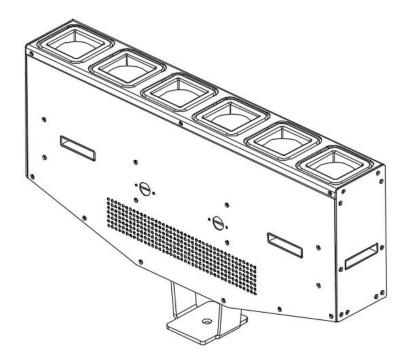


GT640 Puzzle



User Manual



1.Safety Instructions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Unpack and check carefully to ensure that there is no transportation damage before using the unit.

This product is for indoor use only. Use only in a dry location.

DO install and operate by qualified operator.

Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.

DO NOT connect the device to any dimmer pack.

Keep flammable materials away from the fixture while operating to avoid fire hazard

Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

Unit's surface temperature may reach up to 75 C. DO NOT touch the housing bare-handed during its operation.

Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut

off the mains power immediately.

DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly. DO NOT touch any wire during operation as there might be a hazard of electric shock. Avoid entanglement of the power cord with other wires.

The minimum distance to objects/surface must be more than 0.5 meters.

Disconnect mains power before fuse replacement or servicing.

Replace fuse only with the same type.



In the event of serious operating problem, stop using the unit immediately. Never turn on and off the unit time after time.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

DO NOT open the housing as there are no user serviceable parts inside. DO use the original packaging if the device is to be transported.

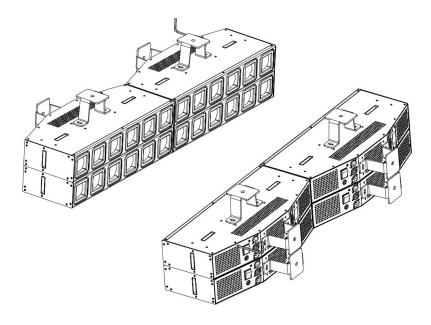
2. INSTALLATIONS

3. DO install and operate by qualified operator. Fixtures should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.

This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or fix on a flat level surface (such as the ground or a wall). 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.

3. Splicing diagram



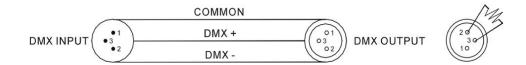


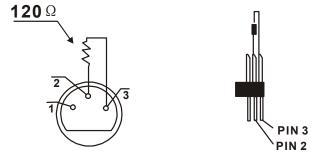
4. DMX-512 control connections

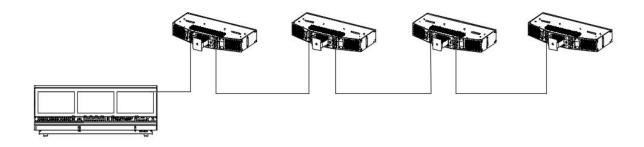
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple

Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors.

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 a 120 Ω 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









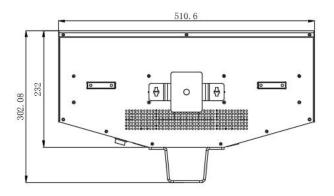
5.Address code setting

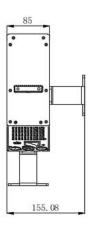
If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink in the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode. Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel	UNIT1	UNIT2	UNIT3	UNIT4
MODE	ADDERSS	ADDERSS	ADDERSS	ADDERSS
17CH	1	18	35	52
23CH	1	24	47	70
38CH	1	39	77	115

6. Fixture size







7. LED technical parameters

Input Voltage: 100-240V, 50/60Hz

Output Voltage: V1:36V(Motor board+LED driver)V2:12V(cooling fan+Display)

Power consumption: 220W

Power supply: 300W

Light source: 6x40W RGBW 4IN1 LED

Light source life: 20000+ hours Can adjust color temperature

Dimmer:0-100%(16bit)Smooth dimming

Strobe:1-30Hz/S outstanding strobe effect with variable speed

Zoom angle: 2-45°

Operate mode: Master/Slave, Auto, DMX512, RDM

DMX Channel: 17/23/38CH

Four dimming modes: Linear, Square Law, Inv SQ Law, S Curve

Color mode: RGBW/CMY switching usage

Excellent color mixing effect

Single point single control is possible to create rich effects

Each motor can be independently controlled to achieve 3D stereoscopic

effects

The four directions can be seamlessly joined, and the spacing of each LED is the same

Display: LCD display, Touch buttons

3-pin/5-pin512signal In/Out Power in/out

Fixture size: 510.6*85*302mm

N. W:7KG G. W:9KG

Features:

This fixture is a multifunctional effect light that integrates beam, dyeing, and dynamic effects. It can achieve seamless splicing of multiple fixtures, and the LED after splicing is still equidistant. The beam emitted by the LED after splicing can cover a wide area, and each can independently control the zoom angle. It has rich built-in color macro effects, adjustable effect direction, color temperature, built-in zoom macro function, variable speed, and RGB/CMY color control mode selection, It can switch in real-time and has multiple dimming modes to meet the needs of different places. The radiator base plate is evenly distributed with 5PCS silent fans, which can quickly export the heat generated by LEDs. The appearance is simple and lightweight, and it is easy to transport



8. LCD Homepage Instructions

	2	
		3
1		4
		5
6	11	7
8	9	10

- 1 Displays the current DMX address in large font
- 2 Logo display area
- 3 DMX signal frame rate (FPS)
- 4 Current channel mode, the displayed number indicates the current channel number
- 5 Show current temperature
- 6 Current Mode (Master, Slave)
- 7 Current running mode (DMX512, Auto, User)
- 8 Error message. If a red band "x" is displayed, the self-test found an error. (Press down to view specific error message)
- 9 Display the address code of the next fixture
- 10 SN term display

9.Menu Description

Level 1	Level 2	Level 3	Level 4	content
DMA address				1 - 512
Channel mode				17/23/38CH
Reset				
operation				
	Motor power supply			On/off
working				DMXs/AUTO/user s
manual control				



	l a als ma a moral		
	Lock manual control		
	CH1		
	CH2		
	•••		
run settings			
	Master-slave mode		Master-slave
	Dimming curve		Linear/Square Law Inv SQ Law/S
			Curve
	colour Mixing		RGBW/CMY
	image	no/yes	
	user program		
	IF NO DMX		
		power On	middle, no effect, user,Auto
		Run time	keep,shuter off
advanced setting			
	ADJ		
	LCD Display	Flip	no/yes
	language	•	Chinese/English
	factory setting		
INfo			
	DMX Value		
		CH	0 - 255
	Error		
		Zoom1 init	
		Zoom2 init	
		Zoom3 init	
		Zoom4 init	
		Zoom5 init	
		Zoom6 init	
	Test mode		
		Fan testing	
		testing	Product internal
	product code		code, for product production only Repair reference.



1. DMA address: Set the DMA address

2. Channel mode: Set the channel mode, and the number of menu options represents the number of channels.

3. Reset operation: Reset the motor

4.Running: Set the running mode

DMX512 control panel controls the operation of the DMX512.

Self running: Runs a program with built-in settings and cannot be changed.

User: Run the user self programming program. You can set the editing scene in the [Run Settings] - [Self Programming] menu.

5.Manual: Set the value of the channel manually

6.Run Settings: Set up running parameters

Master slave mode: Self walking mode Set the master slave mode as needed

Dimming curve: Set the desired dimming mode Color mixing: Set color control mode RGBW/CMY

Self programming: Edit the desired effect and select user mode to use it in runtime mode

When there is no signal: select the operation mode if DMX512 signal cannot be detected

At startup: The above operating mode is only executed when the DMA signal is not detected during startup, Otherwise, the last DMA action will be maintained

Center: Except for Pan and Tilt, all other channels are cleared to zero.

Auto(factory testing/pattern/color):Run the program set by the manufacturer.

User program: Run a user self programming program.

Runtime: The action performed at any time when the DMA signal is lost.

Hold: Hold the last frame's DMA value.

Closed light: Close the shutter

7. Advanced Settings:

Fine tuning: Factory debugging function requires password verification to enter.

Display screen: Menu screen flipping setting

Language: Set system language

Ignore errors: Some error reports may not affect the final use effect, or for product universality, you can choose to close some meaningless error reports

Fine adjustment recovery: After replacing the display board, use this menu to restore the fine adjustment data saved by the motor board to the display board.

Factory settings: Require password verification to enter

8. Information:



DMX value: Display the current received DMX signal value

Error: Display error message (if any item in the menu has an error, an exclamation mark will appear in the upper right corner of the menu cover)

Test mode: For product testing and temporary use only.

Product Code: The internal code of the product is for reference only in product production and maintenance.

9. DMX512

Attention:

When switching between RGB/CMY color selection modes, in CMY mode, the white channel is empty and has no function, and the channel mode does not change, while other RGB correspond to the corresponding CMY channel

RGBW/CMY
R/C
G/M
B/Y
W/No effect

Streamlining mode(17CH)

17CH	CH name	CH value	illustrate
1	Dimmer	0 - 255	Dimming 8bit
2	Dim Fine	0 - 255	Dimming 16bit
		0 - 3	close
3	Strobe	4 - 103	Regular strobe, speed changes from slow to fast
		104 - 107	open



			Pulse strobe, fast on and slow off, speed
		108 - 157	changes from fast to slow
		158 - 207	Pulse strobe, slow on and fast off, speed changes from fast to slow
		213 - 251	Random strobe, speed changes from slow to fast
		252 - 255	open
4	ALL zoom	0 - 255	ALL Zoom
		0 - 9	No effect
		10 - 23	Zoom Macro1
		24 - 37	Zoom Macro2
		38 - 51	Zoom Macro3
		52 - 64	Zoom Macro4
		65 - 78	Zoom Macro5
	Zoom	79 - 92	Zoom Macro6
		93 - 106	Zoom Macro7
		107 - 120	Zoom Macro8
5		121 - 134	Zoom Macro9
	MACRO	135 - 148	Zoom Macro10
		149 - 162	Zoom Macro11
		163 - 176	Zoom Macro12
		177 - 190	Zoom Macro13
		191 - 204	Zoom Macro14
		205 - 218	Zoom Macro15
		219 - 232	Zoom Macro16
		233 - 245	Zoom Macro17
		246 - 255	Zoom Macro18
6	Zoom Macros peed	0-255	Zoom macro speed, from slow to fast
7	Red	0 - 255	Red
8	Green	0 - 255	Green
9	Blue	0 - 255	Blue
10	White	0 - 255	White
11	СТО	1 - 255	Color temperature change



12	Back Color Dimmer	0 - 255	Back Color Dimmer
		0 - 7	No function
		8 - 39	from RED to YELLOW
		40 - 71	from YELLOW to GREEN
		72 - 103	from GREEN to CYAN
13	Back Color	104 - 135	from CYAN to BLUE
	COIOI	136 - 167	from BLUE to MAGENTA
		168 - 199	from MAGENTA to RED
		200 - 231	from RED to WHITE
		232 - 255	Gradient color changes from slow to fast
			Built-in effect selection
		0 - 3	No effect
		4 - 7	Static Effect 1
		8 - 11	Static Effect 2
		80 - 83	Static Effect 20
14	Inner	84 - 88	Dynamic Effect 1
14	Effect	89 - 93	Dynamic Effect 2
		189 - 193	Dynamic Effect 21
		194 - 198	Dynamic Color Effect 1
		244 - 248	Dynamic Color Effect 10
		249 - 255	Dynamic Color Effect 11
15	Effect Speed	0 - 255	Dynamic effect speed (from slow to fast)
	LED	0 - 127	NO Mirror
16	Mirror	128 - 255	LED mirroring/When running the focusing macro, all LED and motors are mirrored
		0 - 39	No effect
17	Function	40 - 49	RGBW/CMY dimming switching
	i dilodoll	50 - 59	Linear curve dimming



60 - 69	Square curve dimming
70 - 79	Cubic curve dimming
80 - 89	S-shaped curve dimming
90 - 99	Logarithmic curve dimming
100 - 126	No effect
127 - 255	LED reset

Standard mode(23CH)

23CH	CH name	CH value	illustrate
1	Zoom1	0 - 255	Zoom from large to small
2	Zoom2	0 - 255	Zoom from large to small
3	Zoom3	0 - 255	Zoom from large to small
4	Zoom4	0 - 255	Zoom from large to small
5	Zoom5	0 - 255	Zoom from large to small
6	Zoom6	0 - 255	Zoom from large to small
7	ALL Zoom	0 - 255	Zoom from large to small
		0 - 9	No effect
		10 - 23	Zoom Macro1
		24 - 37	Zoom Macro2
		38 - 51	Zoom Macro3
		52 - 64	Zoom Macro4
		65 - 78	Zoom Macro5
	-	79 - 92	Zoom Macro6
8	Zoom MACRO	93 - 106	Zoom Macro7
	1717 (0) (0	107 - 120	Zoom Macro8
		121 - 134	Zoom Macro9
		135 - 148	Zoom Macro10
		149 - 162	Zoom Macro11
		163 - 176	Zoom Macro12
		177 - 190	Zoom Macro13
		191 - 204	Zoom Macro14



		205 - 218	Zoom Macro15
		219 - 232	Zoom Macro16
		233 - 245	Zoom Macro17
		246 - 255	Zoom Macro18
9	Zoom Macro s peed	0-255	Zoom macro speed, from slow to fast
		0 - 39	No effect
		40 - 49	RGBW/CMY dimming switching
		50 - 59	Linear curve dimming
		60 - 69	Square curve dimming
10	Function	70 - 79	Cubic curve dimming
		80 - 89	S-shaped curve dimming
		90 - 99	Logarithmic curve dimming
		100 - 126	No effect
		127 - 255	LED reset
		0 - 3	close
		4 - 103	Regular strobe, speed changes from slow to fast
		104 - 107	open
11	Strobe	108 - 157	Pulse strobe, fast on and slow off, speed changes from fast to slow
		158 - 207	Pulse strobe, slow on and fast off, speed changes from fast to slow
		213 - 251	Random strobe, speed changes from slow to fast
		252 - 255	open
12	Dimmer	0 - 255	Dimming 8bit
13	Dim Fine	0 - 255	Dimming 16bit
14	Back Color	0 - 255	Back Color Dimmer
	Dimmer	0 - 7	No function
	Doo!:	8 - 39	from RED to YELLOW
15	Back Color	40 - 71	from YELLOW to GREEN
		72 - 103	from GREEN to CYAN
		12 - 103	IIUIII GNEEN IU CTAN



		104 - 135 136 - 167 168 - 199	from CYAN to BLUE from BLUE to MAGENTA
			from BLUE to MAGENTA
		169 100	
		100 - 199	from MAGENTA to RED
		200 - 231	from RED to WHITE
		232 - 255	Gradient color changes from slow to fast
			Built-in effect selection
		0 - 3	No effect
		4 - 7	Static Effect 1
		8 - 11	Static Effect 2
		80 - 83	Static Effect 20
l 16 In	ner	84 - 88	Dynamic Effect 1
16 E1	fect	89 - 93	Dynamic Effect 2
		189 - 193	Dynamic Effect 21
		194 - 198	Dynamic Color Effect 1
		244 - 248	Dynamic Color Effect 10
		249 - 255	Dynamic Color Effect 11
I 17	fect eed	0 - 255	Dynamic effect speed (from slow to fast)
	ED	0 - 127	NO Mirror
I 18	irror	128 - 255	LED mirroring/When running the focusing macro, all LED and motors are mirrored
	ack olor	0 - 255	Back Color Dimmer
Din	nmer		
20 F	Red	0 - 255	Red
21 Gr	een	0 - 255	Green
22 B	lue	0 - 255	Blue
23 W	hite	0 - 255	White



Extend mode(38CH)

38CH	CH name	CH value	illustrate
1	Zoom1	0 - 255	Zoom from large to small
2	Zoom2	0 - 255	Zoom from large to small
3	Zoom3	0 - 255	Zoom from large to small
4	Zoom4	0 - 255	Zoom from large to small
5	Zoom5	0 - 255	Zoom from large to small
6	Zoom6	0 - 255	Zoom from large to small
7	ALL Zoom	0 - 255	Zoom from large to small
	Zoom Macro	0 - 9	No effect
		10 - 23	Zoom Macro1
		24 - 37	Zoom Macro2
		38 - 51	Zoom Macro3
		52 - 64	Zoom Macro4
		65 - 78	Zoom Macro5
		79 - 92	Zoom Macro6
		93 - 106	Zoom Macro7
		107 - 120	Zoom Macro8
0		121 - 134	Zoom Macro9
8		135 - 148	Zoom Macro10
		149 - 162	Zoom Macro11
		163 - 176	Zoom Macro12
		177 - 190	Zoom Macro13
		191 - 204	Zoom Macro14
		205 - 218	Zoom Macro15
		219 - 232	Zoom Macro16
		233 - 245	Zoom Macro17
		246 - 255	Zoom Macro18
		0 - 9	No effect



9	Zoom Macros peed	0-255	Zoom macro speed, from slow to fast
10	LED Mirror	0 - 127	NO Mirror
		128 - 255	LED mirroring/When running the focusing macro, all LED and motors are mirrored
	Function	0 - 39	No effect
		40 - 49	RGBW/CMY dimming switching
		50 - 59	Linear curve dimming
		60 - 69	Square curve dimming
11		70 - 79	Cubic curve dimming
		80 - 89	S-shaped curve dimming
		90 - 99	Logarithmic curve dimming
		100 - 126	No effect
		127 - 255	LED reset
		0 - 3	close
	Strobe	4 - 103	Regular strobe, speed changes from slow to fast
		104 - 107	open
12		108 - 157	Pulse strobe, fast on and slow off, speed changes from fast to slow
		158 - 207	Pulse strobe, slow on and fast off, speed changes from fast to slow
		213 - 251	Random strobe, speed changes from slow to fast
		252 - 255	open
13	Dimmer	0 - 255	Dimming 8bit
14	Dim Fine	0 - 255	Dimming 16bit
15	Red 1	0 - 255	LED 1
16	Green 1	0 - 255	LED 1
17	Blue 1	0 - 255	LED 1
18	White 1	0 - 255	LED 1
19	Red 2	0 - 255	LED 2
20	Green 2	0 - 255	LED 2
21	Blue 3	0 - 255	LED 2



22	White 2	0 - 255	LED 2
23	Red 3	0 - 255	LED 3
24	Green 3	0 - 255	LED 3
25	Blue 3	0 - 255	LED 3
26	White 3	0 - 255	LED 3
27	Red 4	0 - 255	LED 4
28	Green 4	0 - 255	LED 4
29	Blue 4	0 - 255	LED 4
30	White 4	0 - 255	LED 4
31	Red 5	0 - 255	LED 5
32	Green 5	0 - 255	LED 5
33	Blue 5	0 - 255	LED 5
34	White 5	0 - 255	LED 5
35	Red 6	0 - 255	LED 6
36	Green 6	0 - 255	LED 6
37	Blue 6	0 - 255	LED 6
38	White 6	0 - 255	LED 6
29 30 31 32 33 34 35 36 37	Blue 4 White 4 Red 5 Green 5 Blue 5 White 5 Red 6 Green 6 Blue 6	0 - 255 0 - 255	LED 4 LED 4 LED 5 LED 5 LED 5 LED 5 LED 6 LED 6 LED 6

10. Safety introduction and product maintenance:

- 1. The power connection must be made by professionals.
- 2. Make sure that the use voltage is not higher or lower than the specified value in the instruction manual.
- 3. Confirm that the power cord is not cut or damaged by a sharp blade.
- 4. Be sure to disconnect the power supply when the lamp is not in use or before cleaning.



- 5. Only the plug is allowed to connect the power cord. When pulling out the plug, please do not pull the power cord forcibly.
- 6. Be careful when installing the lamps and avoid touching the bare wires, otherwise you will suffer a fatal electric shock.
- 7. Please do not look directly at the light source when the lamp is in use, otherwise your eyes will be hurt.
- 8. When choosing the installation location, please ensure that the lamp is not exposed to extreme heat, humidity or dust. The distance between the lamp and the illuminated object must exceed 0.5 meters. Make sure that there are no flammable and explosive materials within 0.5 meters.
- 9. Please use proper and safe wires to connect the lamps.
- 10. Please operate after familiarizing with the function of the lamp. Most of the damage to the lamps is caused by improper operation, so non-professionals are not allowed to operate the lamps. Do not shake the lamp at will, and do not operate it roughly.
- 11. Please do not modify the lamp at will. Doing so may cause short circuit, burning, electric shock, etc., and cause malfunction and damage of the lamp. The manufacturer does not provide warranty