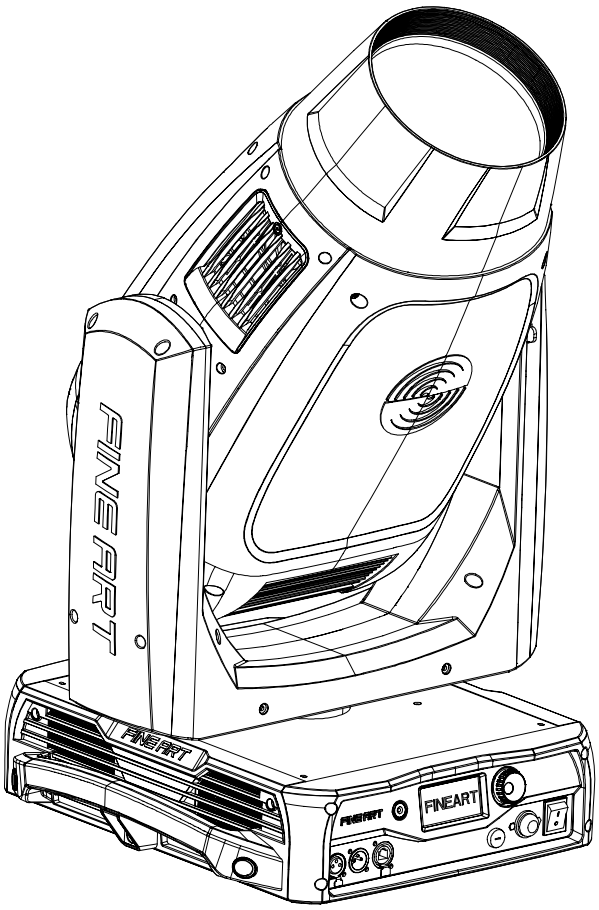
FINE ART

FINE 1800 PERF

USER MANUAL



GUANGZHOU CHAIYI LIGHT CO.,LTD.

★Read the user manual before installing or operating this product.★

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Attached 1: FINE 1800 PERF exploded drawing
Attached 2: Light output and beam angle range
Attached 3: FINE 1800 PERF wiring diagram

Declaration

This product has passed the final check for both functionalities and package when delivered from the factory. All users should observe the instructions and pay attentions to the warnings covered by this manual. Unreasonable damages resulting from unintended operations or not heeding instructions covered by this manual will void the warranty. Specifications in this manual intend for reference only, the fixture delivered takes the priority. Any future modification pertaining to content of this manual, there will be no particular notifications. CAIYI reserves all copyrights. To obtain the latest information about software update, hardware and other files, please visit CAIYI online website.

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

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

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

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

Warning!
Fire hazard.

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

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

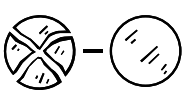
Warning!
Risk of hand injury.
Safety gloves must be worn.

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

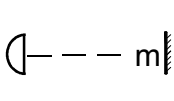
For indoor use only

Do not direct lens to sun ray or strong light!

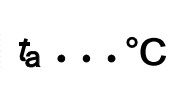
Do not actuate during operation



Replace any cracked protective shield



Minimum distance from lighted objects (metres)



Rated maximum ambient temperature

P/N:390395000147 Edition:A

Safety information

WARNING!
Read the safety precautions in this section before installing, powering, operating or servicing this product.

After receiving the fixture, please unpack and check if there is any damage due to transportation. If any obvious damage or flaw is found, do not put it into use and contact the distributor or manufacturer as soon as possible.

This fixture is intended for professional use only.
When operating the fixture, attentions should be drawn to fire/electrical shock hazards, ultraviolet radiation, lamp shattering or lethal injuries caused by fall.

Read this User Mannual before mounting and ennergizing the fixture.
Observe the safety guideline and notice the warnings both in this User Mannual and on the fixture.
Yet any safety concerns not covered hereby, contact the distributor or service hot-line.

t_a=40℃

Protection against over heat

The fixture is intended for indoor application, its protection rating is IP20.
The fixture should be kept dry and avoid working in presence of moisture, over-heat or heavy smokes.
The natural working temperature should be lower than 40 degrees. If the ambient temperature exceeds 40 degrees, please stop operating the unit immediately.

Protection against explosion

Shields, lenses and ultraviolet screens must be replaced if they have become visible damaged to such an extent that their effectiveness is impaired. Replace the lamp immediately if it becomes visually deformed, damaged or in any way defected.

Protection against injury due to falls

Do not lift or carry the fixture alone.
To inspect that the structure and the truss hooks are in good condition and can bear about 10 times the weight of the fixture.
Ensure the cover and all riggings are securely fastened, safety wire is necessary to use as a secondary attachment.
Block access below the working area and work from a stable platform while installing, servicing or moving the fixture.

Protection against ultraviolet radiation

Prolonged exposure to an unshielded discharged lamp can cause eye and skin burns. Do not stare directly into the light output. Never look at an exposed lamp while it is lit.
Never operate the fixture with missing or damaged lenses and/or covers. Change the damaged head lens, shields or covers immediately.

Protection against electrical shock

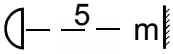
All electrical connections must be performed by a qualified person with technical certificate.
Make sure that the mains power supply you use is up to local construction and electronic code regulation, the over-load protection reliable earthing is essential.
Each fixture must be grounded correctly, and be installed according to related regulation.
Disconnect the fixture from AC power before removing or installing any cover or part, including the lamp and fuses, and when not in use.
Do not expose the fixture to rain or moisture.

Protection against burning or fire

Please do not install the fixture onto combustible surface.
Do not attempt to bypass the thermostat switch or fuse.
Replace defective fuses with specified ratings only.

Keep flammable materials far away from the fixture. Minimum distance from the flammable materials is 0.5m.
Under the steady working state, the max temperature of exterior surface is 130℃, Please don't touch the moving head during movement.

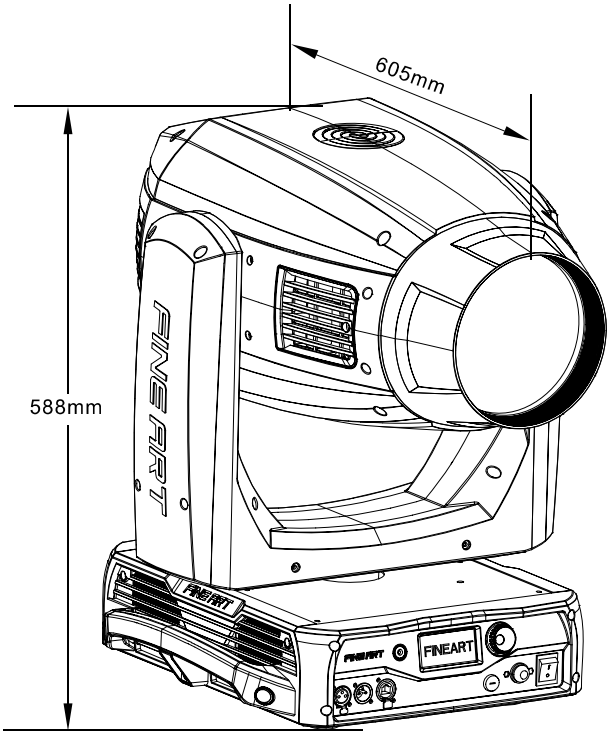
The minimum distance between1800 PERF and the lighted objects is 4 m.
Ensure a minimum clearance of 0.1m around the cooling fans and ventilations.

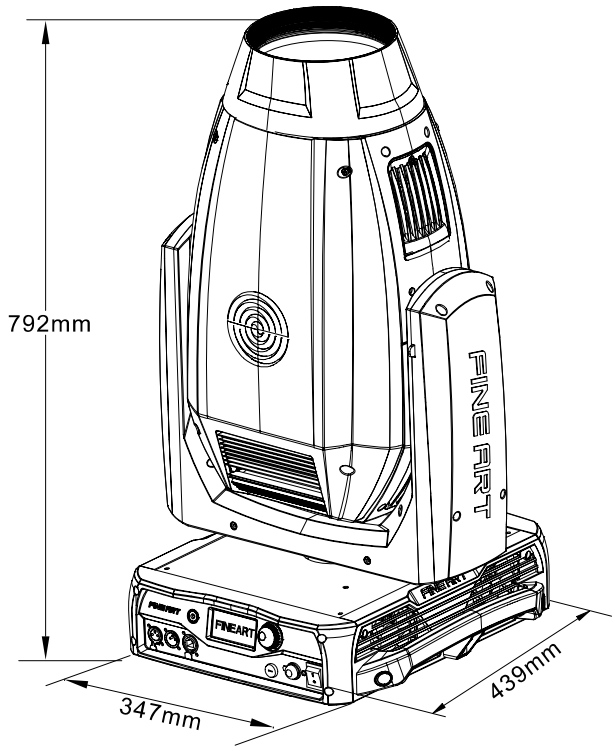


Do not place any filter or other object onto the optical lens.
Allow the fixture to cool for at least 15 minutes before transit.
Do not revise the fixture or install any parts not from Guangzhou CHAI YI LIGHT Co.Ltd.

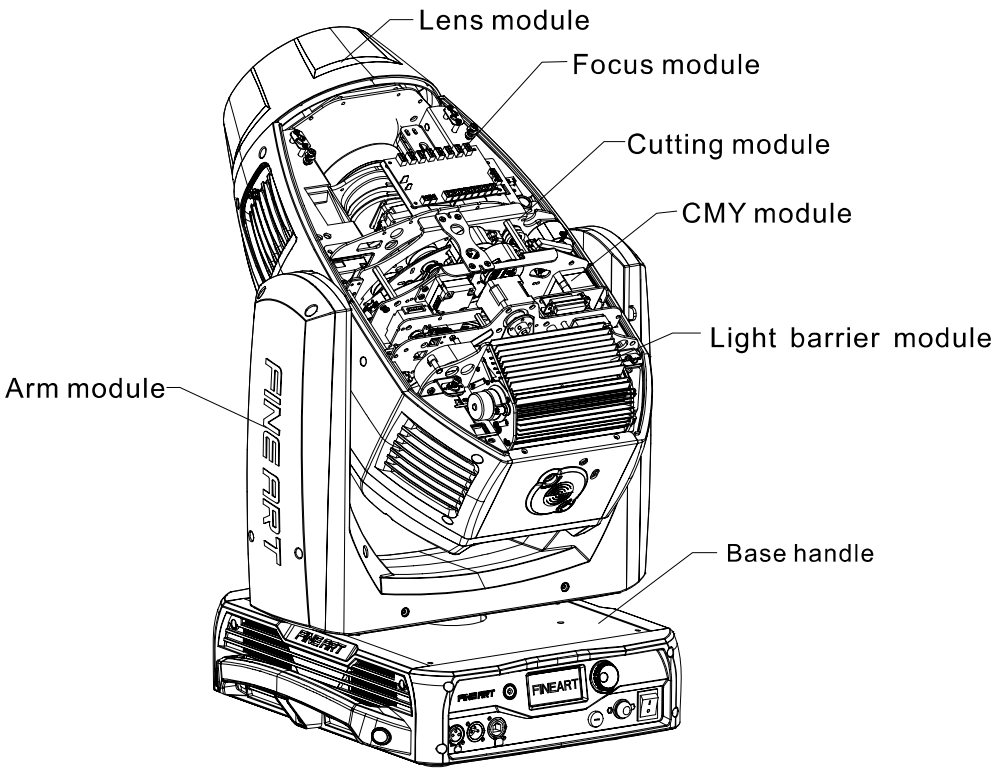
Product introduction

Fixture profile dimensions





Fixture introduction



Package & delivery

Included items

FINE 1800 PERF is packed with single flight case,Included items listed below (shown as table 3.1-1):

Accessories	QTY	UNIT
User manual	1	PCS
Warranty card	1	PCS
Suspension fasteners	2	SET
Signal cable	1	PCS
Safety wire	1	PCS
Fuse	2	PCS

Table 3.1-1

Transportation lock

For the ease of transit, the fixture is provided with the transportation lock with five locking positions. As shown in Fig.3.2-1, the fixture is lock at middle locking position where in the beam axis is perpendicular to the yoke.

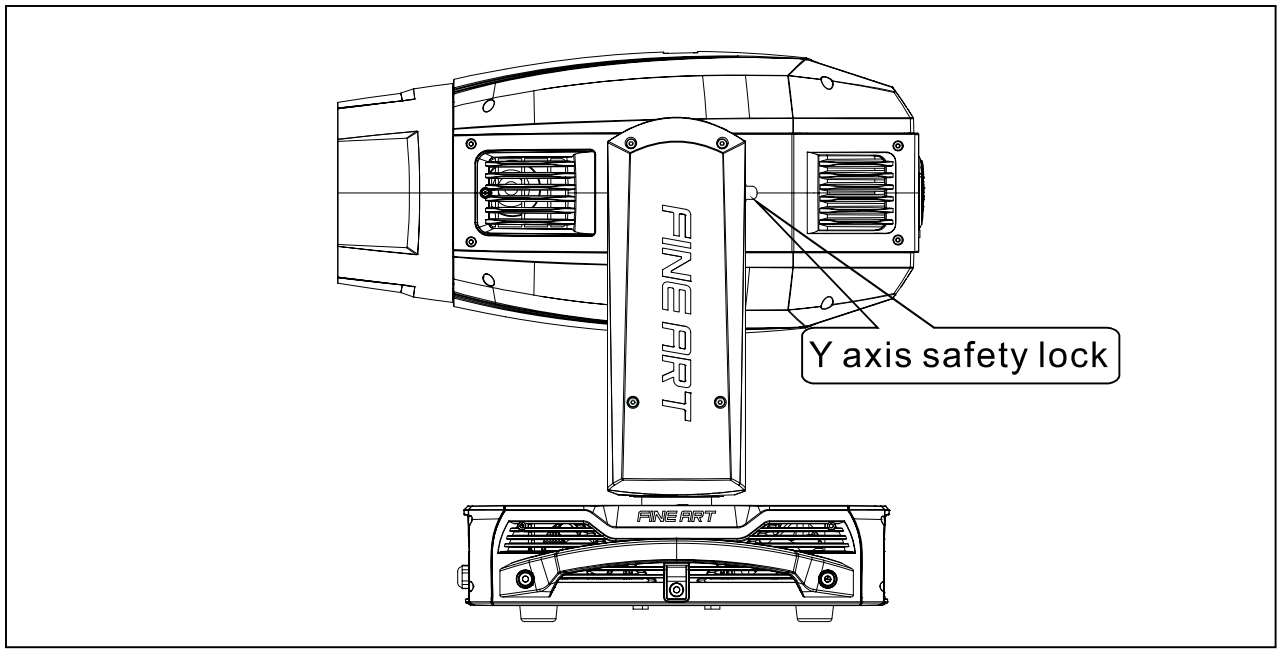


Fig.3.2-1 transportation lock

Fixture package

1. Before packaging, please disconnect the fixture from power supply and wait at least 15 minutes for cooling.
2. Remove dust buildup on the exterior surface, tight the transportation lock.
3. Pack the fixture with an inner bag, grasp both handles on the base and carefully upside down the fixture, and gently place it onto the intended mounting recesses within the road-case.

4. Pack the included accessories into the road-case.
5. Road-case stacking do not exceed 2 layers, upside down the road-case is not allowed.

Unpacking

Notice: inspect the units upon reception. If there is any evident damage due to transit, do not use the units and notify FINEART local distributor or contact Guangzhou CHAIYI LIGHT Co.,ltd directly.

1. Open the road-case and unpack the inner bag.
2. Grasp the handles on the base and lift the fixture out from the road-case. Alternatively, first open the upper casing of the road-case. Apply 2 sets of suspension clamps to the bottom of the base. Then lower the lifter to such a level where it's easier to clamp the fixture and the lifter together via a "G" hook. Secure the locking screw in the "G" hook. Finally, lift the fixture out of the flight case.
3. Release the transportation lock before power up the fixture.

Installation

User must be termly check the fixture and its install materials, if you are non-qualified to check that, please contact the professional person. Wrong installation will result in fatal hazard.

The fixture working ambient temperature are between 0℃-40℃, When ambient temperature over the range, don't operate the fixture. When the fixture are in installtion, teardown, remove or servicing, don't stand in under the fixture. Operator must be insure the fixture are safely connected. The input power supply must match the specific type demanded by the fixture. Make sure the installation check annually by professional person.

Installing riggings

FINE 1800 PERF can be put on stage floor or fixed on any brace or truss.
Quick trigger locks can easily fix the fixture to mounting brackets shown as follows.

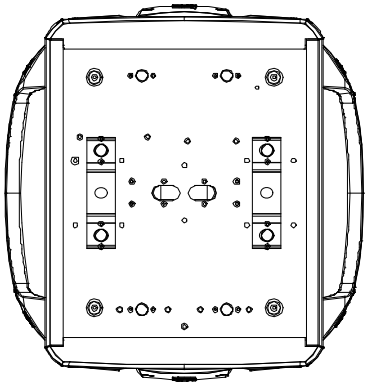


Fig.4.1-1 horizontal orientation

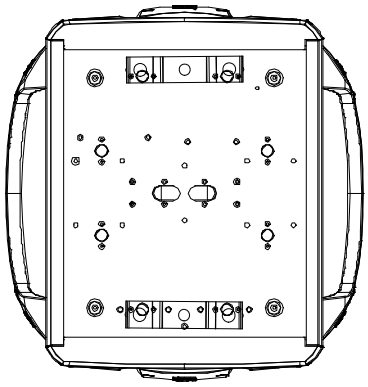


Fig.4.1-2 vertical orientation

Warning

The fixture must be fixed by a pair of 1/4 turn clamps. Clockwise rotate the lever by 90°, then the clamp is securely lock.

Equipment installation

1. To inspect the truss hook/rigging are in good condition and can bear about 10times the weight of the light fixture. Be sure the truss or pipe construction can bear 10 times the weight of all equipments including lights, truss hooks, cables and accessories.
2. Lock each clamp securely to a clamp bracket with a 12M bolt and lock nut.
3. Install a clamp point in the base, insert the fasteners into the base and turn the two levers a full 1/4 buckle clockwise to lock it completely, and install the second clamp in the same way.
4. If the truss can be lift automatic up and down, the light fixture can be lifted and hooked from flight case directly. When the lights equipments need to lift high, the working area below should have some barrier to ensure the installation works operated under safety condition. Finally suspend the fixture onto the truss and fasten clamps all and lift truss totally.
5. Connect a safety rope which can bear 10 times weight of the fixture, the attachment is designed to fit a clamp.
6. Check the transportation lock have been unlocked, Be sure there is no explosive or inflammable materials around the fixture in 0.5 meter around.

Warning

The safety wire should attached to the hole on the mounting plate. Do not tie the safety wire to the handles instead.

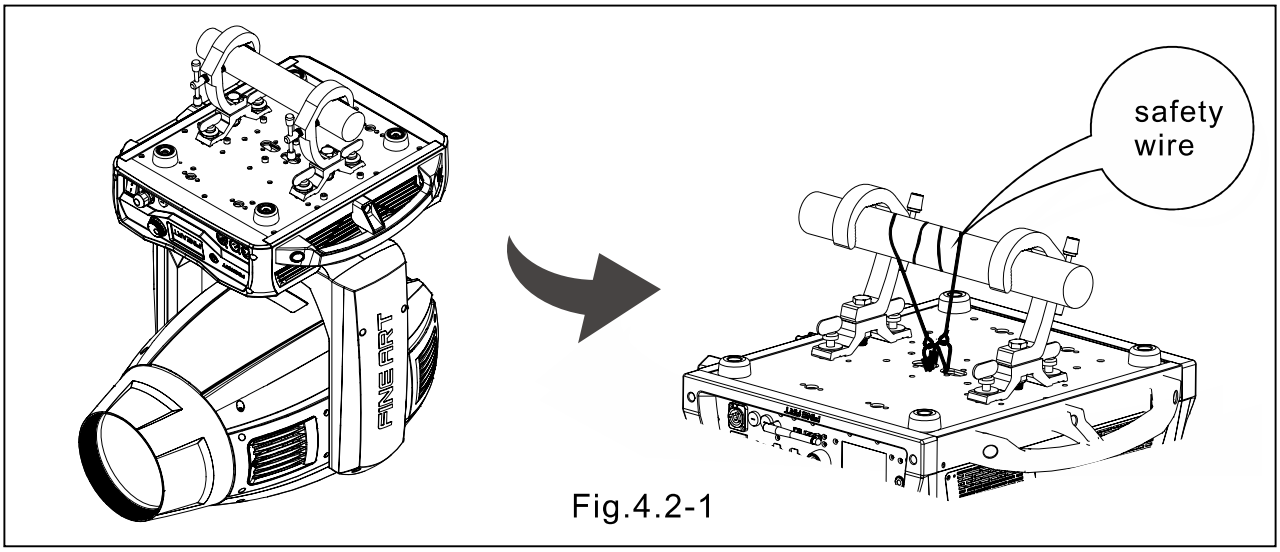


Fig.4.2-1

Warning

The fixtures must be placed upright, minimum spacing between each two fixtures in an array is 500mm, arrangement layout as shown in Fig.4.2-2.

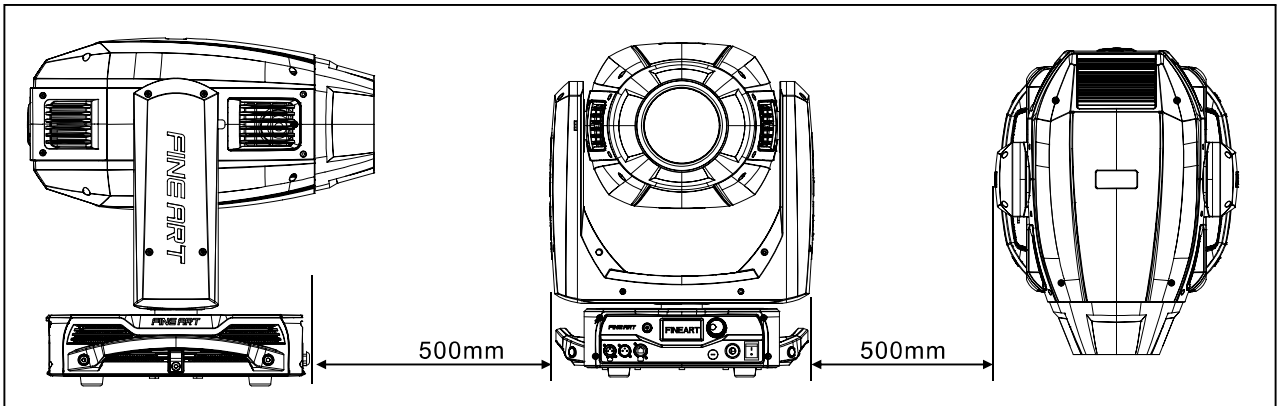


Fig.4.2-2

Tips for data link

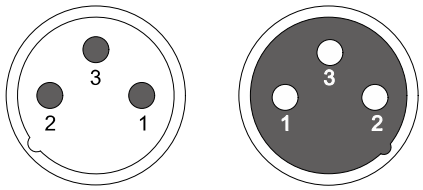
Data linkage for the fixture may be provided by DMX512 connection, Ethernet connection, Ethernet/DMX512 connection and wireless linkage.

DMX connection

Note: The signal cable was type X connection.

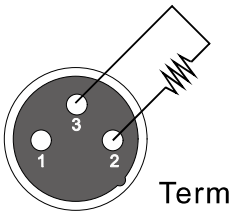
Type X connection—if the external flexible cable or cord of this fixture is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or his service agent.

3-pin XLR connecters 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. To prevent and absorb the reflection and interference of the signals, each data link must be ended by a respective terminator.



3-pin XLR connector

Pin1: GND
Pin2: Signal(-)
Pin3: Signal(+)



Terminator

Terminator specification: a 120Ω plug-in resistor with rated power of 0.25W, soldered between pin 2 and pin 3 at the end of respective data link.

Fig.4.3-1

Connect the 3-pin output of a lighting controller to the 3-pin input of a first fixture on the link, then connect the 3-pinn output of the said first fixture to the 3-pin input of a second fixture. Similarly, repeat the above connection step and end the data link with a plug-in terminator. Shown as Fig. 4.3-2 below.

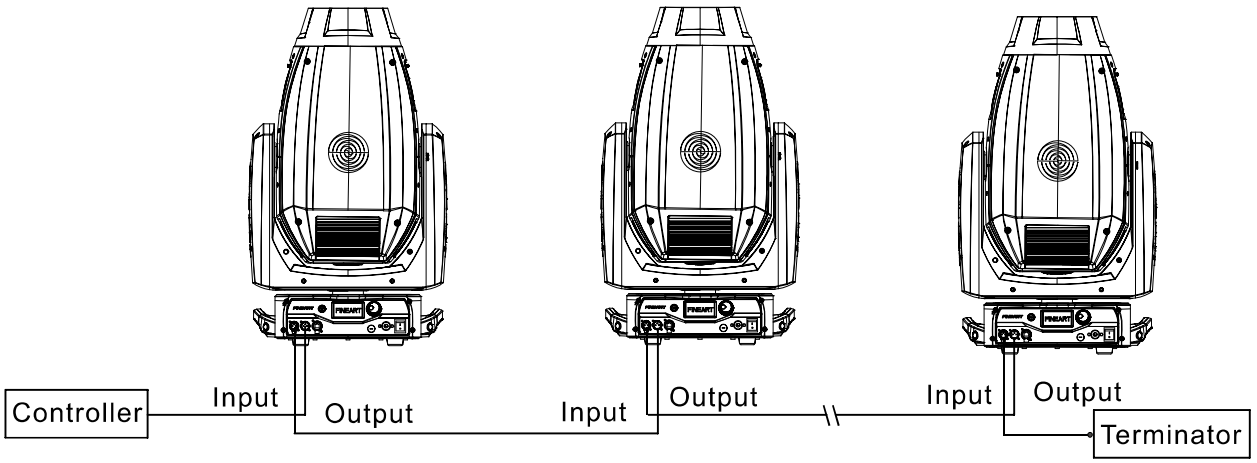


Fig.4.3-2

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.

Ethernet connection

1. The data communication is provided with ART-NET protocol, thus the controlling utilities used in the lighting controller or PC must support such protocol. Art-Net is a kind of 10 base T Ethernet protocol derived from TCP/IP. It allows transmission of enormous DMX512 data over normative network. The maximum transferring speed can reach 10Mb/s.
2. The fixture is provided with 8-pin RJ-45 connector for internet input. Please use class 5 cables and standard RJ-45 connector for internet connection, Shown as Fig.4.3-3.

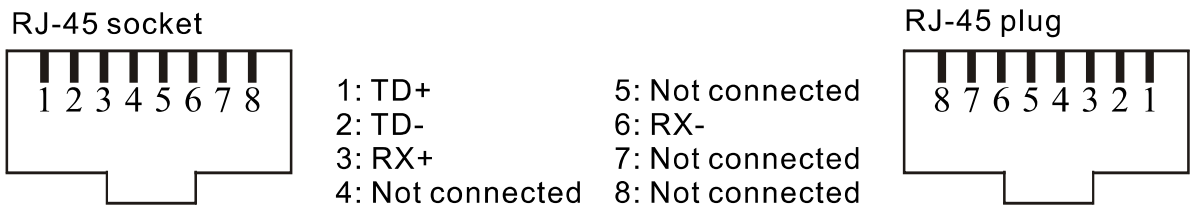


Fig.4.3-3

3. Ethernet setting
   (a) Ethernet receiving mode setup:
   "Personality"→"Receive Mode"→"ENET"
   (b) IP address setup:
   "Personality"→"IP Address A"→"002, 010"
   →"IP Address B"→"xxx (000-255)"
   →"IP Address C"→"xxx (000-255)"
   →"IP Address D"→"xxx (000-255)"
   Type A IP address is configured as default addresses.
   (c) Ethernet node (universe) setup:
   "Personality"→"Universe"→"xxx(000 - 255)"
4. Ethernet connection layout, shown as Fig.4.3-4.

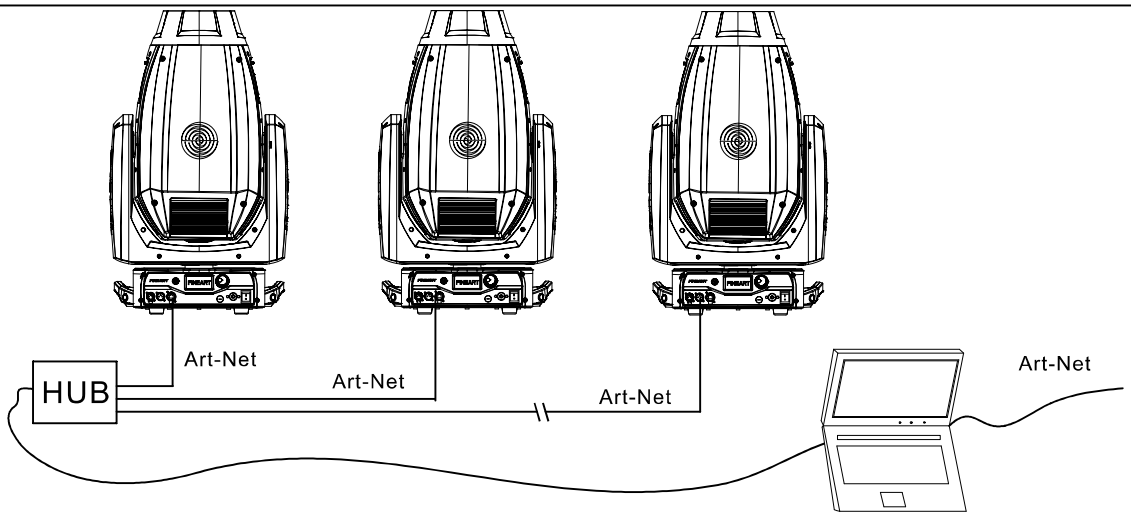
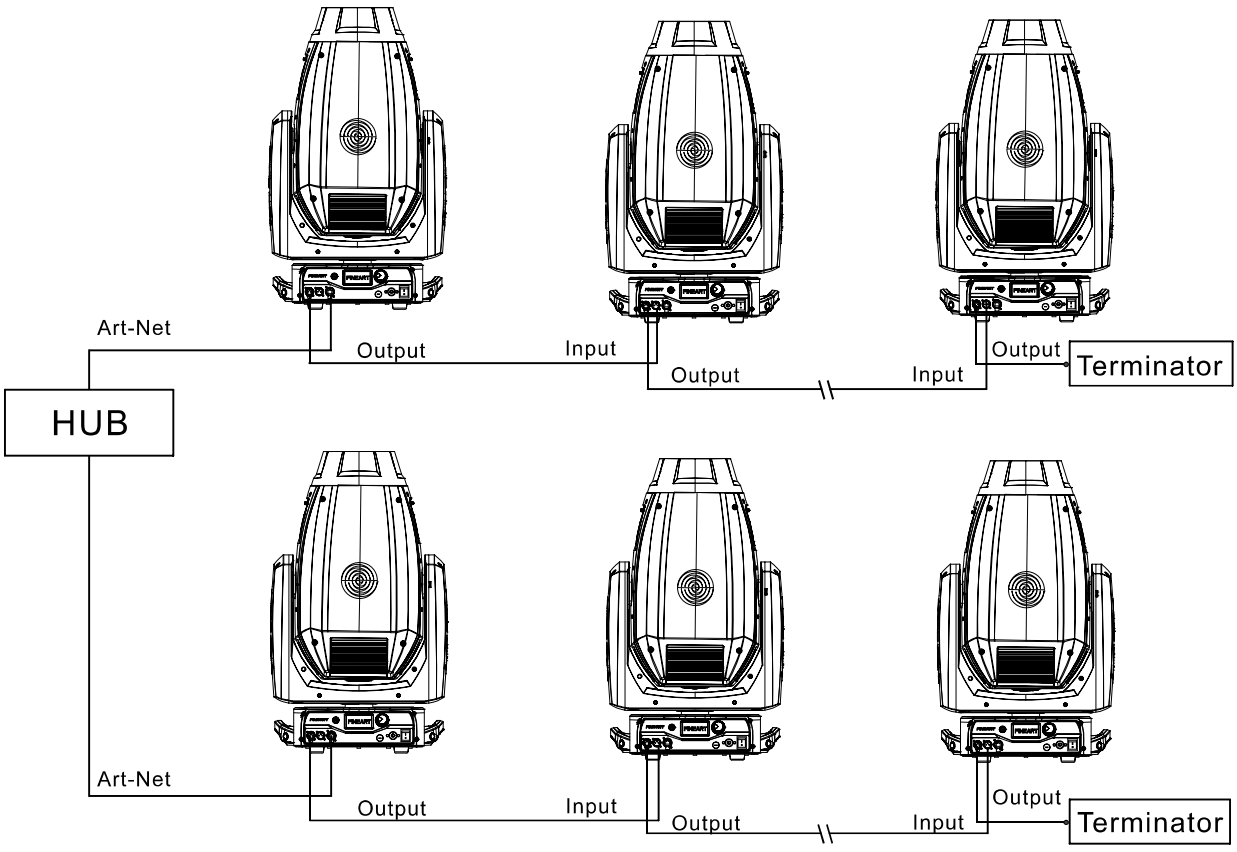


Fig.4.3-4

Notice: If a fixture directly connected to a PC without using a hub or a LAN, the wiring should be crossed connection.

Ethernet/DMX512 connection

The first fixture in the serial link, which is directly connected to the Ethernet network, should be such that the “fixture receiving mode” is set as “ENET→ DMX”. The rest fixtures in the link should be set as “DMX” receiving mode. Then connect the output of the said first fixture to the input of a next fixture. Similarly, repeat the above connection till the DMX data link is completed. Shown as Fig. 4.3-5.



Fig(4.3-5)

Notice: apply a plug-in terminator to end the DMX data link.

Wireless transmission (optional)

1. Customer might choose wireless edition fixture which supports wireless data transmission. Wireless signal control is pretty reliable within a 225m radius empty space, thus no need for physical connection for data transmission. All has to be done is to set up corresponding addresses.
2. 2.4GHz worldwide free frequency band available in wireless control. Such huge frequency band favors users with variable band options.
   (a) Wireless receiving mode setup:
   “Personality”→“Receive Mode”→“WDMX”
   (b) Press emitter button to search preset address within a fixture. When it’s done, remotely control a fixture through a controller, Shown as Fig.4.3-6.

Notice:

1. Emitter location: Distribute the antenna higher than any barrier on floor as possible.
2. Antenna direction: Emitting antenna points to receiving antenna.

3. Antenna position: Keep away from EMI source as possible, such as WLAN antenna.

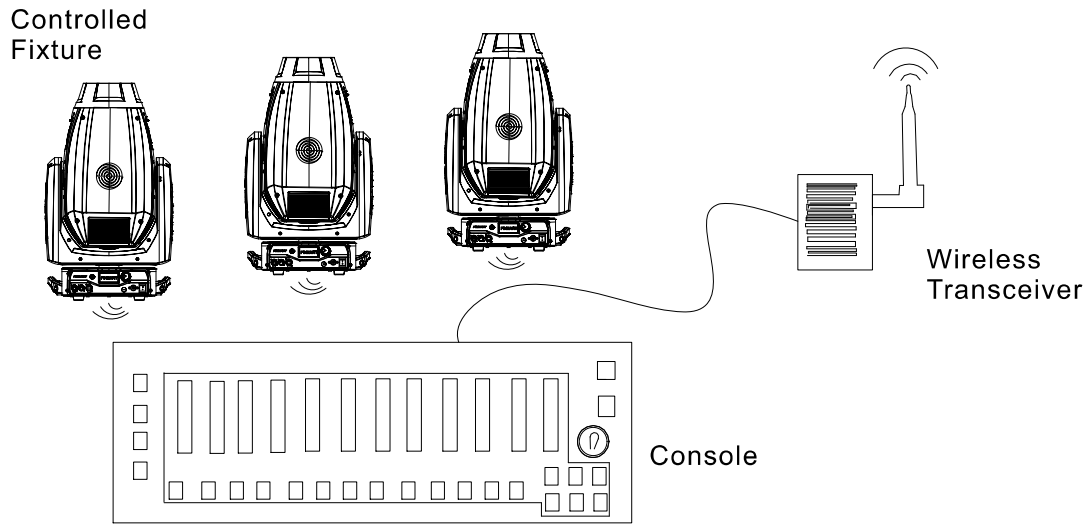


Fig.4.3-6

AC power supply

Fuses

Power supply and fuses' type and rating:

Power	Fuse
200-240V~	15A 6×30 (Main fuse)

Table 5.1-1

Power connection

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 5.2-1 connect to power supply, Yellow/green line must be earthed. If you still have any question to the installation, please consultant 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 5.2-1

Lamp

Lamp introduction

FINE 1800 PERF comes with OSRAM Lok-it 1800W/PS Brilliant single-ended lamp. CDI > 90%.The light blub heat dissipation has been tested strictly.If the customer uses other types of light bulbs,the risk brought by the light blub will be assumed by CAIYI.

Warning

1. Don't use other types of lamps instead of the intended ones, other-wise safety hazards or damages to the fixture may arise.
2. To reduce the risk of lamp shattering, replace a used lamp when it reaches its expected service life.
3. Do not use a defected or fissured lamp.

Lamp replacement

Warning

1. Do not touch the quartz bulb of the lamp by bare hand, always keep the lamp clean and free of oil, clean the lamp by alcohol with a dry cloth, especially when you accidentaly touch the bulb.
2. Slide in or withdraw lamp slightly and carefully when installing or removing the lamp. Never let the lamp touch the reflector and hard-parts around to avoid any damage to lamp.

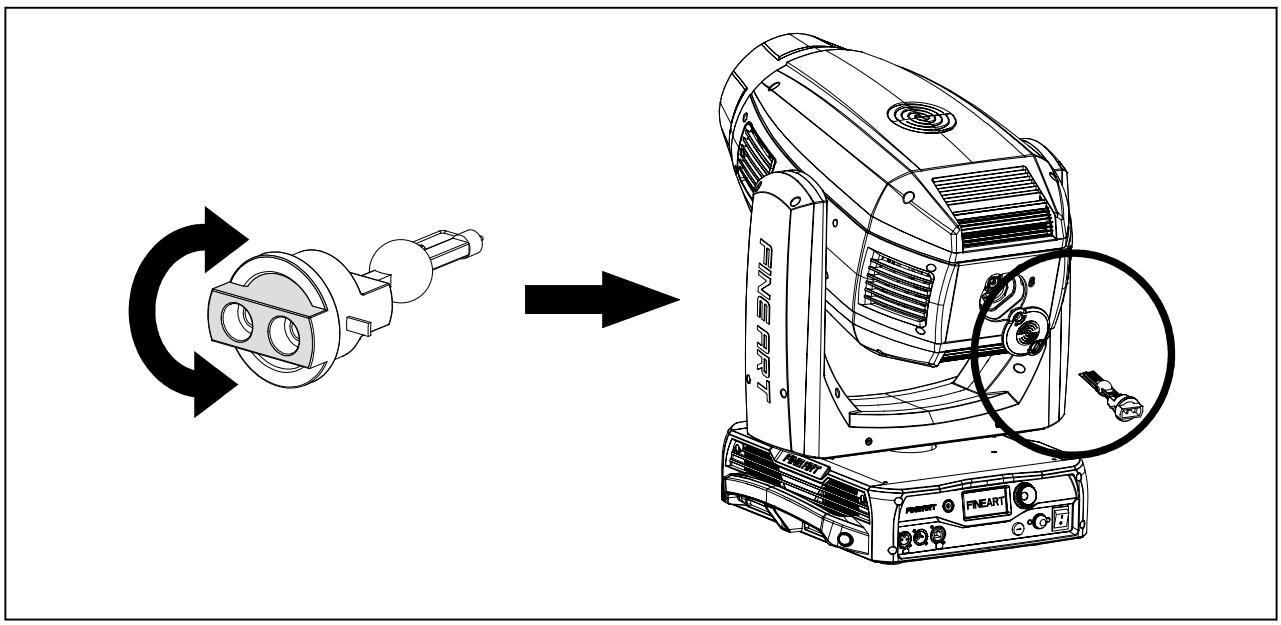
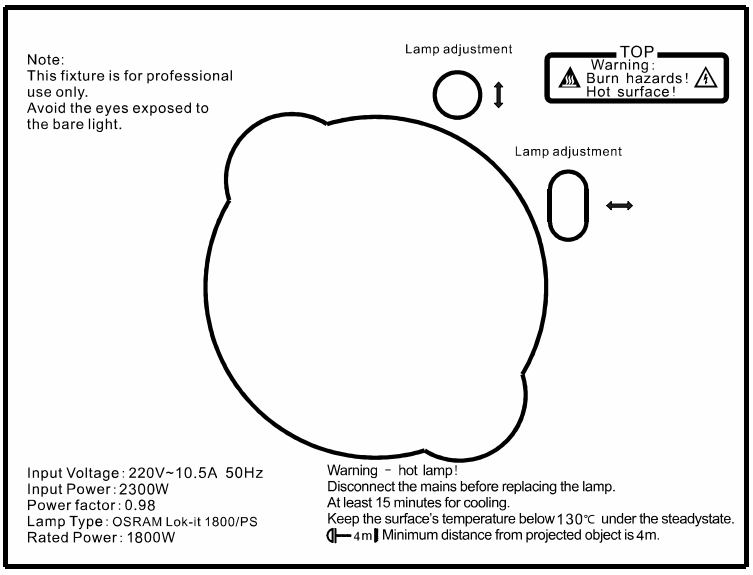


Fig.6.2-1

1. Cut off the power and cool down the fixture completely. Lock the transportation lock wherein the optical axis is horizontally oriented.
2. Open the lamp-access casing with a screwdriver, disconnect supply connection to the lamp base contacts. Press down the springy retainer by one hand and pull out the integrated lamp by the other.
3. When inserting a new lamp, press down the springy retainer against, then carefully insert the lamp inside.
4. The lamp must be inserted in place. Make sure the supply connection to the lamp base contacts are adequately wired. Then fasten the lamp-access casing and screw it up, shown as Fig.6.2-1.

Lamp adjustment

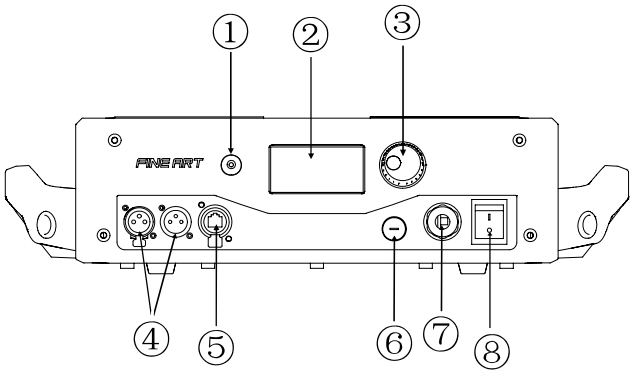
1. Turn on the power and wait for reset. Use the onboard control panel or a standalone lighting controller to project a beam on a non-inflammable surface.
2. 1. Use the (inner)Six angle screwdriver to adjust the screws behind the lamp. B screw can adjust the left-right distance, and the A screw can adjust the up-down distance. The C screw can adjust the front-back distance of the lamp. Please see the following picture.



Control panel

Control panel introduction

Shown in Fig.7.1-1:



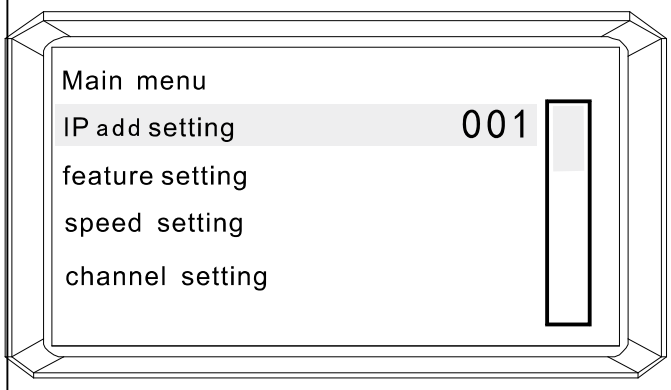
1.Exit
2. LCD touch panel
3. Jog wheel (Enter button)
4. DMX terminal
5. Ethernet terminal
6. Fuse
7. Power terminal
8. Power swith

Fig.7.1-1

Control panel operational instruction

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. Exit button: quit modification or return to upper menu.
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.
   Counterclockwise rotate: scroll up the page/decrease the parameter value.
4. Menu access: Menu editing is accessible even in the case of supply disconnection, wherein press down and hold both "Exit button" and "jog wheel" till the backup battery is activated, then the main menu will display. Details refer to Fig.7.2-1.
5. 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°.

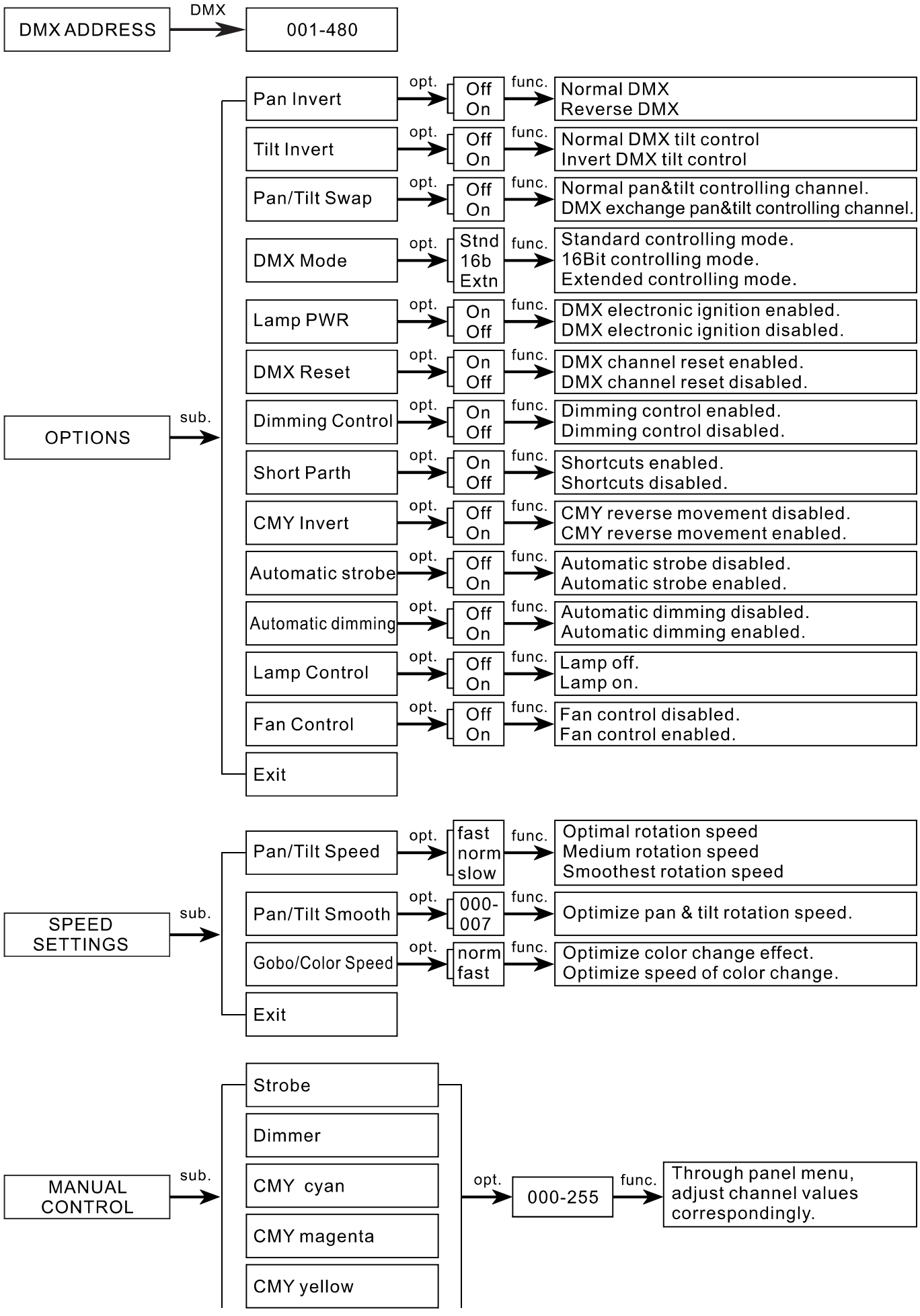
Main Menu Interface

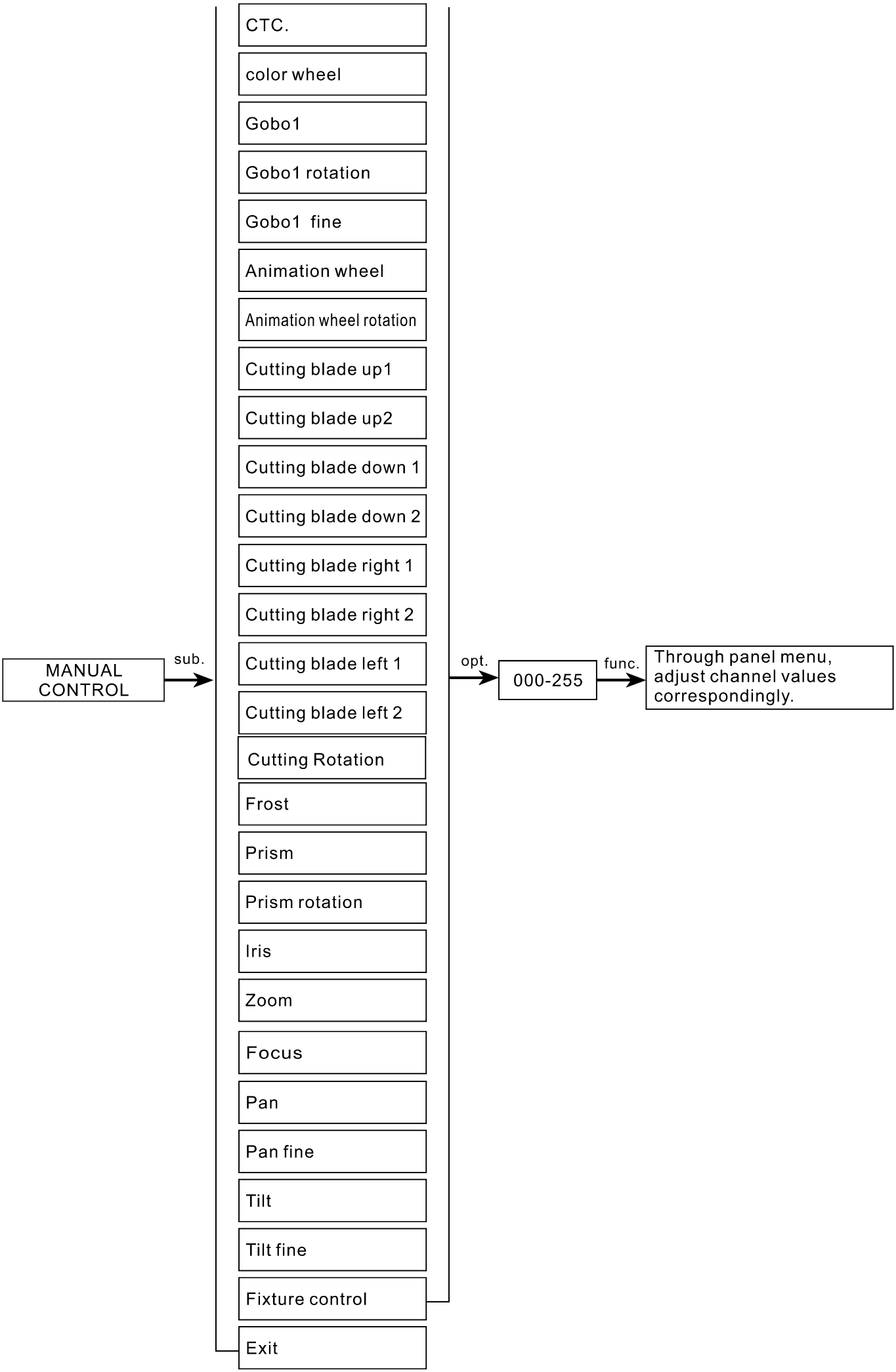


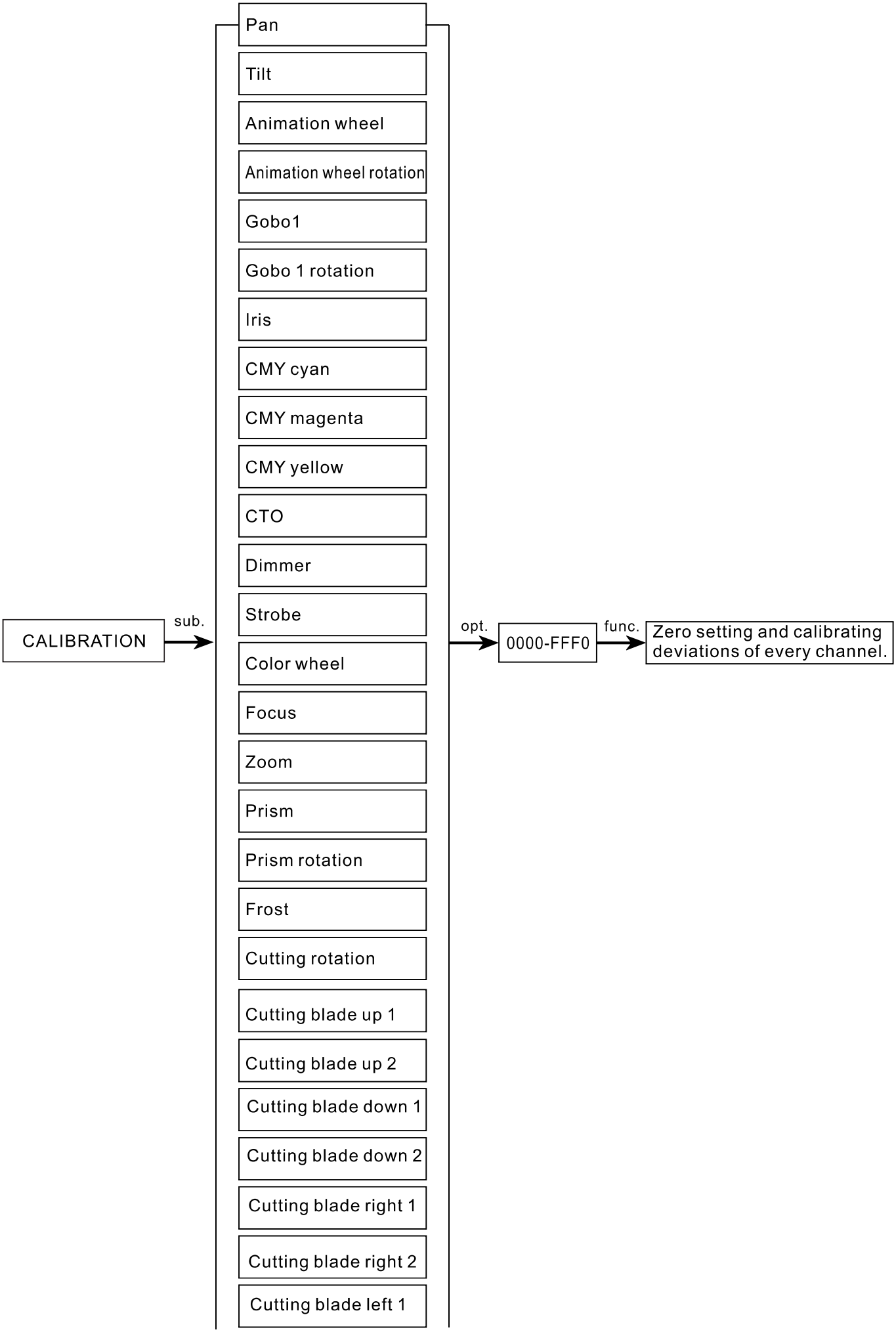
Notice: In the menu page, a grey bar indicates an active item, if you want to enter that item, click the "Jog Wheel" to confirm (alternatively, click the "Enter" icon on the display), then a corresponding submenu appears and allows for further editing. If the present active item is not desired, rotate the "Jog Wheel" to scroll over the items (alternatively, click the "Up"/"Down" icon on the display to scroll over the items).

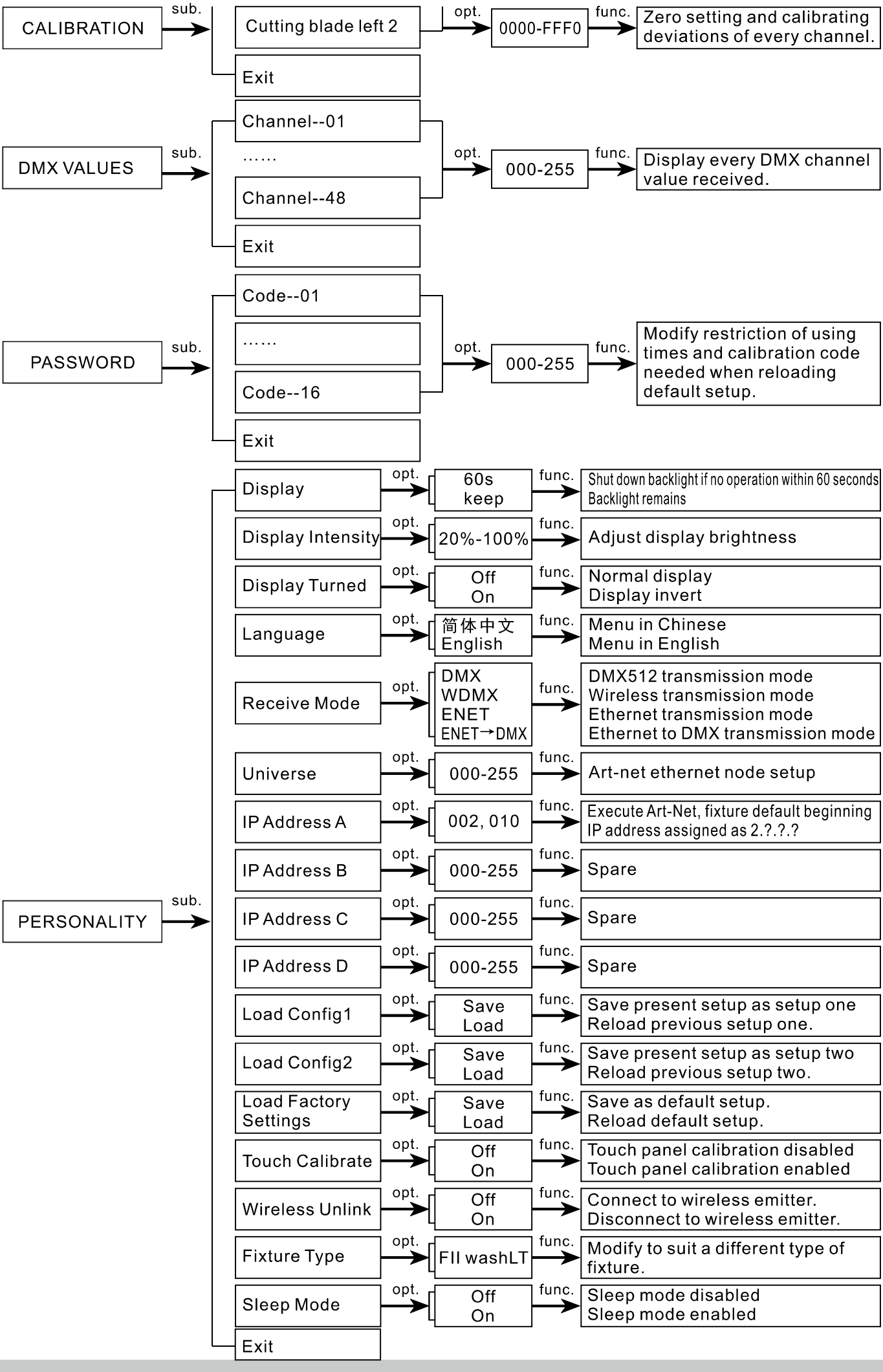
Fig.7.2-1

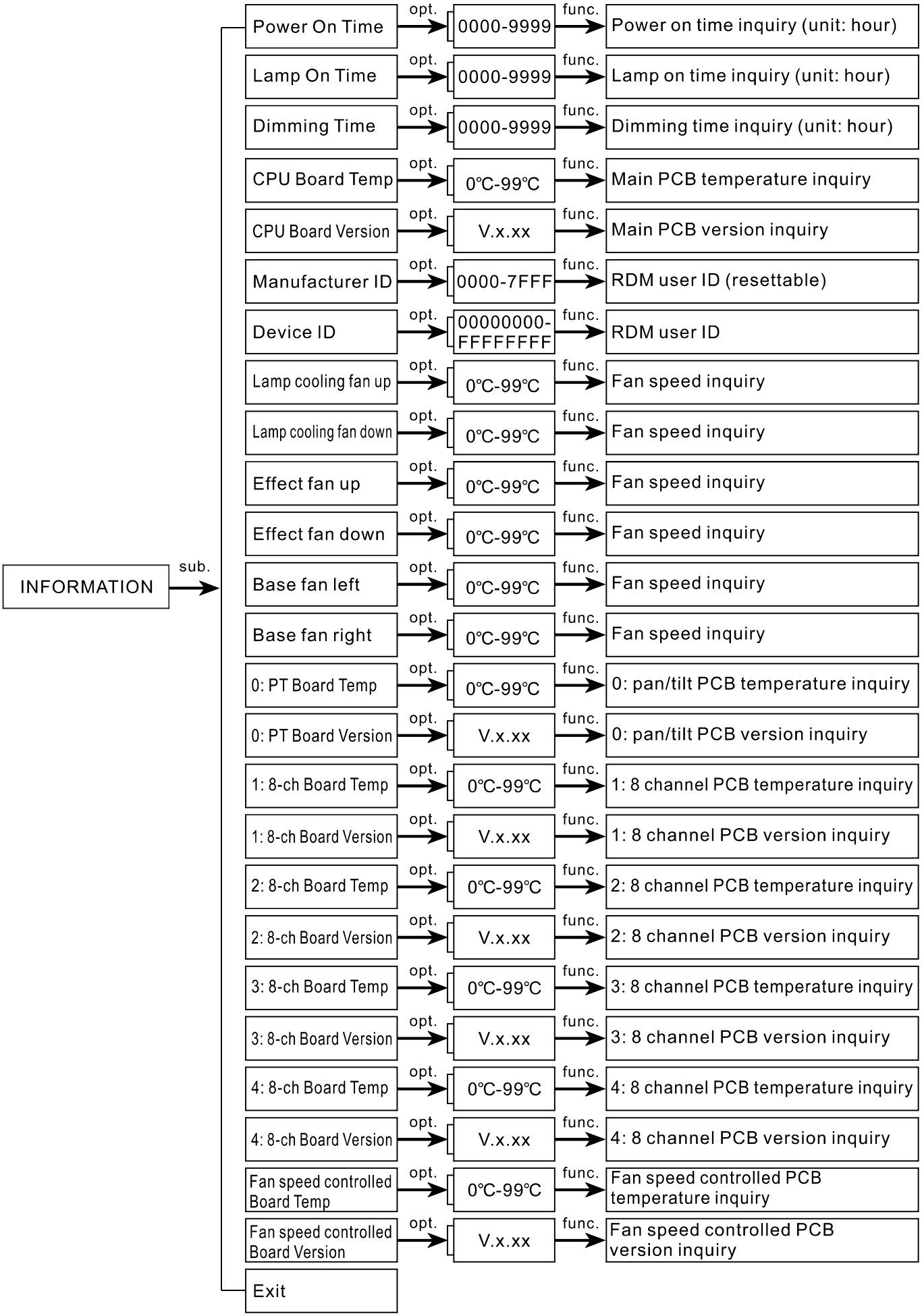
Display panel operational function detail

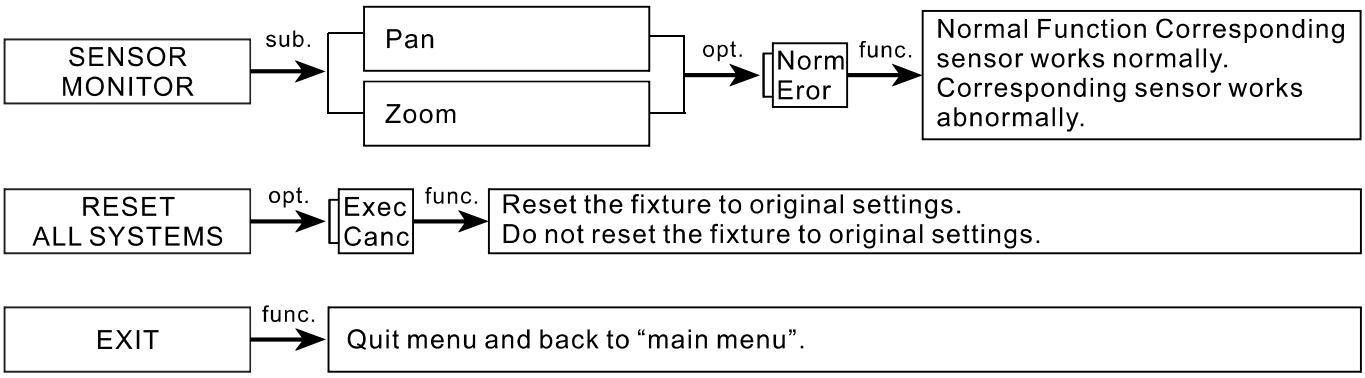



MANUAL CONTROL
sub.
CTC.
color wheel
Gobo1
Gobo1 rotation
Gobo1 fine
Animation wheel
Animation wheel rotation
Cutting blade up1
Cutting blade up2
Cutting blade down 1
Cutting blade down 2
Cutting blade right 1
Cutting blade right 2
Cutting blade left 1
Cutting blade left 2
Cutting Rotation
Frost
Prism
Prism rotation
Iris
Zoom
Focus
Pan
Pan fine
Tilt
Tilt fine
Fixture control
Exit
opt.
000-255
func.
Through panel menu, adjust channel values correspondingly.


Pan
Tilt
Animation wheel
Animation wheel rotation
Gobo1
Gobo 1 rotation
Iris
CMY cyan
CMY magenta
CMY yellow
CTO
Dimmer
Strobe
Color wheel
Focus
Zoom
Prism
Prism rotation
Frost
Cutting rotation
Cutting blade up 1
Cutting blade up 2
Cutting blade down 1
Cutting blade down 2
Cutting blade right 1
Cutting blade right 2
Cutting blade left 1
CALIBRATION
sub.
opt.
0000-FFF0
func.
Zero setting and calibrating deviations of every channel.


CALIBRATION
sub.
Cutting blade left 2
opt.
0000-FFF0
func.
Zero setting and calibrating deviations of every channel.
Exit
DMX VALUES
sub.
Channel--01
.....
Channel--48
opt.
000-255
func.
Display every DMX channel value received.
Exit
PASSWORD
sub.
Code--01
.....
Code--16
opt.
000-255
func.
Modify restriction of using times and calibration code needed when reloading default setup.
Exit
PERSONALITY
sub.
Display
opt.
60s keep
func.
Shut down backlight if no operation within 60 seconds Backlight remains
Display Intensity
opt.
20%-100%
func.
Adjust display brightness
Display Turned
opt.
Off
On
func.
Normal display
Display invert
Language
opt.
简体中文
English
func.
Menu in Chinese
Menu in English
Receive Mode
opt.
DMX
WDMX
ENET
ENET→DMX
func.
DMX512 transmission mode
Wireless transmission mode
Ethernet transmission mode
Ethernet to DMX transmission mode
Universe
opt.
000-255
func.
Art-net ethernet node setup
IP Address A
opt.
002, 010
func.
Execute Art-Net, fixture default beginning IP address assigned as 2.?.?.?
IP Address B
opt.
000-255
func.
Spare
IP Address C
opt.
000-255
func.
Spare
IP Address D
opt.
000-255
func.
Spare
Load Config1
opt.
Save
Load
func.
Save present setup as setup one
Reload previous setup one.
Load Config2
opt.
Save
Load
func.
Save present setup as setup two
Reload previous setup two.
Load Factory Settings
opt.
Save
Load
func.
Save as default setup.
Reload default setup.
Touch Calibrate
opt.
Off
On
func.
Touch panel calibration disabled
Touch panel calibration enabled
Wireless Unlink
opt.
Off
On
func.
Connect to wireless emitter.
Disconnect to wireless emitter.
Fixture Type
opt.
FII washLT
func.
Modify to suit a different type of fixture.
Sleep Mode
opt.
Off
On
func.
Sleep mode disabled
Sleep mode enabled
Exit


INFORMATION
sub.
Power On Time
opt.
0000-9999
func.
Power on time inquiry (unit: hour)
Lamp On Time
opt.
0000-9999
func.
Lamp on time inquiry (unit: hour)
Dimming Time
opt.
0000-9999
func.
Dimming time inquiry (unit: hour)
CPU Board Temp
opt.
0℃-99℃
func.
Main PCB temperature inquiry
CPU Board Version
opt.
V.x.xx
func.
Main PCB version inquiry
Manufacturer ID
opt.
0000-7FFF
func.
RDM user ID (resettable)
Device ID
opt.
00000000-FFFFFFFF
func.
RDM user ID
Lamp cooling fan up
opt.
0℃-99℃
func.
Fan speed inquiry
Lamp cooling fan down
opt.
0℃-99℃
func.
Fan speed inquiry
Effect fan up
opt.
0℃-99℃
func.
Fan speed inquiry
Effect fan down
opt.
0℃-99℃
func.
Fan speed inquiry
Base fan left
opt.
0℃-99℃
func.
Fan speed inquiry
Base fan right
opt.
0℃-99℃
func.
Fan speed inquiry
0: PT Board Temp
opt.
0℃-99℃
func.
0: pan/tilt PCB temperature inquiry
0: PT Board Version
opt.
V.x.xx
func.
0: pan/tilt PCB version inquiry
1: 8-ch Board Temp
opt.
0℃-99℃
func.
1: 8 channel PCB temperature inquiry
1: 8-ch Board Version
opt.
V.x.xx
func.
1: 8 channel PCB version inquiry
2: 8-ch Board Temp
opt.
0℃-99℃
func.
2: 8 channel PCB temperature inquiry
2: 8-ch Board Version
opt.
V.x.xx
func.
2: 8 channel PCB version inquiry
3: 8-ch Board Temp
opt.
0℃-99℃
func.
3: 8 channel PCB temperature inquiry
3: 8-ch Board Version
opt.
V.x.xx
func.
3: 8 channel PCB version inquiry
4: 8-ch Board Temp
opt.
0℃-99℃
func.
4: 8 channel PCB temperature inquiry
4: 8-ch Board Version
opt.
V.x.xx
func.
4: 8 channel PCB version inquiry
Fan speed controlled Board Temp
opt.
0℃-99℃
func.
Fan speed controlled PCB temperature inquiry
Fan speed controlled Board Version
opt.
V.x.xx
func.
Fan speed controlled PCB version inquiry
Exit


SENSOR MONITOR
sub.
Pan
Zoom
opt.
Norm
Eror
func.
Normal Function Corresponding sensor works normally.
Corresponding sensor works abnormally.
RESET ALL SYSTEMS
opt.
Exec
Canc
func.
Reset the fixture to original settings.
Do not reset the fixture to original settings.
EXIT
func.
Quit menu and back to “main menu”.

Technical feature

Production feature explanation

OPTICAL SYSTEM

Lamp type: OSRAM Lok-it! 1800-PS-Brilliant (The lamp cooling has gone through strict tests. If the user use other lamps, Fine Art won't take responsibility for the risk caused by it.)
Reflector: German main and subsidiary reflector
Optical lens: diameter 188mm,
Overal luminous flux: 40000lm
Evenness: 80%
Zoom range: 4°-50°
CRI > 90

COLOR SYSTEM

CMY color mixing system
CTO color linear adjustment
7 color s with white, bidirectional color rainbow can be created, double colors change synchronously and gradually (linear movement), the color wheels rotate bidirectional, change the colors randomly

GOBO SYSTEM

1 rotating gobo wheels, each with 5pcs bidirectional rotating glass gobo filters, with the features of the self-rotating, water running, and shaking effects; The gobo wheels can be positioned;
1 fixed gobo wheel,each wheel has 9 gobo filters

FRAMING SYSTEM

One set of framing system + 90 degree image positioning
precision positioning

EFFECT EQUIPMENT

One rotational 4-facet prism, bidirectional rotation
Independent soft light and frost effect
Independent dimmer, 0-100% linear dimmer
Independent strobe speed 1-13flash/sec,Multiple strobe effects (pulse/asynchronous/synchronous/slow-medium-fast at random)
Fast electric iris 5-100% linear adjustment, macro function of multiple effects change.

MOVEMENT PARAMETER
Angle: PAN=540°,TILT=270°
TILT FINE=0.088°/step

CONTROL AND PROGRAMMING
Control channel: 3 control modes, 32 (standard)/ 35(16Bit)/ 42 (extended)
Protocol: Standard DMX512 protocol, Art-net light control protocol and wireless DMX512 control (optional)
Menu display: 3.5 inches LCD display, random switch of Chinese and English, available to display 180° reversely; non-touch point button for the option.

ELECTRONIC CONTROL TECHNOLOGY
Built-in self-rechargeable battery, menu edit available without power
Light off or CMY closes, power will automatically decrease
Intelligent fan control
Electronic temperature sensor detection
DMX control monitor
Query by LCD screen
RDM bidirectional data transmission
Non-touch magnetic encoder positioning, signal feedback, absolute position memory, position reset when power-off or DMX disconnection.

POWER SUPPLY
AC200-240V 50/60Hz
Electronic ballast
Input power: 2300w
PF≥0.98

DIMENSION AND WEIGHT
Product Dimension:
465mm ×439mm×792mm
Package Dimension:
643mm ×526mm×844mm
Net Weight: 50kg
Gross Weight: 75kg

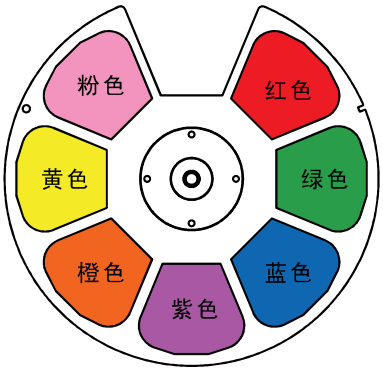
PACKAGE
1pc / flight case

IP RATE
Ip20

Functional introduction

Color wheel

The color wheel comprises seven high-quality color filters as illustrated in Fig.9.1-1.
These amazing palettes favor a lighting designer in creating lighting effects. In conjunction with the gobo wheels, the splendid projected image can be changed as desired anytime.
According to desired requirement, the user can replace with any customized color filters.



color wheel

As shown on the left:

1. Red
2. Green
3. Blue
4. Purple
5. Orange
6. Yellow
7. Pink

Fig.9.1-1

Gobo wheel&Animation wheel

1 rotating gobo wheel, with 5pcs bidirectional rotating gobos;
1 fixed gobo wheel with 9 gobos + white;
1 animation wheel.

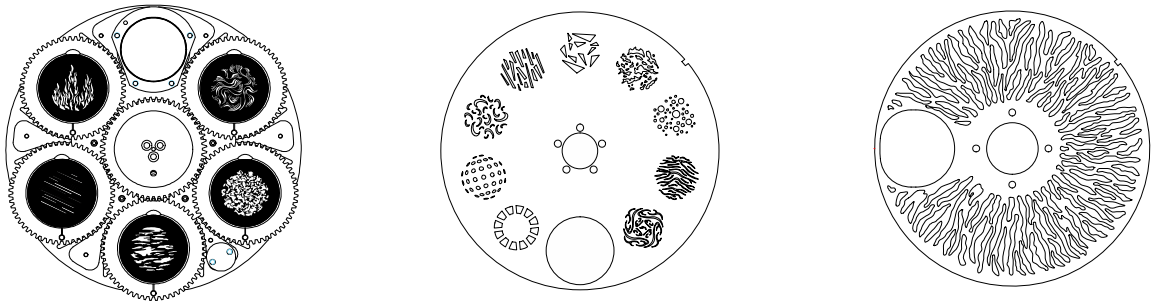
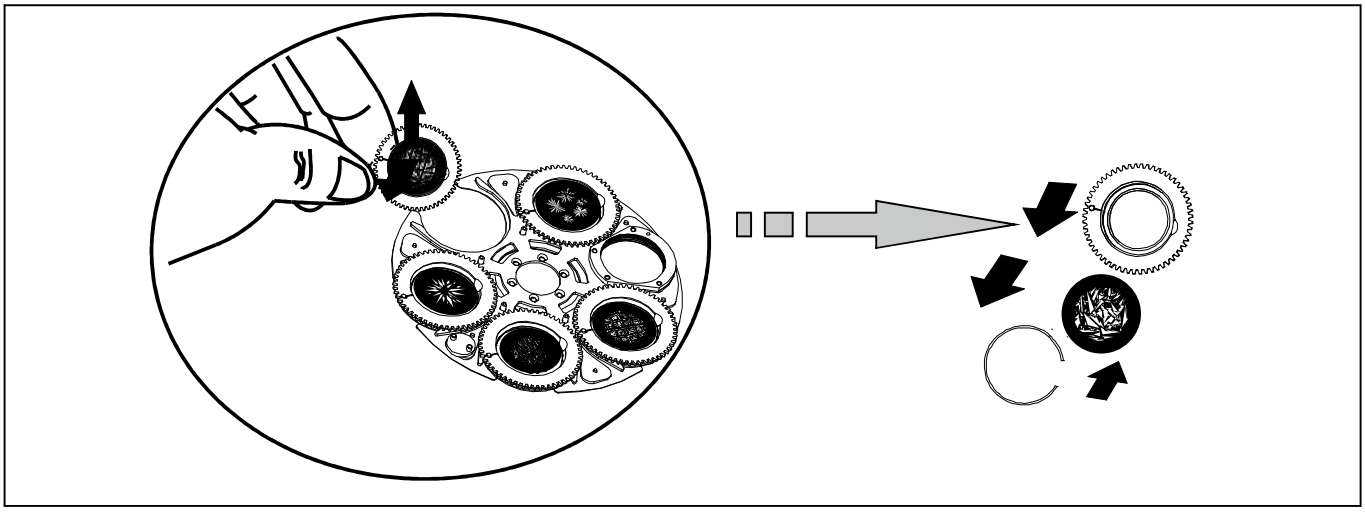


Fig.9.1-2

Gobo replacement

1.Power off and keep the fixture cool for 15 minutes
2.Rotate the fixture and lock the head,open the plastic cover.rotate the gobo wheel to an ideal position.and draw the gobo wheel as the follow picture shows.
3.Take out the spring loop and gobo.take the new gobo to the gobo wheel and then put back the spring loop to the groove.(as below photo shows).
4.Please put the gobo wheel to the relative fix holes under two spring clamps. put it slighting to the former position.the screwdriver or similar tolls also can be used to prize up spring.



CMY color mixing system

Color mixing system uses continuous dichroic filters with cyan,magenta and yellow color filters,it utilizes color mix losing luster principle that can remove color from white,three filters superposed to black,each two colors mixed to another color.
The fixture uses the new-design and simple CMY color system, with the infinite color mixing,
The CMY system occupies less space, changes colors faster, runs smoother, but causes less power.

CTC

The CTO temperature: 6500k-2800k

Dimmer and strobe

The mechanical dimmer/shutter system provides smooth,high-resolution 0-100% dimmer,instant open and close,random and adjustable strobe speed can be up to 13HZ most,strobe has another special effect which open and close slowly or close suddenly open slowly,power of close and open is adjustable automatically.adjustable output power 50%-100%.

Iris

iris can be adjusted from 5%-100%, and the iris channel can be changed from big-narrow or narrow-big randomly.

Pan & Tilt

Pan 540°,tilt 270°.Both of pan & tilt come with 16 Bit precise positioning function. Pan / tilt speed (fast, normal or slow) can be set up through “speed settings” on the menu item.

Focus and zoom

Zoom lens from 4°-50°, use the optical lens and iris.

Cutting system

The blades will be driven by 8 pcs of stepper motors with the transmission belt in the whole plate in order to do the 90°rotation. And every two stepper motors will drive 1 blade to do the forward to backwards movement in the light beam hole, when 4 pcs of the blades are interlaced with the movement, then the light spot will be cut for all kinds of shapes.

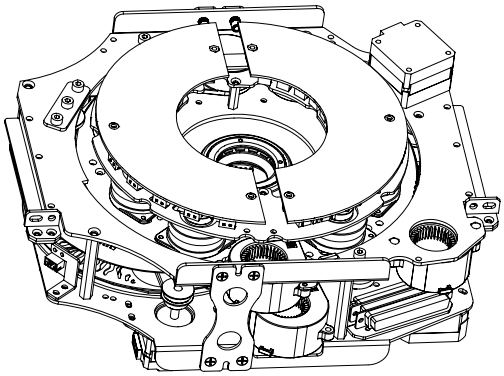
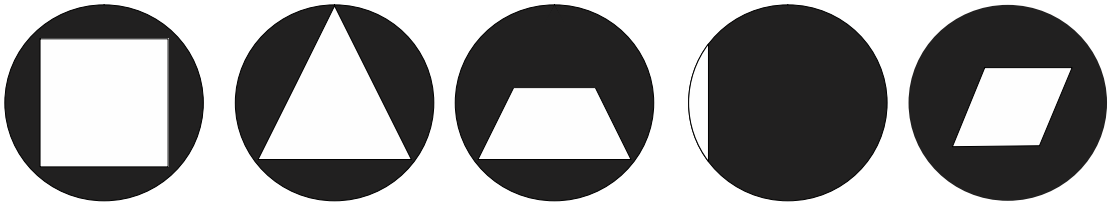


Fig9.8-1

Fine 1800 PERF has the auto cutting system for the images, the light beam will be cut by the blades for the square, rhombus, triangle and other shapes with angle. And the edge will make the light for the shape, which is useful for the stage setting. In addition to that, all the cutting system can do the 90°rotation, and the system will do the shapes as follows (9.8-2 and 9.8-3) with the precise control.

Linear shape pictures (9.8-2)



Blading pictures (9.8-3)

Controlling Channels

Menu control

Channel	Standard mode	16 Bit mode	Extended mode
1	Strobe	Strobe	Strobe
2	Dimmer	Dimmer	Dimmer
3	Cyan	Dimmer fine	Dimmer fine
4	Magenta	Cyan	Cyan
5	Yellow	Magenta	Cyan fine
6	CTC	Yellow	Magenta
7	Color wheel	CTC	Magenta fine
8	Gobo 1	Color wheel	Yellow
9	Gobo 1 rotating	Gobo 1	Yellow fine
10	Gobo 1 rotating fine	Gobo 1 rotating	CTC
11	Fix gobo wheel	Gobo 1 rotating fine	CTC fine
12	Animation rotating	Fix gobo wheel	Color wheel
13	Cutting blade up 1	Animation rotating	Gobo 1
14	Cutting blade up 2	Cutting blade up 1	Gobo 1 rotating
15	Cutting blade down 1	Cutting blade up 2	Gobo 1 rotating fine
16	Cutting blade down 2	Cutting blade down 1	Animation
17	Cutting blade right 1	Cutting blade down 2	Animation ratating
18	Cutting blade right 2	Cutting blade right 1	Cutting blade up 1
19	Cutting blade left 1	Cutting blade right 2	Cutting blade up 2
20	Cutting blade left 2	Cutting blade left 1	Cutting blade down 1
21	Cutting rotation	Cutting blade left 2	Cutting blade down 2
22	Frost	Cutting rotation	Cutting blade right 1
23	Prism	Frost	Cutting blade right 2
24	Prism rotating	Prism	Cutting blade left 1
25	Iris	Prism rotating	Cutting blade left 2
26	Zoom in/out	Iris	Cutting rotation
27	Focus	Zoom in/out	Cutting rotation fine
28	Pan	Zoom in/out fine	Frost
29	Pan fine	Focus	Frost fine
30	Tilt	Focus fine	Prism
31	Tilt fine	Pan	Prism rotating
32	Fixture control	Pan fine	Iris
33	–	Tilt	Iris fine
34	–	Tilt fine	Zoom in/out

35	—	Fixture control	Zoom in /out fine
36	—	—	Focus
37	—	—	Focus fine
38	—	—	Pan
39	—	—	Pan fine
40	—	—	Tilt
41	—	—	Tilt fine
42	—	—	Fixture control

DMX control

STND	16BT	EXTN	Specific	Value	Function
1	1	1	Strobe	000~019	Off
				020~049	Open
				050~200	Strobe, Fast-->Slow
				201~210	Open
				211~255	Random Strobe, Slow->Fast
2	2	2	Dimmer	000~255	0%->100% Off->Open
-	3	3	Dimmer Fine	000~255	0%->100%
3	4	4	Cyan	000~255	0%->100% White->Cyan
-	-	5	Cyan Fine		
4	5	6	Magenta	000~255	0%->100% White->Magenta
-	-	7	Magenta Fine		
5	6	8	Yellow	000~255	0%->100% White->Yellow
-	-	9	Yellow Fine		
6	7	10	CTC	000~255	0%->100% Cold->Warm
-	-	11	CTC Fine	000~255	
7	8	12	Color Wheel		Linear Movement
				000~119	White->Red...->Pink->White Linear Movement
				120~160	White
					Full Color Mode
				161~163	Red
				164~166	Green
				167~169	Blue
				170~172	Purple
				173~175	Orange
				176~178	Yellow
				179~181	Pink
				182~192	White

7	8	12	Color Wheel		Color Watering
				193~214	Clockwise, Fast->Slow
				215~221	Stop
				222~243	Anti Clockwise, Slow->Fast
					Random Color Mode
				244~247	Fast
				248~251	Medium
				252~255	Slow
8	9	13	Gobo1		Position Mode
				000~009	White
				010~014	Gobo1
				015~019	Gobo2
				020~024	Gobo3
				025~029	Gobo4
				030~034	Gobo5
					Rotation Mode
				035~039	Gobo1
				040~044	Gobo2
				045~049	Gobo3
				050~054	Gobo4
				055~059	Gobo5
					Position Mode(Shake speed)
				060~089	Gobo1
				090~119	Gobo2
				120~149	Gobo3
				150~179	Gobo4
				180~209	Gobo5
					Rotation Mode
				210~232	Clockwise, Fast->Slow
				233~255	Anti Clockwise, Slow->Fast
9	10	14	Gobo1 Rotation	Index	Position Mode
				000~255	0~360°
				Continuous gobo rotation	Rotation Mode
				000~002	No Rotation
				003~126	Clockwise, Fast->Slow
				127~129	No Rotation
				130~253	Anti Clockwise, Slow->Fast
				254~255	No Rotation

10	11	15	Gobo1 Rotation Fine	000~255	Index Fine/Rotation speed fine
11	12	16	Fix gobo Wheel		Position Mode
					Linear move
				000~120	White->Gobo 1->..->Gobo 9->White
					Step Mode
				121~124	Gobo1
				125~128	Gobo2
				129~132	Gobo3
				133~136	Gobo4
				137~140	Gobo5
				141~144	Gobo6
				145~148	Gobo7
				149~152	Gobo8
				153~156	Gobo9
				157~160	White
					Watering Mode
				161~200	Clockwise, fast->slow
				201~203	No rotation
				204~243	Anti clockwise,slow->fast
				244~247	Random gobo fast
				248~251	Random gobo middle
				252~255	Random gobo slow
12	13	17	Animation Wheel Rotation	Index	Position Mode
				000~255	0~395°
					Rotation Mode
				000~002	No Rotation
				003~126	Clockwise, Fast->Slow
				127~129	No Rotation
				130~253	Anti Clockwise, Slow->Fast
				254~255	No Rotation
13	14	18	Cutting blade up1	000~255	Cutting blade out->in
14	15	19	Cutting blade up2	000~255	Cutting blade out->in
15	16	20	Cutting blade down 1	000~255	Cutting blade out->in

16	17	21	Cutting blade down2	000~255	Cutting blade out->in
17	18	22	Cutting blade right 1	000~255	Cutting blade out->in
18	19	23	Cutting blade right 2	000~255	Cutting blade out->in
19	20	24	Cutting blade left 1	000~255	Cutting blade out->in
20	21	25	Cutting blade left 1	000~255	Cutting blade out->in
21	22	26	Cutting rotation	000~255	Cutting wheel rotating from 0°->90°
-	-	27	Cutting rotation fine		
22	23	28	Frost	000~255	Frost Insert
-	-	29	Frost Fine		
23	24	30	Prism	000~019	White
					Position Mode(prism rotating)
				011~138	Prism Insert
					Rotation Mode(Prism Rotation)
				139~255	Prism Insert
24	25	31	Prism Rotation	Index	Position Mode
				000~255	0~360°
					Rotation Mode
				000~002	No Rotation
				003~126	Clockwise, Fast->Slow
				127~129	No Rotation
				130~253	Anti Clockwise, Slow->Fast
				254~255	No Rotation
25	26	32	Iris	000~255	Iris Big->Small
-	-	33	Iris Fine		
26	27	34	Zoom In/Out	000~255	Small->Big
-	28	35	Zoom In/Out Fine		
27	29	36	Focus	000~255	Far->Close
-	30	37	Focus Fine		
28	31	38	Pan	000~255	0°->540°
29	32	39	Pan Fine		
30	33	40	Tilt	000~255	0°->252°
31	34	41	Tilt Fine		

32	35	42	Fixture Control	1.the resetting state must be activated after the functional value for 5 seconds	
				2.turn off the light after the lamp is lighting for 5 minutes, turn on the ligt after the lighting is out for 3 minutes.	
				3. use the electricity to turn on or turn off the light.	
				4.if you want to reset the light through the panel, pls open the reset channel, and then re-choose the "0", after that you can operate it.	
				000~009	Useless passage
				010~014	Fixture Reset
				015~029	Characteristic Reset
				030~034	Pan/Tilt Reset
				035~039	Reserve
				040~044	Lamp on
				045~049	Lamp off
				100~104	Filter insert
				105~255	Reserve

Routine maintenance

Cleaning and maintenance

This fixture requires routine cleaning. The service life depends on the operating environment heavily. Please kindly contact GUANG ZHOU CHAI YI 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 overheating 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

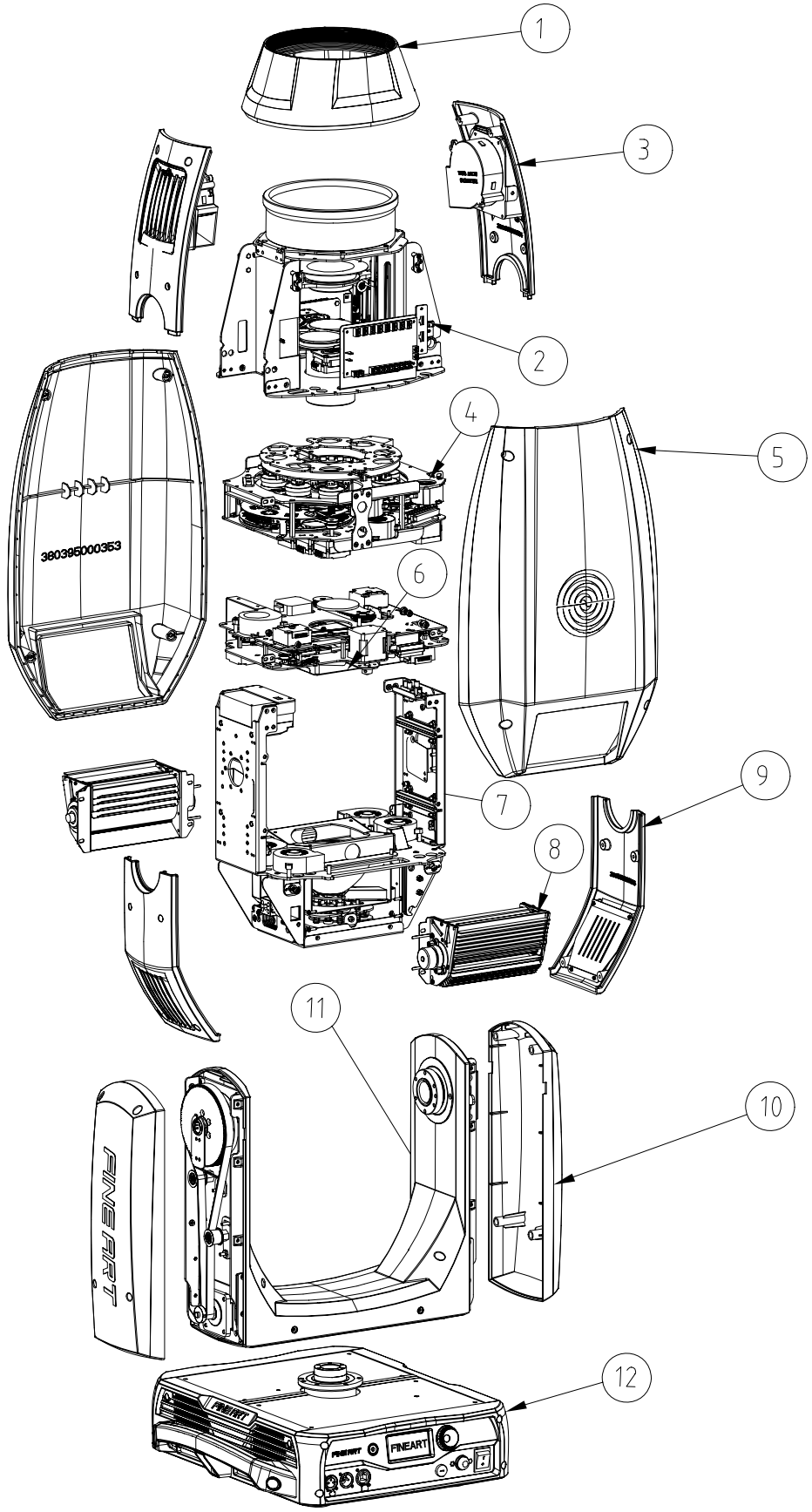
Remove dust from the fans and air vents with a soft brush, cotton paper, vacuum, or compressed air.

Ordering P/N

Common parts for FINE 1800 PERF

Item	Specification	Ordering index
Power supply	29±0.5V/350W	330000300005
6-way Driver Board	—	330395100041
8-way Driver Board	—	330395100040
Fan controlboard	—	330395100051
Lamp	1800W	180101000074
P/T driver board	—	330395100019
Fuse	15A	309905000012
Encoder	—	330395100023
Touch switch	—	330395100025
Focusing lens	—	200395000113
Optical lens	—	200395000070
Zoom lens	—	200395000112
Lithium battery	—	130702000003
4-facet prism	ϕ58	200395000054
Frost	ϕ60	200397000039
Fan	AD0912UB-A7BGL	150101000022

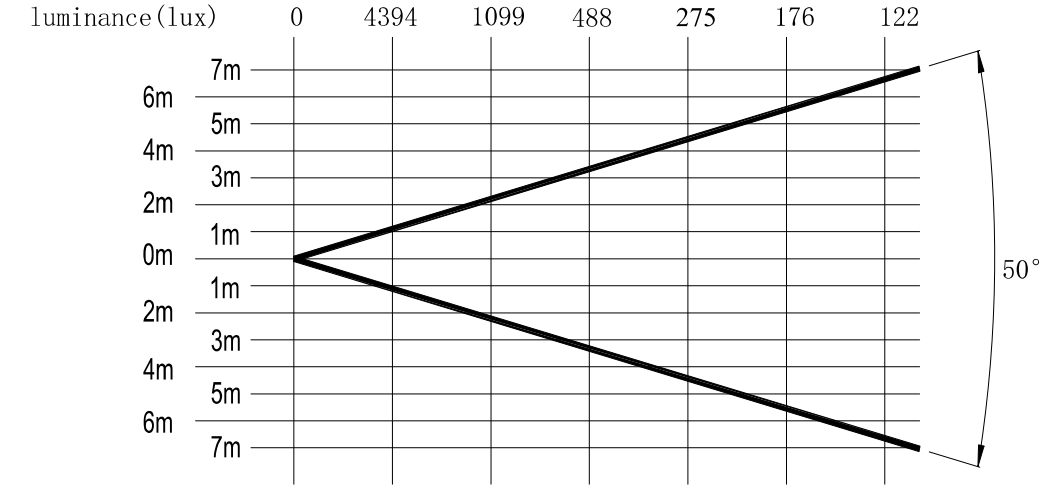
Attached 1: FINE1800 PERF exploded drawing



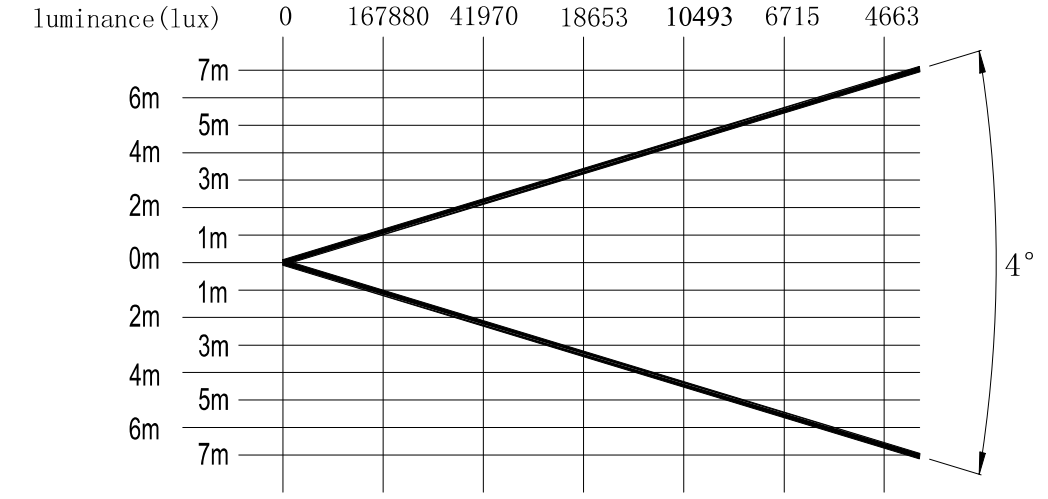
1.LENS cap
2.Focus module
3.Upside cover module
4.Cutting module
5.Body cover
6. CMY module
7. Read body module
8. Fan module
9. Side arm module
10. Arm cover
11.Arm module
12.Base module

Attached 2: Light output and beam angle range

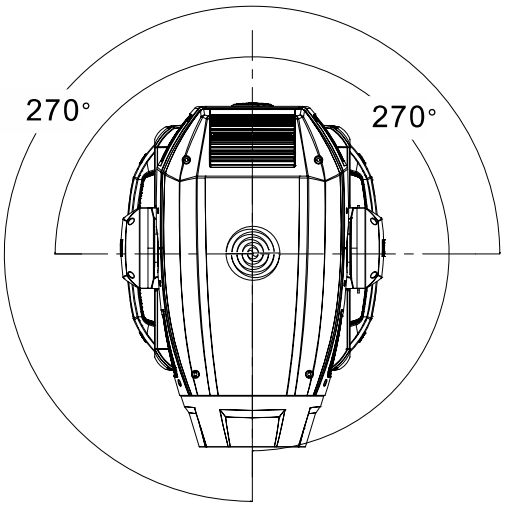
FINE 1800 PERF luminous intensity diagram



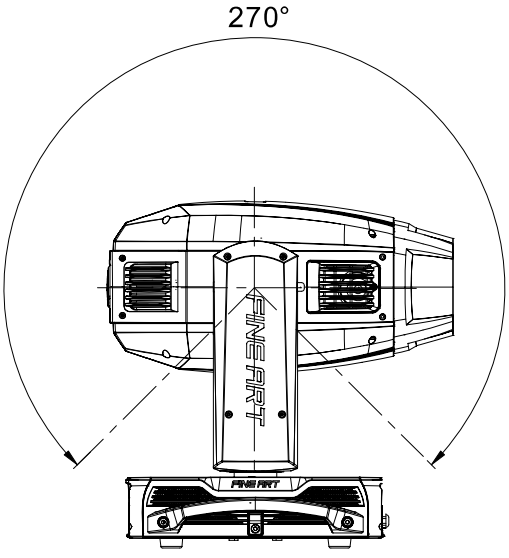
distance (m)	0	5	10	15	20	25	30
spot diameter(m)	0	4.67	9.34	14.01	18.68	23.35	28.02



distance (m)	0	5	10	15	20	25	30
spot diameter(m)	0	0.37	0.73	1.10	1.46	1.83	2.19

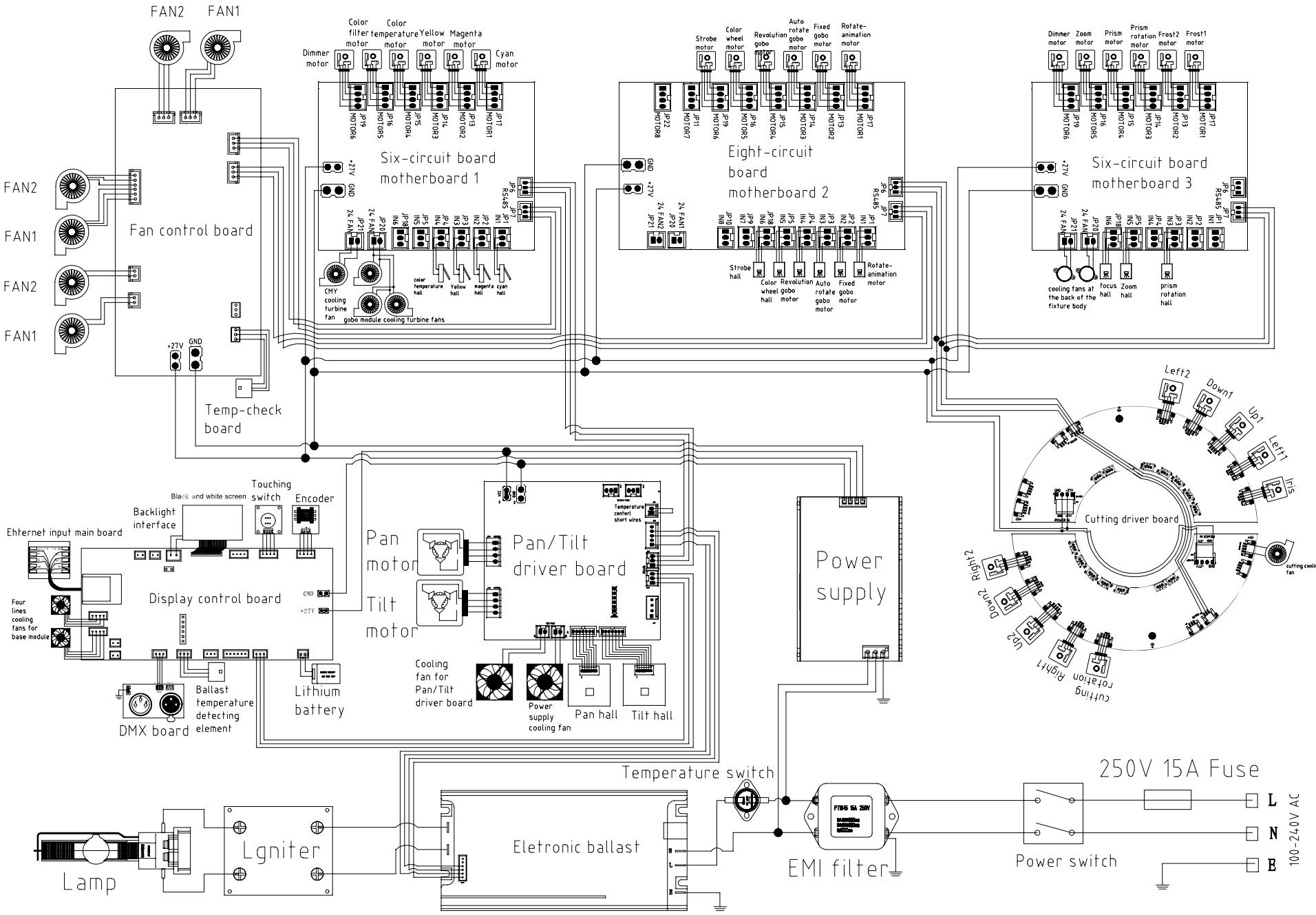


PAN



TILT

Attached 3:FINE 1800 PERF wiring diagram



FINE ART

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