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P/N: 390712000117    Version: B

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# 1/ Technical feature

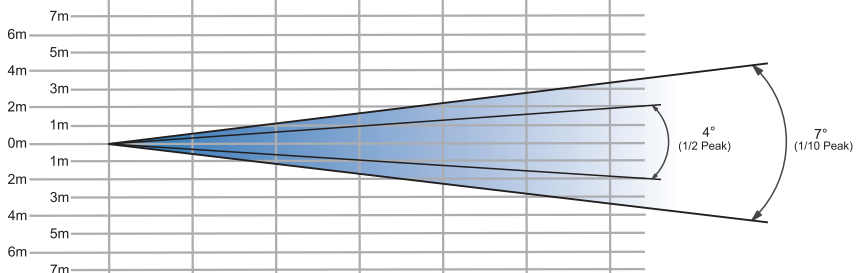
Technical feature	FINE 4037 PIXIE PLUS
Light source	40W 4 in1 LEDs
Input voltage	100-240V~ 50/60Hz
Input current	14A
Input power	1400W
Power factor	PF $\geq$ 0. 98
Beam angle	4°~60°
Initial luminous flux	Small angle: 11010 lm, Large angel: 19493 lm
Efficiency	Small angel: 8.11 lm/W, Large angel:14.36 lm/W
Color system	RGBW 4 in 1
Effect	All-optical domain dimming, 65536 grade dimming accuracy fast strobe 1-25Hz, preset 65 color macro functions, preset 64 effect macro functions
Pan	Pan=540°,Pan= 2.11°/step, Pan fine=0.008°
Tilt	Tilt =240°, Tilt=0.94°/step, Tilt fine=0.0037°
Safety protection	Over current, over voltage and overheating protection
Control mode	DMX512/Wireless DMX (optional)
Control channel	21/35/132/169
Work environment	0°C~40°C
Fixture dimension	430*479*551mm
Package dimension	842*519*845mm
Weight	Net weight: 29kg, Gross weight: 103kg
Package	2pcs/flight case
IP rate	IP20

**Note:** The light source is not recommended to be replaced by user. Ask qualified maintenance personnel to replace the light source if any damage or overheat deformation.

# 2/ Photometric diagram

## FINE 4037 PIXIE PLUS (Min Angle)

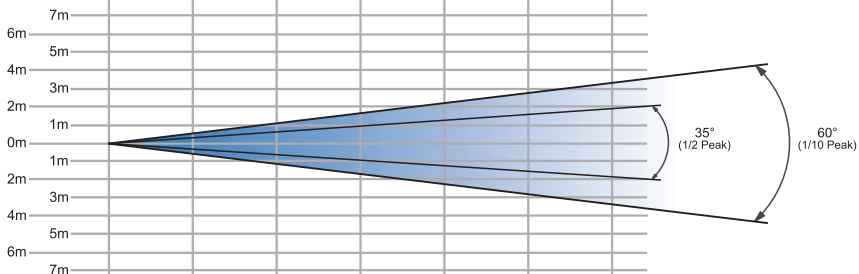
R (lux)	0	67900	16975	7544	4244	2716	1886
G (lux)	0	136875	34219	15208	8555	5475	3802
B (lux)	0	35850	8963	3983	2241	1434	996
W (lux)	0	285500	71375	31722	17844	11420	7931
Full (lux)	0	483500	120875	53722	30219	19340	13431



distance (m)	0	2	4	6	8	10	12
4°(1/2Peak) diameter (m)	0	φ0.16	φ0.33	φ0.49	φ0.66	φ0.82	φ0.99
7°(1/10Peak) diameter (m)	0	φ0.25	φ0.51	φ0.76	φ1.01	φ1.27	φ1.52

## FINE 4037 PIXIE PLUS (Max Angle)

R (lux)	0	2058	515	229	129	82	57
G (lux)	0	4343	1086	483	271	174	121
B (lux)	0	1190	298	132	74	48	33
W (lux)	0	8939	2235	993	559	358	248
Full (lux)	0	15413	3858	1715	964	617	429



distance (m)	0	2	4	6	8	10	12
35°(1/2Peak)diameter (m)	0	φ1.26	φ2.52	φ3.78	φ5.04	φ6.3	φ7.56
60°(1/10Peak)diameter (m)	0	φ2	φ4	φ6	φ8	φ10	φ12

# 3/ Control channel

Specific	Std	RBG	RGBW	SHAP
Red	1	1	1	1
Red fine	2	2	2	2
Green	3	3	3	3
Green fine	4	4	4	4
Blue	5	5	5	5
Blue fine	6	6	6	6
White	7	7	7	7
White fine	8	8	8	8
CTO	9	9	9	9
Macro Colour	10	10	10	10
Strobe	11	11	11	11
Dimmer	12	12	12	12
Dimmer fine	13	13	13	13
Pan	14	14	14	14
Pan fine	15	15	15	15
Tilt	16	16	16	16
Tilt fine	17	17	17	17
Function	18	18	18	18
Reset	19	19	19	19
Zoom	20	20	20	20
Lenses Rotation	21	21	21	21
Shape Selection		22-> 132	22-> 169	22
Shape Speed				23
Shape Fade				24
Shape R				25

Specific	Stnd	RBG	RGBW	SHAP
Shape G				26
Shape B				27
Shape W				28
Shape Dimmer				29
Background Dimmer				30
Shape Transition				31
Shape Offset				32
Shape Strobe				33
Background Strobe				34
Background Select				35

Specific	Std	RBG	RGBW	SHAP	Value	Function
Red	1	1	1	1	0->255	Red Tuning
Red fine	2	2	2	2	0->255	Red fine
Green	3	3	3	3	0->255	Green Tuning
Green fine	4	4	4	4	0->255	Green fine
Blue	5	5	5	5	0->255	Blue Tuning
Blue fine	6	6	6	6	0->255	Blue fine
White	7	7	7	7	0->255	White Tuning
White fine	8	8	8	8	0->255	White fine
CTO	9	9	9	9	0->3	No Function
					4	Colour temperature 2700K
					5	Colour temperature 3200K
					6	Colour temperature 4300K
					7	Colour temperature 5600K
					8	Colour temperature 6500K
					9	Colour temperature 8000K
10->255	Colour temperature from 8000K to 2700K					
Macro Colour	10	10	10	10	0->9	No Function
					10->255	Macro Colour
Strobe	11	11	11	11	0->3	CLOSED
					4->103	Pulse Strobe from slow to fast, 1Hz-25Hz
					104->107	OPEN
					108->207	Strobe from slow to fast, 1Hz-25Hz
					208->212	OPEN
					213->251	Random Strobe from slow to fast
252->255	OPEN					
Dimmer	12	12	12	12	0->255	Dimmer Tuning
Dimmer fine	13	13	13	13	0->255	Dimmer fine
Pan	14	14	14	14	0->255	Pan Tuning
Pan fine	15	15	15	15	0->255	Pan fine
Tilt	16	16	16	16	0->255	Tilt Tuning
Tilt fine	17	17	17	17	0->255	Tilt fine
Function	18	18	18	18	0->255	Reserved
Reset	19	19	19	19	0->25	No Function
					26->76	ZOOM Reset
					77->127	Pan/Tilt Reset
					128->255	All Reset

Zoom	20	20	20	20	0->255	Spot angle from small to big
Lenses Rotation	21	21	21	21	000->127	Linear rotation 0° ->360°
					128->190	Rotate clockwise, fast->slow
					191->192	STOP
					193->255	Rotate counterclockwise, slow->fast
Shape Selection		22->132	22->169	22	0->255	Control the single LED in Stnd, RGB, RGBW mode
						Shape mode corresponding shape selection channel
Shape Speed				23	0->63	Static shape
					64->158	Speed from fast to slow
					159->160	STOP
					161->255	Speed from slow to fast
Shape Fade				24	0->15	No fade-in/out function
					16->255	Fade-in/out function and curve for option
Shape R				25	0->255	Shape red dimmer
Shape G				26	0->255	Shape green dimmer
Shape B				27	0->255	Shape blue dimmer
Shape W				28	0->255	Shape white dimmer
Shape Dimmer				29	0->255	Shape main dimmer
Background Dimmer				30	0->255	Background dimmer
Shape Transition				31	0->4	Transition without delay
					5->255	Delay transition duration 100m->4s
Shape Offset				32	0->255	Adjustment of shape angle or intensity

Shape Strobe				33	0->3	CLOSED
					4->103	Pulse strobe, slow->fast, 1Hz-25Hz
					104->107	OPEN
					108->207	Strobe, slow->fast, 1Hz-25Hz
					208->212	OPEN
					213->251	Random Strobe, slow->fast
					252->255	OPEN
Background Strobe				34	0->3	CLOSED
					4->103	Pulse strobe, slow->fast, 1Hz-25Hz
					104->107	OPEN
					108->207	Strobe, slow->fast, 1Hz-25Hz
					208->212	OPEN
					213->251	Random Strobe, slow->fast
					252->255	OPEN
Background Select				35	0->8	No Function
					9->23	Background shap select
					24->254	No select
					255	Mirror image enable



# 4/ Operation chart for the display panel function

Menu	Item	Options	Notes
DMX ADDRESS		001-512	DMX Address
OPTIONS	Pan Invert	ON	Reverse DMX pan control, R->L
		OFF	Normal DMX pan control, L->R
	Tilt Invert	ON	Reverse DMX tilt control, D->U
		OFF	Normal DMX tilt control, U->D
	Pan/Tilt Swap	ON	DMX change pan&tilt controlling channel
		OFF	Normal Pan & tilt controlling channel
	DMX Mode	Std	Std controlling mode
		RBG	RBG controlling mode
		RBGW	RBGW controlling mode
		SHAP	SHAP controlling mode
Exit			
SPEED SETTINGS	Pan/Tilt Speed	Fast	Optimal rotation speed
		Normal	Medium rotation speed
		Slow	Smoothest rotation speed
	Pan/Tilt Smooth	000~007	Optimize pan & tilt rotation speed
	G/C Speed	High	Optimize color change effect
		Fast	Optimize speed of color change
	Dimmer Curve	GM20	Choose different dimmer curve
		GM15	
		GM10	
		S	
Dimmer Smooth	000-003	Optimize Dimmer Smooth	
Fan Control	Best	Control power and noise of fans	
	Normal		
	Sile		
Exit			
MANUAL CONTROL	Red	000~255	Through panel menu, adjust channel values correspondingly
	Red fine	000~255	
	Green	000~255	
	Green fine	000~255	
	Blue	000~255	
	Blue fine	000~255	
	White	000~255	
	White fine	000~255	
	CTO	000~255	
	Macro Colour	000~255	
	Strobe	000~255	
	Dimmer	000~255	
	Dimmer fine	000~255	
	Pan	000~255	
	Pan fine	000~255	
	Tilt	000~255	
	Tilt fine	000~255	
	Function	000~255	
	Reset	000~255	
	Zoom	000~255	
Lenses Rotation	000~255		
Shape Selection	000~255		
Shape Speed	000~255		

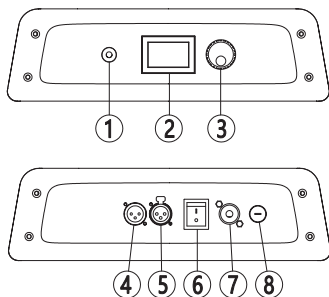
	Shape Fade	000~255	
	Shape R	000~255	
	Shape G	000~255	
	Shape B	000~255	
	Shape W	000~255	
	Shape Dimmer	000~255	
	Background Dimmer	000~255	
	Shape Transition	000~255	
	Shape Offset	000~255	
	Shape Strobe	000~255	
	Background Strobe	000~255	
	Background Select	000~255	
	Exit		
CALIBRATION	Pan	0000~FFF0	Zero setting and calibrating deviations of every channel
	Tilt	0000~FFF0	
	Zoom	0000~FFF0	
	Lenses Rot.	0000~FFF0	
	LED 01	0000~FFF0	
	LED 02	0000~FFF0	
	LED 03	0000~FFF0	
	LED 04	0000~FFF0	
	LED 05	0000~FFF0	
	LED 06	0000~FFF0	
	LED 07	0000~FFF0	
	LED 08	0000~FFF0	
	LED 09	0000~FFF0	
	LED 10	0000~FFF0	
	LED 11	0000~FFF0	
	LED 12	0000~FFF0	
	LED 13	0000~FFF0	
	LED 14	0000~FFF0	
	LED 15	0000~FFF0	
	LED 16	0000~FFF0	
	LED 17	0000~FFF0	
	LED 18	0000~FFF0	
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	LED 22	0000~FFF0	
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	LED 24	0000~FFF0	
	LED 25	0000~FFF0	
	LED 26	0000~FFF0	
	LED 27	0000~FFF0	
	LED 28	0000~FFF0	
	LED 29	0000~FFF0	
	LED 30	0000~FFF0	
	LED 31	0000~FFF0	
	LED 32	0000~FFF0	
	LED 33	0000~FFF0	
	LED 34	0000~FFF0	
LED 35	0000~FFF0		
LED 36	0000~FFF0		
LED 37	0000~FFF0		
	Exit		

DMX VALUES	Channel 01~48	000~255	Display every DMX channel
	Exit		Return to superior menu
PASSWORD	Code01~16	000~255	Modify restriction of using times and calibration code needed when reloading default setup.
	Exit		
PERSONALITY	Display	Keep	Shut down backlight if no operation within 60 seconds
		60s	Backlight remains
	Display Intensity	10%~100%	Adjust display brightness
	Display Turned	ON	Display invert
		OFF	Normal display
	Language	Chinese	Menu in Chinese
		English	Menu in English
	Receive Mode	DMX	DMX512 transmission mode
		WDMX	Wireless transmission mode
		ENET	Ethernet transmission mode
		ADMX	Ethernet to DMX transmission mode
		SACN	
	Universe	000~255	Art-net ethernet node setup
	IP Address A	002~010	Execute Art-Net, fixture default beginning IP address assigned as 2.*.*
	IP Address B	000~255	Spare
	IP Address C	000~255	Spare
	IP Address D	000~255	Spare
	Load Config 1	Load	Reload previous setup one
		Save	Save present setup as setup one
	Load Config 2	Load	Reload previous setup two
		Save	Save present setup as setup two
	Load Factory Settings	Load	Reload default setup
		Save	Save as default setup
	Firmware Upd	OFF	
	WDMX Unlink	OFF	
	Fixture Type	F4037	Modify to suit a different type of fixture.
	Sleep Mode	ON	Sleep mode enabled
OFF		Sleep mode disabled	
Error prompt	ON	Error prompt available unavailable	
	OFF	Error prompt available	
Error code	0000~255	Display error code	
SACN	0000~255		
Exit			
INFORMATION	Fixture Hours	0000~9999	Power on time inquiry (unit: hour)
	Lamp Hours	0000~9999	Lamp on time inquiry (unit: hour)
	Dimming Hours	0000~9999	Dimming time inquiry (unit: hour)
	CPU Board Temp	00°C~99°C	Main PCB temperature inquiry
	CPU Board Version	Vx.xx	Main PCB version inquiry
	Manufacturer ID	0000-7FFF	RDM user ID (resettable)
	Device ID	00000000-FFFFFFF	RDM user ID
	Lamp Head Fan	0000~9999	Fan speed display (unit: RPM)
	Base Power Fan	0000~9999	
	0: PT Board Temp	00°C~99°C	0: pan/tilt PCB temperature inquiry
	0: PT Board Version	Vx.xx	0: pan/tilt PCB version inquiry
	1:LED Board Temp	00°C~99°C	6: LED board temperature inquiry
	1:LED Board Version	Vx.xx	6: LED board version inquiry
	Exit		

SENSOR MONITOR	Pan	Norm Error	Normal Function Corresponding sensor works normally Corresponding sensor works abnormally
	Tilt		
	Zoom		
	Lenses Rot.		
	Exit		
RESET ALL SYSTEMS		Exec	Reset the fixture to original settings
		Canc	Do not reset the fixture to original settings
EXIT			Quit menu and back to "main menu"

# 5/ Control panel


## 5.1 Control panel introduction



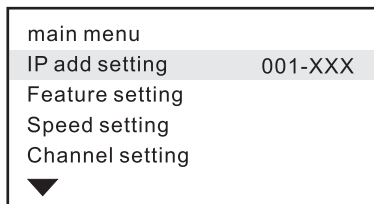
- 1.Exit button
- 2.LCD display
- 3.Function button(Enter)
- 4.DMX IN
- 5.DMX OUT
- 6.Mains switch
- 7.Power in
- 8.Fuse

Figure(5.1-1)

## 5.2 Control panel Operation introduction

1. Mains switch: It's power off when turning the mains switch to "O". And it's power on when turning the mains switch to "I".
2. Press  button to trigger the built-in battery(note:optional) for startup fixture and enter the main menu interface for menu operation.

Main Menu Interface



**Note:** Indicate the selected menu items in the menu interface. If you are sure to enter this menu, please press the runner to confirm. That is to say, enter the next menu and continue editing. If this menu option is not set in the entry address, the menu can be paged by rotating the runner.

Fig.5.2-1

3. Jog wheel:
  - Press down the jog wheel: enter an item/save the present value. Holds for a few more second, it will return to upper menu.
  - Clockwise rotate: scroll down the page/increase the parameter value.
  - Counter clockwise rotate: scroll up the page/decrease the parameter value.
  - Display inverse function: with connection to the supply, press down the "Exit button" and "Jog Wheel" almost at the same time, the screen display will invert by 180°.
  - Press the jog wheel for 2s: return to previous menu.
  - Long Press the jog wheel: return to the main menu.
  - If there no operation in 2minutes in the menu, which means to return to the original menu.
4. LED signal indication
  - DMX512 signal input: The LED light is on and the dot appears on the right side of the address code.

# 6/ Routine maintenance

This fixture requires routine cleaning. The service life depends on the operating environment heavily. Please kindly contact GUANGZHOU CHAIYI LIGHT CO., LTD for more maintenance information not included in this user's manual.

**Notice:** Excessive dust, smoke fluid and particulate buildup will degrade performance and cause over heating or damage to the fixture that is not covered by the warranty.

**Warning:** Please unplug the fixture before you open any covers.

## Cleaning

Optical components should be cleaned carefully and lightly. Coating face is easily damaged, do not use harmful solvent so as to avoid damage to plastic parts or coating parts.

### Cleaning optical components

1. Switch off the fixture and keep it cool completely, then open the cover.
2. Clean the floats by dust collector or compressed.
3. Use cotton paper without smell or cotton cloth soaked with the water, distilled water to wipe the granular thing, don't wipe the surface, float things should be blown away by the pressure gas.
4. Use the cotton cloth or cotton paper without smell soaked with isopropyl alcohol to remove the smoke and other residues. 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.

### Cleaning fan and air vents

Remove dust from the fans and air vents with a soft brush, cotton paper, vacuum, or compressed air.

# 7/ Safety information

The following symbols are used to identify important safety information on the product and in this manual:



**DANGER!**  
Safety hazard.  
Risk of severe injury or death.



**DANGER!**  
Refer to manual before installing, powering or servicing.



**DANGER!**  
Hazardous voltage. Risk of severe or lethal electric shock.



**Warning!**  
Fire hazard.



**Warning!**  
Burn hazard. Hot surface. Do not touch.



**Warning!**  
Risk of eye injury. Safety glasses must be worn.



**Warning!**  
Do not stare at the bulb which is still on.



**Warning!**  
Risk of hand injury. Safety gloves must be worn.



Replace any cracked protective shield.



Minimum distance from lighted objects is 0.5m.



For indoor use only.



Do not direct lens to sun ray or strong light!



Do not actuate during operating.



Luminaires not suitable for direct mounting on normally flammable surfaces (suitable only for mounting on non-combustible surfaces)

$t_c \dots \text{°C}$

The surface's temperature is 70°C.

$t_a \dots \text{C}$

Rated maximum ambient temperature is 40°C.



## Protection against explosion

Protection screen must be replaced if they have become visible damaged to such an extent that their effectiveness is impaired.



## Protection against burning or fire

Keep flammable materials far away from the fixture. Minimum distance from the flammable materials is 0.5m.

# 8/ Product Connection

## 8.1 Included items

FINE 4037 PIXIE PLUS LED is packed with flight case. One single standard flight case carries two fixtures, Included items listed below (shown as table 8.1-1):

Accessories	QTY	UNIT
User manual	1	PCS
Warranty card	1	PCS
Female plug	1	PCS
Signal cable	1	PCS
Safety wire	1	PCS
Fuse	2	PCS

Table(8.1-1)

## 8.2 Power Connection

Power supply and fuses' type and rating:


Power	Fuse
100-240V~	15A 6X30

Table(8.2-1)

**Notice:** Type Y attachment for power supply connection. Method of attachment of the cable or cord such that any replacement can only be made by the manufacturer, his service agent or similarly qualified person.

The person must have the relevant qualification to connect the power supply. The AC power voltage shall be suitable to the lamp provided with over-loading or creepage protection.

1. Connecting the equipment to the power supply, do not connect to silicon box system, or else, it will destroy the equipment.  
The fixture is provided with standard 3-pin socket. Please according to table 8.2-2 connect to power supply, Yellow/green line must be earthed. If you still have any question to the installation, please consult with the experienced electrician.
2. When power is supplied, put the base switch to the position "I".

Color	Wire	Mark
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	

Table(8.2-2)

## 8.3 Signal Connection

Data linkage for the fixture may be provided by DMX512 connection and wireless linkage.

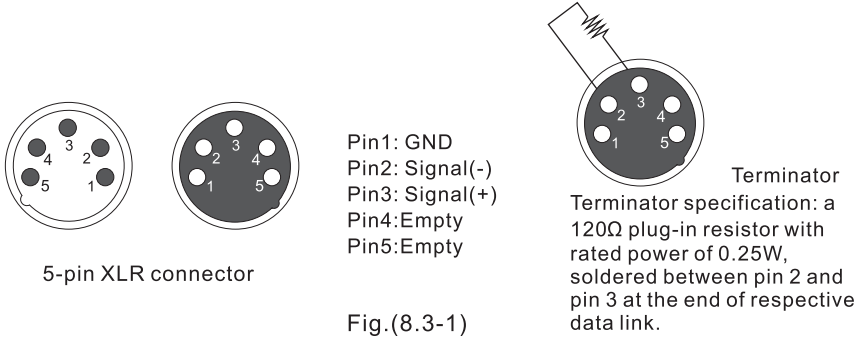


## DMX connection

**Note:** The signal cable was type X connection.

Type X connection—if the external flexible cable or cord of this fixture is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or his service agent.

3-pin or 5-pin XLR connectors are provided for fixture DMX input and output. Pin 1 is for earthing, pin 2 is for minus signals, and pin 3 is for plus signals. T



Connect the fixtures with Max.3 pieces. Make sure to insert the “signal in” terminal in the last connecting fixture. shown in Fig.8.3-2.

**Note:** Make sure the fixture vertically upwards when it is placed horizontally, the safe distance between two adjacent fixtures must be  $\geq 500\text{mm}$ .

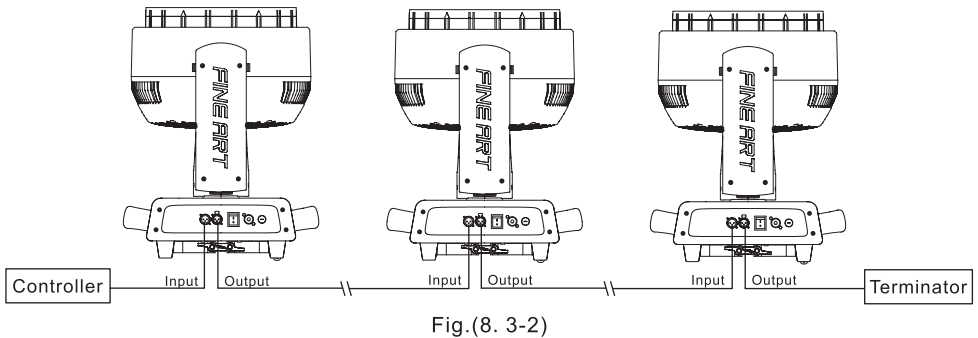


Fig.(8. 3-2)

If long-distance data transfer occurs, a DMX512 signal amplifier is necessary. The added amplifier is inserted between the lighting controller and the first fixture on the basis of a normal data link.



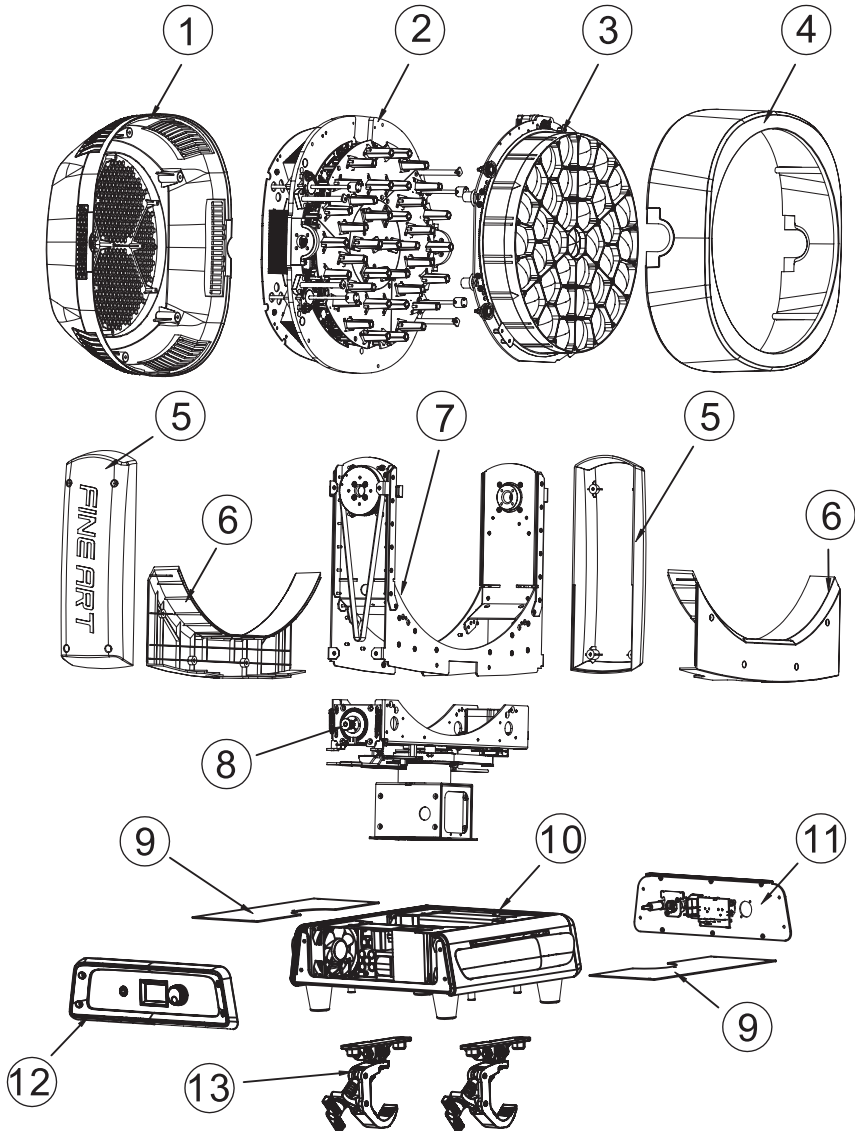
### Notice!

1. No more than one signal input or output can occur in one fixture.
2. Don't split a data link via output ports on the fixture, use a DMX512 signal amplifier instead, if necessary.
3. Use only shielded-pair cables, and standard microphone cable is not reliable for long-distance data transfer.

# 9/ Parts Code

Number	Item	Specification	Ordering index
1	Switch Power	1500W	330001200126
2	LED light board 1	-	330712100103
3	LED light board 2	-	330712100104
4	LCD display	2.0 inch	330397100109
5	XY axis drive board	-	330712100105
6	Fan patch board	-	330712100093
7	Signal board 1	-	330712100101
8	Signal board 2	-	330712100102
9	Communication module	-	330397100110
10	Y axis hall	-	330711100046
11	X axis hall	-	330397200008
12	XY axis Encoder	-	330397200005
13	Rotation hall	-	330712100023
14	Fuse	Φ6.35X31.8 15A	309905000012
15	XY axis moto	-	140103000041
16	Focus moto	-	140102000262
17	X axis synchronous belt	HTD-510-3M	350201000565
18	Y axis synchronous belt	HTD-579-3M	350201000566
19	Lens 1	19 mm	200712000019
20	Lens 2	19 mm	200712000009
21	Lens 3	19 mm	200712000008
22	Lens 4	19 mm	200712000011
23	Lens 5	19 mm	200712000007
24	Lens 6	19 mm	200712000010
25	Lens 7	19 mm	200712000006
26	Light guide column assembly	-	200712000063
27	Base cooling fan	YY8025H12B	150101000112
28	Light cooling fan	YY12025M12B	150101000079
29	Lithium battery	18650 3.7V 3350mAh	130702000020

# Attached 1: Fixture exploded drawing



- 1. Lower head cover
- 2. Head module
- 3. Upper head module
- 4. Head cover
- 5. Arm cover

- 6. Pan cover
- 7. Arm module
- 8. Pan module
- 9. Base cover
- 10. Base module

- 11. Power panel module
- 12. Display module
- 13. Clamp