Squareled

10. Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture's light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

DANGER !
Disconnect from the mains before starting any
maintenance work

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet. Dichroic colour filters, CMY lamellas, gobo and graphic wheels and the internal lenses should be cleaned monthly. Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

Clean two air filters placed in the fixture's covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

After replacing the air filters, reset the elapsed time counter in the menu "Information" (Information--->Air Filters--->Elapsed Time).
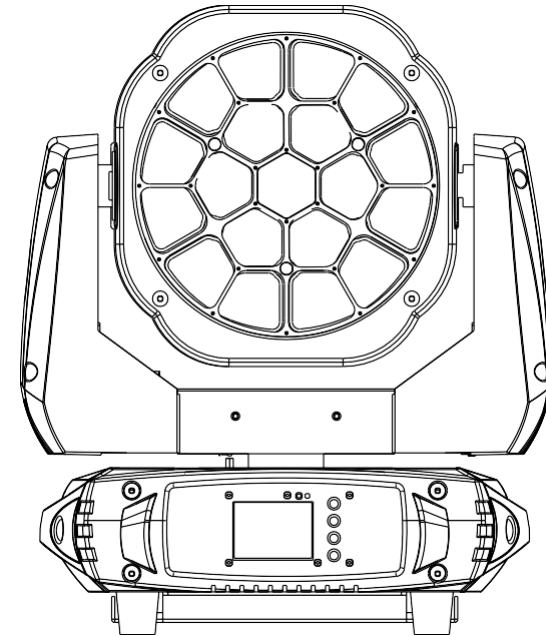
Replacing the fuse. Before replacing the fuse, unplug mains lead.
1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
2) Remove the old fuse from the fuse holder.
3) Install the new fuse in the fuse holder (only the same type and rating).
4) Replace the fuse holder in the housing and fix it.

Squareled Funky Bee 19X10W
RGBW
Battery + W-DMX

Version 1.0

USER MANUAL

● Be sure to read the USER MANUAL carefully before using this product. Be
● sure to keep the USER MANUAL properly for future needs.

1. Safety instructions

Thank you for choosing our Squareled Funky Bee. FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY

BEFORE YOU INITIAL START - UP!

> **CAUTION!**
> **Be careful with your operations.**
> **With a high voltage you can sufer a dangerous electric shock when touching the wires!**

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

> **CAUTION!**
> **Keep this device away from rain and moisture! Unplug mains lead before opening the housing!**

Important:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

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

During the operation the housing becomes hot). Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Make sure that the available voltage is not higher than stated on the rear panel.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power cord.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee. Do not

connect this device to a dimmer pack.

Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Do not touch the device's housing bare hands during its operation (housing becomes hot)! For

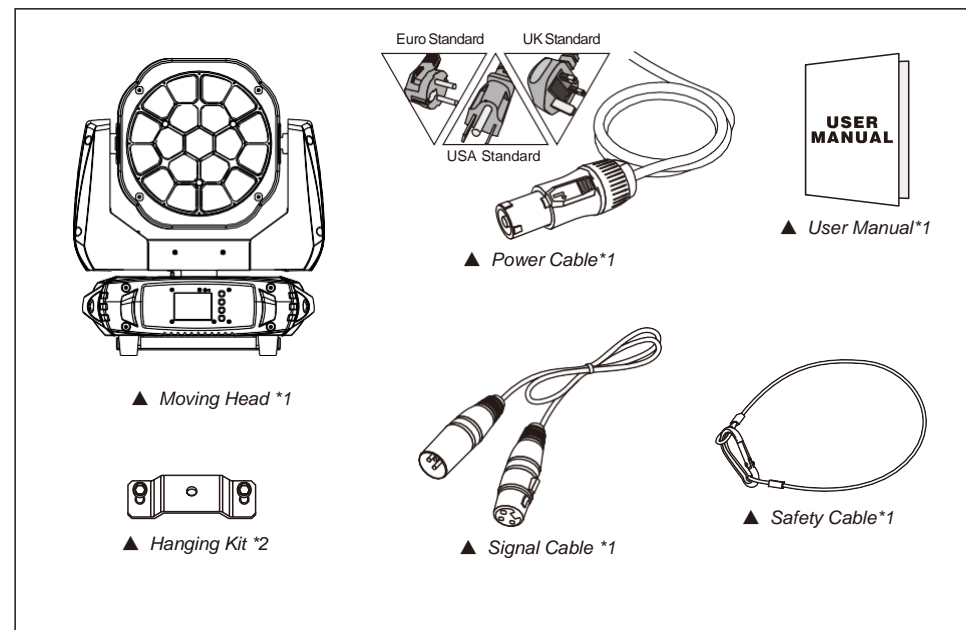replacement use lamps and fuses of same type and rating only.

> **CAUTION ! EYE DAMAGES !**
> **Avoid looking directly into the light source (meant especially for epileptics) !**

		71	75		Red in Pixel 14
				0..255	Red in pixel 14 saturation control (0-100%)
		72	76		Green in pixel 14
				0..255	Green in pixel 14 saturation control(0-100%)
		73	77		Blue in pixel 14
				0..255	Blue in pixel 14 saturation control(0-100%)
		74	78		White in pixel 14
				0..255	White in pixel 14 saturation control(0-100%)
		75	79		Red in Pixel 15
				0..255	White in pixel 15 saturation control (0-100%)
		76	80		Green in pixel 15
				0..255	Green in pixel 15 saturation control(0-100%)
		77	81		Blue in pixel 15
				0..255	Blue in pixel 15 saturation control(0-100%)
		78	82		White in pixel 15
				0..255	White in pixel 15 saturation control(0-100%)
		79	83		Red in Pixel 16
				0..255	White in pixel 16 saturation control (0-100%)
		80	84		Green in pixel 16
				0..255	Green in pixel 16 saturation control(0-100%)
		81	85		Blue in pixel 16
				0..255	Blue in pixel 16 saturation control(0-100%)
		82	86		White in pixel 16
				0..255	White in pixel 16 saturation control(0-100%)
		83	87		Red in Pixel 17
				0..255	White in pixel 17 saturation control (0-100%)
		84	88		Green in pixel 17
				0..255	Green in pixel 17 saturation control(0-100%)
		85	89		Blue in pixel 17
				0..255	Blue in pixel 17 saturation control(0-100%)
		86	90		White in pixel 17
				0..255	White in pixel 17 saturation control(0-100%)
		87	91		Red in Pixel 18
				0..255	Red in pixel 18 saturation control (0-100%)
		88	92		Green in Pixel 18
				0..255	Green in pixel 18 saturation control (0-100%)
		89	93		Blue in Pixel 18
				0..255	Blue in pixel 18 saturation control(0-100%)
		90	94		White in pixel 18
				0..255	White in pixel 18 saturation control(0-100%)
		91	95		Red in pixel 19
				0..255	Red in pixel 19 saturation control(0-100%)
		92	96		Green in pixel 19
				0..255	Green in pixel 19 saturation control(0-100%)
		93	97		Blue in pixel 19
				0..255	Blue in pixel 19 saturation control(0-100%)
		94	98		White in pixel 19
				0..255	White in pixel 19 saturation control(0-100%)
23	17	95	99		Special function
				0..19	No function
				20..29	No function
				30..39	No function
				40..79	No function
				80..89	All Motor reset
				90..94	SCAN Motor Reset
				95..99	Focus Motor Reset
				100..119	Internalprogram 1
				120..139	Internalprogram 2
				140..159	Internalprogram 3
				160..179	Internalprogram 4
				180..199	Internalprogram 5
				200..219	Internalprogram 6
				220..239	Internalprogram 7
				240..255	InternalSound program 1

		41	45	Blue in pixel 6
				0..255	Blue in pixel 6 saturation control(0-100%)

				Description
		41	45	Blue in pixel 6
				0..255 — Blue in pixel 6 saturation control(0-100%)

	41	45		Blue in pixel 6
			0..255	Blue in pixel 6 saturation control(0-100%)
	42	46		White in pixel 6
			0..255	White in pixel 6 saturation control(0-100%)
	43	47		Red in Pixel 7
			0..255	White in pixel 7 saturation control (0-100%)
	44	48		Green in pixel 7
			0..255	Green in pixel 7 saturation control(0-100%)
	45	49		Blue in pixel 7
			0..255	Blue in pixel 7 saturation control(0-100%)
	46	50		White in pixel 7
			0..255	White in pixel 7 saturation control(0-100%)
	47	51		Red in Pixel 8
			0..255	Red in pixel 8 saturation control (0-100%)
	48	52		Green in Pixel 8
			0..255	Green in pixel 8 saturation control (0-100%)
	49	53		Blue in Pixel 8
			0..255	Blue in pixel 8 saturation control(0-100%)
	50	54		White in pixel 8
			0..255	White in pixel 8 saturation control(0-100%)
	51	55		Red in pixel 9
			0..255	Red in pixel 9 saturation control(0-100%)
	52	56		Green in pixel 9
			0..255	Green in pixel 9 saturation control(0-100%)
	53	57		Blue in pixel 9
			0..255	Blue in pixel 9 saturation control(0-100%)
	54	58		White in pixel 9
			0..255	White in pixel 9 saturation control(0-100%)
	55	59		Red in Pixel 10
			0..255	Red in pixel 10 saturation control (0-100%)
	56	60		Green in pixel 10
			0..255	Green in pixel 10 saturation control(0-100%
	57	61		Blue in pixel 10
			0..255	Blue in pixel 10 saturation control(0-100%)
	58	62		White in pixel 10
			0..255	White in pixel 10 saturation control(0-100%)
	59	63		Red in Pixel 11
			0..255	Red in pixel 11 saturation control (0-100%)
	60	64		Green in Pixel 11
			0..255	Green in pixel 11 saturation control (0-100%)
	61	65		Blue in Pixel 11
			0..255	Blue in pixel 11 saturation control(0-100%)
	62	66		White in pixel 11
			0..255	White in pixel 11 saturation control(0-100%)
	63	67		Red in pixel 12
			0..255	Red in pixel 12 saturation control(0-100%)
	64	68		Green in pixel 12
			0..255	Green in pixel 12 saturation control(0-100%)
	65	69		Blue in pixel 12
			0..255	Blue in pixel 12 saturation control(0-100%)
	66	70		White in pixel 12
			0..255	White in pixel 12 saturation control(0-100%)
	67	71		Red in Pixel 13
			0..255	Red in pixel 13 saturation control (0-100%)
	68	72		Green in pixel 13
			0..255	Green in pixel 13 saturation control(0-100%
	69	73		Blue in pixel 13
			0..255	Blue in pixel 13 saturation control(0-100%)
	70	74		White in pixel 13
			0..255	White in pixel 13 saturation control(0-100%)

2. UNPACKING

Squareled Funky Bee adopts a 10W white LED lamp which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Euro Standard   UK Standard

USA Standard

▲ *Power Cable*1*

▲ *User Manual*1*

▲ *Moving Head *1*

▲ *Hanging Kit *2*

▲ *Signal Cable *1*

▲ *Safety Cable*1*

Squareled Funky Bee Is made of a new type of high temperature strength of engineering   plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

This manual covers the important information on installation and applications. Meanwhile, please keep this manual well for future needs.

3. TECHNICAL INFORMATION

Light Source
nLamp: 19pcs*10W 4-IN-1 RGBW LEDS
nLife span: 50000 hours
nColor: RGBW

Optics
nZoom angle: 6°-60°
nImproved optics and flat beam field

Power Supply
nPower supply:Battery or AC mains
nInput Voltage:AC90-260V 50/60Hz
nPower Consumption: State of charge 280W; non-
charged state: 215W

Battery
nBattery type:Lithium iron
nBattery charge time:0% to 100% charge 5.5 hours,
nMax-endurance:8 hours(Full power), 12
hours(built-in program)
nTemperature detection function :(-20 ℃ to 45 ℃)
nBattery protection:Battery short circuit protection, over
current protection,overflow charging
nCharging mode:When connected to mains and
power is insufficient, battery will be charged
automatically.
nSupport battery extension.

Control
nControl Signal:DMX512, master-slave and sound
activated ,auto operation or wireless
nSound control with sensitivity adjustment
Control Channel:23/17/95/99 DMX channels USITT
DMX-512
nDMX recorder and function integrated

Movement
n630° /540° /360° PAN and 270°/180° /90° TILT
movement optional
nSmooth and precise resolution for PAN/TILT
movement
nScan position memory, auto preposition after
unexpected movement.
nPAN/TILT reversible advantage
nPAN/TILT calibration available
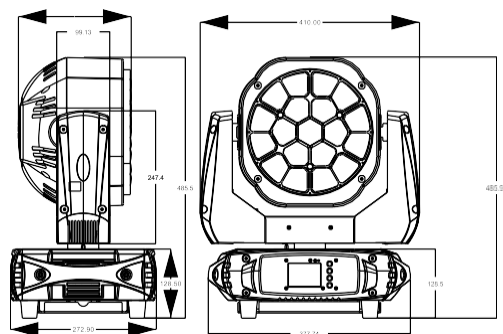
Working Environment
n-20°C-45°C max ambient temperature
nConstant temperature readout and management
function.
nProtection Rating : IP 20

Construction & Weight
nDimensions:41*27*48.6(cm) nPacking
Dimensions:50*34*60(cm) nNet Weight:
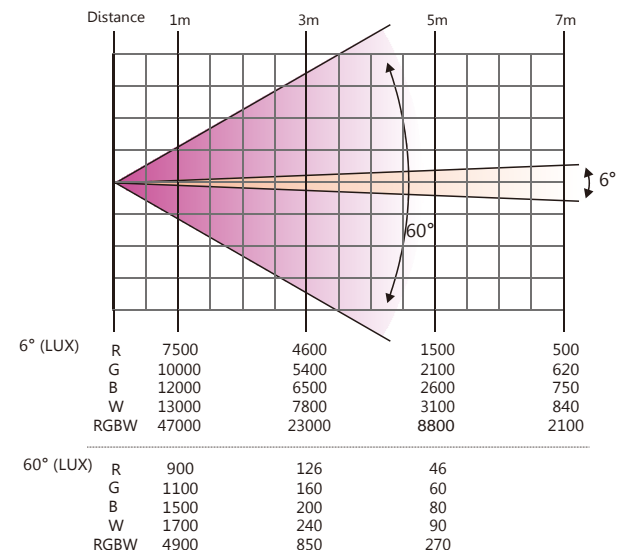nGross Weight: 22 kgs

Features
nABS die-cast plastic cover with Aluminium structure
nEach pixel controllable individually
nColor temperature Liner up and down in 2700-8000K
n8/16 bit smooth and precise resolution for PAN/TILT
movement
nAuto preposition after unexpected movement
nFast,smooth and quiet motorized zoom with 6°-60°
range
nEven,soft edge and pure color mixing coverage
nPixel patterning macro effects
nPetal-like micro beam effect
nBuilt-in running programs
nBuilt-in colour and graphic programs
nFlicker free sources management
nAuto re-position after unexpected movement
n0-100% Linear LED dimmer
nVariable speed strobe effect with 1-28 flashes per
second
nPreset variable/random strobe and dimming pulse
effect
n2.4'' TFT LCD display (320*240pix) with 4 control
buttons
nLCD display switch off automatically after 1 second
nReversible for LCD display
nPOWERCON connector IN/OUT
n3-Pin XLR connectors IN/OUT
nConstant temperature readout and management
function
n2*1/4 turn fastening Omega Clamps(Adaptable
vertically and horizontally)
n1*Safety attachment point

22	18	22		
			174..179	static scene30
			180..185	static scene31
			186..191	static scene32
			192..197	Multicolor static scene1
			198..203	Multicolor static scene2
			204..209	Multicolor static scene3
			210..215	Multicolor static scene4
			216..221	Multicolor static scene5
			222..227	Multicolor static scene6
			228..233	Multicolor static scene7
			234..239	Multicolor static scene8
			240..245	Multicolor static scene9
			246..251	Multicolor static scene10
			252..255	Multicolor static scene11
				Dynamic Patterns (If Patterns channel is in the interval 032 — 255)
			000..023	No function
			024..137	Forward speed from zero speed to fast speed
			138..141	Stop movement
			142..255	Reverse speed from zero speed to fast speed
	19	23		Red in Pixel 1
			0..255	Red in pixel 1 saturation control (0-100%)
	20	24		Green in Pixel 1
			0..255	Green in pixel 1 saturation control (0-100%)
	21	25		Blue in Pixel 1
			0..255	Blue in pixel 1 saturation control(0-100%)
	22	26		White in pixel 1
			0..255	White in pixel 1 saturation control(0-100%)
	23	27		Red in pixel 2
			0..255	Red in pixel 2 saturation control(0-100%)
	24	28		Green in pixel 2
			0..255	Green in pixel 2 saturation control(0-100%)
	25	29		Blue in pixel 2
			0..255	Blue in pixel 2 saturation control(0-100%)
	26	30		White in pixel 2
			0..255	White in pixel 2 saturation control(0-100%)
	27	31		Red in Pixel 3
			0..255	Red in pixel 3 saturation control (0-100%)
	28	32		Green in pixel 3
			0..255	Green in pixel 3 saturation control(0-100%
	29	33		Blue in pixel 3
			0..255	Blue in pixel 3 saturation control(0-100%)
	30	34		White in pixel 3
			0..255	White in pixel 3 saturation control(0-100%)
	31	35		Red in Pixel 4
			0..255	Red in pixel 4 saturation control (0-100%)
	32	36		Green in pixel 4
			0..255	Green in pixel 4 saturation control(0-100%)
	33	37		Blue in pixel 4
			0..255	Blue in pixel 4 saturation control(0-100%)
	34	38		White in pixel 4
			0..255	White in pixel 4 saturation control(0-100%)
	35	39		Red in Pixel 5
			0..255	White in pixel 5 saturation control (0-100%)
	36	40		Green in pixel 5
			0..255	Green in pixel 5 saturation control(0-100%)
	37	41		Blue in pixel 5
			0..255	Blue in pixel 5 saturation control(0-100%)
	38	42		White in pixel 5
			0..255	White in pixel 5 saturation control(0-100%)
	39	43		Red in Pixel 6
			0..255	White in pixel 6 saturation control (0-100%)
	40	44		Green in pixel 6
			0..255	Green in pixel 6 saturation control(0-100%)

			137..141	Dynamic Scene22
			142..146	Dynamic Scene23
			147..151	Dynamic Scene24
			152..156	Dynamic Scene25
			157..161	Dynamic Scene26
			162..166	Dynamic Scene27
			167..171	Dynamic Scene28
			172..176	Dynamic Scene29
			177..181	Dynamic Scene30
			182..186	Dynamic Scene31
			187..191	Dynamic Scene32
21	17	21	192..196	Multicolor Dynamic Scene1
			197..201	Multicolor Dynamic Scene2
			202..206	Multicolor Dynamic Scene3
			207..211	Multicolor Dynamic Scene4
			212..216	Multicolor Dynamic Scene5
			217..221	Multicolor Dynamic Scene6
			222..226	Multicolor Dynamic Scene7
			227..231	Multicolor Dynamic Scene8
			232..236	Multicolor Dynamic Scene9
			237..241	Multicolor Dynamic Scene10
			242..246	Multicolor Dynamic Scene11
			247..251	Multicolor Dynamic Scene12
			252..255	Multicolor Dynamic Scene13
				Static patterns or patterns speed
			Static Patterns (If Patterns channel is in the interval 016 − 031)	
			000..005	static scene1
			006..011	static scene2
			012..017	static scene3
			018..023	static scene4
			024..029	static scene5
			030..035	static scene6
			036..041	static scene7
			042..047	static scene8
			048..053	static scene9
			054..059	static scene10
			060..065	static scene11
			066..071	static scene12
22	18	22	072..075	static scene13
			078..083	static scene14
			084..089	static scene15
			090..095	static scene16
			096..101	static scene17
			102..107	static scene18
			108..113	static scene19
			114..119	static scene20
			120..125	static scene21
			126..131	static scene22
			132..137	static scene23
			138..143	static scene24
			144..149	static scene25
			150..155	static scene26
			156..161	static scene27
			162..167	static scene28
			168..173	static scene29

4. PHOTOMETRICS DIAGRAM

6° (LUX)		1m	3m	5m	7m
	R	7500	4600	1500	500
	G	10000	5400	2100	620
	B	12000	6500	2600	750
	W	13000	7800	3100	840
	RGBW	47000	23000	8800	2100

60° (LUX)		1m	3m	5m
	R	900	126	46
	G	1100	160	60
	B	1500	200	80
	W	1700	240	90
	RGBW	4900	850	270

5. OPERATION INSTRUCTIONS

● Squareled Funky Bee Product for beam effect for on-site decoration purpose. Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.

● This light should be keep away from strong shaking during any transportation or movement.

● Don't pull up the light by only the head, or it might cause damages to the mechanical parts.

● Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And

● Don't lay any power cables on the floor. Or it might cause electronic shock to the people.

● Make sure the installation place is in good safety condition before installing the fixture.

● Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.

● Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.

● Make sure the fixture is operated by qualified personnel who knows the fixture before using.

● Keep the original packages if any second shipment is needed.

● Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.

● It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock , lamp broke, etc.

6. INSTALLATIONS

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 f t) away from any flammable materials (decoration etc.).
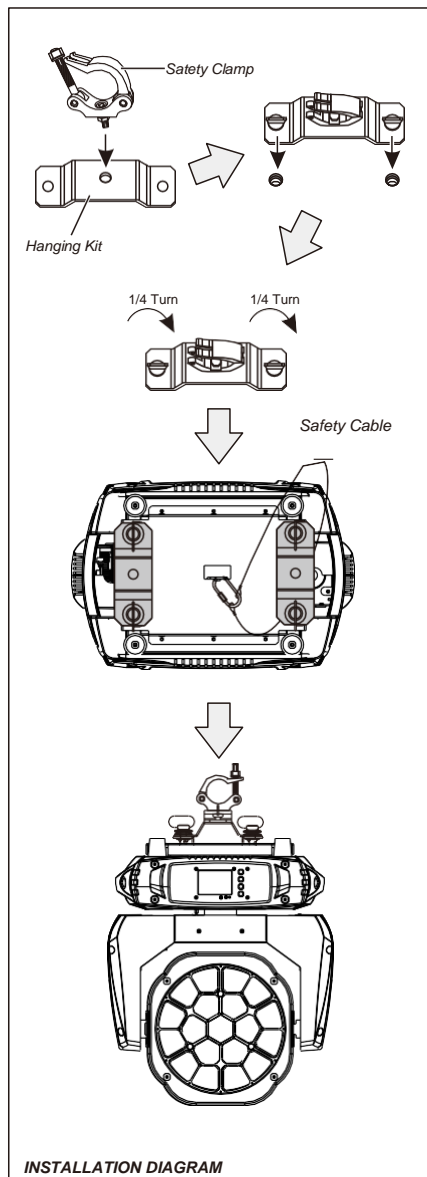
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points:

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.
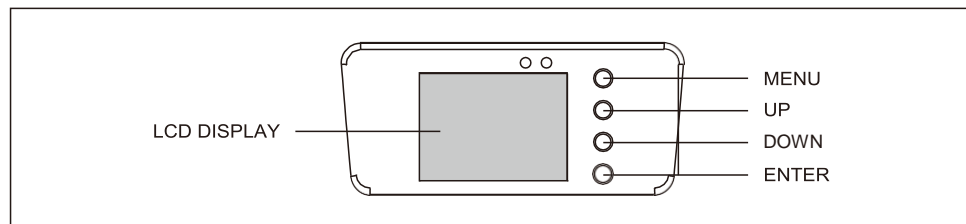
Clamp Mounting:

Squareled Funky Bee provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "Hanging Kit". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly .

Satety Clamp

Hanging Kit

1/4 Turn   1/4 Turn

Safety Cable

INSTALLATION DIAGRAM

18		14	18		Foreground dimmer
				000..255	Foreground dimmer 0 − 100%.
19		15	19		Background color for patterns
					Choose Background color for Dynamic/Static Scene,no function for Multicolor Scene
				0..0	No Function
				1..13	Red
				14..27	Green
				28..41	Blue
				42..55	White
				56..69	Red+White
				70..83	Green+White
				84..97	Blue+White
				98..111	Green+Blue
				112..125	Red+Blue
				126..139	Red+Green
				140..153	Green+Blue+White
				154..167	Red+Blue+White
				168..181	Red+Green+White
				182..195	Red+Blue+Green+White
				196..202	2700K
				203..209	3200K
				210..216	3500K
				217..223	5000K
				224..230	5500K
				231..237	6000K
				238..244	6500K
				245..251	7000K
				252..255	8000K
20		16	20		Background dimmer
				000..255	Background dimmer 0 − 100%.
21		17	21		Patterns
				000..015	No function
				016..031	Static patterns
				032..036	Dynamic Scene1
				037..041	Dynamic Scene2
				042..046	Dynamic Scene3
				047..051	Dynamic Scene4
				052..056	Dynamic Scene5
				057..061	Dynamic Scene6
				062..066	Dynamic Scene7
				067..071	Dynamic Scene8
				072..076	Dynamic Scene9
				077..081	Dynamic Scene10
				082..086	Dynamic Scene11
				087..091	Dynamic Scene12
				092..096	Dynamic Scene13
				097..101	Dynamic Scene14
				102.106	Dynamic Scene15
				107..111	Dynamic Scene16
				112..116	Dynamic Scene17
				117..121	Dynamic Scene18
				122..126	Dynamic Scene19
				127..131	Dynamic Scene20
				132..136	Dynamic Scene21

				140..153	Green+Blue+White
				154..167	Red+Blue+White
				168..181	Red+Green+White
				182..195	Red+Blue+Green+White
				196..202	2700K
				203..209	3200K
14	14	10	14	210..216	3500K
				217..223	5000K
				224..230	5500K
				231..237	6000K
				238..244	6500K
				245..251	7000K
				252..255	8000K
					Color Temp
				0..15	No Function
				16..45	Below 3200K
				46..75	3200K - 3500K
				76..105	3500K - 5000K
15	15	11	15	106..135	5000K - 5500K
				136..165	5500K - 6000K
				166..195	6000K - 6500K
				196..225	6500K - 7000K
				226..255	7000K - 8000K
					Visual Tungsten Lamp
16	16	12	16	0..15	No Function
				16..255	Tungsten lamp effect is gradually enhanced
					Foreground color for patterns
					Choose Foreground color for Dynamic/Static Scene,no function for Multicolor Scene
				0..0	No Function
				1..13	Red
				14..27	Green
				28..41	Blue
				42..55	White
				56..69	Red+White
				70..83	Green+White
				84..97	Blue+White
				98..111	Green+Blue
				112..125	Red+Blue
17		13	17	126..139	Red+Green
				140..153	Green+Blue+White
				154..167	Red+Blue+White
				168..181	Red+Green+White
				182..195	Red+Blue+Green+White
				196..202	2700K
				203..209	3200K
				210..216	3500K
				217..223	5000K
				224..230	5500K
				231..237	6000K
				238..244	6500K
				245..251	7000K
				252..255	8000K

7. CONTROL CONNECTION

DMX OUT
DMX IN
Expansion Port
POWER IN
POWER OUT
Fuse
Power Switch

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.
Please refer to the diagram below. DMX-512 connection with DMX terminator.

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a3 resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.

DMX IN
POWER IN
Signal (-)
Signal (+)
Ground
Signal (-)
Signal (+)
120 Ω
DMX512 OUT
DMX512 IN

8. MENU OPERATIONS

LCD DISPLAY

MENU
UP
DOWN
ENTER

MENU			Description
Function Mode	Dmx Address	A001~AXXX	**DMX address setting**
	Channel Mode	CH23 MODE	**23 Channel Mode**
		CH17 MODE	**17 Channel Mode**
		CH95 MODE	**95 Channel Mode**
		CH99 MODE	**99 Channel Mode**
	Auto Run	Internal Program1~8 / Master/Alone	**Auto run**
	Music Control	Internal Program1~8 / Master/Alone	**Sound Control**
Option	Reset Default	Yes/No	**Reset Default**
	Signal Set	Wire DMX	**Wire DMX**
		Wireless DMX	**Wireless DMX**
		Act WDMX & Out	**Act WDMX & Out**
	Pan / Tilt	Reverse Pan (On/Off)	**Reverse Pan**
		Reverse Tilt (On/Off)	**Reverse Tilt**
		Select Pan 630°/540°/360°	**Pan Degree,default is 540°**
		Select Tilt 270°/180°/90°	**Tilt Degree,default is 270°**
	UI SET	Mic SEN 0~99%	**Sensitivity Setting**
		OFF Signal Mode (On/Off)	**OFF at original status and ON at reset status when no DMX signal**
Information	Temperature	XXX°C/°F	**Current Temperature**
	Software Version	V1.0~V9.9	**Software Version**
Manual Control	Reset	Total Reset	**Total Reset**
		Pan/Tilt Reset	**Pan/Tilt Reset**
		Zoom Reset	**Zoom Reset**
	Channel	PAN=XXX……	**Manual Control Channel**
Advanced (Access Code 088)	Calibration	PAN=XXX……	**Calibration(Code:088)**

9.DMX PROTOCOL

Mode/Channel				Value	Function
23	17	95	99		
1	1	1	1		Pan
				0..255	PAN Movement
2	2	2	2		Pan -fine
				0..255	Fine control of Pan movement
3	3	3	3		Tilt
				0..255	Tilt Movement
4	4	4	4		Tile -fine
				0..255	Fine control of Tilt movement
5	5	5	5		Speed pan/tile
				0..225	max to min speed
				226..235	blackout by movement
				236..255	no function
6	6	6	6		Dimmer
				0..255	Dimmer 0%...100%
7	7	7	7		Shutter
				0..31	Shutter closed
				32..63	shutter open
				64..95	Strobe effect slow to fast
				96..127	shutter open
				128..159	Pulse-effect in sequences slow to fast
				160..191	shutter open
				192..223	Random strobe effect slow to fast
				224..255	shutter open
8	8		8		Red
				0..255	0-100% Red dimmer from dark to bright
9	9		9		Green
				0..255	0-100% Green dimmer from dark to bright
10	10		10		Blue
				0..255	0-100% Blue dimmer from dark to bright
11	11		11		White
				0..255	0-100% White dimmer from dark to bright
12	12	8	12		Zoom
				0..255	In(near)to out(far)
13	13	9	13		Zoom Rotation
				0..3	Zoom rotation stop
				4..127	Forwards rotation from fast to slow
				128..131	Zoom rotation stop
				132..255	Backwards rotation from slow to fast
14	14	10	14		Virtual color
				0..0	No Function
				1..13	Red
				14..27	Green
				28..41	Blue
				42..55	White
				56..69	Red+White
				70..83	Green+White
				84..97	Blue+White
				98..111	Green+Blue
				112..125	Red+Blue
				126..139	Red+Green