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STAGE 100F

CE

Content List

1. Product Introduction:

1.1 Before unpack the fixture, please make sure that the packing is in good condition, following items will be found in the box:

- Stage 100F
- This users guide
- 3m DMX cable
- 1.5m power cable with True1
- Safety chain

1.2 Specifications

Source

- Light source: 100W Warm white or Cool white LED engine
- CT: 3200K(WW) 5600K(CW)
- CRI: 97(WW), 97(CW)
- LED life: 50,000 hours （under 80% output condition）

Continuous Operation Test: IF=1080mA Ta= 25C (with Al-fin) x1000hrs

IF=1080mA Tj=140C (with Al-fin) x1000hrs

Low Temperature Storage Test: -40℃ x 1000 hours

High Temperature Storage Test: 100℃ x 1000 hours

Moisture-proof Test: 85℃, 85% RH for 500 hours

Thermal Shock Test: -40℃x 30 minutes & 100℃ x 30 minutes, 100 cycles

- Flux on small angle 23°: 2820lux@3m | 1000lux@5m (WW) 2910lux@3m | 1030lux@5m (CW)
- Flux on big angle 90°: 510lux@3m | 183lux@5m(WW)   542lux@3m | 193lux@5m (CW)

Control: Via DMX 512 protocol

Remote Control via wireless

Via RDM

Optical System

- Beam angle: 23°-90°
- Lens Type: HQ Glass optics

Body

- Body: Sturdy die-cast aluminum body conceived for long-time durability
- Body Color: Black/White

Features

- DMX channels:2/4/1CH
- RDM function is to change DMX address, display flip, X/Y Reverse, show led voltage, current and power consumption info.
- Software upgrade via DMX only
- Hibernation when lost DMX for preset time
- Indicate temperature info of led
- Fan speed auto change according to temperature
- Dimmer Curve: 4 different dimmer curve available(Exponential, Linear, INV-Exp, and S-Curve).

Display

- Display: Black OLED high resolution display with friendly English menu
- Auto lock
- Flip
- Back-up communicating IC

Dimming

Dimmer Curve provides 4 dimming options（see below figure）

- **Linear**: the increase in light intensity appears to be linear as DMX value is increased.
- **Exponential**:the light intensity control is finer at low level, coarser at high level.
- **In-Exp**:the light intensity control is finer at high level, coarser at low level.
- **S-Curve**:the light intensity control is finer at lower and higher level, coarser at medium level.
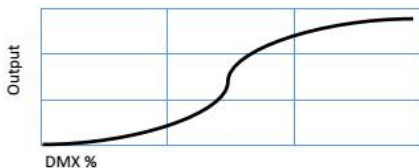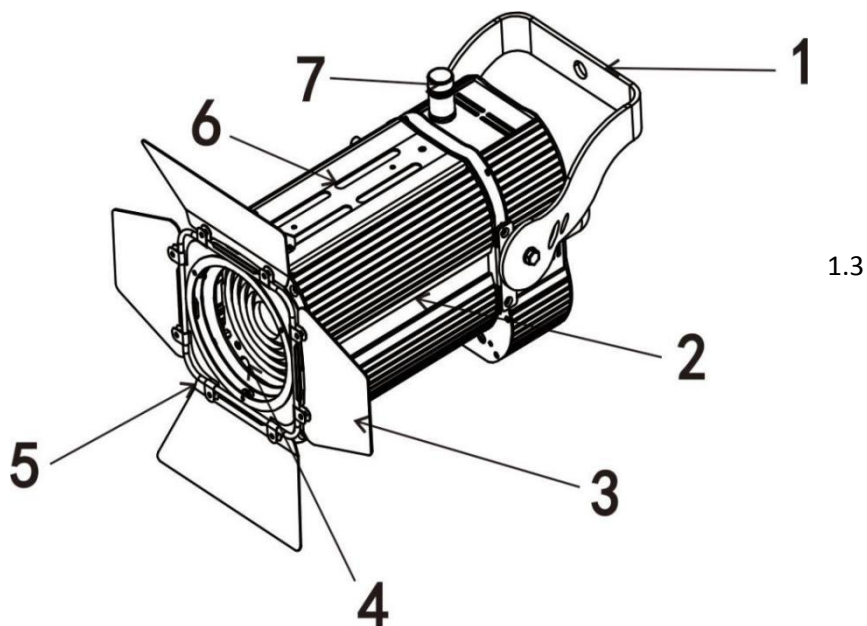
Linear

Exponential

In-Exp

S-Curve

1.3

Description of the Device

1. Bracket
2. Housing
3. Barndoor
4. Lens
5. Barndoor holder
6. Light shield panel
7. Wireless DMX Antenna
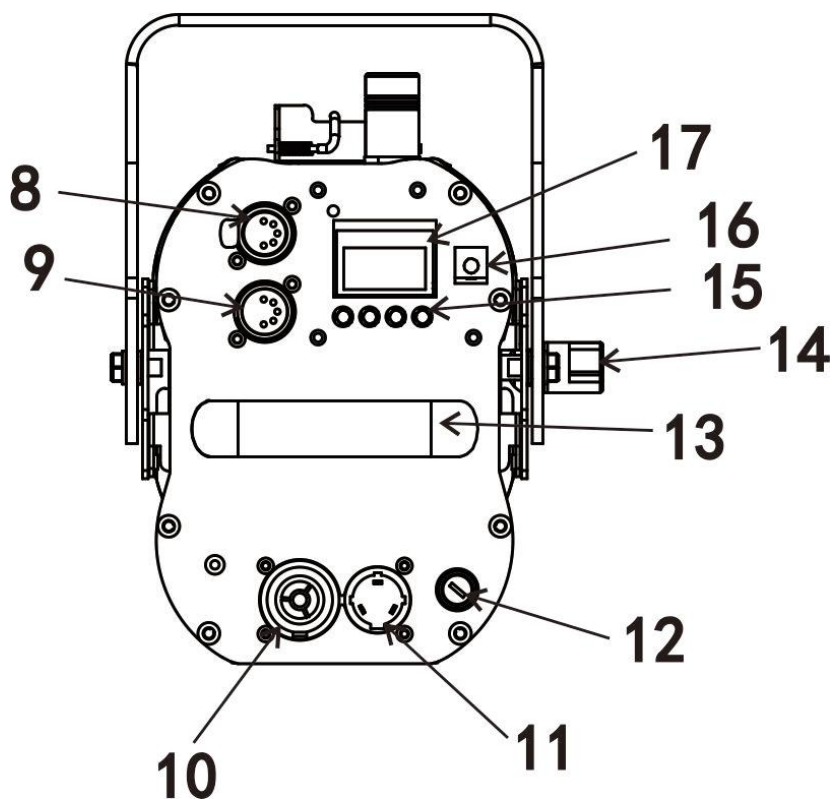
8. 5-Pin DMX 512 output

9. 5-Pin DMX 512 input

10. Power In TRUE1

11. Power Out TRUE1

12. Fuse

13. Handle

14. Knob

15. Buttons

16. Dimmer knob

17. Display

2. Safety and Maintenance Information

2.1 Safety Info

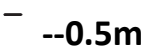|	
⚠	Before operate this unit, please carefully read this users guide and keep if needed in future. It's necessary to respect following rules.
🗑	The disposal of the device after life-cycle could damage the environment. Need to take it to special company for recycling or return to authorized dealer.
CE	The products referred to in this manual conform to the European Community Directives and are therefore marked with CE logo.
⚠	Keep this device away from children and unauthorized users, the manufacturer will not take responsibility for the damage due to any disregard of the information provided in this manual and wrong operation.
⚠	Before operate the device, please make sure the fixture is in good housing, ensure pan and tilt can rotate in its complete range.
--0.5m	Please make sure minimal 0.5m distance need to kept between the fixture to any flammable material.
⊡	The device can only run with 100-240v voltage, 50/60Hz power, don't connect to any other wrong power. Disconnect the device from main power before open the shield or maintenance.
⌂	The device is designed only for indoor usage, please keep it away from moisture. Do not expose the device under the sun or directly to any other lighting source.
⚠	Never look directly into the projecting lens when the fixture is power on, the light may trigger epileptic seizures in photosensitive persons or persons with epilepsy. Especially at beam effect, extreme caution and observance of these safety instructions is mandatory.

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⚠	Don't put or install the device on a surface that subject to vibration or bumps.
Ta=45℃	The device is supposed to work in the temperate range -20° to +45°C, do not use the device when the temperate exceed this range.
🗙-▯	The lens, shield need to be replaced when obviously broken, never use the device when the shield is not completed closed.
⏚	Safety I class device, need to be earth connected.
⬤	When the fixture is hanged overhead, the safety rope must be fixed to the bottom of the device to the appropriate fixing point.
⚠	Always carry the device by the bracket, do not take the body directly for transportation.

2.2 Maintenance

2.2.1 Operation only allowed to qualified person, damages due to unprofessional operation or remove of any parts inside will not be considered in warranty service. There are no serviceable parts inside the device or package, service only leaves to authorized dealers.

2.2.2 Never allow the optical components contact with oil, fat or any other liquid.

2.2.3 A regular clearance of the device is needed for long-term usage, this is very helpful to maintain the lifetime and brightness need to use a soft and lint-free cloth to clean the optical system, fan and air flowing tunnel.

2.2.4. Trouble Shooting

Problems	Possible reasons	Checking or solutions
Device not power up	TRUE1 or power cable damaged Faulty power supply	Change a good power cable to try Replace new power supply
LED off	Temperature protection Fan not working Faulty LED Dimmer and strobe set at 0 Faulty power supply	Check the temperature from menu Check the fan speed info from menu Replace new LED Set dimmer channel at 255 and strobe channel at 0~5 Replace new power supply
Device not response to DMX	Faulty communication IC Faulty display PCB Wrong DMX addressing Faulty DMX cable	Replace the IC with back-up one in the display PCB Replace new display PCB Check the address and setting Change to a good DMX cable

2.2.5 Replacement of the fuse

Need to replace with same type and rating(T 2A-250V), which originally installed in the device.

Step One: Unplug power cable from main power.

Step Two: Unscrew the fuse holder out of the housing with a screwdriver.

Step Three: Remove the broken fuse and replace with an exact same type of new fuse.

Step Four: Insert the fuse holder back to the housing and screw tight and reconnect power.

3. Installation

3.1 The device could be either put on a solid and even surface, or mounted upside down or sideways like left picture.

3.2 The mounting place must be sufficient stable and be able to support a weight of 10 times of the unit's weight. When the fixture is hanged, always additionally secure the device with the safety chain, fasten the safety rope at a suitable position so that the maximum fall of the projector will be 20 cm
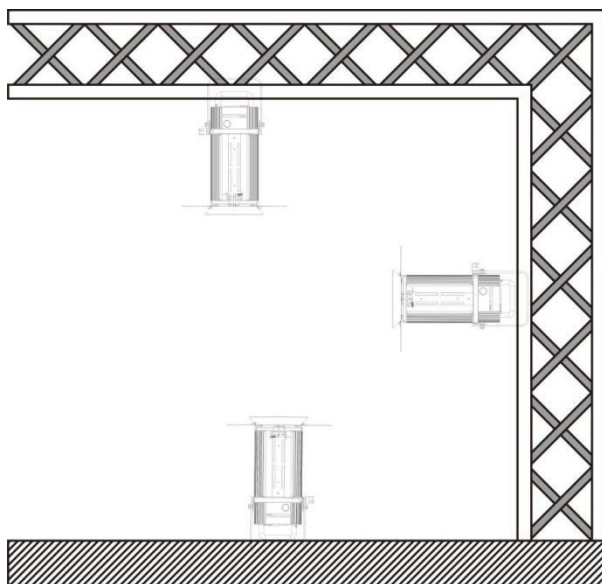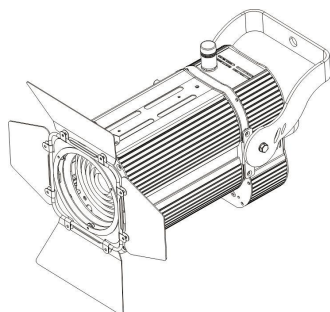
4. Control Menu

4.1 Meaning of the icons in menu

CONNECT	LIGHT	INFOMATION	SET	PROGRAM

4.2 Menu tree

Default setting shadowed. Mark with ①can be basic reloaded, ②be program reloaded, ③can be private reloaded.

DMX Settings	DMX Addr①	XXX	
	DMX Mode	Standard/Extended/Basic(Standard)	
	DMX Hold	Off	
		On (On)	
	Wireless	Off (Off)	
		On	
		Unlink	
		DMXOut	On/Off (On)
Manual	Dimmer……		
Fixture Settings	Settings	Fan Level ①	Auto/Low (Auto)
		Max Temp①	80~130℃ (85℃)
		Temp. C①	Celsius (Celsius)
		Energy Mode①	Off, 01M~99M，(Off)
		Backlight①	Off,01~99m (02m)
		Flip Display①	On/Off (Off)

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	LED Frequency	1200Hz-4000Hz(1200Hz)	
	Dim Curve	Exponential (Expontenial)	
		Linear	
		INV-Exp	
		S-Curve	
	Fixture ID③	Name	
		RDM Mode	
		-Password-	
		PID Code	
	Fixture Reset	Basic Reset(①)	On/Off (Off)
		---Password---	XXX
		Factory Reset	On/Off (Off)
Information	Software V	Vx.x.xx	
	LED Temp	XXXC	
	FAN Speed	FAN1: XXXR	

5. DMX Connection and DMX Protocol

5.1 DMX addressing:

5.1.1 The device is controlled by universal DMX 512 protocol, DMX address is the start channel used to receive instructions from the external controller. For independent control, each fixture must be assigned its unique address control channels. For example, this device has three channel modes: St/Ex/Ba, if we set the mode at standard 18 channels mode, and there are several models need to be independently controlled. We just simply address first fixture at 1, second fixture at 21, and third one at 41, etc.
If the devices have the same address, they will behave synchronically.
DMX addressing is limited, don't set the address so high without enough control channels for the fixtures.
Display is flashing when no DMX signal is received.

5.1.2 Connection: use DMX cable with 5-pin XLR-plugs to connect the controller with the fixture or one fixture with another.
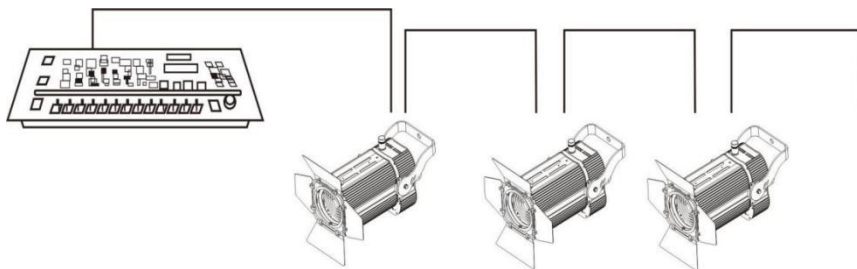
5.1.2 This device is equipped with 5-pin DMX in and out sockets only.
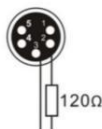
Pin1 =GND   Pin4 =N.A.
Pin2 =SIG(-) Pin5 =N.A.
Pin3 =SIG(+)

5.1.3 The termination is prepared by soldering a 120Ω resistor between pins 2 and 3.

120Ω

5.2 DMX chart

Channel			name	function	Min DMX	Max DMX
St	Ex	Ba				
1	1	1	Dimmer	Dimmer 0->100%	0	255
	2		Dimmer Fine	Dimmer fine 0->100%	0	255
2	3		Strobe	Strobe open	0	5
				Strobe effect slow to fast	6	127
				Random strobe effect slow to fast	128	255
	4		Fans Mode	No Function	0	10
				Auto	11	128
				Low	129	255

6. Wireless Control Settings

To change wireless control settings, proceed as follows:
*Press the Enter button to access the main menu.
*Press the UP/DOWN button to scroll the menu, select the DMX Settings icon, then press the ENTER button to enter the next menu.
*Press the UP/DOWN button to scroll through the menu, select Wireless and press ENTER.
*Press the UP/DOWN button to select the desired function(On/Off/Unlink/DMX Out).
*Press the ENTER key to confirm the setting.

7. Setting Options by RDM

You can remotely configure the fixture over the DMX line using RDM.
A full list of the RDM functions that STAGE 100F fixture supports is given at the end of this chapter.
These functions are generally referred to using the more specific term 'PIDs' or 'Parameter IDs'.

7.1 Scanning for RDM devices on the data link
Before you can communicate with fixtures using RDM, you must send a scan command(also called a device discovery command) to all the devices on the data link so that the RDM controller can identify them. It does this by retrieving each device's factory-set parameter identifier(PID). This process can take some time depending on the number of devices on the link.

7.2 To identify the fixtures on the link:
Check that the fixtures are correctly connected to the RDM controller on the data link and that power is applied to all fixtures.
*Go to discover devices of the RDM controller.
*Give the controller time to identify the devices on the link and prepare for communication with the devices.
Getting status and setting options by RDM.
The status and options listed in the table below can be ready and set by RDM.
You can set an option on one fixture by sending a unicast RDM command to that one fixture only, or you can set the same option on all the fixtures on the data link by sending a broadcast RMD command to all the devices on the link.
For status reading, you can only use unicast RDM to read information from an individual fixture.

*Device Discovery

DISC_UNIQUE_BRANCH
DISC_MUTE
DISC_UN-MUTE

*Device management

	GET	SET
QUEUED_MESSAGE	V	V
STATUS_MESSAGE	V	
SUPPORTED_PARAMETERS	V	V
DEVICE_INFO	V	V
DEVICE_MODEL_DESCRIPTION	V	V
MANUFACTURER_LABEL	V	V
DEVICE_LABEL	V	V
FACTORY_DEFAULTS	V	V
SOFTWARE_VERSION_LABEL	V	V
DMX_PERSONALITY	V	V
DMX_PERSONALITY_DESCRIPTION	V	V
DMX_START_ADDRESS	V	V

8.   Unique Features

8.1 RDM, stand for "Remote Device Management", with this function, users can realize remote control of the device, such as remotely changing DMX address, reversing pan/tilt setting, and checking a lot of useful information such as temperature, power consumption, fan speed, etc. Every single device has a unique RDM code before leaving factory to distinguish from each other. Usually not suggest users change this code freely.

8.2 Software upgrade function via DMX cable, if there is any new firmware for this device coming out, it can be upgraded simply via a software upgrade box, no need to change any mechanical parts. The upgrade box is not included in the package, if need any further assistance please just contact authorized dealers.

8.3 Hibernation, the device will enter sleeping mode if activated after a period of disconnecting DMX signal to save the power consumption, and will return immediately as soon as the DMX signal is sent again.

8.4 Display battery, this function is prepaid in the display PCB. Users just need to install a normal 10440 600mAh 3.7V rechargeable lithium battery, then users could power on the display and do setting without being connected to main power.

8.5 Display back-up communication IC, there is a back-up communication IC installed in the display PCB, so users could replace at once if the working one is broken, no need to wait long time from service.

8.6 Display flip：by press up and down button for more than 3 seconds, the display will flip automatically. This function is useful to read menu conveniently when device is hanged.

9. Dimensions Drawing
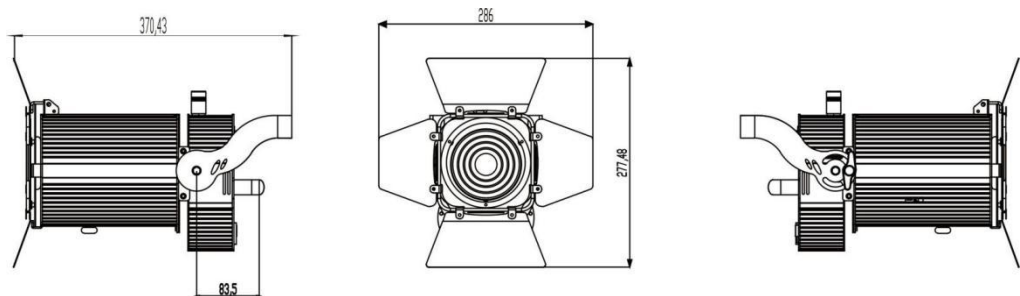
10. Technical Specification

Power supply	100-240V,50/60Hz~
Power consumption	108W(Warm white, Cool white)
LED	100W Warm white or 100W Cool white LED engine
DMX channels	2/4/1CH modes
Beam angle	23°-90°
Luminous flux	23°: 2820lux@3m | 1000lux@5m (WW) 2910lux@3m | 1030lux@5m (CW) 90°: 510lux@3m | 183lux@5m(WW) 542lux@3m | 193lux@5m (CW)
Fuse	T2A, 250V
Device dimensions	37x28x28cm
Net weight	4.4 kg

Declaration Of Conformity

Importer:
Interlite AB
Stureparksvägen 7
45155 UDDEVALLA
Sweden

Producer:
Ablelite International LTD
NO.1 Building, Dagang Industrial District,
Shilou Town, PanYu District, Guangzhou,
China 511400

Declares responsibility that the products

Stage 100F C01050030100
Stage 100F C01050030101
Stage 100F C01050030102
Stage 100F C01050030103

to which this declaration relates is in conformity with the following European product and basic standards:
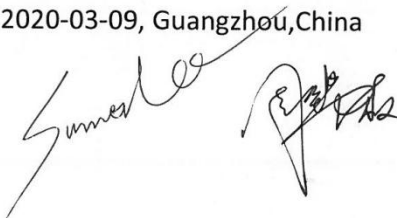
Essential Requirement	Applied Specification/Standard
EMC & LCD	EN60598
	EN55015
	EN61000
	EN61547
RoHS	RoHS 2.0

Date of issue: 2020-03-09, Guangzhou,China
Jinquan Zhou
CTO
Signature:

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