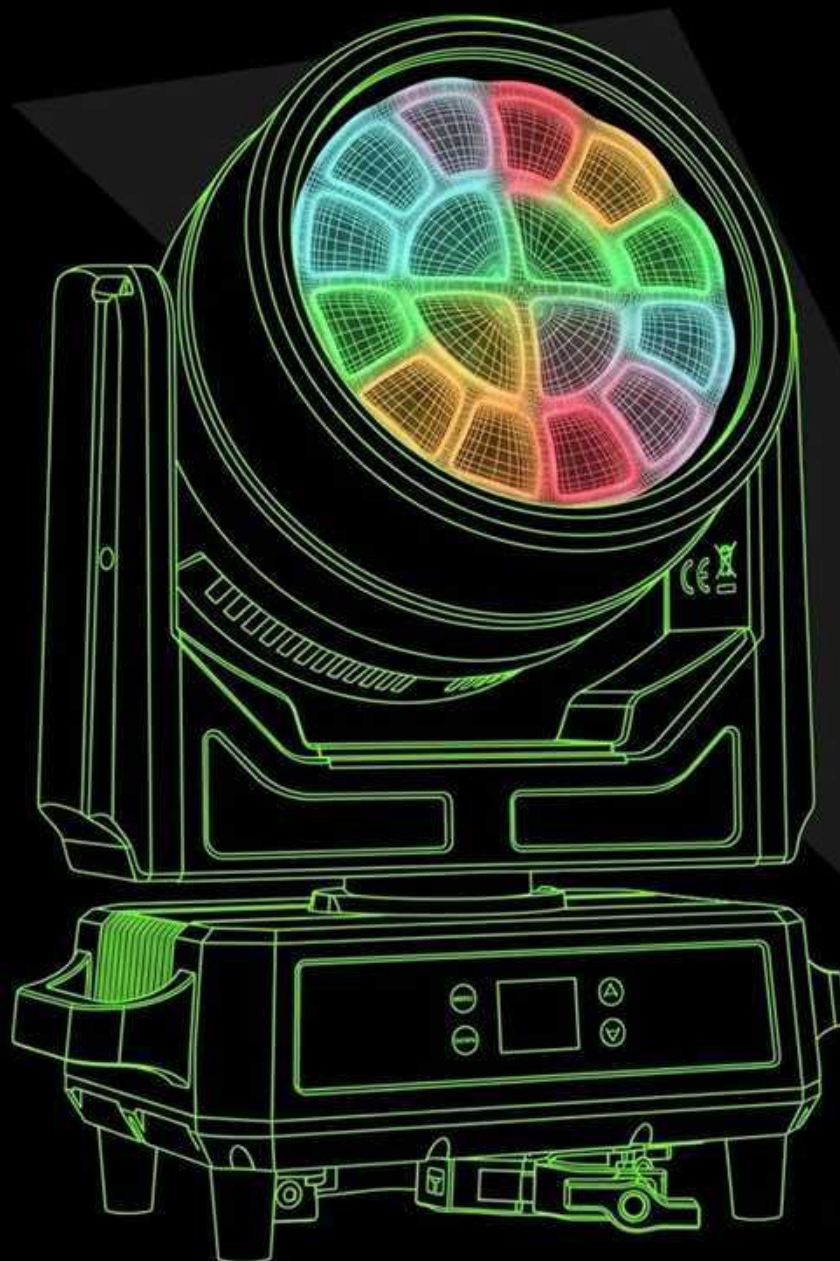
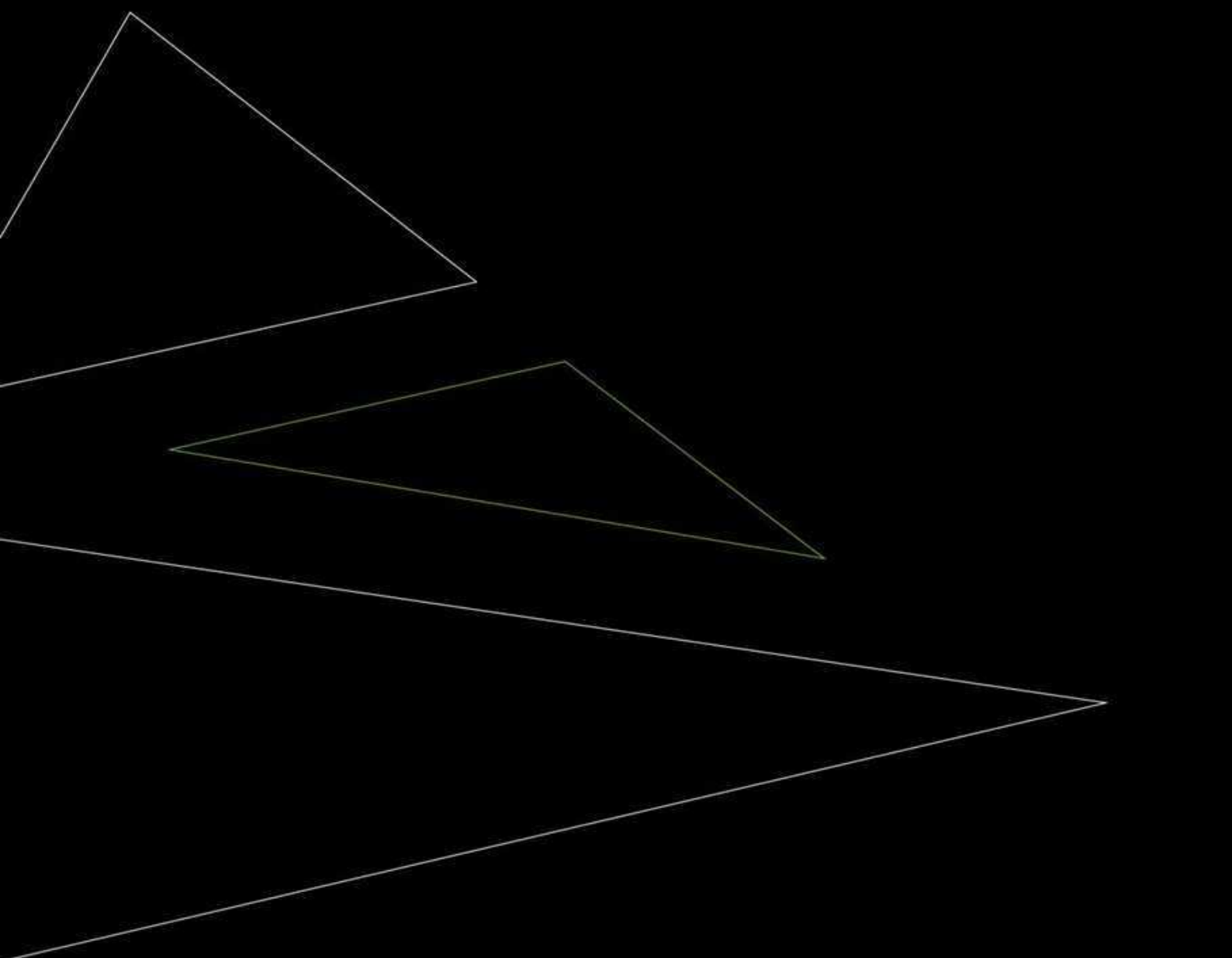




ZM16 ARGO FX IP

OUTDOOR 16X50W MOVING WASH LIGHT

USER MANUAL



USER MANUAL

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 FOR FUTURE REFERENCE.

PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE USE

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STATEMENT

THE PRODUCT HAS WELL CAPABILITY AND INTACT PACKING WHEN LEAVE FACTORY. ALL OF THE USER SHOULD COMPLY WITH WARNING ITEM AND MANUAL, ANY MISUSE CAUSE OF THE DAMAGES ARE NOT INCLUDED IN OUR GUARANTEE, AND ALSO CAN NOT BE RESPONSIBLE FOR ANY MALFUNCTION & PROBLEM OWING TO IGNORE THE MANUAL.

SAFETY INSTRUCTIONS

01

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 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 TA: 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-HAND DURING ITS OPERATION. TURN OFF THE POWER AND ALLOW ABOUT 15 MINUTES FOR THE UNIT TO COOL DOWN BEFORE REPLACING OR SERVING.

IN THE EVENT 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 CENTER. ALWAYS USE THE SAME TYPE SPARE PARTS. DO NOT TOUCH ANY WIRE DURING OPERATION AS HIGH VOLTAGE MIGHT BE CAUSING ELECTRIC SHOCK.

WARNING:

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 YOURSELF. IN THE UNLIKELY EVENT YOUR UNIT MAY REQUIRE 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. ALSO 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 A PLACE WHERE IS OUT OF THE TOUCH OF PEOPLE.

TECHNICAL SPECIFICATION

02

POWER VOLTAGE: AC 100-240V, 50/60HZ, POWER CONSUMPTION: 900W, LIGHT SOURCE LIFESPAN: 20000 HOURS, LIGHT SOURCE: HIGH POWER TX 4IN1 RGBL 16PCS 50W LEDS + 204PCS 0.3W 3IN1, RGB LEDS.

COLOR MIXING: UNIFORM RGBL COLOR MIXING SYSTEM AND RAINBOW EFFECT, ZOOM ANGLE: 4° - 60° LINEAR ZOOM FUNCTION
COLOR TEMPERATURE : 2700K-8000K
PIXEL EFFECT: EACH LED AND COLOR CAN BE CONTROL INDIVIDUALLY
DIMMER: 0-100% LINEAR DIMMER
STROBE : 1-30 TIMES/ SECOND ELECTRONIC STROBE AND RANDOM STROBE
INSIDE APERTURE : CAN BE CONTROLLED AT A SINGLE POINT, ALLOWING FOR FREE PURSUIT OF FLOWING COLOR CHANGING EFFECTS PAN 540°, TILT 270° MOVEMENT QUICKER, SMOOTHER AND MORE MUTE

CONTROL

DMX CHANNEL: BASIC 24CH / STAND 44CH / EXTEND 48CH / EXTEND2 113CH
CONTROL MODES: DMX512, AUTO, MASTER-SLAVE
PROTOCOL: DMX-512, RDM, ART-NET, SCAN
RDM: BIDIRECTIONAL COMMUNICATION
COOLING: TEMPERATURE CONTROLLED, OVERHEATING PROTECTION
CONSTRUCTION

CONSTRUCTION

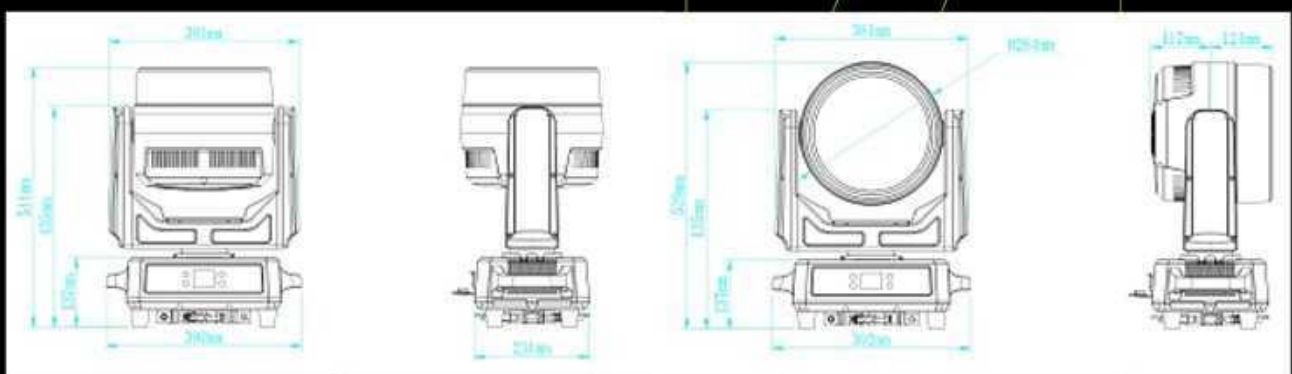
DISPLAY: OLED TOUCH DISPLAY
DMX SOCKET: SEETRONIC 3-PIN XLR WATERPROOF SOCKET IN/OUT
POWER SOCKET: SEETRONIC POWERCON WATERPROOF SOCKET IN/OUT
ART-NET SOCKET: SEETRONIC ART-NET WATERPROOF SOCKET IN/OUT
HOUSING: WHOLE DIE-CASTING ALUMINUM HOUSING

SIZE

PRODUCT SIZE: 392X283X511MM
CARTON PACKING SIZE: 470*320*620MM

WEIGHT

NET WEIGHT: 21KGS
GROSS WEIGHT: 23.7KGS
PRODUCT DIMENSIONS VIEW:

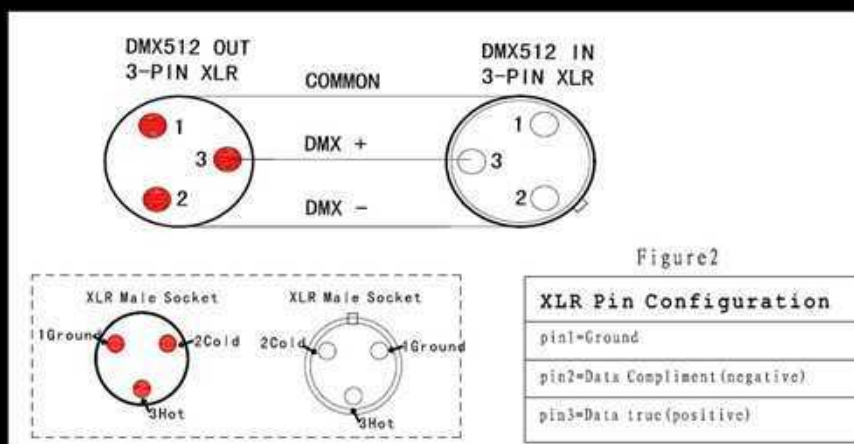


The background is black with several thin, white and green geometric lines. A horizontal white line is on the left. A large white triangle points downwards from the top right. A green triangle points upwards from the bottom right. A vertical white line runs down the center-right. The text is white, and the number '03' has a green outline.

HOW TO CONTROL THE DEVICE

03

THE DMX512 IS WIDELY USED IN INTELLIGENT LIGHTING CONTROL,WITH A DMX 512 CONTROLLER.CONNECT SEVERAL LIGHTS TOGETHER,DMX IN AND DMX OUT, 3 PIN XLR CONNECTORS: PIN 1: GND, PIN 2: NEGATIVE SIGNAL (-), PIN 3: POSITIVE SIGNAL (+)



DISPLAY

DOWN TO GO BACKWARD IN THE SELECTED FUNCTIONS
UP TO GO FORWARD IN THE SELECTED FUNCTIONS
ENTER TO CONFIRM THE SELECTED FUNCTIONS

SET DMX ADDRESS CODE

1. PRESS "MENU" TO "SET DMX ADDRESS",AND PRESS "ENTER" KEYS TO ENTER INTO
2. SHOW "SET DMX ADDRESS DMX ADDRESS:001",PRESS THE "UP AND DOWN" KEYS TO AMENDED
- 3 PRESS "ENTER" KEYS TO SAVE AND EXIT,PRESS THE "MENU" KEYS DOES NOT SAVE AND EXIT
- 4 FUNCTIONS SETTING VIA LCD DISPLAY PANEL AS BELOW:



- ADDRESS: CLICK TO ENTER THE ADDRESS CODE SETTINGS
- SETTINGS: CLICK TO ENTER SYSTEM SETTINGS
- MANUAL: CLICK TO ENTER MANUAL MODE
- CALIBRATION: CLICK TO ENTER THE PASSWORD AND ENTER THE SYSTEM CALIBRATION MODE
- RESET: CLICK TO ENTER THE SYSTEM RESET MODE
- INFORMATION: CLICK TO VIEW THE DEPARTMENT

Main menu	Secondary menu	Three-level menu/parameters
Address	001 - 512	(Increase the number of channels each time, decrease normal)
System Settings	Operation modes	Operation modes: DMX/ Voice Control/Auto 1/ Auto 2
	Channel mode	BASIC 24CH / STAND 44CH / EXTEND 48CH / EXTEND2 113CH
	Art-Net Set	
	Horizontal reversal	Open / Off
	Vertical reversal	Open / Off
	Hall error correction	Open / Off
	Optocoupler error correction	Open / Off
	Signal hold	Open / Off
	Screen saver	Open / Off
	Screen overturn	On/Off/Automatic
	Synchronous update	Open / Off
	Language	中/EN
	Dimming speed	Standard/Fast
	Dimming curve	Curve 1 Curve 2 Curve 3 Curve 4
	Dimming frequency	6K 4K 1K 25K 20K 15K 10K
	Screen lock	Open / Off
	factory data reset	
Manual mode	The current channel mode	0-255
System calibration	Enter the password	Luminaire calibration
System reset	Effect motor reset	
	Scan motor reset	
	Reset all motors	
System information	Reset information	Display a reset error message
	DMX data monitoring	Receive the channel value of the control console
	Sensor information	Hall information
		Pan optocoupler information
		Tilt optocoupler information
	Hardware version	Display hardware version
	Software version	Display the software version

TAUTOMATIC SCREEN ROTATION FUNCTION

THE SYSTEM CAN AUTOMATICALLY ROTATE THE SCREEN ACCORDING TO THE DIRECTION OF GRAVITY WITHOUT THE NEED FOR MANUAL ROTATION. THE AUTOMATIC ROTATION FUNCTION CAN ALSO BE TURNED OFF.

MANUAL CONTROL

THIS INTERFACE IS USED TO CONTROL THE CURRENT LAMP. PRESS THE "OK" KEY TO ENTER THE EDITING STATE. PRESS THE "UP" AND "DOWN" KEYS TO CHANGE THE CHANNEL VALUE. PRESS "OK" AGAIN TO SAVE THE MODIFIED VALUE AND EXIT THE EDITING. PRESSING "EXIT" WILL NOT SAVE THE MODIFIED VALUE AND DIRECTLY EXIT THE EDITING.

SYSTEM CALIBRATION

A PASSWORD IS SET HERE TO PREVENT NON-PROFESSIONALS FROM MAKING ACCIDENTAL OPERATIONS. JUST PRESS THE "OK" KEY DIRECTLY TO VERIFY THE PASSWORD.

Option	Description
Initial position calibration	After entering the sub-interface, the starting positions of the X-axis, Y-axis, and focusing motor can be adjusted to compensate for hardware installation errors. The adjustment range is 0 to 255, and 127 indicates no adjustment.
Itinerary calibration	After entering the sub-interface, you can adjust the travel of the X-axis, Y-axis, and focusing motor. The adjustment range is 0 to 255. 127 indicates no adjustment.
Dynamics calibration	After entering the sub-interface, the force of the X-axis, Y-axis and other motors can be adjusted. The adjustment range is 0 to 255. 127 indicates no adjustment.
Other calibration	MIC sensitivity calibration and password modification.

RESET

PRESS THE "UP" AND "DOWN" KEYS TO SWITCH THE RESET MODE. PRESS "OK" TO RESET DIRECTLY

Option	Description
Effect motor reset	Reset the effect expect pan and tilt
Scan motor reset	Pan Tilt reset
All motor reset	Fixture reset

SYSTEM INFO

Option	Description
Reset info	If the red ERR indicator light is on, it indicates that the lamp is operating incorrectly. For detailed information, you can enter the sub-interface from here to view.
DMX data monitoring	From here enter the sub-interface, where the channel values are displayed in numerical form for viewing
Sensor info	Real-time monitoring of the status of sensors such as optocouplers and Hall sensors on the light
Hardware version number	Lighting hardware information
Software version number	Lighting software version

DMX CHANNEL TABLE

04

DMX 512 24CHs ZM16 Argo FX IP

24CH	Function	Value	Description
1	Pan	0-255	Pan
2	Pan Fine	0-255	Pan Fine
3	Tilt	0-255	Tilt
4	Tilt Fine	0-255	Tilt Fine
5	P/T Speed	0-255	P/T Speed Fast And Slow
6	Background Red	0-255	Background Red (0 - 100%)
7	Background Red Fine	0-255	Background Red Fine (0-100%)
8	Background Green	0-255	Background Green (0 - 100%)
9	Background Green Fine	0-255	Background Green Fine (0-100%)
10	Background Blue	0-255	Background Blue (0 - 100%)
11	Background Blue Fine	0-255	Background Blue Fine (0 - 100%)
12	Background White	0-255	Background White (0 - 100%)
13	Background White Fine	0-255	Background White Fine (0 - 100%)
14	Flash	0-31	Turn Off The Light

		32-63	Open The Light
		64-95	Flash From Slow To Fast
		96-127	Open The Light
		128-159	The Pulse Flicker Increases In Speed.
		160-191	Open The Light
		192-223	Random flash
		224-255	Open The Light
15	Dimmer	0-255	Dimming(0%~100%)
16	Dimming Fine	0-255	Dimming(0%~100%)
		0-21	No function
		22-42	
		43-63	7500K
		64-84	
		85-105	6500K
		106-126	

17	CTO	127-147	5500K
		148-168	
		169-189	4500K
		190-210	
		211-231	3500K
		232-255	
18	Color Presets	0-255	Color Presets
19	Color presets / RGBW cross fade in/out	0	Output is controlled by RGBW values.
		1-254	Crossfade in/out between RGBW settings and color preset channels
		255	Colors are controlled by color presets.
20	Color preset cross fade in/out	0-4	No function
		5-255	Two-color preset cross-gradient ranging from 100 milliseconds to 5 seconds
21	Zoom	0-255	Zoom
22	Zoom Fine	0-255	Zoom Fine
23	Reserved	0-255	Reserved
24	Reset/Internal	0-4	No function
		5-9	Power Off The Screen
		10-14	Open The Screen
		15-19	Display Reverse Off
		20-24	Display Reverse Open
		45-49	Linear Dimming Curve

	Function	50-54	Dimming Curve Square
		55-57	1K
		58-60	2.5K
		61-63	6K
		64-69	10K
		80-84	All Motors Reset
		85-87	P/T Motor Reset
		88-90	Amplifying Motor Reset

DMX 512 44CHs ZM16 Argo FX IP

44CH	Function	Value	Description
1	Pan	0-255	Pan
2	Pan Fine	0-255	Pan Fine
3	Tilt	0-255	Tilt
4	Tilt Fine	0-255	Tilt Fine
5	P/T Speed	0-255	P/T Speed Fast And Slow
6	Background Red	0-255	Background Red (0 - 100%)
7	Background Red Fine	0-255	Background Red Fine (0-100%)

8	Background Green	0-255	Background Green (0 - 100%)
9	Background Green Fine	0-255	Background Green Fine (0-100%)
10	Background Blue	0-255	Background Blue (0 - 100%)
11	Background Blue Fine	0-255	Background Blue Fine (0 - 100%)
12	Background White	0-255	Background White (0 - 100%)
13	Background White Fine	0-255	Background White Fine (0 - 100%)
14	Flash	0-31	Turn Off Light
		32-63	Open The Light
		64-95	Flash From Slow To Fast
		96-127	Open The Light
		128-159	The Pulse Flicker Increases In Speed.
		160-191	Open The Light
		192-223	Random flash

		224-255	Open The Light
15	Dimmer	0-255	Dimming(0%~100%)
16	Dimming Fine	0-255	Dimming(0%~100%)
17	CTO	0-21	No function
		22-42	
		43-63	7500K
		64-84	
		85-105	6500K
		106-126	
		127-147	5500K
		148-168	
		169-189	4500K
		190-210	
		211-231	3500K
		232-255	
18	Color Presets	0-255	Color Presets
19	Color presets / RGBW cross fade in/out	0	Output is controlled by RGBW values.
		1-254	Crossfade in/out between RGBW settings and color preset channels

		255	Colors are controlled by color presets.
20	Color preset cross fade in/out	0-4	No function
		5-255	Two-color preset cross-gradient ranging from 100 milliseconds to 5 seconds
21	Zoom	0-255	Zoom
22	Zoom Fine	0-255	Zoom Fine
23	Reserved	0-255	Reserved
24	Reset/Internal Function	0-4	No function
		5-9	Power Off The Screen
		10-14	Open The Screen
		15-19	Display Reverse Off
		20-24	Display Reverse Open
		45-49	Linear Dimming Curve
		50-54	Dimming Curve Square
		55-57	1K
		58-60	2.5K
		61-63	6K
		64-69	10K
		80-84	All Motors Reset
		85-87	P/T Motor Reset
		88-90	Amplifying Motor Reset
25	Main Light	0--9	No Function

	Effect	10-14	Effect 1
		15-19	Effect 2
		20-24	Effect 3
		25-29	Effect 4
		30-34	Effect 5
		35-39	Effect 6
		40-44	Effect 7
		45-49	Effect 8
		50-54	Effect 9
		55-59	Effect 10
		60-64	Effect 11
		65-69	Effect 12
		70-74	Effect 13
		75-79	Effect 14
		80-84	Effect 15
		85-89	Effect 16
		90-94	Effect 17
		95-99	Effect 18
		100-104	Effect 19
		105-109	Effect 20
		110-255	Reserve
26	Main Light	0-125	Main Effect Speed Forward, from Fast to Slow

	Effect Speed	126-130	Stop
		131-255	Main effect speed reverse, from slow to fast
27	Main Light Effect Fade	0-255	Main Effect Fade Function (0-100%)
28	Main Light Effect Length	0-255	Main Effect Length Function
29	Main Light Effect Red	0-255	Main Effect Red (0-100%)
30	Main Light Effect Green	0-255	Main Effect Green (0-100%)
31	Main Effect Blue	0-255	Main Effect Blue (0-100%)
32	Main Effect White	0-255	Main Effect White (0-100%)
33	Main Light Effect Dimmer	0-255	Main Effect Dimmer (0-100%)
34	Main Light Background Dimmer	0-255	Main Light Background Dimmer (0-100%)
35	Main Light Effect Flash	0-31	Turn Off
		32-63	Light On
		64-95	Flash speed from slow to fast
		96-127	Light On
		128-159	Pulse Flash from slow to fast
		160-191	Light On
		192-223	Random Flash
		224-255	Light On

36	Main Light Control	0-255	Crossfade between RGBW settings and single color channels
37	Main Light Red Ring 1	0-255	Main Red Ring 1 (0-100%)
38	Main Light Green Ring 1	0-255	Main Green Ring 1 (0-100%)
39	Main Light Blue Ring 1	0-255	Main Blue Ring 1 (0-100%)
40	Main Light White Ring 1	0-255	Main White Ring 1 (0-100%)
41	Main Light Red Ring 2	0-255	Main Red Ring 2 (0-100%)
42	Main Light Green Ring 2	0-255	Main Green Ring 2 (0-100%)
43	Main Light Blue Ring 2	0-255	Main Blue Ring 2 (0-100%)
44	Main Light White Ring 2	0-255	Main White Ring 2 (0-100%)

DMX 512 48CHs ZM16 Argo FX IP

48CH	Function	Value	Description
1	Pan	0-255	Pan
2	Pan Fine	0-255	Pan Fine
3	Tilt	0-255	Tilt
4	Tilt Fine	0-255	Tilt Fine

5	P/T Speed	0-255	P/T Speed Fast And Slow
6	Background Red	0-255	Background Red (0 - 100%)
7	Background Red Fine	0-255	Background Red Fine (0-100%)
8	Background Green	0-255	Background Green (0 - 100%)
9	Background Green Fine	0-255	Background Green Fine (0-100%)
10	Background Blue	0-255	Background Blue (0 - 100%)
11	Background Blue Fine	0-255	Background Blue Fine (0 - 100%)
12	Background White	0-255	Background White (0 - 100%)
13	Background White Fine	0-255	Background White Fine (0 - 100%)
14	Flash	0-31	Turn Off The Light
		32-63	Open The Light
		64-95	Flash From Slow To Fast
		96-127	Open The Light

		128-159	The Pulse Flicker Increases In Speed.
		160-191	Open The Light
		192-223	Random flash
		224-255	Open The Light
15	Dimmer	0-255	Dimming (0%~100%)
16	Dimming Fine	0-255	Dimming (0%~100%)
17	CTO	0-21	No function
		22-42	
		43-63	7500K
		64-84	
		85-105	6500K
		106-126	
		127-147	5500K
		148-168	
		169-189	4500K
		190-210	

		211-231	3500K
		232-255	
18	Color Presets	0-255	Color Presets
19	Color presets / RGBW cross fade in/out	0-125	Output is controlled by RGBW values.
		126-130	Crossfade in/out between RGBW settings and color preset channels
		131-255	Colors are controlled by color presets.
20	Color preset cross fade in/out	0-4	No function
		5-255	Two-color preset cross-gradient ranging from 100 milliseconds to 5 seconds
21	Zoom	0-255	Zoom
22	Zoom Fine	0-255	Zoom Fine
23	Reserved	0-255	Reserved
24	Reset/Internal Function	0-4	No function
		5-9	Power Off The Screen
		10-14	Open The Screen
		15-19	Display Reverse Off
		20-24	Display Reverse Open
		45-49	Linear Dimming Curve
		50-54	Dimming Curve Square
		55-57	1K
		58-60	2.5K
		61-63	6K

		64-69	10K
		80-84	All Motors Reset
		85-87	P/T Motor Reset
		88-90	Amplifying Motor Reset
25	Main Light Effect	0-9	No Function
		10-14	Effect 1
		15-19	Effect 2
		20-24	Effect 3
		25-29	Effect 4
		30-34	Effect 5
		35-39	Effect 6
		40-44	Effect 7
		45-49	Effect 8
		50-54	Effect 9
		55-59	Effect 10
		60-64	Effect 11
		65-69	Effect 12
		70-74	Effect 13
		75-79	Effect 14
		80-84	Effect 15
		85-89	Effect 16
		90-94	Effect 17

		95-99	Effect 18
		100-104	Effect 19
		105-109	Effect 20
		110-255	Reserve
26	Main Light Effect Speed	0-125	Main Effect Speed Forward, from Fast to Slow
		126-130	Stop
		131-255	Main effect speed reverse, from slow to fast
27	Main Light Effect Fade	0-255	Main Effect Fade Function (0-100%)
28	Main Light Effect Length	0-255	Main Effect Length Function
29	Main Light Effect Red	0-255	Main Effect Red (0-100%)
30	Main Light Effect Green	0-255	Main Effect Green (0-100%)
31	Main Effect Blue	0-255	Main Effect Blue (0-100%)
32	Main Effect White	0-255	Main Effect White (0-100%)
33	Main Light Effect Dimmer	0-255	Main Effect Dimmer (0-100%)
34	Main Light Background Dimmer	0-255	Main Light Background Dimmer (0-100%)
35	Main Light Effect Flash	0-31	Turn Off
		32-63	Light On
		64-95	Flash speed from slow to fast

		96-127	Light On
		128-159	Pulse Flash from slow to fast
		160-191	Light On
		192-223	Random Flash
		224-255	Light On
36	Halo Ring Control	0-255	No Function
37	Halo Ring Dimmer	0-255	Halo Ring Dimmer (0-100%)
38	Halo Ring Dimming Fine Tune	0-255	Halo Ring Dimming Fine Tune (0-100%)
39	Halo Ring Effect Red	0-255	Halo Ring Effect Red (0-100%)
40	Halo Ring Effect Green	0-255	Halo Ring Effect Green (0-100%)
41	Halo Ring Effect Blue	0-255	Halo Ring Effect Blue (0-100%)
42	Halo Ring Effect	0-9	No Function
		10-205	Effect 1-97 (one effect every 2 numbers)
		206-255	Effect 98
43	Halo Ring Effect Speed	0-130	Halo Ring effect speed forward, from fast to slow
		131-255	Halo Ring effect speed reverse, from slow to fast
44	Reserve	0-255	No Function
45	Halo Ring Effect Background	0-255	Halo Ring Effect Background Dimmer (0-100%)

	Dimmer		
46	Halo Ring Effect Background Red	0-255	Halo Ring Effect Background Red (0-100%)
47	Halo Ring Effect Background Green	0-255	Halo Ring Effect Background Green (0-100%)
48	Halo Ring Effect Background Blue	0-255	Halo Ring Effect Background Blue (0-100%)

DMX 512 113CHs ZM16 Argo FX IP

113CH	Function	Value	Description
1	Pan	0-255	Pan
2	Pan Fine	0-255	Pan Fine
3	Tilt	0-255	Tilt
4	Tilt Fine	0-255	Tilt Fine
5	P/T Speed	0-255	P/T Speed Fast And Slow
6	Background Red	0-255	Background Red (0 - 100%)

7	Background Red Fine	0-255	Background Red Fine (0-100%)
8	Background Green	0-255	Background Green (0 - 100%)
9	Background Green Fine	0-255	Background Green Fine (0-100%)
10	Background Blue	0-255	Background Blue (0 - 100%)
11	Background Blue Fine	0-255	Background Blue Fine (0 - 100%)
12	Background White	0-255	Background White (0 - 100%)
13	Background White Fine	0-255	Background White Fine (0 - 100%)
14	Flash	0-31	Turn Off The Light
		32-63	Open The Light
		64-95	Flash From Slow To Fast
		96-127	Open The Light
		128-159	The Pulse Flicker Increases In Speed.
		160-191	Open The Light

		192-223	Random flash
		224-255	Open The Light
15	Dimmer	0-255	Dimming(0%~100%)
16	Dimming Fine	0-255	Dimming (0%~100%)
17	CTO	0-21	No function
		22-42	
		43-63	7500K
		64-84	
		85-105	6500K
		106-126	
		127-147	5500K
		148-168	
		169-189	4500K
		190-210	
		211-231	3500K
		232-255	
18	Color Presets	0-255	Color Presets
19	Color presets /	0-125	Output is controlled by RGBW values.

	RGBW cross fade in/out	126-130	Crossfade in/out between RGBW settings and color preset channels
		131-255	Colors are controlled by color presets.
20	Color preset cross fade in/out	0-4	No function
		5-255	Two-color preset cross-gradient ranging from 100 milliseconds to 5 seconds
21	Zoom	0-255	Zoom
22	Zoom Fine	0-255	Zoom Fine
23	Reserved	0-255	Reserved
24	Reset/Internal Function	0-4	No function
		5-9	Power Off The Screen
		10-14	Open The Screen
		15-19	Display Reverse Off
		20-24	Display Reverse Open
		45-49	Linear Dimming Curve
		50-54	Dimming Curve Square
		55-57	1K
		58-60	2.5K
		61-63	6K
		64-69	10K
		80-84	All Motors Reset
		85-87	P/T Motor Reset
		88-90	Amplifying Motor Reset

25	Main Light Effect	0--9	No Function
		10-14	Effect 1
		15-19	Effect 2
		20-24	Effect 3
		25-29	Effect 4
		30-34	Effect 5
		35-39	Effect 6
		40-44	Effect 7
		45-49	Effect 8
		50-54	Effect 9
		55-59	Effect 10
		60-64	Effect 11
		65-69	Effect 12
		70-74	Effect 13
		75-79	Effect 14
		80-84	Effect 15
		85-89	Effect 16
		90-94	Effect 17
		95-99	Effect 18
		100-104	Effect 19
		105-109	Effect 20
		110-255	Reserve

26	Main Light Effect Speed	0-125	Main Effect Speed Forward, from Fast to Slow
		126-130	Stop
		131-255	Main effect speed reverse, from slow to fast
27	Main Light Effect Fade	0-255	Main Effect Fade Function (0-100%)
28	Main Light Effect Length	0-255	Main Effect Length Function
29	Main Light Effect Red	0-255	Main Effect Red (0-100%)
30	Main Light Effect Green	0-255	Main Effect Green (0-100%)
31	Main Effect Blue	0-255	Main Effect Blue (0-100%)
32	Main Effect White	0-255	Main Effect White (0-100%)
33	Main Light Effect Dimmer	0-255	Main Effect Dimmer (0-100%)
34	Main Light Background Dimmer	0-255	Main Light Background Dimmer (0-100%)
35	Main Light Effect Flash	0-31	Turn Off
		32-63	Light On
		64-95	Flash speed from slow to fast
		96-127	Light On
		128-159	Pulse Flash from slow to fast
		160-191	Light On
		192-223	Random Flash

		224-255	Light On
36	Halo Ring Control	0-255	No Function
37	Halo Ring Dimmer	0-255	Halo Ring Dimmer (0-100%)
38	Halo Ring Dimming Fine Tune	0-255	Halo Ring Dimming Fine Tune (0-100%)
39	Halo Ring Effect Red	0-255	Halo Ring Effect Red (0-100%)
40	Halo Ring Effect Green	0-255	Halo Ring Effect Green (0-100%)
41	Halo Ring Effect Blue	0-255	Halo Ring Effect Blue (0-100%)
42	Halo Ring Effect	0-9	No Function
		10-205	Effect 1-97 (one effect every 2 numbers)
		206-255	Effect 98
43	Halo Ring Effect Speed	0-130	Halo Ring effect speed forward, from fast to slow
		131-255	Halo Ring effect speed reverse, from slow to fast
44	Reserve	0-255	No Function
45	Halo Ring Effect Background Dimmer	0-255	Halo Ring Effect Background Dimmer (0-100%)
46	Halo Ring Effect Background Red	0-255	Halo Ring Effect Background Red (0-100%)

47	Halo Ring Effect Background Green	0-255	Halo Ring Effect Background Green (0-100%)
48	Halo Ring Effect Background Blue	0-255	Halo Ring Effect Background Blue (0-100%)
49	Main Light Control	0-255	Crossfade between RGBW settings and single color channels
50	Main Light Red Ring 1	0-255	Main Red Ring 1 (0-100%)
51	Main Light Green Ring 1	0-255	Main Green Ring 1 (0-100%)
52	Main Light Blue Ring 1	0-255	Main Blue Ring 1 (0-100%)
53	Main Light White Ring 1	0-255	Main White Ring 1 (0-100%)
54	Main Light Red Ring 2	0-255	Main Red Ring 2 (0-100%)
55	Main Light Green Ring 2	0-255	Main Green Ring 2 (0-100%)
56	Main Light Blue Ring 2	0-255	Main Blue Ring 2 (0-100%)
57	Main Light White Ring 2	0-255	Main White Ring 2 (0-100%)
58	Main Light Red Ring 3	0-255	Main Red Ring 3 (0-100%)
59	Main Light Green Ring 3	0-255	Main Green Ring 3 (0-100%)
60	Main Light Blue Ring 3	0-255	Main Blue Ring 3 (0-100%)

61	Main Light White Ring 3	0-255	Main White Ring 3 (0-100%)
62	Main Light Red Ring 4	0-255	Main Red Ring 4 (0-100%)
63	Main Light Green Ring 4	0-255	Main Green Ring 4 (0-100%)
64	Main Light Blue Ring 4	0-255	Main Blue Ring 4 (0-100%)
65	Main Light White Ring 4	0-255	Main White Ring 4 (0-100%)
67	Main Light Red Ring 5	0-255	Main Red Ring 5 (0-100%)
68	Main Light Green Ring 5	0-255	Main Green Ring 5 (0-100%)
69	Main Light Blue Ring 5	0-255	Main Blue Ring 5 (0-100%)
70	Main Light White Ring 5	0-255	Main White Ring 5 (0-100%)
71	Main Light Red Ring 6	0-255	Main Red Ring 6 (0-100%)
72	Main Light Green Ring 6	0-255	Main Green Ring 6 (0-100%)
73	Main Light Blue Ring 6	0-255	Main Blue Ring 6 (0-100%)
74	Main Light White Ring 6	0-255	Main White Ring 6 (0-100%)
75	Main Light Red Ring 7	0-255	Main Red Ring 7 (0-100%)
76	Main Light Green Ring 7	0-255	Main Green Ring 7 (0-100%)
77	Main Light	0-255	Main Blue Ring 7 (0-100%)

	Blue Ring 7		
78	Main Light White Ring 7	0-255	Main White Ring 7 (0-100%)
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106	Main Light Red Ring 15	0-255	Main Red Ring 15 (0-100%)
107	Main Light Green Ring 15	0-255	Main Green Ring 15 (0-100%)
108	Main Light Blue Ring 15	0-255	Main Blue Ring 15 (0-100%)
109	Main Light White Ring 15	0-255	Main White Ring 15 (0-100%)
110	Main Light Red Ring 16	0-255	Main Red Ring 16 (0-100%)
111	Main Light Green Ring 16	0-255	Main Green Ring 16 (0-100%)
112	Main Light Blue Ring 16	0-255	Main Blue Ring 16 (0-100%)
113	Main Light White Ring 16	0-255	Main White Ring 16 (0-100%)

TROUBLE SHOOTING

FOLLOWING ARE A FEW COMMON PROBLEMS THAT MAY OCCUR DURING OPERATION. HERE ARE SOME SUGGESTIONS FOR EASY TROUBLESHOOTING:

A. THE UNIT DOES NOT WORK, NO LIGHT AND THE FAN DOES NOT WORK

1. CHECK THE CONNECTION OF POWER AND MAIN FUSE.
2. MEASURE THE MAINS VOLTAGE ON THE MAIN CONNECTOR.
3. CHECK THE POWER ON LED.

B. NOT RESPONDING TO DMX CONTROLLER

1. DMX LED SHOULD BE ON. IF NOT, CHECK DMX CONNECTORS, CABLES TO SEE LINK PROPERLY.
2. IF THE DMX LED IS ON AND NO RESPONSE TO THE CHANNEL, CHECK THE ADDRESS SETTINGS AND DMX POLARITY.
3. IF YOU HAVE INTERMITTENT DMX SIGNAL PROBLEMS, CHECK THE PINS ON CONNECTORS OR ON PCB OF THE UNIT OR THE PREVIOUS ONE.
4. TRY TO USE ANOTHER DMX CONTROLLER.
5. CHECK IF THE DMX CABLES RUN NEAR OR RUN ALONGSIDE TO HIGH VOLTAGE CABLES THAT MAY CAUSE DAMAGE OR INTERFERENCE TO DMX INTERFACE CIRCUIT.

FIXTURE CLEANING

THE CLEANING OF INTERNAL AND EXTERNAL OPTICAL LENSES AND/OR MIRRORS MUST BE CARRIED OUT PERIODICALLY TO OPTIMIZE LIGHT OUTPUT. CLEANING FREQUENCY DEPENDS ON THE ENVIRONMENT IN WHICH THE FIXTURE OPERATES: DAMP, SMOKY OR PARTICULARLY DIRTY SURROUNDING CAN CAUSE GREATER ACCUMULATION OF DIRT ON THE UNIT'S OPTICS.

▣ **CLEAN WITH SOFT CLOTH USING NORMAL GLASS CLEANING FLUID.**

▣ **ALWAYS DRY THE PARTS CAREFULLY.**

▣ **CLEAN THE EXTERNAL OPTICS AT LEAST EVERY 20 DAYS. CLEAN THE INTERNAL OPTICS AT LEAST EVERY 30/60 DAYS.**