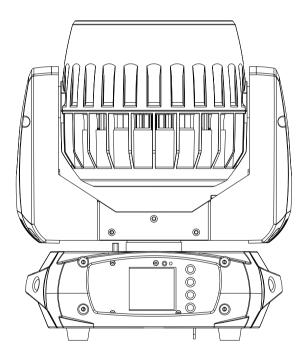


# ULTRA WASH ZOOM LCG-MHW730Z



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.
- Use this product correctly when you can fully understand the User Manual

### 1.Safety instructions

Thank you for choosing our ULTRA WASH ZOOM . 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 suffera 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)!

## 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. 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).

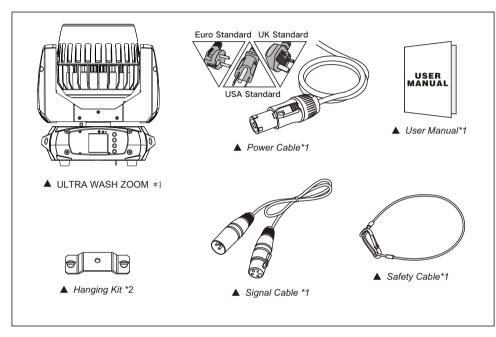
Replacing the fuse. Before replacing the fuse, unplug mains lead.

- 1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anticlockwise).
- 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 fuseholder in the housing and fix it.

				Green in pixel 4
35			0255	Green in pixel 4 saturation control(0-100%)
			0233	Blue in pixel 4
36			0255	Blue in pixel 4 saturation control(0-100%)
			0233	White in pixel 4
37			0255	White in pixel 4 saturation control(0-100%)
			0255	Red in Pixel 5
38			0.255	
			0255	White in pixel 5 saturation control (0-100%)
39			0.055	Green in pixel 5
			0255	Green in pixel 5 saturation control(0-100%)
40			0.055	Blue in pixel 5
			0255	Blue in pixel 5 saturation control(0-100%)
41			0.055	White in pixel 5
			0255	White in pixel 5 saturation control(0-100%)
42				Red in Pixel 6
			0255	White in pixel 6 saturation control (0-100%)
43				Green in pixel 6
			0255	Green in pixel 6 saturation control(0-100%)
44				Blue in pixel 6
			0255	Blue in pixel 6 saturation control(0-100%)
45				White in pixel 6
			0255	White in pixel 6 saturation control(0-100%)
46				Red in Pixel 7
-10			0255	White in pixel 7 saturation control (0-100%)
47				Green in pixel 7
47			0255	Green in pixel 7 saturation control(0-100%)
18				Blue in pixel 7
48			0255	Blue in pixel 7 saturation control(0-100%)
49				White in pixel 7
			0255	White in pixel 7 saturation control(0-100%)
		16		Special function
			019	No function
			2029	No function
			3039	No function
			4079	No function
			8089	All Motor reset
			9094	SCAN Motor Reset
50	22		9599	ZOOM Motor Reset
50			100119	Internal program 1
			120139	Internal program 2
			140159	Internal program 3
			160179	Internal program 4
			180199	Internal program 5
			200219	Internal program 6
			220239	Internal program 7
			240255	Internal Sound program 1

## 2.UNPACKING

The ULTRA WASH ZOOM adopts 7\*30W RGBW 4-IN-1 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:



The ULTRA WASH ZOOM 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 per formances, theater, studio, nightclubs and discos.

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

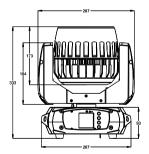
### 3.TECHNICAL INFORMATION

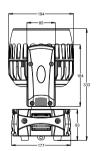
#### SPECIFICATIONS:

- > LED Quantities:7\*30W 4-IN-1 RGBW LEDs, 50000 hours life span
- > Input Voltage:AC90-260V 50/60Hz
- > Control Signal:DMX512 master-slave and sound activated or auto operation
- > Control Channel: 50/22/16 DMX channels USITT DMX-512
- > Power Consumption: 240W
- > Dimension:287(D)\*194(W)\*333(H)mm
- > Packing Dimension:380(D)\*280(W)\*420(H)mm
- > Net Weight: 6.0kgs
- > Gross Weight: 8.8kgs

#### Features

- > Low power consumption
- > Pixel each LED controllable individually
- > 8/16 bit smooth and precise resolution for PAN/TILT movement
- > Scan position memory auto reposition after unexpected movement
- > 6-60°Smooth electronic linear zoom
- > Built-in running programs
- > 0-100% Linear LED dimmer
- > 1.8' TFT LCD display
- > 1-25T/sec high speed LED shutter/strobe effect with variable speed
- > Preset variable/random strobe and dimming pulse effect
- > DMX recorder and edit function integrated
- > High resolution graphic LCD display
- > POWERCON connector IN
- > 3-Pin XLR connectors IN/OUT
- > Constant temperature readout and management function
- > -35°C ~ 45°C max ambient temperature
- > IP20 protection rating



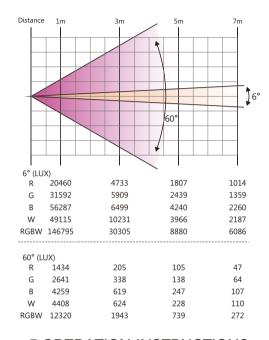


		<u> </u>	
		152159	static scene20
		160167	static scene21
		168175	static scene22
		176183	static scene23
		184191	static scene24
		192199	static scene25
		200207	static scene26
		208215	static scene27
		216223	static scene28
21	21	224231	static scene29
		232239	static scene30
		240247	static scene31
		248255	static scene32
			Dynamic Patterns
			(If channel Patterns is in the interval 032 – 255)
		000023	No function
		024137	Forward speed from zero speed to fast speed
		138141	Stop movement
		142255	Reverse speed from zero speed to fast speed
			Red in Pixel 1
22		0255	Red in pixel 1 saturation control (0-100%)
		0233	Green in Pixel 1
23		0255	Green in pixel 1 saturation control (0-100%)
		0255	Blue in Pixel 1
24		0255	
		0255	Blue in pixel 1 saturation control(0-100%)
25		0.055	White in pixel 1
$\longrightarrow$		0255	White in pixel 1 saturation control(0-100%)
26			Red in pixel 2
$\longrightarrow$		0255	Red in pixel 2 saturation control(0-100%)
27			Green in pixel 2
		0255	Green in pixel 2 saturation control(0-100%)
28			Blue in pixel 2
		0255	Blue in pixel 2 saturation control(0-100%)
29			White in pixel 2
20		0255	White in pixel 2 saturation control(0-100%)
30			Red in Pixel 3
30		0255	Red in pixel 3 saturation control (0-100%)
31			Green in pixel 3
		0255	Green in pixel 3 saturation control (0-100%
20			Blue in pixel 3
32		0255	Blue in pixel 3 saturation control(0-100%)
0.7			White in pixel 3
33		0255	White in pixel 3 saturation control(0-100%)
			Red in Pixel 4
34		0255	Red in pixel 4 saturation control (0-100%)
	<del></del>	0200	1.00 m pixor i outuration control (o 10070)

12

			Patterns
		000015	No function
		016031	Static patterns
		032043	Dynamic Scene1
		44.055	Dynamic Scene2
		056067	Dynamic Scene3
		068079	Dynamic Scene4
		080091	Dynamic Scene5
		092103	Dynamic Scene6
		104115	Dynamic Scene7
20	20	116127	Dynamic Scene8
20	20	128139	Dynamic Scene9
		140151	Dynamic Scene10
		152163	Dynamic Scene11
		164175	Dynamic Scene12
		176187	Dynamic Scene13
		188199	Dynamic Scene14
		200211	Dynamic Scene15
		212223	Dynamic Scene16
		224235	Dynamic Scene17
		236247	Dynamic Scene18
		248255	Dynamic Scene19
			Static patterns or patterns speed
			Static patterns or patterns speed Static Patterns
			•
		000007	Static Patterns
		000007 008015	Static Patterns (If channel Patterns is in the interval 016 – 031)
			Static Patterns (If channel Patterns is in the interval 016 – 031) static scene1
		008015	Static Patterns  (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2
		008015 016023	Static Patterns  (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3
		008015 016023 024031	Static Patterns  (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4
		008015 016023 024031 032039	Static Patterns  (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6
		008015 016023 024031 032039 040047	Static Patterns  (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5
21	21	008015 016023 024031 032039 040047 048055	Static Patterns (If channel Patterns is in the interval 016 – 031) static scene1 static scene2 static scene3 static scene4 static scene5 static scene6 static scene7
21	21	008015 016023 024031 032039 040047 048055	Static Patterns (If channel Patterns is in the interval 016 – 031) static scene1 static scene2 static scene3 static scene4 static scene5 static scene6 static scene7 static scene8
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079	Static Patterns (If channel Patterns is in the interval 016 – 031) static scene1 static scene2 static scene3 static scene4 static scene5 static scene6 static scene7 static scene8 static scene9 static scene9
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene8  static scene9  static scene10  static scene11  static scene12
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13  static scene14
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103 104111 112119	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13  static scene14  static scene15
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103 104111 112119 120127	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13  static scene14  static scene15  static scene15  static scene15  static scene15
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103 104111 112119 120127 128135	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene8  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13  static scene14  static scene15  static scene16  static scene16  static scene16  static scene17
21	21	008015 016023 024031 032039 040047 048055 056063 064071 072079 080087 088095 096103 104111 112119 120127	Static Patterns (If channel Patterns is in the interval 016 – 031)  static scene1  static scene2  static scene3  static scene4  static scene5  static scene6  static scene6  static scene7  static scene8  static scene9  static scene10  static scene11  static scene12  static scene13  static scene14  static scene15  static scene15  static scene15

## **4.PHOTOMETRICS DIAGRAM**



## **5.OPERATION INSTRUCTIONS**

- The ULTRA WASH ZOOM is for beam&wash 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.).

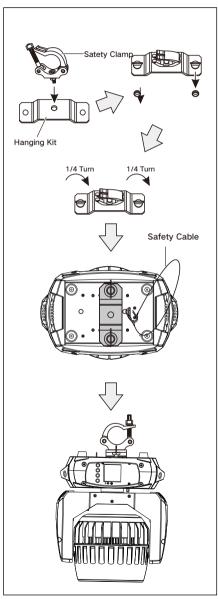
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

#### 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:

ULTRA WASH ZOOM 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.



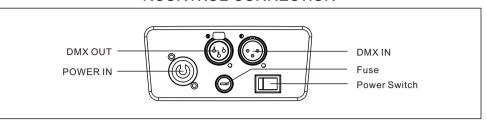
INSTALLATION DIAGRAM

16		154167	Red+Blue+White
		168181	Red+Green+White
		182195	Red+Blue+Green+White
		196202	2700K
		203209	3200K
	16	210216	3500K
	16	217223	5000K
		224230	5500K
		231237	6000K
		238244	6500K
		245251	7000K
		252255	8000K
4-7	47		Foreground dimmer
17	17	000255	Foreground dimmer 0 – 100%.
			Background color for patterns
		00	No Function
		113	Red
		1427	Green
		2841	Blue
		4255	White
		5669	Red+White
		7083	Green+White
		8497	Blue+White
		98111	Green+Blue
		112125	Red+Blue
		126139	Red+Green
18	18	140153	Green+Blue+White
		154167	Red+Blue+White
		168181	Red+Green+White
		182195	Red+Blue+Green+White
		196202	2700K
		203209	3200K
		210216	3500K
		217223	5000K
		224230	5500K
		231237	6000K
		238244	6500K
		245251	7000K
		252255	8000K
10	10		Background dimmer
19	19	000255	Background dimmer 0 – 100%.

10

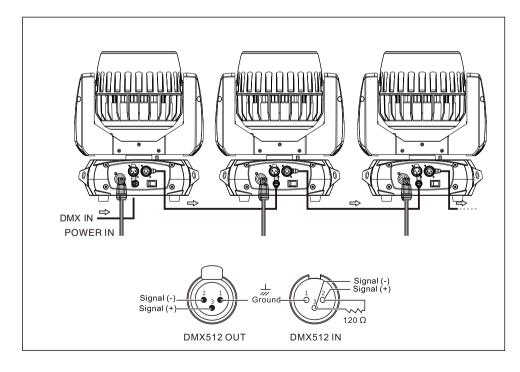
		1		
13 13			8497	Blue+White
			98111	Green+Blue
			112125	Red+Blue
			126139	Red+Green
			140153	Green+Blue+White
			154167	Red+Blue+White
			168181	Red+Green+White
			182195	Red+Blue+Green+White
	13	13	196202	2700K
			203209	3200K
			210216	3500K
			217223	5000K
			224230	5500K
			231237	6000K
			238244	6500K
			245251	7000K
			252255	8000K
				Color Temp
			015	No Function
		4 14	1645	Below 3200K
	14		4675	3200K - 3500K
14			76105	3500K - 5000K
14			106135	5000K - 5500K
			136165	5500K - 6000K
			166195	6000K - 6500K
			196225	6500K - 7000K
			226255	7000K - 8000K
		15		Visual Tungsten Lamp
15	15		015	No Function
			16255	Tungsten lamp effect is gradually enhanced
	16			Foreground color for patterns
			00	No Function
16			113	Red
			1427	Green
			2841	Blue
			4255	White
			5669	Red+White
			7083	Green+White
			8497	Blue+White
			98111	Green+Blue
			112125	Red+Blue
			126139	Red+Green
			140153	Green+Blue+White

## 7.CONTROL CONNECTION

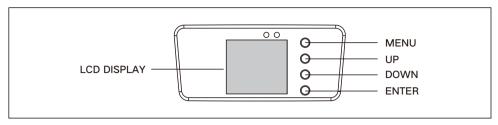


Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.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



# **8.MENU OPERATIONS**



		Description	
DMX	Dmx Address	A001~AXXX	DMX address setting
	Channel Mode	Ch22	22 Channel mode
( <b>Munda</b> tion )		Ch16	16 Channel mode
,	, 	Ch50	50 Channel mode
	Auto Run	Internal Program1~9 Master/Alone	Auto run
	Music Control	Internal Program1~9   Master/Alone	Sound Control
	Reset Default	Yes/No	Reset Default
		Wire	Wire
	Signal Set	Wireless	Wireless
	<u> </u>	WDMX&Out	WDMX&Out
SET	Reverse Pan (On/Off)		Reverse Pan
(Fixture Set)	Reverse Tilt	(On/Off)	Reverse Tilt
(i intaio dot)	Select Pan	540 ° /360 ° /630 °	Pan Degree,default is 540 °
	Select Tilt	270°/90°/180°	Tilt Degree,default is 270 °
	Mic sensitivity	Mic SEN 0~99%	MIC Sensitivity Setting
	OFF Signal Mode	OFF Signal Mode (On/Off)	OFF at original status and ON at reset status when no DMX signal
		Total Reset	Total Reset
MANU	Reset	Scan Reset	Scan Reset
(Manual)	, 	Zoom Reset	Zoom Reset
	Channel	PAN=XXX······	Channel Control
ADV Advanced (Access Code 088)	Calibration	PAN=XXX······	Calibration

# 9.DMX PROTOCOL

Mode/Channel		Value	Function		
50	22	16			
1	1	1		Pan	
		ı	0255	PAN Movement	
0	2 2			Pan-fine Pan-fine	
2		2	0255	Fine control of Pan movement	
				Tilt	
3	3	3	0255	Tilt Movement	
				Tile-fine	
4	4	4	0255	Fine control of Tilt movement	
				Speed pan/tile	
_	_	_	0225	max to min speed	
5	5	5	226235	blackout by movement	
			236255	no function	
	_	-		Dimmer	
6	6	6	0255	Dimmer 0%100%	
				Shutter	
			031	Shutter closed	
			3263	shutter open	
			6495	Strobe effect slow to fast	
7	7	7	96127	shutter open	
			128159	Pulse-effect in sequences slow to fast	
			160191	shutter open	
			192223	Random strobe effect slow to fast	
			224255	shutter open	
0	0			Red	
8	8	8	0255	0-100% Red dimmer from dark to bright	
0	0			Green	
9	9	9	0255	0-100% Green dimmer from dark to bright	
40	40	10		Blue	
10	10		0255	0-100% Blue dimmer from dark to bright	
44	44	44		White	
11	11	11	0255	0-100% White dimmer from dark to bright	
		12		Zoom	
12	12		0255	In(near) to out(far)	
	13	13		Virtual color	
			00	No Function	
			113	Red	
1			1427	Green	
13			2841	Blue	
			4255	White	
			5669	Red+White	
11 12 13	11 12 13		0255 0255 00 113 1427 2841 4255	White	