



MR-BF12B Master Controller Instruction

V1.0

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Functions overview

I. System Features

1. The system may support 150,000 points in offline. It may meet project needs of clients.
2. The system supports automatic, regular, preset programs play.
3. The controller is equipped with keys and External Remote Control; the episode selection, overall brightness adjustment, white balance adjustment and playback speed adjustment etc.
4. Support offline one key fixed; clearing sub-controller ID number; it is convenient to use on field.
5. Support switch parallel program; reduce system cascade chain length; improve stability.
6. Support dual backup; Failure of one controller and net wire broken will not influence operation.
7. Tricolor independent brightness control may adjust white balance precisely, simple and effectively.
8. Support four-color lighting: energy saving, environmental and pure color.
9. Adopt Ethernet interface and UDP network protocol, the maximum transmission distance is 100 meters.
10. The LCD display module timely display the controller parameters and status.
11. SD card storage, support maximum 32G, preset maximum 255 program files.
12. Support remote online download and offline program update of multiple offline host controllers.
13. The built-in animation test program may help customer to debug and apply in project.
14. Support mixture of different type lamps and different protocols lamps (including DMX512 lamps), strong compatibility.

II. Design concept

1. The system signal is dual redundant with doubled stability.
2. Four-color design: energy saving, environmental and pure color.
3. Synchronous with asynchronous integrated control: online priority; it will be shifted to offline effects when without online signal, achieve the video source backup.
4. 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.
5. Support mainstream 32, 64-bit operating system: Windows 2000, Windows XP, Windows 7, Windows

8 etc.

III. Extensibility

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.
3. Support and MR control system, such as multi-function converter controller in combination to achieve the special project application requirements.

Controller specification and basic parameters

I. Controller Appearance

MR-BF12B Front view :



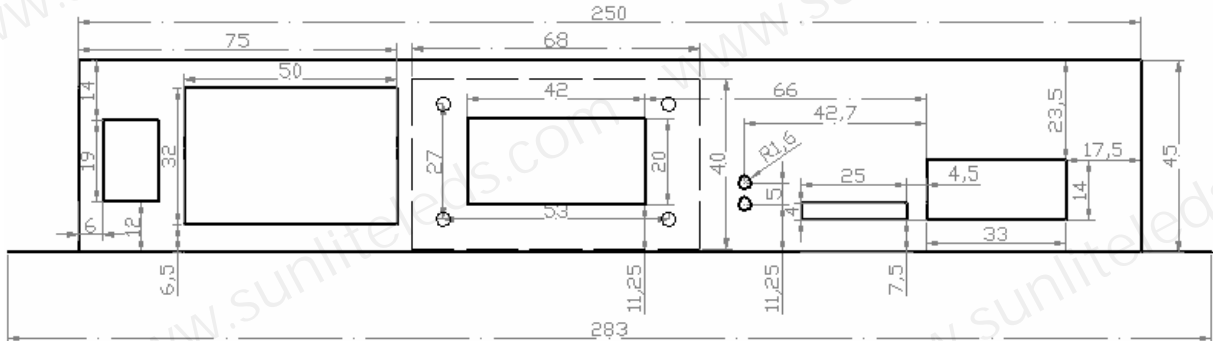
MR-BF12B Rear view :



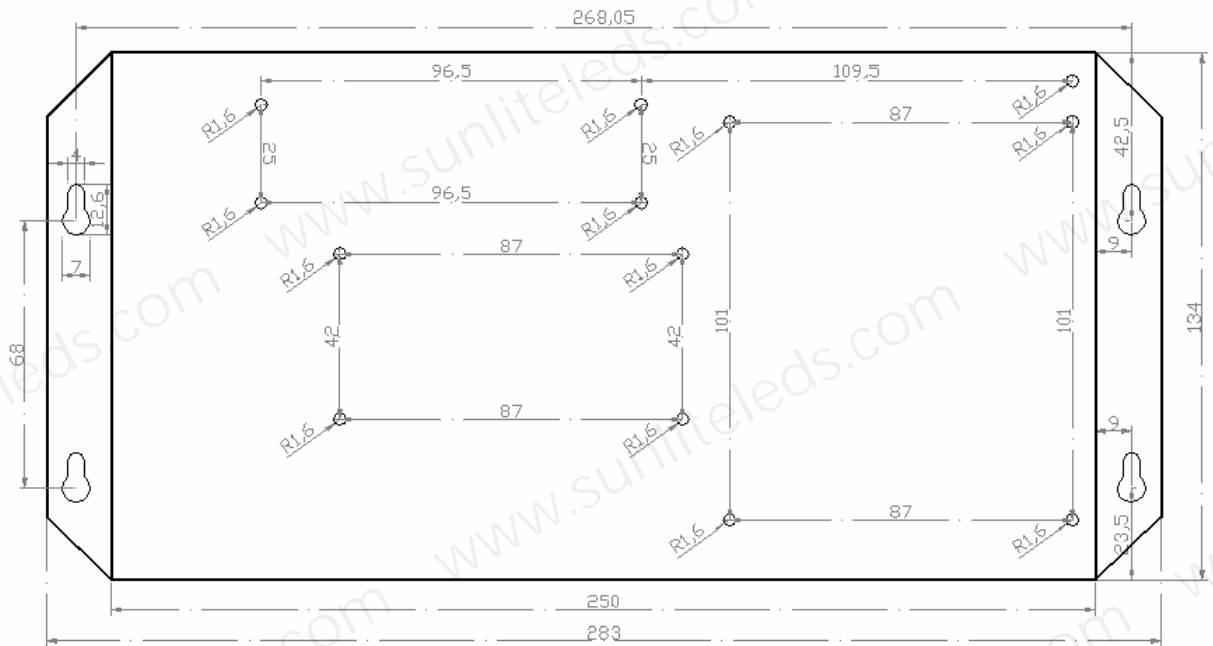
- ①: Power Switch ②: Key ③: LCD Display ④: Power / Communication Indicator
⑤: Operation Indicator ⑥: SD Slot ⑦: Adaptive Network Interface
⑧: Remote Control Infrared Indicator ⑨: Power Interface

II. Controller three view size chart

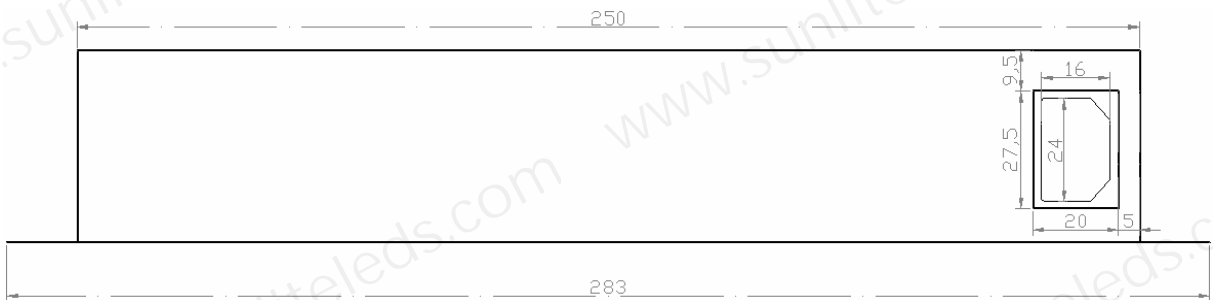
MR-BF12B Front view



MR-BF12B Top view

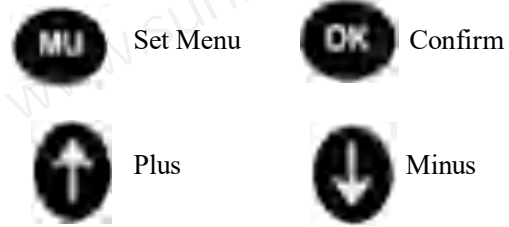


MR-BF12B Rear view



Remark : Above three views the size unit is mm.

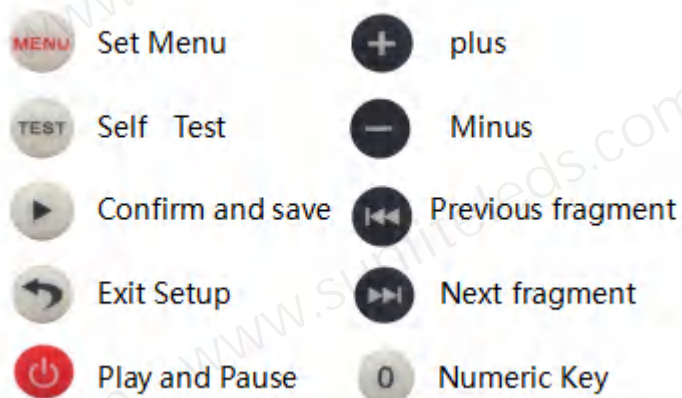
III. Controller three view size chart



IV. Controller basic parameters table :

Rated voltage	AC 100V ~ 240V
Rated power	15W
Length	283mm
Width	134mm
Height	45mm
Spacing of fixing holes	268mm ; 68 mm
Standard accessories	Remote control×1 /SD card×1/AC power cord×1

Remote control button definition





Controller keys and display instructions

I、MR-BF12B LCD main screen after boot



←Controller name

←Currently playing program fragment number

II、MR-BF12B Controller parameters setting

1、 In the MR-BF12BA main interface , press to enter the fragment selection settings interface , as shown below :

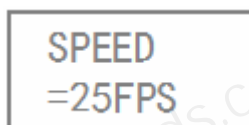


←Catalog

←Loop play (When the number is displayed is the selected fragment number)

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 :

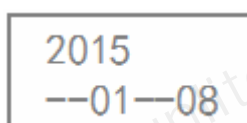


←Playback speed

←Frame count in each second

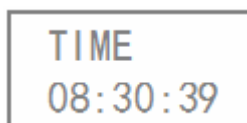
In the interface to set playback speed , then press to exit with saving , press to exit without saving.

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



←Year

←Month — Day



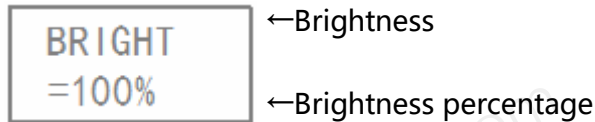
←Time

←Hour—Minute—Second

In the interface,press to adjust position , press to adjust related value ;

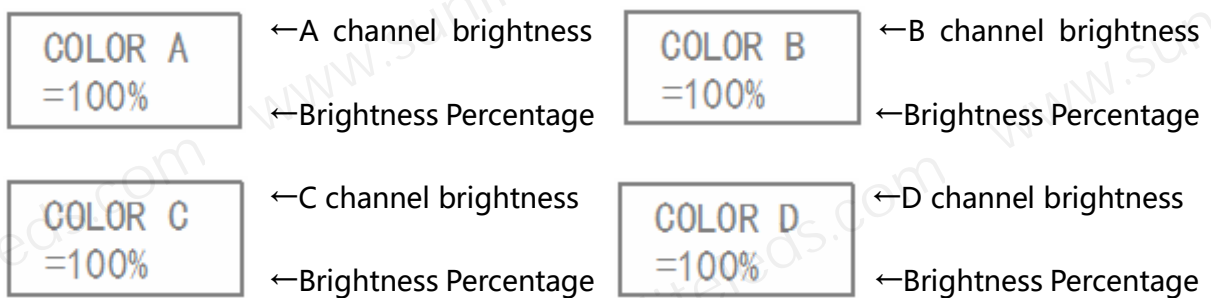
then press to exit with saving , press to exit without saving.

4、 Press again to enter brightness adjustment settings interface. As figure below :



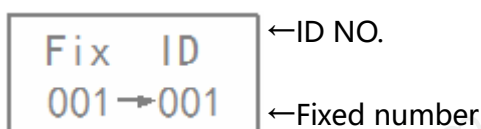
In the interface, press to set brightness, press to adjust channel position of A, B, C, D, press again to set brightness of the four channels, then press to exit with saving, press to exit without saving.

5、 press again In turn to enter the A, B, C, D channel brightness adjustment settings interface , as shown below :



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

6、 Press again can enter the sub-controller ID number fixed interface, as shown below :



In the interface can press can adjust modified number positions , press or Numeric keys to change number , the front number refers to the initial controller's number , the after number refers to the end of controller , after the

number is amended, press can fixed the sub-controller ID number.

7、Press again can clear the fixed ID number interface of sub-controller , as shown below :



In the interface can press it can clear all the sub-controller ID numbers connected to the master controller.

III. MR-BF12B Self Test Setting

In MR-BF12B 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

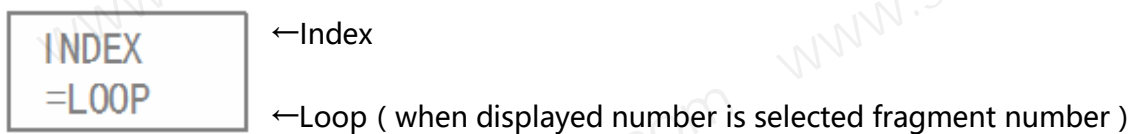
MR-BF12B after power up can enter the multi segment loop playing or a single segment playing. But requires MR-BF12B not play any segment after power up , select a segment to play by remote control. Such playback mode is WAIT mode.




MR-BF12B after power up , Press the "Menu" button to enter the segment selection interface , repeatedly press or key until Select INDEX=WAIT , as shown below :




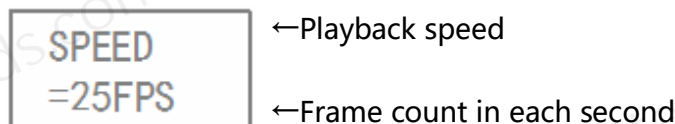
V、Controller Key Setting Parameter




1、In MR-BF12B main interface , press  to enter fragment selection setting interface , as shown below :




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

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




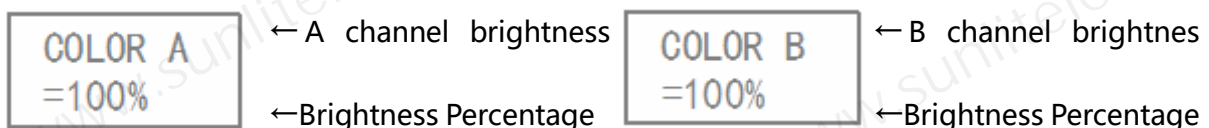
In the interface, press   to set playback speed , press  to save and exit setting.

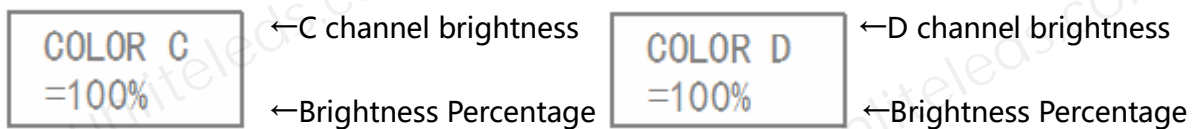
3、 Press  again to enter date and time setting interface , as shown below:



In the interface, press   to set brightness , press  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-BF12B is playing.

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



2、 Pause the master controller playing

In the MR-BF12B 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.

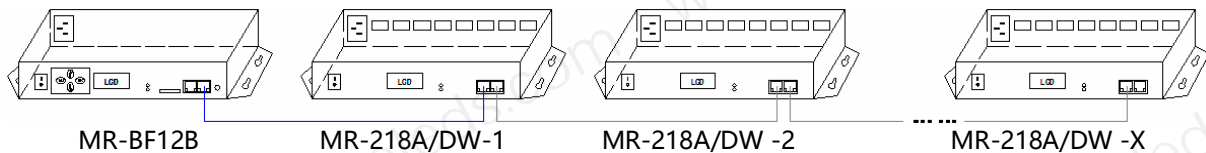
4、 Check master controller current time

In the MR-BF12B player interface, press  Can display the current master controller time on the LCD screen. Continue to press  then can return to play interface.

Controller install applications

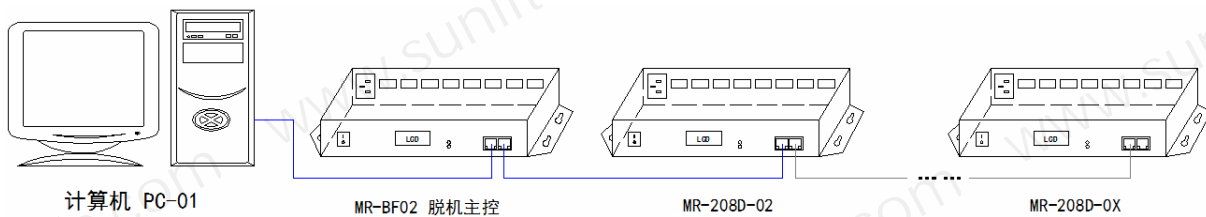
I、Offline mode

MR-BF12B connect with the offline master controller , as shown below :



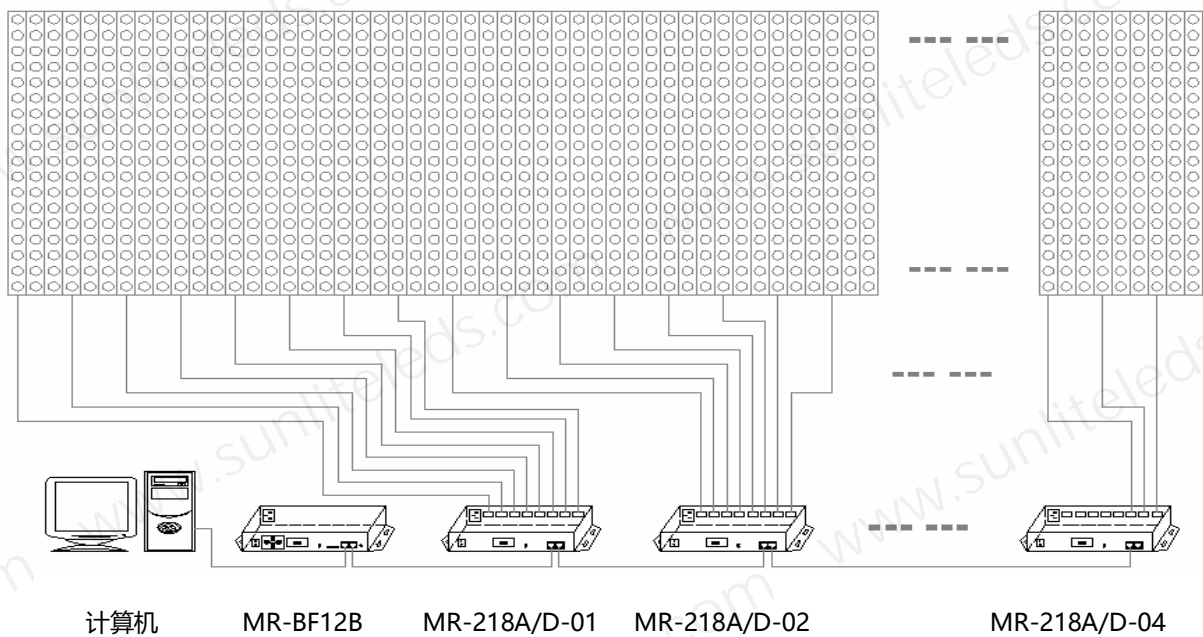
II、Integrated synchronous and asynchronous mode

Connected with the computer and offline master controller (when the mode is selected, the computer on-line works in priority, and the offline effect is automatically switched to without online signal) , as shown below



IV、Engineering case description and sketch map

For example in DMX512 point light source composed of 96 points \times 18 dots matrix screen , use MR-218DW controller , the wiring is arranged in the vertical S type , controller for each output port to control 3 lines point light source, totally need of 32 DMX512 interfaces. The following diagram for example :



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-BF12B Controller SD Card Application Notes

MR-BF12B 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、 Controller connect to ground application notes

MR-BF12B 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.