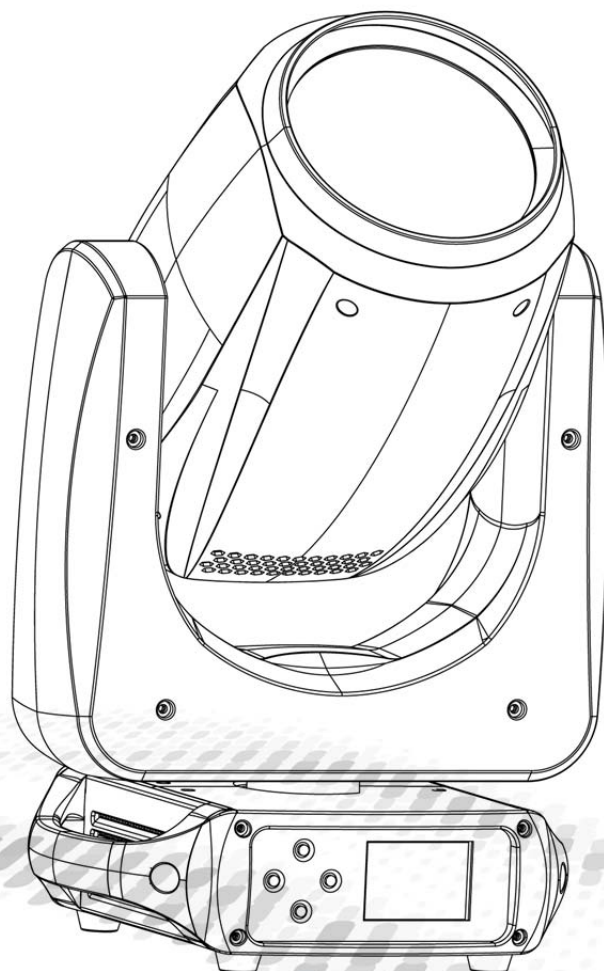




创意源于追求  
Own Idea Of Lighting

# PLUTO BEAM

## USER MANUAL



MODEL: SS9151SC



— Since 1985 —

广州市雅江光电设备有限公司

Guangzhou Yajiang Photoelectric Equipment Ltd.

电话/ Tel : 020 - 86947788

邮箱/ E-mail : sales @yajiang .cn

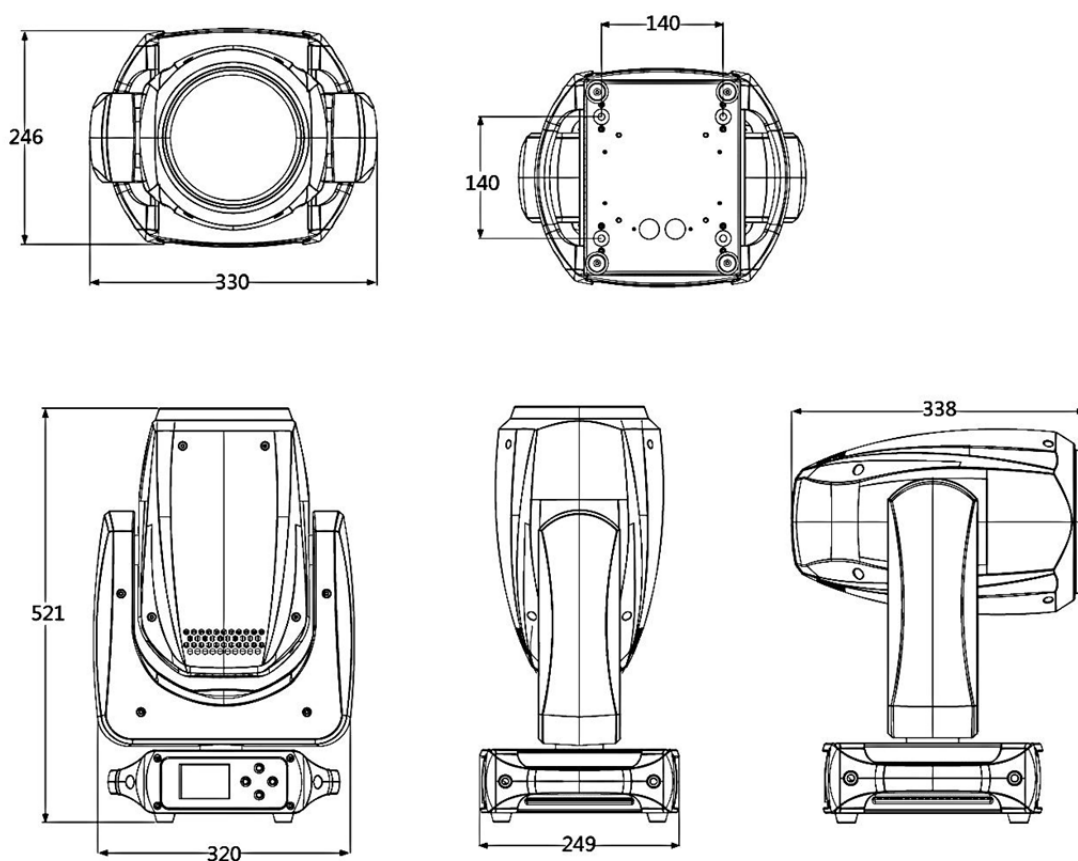
传真/ Fax : 020 - 86943773

网址/ Website : www.yajiang.cn

# 1 PRODUCT

## 1.1 TECHNICAL SPECIFICATIONS

Type	SS9151SC
LED colors	130W Cool White LED
Power	200W
Voltage Range	AC100~240V,50/60Hz
Protection	IP20
Operation Temperature	0℃~45℃
Dimensions	330x249x521mm
Weight	15kg



## 1.2 Safety Notes

### **IMPORTANT**

- This product must be installed by a qualified professional.
- 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
- 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.

### **CAUTION!**

- Make sure that the available voltage is not higher than stated on the rear panel.
- Do not touch the power cables if your hands are wet.
- The earth wire must always be connected to the ground. Therefore it is essential to connect the yellow/green conductor to earth.
- 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. The electric connection, repairs and servicing must be carried out by a qualified employee.
- Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.
- Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)! The surface of the product's casing can reach up to 70° C (158° F) during operation. Avoid contact by persons and materials. Do not install the product in a location where there is a risk of accidental contact. Allow the product to cool for at least 10 minutes before handling.
- For replacement use lamps and fuses of same type and rating only.
- Please protect the fixture and avoid destroy during transport and installation. If there is any damage to the coating, the shell may be corroded.
- When hanging lamps and lanterns, it is necessary to verify that facilities and hooks can bear at least 10 times the weight of lamps and lanterns.
- Fix the safety rope at the correct holes only. Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The maximum ambient temperature 45°C must never be exceeded. Do not operate the product if the ambient temperature (Ta) exceeds 45° C (115° F).
- 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.

### **Electrical Warning**

- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person
- For replacement use lamps and fuses of same type and rating only.
- The lens has to be replaced when it is obviously damaged, so that its function is impaired, e. g. due to cracks or deep scratches!



## **PLUTO BEAM SS9151**

### **Keep the product well away from flammable materials**

- Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- Ensure that there is free and unobstructed airflow around the product. Provide a minimum clearance of 150 mm (6 in.) around fans and air vents.
- Do not illuminate surfaces within 3 m (10 ft.) of the product.
- Do not install a fuse that has a higher rating than the one originally installed in the product. Do not bypass fuses.
- Do not stick filters, masks or other materials onto optical components.
- If the fixture seems to be abnormally hot, shows signs of melting or emits smoke, disconnect the fixture from power immediately and allow it to cool. Do not touch the fixture without heatproof safety gloves. Keep the fixture well away from combustible and flammable materials.

**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!**

**Do not point the front of the fixture towards the sun or other strong light sources. The front lens focuses and concentrates light just like a magnifying glass. Strong light can cause internal damage to the fixture, melting components or starting an internal fire within seconds.**

### **To avoid problems from strong light sources:**

- Do not expose the front of a fixture to sunlight or any other strong light source. Avoid pointing other high-powered beam lights directly at the fixture.
- Do not focus a light beam from one lighting fixture directly towards another.
- For outdoor applications during daylight, make sure that the front face of any fixture is shielded or points away from the sun, even when not in use.
- Do not expose the product to heat (from other lighting fixtures for example).



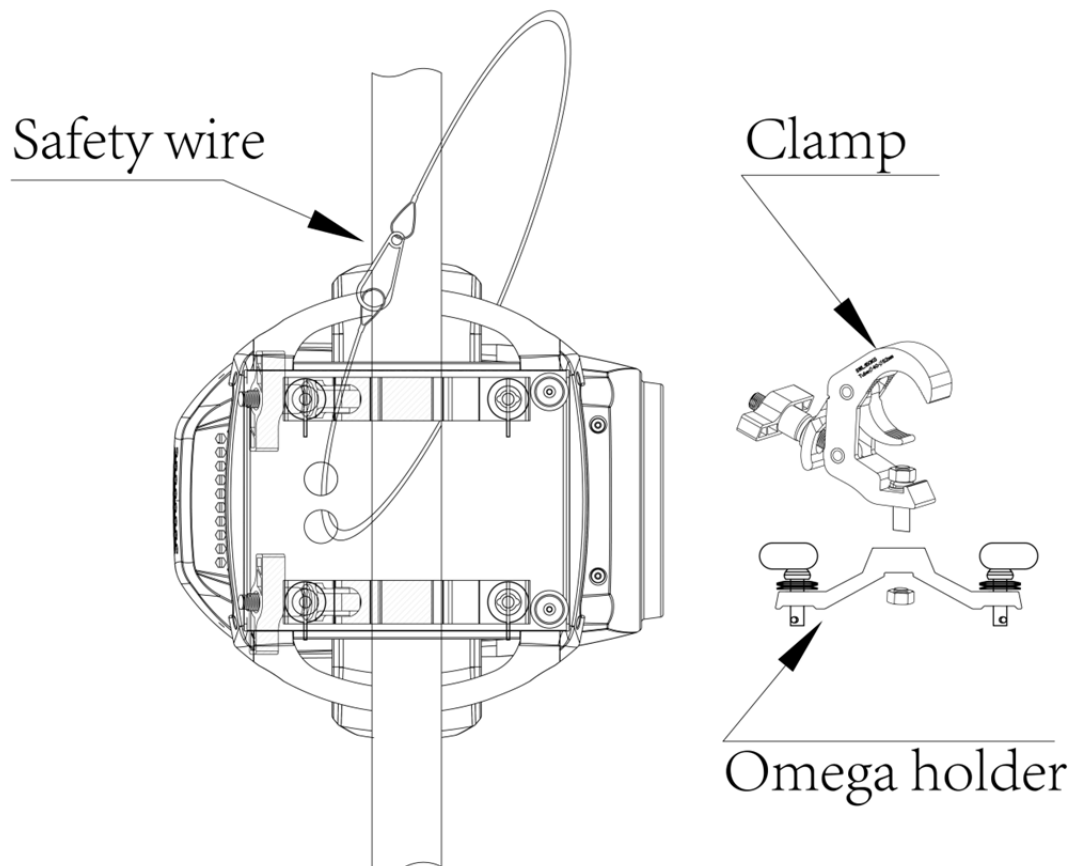
**PLUTO BEAM  
SS9151**

## **2 INSTALLATION**

### **2.1 MOUNTING**

#### **Truss installation**

- ◆ Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- ◆ For overhead use, always install a safety cable that can hold at least 10 times the weight of the fixture.
- ◆ For overhead installation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture;
- ◆ Secure the fixture with a safety cable through the rear safety eye and truss as shown..
- ◆ Ensure that the structure (truss) to which you are attaching the fixture is secure





# PLUTO BEAM SS9151

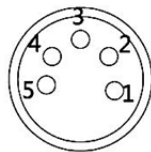
## 2.2 POWER CONNECTIONS

- ◆ This product has an auto-ranging power supply that can work with an input voltage range of 100–240 VAC, 50/60 Hz.

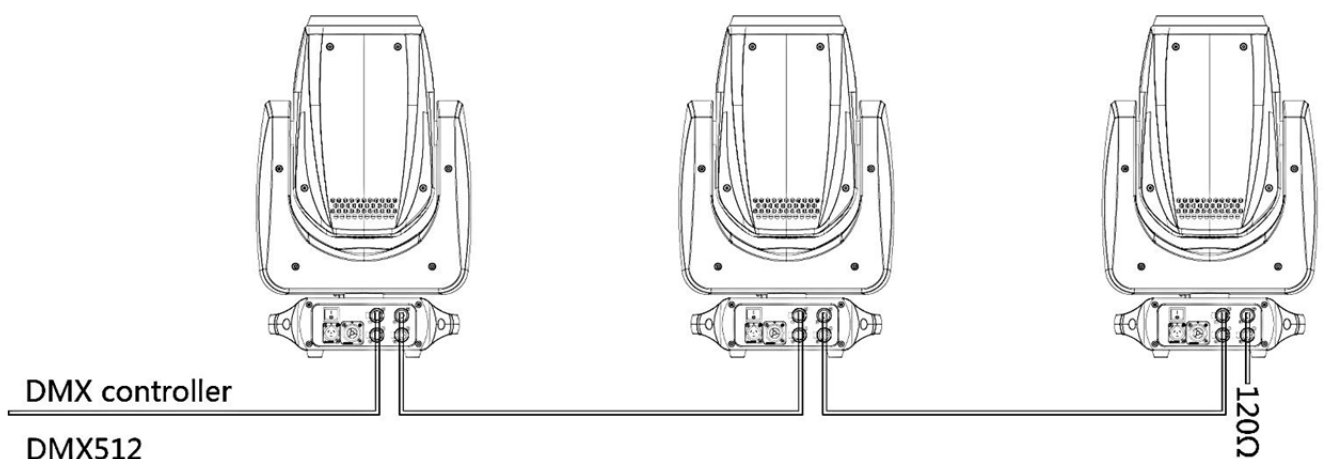
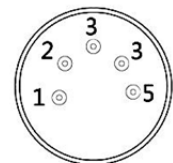
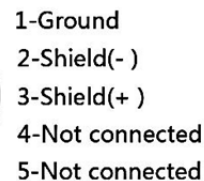
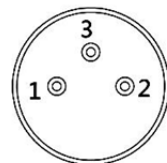
## 2.3 Data network requirements

- ◆ Connect the DMX512 controller to the units in series. A DMX 512 data link is required in order to control the fixture via DMX. The fixture has 3/5-pin XLR connectors for DMX data input and output.
- ◆ Each unit has 13 DMX channels so the DMX Addresses should increase by increments of 1, (Nx1)+1, (Nx2)+1, (Nx3)+1...
- ◆ Any DMX address in the range from 001 to 512 may be used.
- ◆ 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 120  $\Omega$  resistor between Signal (–) and Signal (+) into a 3/5-pin XLR-plug and plug it in the DMX-output of the last fixture.

DMX-output  
XLR mounting-sockets



DMX-input  
XLR mounting-plugs



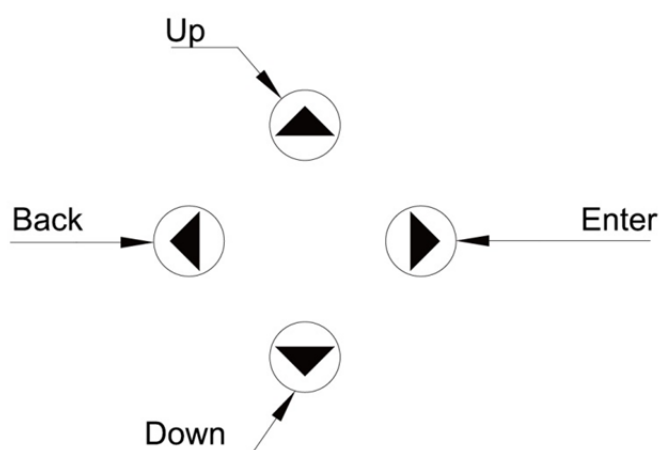


**PLUTO BEAM**  
**SS9151**

## 3 FUNCTIONS AND SETTINGS

### 3.1 DISPLAY OPERATION

- ◆ Up: Scroll 'Up' through the menu list or increase the value of the current function.
- ◆ Down: Scroll 'Down' through the menu list or decrease the value of the current function.
- ◆ Left(Back): Scroll through the main menu.
- ◆ Right(Enter): Enter the currently selected menu or confirm the current function value.



### 3.2 Menu Map

ADDRESS	001 - 512		DMX address setting
PERSON	BASIC		Use the menu to select desired channel mode
	STANDARD (Default)		
	EXTEND		
	SY		
RUNMODE	DMX512 (Default)		Select Signal
	AUTO		Default: DMX512
	CUSTOM1		CUSTOM1-2 Set up get into EDIT MENU edit
	CUSTOM2		
OPTION	PAN INVERT	NORMAL(Default)	PAN moving direction selection
		INVERT	
	TILT INVERT	NORMAL(Default)	TILT moving direction selection
		INVERT	
	PERFORM	STUDIO	Fan mode low speed
		POWER	Fast rotation of fan, all power
		LIVE (Default)	Automatic rotation of fan
	BLACKOUT	OFF(Default)	Select OFF blackout without delay
		ON	Select ON Blackout delay 3s
	DIMMER	DIM4(Default)	Dimming curves DIM1 (fast) to DIM4





# PLUTO BEAM

## SS9151

EDIT		DIM3			(slow)
		DIM2			
		DIM1			
		OFF			
	LED PWM	1200Hz (Default)			Sets the PWM frequency
		2000Hz			
		2400Hz			
		4000Hz			
		6000Hz			
		25000Hz			
	DMX ERROR	SAVE (Default)			Hold after loss of DMX signal
		BLACK			Blackout after loss of DMX signal
	DISPLAY INVERT	OFF(Default)			Display reverse off
		ON			Display reverse on
	DISPLAY TIME	On			Display backlight always on
		30s			Display light 30s
		1min(Default)			Display light 1min
		2min			Display light 2min
	DISPLAY LOCK	OFF			Locks display (passcode is <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)
		ON(Default)			
	LOAD PARA	NO			Upload data
		YES			Not upload data
	SETTING	RECOVERY	****	Restore default factory settings.	
		CLEAN EDIT1	****	Clean customer self-editing scene 1	
		CLEAN EDIT2	****	Clean customer self-editing scene 2	
		WDMX HIDE	YES	Hide wireless mode WDMX reset and	
			NO	signal hide and the default is wired mode only	
	PT ENCODER	OFF			XY Encoder switch.
		ON			OFF is close; ON is open.
	WDMX RESET	NO			Do not clear the receiver's message.
		YES			Clear the receiver's message
	SIGNAL	ONLY XLRDMX			ONLY XLR is wire only
		XLRDMX FIRST			XLR FIRST is wire first
		ONLY WDMX			ONLY WDMX is wireless only
		WDMX FIRST			WDMX FIRS is wireless first
		WDMX TO XLRDMX			WDMX TO DMX is wireless to wired
EDIT 1-2	STEP 1-14	PAN	0-255	Edit the custom programs1-30	
		TILT	0-255	Select play 【EDIT 1】 in RUNMOEDE	
		PT SPEED	0-255	CUSTOM 1; Select play 【EDIT 2】 in	
		COLOR	0-255	RUNMOEDE CUSTOM 2	





# PLUTO BEAM

## SS9151

			FIXED GOBO	0-255	
			PRISM1	0-255	
			PRISM2	0-255	
			FOCUS	0-255	
			RAINBOW.D	0-255	
			RAINBOW.R	0-255	
			DIMMER	0-255	
			STROBE	0-25	
			TIME	0-255	
			USE	YES/NO	
MENUAL	Auto Test	Auto Test	YES/NO		Auto Test channel
	CHANNEL	PAN	0-255		Manual control channel
		TILT	0-255		
		PT SPEED	0-255		
		COLOR	0-255		
		FIXED GOBO	0-255		
		PRISM1	0-255		
		PRISM2	0-255		
		FOCUS	0-255		
		RAINBOW.D	0-255		
		RAINBOW.R	0-255		
		DIMMER	0-255		
		STROBE	0-25		
	DEBUG HIDE	NO			Factory testing mode. All stepper motors are not controlled by signal, It only works again after the reset.
		YES			
	RESET	ALL RESET			Select Yes/No to carry out all reset hide
		PT RESET			Select Yes/No to carry out P/T reset
		COLOR SYS			COLOR reset
		OTHER			Zoom/ Focus/ Prism reset
	INFO	FIXTURE HOURS			
LED USE HOURS				LED use time	
TEMPERATURE				LED temperature	
VERSION				Software versions	
RDM		UID		0x388Axxxxxxxx	Check fixture's ID
		LABEL		PLUTO BEAM	Check fixture's LABEL
SYSTEM ERROR		MEMORY IC			Memory IC
		ANGLESENSOR			Angle Sensor
		PAN SENSOR			PAN SENSOR
		PAN ENCODER			PAN ENCODER
		PAN DRIVE IC			PAN DRIVE IC



# PLUTO BEAM

## SS9151

		TILT SENSOR		TILT SENSOR
		TILT ENCODER		TILT ENCODER
		TILT DRIVEIC		TILT DRIVEIC
		TEMPERATURE		TEMPERATURE
		COLOR RESET		COLOR RESET
		FGOBO RESET		FGOBO RESET
		PRISM1 RESET		PRISM1 RESET
		PRISM2 RESET		PRISM2 RESET
		FOCUS RESET		FOCUS RESET
		RAINBOW RESET		RAINBOW RESET
SERVICE	****	PAN	±127	Pan position fine adjustment
		TILT	±127	Tilt position fine adjustment
		COLOR	±127	Color position fine adjustment
		FIXED GOBO	±127	Fixed Gobo position fine adjustment
		PRISM1	±127	Prism 1 position fine adjustment
		PRISM2	±127	Prism 2 position fine adjustment
		FOCUS	±127	Focus position fine adjustment
		RAINBOW	±127	RAINBOW position fine adjustment
		LED DIMMER	128-255	
		Rest Fixture Time		Rest fixture time
		Rest LED Time		Rest LED time

All passwords of this product are <UP>, <DOWN>, <UP>, <DOWN>, <ENTER>)



**PLUTO BEAM**  
**SS9151**

## 4 USING A DMX512 CONTROLLER

### 4.1 DMX CONTROL

BASIC (13CH)	STANDARD (15CH)	Extend (18CH)	Value	Function
CH.1	CH.1	CH.1	000-255	PAN 0-540°
-	CH.2	CH.2	000-255	PAN FINE
CH.2	CH.3	CH.3	000-255	TILT 0-270°
-	CH.4	CH.4	000-255	TILT FINE
CH.3	CH.5	CH.5	000-255	PT Speed
CH.4	CH.6	CH.6	<b>COLOUR WHELL9+1</b>	
			000-007	WHITE
			008-013	COLOR1
			014-019	COLOR2
			020-025	COLOR3
			026-031	COLOR4
			032-037	COLOR5
			038-043	COLOR6
			044-049	COLOR7
			050-055	COLOR8
			056-063	COLOR9
			064-191	COLOR WHELL10-360°
			192-222	COLOR WHELL1 RAINBOW EFFECT(SPEED 100%→1)
			223-224	STOP
			225-255	COLOR WHELL1 RAINBOW EFFECT(SPEED 1→100%)
-	-	CH.7	000-255	000-255
CH.5	CH.7	CH.8	<b>FIXED GOBO WHEEL14+1</b>	
			0-10	WHITE
			11-17	FIXED GOBO 1
			18-24	FIXED GOBO 2
			25-31	FIXED GOBO 3
			32-38	FIXED GOBO 4
			39-45	FIXED GOBO 5
			46-52	FIXED GOBO 6
			53-59	FIXED GOBO 7
			60-66	FIXED GOBO 8
			67-73	FIXED GOBO 9
			74-80	FIXED GOBO 10
			81-87	FIXED GOBO 11
			88-94	FIXED GOBO 12
			85-102	FIXED GOBO 13



# PLUTO BEAM

## SS9151

			103-110	FIXED GOBO 14
			111-118	FIXED GOBO 1 SHAKE (SPEED 1 → 100%)
			119-126	FIXED GOBO 2 SHAKE (SPEED 1 → 100%)
			127-134	FIXED GOBO 3 SHAKE (SPEED 1 → 100%)
			135-142	FIXED GOBO 4 SHAKE (SPEED 1 → 100%)
			143-150	FIXED GOBO 5 SHAKE (SPEED 1 → 100%)
			151-158	FIXED GOBO 6 SHAKE (SPEED 1 → 100%)
			159-166	FIXED GOBO 7 SHAKE (SPEED 1 → 100%)
			167-174	FIXED GOBO 8 SHAKE (SPEED 1 → 100%)
			175-182	FIXED GOBO 9 SHAKE (SPEED 1 → 100%)
			183-190	FIXED GOBO 10 SHAKE (SPEED 1 → 100%)
			191-198	FIXED GOBO 11 SHAKE (SPEED 1 → 100%)
			199-206	FIXED GOBO 12 SHAKE (SPEED 1 → 100%)
			207-214	FIXED GOBO 13 SHAKE (SPEED 1 → 100%)
			215-222	FIXED GOBO 14 SHAKE (SPEED 1 → 100%)
			223-230	WHITE
			231-238	STATIC GOBO POSITIVE WATER EFFECT (SPEED 100 → 1%)
			239-246	STOP WATER EFFECT
			247-255	STATIC GOBO REVERSE WATER EFFECT (SPEED 1 → 100%)
CH.6	CH.8	CH.9	0-255	RAINBOW Insert effect wheel
CH.7	CH.9	CH.10	<b>RAINBOW DISC ROTATION</b>	
			0-10	Rotation STOP
			11-127	RAINBOW Insertion CW Rotate Slow to Fast
			128-138	Rotation STOP
			139-255	RAINBOW Insertion CCW Rotate Fast to Slow
CH.8	CH.10	CH.11	<b>PRISM1</b>	
			0-10	WHITE
			11-145	PRISM INSERT AND ADJUST THE ANGLE (0 → 360°)
			146-150	STOP
			151-200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% → 1)
			201-205	STOP
			206-255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 → 100%)
CH.9	CH.11	CH.12	<b>PRISM2</b>	
			0-10	WHITE
			11-145	PRISM INSERT AND ADJUST THE ANGLE (0 → 360°)
			146-150	STOP
			151-200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% → 1)
			201-205	STOP
			206-255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 → 100%)
CH.10	CH.12	CH.13	0-255	FOCUS
-	-	CH.14	0-255	FOCUS FINE



# PLUTO BEAM

## SS9151

CH.11	CH.13	CH.15	0-255	DIMMER
-	-	CH.16	0-255	DIMMER FINE
CH.12	CH.14	CH.17	<b>STROBE</b>	
			0-9	NO FUNCTION
			10-99	STROBE (FROM SLOW TO FAST)
			100-109	NO FUNCTION
			110-179	LIGHTNING STROBE
			180-189	NO FUNCTION
			190-255	RANDOM SROBE
CH.13	CH.15	CH.18	<b>CONTROL</b> (EXECUTE AFTER 3 SECONDS)	
			000-010	NO FUNCTION
			011-020	PAN/TILT BLACK ACTIVATED
			021-030	PAN/TILT BLACK DEACTIVATED
			031-040	PAN INVERT
			041-050	TILT INVERT
			051-060	PAN/TILT INVERT OFF
			061-070	STUDIO
			071-080	POWER
			081-090	LIVE
			091-100	DIM4
			101-110	DIM3
			111-120	DIM2
			121-130	DIM1
			131-140	DIM0
			141-150	1200Hz
			151-160	2000Hz
			161-170	2400Hz
			171-180	4000Hz
			181-190	6000Hz
			191-200	25000Hz
			201-210	ALL RESET
			211-220	XY RESET
			221-230	COLOR GOBO SYSTEM RESET
			231-240	FOCUS RESET
			241-255	PRISM RESET



# PLUTO BEAM

## SS9151

SY (16CH)	VALUE	FUNCTION
CH.1	<b>COLOUR WHEEL9+1</b>	
	000-007	WHITE
	008-013	COLOR1
	014-019	COLOR2
	020-025	COLOR3
	026-031	COLOR4
	032-037	COLOR5
	038-043	COLOR6
	044-049	COLOR7
	050-055	COLOR8
	056-063	COLOR9
	064-191	COLOR WHEEL10-360°
	192-222	COLOR WHEEL1 RAINBOW EFFECT(SPEED 100%→1)
	223-224	STOP
	225-255	COLOR WHEEL1 RAINBOW EFFECT(SPEED 1→100%)
CH.2	<b>STROBE</b>	
	0-3	NO LIGHT
	4-103	STROBE ( FROM SLOW TO FAST )
	104-107	NO FUNCTION (100% light)
	108-207	LIGHTNING STROBE
	208-212	NO FUNCTION (100% light)
	213-251	RANDOM STROBE
	252-255	NO FUNCTION (100% light)
CH.3	0-255	<b>DIMMER</b>
CH.4	<b>FIXED GOBO WHEEL14+1</b>	
	0-3	NO FUNCTION (100% light)
	4-7	FIXED GOBO 1
	8-11	FIXED GOBO 2
	12-15	FIXED GOBO 3
	16-19	FIXED GOBO 4
	20-23	FIXED GOBO 5
	24-27	FIXED GOBO 6
	28-31	FIXED GOBO 7
	32-35	FIXED GOBO 8
	36-39	FIXED GOBO 9
	40-43	FIXED GOBO 10
	44-47	FIXED GOBO 11
	48-51	FIXED GOBO 12
	52-55	FIXED GOBO 13



# PLUTO BEAM

## SS9151

	56-59	FIXED GOBO 14
	60-72	NO FUNCTION
	72-113	STATIC GOBO POSITIVE WATER EFFECT (SPEED 100 → 1%)
	114-117	STOP WATER EFFECT
	118-159	STATIC GOBO REVERSE WATER EFFECT (SPEED 1 → 100%)
	160-166	FIXED GOBO 2 SHAKE (SPEED 1 → 100%)
	167-172	FIXED GOBO 3 SHAKE (SPEED 1 → 100%)
	173-179	FIXED GOBO 4 SHAKE (SPEED 1 → 100%)
	180-185	FIXED GOBO 5 SHAKE (SPEED 1 → 100%)
	186-191	FIXED GOBO 6 SHAKE (SPEED 1 → 100%)
	192-198	FIXED GOBO 7 SHAKE (SPEED 1 → 100%)
	199-204	FIXED GOBO 8 SHAKE (SPEED 1 → 100%)
	205-211	FIXED GOBO 9 SHAKE (SPEED 1 → 101%)
	212-217	FIXED GOBO 10 SHAKE (SPEED 1 → 101%)
	218-223	FIXED GOBO 11 SHAKE (SPEED 1 → 101%)
	224-230	FIXED GOBO 12 SHAKE (SPEED 1 → 101%)
	231-236	FIXED GOBO 13 SHAKE (SPEED 1 → 101%)
	237-243	FIXED GOBO 14 SHAKE (SPEED 1 → 101%)
	244-255	NO FUNCTION
CH.5	<b>PRISM INSERTION (16 Prism)</b>	
	0-127	WHITE
	128-255	16 Facet Prism INSERTION
CH.6	<b>PRISM ROTATION (16 Prism)</b>	
	0-127	PRISM ADJUST THE ANGLE (0 → 360°)
	128-190	PRISM POSITIVE ROTATION (SPEED 100% → 1)
	191-192	STOP
	193-255	PRISM REVERSE ROTATION (SPEED 1 → 100%)
CH.7	<b>RAINBOW EFFECT WHEEL</b>	
	0-10	WHITE
	11-145	ANIMATION INSERT AND ADJUST THE ANGLE (0 → 360°)
	146-150	STOP
	151-200	ANIMATION INSERT AND POSITIVE ROTATION (SPEED 100% → 1)
	201-205	STOP
	206-255	ANIMATION INSERT AND REVERSE ROTATION (SPEED 1 → 100%)
CH.8	<b>PRISM EFFECT (Linear Prism)</b>	
	0-10	WHITE
	11-127	PRISM INSERTION
	128-191	ANIMATION INSERT AND LEFT ROTATION (SPEED 100% → 1)
	192	STOP
	193-255	ANIMATION INSERT AND RIGHT ROTATION (SPEED 1 → 100%)
CH.9	0-255	<b>FOCUS</b>





# PLUTO BEAM

## SS9151

CH.10	0-255	<b>PAN</b>
CH.11	0-255	<b>PAN FINE</b>
CH.12	0-255	<b>TILT</b>
CH.13	0-255	<b>TILT FINE</b>
CH.14	<b>FUNCTION</b>	
	000-010	NO FUNCTION
	011-020	PAN/TILT BLACK ACTIVATED
	021-030	PAN/TILT BLACK DEACTIVATED
	031-040	PAN INVERT
	041-050	TILT INVERT
	051-060	PAN/TILT INVERT OFF
	061-070	STUDIO
	071-080	POWER
	081-090	LIVE
	091-100	DIM4
	101-110	DIM3
	111-120	DIM2
	121-130	DIM1
	131-140	DIM0
	141-150	1200Hz
	151-160	2000Hz
	161-170	2400Hz
	171-180	4000Hz
	181-190	6000Hz
	191-200	25000Hz
	201-255	NO FUNCTION
CH.15	<b>RESRT</b>	
	000-025	UNUSED RANGE
	26-76	EFFECTS RESET
	77-127	PAN/TILT RESET
	128-255	COMPLETE RESET
CH.16	<b>LAMP CONTROL</b>	
	0-25	UNUSED RANGE
	26-100	LAMP OFF
	101-255	LAMP ON