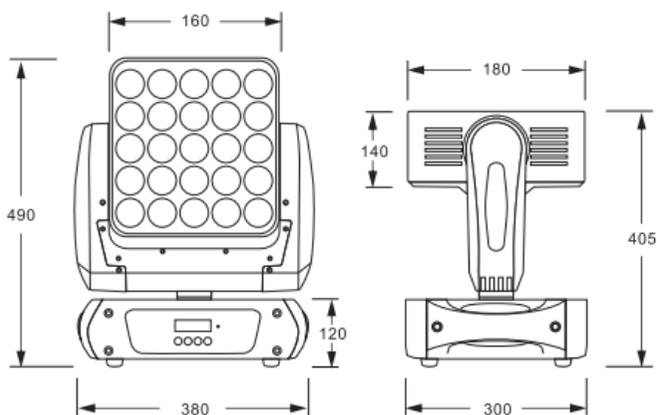
Control Channel: 19/23/119 DMX Channels USITT DMX-512

Power Consumption: 300W

Dimensions: 290(D)*380(W)*490(H)mm

Packing Dimensions: 475(D)*550(W)*420(H)mm,

Net Weight: 14.92kg , Gross Weight: 18.34kg

4   PHOTOMETRIC DATA

■ **Photometric Beam Angle Data**   *25° Beam Angle LUX × 0.0929=FC*

R	2900 / 31210	516 / 5550	182 / 1960	94 / 1010	
G	2937 / 31620	633 / 6810	227 / 2450	116 / 1250	
B	4892 / 52660	1020 / 10990	354 / 3810	180 / 1940	
W	4546 / 48930	889 / 9570	310 / 3340	164 / 1770	
RGBW	13630 / 146720	2770 / 29820	1938 / 10430	506 / 5450	(FC/LUX)

| 0m (0ft) | 1m (3.3ft) | 3m (9.8ft) | 5m (16.4ft) | 7m (23.0ft) |

5°
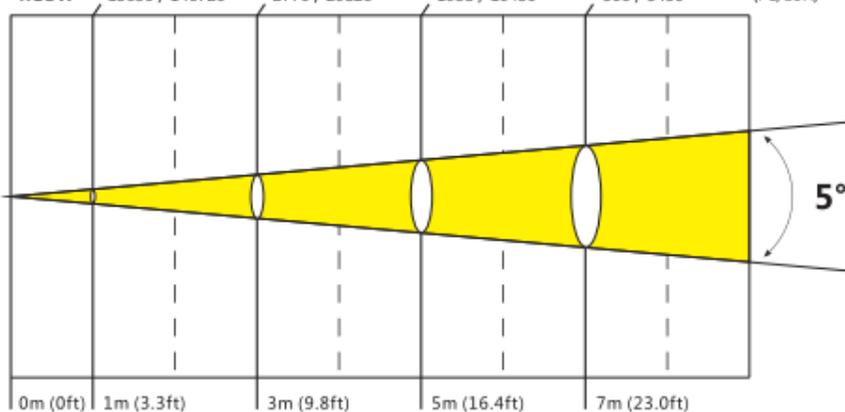
5 OPERATION INSTRUCTIONS

· The moving head is for beam effect for on-site decoration purpose.

· Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.

· This light should be keep away from strong shaking during any transportation or movement.

· Don't pull up the light by only the head, or it might cause damages to the mechanical parts.

· Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronics shock to the people.

· Make sure the installation place is in good safety condition before installing the fixture.

· Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.

· Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.

· Make sure the fixture is operated by qualified personnel who know the fixture before using.

· Keep the original packages if any second shipments is needed.

· Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.

· It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

6 INSTALLATIONS

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 items the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

From a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable materials (decoration etc.).

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points: Overhead mounting requires extensive experience, including among others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting: The Matrix 25 provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

① Omega Bracket
② Satety Clamp
③ Safety Cable
④ 1/4 Turn Quick-Lock Fasteners
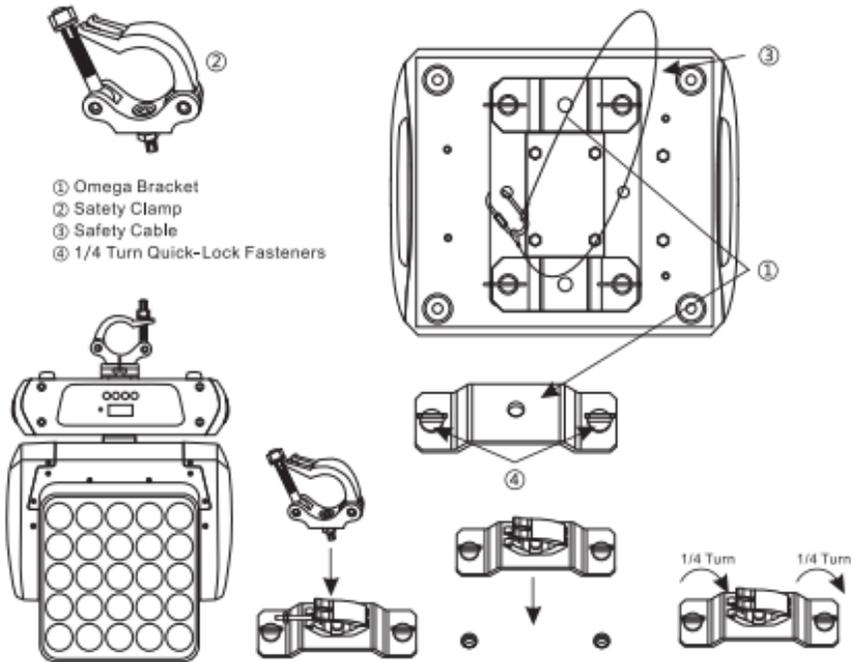
Regardless of the rigging option you choose for your Matrix 25, always be sure to secure your fixture with a safety cable. The fixture providers a bulit-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

7   *DMX-512 CONTROL CONNECTIONS*

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator

5-pin DMX IN
ARTNET IN
3-pin DMX IN
ARTNET OUT
3-pin DMX OUT

Fuse
POWER OUT
POWER IN
5-pinDMX OUT

ARTNET IN
3-pin DMX IN
5-pin DMX IN
POWER IN

1:Ground
2:Data(-)
3:Data(+)

DMX Output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket

COMMON

DMX+
DMX-

DMX512 OUT
3-PIN XLR

DMX512 IN
3-PIN XLR
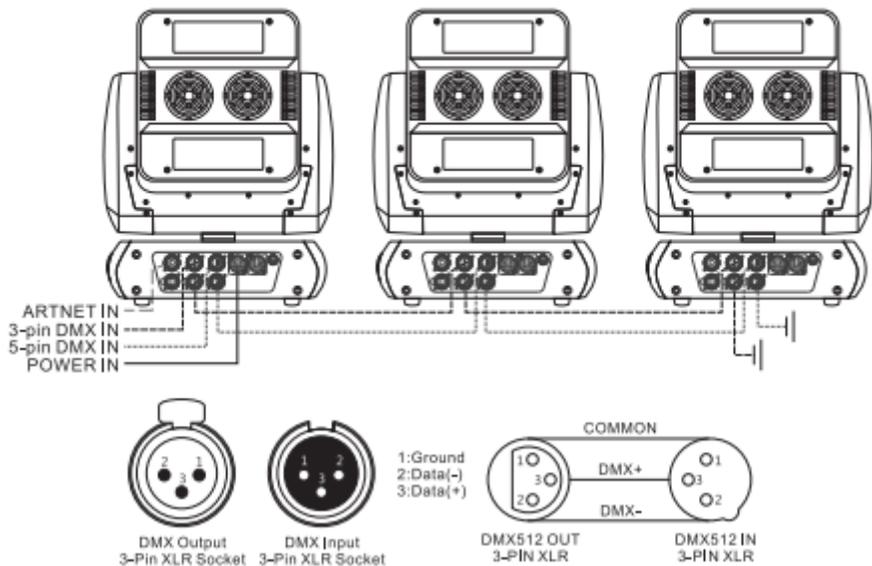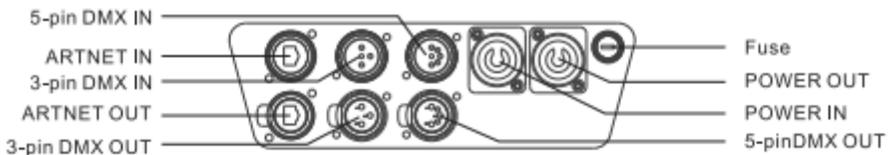
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω 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

120 Ω

PIN3
PIN2
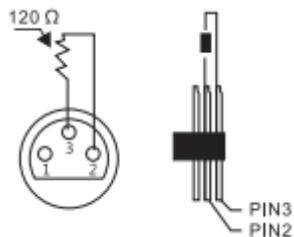
below.   .

8 MENU OPERATIONS

MENU

System Mode ├──→DMX Mode──→Addr Setup←──→Addr Setup
　　　　　　　　[DMX]　　[119CH]　　[001]　[512]
　　　　　　　　──→

　　　　　├──→DMX Mode──→Addr Setup←──→Addr Setup
　　　　　　　　　[23CH]　　　[001]　[512]

　　　　　└──→DMX Mode──→Addr Setup←──→Addr Setup
　　　　　　　　　[19CH]　　【001】　【512】

──→【Auto】──→[Au P1]←──→ [Au P10] XY　Auto mode

──→【Auto】──→[Au P1]←──→ [Au P12] LED Auto mode（LED auto speed 01-12）

──→【Sound】──────→ [So P1]←──→ [So P12]　Sound mode

──→R0-255 Dimmer（All LEDs）
──→G0-255 Dimmer（All LEDs）
──→B0-255 Dimmer（All LEDs）
──→W0-255 Dimmer（All LEDs）
──→ Pan-Tilt Invert Selection
──→ Custom color adjustment
──→ Default Factory settings

9 DMX CHANNELS

19/23/119 channel mode sheet

Mode/Channel			Function	Channel Value	Description
19ch	23ch	119ch			
CH1	CH1	CH1	Pan	0-255	0-540°
CH2	CH2	CH2	Pan Fine	0-255	Pan Fine
CH3	CH3	CH3	Tilt	0-255	0-270 °
CH4	CH4	CH4	Tilt Fine	0-255	Tilt Fine
CH5	CH5	CH5	Pan, Tilt Speed Adjustment	0-255	From fast to slow
CH6	CH6	CH6	Pan	0-35 36-164 165-255	No function Continuous Rotating CW Continuous Rotating CCW
CH7	CH7	CH7	Tilt	0-35 36-164 165-255	No function Continuous Rotating CW Continuous Rotating CCW
CH8	CH8	CH8	Built-in Program (image)	0-47 48-63 64-79 80-95 96-111 112-127 128-143 144-159 160-175 176-191 192-207 208-255 224-239 240-245 246-255	No function Single control. LED Chase LED Run LED Jump LED Edacity LED Grouping Image 1 Image 2 Image 3 Image 4 Image 5 Sound Mode Sound mode with movement Total Program
CH9	CH9	CH9	Built-in Program (Numbers & Symbols	0-8 9-17 18-26 27-35	No function 0 1 2

				36-44	3
				45-53	4
				54-62	5
				63-71	6
				72-80	7
				81-89	8
				90-98	9
				99-107	+
				108-116	-
				117-125	x
				126-134	÷
				135-143	╱
				144-152	<
				153-161	>
				162-170	?
				171-179	!
				180-188	*
				189-197	Ó
				198-206	#
				207-215	Á
				216-224	Ç
				225-233	（
				234-242	）
				243-255	Total Program
CH10	CH10	CH10	Built-in Program (Letters)	0-8	No Function
				9-17	A
				18-26	B
				27-35	C
				36-44	D
				45-53	E
				54-62	F
				63-71	G
				72-80	H
				81-89	I
				90-98	J
				99-107	K
				108-116	L
				117-125	M
				126-134	N
				135-143	O
				144-152	P

				153-161	Q
				162-170	R
				171-179	S
				180-188	T
				189-197	U
				198-206	V
				207-215	W
				216-224	X
				225-233	Y
				234-242	Z
				243-255	Total Program
CH11	CH11	CH11	Built-in Program Speed Adjustment	0-255	From slow to fast
CH12	CH12	CH12	Built-in Program ROTATION	0-31	Head Up
				32-63	Head Right
				64-95	Head Down
				96-127	Head Left
				128-191	Continuous Rotating CW from slow to fast
				192-255	Continuous Rotating CCW from slow to fast
CH13	CH13	CH13	LED Strobe	0-255	From slow to fast and random
CH14	CH14	CH14	RGBW Dimmer	0-255	From dark to bright (can control the build-in program)
CH15	CH15	CH15	Global Red	0-255	From dark to bright
CH16	CH16	CH16	Global Green	0-255	From dark to bright
CH17	CH17	CH17	Global Blue	0-255	From dark to bright
CH18	CH18	CH18	Global White	0-255	From dark to bright
	CH19		LED LINE 1	0-7	LED 1 ,2 ,3 ,4 & 5 ON
	CH20		LED LINE 2	8-15	LED 1 ON
	CH21		LED LINE 3	16-23	LED 2 ON
	CH22		LED LINE 4	24-31	LED 1& 2 ON
	CH23		LED LINE 5	32-39	LED 3 ON
				40-47	LED 1&3 ON
				48-55	LED 2&3 ON
				56-63	LED 1 , 2 &3 ON
				64-71	LED 4 ON

				72-79	LED 1&4 ON
				80-87	LED 2&4 ON
				88-95	LED 1, 2 &4 ON
				96-103	LED 3&4 ON
				104-111	LED 1 ,3 &4 ON
				112-119	LED 2 ,3 &4 ON
				120-127	LED 1 ,2, 3 &4 ON
				128-135	LED 5 ON
				136-143	LED 1 &5 ON
				144-151	LED 2&5 ON
				152-159	LED 1 ,2 &5 ON
				160-167	LED 3 & 5 ON
				168-175	LED 1 ,3 &5 ON
				176-183	LED 2 ,3 & 5 ON
				184-191	LED 1, 2 ,3 & 5ON
				192-199	LED 4 & 5 ON
				200-207	LED 1 ,4 & 5 ON
				208-215	LED 2 ,4 & 5 ON
				216-223	LED 1, 2 ,4 & 5 ON
				224-231	LED 3, 4 & 5 ON
				232-239	LED 1，3 ,4 & 5 ON
				240-247	LED 2, 3 ,4 & 5 ON
				248-255	No function
		CH19	1R	0-255	From dark to bright
		CH20	1G	0-255	From dark to bright
		CH21	1B	0-255	From dark to bright
		CH22	1W	0-255	From dark to bright
		CH23	2R	0-255	From dark to bright
		CH24	2G	0-255	From dark to bright
		CH25	2B	0-255	From dark to bright
		CH26	2W	0-255	From dark to bright
		CH27	3R	0-255	From dark to bright
			3G	0-255	From dark to bright
		...... CH114	24W	0-255	From dark to bright
		CH115	25R	0-255	From dark to bright
		CH116	25G	0-255	From dark to bright
		CH117	25B	0-255	From dark to bright
		CH118	25W	0-255	From dark to bright
CH19		CH119	Reset	250-253	Reset

10 *MAINTENANCE AND CLEANING*

The following points have to be considered during the inspection:

1) All screws for installing the devices or parts of the device have to be tightly connected and

must not be corroded.

2) There must not be any deformations on the housing, color lenses, fixations and installation

spots (ceiling, suspension, trussing).

3) Mechanically moved parts must not show any traces of wearing and must not rotate with

unbalances.

4) The electric power supply cables must not show any damage, material fatigue or

sediments.

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.

CAUTION
Disconnect from mains before starting maintenance operation.

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

1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.

2) Clean the fan each week.

3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.