



MR-318A Controller Instructions

V1.0

Functions overview

I、 System Features

1. 32-65536 degree Gray control, which can restore the real image color and detail ;
2. The system supports automatic, regular, preset programs play ;
3. Precise gamma correction algorithm. It better conforms to the visual photographic characteristics of the human body, and the display color is more sufficient and rich, so as to perfectly reflect the animation or video effects of the designer ;
4. Support 120-frame frequency at most, to guarantee demands for HD display and 3D display of the image ;
5. The controller is equipped with keys and External Remote Control; the episode selection, overall brightness adjustment, white balance adjustment and playback speed adjustment etc ;
6. The LCD display module timely display the controller parameters and status ;
7. Controller output compatible with TTL electrical signal and LVDS dual mode ;
8. Multiple-chip control is integrated, and the control chip type, clock frequency, duty ratio, gray scale and other parameters are changed through software settings ;
9. Support four-color lighting: energy saving, environmental and pure color ;
10. 8-port output, the number of loading points of the single port is not limited, and the customer shall conduct test according to the chip characteristics ;
11. SD card storage, support maximum 32G, preset maximum 255 program files ;
12. Support remote online download and offline program update ;
13. The built-in animation test program may help customer to debug and apply in project ;

II. Design concept

14. Four-color design: energy saving, environmental and pure color ;
15. Synchronous with asynchronous integrated control: online priority; it will be shifted to offline effects when without online signal, achieve the video source backup ;
16. Large self-development and design video editing, playback and layout design software: greater adaptability, more support languages, greater openness. It is applicable for various complicated applications of shaped screen, multi-screen, building screen, pixel light screen etc ;
17. Support mainstream 32, 64-bit operating system: Windows 2000, Windows XP, Windows 7, Windows 8 etc ;

III. Expansibility

1. It allows installing all Windows operating systems and supporting for international languages ;
2. The player software has adequate interfaces so that to compatible with other internationally accepted protocols. It supports personalized design requirements of customers ;

Controller specification and basic parameters

I. Controller Appearance

MR-318A Front view :



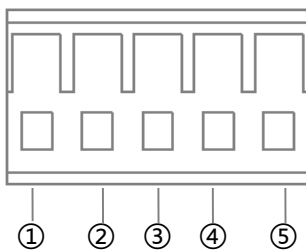
MR-318A Rear view :



- ①: Power Switch ②: Key ③ : LCD Display Screen
- ④: Power / Communication Indicator ⑤ : Operation Indicator
- ⑥: SD Slot ⑦: Adaptive Network Interface
- ⑧: Remote Control Infrared Indicator ⑨ : Output port ⑩ : Power Interface

II. Output port definition

MR-318A controller uses 8pcs 5pin terminal interface output signals. 5Pin Terminals Sort sequentially from left to right , as shown below.



	①	②	③	④	⑤
TTL Signal	Groun d	Data	Latch	Clock	Output enable
	GND	DATA	LE	CLK	OE
Differenti al Signal	Groun d	Data+	Data-	Clock+	Clock-
	GND	A1	B1	A2	B2

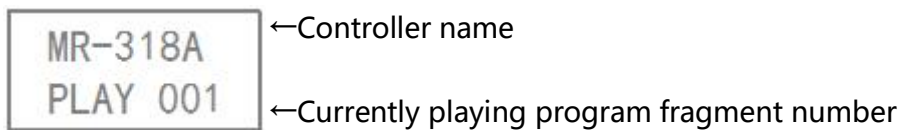
Remote control button definition




	Set Menu		plus
	Self Test		Minus
	Confirm and save		Previous fragment
	Exit Setup		Next fragment
	Play and Pause		Numeric Key

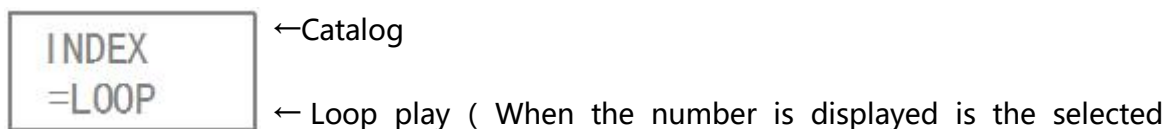
Controller keys and display instructions







I、MR-318A LCD main screen after boot




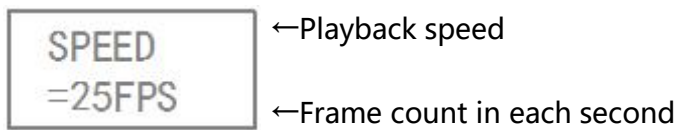
II、MR-318A Controller parameters setting





1、 In the MR-318A main interface , press  to enter the fragment selection settings interface , as shown below :




In this interface , press   Adjustable loop mode , transferred to digital mode , can press   to adjust program serial number , press  again can save and exit settings , press  to exit without saving settings.







2、 Press  again to enter the playback speed selection interface , as shown below :




In the interface   to set playback speed , then press  to exit with saving , press  to exit without saving.

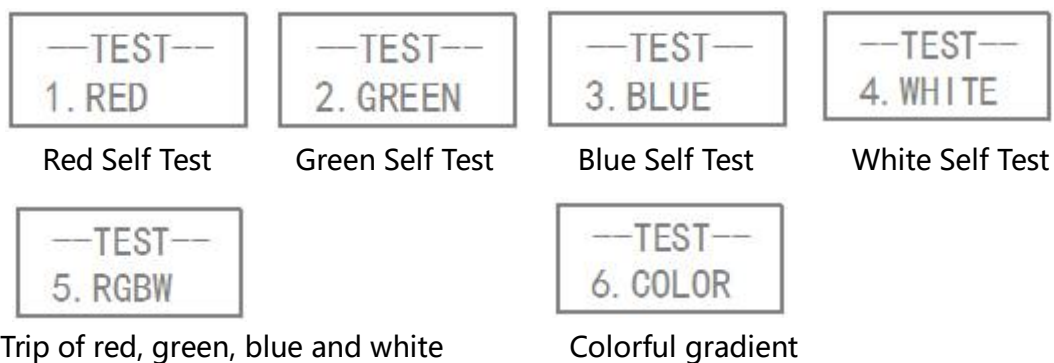
3、 Press  again to enter date and time setting interface. As figure below



In the interface,press   to adjust position , press   to adjust related value ; then press  to exit with saving , press  to exit without saving.

III. MR-318A Self Test Setting

In MR-318A main interface, press  to enter self test playing interface , as shown below :



Note: during self test, press  to shift various self test modes

IV. Methods for setting up WAIT play mode

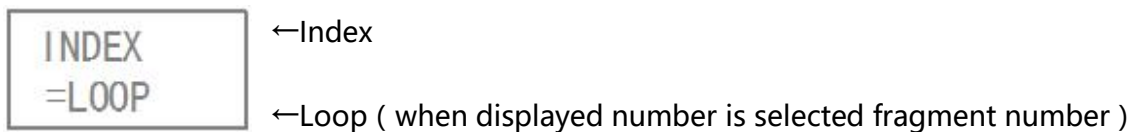
MR-318A after power up can enter the multi segment loop playing or a single segment playing. But requires MR-318A not play any segment after power up , select a segment to play by remote control. Such playback mode is WAIT mode.

MR-318A after power up , Press the "Menu" button to enter the segment selection interface , repeatedly press **+** or **-** key until Select INDEX=WAIT , as shown below :



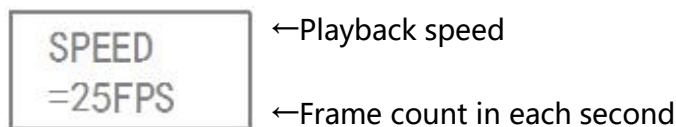
V、 Controller Key Setting Parameter

1、 In MR-318A main interface , press **MU** to enter fragment selection setting interface. , as shown below :



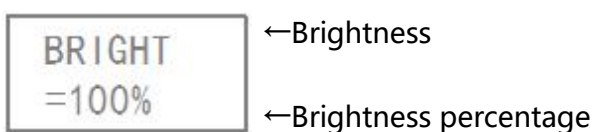
In the interface can press **↑** **↓** conduct program numbers and adjusting loop mode , press **OK** to save and exit setting.

2、 Press **MU** again to enter playback speed selection interface , as shown below :




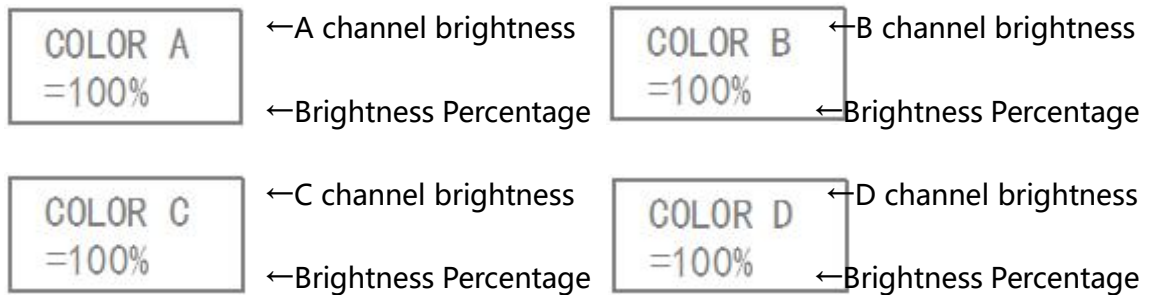
In the interface, press **↑** **↓** to set playback speed , press **OK** to save and exit setting.

3、 Press **MU** again to enter date and time setting interface , as shown below:




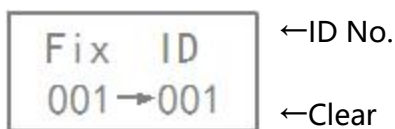
In the interface, press **↑** **↓** to set brightness , press **OK** to save and exit setting.


4、 Press  again can enter A、 B、 C、 D Channel brightness adjustment settings interface , as shown below :



In the interface, press   to set brightness , press  to save and exit setting.


5、 Press  again can clear sub-control fixed ID number interface, as shown below :



In the interface, press  can clear the fixed ID number interface of sub-controller.


V、 Remote control operation during playing

1、 Turn off master controller playing





Press  button can Switchable master controller playing when MR-318A is playing.

LCD screen display "NO PLAY" , Lamp turns black.



2、 Pause the master controller playing

In the MR-318A player interface, press  button can pause the master controller playing ,LCD screen display "PAUSE" , the lamp colors to stay in that frame before stopping playback color.

3、 Adjust program segment

when playing a segment , by pressing a button   or   Remote control Numeric keys to adjust the playback of fragment.

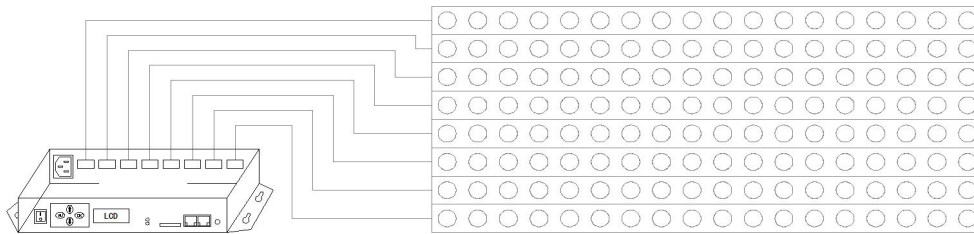
4、 Check master controller current time

In the MR-318A player interface, press  Can display the current master controller time on the LCD screen. Continue to press  then can return to play interface.

Controller installation and Application

I、 Offline Mode

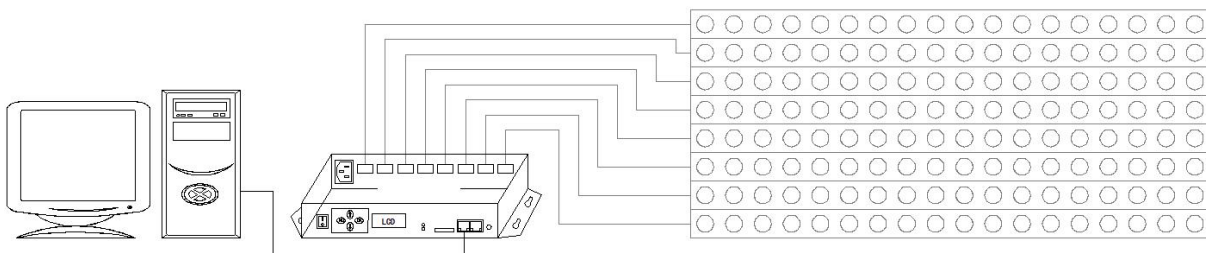
Offline mode directly load with lamps , as shown below :



MR-318A

II、 Online/Offline Integrated model

Connected to the computer (Online signal priority. Automatic switching off line signal without online signal), as shown below :



Computer (optional)

MR-318A

Attention matters

I、 Cat.5e twisted pair Application Notes

568B : orange-white/orange/green-white/ blue/blue-white/green/brown-white/brown

568A : green-white/green/orange-white/blue/blue-white/orange/brown-white/brown



Controller and offline master controller and switch these three devices between each other using a crossover cable is better , One head is 568B, the other head is 568A. Above any equipment and computer room with a straight line , that is both 568B or 568A , Do not define the order of the straight line.

II、 MR-318A Controller SD Card Application Notes

MR-318A SD memory card is used on the controller , need to use the FAT32 file system to format and then to store the corresponding offline files.

III、 Wire and connecting method from lights to controller

1. Controller output port to the lamp if the distance is too far , Recommended for the use of 485 dedicated lines or Cat.5e kind shielded cable connection , the best connection way is :

Orange-A ;Orange white-B ;Green-addressing+ (ADRI/PO+) ;Green white-addressing- (ADRI/PO-) ; Other connect to GND (Ground)

2. At the end of each road signal that is between A and B to add a 120R terminal resistance.

3. Do not connect the two wires that are intertwined to receive the signal, such as orange and orange white connect to A+or B- at same time.

IV、 Controller connect to ground application notes

MR-318A Controller using metal case ,rated supply voltage is AC100V-240V ,Therefore, it is necessary to ensure the effective grounding of the controller equipment and the effective grounding of the metal outer box.

And the output port of the controller is exposed to the metal contact surface ,therefore, according to the requirements of safety regulations , to ensure safe use of the operator , signal output port GND signal must be effectively grounded.