XBLACK XL600

Contents

1. Safety information

Safe symbol for this manual

⚠	**Dangerous！** May cause serious damages or even to death
📖	**Dangerous！** Read manual before installation and maintain
⚡	**Dangerous！** High voltage, to avoid deadly electric shook
🔥	**Warning！** Be care of fire
♨	**Warning！** Do not touch hot surface to avoid be scalded
👓	**Warning！** Be care of radiation to eyes, eye shade needed
✋	**Warning！** Be care of hands, gloves needed

Warning:
This fixture is only for professional users, prohibited for home or other nonprofessional use.

This light may case risks of serious damages, dead electric shook, burning, explosion and fall of the lamp.

Please read the following safe tips carefully and obey the safe notices on the light before installation, charging and maintain.

⚡ **Electric Shook Protection**

- Please cut off the power supply before you open or change accessories of the light (such as lamp and the fuse), if you don't want to use the light, cut the power off.
- Make sure the fixture has ground-connect protection and use AC power supply same as the light requires.
- Please use 3 pins power cable over 20A load
- Before using, please make sure the cables are in good condition and suitable for the electric current which connect with the fixture
- If the cable or the plug damaged, light be soaked or the cable is overheat. Please cut off the power
- Don't make this fixture in the rain or moist environment

Lamp safe

- It may cause burn damage to eyes and skin if unmask at the charging lamp, please don't stare at the charging lamp directly
- Don't use fixture with broken shell, resist-light board, shot lens, protector and resist-heat board
- Heat charging lamp with strong air pressure, may cause expression accidently
- Maintain the light or change the lamp, protect-glasses and gloves are needed, cut off the power supply and make sure the light is cool enough
- Don't use lamps of fragmentary, damaged or any other defects
- Notice the using time and the status of the lamp, replace the lamp before the service time marked in this manual or lamp manufacture limits
- Lamp installed should fit for the relevant safe demands
- Once the quartz part of the lamp broken, it will release static electricity and poison gas. If the space is not large enough, please keep away and keep the space in good air circulate. Wear protect gloves when clear up the broken lamp, don't throw the useless lamps, send the dangerous items to the relevant department

Be care of scalded and fire disaster

- The temperature of light face may a bit high, please avoid to touch anybody or any other items, keep it cool enough before moving it
- Keep away the combustible item (such as textile, wood, paper etc) from the light at least 0.3 meters, inflammable items keep away from this item as far as possible, keep 0.1m space at least for in/out wind
- Don't light directly at façade of item with 4 meters
- Covering the shot lens or rotate the shot lens to avoid the direct sunshine in day time
- Don't use the fixture when the temperate is over 40°C (104°F)
- Prohibit to reinstall the fixture and install any parts original accessories from dealer,

prohibit to stick any paper of gobo on the lens and other parts, accessories admitted by dealer only can used to change the light effect

- Prohibit to control the fuse or temperate-control switch illegally, replace the fuse according to the specified specification and load

 Avoid fall injury

- Don't move the fixture alone

- Install the light on flat ground or platform

- Make sure the external accessories and holder stable enough stable platforms needed when install, maintain and move the fixture, safe guard need Contact our after-service for more information have not mentioned above
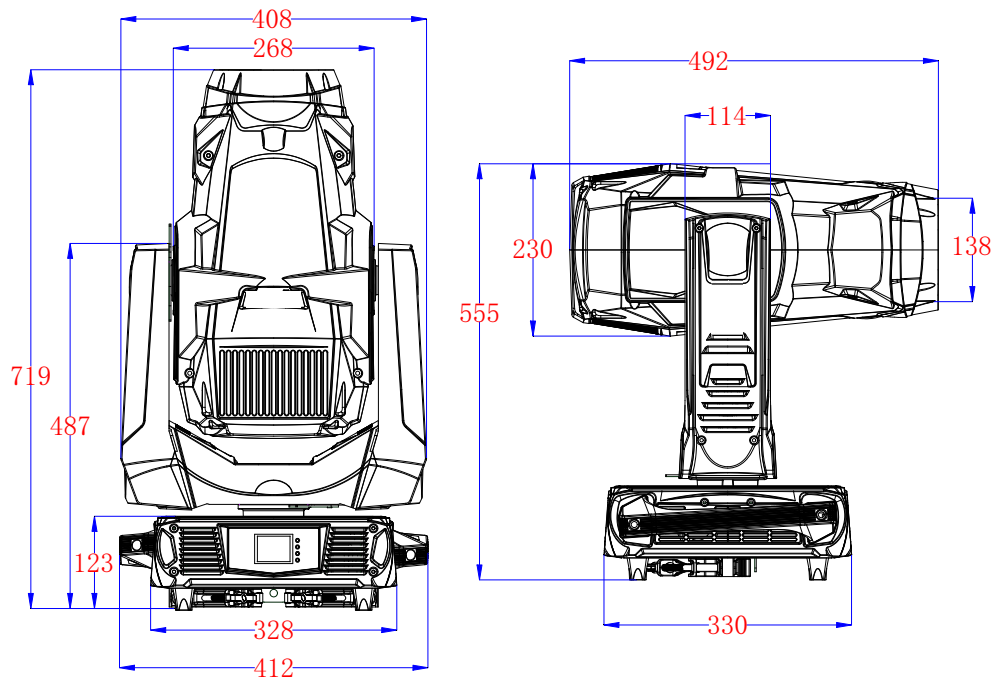
Declaration

Thanks for your purchasing our product. For in case of any possible injury, property loss or product damege. Before you try out our product, please make sure you have read this manual and understand all the safty guides, we will not afford any loss if users don't follow the safety guides.

2.1   Fixture dimensions

Unit: mm

2.2   Pan/Tilt Scan
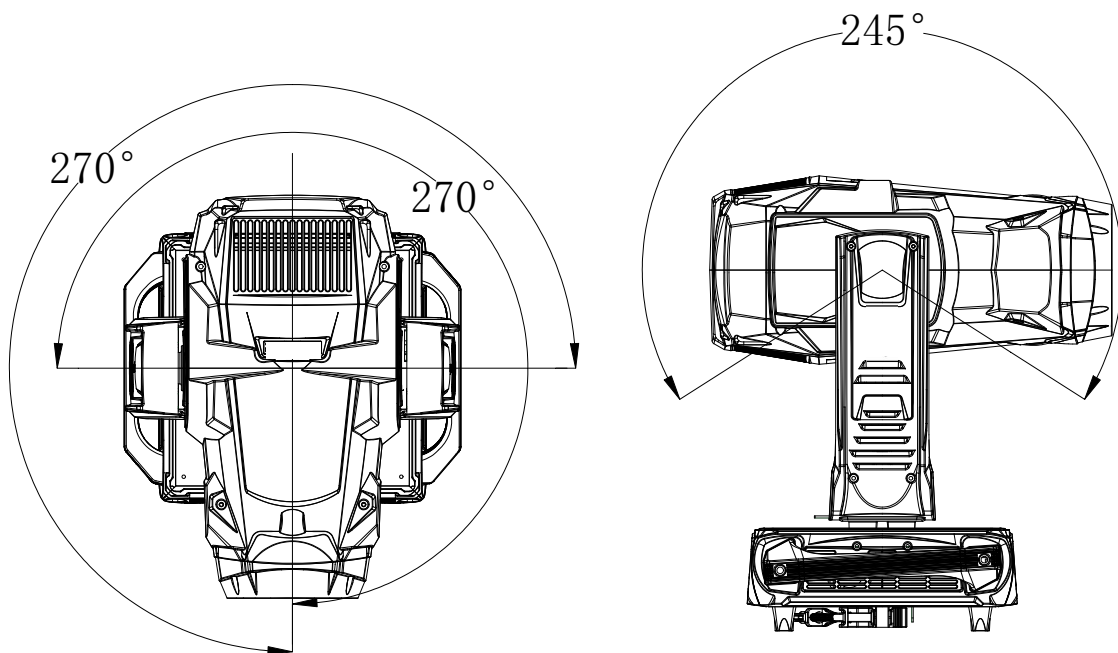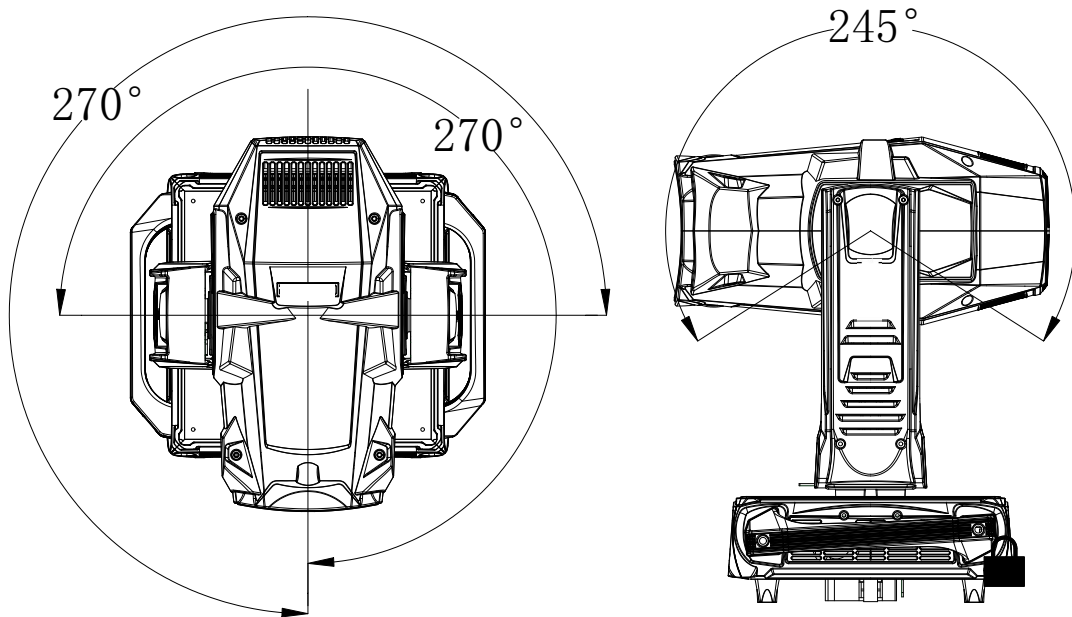
3. Technical Feature

1.1 Power Supply

- AC 100 ~ 240V 50/60Hz

1.2 Input Power

- 800W@220V

1.3 Lamp Source

- Type: 680W LED lamp
- Average Life: More than 20000 hours.
- Light souce color: 6800K

1.4 Color System

- One color wheel with 8 color filters.

1.5 Effects

- 2 gobo wheels, one wheel with 6 metal gobos. Other is a rotating gobo wheel, with 7 interchangeable gobo filters. Gobo indexing, bidirectionally rotation and with flowing and shaking effect.
- 1 Interchangeable 8-facet Prism
- 1 Separate flexible light mirror
- Electronic strobe, 0-100% linear dimming, extremely smoothing for dimming
- Electronic linear zoom 5°-45°

1.6 Control & Programming

- Standard Mode: 39Channels, Simplified Mode: 34 Channels
- DMX protocol signal: USITT DMX 512

  Art-Net / RDM

  Wireless DMX512
- DMX signal connection: 3 and 5 pole XLR input and output
- Pan/Tilt Resolution: 16 bit
- Dimmer Resolution: 16 bit

1.7 Fixture Body

- Two side handles for transportation
- PAN and TILT lock for transport and maintenance
- LCD Display, HMI user-friendly, Language: Chinese and English

1.8 Moving Feature

- Angle:
  - PAN = 540°
  - TILT = 245°
- Automatic autopositioning of PAN and TILT after accidental movement not controlled by control unit

1.9 Electronics

- Electronic control engine.
- Fan speed control: Intelligently automatic fan speed adjustable.
- Temperature electronic sensor detection.
- LCD screen lighting information inquiry.
- Up to GB7000.217-2008 standard and CE Certification

1.10　Weight

- Net Weight: 32Kg

1.11 Color wheel
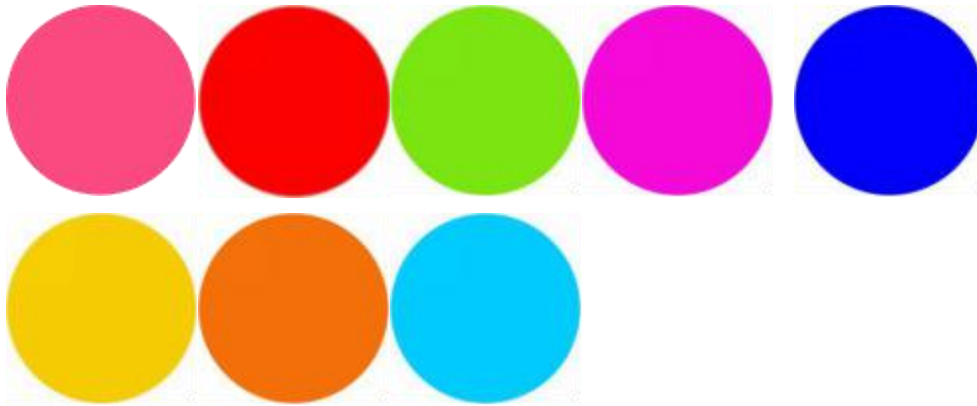
Fixed Gobo Wheel
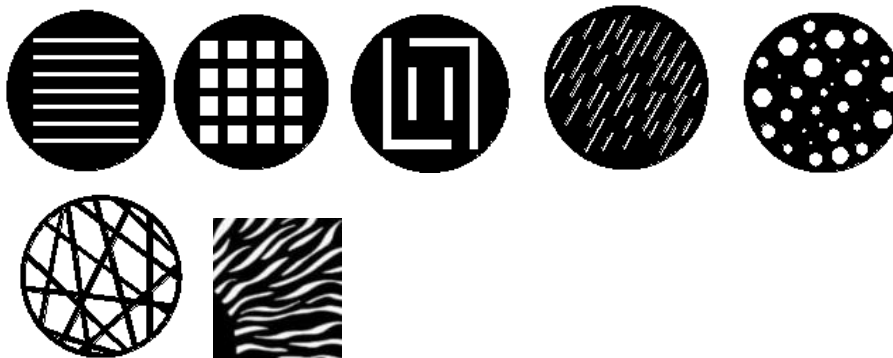
Rotate Gobo Wheel

| Pos1 | Pos2 | Pos3 | Pos4 | Pos5 |

Pos6   Pos7

1.13 Profile system

4 independently steerable cutting blades, the cutting module can be rotated 90° overall.

1.14 CMY

With CMY Promise, you can get any color you want.

5. Transport

5.1   Items list

- The light use flight case for package, every case has one light, and also have those items as listed below:

Item name	QTY	UNIT
Warranty card	1	PCS
3 pole XLR signal cable	1	PCS
Safety Rigging	1	PCS
qualification certificate	1	PCS
User manual	1	PCS

5.2   Package & Unpackage

- Unpacking the fixture
  - ➢ Remove the top of the flight case.
  - ➢ With one person on each side, lift the fixture out of the bottom of the flight case.
  - ➢ Release the pan and tilt locks before operating.
- Packing the fixture
  - ➢ Disconnect the fixture from power and allow it to cool.
  - ➢ Lock the head and yoke in the position shown in Figure 2.
  - ➢ Place the fixture in the bottom of the flight case. Place the top section over the fixture without forcing.

6. Installation

6.1　Fixture Installation

- Verify that the safety cable is undamaged and can bear at least 10 times the weight of the fixture. Verify that the structure can bear at least 10 times the weight of all installed fixtures, clamps, cables, auxiliary equipment, etc.

- Bolt each clamp securely to a clamp bracket with an M12 bolt (grade 8.8 or better) and lock nut.

- Align a clamp with 2 mounting points in the base. Insert the fasteners into the base and turn both levers a full 1/4-turn clockwise to lock. Install the second clamp.

- If the truss can be lowered, fixtures can be clamped on directly from the double flight case. If the fixture must be lifted, block access under the work area. Working safely from a stable platform, hang the fixture on the truss with the arrow towards the area to be illuminated. Tighten the rigging clamps.

- Install a safety cable that can bear at least 10 times the weight of the fixture. The attachment point is designed to fit a carabiner clamp.
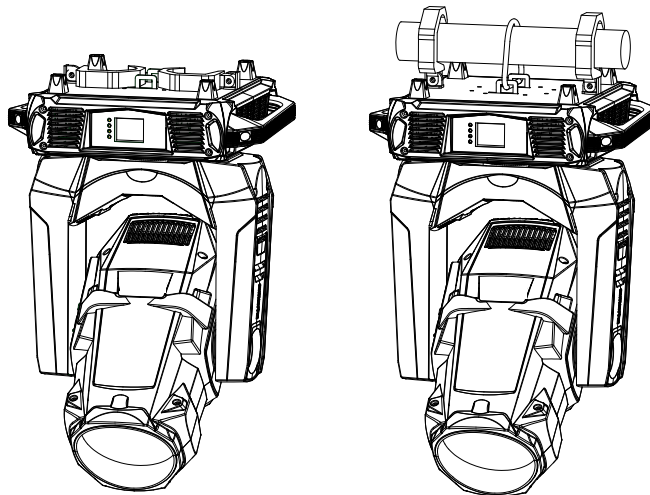
The minimum space between fixtures in array is 900mm.

7. Data Link

7.1   Pin Define

- The fixture use 3-pin XLR cable for DMX input and output. Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded.

Pin 1	Shield
Pin 2	Signal –
Pin 3	Signal +

7.2   Data connect

- Connect the DMX data input from the controller to the light 3-pin input (male) socket.
- Using the sockets that match your data cable, connect the output of the fixture closest to the controller to the input of the next fixture.
- Insert a male 120 Ω XLR termination plug in the 3-pin or 5-pin output of the last fixture on the link.

7.3   Signal Reliability Hints

- Use shielded twisted-pair cable designed for RS-485 devices: standard microphone cable cannot transmit control data reliably over long runs. 24 AWG cable is suitable for runs up to 300 meters (1000 ft). Heavier gauge cable and/or an amplifier is recommended for longer runs.
- Never use both outputs to split the link. To split the serial link into branches use a splitter .
- Do not overload the link. Up to 32 devices may be connected on a serial link.
- Terminate the link by installing a termination plug in the output socket of the last fixture. The termination plug, which is a male XLR plug with a 120 ohm, 0.25 watt resistor soldered between pins 2 and 3, "soaks up" the control signal so it does not

reflect and cause interference. If a splitter is used, terminate each branch of the link.

- This fixtures introduced before 1997 have reversed polarity data sockets (pin 2 hot and pin 3 cold). The socket polarity is labelled. Use a phase-reversing cable between any device with reversed polarity.

8. AC Power Supply

8.1 Fuses

⚠ **Notice:**
For protection from electric shock, the fixture must be earthed!

- The fixture is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 200-240 Volts. The fixture is protected by one 2 A blow primary fuse (φ5x20).

8.2 Power connection

- You may need to install a cord cap that fits your supply on the power cable. A 3-prong grounding-type plug must be installed following the manufacturer's instructions. The table shows some possible pin identification schemes; if the pins are not clearly identified, or if you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⏚

- To apply power, set the power switch on the base to the "On" position.

8.3 Replace Power Cable

| Gehäuse Housing | Einsatz Insert | Spannzange Chuck | Spannhülse Bushing |

20.0 mm [0.787"]
8.0 mm [0.315"]
Da
PE 23.0 mm [0.90"]
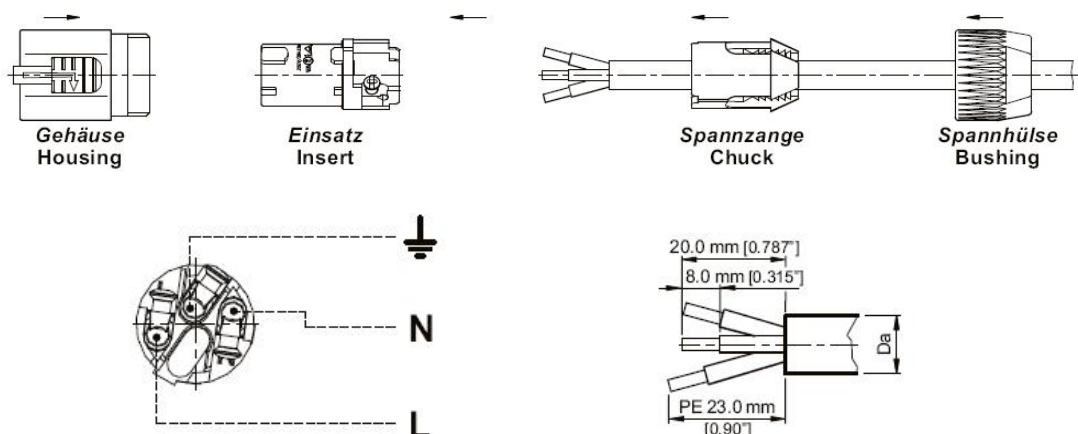
1.   Tear down the former power cable
2.   Tailor a cable with specification of 3 meters long and 3*2.5 square meters
3.   Wiping off the protect skin as the picture above, across the plug cover and chuck
4.   Make sure the cable at the correct position and press tightly. L-brown N-Blue

   ⏚ –Yellow/Green

5.   Installing the plug and roll the cover tightly
6.   Connecting appropriate ground touch 3 pins plug to the other side

9. DMX Channels

XL600	39CH Mode1	34CH Mode2	DMX Value	Function
Dimmer	1	1	0---255	Brightness--->Darkness
Dimmer FINE	2		0---255	
Strobe	3	2	0---3	Closed
			4---103	Slow Strobe--->Fast Strobe
			104---107	Open
			108---207	SlowPuls---->Fast Puls
			208---212	Open
			213---225	Random Slow Strobe
			226---238	Random Medium Strobe
			239---251	Random Fast Strobe
			252---255	Open
Color	4	3		
Cyan	5	4	0---255	EXCLUDED---->INSERTED
Magenta	6	5	0---255	EXCLUDED---->INSERTED
Yellow	7	6	0---255	EXCLUDED---->INSERTED
CTC	8	7	0---255	EXCLUDED---->INSERTED
Macro Color	9		0---255	
IRIS	10	8	0---128	MAX----->MIN
			129---131	Close
			132---171	Slow Puls---->Fast Puls
			172---211	Slow Puls Fast Close---->Fast Puls Fast Close
			212---251	Slow Puls Fast Open---->Fast Puls Fast Open
			252---255	Open

Gobo1 Select	11	9		
Gobo1 Index Rotation	12	10	0---127	0°---->360°(FINE IN 13CH)
			128---191	CW Rotating Slow---Fast
			192---255	CCW Rotation Fast---Slow
Gobo1 Index Rotation FINE	13		0---255	
Fixed Gobo	14	11	0---4	White
			5---10	Gobo1
			11---16	Gobo2
			17---22	Gobo3
			23---28	Gobo4
			29---34	Gobo5
			35---40	Gobo6
			41---46	Gobo1Shake Slow--->-Fast
			47---52	Gobo2 Shake Slow--->-Fast
			53---58	Gobo3 Shake Slow----->Fast
			59---74	Gobo4 Shake Slow----->Fast
			75---90	Gobo5Shake Slow----->Fast
			91---106	Gobo6 Shake Slow----->Fast
			107---122	Gobo7 Shake Slow----->Fast
			123---138	Gobo8 Shake Slow----->Fast
			139---154	Gobo9 Shake Slow----->Fast
			155---170	CW Rotation Slow--->Fast
			171--- 186	CCW Rotation Fast--->Slow
			187--- 202	
			203---229	
			230---255	
BLADE1	15	12	0---255	EXCLUDED---->INSERTED
BLADE2	16	13	0---255	EXCLUDED---->INSERTED
BLADE3	17	14	0---255	EXCLUDED---->INSERTED
BLADE4	18	15	0---255	EXCLUDED---->INSERTED
BLADE5	19	16	0---255	EXCLUDED---->INSERTED
BLADE6	20	17	0---255	EXCLUDED---->INSERTED
BLADE7	21	18	0---255	EXCLUDED---->INSERTED
BLADE8	22	19	0---255	EXCLUDED---->INSERTED
FRAMING ROTATION	23	20	0---255	Position 0°---->90°
Animation	24	21	0---10	White
			11----133	CW Rotation Fast--->Slow
			134---255	CCW Rotation Slow--->Fast
Prism1	25	22	0---127	EXCLUDED
			128---255	INSERTED
PrismRotation1	26	23	0---127	Position 0°-->360°
			128---190	CW Rotation Fast---> Slow
			191---194	STOP

			195---255	CCW Rotation Slow--->Fast
FORST	27	24	0---127	EXCLUDED
			128---255	INSERTED
NULL	28	25		
Focus	29	26	0---255	
Focus FINE	30		0---255	
Zoom	31	27	0---255	
Zoom FINE	32		0---255	
PAN(X)	33	28	0---255	
PAN(X) FINE	34	29	0---255	
TILTE(Y)	35	30	0---255	
TILTE(Y) FINE	36	31	0---255	
P/T SPEED	37	32	0---128	Fastest------->Slowest
			129---170	SlowSpeed (1/3 MaxSpeed)
			171---211	MediumSpeed (1/2 MaxSpeed)
			212---255	Fast Speed (Fastest Speed)
NULL	38	33		
Control	39	34	0---127	Undefined
			128---153	Undefined
			154---179	Undefined
			180---205	Undefined
			206---231	Undefined
			232---255	Reset ALL(> 3s)

10. Maintenance

12.1   Cleaning

- The Light requires routine cleaning. The schedule depends heavily on the operating environment; please consult a service technician for recommendations.
- Refer all service not described here to a qualified   technician.

Warning!
Disconnect the fixture from power before removing any cover.

Important!
Excessive dust, smoke fluid, and particulate buildup degrades performance and causes overheating and damage to the fixture that is not covered by the warranty.

- Use care when cleaning optical components and work in a clean, well lit area. The

coated surfaces are fragile and easily scratched. Do not use solvents that can damage plastic or painted surfaces.

- Inspect the air filters regularly and clean before they become clogged. Replace the air filters with new ones when replacing the lamp.
- To maintain adequate cooling, dust must be cleaned from the fans and air vents periodically.

12.2   Cleaning optical components

- Disconnect the fixture from power and allow the components to cool completely. Remove the head cover.
- Vacuum or gently blow away dust and loose particles with compressed air.
- Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water. Do not rub the surface: lift the particles off with a soft repeated press.
- Remove smoke and other residues with cotton swabs or unscented tissues moistened with isopropyl alcohol. A commercial glass cleaner may be used, but residues must be removed with distilled water. Clean with a slow circular motion from center to edge. Dry with a clean, soft and lint-free cloth or compressed air.

12.3   Cleaning the fan and air vents

- Remove dust from the fans and air vents with a soft brush, cotton swab, vacuum, or compressed ai