# YC-Max9 All-in-one player product specifications

# Version number: V1.0

#### **1** System characteristics

1.1 Eight-port output, 1024 pixels per channel, and the maximum load of a single unit supports 8196 pixels, which greatly meets the needs of customer projects;

1.2 The system supports automatic, timing, and holiday preset effect playback;

1.3 The controller with keys and external remote control (optional), program segment

selection, overall brightness adjustment, white balance adjustment, playback speed

adjustment, etc;

1.4 Support single independent use, also support multiple cascade, and support the first as the main control use.

1.5 The RS485 / DMX512 interface is reserved to support scene selection, brightness adjustment, speed adjustment, etc;

1.6 Support the switch parallel scheme: reduce the system cascade chain length to improve the stability;

1.7 Three basic color independent brightness control, make the precise adjustment of white balance more simple and effective;

1.8 Support four-color lamps: energy saving and environmental protection, pure color;

1.9 The Ethernet interface and UDP network protocol are used for stable transmission, with a maximum transmission distance of 100 m;

1.10 The LCD display module displays the controller parameters and status in time;

1.11 SD card storage (standard with 1G), the controller can support up to 32G, can be preset up to 99 program files;

1.12 Built-in animation test program, convenient for customers in the debugging and application of the project;

1.13 Can support different types of lamps and different protocol lamps mixed use, strong compatibility.

#### 2 design philosophy

2.1 Double redundancy of system signals: double the stability;

2.2 Four-color design: energy-saving and environmental protection, pure color;

2.3 Asochronous integrated control: online priority, no online signal automatic switch offline effect, to achieve video source backup;

2.4 Large-scale independent development and design of video editing, playback and wiring design software: more adaptable, more powerful language support, higher openness, used in a variety of complex applications such as special screen, multi-screen, building screen, pixel light screen at home and abroad; 2.5 Support for mainstream 32-bit and 64-bit operating systems: windows 2000, windows XP, windows 7, windows8, etc;

#### 3 expansibility

3.1 Install all current Windows operating systems and support national languages; 3.2 The playback software has sufficient interfaces to be compatible with other international general protocols and to support customers' personalized design needs; 3.3 Support the combination with the controllers such as the multi-function converter in the YC control system to realize the special project application requirements.

# **Controller specifications and basic parameters**

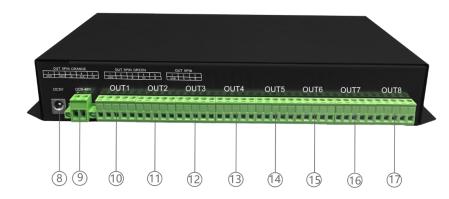
#### **1** Controller appearance

YC-MAX9 Front view of the video player:



①②Adaptive network interface
 ③ SD card slot
 ④ LCD, display screen
 ⑤ Key control panel
 ⑥ DMX signal input
 ⑦ DMX (console) signal input

YC-MAX9 The back picture of the video player:



⑧DC5V input
⑨The DC 6-48 V power supply input terminal

1011121314151617 output port

#### 2 Port definition

YC-MAX9The controller uses 85pin terminal interfaces to output signals

5 The Pin terminals are sorted from left to right, as illustrated in following figure:

1	2	3	4	5

	1	2	3	4	5
TTL signal	the earth	data	Lock storag e	clock	enable
	GND	DATA	LE	CLK	OE
Differen tial	the earth	data +	data-	clock +	clock -
signal	GND	A1	B1	A2	B2

**3 Controller panel buttons** 

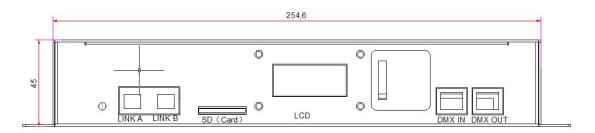


# 4 Controller basic parameters

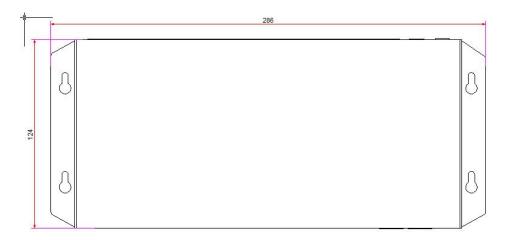
product name	Shadow can LED control system video broadcast	
product model	YC-MAX9	
rated voltage	AC 100V ~ 240V	
power rating	15W	
length	286mm	
width	135mm	
altitude	45mm	
weight	1.3KG	
Fixed hole		
between	268mm; 68 mm	
Standard	Demote control 1 / CD cord 1 / AC newsrated 1	
attached	Remote control 1 / SD card 1 / AC power cord 1	
packing	220+246+56	
measurement	330*246*56mm	

# 5 Three-view dimensions of the controller

#### YC-MAX9 front elevation



#### YC-MAX9 vertical view



#### YC-MAX9 back view

DC5V DC6~	OUT2	OUT3	OUT4	OUT5	OUT6	OUT7	OUT8
		1		1		1	

pour: The dimensions in the above three views are in units of mm (mm).

#### Time Play the switch Time / number 0 Addition key Left button / previous scene Set the menu Right-click / go to the next scene 3 2 5 Self-test animation additional key 6 TEST) 8 9 The key reduction **Exit Settings** ok Determine and save 9 numbering key

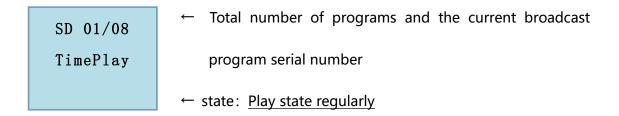
# Display screen display and remote control / key description

## **1** YC-MAX9 LCD main interface after boot

YC-MAX9	← Current equipment model
NO CARD	← state: <u>No SD card was detected</u>
YC-MAX9	← Current equipment model
NO FILE	← state: Invalid file or SD card format
	$\leftarrow$ Total number of programs and the current broadcast
SD 01/08	
LoopPlay	program serial number
	← state: <u>Circulating play status</u>
	$\leftarrow$ Total number of programs and the current broadcast
SD 01/08	Total number of programs and the current broadcast
TFixPlay	program serial number

# Remote control key definition

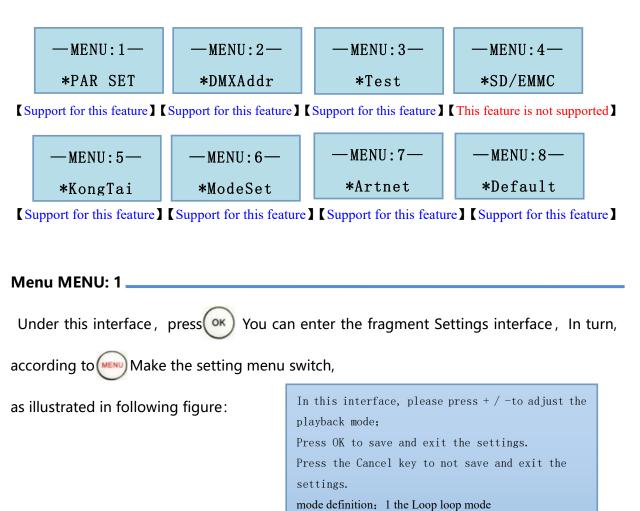
#### ← state: <u>Temporary play status</u>



#### 2 YC-MAX9 Remote control setting parameters



selected, as illustrated in following figure:

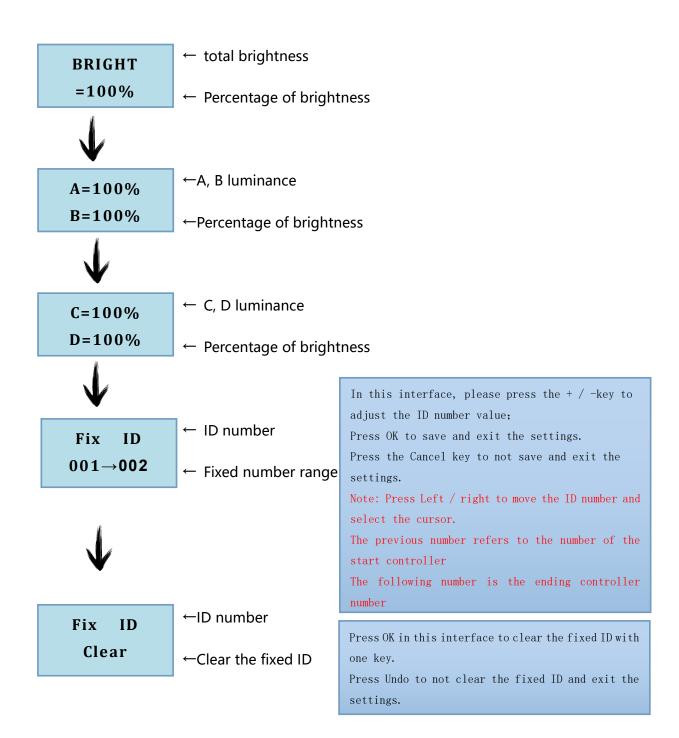


8/34

2 Wait waiting mode

3 01~99 Fixed a place on a certain program

—MENU:1—	← Menu serial number: 1				
*PAR SET	$\leftarrow$ Enter the parameter setting by pressing OK				
V	f F S N	In this interface, press + / -to adjust the playback frame frequency and playback speed; Press OK to save and exit the settings. Press the Cancel key to not save and exit the settings. Note: Press the left / right button to switch the frame frequency and speed setting.			
INDEX	$\leftarrow$ Segment selection setti	tings			
=Loop	← [Loop Mode] The default				
$\checkmark$		In this interface, please press the + / -key to adjust the date value; Press OK to save and exit the settings.			
*SPD=025	← Play frame frequency	Press the Cancel key to not save and exit the settings.			
FPD = X01	← Play speed	Note: Press left / right to move the date and select			
V		the cursor. In this interface, please press the + / -key to adjust the time value:			
2021	← year	Press OK to save and exit the settings. Press the Cancel key to not save and exit the			
0616	← moon— sun	settings.			
V		Note: Press left / right to select the cursor.			
TIME	← time	brightness value; Total luminance interval: 0-100%			
08:30:39	←time —component—second Press OK to save and exit the settings.				
	-	Press Undo to not save and exit the settings.			
V		In this interface, press + / -to adjust the			
	9 / 34	brightness values of A, B, C and D; A Brightness range: 0~100%; B. Brightness interval: 0-100%; C. Brightness interval: 0-100%;			



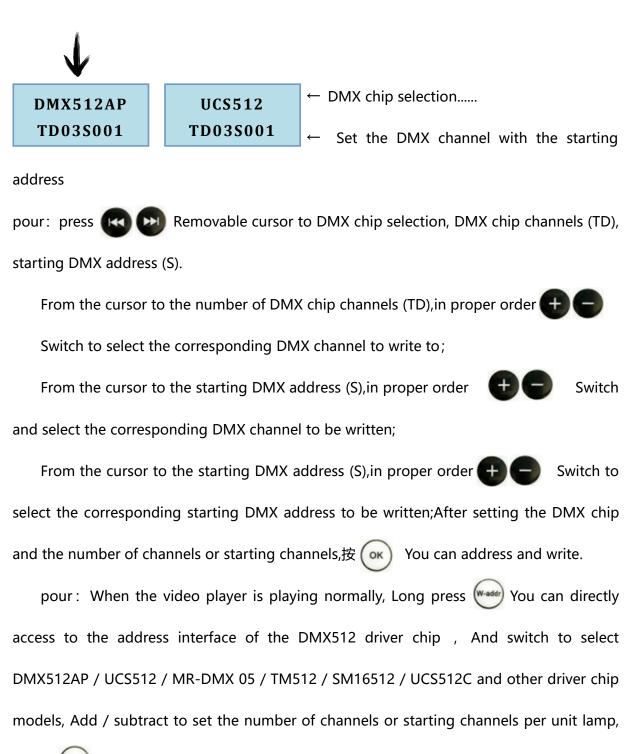
#### Menu MENU: 2

Under this interface, press according to

S OK You can enter the write-down address interface, In turn, Make the setting menu switch, as illustrated in following figure:

—MENU:2— \*DMXAddr

- ← Menu serial number: 2
- ← Set the DMX address

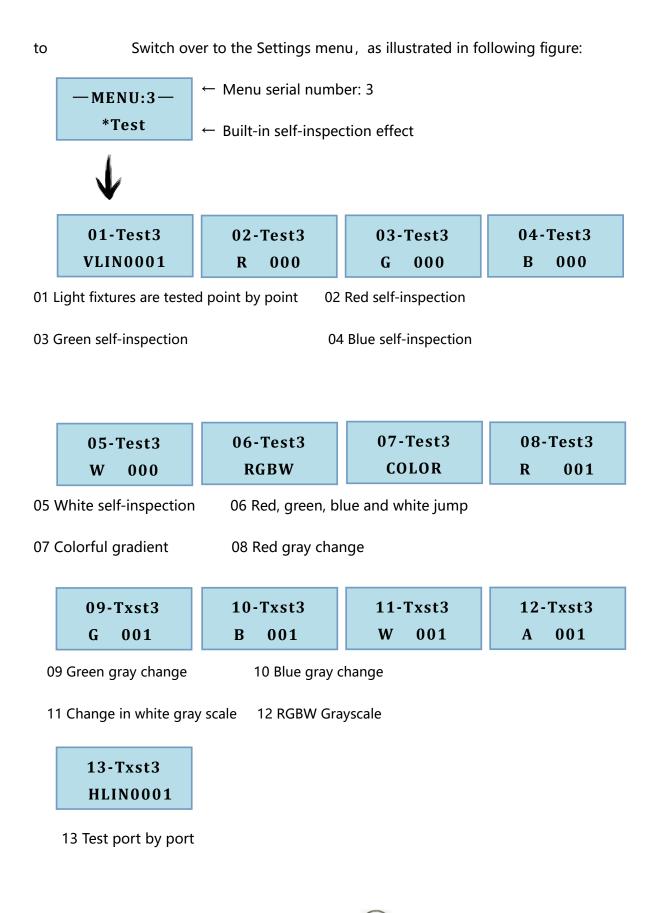


press (ok) You can address and write.

#### Menu MENU: 3

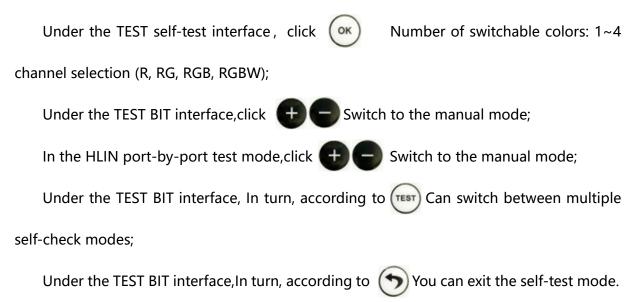
Under this interface, press (ox) You can enter the self-built test interface, In turn, according





pour: At the YC-MAX 9 main interface, press (rest) You can enter the self-test and play

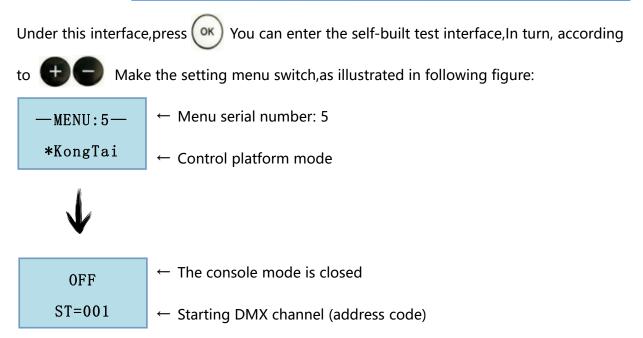
interface;



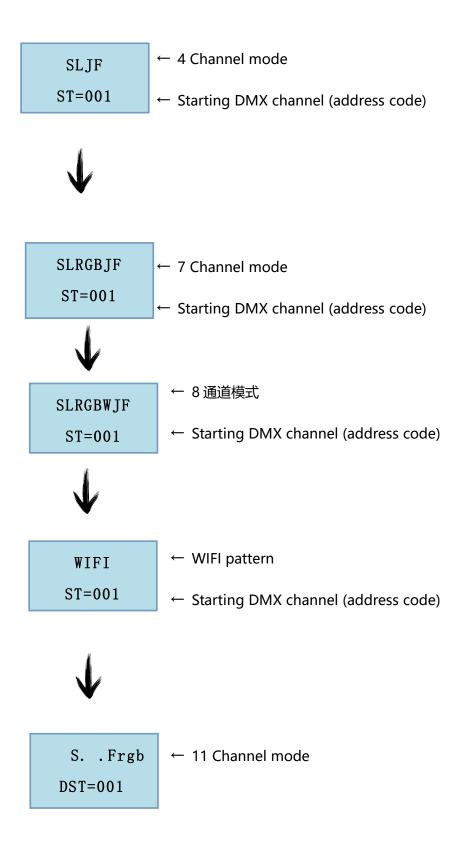
#### Menu MENU: 4

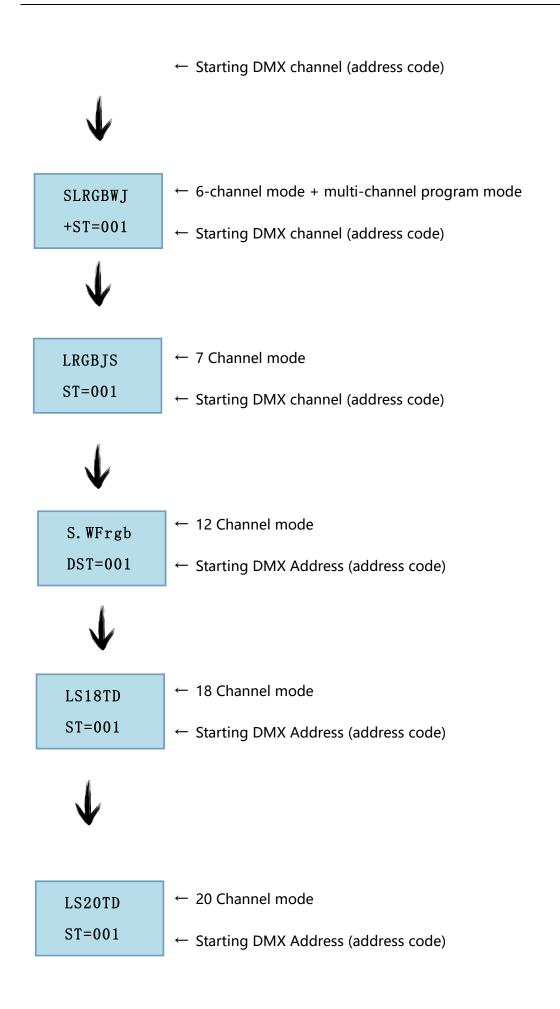
— MENU:4—	This mode is not supported and will be updated later
*SD/EMMC	

#### Menu MENU: 5



# $\checkmark$





#### DMX512 Call mode:

"SLJF"、"SLRGBJF"、"SLRGBWJF"、"SLRGBJFrgbD"、"SLRGBWJ+"、"LRGBJS"、 "SLRGBWJFrgbd"、"LS18TD"、"LS20TD" class channel pattern.

#### Start channel: You can set any starting address.

#### Mode 1. The 4-channel mode "SLJF"

thoroughfare	content	DMX price	Control content description
		000-128	Speed varies
1	speed adjustment	000-120	from slow to fast
•	spece adjustment	129-255	Speed varies
		129-235	from fast to slow
2	brightness control	000-255	Total dimming
		000-003	scenario one
		004-007	Scene 2
	Program scene	008-011	Scene 3
3		012-015	Scene 4
5		016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
	atura la seficia d	064-127	2 File flash
4	stroboflash	128-191	3 File flash
		192-255	4 File flash

thoroughfare	content	DMX price	Control content description
1		000-128	Speed varies from slow to fast
1	speed adjustment	129-255	Speed varies from fast to slow
2	brightness control	000-255	Total dimming
3	Color adjustment	000-255	Red color (R)
4	Color adjustment	000-255	Green color (G)
5	Color adjustment	000-255	Blue color (B)
		000-003	scenario one
		004-007	Scene 2
		008-011	Scene 3
6		012-015	Scene 4
6	Program scene	016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
7	stroboflach	064-127	2 File flash
/	stroboflash	128-191	3 File flash
		192-255	4 File flash

Mode 2. 7 Channel mode "SLRGBJF"

#### Mode 3.

8-Channel mode "SLRGBWJF"

thoroughfare	content	DMX price	Control content description
		000-128	Speed varies
1	speed adjustment	000-128	from slow to fast
1		129-255	Speed varies
		129-233	from fast to slow
2	brightness control	000-255	Total dimming
3	Color adjustment	000-255	Red color (R)
4	Color adjustment	000-255	Green color (G)
5	Color adjustment	000-255	Blue color (B)
6	Color adjustment	000-255	White color (W)

			000-003	scenario one		
			004-007	Scene 2		
			008-011	Scene 3		
	_	Program scene	012-015	Scene 4		
	7		016-019	Scene 5		
			020-023	Scene 6		
			-		024-027	Scene 7
				and so on		
		8 stroboflash	000-063	1 File flash		
			064-127	2 File flash		
	8		128-191	3 File flash		
Mode 4.			192-255	4 File flash		

11.

Channel mode "SLRGBJFrgbD"

therewahtere	contont	DMV price	Control content
thoroughfare	content	DMX price	description
		000-128	Speed varies
1	speed adjustment	000-128	from slow to fast
	speed adjustment	129-255	Speed varies
		125 255	from fast to slow
2	brightness control	000-255	Total dimming
3	Color adjustment	000-255	Red color (R)
4	Color adjustment	000-255	Green color (G)
5	Color adjustment	000-255	Blue color (B)
		000-003	scenario one
		004-007	Scene 2
	_	008-011	Scene 3
		012-015	Scene 4
6	Program scene	016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
-	atura la afficiale	064-127	2 File flash
7	stroboflash	128-191	3 File flash
		192-255	4 File flash
8	The background	000-255	Red color (R)
0	adjustment		
9	The background	000-255	Green color (G)

	adjustment		
10	The background adjustment	000-255	Blue color (B)
11	Reverse	0-127	forward direction
11	broadcast	128-255	opposite direction

# Mode 5. The 6-channel + multi-channel program mode is "SLRGBWJ +"

thoroughfare	content	DMX price	Control content description
		000-128	Speed varies
1	speed adjustment	000-128	from slow to fast
I	speed adjustment	129-255	Speed varies
		129-235	from fast to slow
2	brightness control	000-255	Total dimming
3	Color adjustment	000-255	Red color (R)
4	Color adjustment	000-255	Green color (G)
5	Color adjustment	000-255	Blue color (B)
6	Color adjustment	000-255	White color (W)
7		0-255	scenario one
8		0-255	Scene 2
9		0-255	Scene 3
10		0-255	Scene 4
11	Program scene	0-255	Scene 5
12		0-255	Scene 6
13		0-255	Scene 7
		•••••	and so on

#### Mode 6. 6-channel mode "LRGBJS"

		DMX price	Control content
thoroughfare	content		description
1	brightness control	000-255	Total dimming
2	Color adjustment	000-255	Red color (R)
3	Color adjustment	000-255	Green color (G)
4	Color adjustment	000-255	Blue color (B)
		000-003	scenario one
5	Program scene	004-007	Scene 2
		008-011	Scene 3

t	1		
		012-015	Scene 4
		016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
	6 stroboflash	000-063	1 File flash
6		064-127	2 File flash
6		128-191	3 File flash
		192-255	4 File flash

# Mode 7. The 12-channel mode "SLRGBWJFrgbD"

thoroughfare	content	DMX price	Control content
liorouginare	content	Divix price	description
		000-128	Speed varies
1	speed adjustment	000-120	from slow to fast
	spece adjustment	129-255	Speed varies
		123 233	from fast to slow
2	brightness control	000-255	Total dimming
3	Color adjustment	000-255	Red color (R)
4	Color adjustment	000-255	Green color (G)
5	Color adjustment	000-255	Blue color (B)
6	Color adjustment	000-255	White color (W)
		000-003	scenario one
	Program scene	004-007	Scene 2
		008-011	Scene 3
_		012-015	Scene 4
7		016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
		064-127	2 File flash
8	stroboflash	128-191	3 File flash
		192-255	4 File flash
	The	000-255	Red color (R)
9	background		
	adjustment		
10	The	000-255	Green color (G)

	background		
	adjustment		
	The	000-255	
11	background		Blue color (B)
	adjustment		
10	Reverse	0-127	forward direction
12	broadcast	128-255	opposite direction

#### Mode 8. 18. Channel mode "LS18TD"

thoroughfare	content	DMX price	Control content description
1	Total height regulation	000-255	Total dimming
2	The first program is a	000-128	Speed varies from slow to fast
	speed adjustment	129-255	Speed varies from fast to slow
3	The first program is red adjustment	000-255	Red color (R)
4	The first program is green adjustment	000-255	Green color (G)
5	The first program is blue adjustment	000-255	Blue color (B)
		000-003	scenario one
		004-007	Scene 2
		008-011	Scene 3
6	The first show is the	012-015	Scene 4
6	program scene	016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
_	The first program was	064-127	2 File flash
7	stroboscopic	128-191	3 File flash
		192-255	4 File flash
	tonline	0-127	Animation
8	top line Backplay (animation		positive
0	reverse)	128-255	Animation
			reverse
9	The second program	000-128	Speed varies
	speed adjustment		from slow to fast

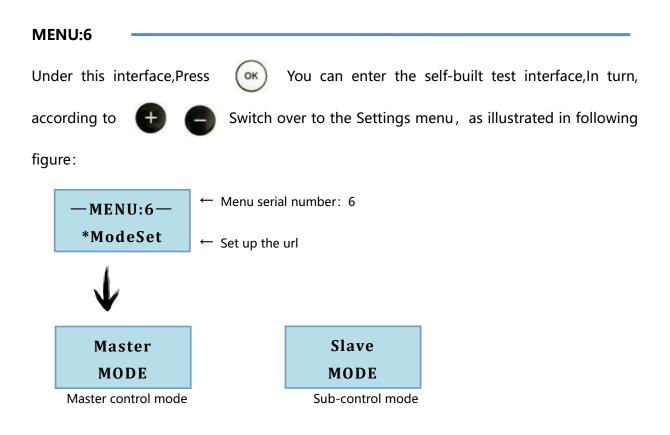
			1
		129-255	Speed varies
			from fast to slow
10	The second program is	000-255	Red color (R)
10	the red adjustment		
11	The second program is	000-255	Green color (G)
	the green adjustment		
12	The second program is	000-255	Blue color (B)
12	the blue adjustment		
		000-003	scenario one
		004-007	Scene 2
		008-011	Scene 3
10	The second program	012-015	Scene 4
13	program scene	016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
14	The second program is	064-127	2 File flash
14	stroboscopic	128-191	3 File flash
		192-255	4 File flash
	The second program	0-127	Animation
15	The second program		positive
15	Backplay (animation reverse)	128-255	Animation
	(everse)		reverse
16	Background background	0-255	Red color (R))
10	adjustment		
17	Background background adjustment	0-255	Green color (G)
	-	0-255	Dhua calar (D)
18	Background background adjustment	0-255	Blue color (B)

Mode of 9. 20-Channel mode "LS20TD"

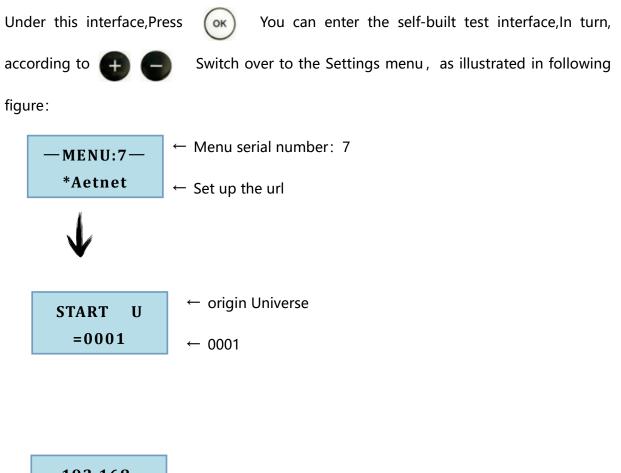
thoroughforo	content	DMX price	Control content
thoroughfare	content		description
1	Total height regulation	000-255	Total dimming
2		000-128	Speed varies
2	The first program is a	000-128	from slow to fast
	speed adjustment	129-255	Speed varies

			from fast to slow
3	The first program is red adjustment	000-255	Red color (R)
4	The first program is the green adjustment	000-255	Green color (G)
5	The first program is blue adjustment	000-255	Blue color (B)
6	The first program is white adjustment	000-255	White color (W)
		000-003	scenario one
		004-007	Scene 2
		008-011	Scene 3
7	The first show is the	012-015	Scene 4
7	program scene	016-019	Scene 5
		020-023	Scene 6
		024-027	Scene 7
			and so on
		000-063	1 File flash
	The first program was	064-127	2 File flash
8	stroboscopic	128-191	3 File flash
		192-255	4 File flash
		0-127	Animation
0	top line Reverse		positive
9	broadcast(Animation reverse)	128-255	Animation reverse
10	The second program	000-128	Speed varies from slow to fast
10	speed adjustment	129-255	Speed varies
			from fast to slow
11	The second program speed adjustment	000-255	Red color (R)
12	The second program is the green adjustment	000-255	Green color (G)
13	The second program is the blue adjustment	000-255	Blue color (B)
14	The second program is the white adjustment	000-255	White color (W)
		000-003	scenario one
4 -	The second program	004-007	Scene 2
15	program scene	008-011	Scene 3
		012-015	Scene 4

		1
	016-019	Scene 5
	020-023	Scene 6
	024-027	Scene 7
		and so on
	000-063	1 File flash
The second program is	064-127	2 File flash
stroboscopic	128-191	3 File flash
	192-255	4 File flash
The second program	0-127	Animation
Reverse broadcast(Animation		positive
	128-255	Animation
ieveise)		reverse
Background background	0-255	Red color (R)
	0-255	Green color (G)
adjustment	0-233	
Background background	0-255	Blue color (B)
	stroboscopic The second program Reverse broadcast(Animation reverse) Background background adjustment Background background adjustment	020-023           024-027           000-063           064-127           128-191           192-255           0-127           The second program reverse broadcast(Animation reverse)           Background background adjustment           Background background adjustment           Background background background background background background background 0-255           Background background background 0-255



#### MENU:7



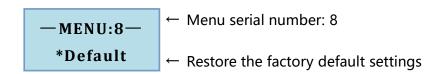
 192.168.
 ← IP address

 001.202

You can manually match the starting U and IP address by pressing MENU and upper and down keys, Support for 192.168.x.x network segment and support for 2.x.x.x network segment

#### MENU:8

Under this interface, Press or The factory default settings can be restored, as illustrated in following figure:

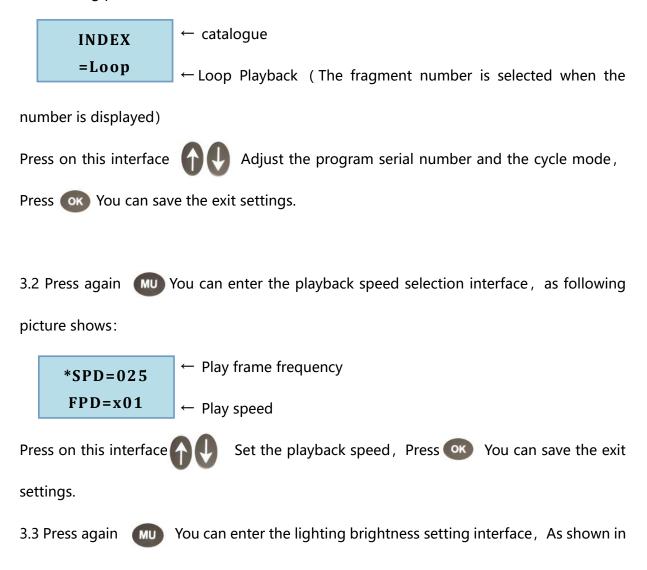


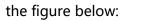
Press OK to restore the default Settings, The default setting is the master control machine mode

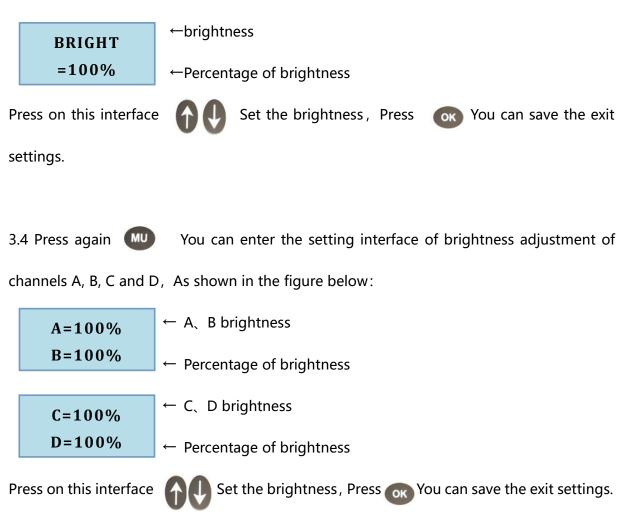
#### **3** Controller key setting parameters

3.1 Menu MENU: under the 1 interface, Press WU You can enter the fragment Settings interface, In turn, according to ox Switch over to the Settings menu,

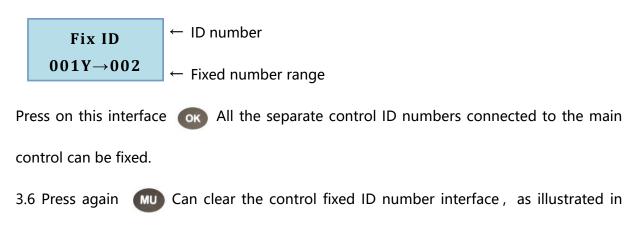
as following picture shows:



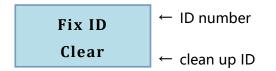




3.5 Press again *w* Can modify the separate control and fixed ID number interface, as illustrated in following figure:



following figure:



Press on this interface or Clear all separate control ID numbers connected to the main control.

#### 4 About the WAIT play mode

The YC-MAX 9 offline player enters a multi-segment loop or a single segment. But require MR-3F12 offline player to play no clips, Use the remote control to select the play clips. This playback mode is the WAIT mode.

At the YC-MAX 9 main interface, Press Wew You can enter the menu to select the Settings interface, Press on this interface Constrained Key can select different function options;

Menu MENU: under the 1 interface, Press or That is, into the fragment setting, In turn,

according to enabled Switch over to the Settings menu, as illustrated in following figure:

-MENU:1

\*PAR SET

← parameter setting

↓

INDEX

=Loop

↓

↓

INDEX

=Wait

← Segment selection settings

← Segment selection settings

← Segment selection settings

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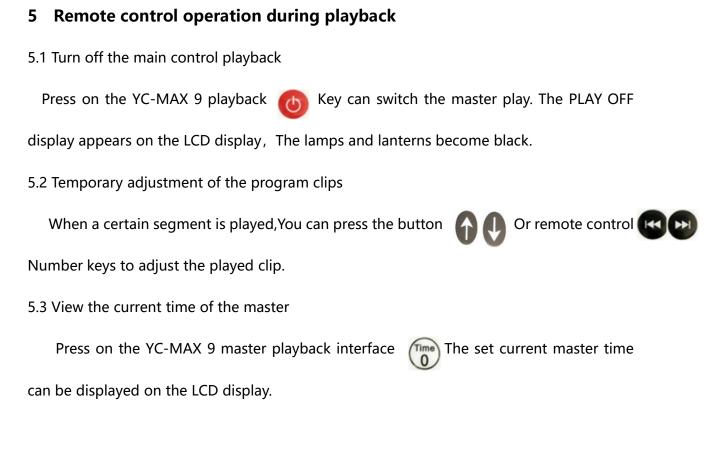
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Press at this interface on You can save the exit settings.



# **Controller installation application**

### **1** Control platform mode (Connect to the MA light console)

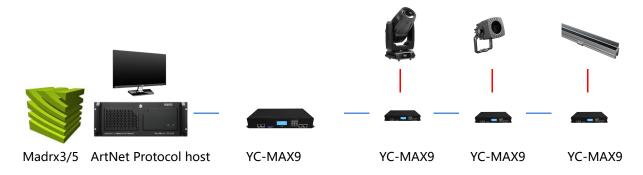
YC-MAX9 ArtNet The device is connected to the network port of the MA light console,

As shown in the figure below:



#### 2 Computer mode (Connect with the computer)

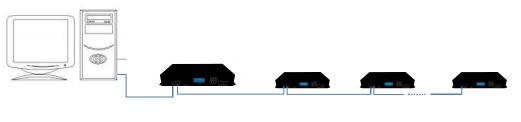
YC-MAX9 ArtNet The device is connected to the computer network port (pre-installed with ArtNet protocol software), As shown in the figure below:

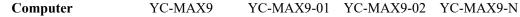


#### **3** on-line mode (Connect to the upper computer)

The YC-MAX9 controller is connected to the Ethernet port of the computer, As shown in the

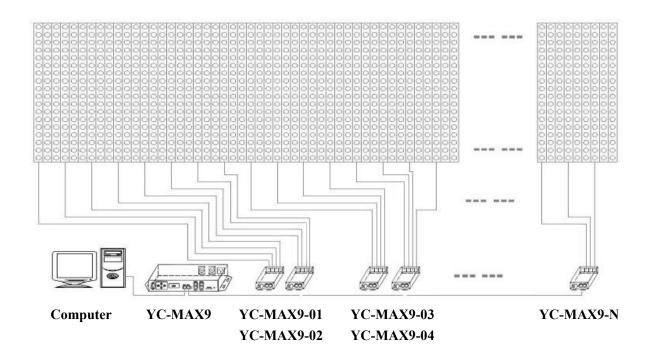
figure below:



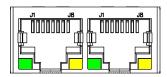


#### 4 Engineering case illustration and schematic diagram

Take the dot array screen of 96 points and 18 points composed of DMX512 point light source as an example, The YC-A18D controller was used, as shown in the figure: 96 Points wide, At 18 o'clock, The wiring is arranged in a vertical, S-shaped manner, Each output port of the controller controls 3 columns of point light sources for a total of 32 DMX512 joggle.The following figure is an example:



# **1** Network port communication status



#### LINK A LINK B

Indicator lamp	Indicator lamp status	Network mode	status
	Yellow The indicator light is often on	100Mb pattern	The communication status is normal
	Green and Yellow The indicator light is often on	1000Mb pattern	The communication status is normal
	Yellow The indicator light flashes	100Mb pattern	Network port abnormality or network cable abnormality
	Green and Yellow The indicator light flashes	1000Mb pattern	Network port abnormality or network cable abnormality

# 2 Super five types of twisted pair application points

568B: Orange white Orange Green white Blue Blue and white Green

Brown white Brown



568A: Green white Green Orange white Blue Blue and white Orange Brown white Brown

The controller cascades with the controller network cable, It is recommended to use the [cross] line order: Is 568B at one end and 568A at the other end.

The switch is cascading with the controller network cable, It is recommended to use the [cross] line order: Is 568B at one end and 568A at the other end.

Any of the above equipment and computer cascade, It is recommended to adopt the [straight-through] line sequence: That is, 568B or 568A.

concentrate on: Follow the requirements, Do not define your own network line order.

#### **3 YC-MAX9 Video player SD card application points**

A SD memory card is used on the YC-MAX 9 video player, The "FAT 32" file system should be formatted before storing the corresponding offline files.

#### 4 Application points of the controller grounding

The YC-MAX 9 video player uses a metal case, The rated power supply voltage is AC100V-240V, Therefore, it is necessary to ensure the effective grounding of the controller equipment and the equipment metal outer box.

#### 5 Warning reminder

Please note the dust and water resistance

Please avoid direct sunlight for a long time

Do not approach the heat and fire sources

Do not place it in an explosive gas environment

Keep the product in a stable position to prevent product damage or personal injury

caused by falling

Please keep the packing boxes and packaging materials, which can be used when storing and transporting the products

#### matters needing attention

#### 1 Super five types of twisted pair application points

568B: Orange white Orange Green white Blue Blue and white Green
Brown white Brown
568A: Green white Green Orange white Blue Blue and white Orange
Brown white Brown

The controller and offline main controller and switch use cross network cable, Is 568B at one end and 568A at the other end. Any of the above equipment and computer network cable with direct line, That is, 568B or 568A, Do not.

#### 2 Wire material and connection method of the lamps to the controller

1. If the distance between the controller output port and the lamp is too far, It is recommended to use 485 special line or more than super class 5 shielded network cable connection, The best method is: Orange—A; Orange white-B; Other GND (ground) can be connected.

2、A terminal resistance of 120R is added to the end of each channel signal between A and

Β.

3. Do not use two intertwined wires to connect the signal simultaneously, Such as orange and orange white simultaneously to A or B.

#### **3** Application points of the controller grounding

The YC-MAX9 controller uses a metal housing, The rated power supply voltage is AC100V-240V, Therefore, it is necessary to ensure the effective grounding of the controller equipment and the equipment metal outer box.

Also because of the controller signal output port has an exposed metal contact surface, Therefore in accordance with the safety regulations and requirements, To ensure the safe application of the operators, The signal output port GND signal must be effectively grounded.