

Smart 400

Beam



This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place

User manual

Please read the instructions carefully before use

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STATEMENT

The product has full capability and intact packing when leaves factory. All the users should comply with provided warnings and manual. Any damages caused by misuse are not included in our guarantee. We cannot be responsible for any malfunctions & problems owing to ignoring the manual.

1. Safety Instructions

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is T_a : 40°C. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85°C.
- DO NOT touch the housing bare-hands during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- In case of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance centre. Always use the same type spare parts.
- DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- DO NOT open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs by yourself. If your unit requires service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you

are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at the safe place where it is not available for other people.

2. Unpacking

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 x User manual
- 2 x bracket
- 1 x DMX cable
- 1 x power wire
- 1 x warranty card

3. Features & Specifications

- Voltage: AC100-240V 50/60HZ
- Lamp: Osram
- Power: 230W
- Colour temperature: 8000K
- Average life: 2000h
- Channels: Standard 16 control channels.
- Colour system: 14 kinds HQ imported colour
- Gobo system: 1 apotic gobo, 17 gobos + white colour,
- Beam angle : parallel beam angel 0 – 3.8°
- Focus: linear adjustment
- Prism : rotation 8-face prism, Bilateral rotation. Beam effect could stretch and close.
- Atomization effect: 0-100% linear atomization effect.
- Dimmer: 0-100% linear adjustment.
- Pan/Tilt : X axis 540° Y axis 250° automatically accurate positioning
- IP protection rating: IP20: protected against the entry of solid bodies larger than 12mm. No protection against the entry of liquids.
- Motor: 13pcs Stepper motor (x.y is three-phase motor).
- Automatic break in power supply in case of overheating or failed operation of cooling system,
- Size: 400mm X330mm X475mm
- Weight: 17 kg

Characteristic functions:

- If you turn off optical shutter for 5 seconds, the power will automatically reduce 35% , to extend the service life of the lamp.
- Monitoring the lamp and cooling fan speed, when the fan speed is lower than 500RPM, lamp will extinguish to protect the lamp.

5. Operating Instructions

- The moving head is for spot 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. Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at the safe place where it is not available for other people.

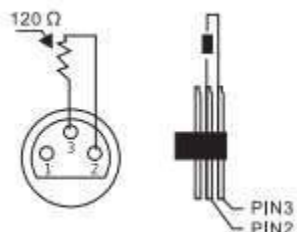
7. DMX-512 Control Connections

This product accepts the international standard DM 512 (1990) of the digital control signal.

Please use the 3 pin or 5pin XLR plugs&socket offered by factory to connect the first projector's input to the second projector output, and connect the second projectors output to the third projectors input and so on. Eventually connect the last projectors output.

The projectors control signal output or input by using the 3 or 5 pin XLR plug and socket. If need to lengthen the communication cable(standard meter is 2 meters),please make sure the both side of 3 or 5 pin plug is one to one.(one to one, two to two, three to three).Otherwise ,the communication cable will be interrupted. The communicate cable is 2-cord screened cable 75Ω resistance with each core having at least a 0.5mm diameter.

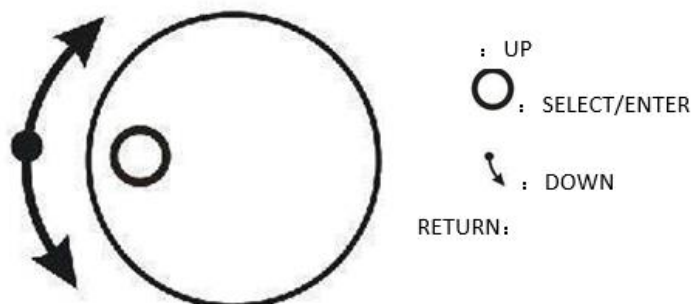
It is highly recommend to use the DMX signal terminator for the installation to avoid the electronic noise damage the digital control signal. Simply speaking, DMX terminator is an XLR CINNEXTOR WITH A 120Ω 1/2 W resistor connected across pin 2 and 3. Which is plugged into the output socket on the last projector in the chain. See illustrations below:



8. Menu Operations

Control panel:

Rotating button and the LCD display. It allows to set address code and the function menu.



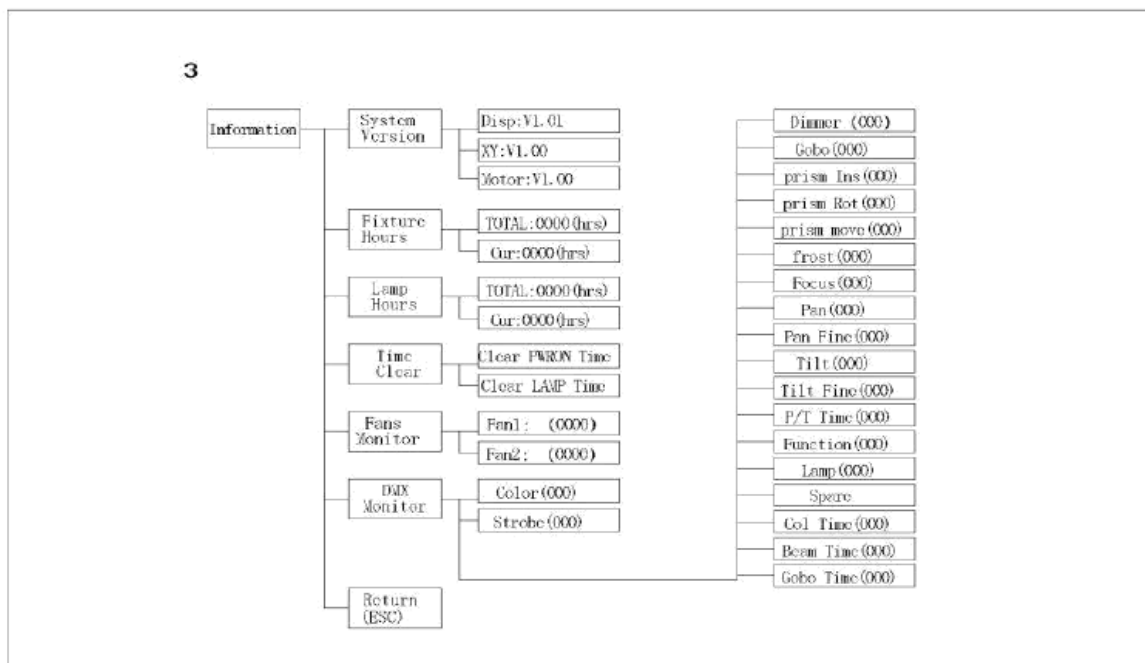
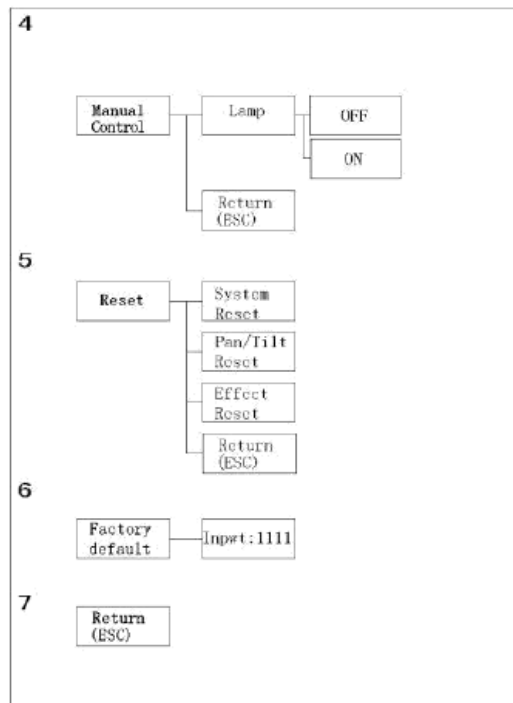
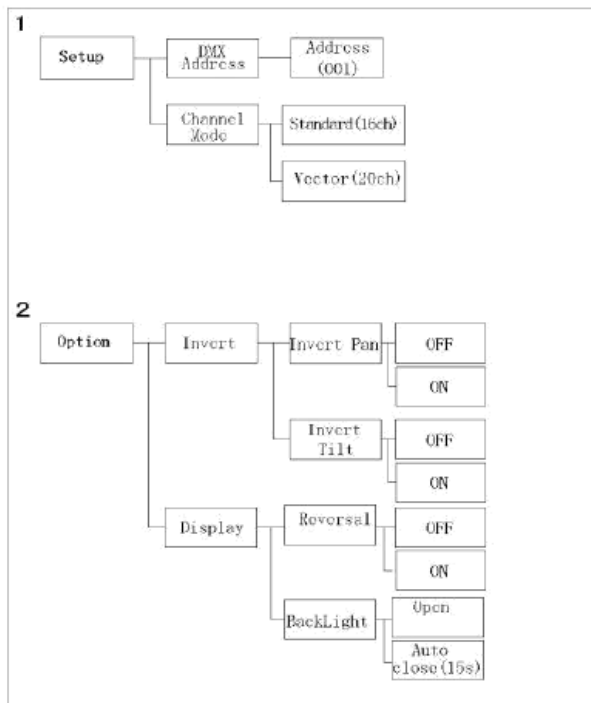
LED pilot lamp:

POWER: Power signal lamp, red LED keeps bright means working normally.

DMX:DMX512 signal pilot lamp, green LED keeps bright means working normally.

ADJUST: LCD display brightness adjustment.

Menu function:



9. DMX Channels

CHANNEL	CHANNEL MODE	
	STANDARD (16)	EXTENDED (20)
1	COLOR WHEEL	COLOR WHEEL
2	STROBE	STROBE
3	DIMMER	DIMMER
4	FIXGOBO	FIXGOBO
5	PRISM INS	PRISM INS
6	PRISM ROT	PRISM ROT
7	PRISM MOVE	PRISM MOVE
8	FROST	FROST
9	FOCUS	FOCUS
10	PAN	PAN
11	PAN FINE	PAN FINE
12	TILT	TILT
13	TILT FINE	TILT FINE
14	PTTIME	PTTIME
15	FUNCTION	FUNCTION
16	LAMP ON/OFF	LAMP ON/OFF
17		PAN-TILTTIME
18		COLOUR TIME
19		BEAM TIME
20		GOBO TIME

CHANNEL	DMX VALUE	EFFECT
1CH: COLOR	0-4	WHITE
	5-8	WHITE+DARK RED
	9-12	DARK RED
	13-17	DARK RED +ORANGE

18-21	ORANGE
22-25	ORANGE+AQUAMARINE
26-29	AQUAMARINE
30-34	AQUAMARINE+DARK GREEN
35-38	DARK GREEN
39-42	DARK GREEN+GREEN
43-46	GREEN
47-51	GREEN+LAVENDER
52-55	LAVENDER
56-59	LAVENDER+PINK
60-63	PINK
64-68	PINK+YELLOW
69-72	YELLOW
73-76	YELLOW+ MAGENTA
77-81	MAGENTA
82-85	MAGENTA+CYAN
86-89	CYAN
90-93	CYAN+CTO2
94-98	CTO2
99-102	CTO2+CTO1
103-106	CTO1
107-110	CTO1+CTB
111-115	CTB
116-119	CTB+DARK BLUE
120-123	DARK BLUE
124-127	DARK BLUE/WHITE
128-191	CLOCKWISE RAINBOW FROM FAST TO SLOW
192-255	ANTICLOCKWISE RAINBOW

		FROM SLOW TO FAST
2CH:STROBE	0-3	CLOSED LIGHT
	4-7	OPEN LIGHT
	8-97	STROBE FROM SLOW TO FAST
	98-101	OPEN LIGHT
	102-126	PULSE ON ,STROBE FROM SLOW TO FAST
	127-151	PULSE OFF,STROBE FROM SLOW TO FAST
	152-155	LIGHT ON
	156-180	RANDOM PULSE ON,STROBE FROM SLOW TO FAST
	181-205	RANDOM PULSE OFF,STROBE FROM SLOW TO FAST
	206-209	LIGHT ON
	210-249	RANDOM STROBE FROM SLOW TO FAST
	250-255	LIGHT OFF
3CH : DIMMER	0-225	DIMMER FROM DARK TO BRIGHT

4CH : GOBO	0-3	WHITE
	4-7	GOBO1
	8-11	GOBO2
	12-15	GOBO3
	16-19	GOBO4
	20-23	GOBO5
	24-27	GOBO6
	28-31	GOBO7
	32-35	GOBO8
	36-39	GOBO9
	40-43	GOBO10
	44-47	GOBO11
	48-51	GOBO12
	52-55	GOBO13
	56-59	GOBO14
	60-63	GOBO15
	4-7	OPEN LIGHT
	8-97	STROBE FROM SLOW TO FAST
	98-101	OPEN LIGHT
	102-126	PULSE ON ,STROBE FROM SLOW TO FAST
	127-151	PULSE OFF,STROBE FROM SLOW TO FAST
	152-155	LIGHT ON
	156-180	RANDOM PULSE ON,STROBE FROM SLOW TO FAST

	181-205	RANDOM PULSE OFF,STROBE FROM SLOW TO FAST
	206-209	LIGHT ON
	210-249	RANDOM STROBE FROM SLOW TO FAST
	250-255	LIGHT OFF
3CH: DIMMER	0-225	DIMMER FROM DARK TO BRIGHT
4CH: GOBO	0-3	WHITE
	4-7	GOBO1
	8-11	GOBO2
	12-15	GOBO3
	16-19	GOBO4
	20-23	GOBO5
	24-27	GOBO6
	28-31	GOBO7
	32-35	GOBO8
	36-39	GOBO9
	40-43	GOBO10
	44-47	GOBO11
	48-51	GOBO12
	52-55	GOBO13
	56-59	GOBO14
	60-63	GOBO15
	64-67	GOBO16
	68-71	GOBO17

72-115	GOBO ANTICLOCKWISE RAINBOW FROM SLOW TO FAST
116-159	GOBO CLOCKWISE RAINBOW FROM FAST TO SLOW
160-166	GOBO 1 SHAKE FROM SLOW TO FAST
167-172	GOBO 2 SHAKE FROM SLOW TO FAST
173-179	GOBO SHAKE FROM SLOW TO FAST
180-185	GOBO 4 SHAKE FROM SLOW TO FAST
186-191	GOBO 5 SHAKE FROM SLOW TO FAST
192-198	GOBO 6 SHAKE FROM SLOW TO FAST
199-204	GOBO7 SHAKE FROM SLOW TO FAST
205-211	GOBO 8 SHAKE FROM SLOW TO FAST
212-217	GOBO 9 SHAKE FROM SLOW TO FAST
218-223	GOBO 10 SHAKE FROM SLOW TO FAST
224-230	GOBO 11 SHAKE FROM SLOW TO FAST
231-236	GOBO 12 SHAKE FROM SLOW

		TO FAST
	237-243	GOBO 13 SHAKE FROM SLOW TO FAST
	244-249	GOBO 14 SHAKE FROM SLOW TO FAST
	250-255	GOBO 15 SHAKE FROM SLOW TO FAST
5CH: PRISM	0-127	WITHOUT PRISM
	128-255	WITH PRISM
6CH: PRISM ROTATION	0-63	0-360° POSITION
	64-127	CLOCKWISE ROTATION FROM
		FAST TO SLOW
	128-191	ANTICLOCKWISE ROTATION
		FROM FAST TO SLOW
	192-207	90° SHAKE FROM SLOW TO
		FAST
	208-223	180° SHAKE FROM SLOW TO
		FAST
	224-239	270° SHAKE FROM SLOW TO
		FAST
	240-255	360° SHAKE FROM SLOW TO
		FAST
7CH : PRISM ZOOM	0-255	No Function
8CH : FROST	0-255	0-100% LINEAR ATOMIZATION
9CH : FOCUS	0-255	0-100% LINEAR FOCUS
10CH : PAN	0-255	0-540°
11CH : PAN FINE	0-255	0-1.8°
12CH : TILT	0-255	0-270°
13CH : TILT FINE	0-255	0-1.8°

14CH : PAN-TILT SPEED	0-255	SPEED FROM FAST TO SLOW
15CH : FUNCTION	0-13	UNUSED RANGE
	14-24	PAN-TILT MOVES,BLACKOUT
	25-35	CHANGE GOBOS, BLACKOUT
	36-46	CHANGE COLORS,BLACK OUT
	47-57	CHOOSE PRISMS, BLACK OUT
	58-68	CHOOSE FROST, BLACK OUT
	69-79	XY、GOBO、COLOR、FROST、
		CHANGING, BLACKOUT
	80-90	GOBO、COLOR、
		FROST,FUNCTION
		CHANGES,BLACKOUT
	91-101	UNUSED RANGE
	102-112	DISPLAY SCREEN ON
	113-123	DISPLAY SCREEN OFF
	124-134	SCREEN
		BACKWARD(5SECONDS)
	135-145	SCREEN
		FORWARD(5SECONDS)
	146-156	UNUSED RANGE
	157-167	HEAD MOTOR RESET
	168-178	PAN-TILT RESET
	179-189	WHOLE MACHINE RESET
16CH : LAMP	0-31	UNUSED RANGE
	32-63	LAMP POWER REDUCTION (ACTION)
	64-159	UNUSED RANGE
	160-191	TURN OFF (5 SECONDS)
	192-223	UNUSED RANGE
	224-255	TURN ON(5 SECONDS)

10. Maintenance and Cleaning

The following points have to be considered during the inspection:

- All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
- Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 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.

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

- Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- Clean the fan each week.
- 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 to clean the device frequently. 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".

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