图纸编码	RD-SS9181-S	SM-01-(SS-I)	版本号	D		
	SS9181SC/SS9181SC HC 英文说明书 编辑日期 2021/3/					
制作	刘丽萍	审核	白丹	批准	余泽松	
物料编码	1320109215	1320109215				
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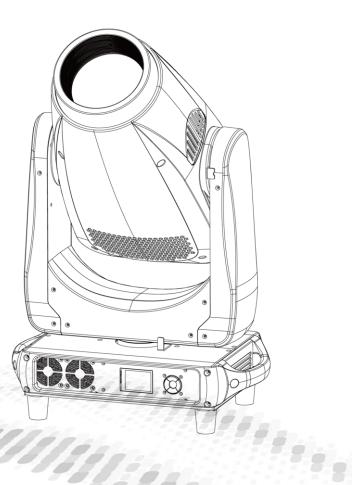
创意源于追求 Own Idea Of Lighting

PLUTO 800 PROFILE

USER MANUAL



PLUTO 800 PROFILE SS9181



MODEL: SS9181SC/SS9181SC HC

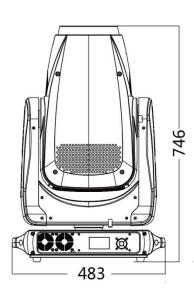


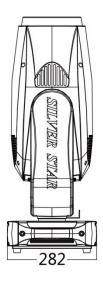
电话/ Tel: 020-86947788 邮箱/E-mail: sales @yajiang .cn 传真/Fax: 020-86943773 网址/Website: www.yajiang.cn

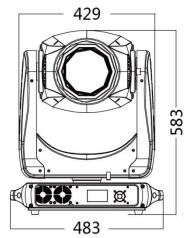
1 PRODUCT

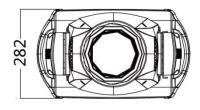
1.1 TECHNICAL SPECIFICATIONS

Туре	SS9181SC/ SS9181SC HC
LED colors	800W Cool White LED
Angle	5-50°
Power	880W
Control Protocol	DMX512, RDM, Artnet, sACN, W-DMX(Optional)
Voltage Range	AC100~240V,50/60Hz
Input Current	110V/8A,220V/4A
Protection	IP20
Operation Temperature	0°C~45°C
Dimensions	483X283X746mm
Weight	35kg









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.

<u>CAUTION!</u>

- 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!

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:

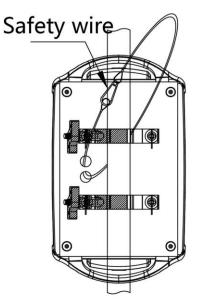
- Do not expose the front of a fixture to sunlight or any other strong light source. Avoid pointing other high-powered beam lights directly at the fixture.
- Do not focus a light beam from one lighting fixture directly towards another.
- For outdoor applications during daylight, make sure that the front 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).

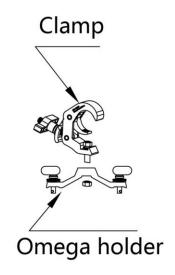
2 INSTALLATION

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





2.2 Fuse replacement

- Remove the safety cap by a screwdriver.
- Fetch the old fuse from safety cap.
- Install a new fuse.
- Install the safety cap.

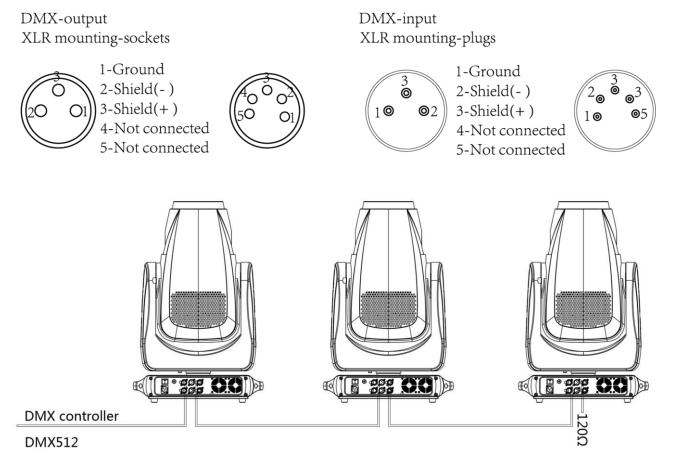


2.3 POWER CONNECTIONS

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

2.4 Data network requirements

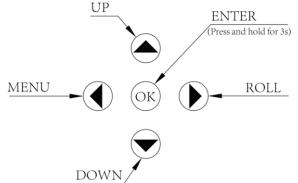
- Connect the DMX512 controller to the units in series. A DMX 512 data link is required in order to control the fixture via DMX. The fixture has 3/5-pin XLR connectors for DMX data input and output.
- Each unit has 13 DMX channels so the DMX Addresses should increase by increments of 1, (Nx1)+1, (Nx2)+1,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



3 FUNCTIONS AND SETTINGS

3.1 DISPLAY OPERATION

- MENU: Used to access the menu or to return a previous menu option;
- ENTER: Used to select and store the current menu or confirm the current function value or option within a menu;
- UP: Navigates downwards through the menu list and increases the numeric value when in a function;
- DOWN: Navigates upwards through the menu list and decreases the numeric value when in a function;



3.2 Menu Map

ADDRESS	001 – 512(Defau	ılt 001)	DMX address setting	
PERSON	BASIC		Use the menu to select desired channe	
	STANDARD (De	fault)	mode	
	Extend			
RUNMODE	DMX512 (Defau	lt)	Select Signal	
	ARTNET		Default: DMX512	
	sACN		CUSTOM1-2 Set up get into EDIT MENU	
	ARTNET TO DM	IX	edit	
	AUTO			
	CUSTOM1			
	CUSTOM2			
OPTION		NORMAL (Default)	PAN moving direction selection	
	PAN INVERT	INVERT		
	TILT INVERT	NORMAL (Default)	TILT moving direction selection	
	HLI INVERI	INVERT		
		STUDIO	Fan mode low speed	
	PERFORM	POWER	Fast rotation of fan, all power	
		LIVE (Default)	Automatic rotation of fan	
	BLACKOUT	OFF (Default)	Select OFF blackout without delay	
	BLACKOUT	ON	Select ON Blackout delay 3s	
		DIM4 (Default)	Dimming curves DIM1 (fast) to DIM4 (slow);	
		DIM3		
	DIMMER	DIM2		
		DIM1		
		OFF		

	1200Hz (Default)		Sets the PWM frequency
	2400Hz)		
LED PWM	4000Hz			-
	4000Hz		-	
	25000Hz		-	
				Hold after loss of DMX signal
DMX ERROR	SAVE (Default) BLACK			Blackout after loss of DMX signal
	On			ů
	-			Display backlight always on
DISPLAY TIME	30s			Turns off display backlight after 30s/1mir /2min of inactivity
	1min (Default)			
	2min			Looke diaplay (accorde in UD)
DISPLAY LOCK	OFF			Locks display (passcode is <up></up>
	ON (Default)			<down>,<up>, <down>, <enter>)</enter></down></up></down>
LOAD PARA	YES			Upload data
	NO	1		Not upload data
	RECOVERY	****		Restore default factory settings.
	CLEAN EDIT1	****		Clean customer self-editing scene 1
SETTING	CLEAN EDIT2	****		Clean customer self-editing scene 2
		YES		Hide wireless mode WDMX reset and
	WDMX HIDE	NO		signal hide and the default is wired mode
				only
	OFF OFF			Net switch off IP mode
	ON			Net switch on IP mode
NETWORK	UNIVERS	0-255		Packet group Settings
	IP MODE	DEFAUL IP	Default IP	
		CUSTOM IP		Customer's IP
	CUSTOM IP	XX.XX.XX.XX		Customer's IP setting
	OFF			XY Encoder switch.
PT ENCODER	OFF ON			XY Encoder switch. OFF is close; ON is open.
				-
PT ENCODER	ON			OFF is close; ON is open.
	ON YES			OFF is close; ON is open. Clear the receiver's message
	ON YES NO			OFF is close; ON is open. Clear the receiver's message Do not clear the receiver's message.
	ON YES NO ONLY XLRDMX			OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire only
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST			OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire first
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX			OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless only
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST		0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless first
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST	DMX	0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST	DMX PAN		OFF is close; ON is open. Clear the receiver's message Do not clear the receiver's message. ONLY XLR is wire only XLR FIRST is wire first ONLY WDMX is wireless only WDMX FIRS is wireless first WDMX TO DMX is wireless to wired Edit the custom programs1-30 Select play [EDIT 1] in RUNMOED
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST	DMX PAN TILT	0-255	OFF is close; ON is open. Clear the receiver's message Do not clear the receiver's message. ONLY XLR is wire only XLR FIRST is wire first ONLY WDMX is wireless only WDMX FIRS is wireless first WDMX TO DMX is wireless to wired Edit the custom programs1-30 Select play 【EDIT 1】 in RUNMOEDI
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST WDMX TO XLRI	DMX PAN TILT PT SPEED	0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30Select play [EDIT 1] in RUNMOEDCUSTOM 1; Select play [EDIT 2] i
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST	DMX PAN TILT PT SPEED CMY C	0-255 0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30Select play 【EDIT 1】 in RUNMOEDICUSTOM 1; Select play 【EDIT 2】 i
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST WDMX TO XLRI	DMX PAN TILT PT SPEED CMY C CMY M	0-255 0-255 0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30Select play 【EDIT 1】 in RUNMOEDECUSTOM 1; Select play 【EDIT 2】 in
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST WDMX TO XLRI	DMX PAN TILT PT SPEED CMY C CMY M CMY Y	0-255 0-255 0-255 0-255 0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30Select play 【EDIT 1】 in RUNMOEDECUSTOM 1; Select play 【EDIT 2】 in
WDMX RESET	ON YES NO ONLY XLRDMX XLRDMX FIRST ONLY WDMX WDMX FIRST WDMX TO XLRI	DMX PAN TILT PT SPEED CMY C CMY M CMY Y CTO	0-255 0-255 0-255 0-255 0-255 0-255 0-255	OFF is close; ON is open.Clear the receiver's messageDo not clear the receiver's message.ONLY XLR is wire onlyXLR FIRST is wire firstONLY WDMX is wireless onlyWDMX FIRS is wireless firstWDMX TO DMX is wireless to wiredEdit the custom programs1-30Select play 【EDIT 1】 in RUNMOEDECUSTOM 1; Select play 【EDIT 2】 in

EDIT

			GOBO.ROTA	0-255	
			ANIMATION.D	0-255	-
			ANIMATION.R	0-255	-
			PRISM	0-255	-
			FROST	0-255	
			ZOOM	0-255	
			FOCUS	0-255	-
			IRIS	0-255	-
			FRAMING1.L	0-255	1
			FRAMING1.R	0-255	1
			FRAMING2.L	0-255	
			FRAMING2.R	0-255	
			FRAMING3.L	0-255	
			FRAMING3.R	0-255	
			FRAMING4.L	0-255	
			FRAMING4.R	0-255	
			FRAMING ROT	0-255	
			DIMMER	0-255	
			STROBE	0-255	
			TIME	0-255	
			USE	YES/NO	Select YES to run the steps user need.
MANUAL	Auto Test	OFF		Auto Test channel	
		ON			
		PAN	0-255	Manual control channel	
		TILT	0-255	-	
			PT SPEED 0-255		-
		CMY C	0-255		-
			0-255		4
		CMY Y CTO	0-255		-
		COLOR	0-255		-
		FIXED GOBO	0-255		-
		ROTA.GOBO	0-255		-
		GOBO.ROTA	0-255		-
	CHANNEL	ANIMATION.D	0-255		-
		ANIMATION.R	0-255		-
		PRISM	0-255		-
		FROST	0-255		-
		ZOOM	0-255		-
		FOCUS	0-255		1
		IRIS	0-255		1
		FRAMING1.L	0-255		1
		FRAMING1.R	0-255		1
		FRAMING2.L	0-255		1
					1
		FRAMING2.R	0-255		

		FRAMING3.R	0-255	
		FRAMING4.L	0-255	
		FRAMING4.R	0-255	
		FRAMING ROT	0-255	
		DIMMER	0-255	
		STROBE	0-255	
		YES		Factory testing mode. All stepper motors
	DEBUG HIDE	NO		are not controlled by signal, It only works again after the reset.
		ALL RESET		Select Yes/No to carry out all reset
		PT RESET		Select Yes/No to carry out P/T reset
	RESET	COLOR SYSTEM	1	COLOR/CMYK reset
		OTHER		Zoom/ Focus/ Prism reset
INFO	FIXTURE HOUR	RS		Hours of fixture use
-	LED USE HOUR			LED use time
	TEMPERATURE			LED temperature
	VERSION			Software versions
	NETWORK			Check network parameter
		UID	0x388Axxxxxxx	Check fixture's ID
	RDM	LABEL	PLUTO 800 PROFILE	Check fixture's LABEL
		MEMORY IC		Memory IC
		ANGLESENSOR		Angle Sensor
		PAN SENSOR		Pan Sensor
		PAN ENCODER		Pan Encoder
		PAN DRIVEIC		Pan Drive IC
		TILT SENSOR		Tilt Sensor
		TILT ENCODER		Tilt Encoder
		TILT DRIVEIC		Tilt Drive IC
		TEMPERATURE		Temperature
		CMY_C RESET		CMY C Reset
		CMY_M RESET		CMY M Reset
	SYSTEM	CMY_Y RESET		CMY Y Reset
	ERROR	СТО		CTO Reset
		COLOR RESET		Color Reset
		FGOBO RESET		Fixed Gobo Reset
		GOBO RESET		Gobo Reset
		RGOBO RESET		Rotate Gobo Reset
		ANIMATION RES	FT	Animation Reset
		Z00M RESET		Zoom Reset
		FOCUS RESET		Focus Reset
		PRISM RESET		Prism Reset
		FROST RESET		Frost Reset
		FRAMING		Framing Reset
SERVICE		PAN	±127	Pan position fine adjustment
JENVICE	****	TILT	±127	Tilt position fine adjustment
		COLOR	±127	Color position fine adjustment

CMY-C	±127	CMY-C position fine adjustment
CMY-M	±127	CMY-M position fine adjustment
CMY-Y	±127	CMY-Y position fine adjustment
СТО	±127	CTO position fine adjustment
FIXED GOBO	±127	Fixed Gobo position fine adjustment
ROTA. GOBO	±127	Rotate Gobo position fine adjustment
GOBO.ROTA	±127	Self-rotation position fine adjustment
ANIMATION	±127	Animation position fine adjustment
FOCUS	±127	Focus position fine adjustment
ZOOM	±127	Zoom position fine adjustment
IRIS	±127	Iris position fine adjustment
PRISM1	±127	Prism 1 position fine adjustment
FRAMING1	±127	Framing position fine adjustment
FRAMING2	±127	Framing position fine adjustment
FRAMING3	±127	Framing position fine adjustment
FRAMING4	±127	Framing position fine adjustment
FRAMING ROT	±127	Framing position fine adjustment
OTHER	±127	

4 USING A DMX512 CONTROLLER

4.1 DMX CONTROL

BASIC (34CH)	STANDARD (40CH)	Extend (43CH)	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	000-255	CYAN
CH.5	CH.7	CH.7	000-255	MAGENTA
CH.6	CH.8	CH.8	000-255	YELLOW
CH.7	CH.9	CH.9	000-255	СТО 6800К-2700К
			COLOUR M	IACRO
			000-019	No Function
			020-021	3000K
			022-023	3200K
			024-025	3500K
			026-027	4000K
			028-029	4500K
			030-031	5000K
			032-033	5400K
			034-035	5600K
			036-037	6000K
			038-039	6500K
CH.8	CH.10	CH.10	040-041	6800K
			042-043	L106
			044-045	L194
			046-047	L019
			048-049	R08
			050-051	L213
			052-053	R80
			054-055	L202
			056-057	L328
			058-059	R3314
			060-061	L101
			062-063	L768
			064-255	MACRO EFFECT R->G->B->R
CH.9	CH.11	CH.11	000-255	CMYK SPEED(SPEED 100%->1)
			COLOR WH	IELL
			000-007	WHITE
CH.10	CH.12	CH.12	008-015	COLOR 1
			016-023	COLOR 2
			024-031	COLOR 3
				1

			032-039 040-047	COLOR 4 COLOR 5
			040-047	
			048-055	COLOR 6
			056-063	COLOR 7
			064-191	COLOR WHELL 0-360°
			192-222	COLOR WHELL RAINBOW EFFECT(SPEED 100%->1)
			223-224	STOP
			225-224	COLOR WHELL RAINBOW EFFECT(SPEED 1->100%)
		CH.13	000-255	COLOR WHELL FINE
		011.13	ROTATING	
			000-010	ROTATING WHITE
			011-018	ROTATING GOBO 1
			019-026	ROTATING GOBO 2
			027-034	ROTATING GOBO 3
			035-042	ROTATING GOBO 4
			043-050	ROTATING GOBO 5
			051-058	ROTATING GOBO 6
			059-066	ROTATING GOBO 7
			067-074	ROTATING GOBO 1 SHAKE (SPEED 1 —> 100%)
CH.11 C	CH.13	CH.14	075-082	ROTATING GOBO 2 SHAKE (SPEED 1 —> 100%)
		·	083-090	ROTATING GOBO 3 SHAKE (SPEED 1 —> 100%)
		·	091-098	ROTATING GOBO 4 SHAKE (SPEED 1 —> 100%)
			099-106	ROTATING GOBO 5 SHAKE (SPEED 1 -> 100%)
			107-114	ROTATING GOBO 6 SHAKE (SPEED 1 —> 100%)
			115-122	ROTATING GOBO 7 SHAKE (SPEED 1 —> 100%)
			123-127	WHITE
			128-190	STATIC GOBO POSITIVE WATER EFFECT (SPEED 100 -> 1%)
		·	191-192	STOP WATER EFFECT
			193-255	STATIC GOBO REVERSE WATER EFFECT (SPEED 1 -> 100%)
			GOBO ROT	
			0-120	ROTATING GOBO ANGLE ADJUSTMENT (0 -> 360°)
			121-125	STOP
			126-165	ROTATING GOBO SHAKE (SPEED 1 -> 100%)
CH.12 C	CH.14	CH.15	166-170	STOP
			171-210	ROTATING GOBO POSITIVE ROTATION (SPEED 100% -> 1)
			211-215	STOP
			216-255	ROTATING GOBO REVERSE ROTATION (SPEED 1 -> 100%)
- C	CH.15	CH.16	000-255	GOBO ROTATING FINE
			FIXED GOB	O WHEEL
			0-10	WHITE
			11-15	FIXED GOBO WHEEL 1
		011.47	16-20	FIXED GOBO WHEEL 2
CH.13 C	CH.16	CH.17	21-25	FIXED GOBO WHEEL 3
			26-30	FIXED GOBO WHEEL 4
			31-35	FIXED GOBO WHEEL 5
			36-40	FIXED GOBO WHEEL 6

			41-45	FIXED GOBO WHEEL 7
			46-50	FIXED GOBO WHEEL 8
			51-55	FIXED GOBO WHEEL 9
			56-60	FIXED GOBO WHEEL 10
			61-65	FIXED GOBO WHEEL 1 SHAKE (SPEED 1 -> 100%)
			66-70	FIXED GOBO WHEEL 2 SHAKE (SPEED 1 -> 100%)
			71-75	
			76-80	FIXED GOBO WHEEL 3 SHAKE (SPEED 1 -> 100%)
			81-85	FIXED GOBO WHEEL 4 SHAKE (SPEED 1 -> 100%)
				FIXED GOBO WHEEL 5 SHAKE (SPEED 1 -> 100%)
			86-90	FIXED GOBO WHEEL 6 SHAKE (SPEED 1 -> 100%)
			91-95	FIXED GOBO WHEEL 7 SHAKE (SPEED 1 -> 100%)
			96-100	FIXED GOBO WHEEL 8 SHAKE (SPEED 1 -> 100%)
			101-105	FIXED GOBO WHEEL 9 SHAKE (SPEED 1 -> 100%)
			106-110	FIXED GOBO WHEEL 10 SHAKE (SPEED 1 —> 100%)
			111-127	
			128-190	STATIC GOBO JUMPING WATER EFFECT (SPEED 100 -> 1%)
			191-192	STOP WATER EFFECT
			193-255	STATIC GOBO FLOWING WATER EFFECT (SPEED 1 —> 100%)
CH.14	CH.17	CH.18	0-255	Insert effect wheel
				N DISC ROTATION
			0-10	Rotation STOP
CH.15	CH.18	CH.19	11-127	Animation Insertion CW Rotate Slow to Fast
			128-138	Rotation STOP
			139-255	Animation Insertion CCW Rotate Fast to Slow
			PRISM	
			0-10	WHITE
			11-145	PRISM INSERT AND ADJUST THE ANGLE (0 -> 360°)
CH.16	CH.19	CH.20	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.17	CH.20	CH.21	FROST	
			0-255	FROST (0-100%)
			IRIS	
			0-127	IRIS OPEN> CLOSE (FROM LARGE TO SMALL)
			128-130	IRIS CLOSE
CH.18	CH.21	CH.22	131-171	IRIS FAST IN FAST OUT
			172-211	IRIS FADE IN FADE OUT RANDOMLY
			212-251	IRIS FAST IN FADE OUT RANDOMLY
			252-255	IRIS CLOSE
-	-	CH.23	000-255	IRIS FINE
CH.19	CH.22	CH.24	0-255	ZOOM
-	CH.23	CH.25	0-255	ZOOM FINE
CH.20	CH.24	CH.26	0-255	FOCUS
-	CH.25	CH.27	0-255	FOCUS FINE
CH.21	CH.26	CH.28	AUTO FOO	SUS

			0-12	NO FUNCTION
			13-39	5 METER
			40-66	7 METER
			67-93	9 METER
			94-120	11 METER
			121-147	13 METER
			148-174	15 METER
			175-201	17 METER
			202-228	19 METER
			229-255	21 METER
CH.22	CH.27	CH.29	0-255	AUTO FOCUS FINE
CH.23	CH.28	CH.30	0-255	FRAMING1.Left
CH.24	CH.29	CH.31	0-255	FRAMING1.Right
CH.25	CH.30	CH.32	0-255	FRAMING2.Left
CH.26	CH.31	CH.33	0-255	FRAMING2.Right
CH.27	CH.32	CH.34	0-255	FRAMING3.Left
CH.28	CH.33	CH.35	0-255	FRAMING3.Right
CH.29	CH.34	CH.36	0-255	FRAMING4.Left
CH.30	CH.35	CH.37	0-255	FRAMING4.Right
011.04	011.00	011.00	ALL FRAM	ING ROTATION
CH.31	CH.36	CH.38	0-255	FRAMING ROT
-	-	CH.39	0-255	FRAMING ROTATION FINE
CH.32	CH.37	CH.40	0-255	DIMMER
-	CH.38	CH.41	0-255	DIMMER FINE
-	CH.38	CH.41	0-255 STROBE	DIMMER FINE
-	CH.38	CH.41		DIMMER FINE NO FUNCTION
-	CH.38	CH.41	STROBE	
- CH.33	CH.38 CH.39	CH.41 CH.42	STROBE 0-9	NO FUNCTION
			STROBE 0-9 10-99	NO FUNCTION STROBE (FROM SLOW TO FAST)
			STROBE 0-9 10-99 100-109	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION
			STROBE 0-9 10-99 100-109 110-179	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS)
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN INVERT
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT PAN/TILT INVERT OFF
			STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 071-080	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 081-100	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER LIVE
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 071-080 081-100 101-110	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN/TILT INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER LIVE DIM4
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 071-080 081-100 101-110 111-120	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN/TILT BLACK DEACTIVATED PAN/TILT INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER LIVE DIM4 DIM3
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 071-080 081-100 101-110 121-130	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER LIVE DIM4 DIM2
CH.33	CH.39	CH.42	STROBE 0-9 10-99 100-109 110-179 180-189 190-255 CONTROL 000-010 011-020 021-030 031-040 041-050 051-060 061-070 071-080 081-100 101-110	NO FUNCTION STROBE (FROM SLOW TO FAST) NO FUNCTION LIGHTNING STROBE NO FUNCTION RANDOM SROBE (EXECUTE AFTER 3 SECONDS) NO FUNCTION PAN/TILT BLACK ACTIVATED PAN/TILT BLACK DEACTIVATED PAN/TILT BLACK DEACTIVATED PAN/TILT INVERT TILT INVERT PAN/TILT INVERT OFF STUDIO POWER LIVE DIM4 DIM3

151-160	1200Hz
161-170	2400Hz
171-180	4000Hz
181-190	6000Hz
191-200	25000Hz
201-210	ALL RESET
211-220	XY RESET
221-230	COLOR SYSTEM RESET
231-255	OTHER RESET