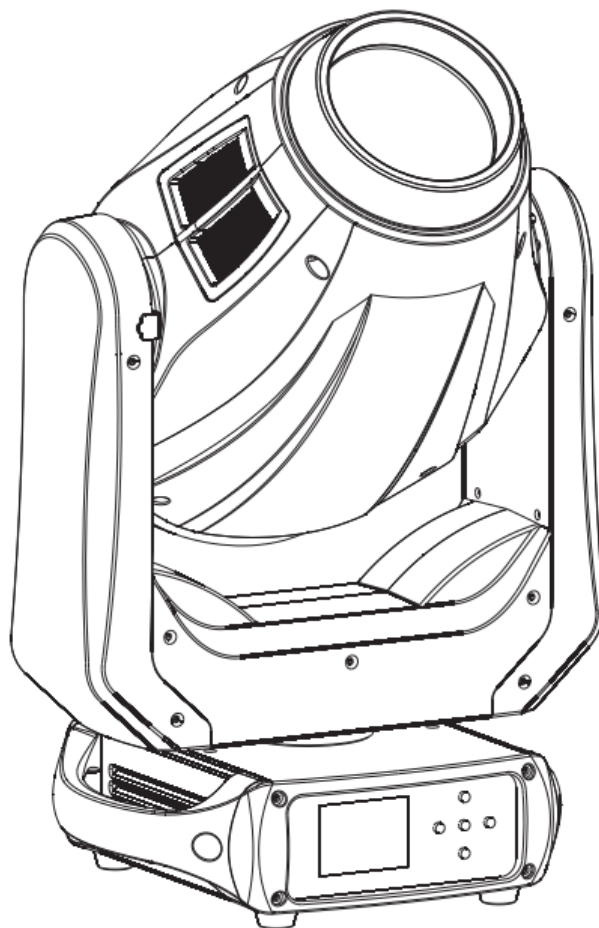


SHOWPRO

Pluto 200 Spot MANUAL

LEDMOV500



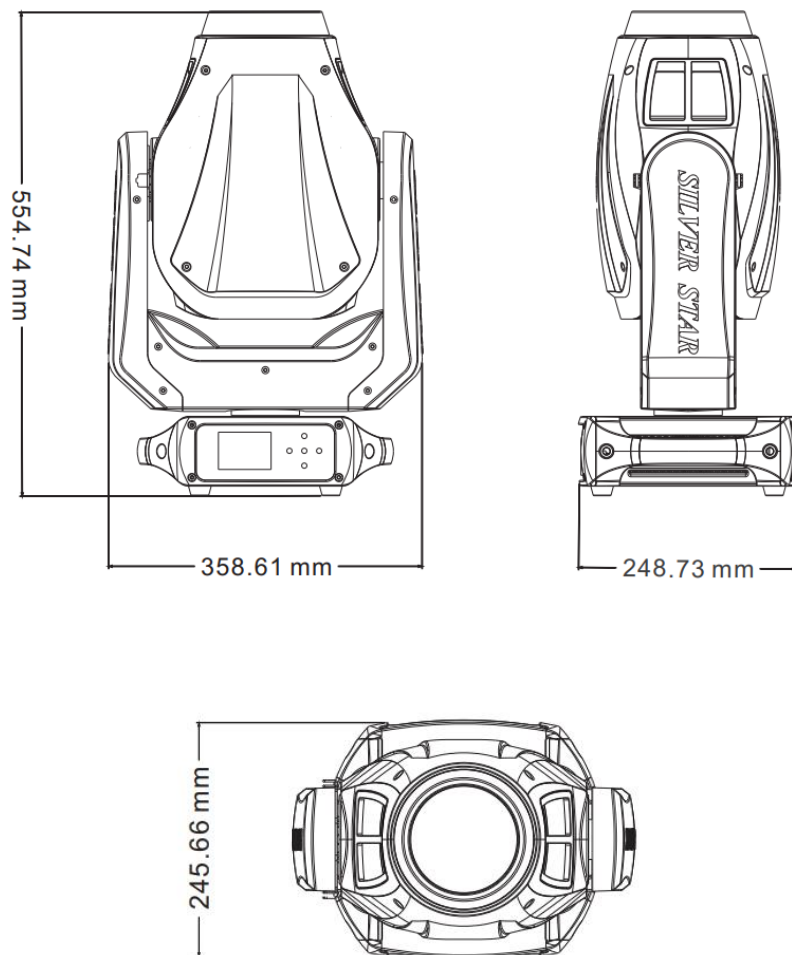
1 Product Specifications

1.1 Technical specifications

Led module:

- Voltage: AC 100V - 240V, 50/60Hz
- Power: 280W
- Dimensions: 359 x 249 x 555mm
- Weight 16.5kg

1.2 Dimensions



1.2 Safety Warning

IMPORTANT

Always read the user manual before operation.

Please confirm that the power supply stated on the product is the same as the mains power supply in your area.

- This product must be installed by a qualified professional.
- Always operate the equipment as described in the user manual.
- A minimum distance of 0.5m must be maintained between the equipment and a combustible surface.
- The product must always be placed in a well-ventilated area.
- Always make sure that the equipment is installed securely.
- Do not stare directly into the LED light source.
- Always disconnect the power supply before attempting maintenance.
- Always make sure that the supporting structure is solid and can support the weight of the product.
- The earth wire must always be connected to the ground.
- Do not touch the power cables if your hands are wet.

ATTENTION

- This product left the place of manufacture in perfect condition. To maintain this condition, and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.
- Avoid shaking or impact to any part of the equipment.
- Make sure that all parts of are kept clean and free of dust.
- Always make sure that the power connections are connected correctly and securely.
- If there is any malfunction of the equipment, contact your distributor immediately.
- When transferring the product, it is advisable to use the original packaging in which the product left the factory.
- Shields, lenses, or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- The lamp (LED) shall be changed if it has become damaged or thermally deformed.



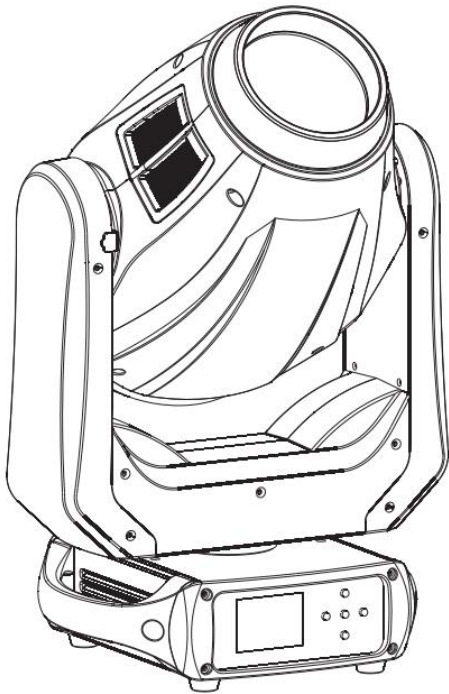
Caution, risk of electric shock

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

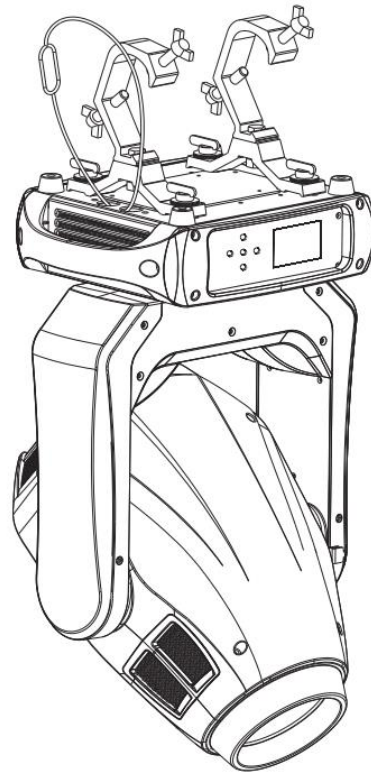
2 Installation

2.1 Mounting

- The fixture can be mounted in any position.
- Always ensure that mounting surface can withstand 10 times the weight of the fixture.
- Always use a safety cable when mounting the fixture in any elevated position.



UPRIGHT



HANGING

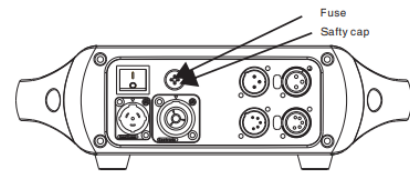
IMPORTANT SAFETY NOTE

Always use a safety cable when installing this unit.

Be sure that the safety cable is connected to a solid load bearing structure

2.2 Fuse replacement

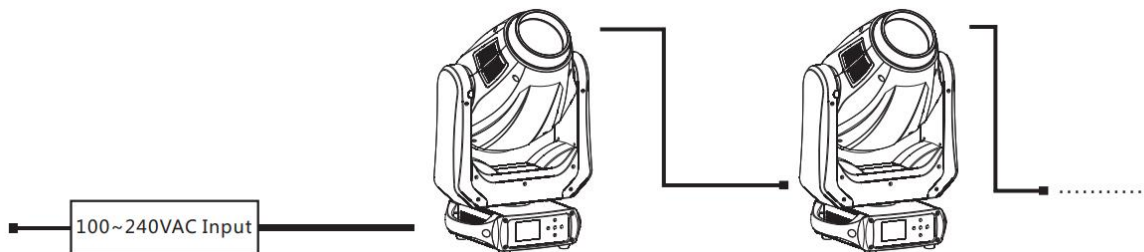
- Remove the safety cap with a screwdriver.
- Remove the old fuse from the safety cap.
- Install a new fuse.
- Install the safety cap.



2.3 Power connections

This product uses input and output power cable. Note: If the signal cable is over 60m between the DMX512 controller and fixture or between two fixtures, then a DMX signal amplifier is needed as well.

This product requires the use of three-core power and signal cables. The connection diagram is as follows:

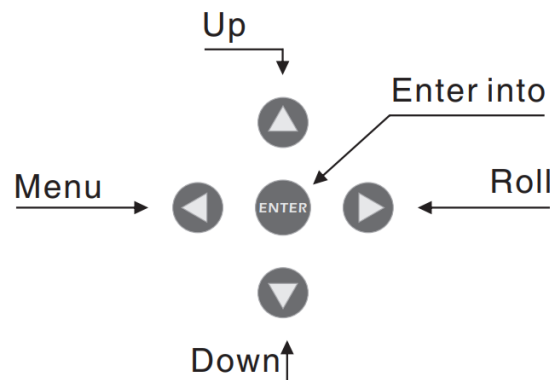


When using this product to connect 220V AC, the number of tandem fixtures must not exceed ten.

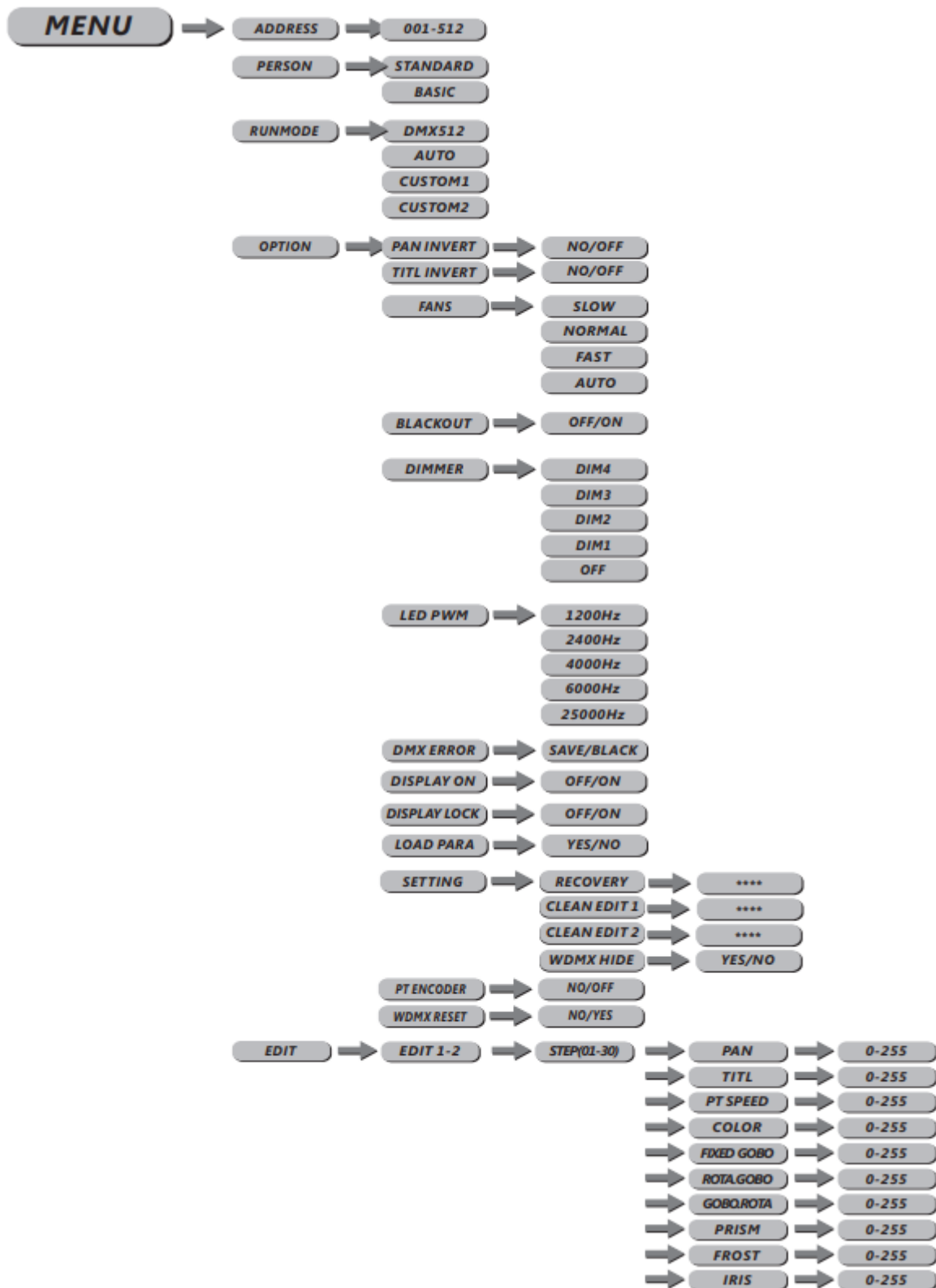
When using this product to connect 110V AC, the number of tandem fixtures must not exceed five.

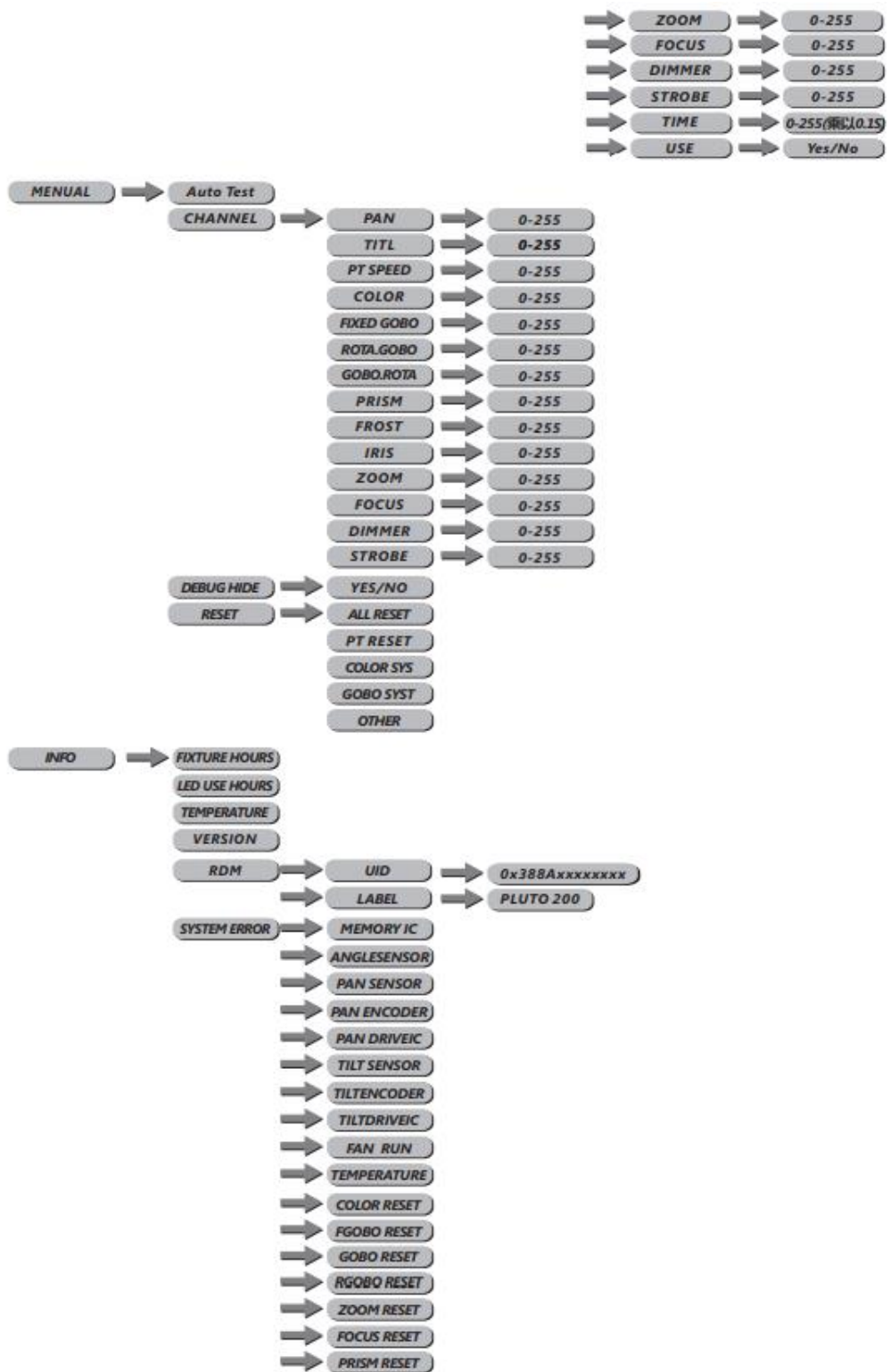
3 Display Panel Operation

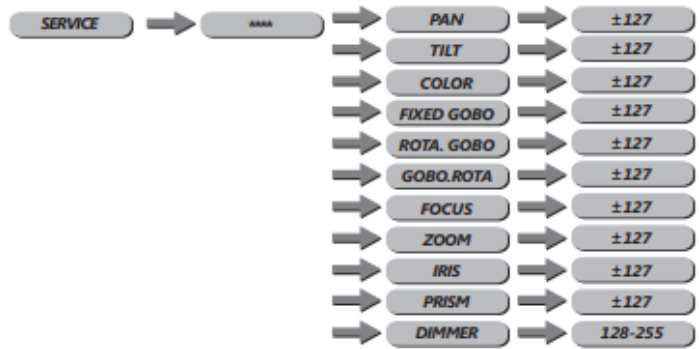
3.1 Display Operation



3.2 Menu







3.3 DMX Address



Enter the DMX mode to set the DMX address.

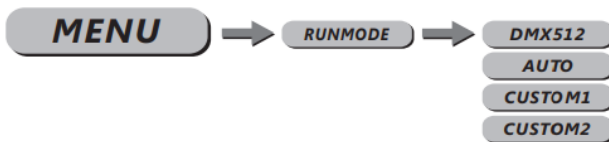
Enter UP/DOWN select 1~512 address.

3.4 Personality (Person)



Enter the PERSON mode to select DMX mode: STANDARD, BASIC.

3.5 Runmode



There are four modes:

DMX512: DMX512 mode

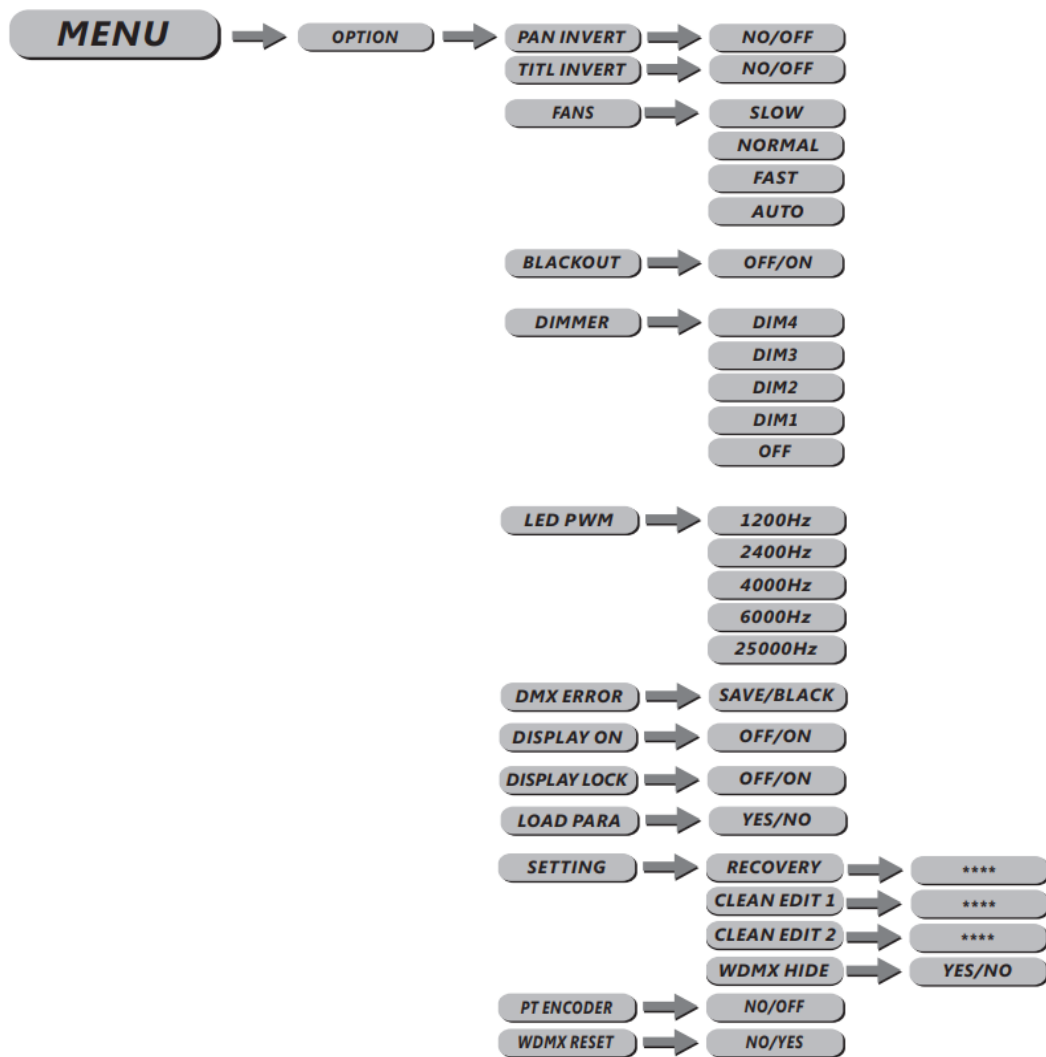
AUTO: auto run mode

CUSTOM1: custom self-edited scene mode 1

CUSTOM2: custom self-edited scene mode 2

Press UP/DOWN to select mode, press ENTER to accept, press MENU to return.

3.6 Performance (Option)



PAN/TILT INVERT: menu, select NORMAL for normal direction, select INVERT to invert the PAN/TILT direction.

FANS: select Slow/Norm/Fast/Auto as required.

BLACKOUT: Choose OFF and ON to control the blackout mode.

DIMMER: select from DIM1/DIM2/DIM3/DIM4/OFF dimming curve.

LED PWM: set the PWM refresh rate. Press UP/DOWN to choose 1200Hz, 2000Hz, 2400Hz, 6000Hz, 25000Hz. Attention: the grey level of dimming will be reduced as the refresh rate increases.

DMX ERROR: select SAVE to maintain last command in case of DMX error, or BLACK to blackout.

DISPLAY: Choose OFF and ON to have the display turn off after a period.

DISPLAY LOCK: Choose OFF and ON to require a password to access the menu.

LOAD PARA: parameter upload settings, enter NO to cancel, or YES to upload.

SETTING: maintenance settings. Select RECOVERY to restore default factory settings. Press ENTER, enter password, then press ENTER.

CLEAN EDIT1: clean custom self-edited scene 1, press ENTER to confirm.

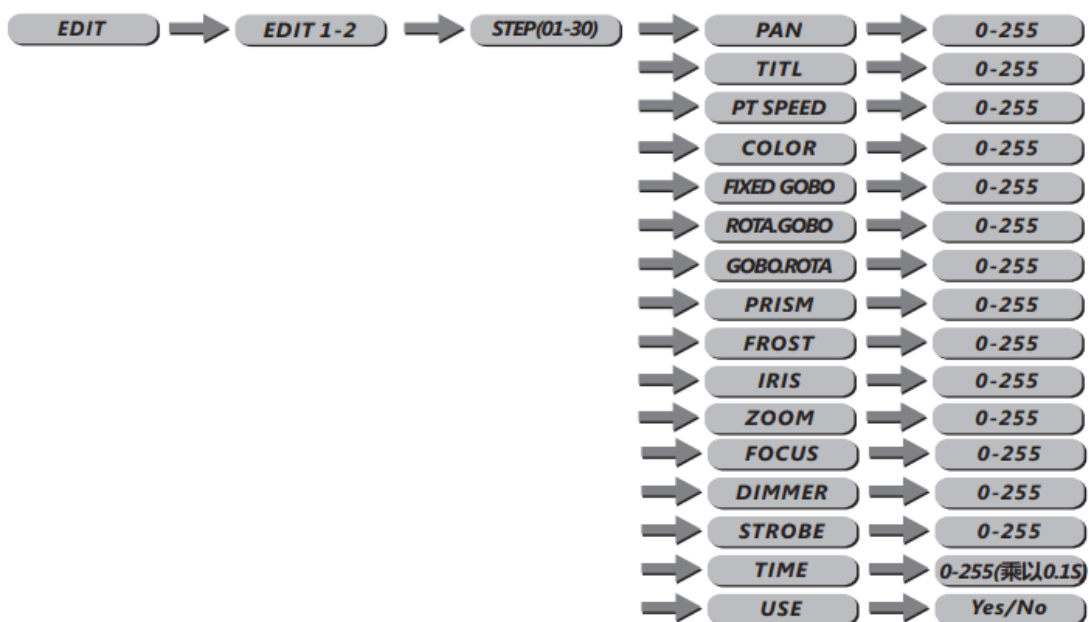
CLEAN EDIT2: clean custom self-edited scene 2, press ENTER to confirm.

WDMX HIDE: WDMX RESET and SIGNAL. Default is wired mode only.

PT ENCODER XY: encoder switch. OFF is close, ON is open.

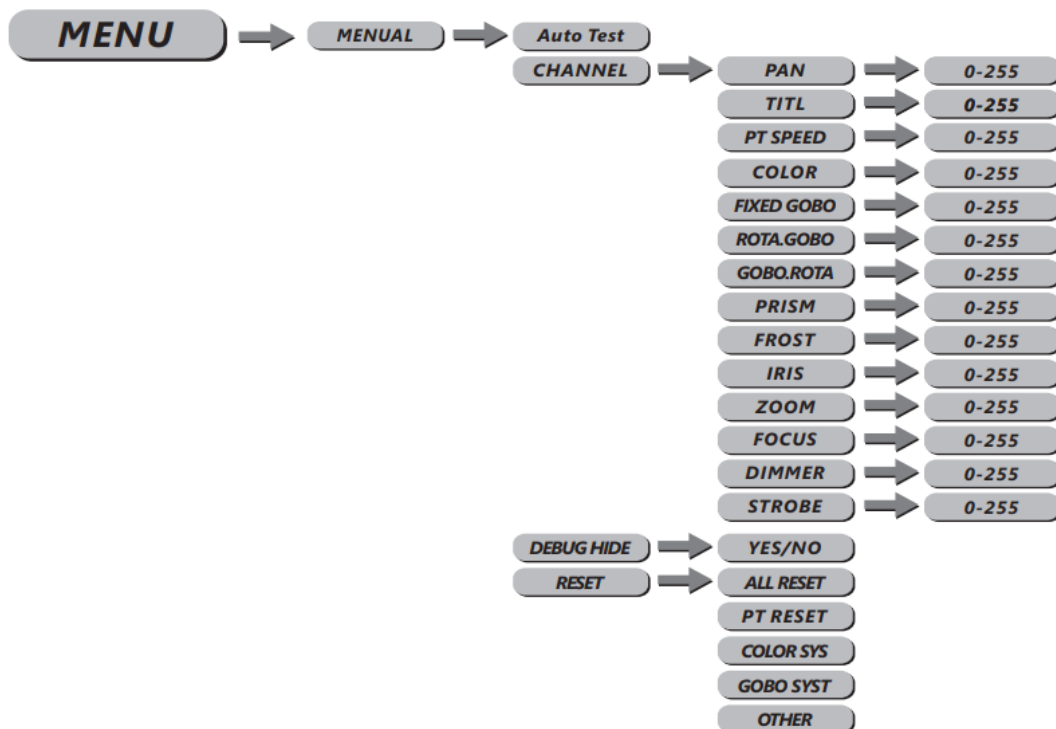
WDMX RESET: wireless resetting, use to reset wireless signal. YES patches the wireless signal, NO to return.

3.7 Edit



Enter the EDIT mode to change the custom programs. Can adjust the value of PAN , TILT , PT SPEED , COLOR, FIXED GOBO , ROTA.GOBO , GOBO.ROTA , PRISM , FROST ,IRIS , ZOOM , FOCUS , DIMMER , STROBE , TIME .

3.8 Manual Control Mode



Press ENTER into AUTOTEST.

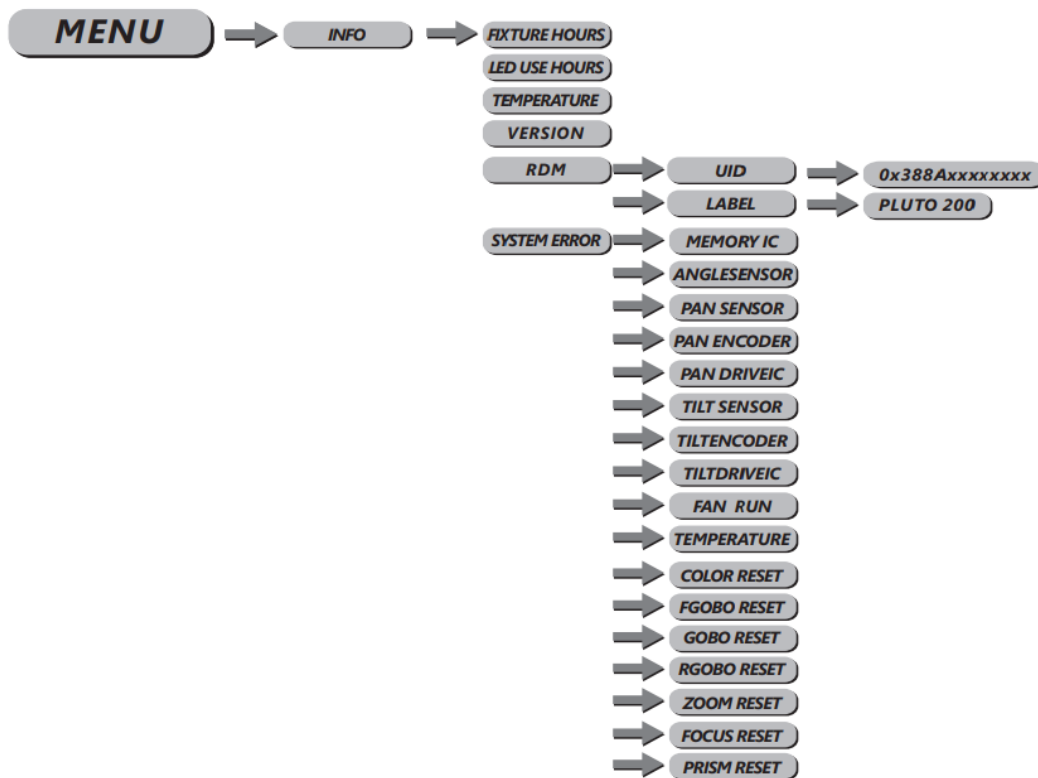
Set and Adjust the value of PAN, TILT, PT SPEED, CTO, COLOR, FIXED GOBO, ROTA.GOBO, GOBO.ROTA, PRISM, FROST, IRIS, ZOOM, FOCUS, DIMMER, STROBE. Push UP/DOWN to set the value 0 – 255.

DEBUGHIDE: factory testing mode. All parameters will be controlled by the menu, and ignore DMX signal.

RESET set the reset:

- ALL RESET resets every feature
- PTRESET resets the pan and tilt motors
- COLOR SYS resets the colour system
- GOBO SYST resets the gobo wheels
- OTHER resets the optics systems

3.9 Info



Press ENTER into INFO.

FIXTURE HOURS: hours of fixture use

LED USE HOURS: LED usage time

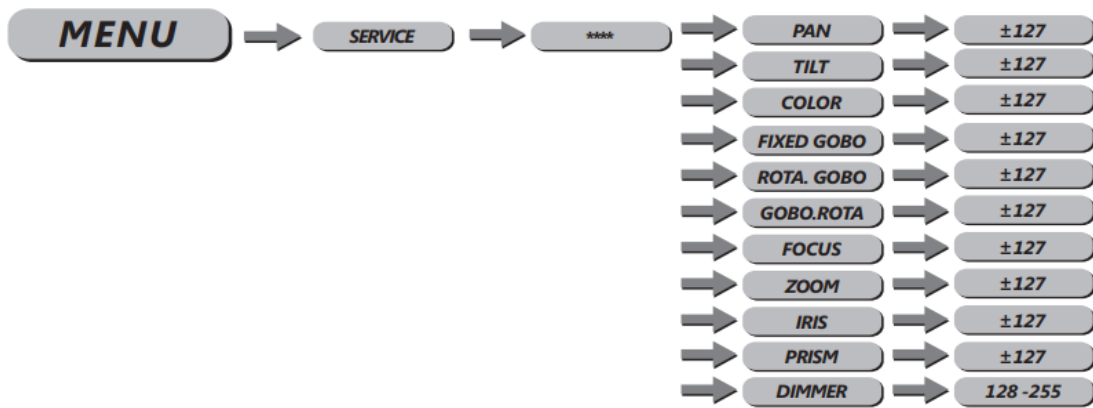
TEMPERATURE: current LED temperature

VERSION: display software version

RDM: check fixture's ID

SYSTEM ERROR: system information error: Memory IC, Angle Sensor, PanSensor, Pan Encoder, Pan Drive IC, Tilt Sensor, TiltEncoder, TiltDriveIC, FAN RUN, Temperature, Color Reset, FGobo Reset, Gobo Reset, RGobo Reset, Zoom Reset, Focus Reset, Prism Reset.

3.10 Service



Press ENTER to access SERVICE. Enter password to access the options page.

Use the Up/DOWN buttons to adjust the value ± 127 . Available for PAN, TILT, COLOR, FIXED GOBO, ROTA.GOBO, GOBO.ROTA, FOCUS, ZOOM, IRIS, PRISM.

DIMMER: adjusts from 128~255.

4 Using a DMX512 Controller

4.1 Channel Assignment

Note: this product has two DMX512 channel configurations: STANDARD, BASIC.

STANDARD

CHANNEL	VALUE	FUNCTION
1	000 – 255	Pan (0-540°)
2	000 – 255	Pan Fine
3	000 – 255	Tilt (0-270°)
4	000 – 255	Tilt Fine
5	000 – 255	Pan/Tilt Speed (From fast to slow)
6	Colour Wheel	
	000 – 007	White
	008 – 015	Colour 1
	016 – 023	Colour 2
	024 – 031	Colour 3
	032 – 039	Colour 4
	040 – 047	Colour 5
	048 – 055	Colour 6
	056 – 063	Colour 7
	064 – 191	Colour Wheel Indexing 0-360°
	192 – 222	Colour Wheel Spin CW (100% - 1%)
	223 – 224	Stop
	225 – 255	Colour Wheel Spin CCW (1% - 100%)
7	000 – 255	Colour Wheel Fine
8	Fixed Gobo Wheel	
	000 – 010	White
	011 – 017	Fixed Gobo Wheel 1
	018 – 024	Fixed Gobo Wheel 2
	025 – 031	Fixed Gobo Wheel 3
	032 – 038	Fixed Gobo Wheel 4
	039 – 045	Fixed Gobo Wheel 5
	046 – 052	Fixed Gobo Wheel 6
	053 – 059	Fixed Gobo Wheel 7
	060 – 066	Fixed Gobo Wheel 8
	067 – 073	Fixed Gobo Wheel 9
	074 – 080	Fixed Gobo Wheel 10
	081 – 087	Fixed Gobo Wheel 1 Shake (1% - 100%)
	088 – 094	Fixed Gobo Wheel 2 Shake (1% - 100%)
	095 – 101	Fixed Gobo Wheel 3 Shake (1% - 100%)
	102 – 108	Fixed Gobo Wheel 4 Shake (1% - 100%)
	109 – 115	Fixed Gobo Wheel 5 Shake (1% - 100%)
	116 – 122	Fixed Gobo Wheel 6 Shake (1% - 100%)
	123 – 129	Fixed Gobo Wheel 7 Shake (1% - 100%)
	130 – 136	Fixed Gobo Wheel 8 Shake (1% - 100%)
	137 – 143	Fixed Gobo Wheel 9 Shake (1% - 100%)
	144 – 150	Fixed Gobo Wheel 10 Shake (1% - 100%)
	151 – 200	Gobo Wheel Spin CW (100% - 1%)
201 – 205	Stop	
206 – 255	Gobo Wheel Spin CCW (1% - 100%)	

9	Rotating Gobo	
	000 – 010	White
	011 – 018	Rotating Gobo 1
	019 – 026	Rotating Gobo 2
	027 – 034	Rotating Gobo 3
	035 – 042	Rotating Gobo 4
	043 – 050	Rotating Gobo 5
	051 – 058	Rotating Gobo 6
	059 – 066	Rotating Gobo 7
	067 – 074	Rotating Gobo 1 Shake (1% - 100%)
	075 – 082	Rotating Gobo 2 Shake (1% - 100%)
	083 – 090	Rotating Gobo 3 Shake (1% - 100%)
	091 – 098	Rotating Gobo 4 Shake (1% - 100%)
	099 – 106	Rotating Gobo 5 Shake (1% - 100%)
	107 – 114	Rotating Gobo 6 Shake (1% - 100%)
	115 – 122	Rotating Gobo 7 Shake (1% - 100%)
	123 – 127	White
	128 – 190	Gobo Wheel Spin CW (100% - 1%)
	191 – 192	Stop
	193 – 255	Gobo Wheel Spin CCW (1% - 100%)
10	Gobo Rotating	
	000 – 120	Rotating Gobo Indexing (0-360°)
	121 – 125	Stop
	126 – 165	Rotating Gobo Shake (Speed 1% - 100%)
	166 – 170	Stop
	171 – 210	Gobo Rotating CW (100% - 1%)
	211 – 215	Stop
	216 – 255	Gobo Rotating CCW (1% - 100%)
11	Prism	
	000 – 010	White
	011 – 145	Prism Insert and Index (0-360°)
	146 – 150	Stop
	151 – 200	Prism Rotating CW (100% - 1%)
	201 – 205	Stop
	206 – 255	Prism Rotating CCW (1% - 100%)
12	Frost	
	000 – 010	White
	011 – 251	Frost Insert (0% - 100%)
	252 – 255	Frost 100%
13	Iris	
	000 – 127	Iris Open – Closed (Large to Small)
	128 – 130	Iris Closed
	131 – 171	Iris Fast in Fast out (1% - 100%)
	172 – 211	Iris Fade in Fade out (1% - 100%)
	212 – 251	Iris Fast in Fade out (1% - 100%)
	252 – 255	Iris Closed
14	000 – 255	Zoom
15	Auto Focus	
	000 – 012	No Function
	013 – 039	5m
	040 – 066	7m
	067 – 093	9m
	094 – 120	11m
	121 – 147	13m
	148 – 174	15m
	175 – 201	17m
	202 – 228	19m

	229 – 255	21m
16	000 – 255	Manual Focus
17	000 – 255	Dimmer
18	000 – 255	Dimmer Fine
19	Strobe	
	000 – 009	No Function
	010 – 099	Strobe (Slow to Fast, 0-25Hz)
	100 – 109	No Function
	110 – 179	Lightning Strobe
	180 – 189	No Function
	190 – 255	Random Strobe
20	Control	
	000 – 010	No Function
	011 – 020	Pan/Tilt Blackout Activated
	021 – 030	Pan/Tilt Blackout Deactivated
	031 – 040	Pan Invert
	041 – 050	Tilt Invert
	051 – 060	Pan/Tilt Invert Off
	061 – 070	Fan Slow
	071 – 080	Fan Normal
	081 – 090	Fan Fast
	091 – 100	Fan Auto
	101 – 110	Dim 4
	111 – 120	Dim 3
	121 – 130	Dim 2
	131 – 140	Dim 1
	141 – 150	Dim Off
	151 – 160	1200Hz
	161 – 170	2400Hz
	171 – 180	4000Hz
	181 – 190	6000Hz
	191 – 200	25000Hz
	201 – 210	All Reset
	211 – 220	Pan/Tilt Reset
	221 – 230	Colour System Reset
	231 – 240	Gobo System Reset
241 – 250	Optics System Reset	
251 – 255	No Function	

BASIC

CHANNEL	VALUE	FUNCTION
1	000 – 255	Pan (0-540°)
2	000 – 255	Tilt (0-270°)
3	000 – 255	Pan/Tilt Speed (From fast to slow)
4	Colour Wheel	
	000 – 007	White
	008 – 015	Colour 1
	016 – 023	Colour 2
	024 – 031	Colour 3
	032 – 039	Colour 4
	040 – 047	Colour 5
	048 – 055	Colour 6
	056 – 063	Colour 7
	064 – 191	Colour Wheel Indexing 0-360°
	192 – 222	Colour Wheel Spin CW (100% - 1%)

	223 – 224	Stop
	225 – 255	Colour Wheel Spin CCW (1% - 100%)
5	000 – 255	Colour Wheel Fine
6	Fixed Gobo Wheel	
	000 – 010	White
	011 – 017	Fixed Gobo Wheel 1
	018 – 024	Fixed Gobo Wheel 2
	025 – 031	Fixed Gobo Wheel 3
	032 – 038	Fixed Gobo Wheel 4
	039 – 045	Fixed Gobo Wheel 5
	046 – 052	Fixed Gobo Wheel 6
	053 – 059	Fixed Gobo Wheel 7
	060 – 066	Fixed Gobo Wheel 8
	067 – 073	Fixed Gobo Wheel 9
	074 – 080	Fixed Gobo Wheel 10
	081 – 087	Fixed Gobo Wheel 1 Shake (1% - 100%)
	088 – 094	Fixed Gobo Wheel 2 Shake (1% - 100%)
	095 – 101	Fixed Gobo Wheel 3 Shake (1% - 100%)
	102 – 108	Fixed Gobo Wheel 4 Shake (1% - 100%)
	109 – 115	Fixed Gobo Wheel 5 Shake (1% - 100%)
	116 – 122	Fixed Gobo Wheel 6 Shake (1% - 100%)
	123 – 129	Fixed Gobo Wheel 7 Shake (1% - 100%)
	130 – 136	Fixed Gobo Wheel 8 Shake (1% - 100%)
137 – 143	Fixed Gobo Wheel 9 Shake (1% - 100%)	
144 – 150	Fixed Gobo Wheel 10 Shake (1% - 100%)	
151 – 200	Gobo Wheel Spin CW (100% - 1%)	
201 – 205	Stop	
206 – 255	Gobo Wheel Spin CCW (1% - 100%)	
7	Rotating Gobo	
	000 – 010	White
	011 – 018	Rotating Gobo 1
	019 – 026	Rotating Gobo 2
	027 – 034	Rotating Gobo 3
	035 – 042	Rotating Gobo 4
	043 – 050	Rotating Gobo 5
	051 – 058	Rotating Gobo 6
	059 – 066	Rotating Gobo 7
	067 – 074	Rotating Gobo 1 Shake (1% - 100%)
	075 – 082	Rotating Gobo 2 Shake (1% - 100%)
	083 – 090	Rotating Gobo 3 Shake (1% - 100%)
	091 – 098	Rotating Gobo 4 Shake (1% - 100%)
	099 – 106	Rotating Gobo 5 Shake (1% - 100%)
	107 – 114	Rotating Gobo 6 Shake (1% - 100%)
	115 – 122	Rotating Gobo 7 Shake (1% - 100%)
	123 – 127	White
	128 – 190	Gobo Wheel Spin CW (100% - 1%)
191 – 192	Stop	
193 – 255	Gobo Wheel Spin CCW (1% - 100%)	
8	Gobo Rotating	
	000 – 120	Rotating Gobo Indexing (0-360°)
	121 – 125	Stop
	126 – 165	Rotating Gobo Shake (Speed 1% - 100%)
	166 – 170	Stop
	171 – 210	Gobo Rotating CW (100% - 1%)
	211 – 215	Stop
216 – 255	Gobo Rotating CCW (1% - 100%)	

9	Prism	
	000 – 010	White
	011 – 145	Prism Insert and Index (0-360°)
	146 – 150	Stop
	151 – 200	Prism Rotating CW (100% - 1%)
	201 – 205	Stop
	206 – 255	Prism Rotating CCW (1% - 100%)
10	Frost	
	000 – 010	White
	011 – 251	Frost Insert (0% - 100%)
	252 – 255	Frost 100%
11	Iris	
	000 – 127	Iris Open – Closed (Large to Small)
	128 – 130	Iris Closed
	131 – 171	Iris Fast in Fast out (1% - 100%)
	172 – 211	Iris Fade in Fade out (1% - 100%)
	212 – 251	Iris Fast in Fade out (1% - 100%)
	252 – 255	Iris Closed
12	000 – 255	Zoom
13	Auto Focus	
	000 – 012	No Function
	013 – 039	5m
	040 – 066	7m
	067 – 093	9m
	094 – 120	11m
	121 – 147	13m
	148 – 174	15m
	175 – 201	17m
	202 – 228	19m
	229 – 255	21m
14	000 – 255	Manual Focus
15	000 – 255	Dimmer
16	Strobe	
	000 – 009	No Function
	010 – 099	Strobe (Slow to Fast, 0-25Hz)
	100 – 109	No Function
	110 – 179	Lightning Strobe
	180 – 189	No Function
	190 – 255	Random Strobe
17	Control	
	000 – 010	No Function
	011 – 020	Pan/Tilt Blackout Activated
	021 – 030	Pan/Tilt Blackout Deactivated
	031 – 040	Pan Invert
	041 – 050	Tilt Invert
	051 – 060	Pan/Tilt Invert Off
	061 – 070	Fan Slow
	071 – 080	Fan Normal
	081 – 090	Fan Fast
	091 – 100	Fan Auto
	101 – 110	Dim 4
	111 – 120	Dim 3
	121 – 130	Dim 2
	131 – 140	Dim 1
	141 – 150	Dim Off
	151 – 160	1200Hz
	161 – 170	2400Hz
171 – 180	4000Hz	

	181 – 190	6000Hz
	191 – 200	25000Hz
	201 – 210	All Reset
	211 – 220	Pan/Tilt Reset
	221 – 230	Colour System Reset
	231 – 240	Gobo System Reset
	241 – 250	Optics System Reset
	251 – 255	No Function