

# Instruction Manual

PROFESSIONAL SHOW LIGHT

## Little Bee 407



**Unpacking:** Thank you for purchasing Little Bee 407. Every fixture has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case damage has been found or parts are missing, please contact the manufacturer or your dealer for further instructions. Do not return this unit to your dealer without first contacting.

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING LITTLE BEAM 407. SAVE IT FOR FUTURE REFERENCE.**

**Warning!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

**PLEASE** consider that damages caused by manual modifications to the device are not subject to warranty.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact the manufacturer or your dealer.

**PLEASE recycle the shipping carton when ever possible.**

**General Instructions:** To optimize the performance of this product, please read these operating instructions carefully to familiarize you with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit.

## Features

- Multi-Colors buttons
- Color Strobe
- Electronic Dimming 0-100%
- DMX-512 protocol
- Master/Slave synchronization
- LCD operation menu with function
- Daisy Chain Units Together in DMX Mode
- Sound control
- Linear zoom control

## Safety Precautions

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet match that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.

- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only; use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See "Cleaning" for details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the appliance.
  - C. The appliance has been exposed to rain or water.
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

## Technical Specifications

### Electrical

Power supply:.....electronic auto-ranging  
 Input voltage range:.....supply 90-250V, 50/60Hz  
 Power consumption:.....300W

### Optic

Light source: Osram (RGBW 40W) LED X7PCS  
 LED life expectancy: 100,000 hours  
 Dimmer: Smooth dimmer from 0-100%  
 RGBW color mixing + CTO  
 4.5° -36° electronic zoom

### Motorized

Pan/Tilt  
 Pan movement range: 540°  
 Tilt movement range: 200°  
 16 bit movement resolution  
 Automatic Pan/Tilt position correction  
 Pan movement 0°-540°at max.....Speed: 2.2 sec.  
 Tilt movement 0°-200°at max..... Speed: 1.2 sec.

### LCD operation

Built-in demo sequences  
 Silent fans cooling  
 Strong three-phase motors  
 Stand-alone operation  
 Supported protocols: DMX512

2 DMX modes (12, 17 control channels)

**Connection**

DMX data in/out: Locking 3-pin+5-pin XLR  
AC power input: 1.5m power cord with plug

**Rigging**

Mounting points: 2 pairs of 1/4-turn locks  
Mounting horizontally or vertically via 2 Omega brackets

**Temperatures**

Maximum ambient temperature: 45°C  
Maximum housing temperature: 75°C

**Minimum distances**

Min. distance from flammable surfaces: 3.0m  
Min. distance to lighted object: 2.0m

Total heat dissipation: 1350 BTU/h (calculated)  
Pack size: 310(L) x 225(W) x 370(H) mm  
Weight (net): 9kg  
Warranty: 1 Year .....

**Set Up:**

**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for the fixture, The model is Auto power supply, It is workable in 90-250V/50~60Hz. Please make sure your unit voltage matches the wall outlet voltage before attempting to operate you fixture.

**Connection to the mains**

For protection from electric shock, the fixture must be earthed!  
Install a suitable plug on the power cord, note that the cores in the power cord are colored according to the following table. The earth has to be connected!

If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

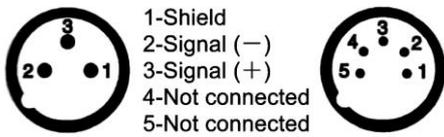
**DMX512 connection**

The fixture is equipped with both 3-pin and 5-pin XLR sockets for DMX input and output. The sockets are wired in parallel.

Only use a shielded twisted-pair cable designed for RS-485 and 3-pin and 5-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

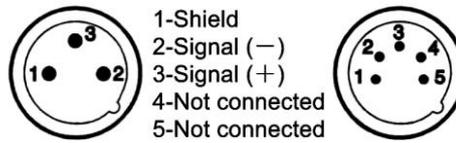
## DMX-output

XLR mounting-sockets (rear view):



## DMX-input

XLR mounting-plugs (rear view):

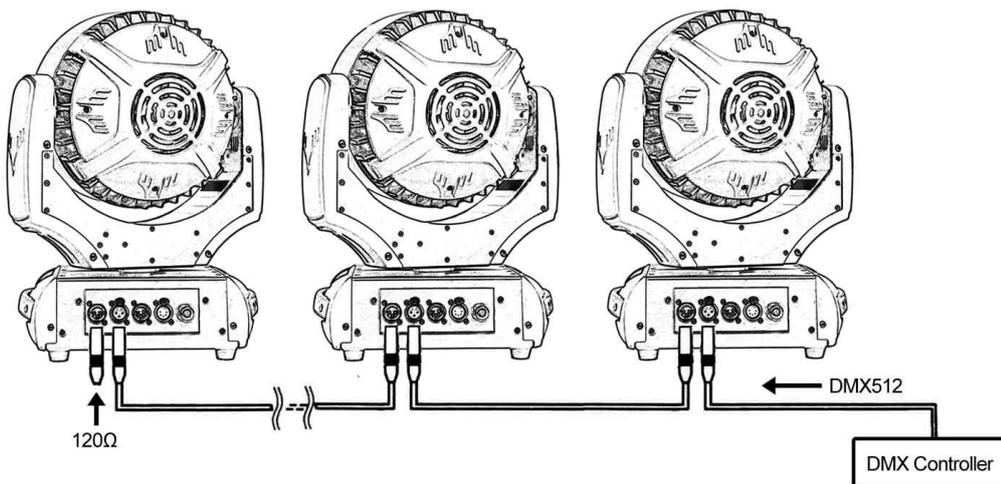


**DMX Linking:** To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

### Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120Ω resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.



**Operating Modes:** You can use the fixture by 4 ways:

- Auto Mode - The unit automatically chase through the different colors and built-in programs.
- Slave Mode – The unit is available work by slave mode.
- DMX control mode - This function allows you to control each individual fixtures traits with a standard DMX 512 controller.
- Sound control-This function allows you activate fixtures by sound.

**DMX Mode:** Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. This function also allows you to use your fixtures as spot lights.

1. This function will allow you to control each individual fixture's traits with a standard DMX 512 controller.
2. The fixture uses 12/17 DMX channels (RGBW version) to operate. Please see "DMX Values and Functions" for the DMX traits.
3. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX

controller. Set your desired DMX address following the setup specifications that come with your DMX controller.

4.

**Menu map:**

DmxAddr	001 - 512			
Fix Set	Ch Mode	STD/HIS		
	Run Mode	DMX/Host		
	Pan Inv	Close/Open		
	Tilt Inv	Close/Open		
Manual	Pan	0 - 255		
	Pan Fine	0 - 255		
	Tilt	0 - 255		
	Tilt Fine	0 - 255		
	.	0 - 255		
	.	0 - 255		
	.	0 - 255		
Fix Info	TimeInfo	Cur Time	xxxh	
		Show Time	xxxh	
		PowerCnt	xxx	
	SenSor	Pan	OK/NG	
		Tilt	OK/NG	
		Zoom	OK/NG	
		Temp	OK/NG	
		Fan	OK/NG	
	TemplInfo	Temprat	xxx C	
		FanSpeed	xxxx RPM	
	Soft Ver	Panel	Vx.xxx	
		Motor	Vx.xxx	
Home Set	Password	0 - 255		
	Pan	0 - 255		
	Tilt	0 - 255		
	Zoom	0 - 255		
	Red	0 - 255		

	Green	0 - 255
	Blue	0 - 255
	White	0 - 255
FixReset	Reset	Cance/Run
	Factory	Cance/Run
Display	Language	EN/CH
	DispFlip	Open/Close
	DispMode	Show/60s

### Channel Chart:

#### Reduced mode( 12channels)

Channel	Function	Description	DMX Value
1	Pan	Pan	0-255
2	Pan Fine	Pan Fine	0-255
3	Tilt	Tilt	0-255
4	Tilt Fine	Tilt Fine	0-255
5	P/T Speed	P/T Speed	0-255
6	Hue	Hue	0-255
7	Saturation	Saturation	0-255
8	Dimmer	0-100%	0-255
9	Strobe	Slow to Fast	0-255
10	Zoom	Narrow Beam-Wide Beam	0-255
11	Macro	Control	0-255
12	Reset	None	0-255
		Complete Reset	0-255

#### Standard Mode( 17 channels)

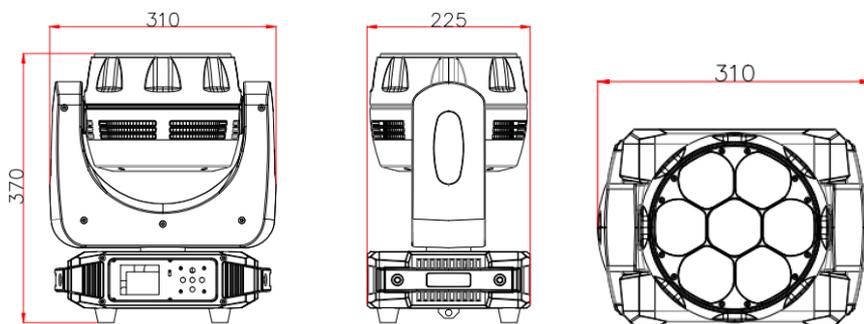
Channel	Function	Description	DMX Value
1	Pan	Pan	0-255
2	Pan Fine	Pan Fine	0-255
3	Tilt	Tilt	0-255
4	Tilt Fine	Tilt Fine	0-255
5	P/T Speed	P/T Speed	0-255
6	Red Intensity	0-100%	0-255
7	Green Intensity	0-100%	0-255
8	Blue Intensity	0-100%	0-255
9	White Intensity	0-100%	0-255

10	Dimmer	0-100%	0-255
11	Strobe	OPEN	252 - 255
		Random Strobe-Fast	239 - 251
		Random Strobe-Medium	226 - 238
		Random Strobe-Slow	213 - 225
		Open	208 - 212
		Puls Strobe-Slow to Fast	108-207
		Open	104 - 107
		Slow Strobe - Fast Strobe	4-103
	Close	0 - 3	
12	CCT	2500 K	225-255
		3200 K	189-224
		4000 K	145-188
		5000 K	118-144
		5600 K	100-117
		6000 K	55-99
		7000 K	11-54
		8000 K	10
		None	0-9
13	Macro colour	White	209-255
		Dirty White	208
		Alice Blue	207
		Congo Blue	191-206
		Dark Steel Blue	184-190
		Deep lavender	180-183
		Lilac Tint	179
		Daylight Blue	175-178
		Flame Red	174
		Bastard Amber	172-173
		Deep Orange	168-171
		Pale Gold	162-167
		Apricot	157-161
		Bright Blue	151-156
		Primary Green	149-150
		Special lavender	147-148
		Pale Lavender	146
		Deep Golden Amber	145
		Medium Blue	142-144
		Bright Pink	138-141
Mauve	136-137		
Dark Green	134-135		
Leaf Green	131-133		

	Dark Blue	129-130
	Light Blue	128
	Steel Blue	127
	Med Blu Green	126
	Peacock Blue	125
	Magenta	123-124
	Dark Pink	121-122
	Middle Rose	120
	Light Salmon	119
	English Rose	118
	Light Rose	117
	Orange	115-116
	Deep Amber	114
	Straw	113
	Light Amber	112
	Spring Yellow	110-111
	Dark yellow green	100-109
	Just Blue	89-99
	Sky Blue	78-88
	Lavender	68-77
	Light Lavender	62-67
	Pink Carnation	49-61
	Medium Pink	46-48
	Light Pink	45
	Sunrise Red	35-44
	Dark Amber	32-34
	Gold Amber	31
	Medium Amber	30
	Fire	29
	Surprise Peach	27-28
	Straw Tint	23-26
	Medium Yellow	20-22
	Black	19
	White 5000 K	18
	White 3700 K	17
	White 7000 K	16
	Magenta	15
	Yellow	14
	Cyan	13
	Blue	12
	Green	11
	Red	10

		Off	0-9
14	Zoom	Narrow Beam-Wide Beam	0-255
15	Reset	None	0-127
		Complete Reset	128-255
16	Control	Macro Control	0-255
17	Effect	Close	0
		Wave effect Slow to Fast	1-100
		Dream effect Slow to Fast	101-200
		Close	201-255

## Dimension(mm)



## Rigging the fixture

**Caution:** Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 1.0 m.

### CAUTION!

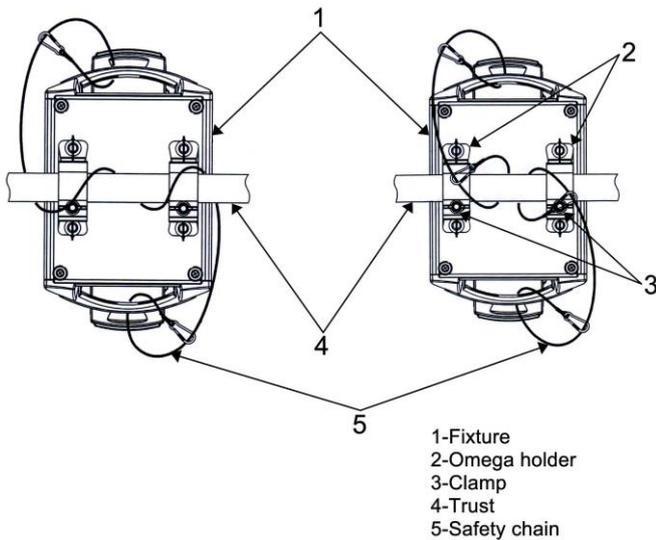
Use an appropriate clamp to ring the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

Securing the fixture via one safety wire

Securing the fixture via two safety wires



## Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

**TROUBLE SHOOTING:** Listed below are a few common problems the user may encounter, with solutions.

## Replacing fuse

Only replace the fuse by a fuse of the same type and rating. Before replacing the fuse, unplug mains lead! If you need to replace the main fuse, follow the instructions:

- 1) Remove the rear cover of the base by unscrewing 6 fastening screws.
- 2) Remove the old fuse from the fuse holder.
- 3) Install the new fuse into the fuse holder.
- 4) Replace the rear cover back to the base.

## Unit not respond to DMX:

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 5 may be 'hot'). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

**Note: All information is subject to change without prior notice.**