



# MC01 Standard Master

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Version:V4.5

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## Overview

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### I. Features

1. MC01 Supports a Maximum Load of 450,000 ChannelsIn;
2. MC01 Support Unlimited Cascade Transmission, Unlimited Number;
3. The System Supports Automatic, Timing, Holiday Preset Effect Playback;
4. Support Buttons and External Remote Control, Program Selection, Brightness Adjustment, White Balance Adjustment, Playback Speed Adjustment, etc;
5. Support a Variety of DMX512 Driver Chips Offline One-Key Write Address;
6. Supports Periodic Adjustment of The Local Brightness;
7. Support One-key Restoration of Factory Default Settings;
8. Support Offline Fix, Clear Device ID Number;
9. Support Switch Parallel Scheme: improve Stability;
10. Support Multi-Loop Ring Backup, One Controller is Broken or The Network Cable is Broken and The Display is Not Affected;
11. Support Real-Time Hot Backup of Multiple Master Controllers;
12. Independent Brightness Control of 3 Primary Colors, Easy to Adjust White Balance;
13. Support R,RB,RGB,RGBW,RGBWY,and Multi-Color Mixing Control;
14. Using Ethernet Interface and UDP Protocol, The Distance is 100 Meters;
15. LCD Display Module Displays Controller Parameters and Status in Time;
16. SD Card Storage, Can Support 64G, Can Preset 99 Program Files;
17. Support Multiple Master Control Offline and Online Partition Management Function;
18. Support Multiple Devices LAN Remote Online Download and Update Programs;

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19. Built-in Animation Test Program;
  20. Supports Mixed use of Different Types of Lamps and Lamps of Different Protocols;
  21. Equipment Network Port, Surge Protection: 1.5KV;
  22. Support Severe Working Environment -40°C-80°C, Normal Operation Without Failure;
  23. Supports Offline and Online Firmware Upgrades;
  24. Dual Network Port Output Simultaneously, More Flexible Architecture.

## **II. Design Concept**

1. 1000Mbps/ 100Mbps Optional, Adapt to Different Project Schemes;
2. Two-way Redundancy of The System Signal, Doubled Stability;
3. 4 Color Algorithm: Energy Saving and Environmental Protection, Pure Color;
4. Integrated Control, Online Priority, Automatic Switching Offline Effect Without Signal;
5. Self-developed Playback and Wiring Software, More Adaptable;
6. Use Complex Applications Such as Various Lighting Screens;
7. Use The Switch Parallel Scheme and Improve The Stability of The System;
8. Add Fiber Optic Modules, The System Can Transmit Fiber Optic Signals;
9. Add a Wireless Bridge for Wireless Signal Transmission;
10. With Internet Control Software, Support Internet Remote Control;
11. The System Supports Automatic, Timed and Holiday Preset Playing;
12. Support Mainstream 32Bit and 64Bit Systems: Win 7, Win 8 Win 10 and so on;

## **III. Expansibility**

1. All Current Windows Systems and Multiple Languages Can be Installed;
2. Leave The Interface for Compatibility With International Common Protocols

3. It can be Combined With Controller Such as Converter in MR Control System
4. Expandable and Compatible With Third-Party Software and Devices;
5. The Master Controller Supports Off-Line Address Writing, Which Can Realize DMX512 Channel Automatic Addressing. Support MR-RDM06, MR-DMX05,MR-GX06,MY7221, WS2821, UCS512C, UCS512D, UCS512E, UCS512F, UCS512G, UCS512H, DMX512AP, SM16511, SM16512, SM16522, SM17511, SM17512, SM17522, SM17500, SM18522P, SM18522PH, SM18512P, SM19512PG, SM19512PGH, HI512A, HI512D, HI5 12E, HM512G, HM612RE, HM612RH, MR612R, HM512GF, HM512GH, TM512AC, TM512AL, TM512AD, TM512AB, TM512AE, GS8511, GS8512, GS8513, GS8515, GS 8516, etc.

## Specifications and Parameters

### I. Controller Appearance

MC01 Front view:



MC01 Rear view:

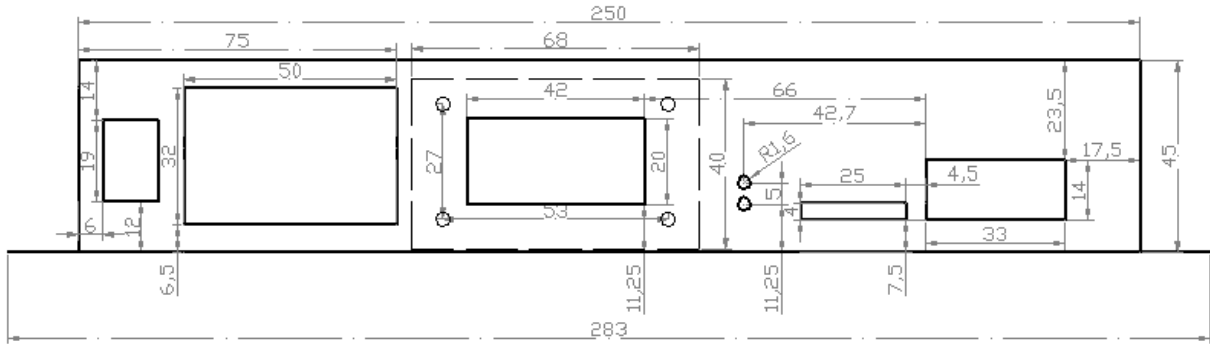


① Power Switch ② Key Control Panel ③ LCD Display ④ Power Lights ⑤ Signal Lights

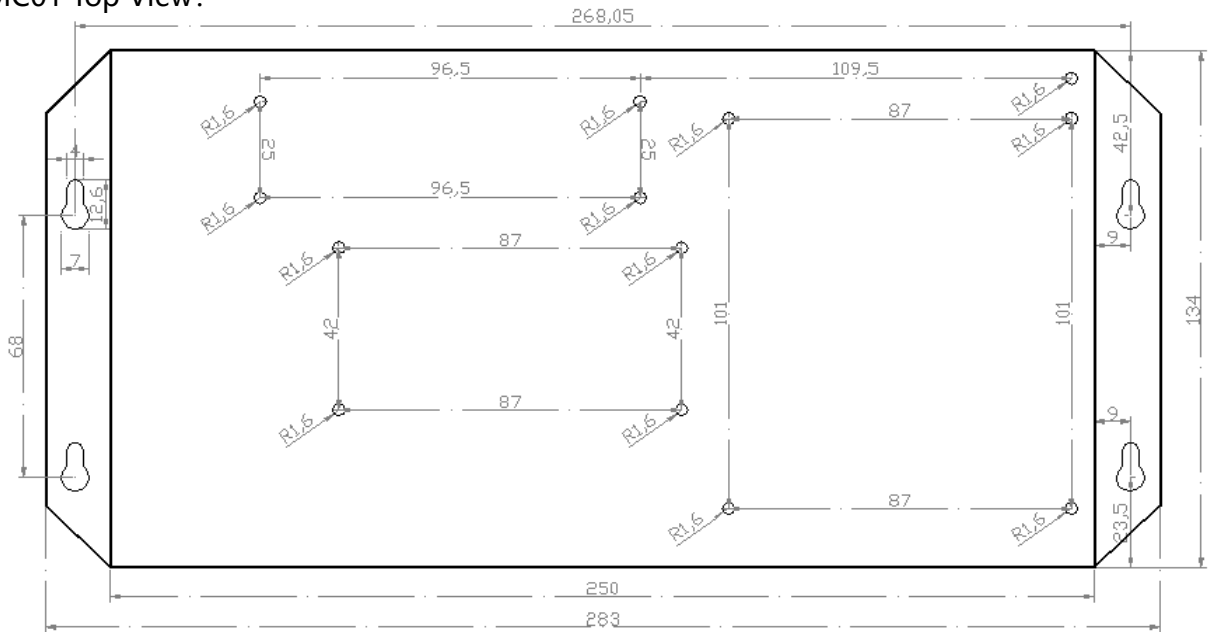
⑥ SD Card Slot ⑦⑧ Self-adapting Network Interface ⑨ Power Interface

## II. Controller Three View Size Chart

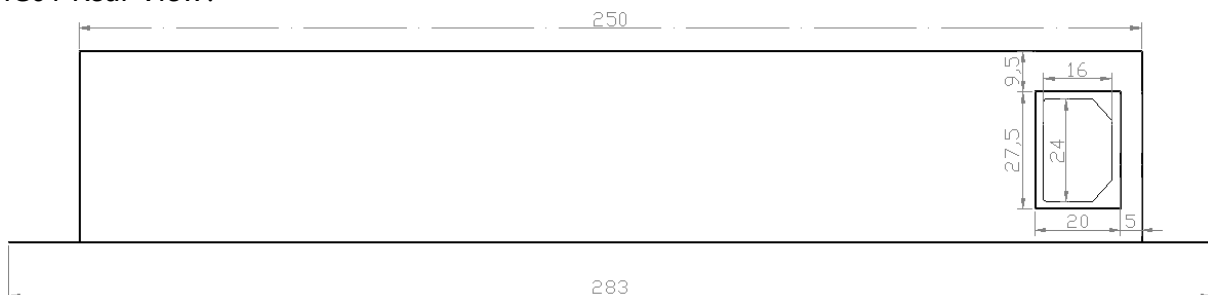
MC01 Front View:



MC01 Top View:



MC01 Rear View:



Remark: Above Three Views The Size Unit is mm.

### III. Controller panel buttons



### IV. Controller basic Parameter Table:

Product Name	Standard Master
Product Model	MC01
A Storage Medium	High-Speed SD Card (Standard)
Rated Voltage	AC 100V ~ 240V±15%Vac50/60Hz
Rated Power	About 15W
Protocol	RJ45X2PCS, Standard UDP/TCP Protocol
Network Rate	100MB/1000MB Adaptive
Relative Humidity	About 95% (Non-Condensing)
Temperature	-40°C ~ 80°C;
Length	283mm
Width	134mm
Height	45mm
Hole Spacing	268mm; 68 mm
Protection Class	IP20
Installation Method	Fixed Hole Installation Method (See Above Drawing)
Weight	1.48kg

Shell Material	Iron (dusting process)
Accessories	Power Cord x1/Warranty Card x1/Foam Paper Box x1/ Screwdriver x1/Card Reader x1/SD Card x1

## Key Definition



	Play Switch		Time/Number 0
	Addressing Key		Left Button
	MENU		Plus
	Exit Settings		Minus
	OK		Number key

## Display Description

### I. LCD Main interface After MC01 is Turned on

**NO CARD**

← Status: SD Card Not Detected

**NO File**

← Status: Invalid File or SD Card Format Error

**SD 01/08  
LoopPlay**

← The Number of Programs and The Current Play Number

← Status: Loop Play Status

**SD 01/08  
TFixPlay**

← The Number of Programs and The Current Play Number


← Status: Temporary Play Status

**SD 01/08  
TimePlay**

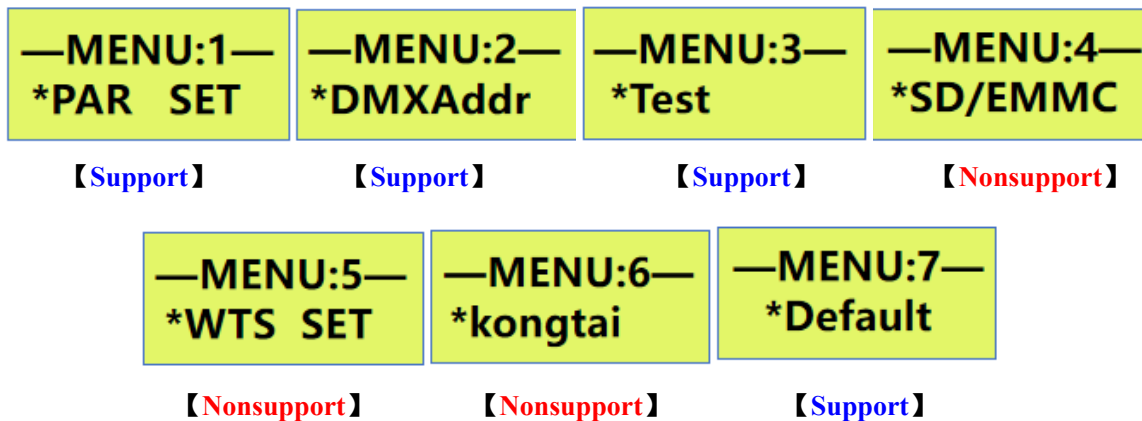
← The Number of Programs and The Current Play Number

← Status: Timing Play Status



## II. MC01 Remote Control Settings

MC01 Press  Enter the MENU, and Press   Select in This interface, as

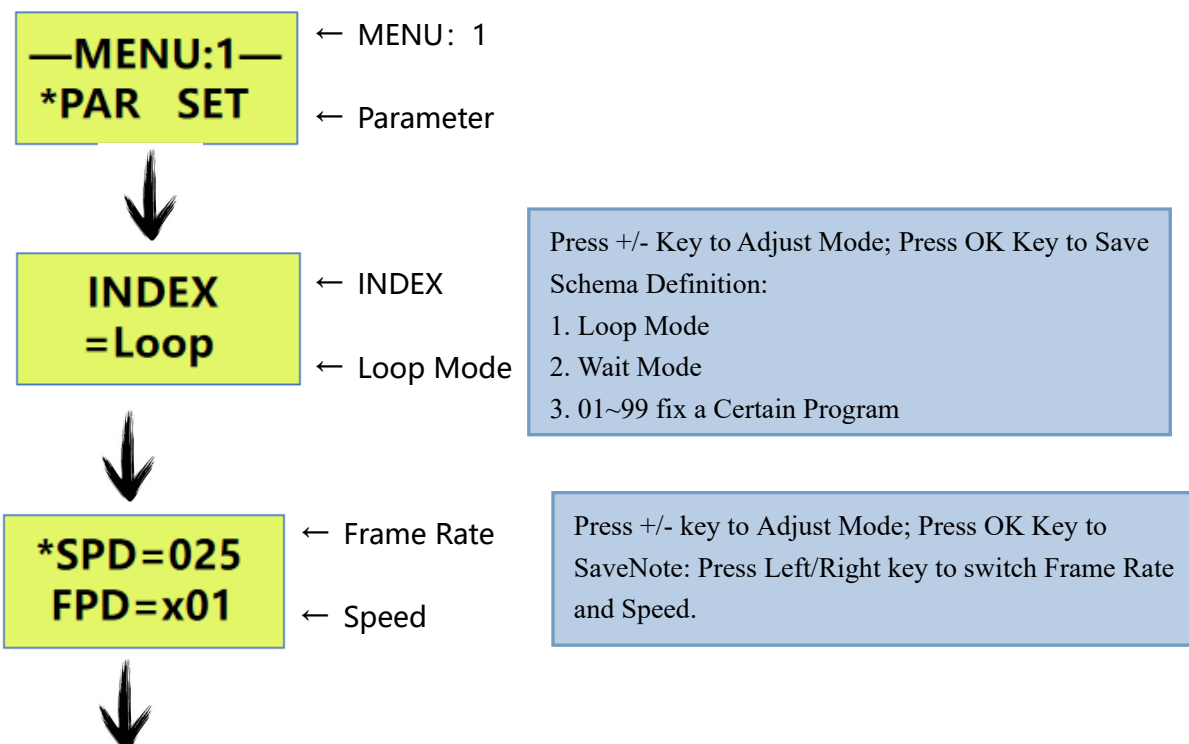
Shown in The Figure Below:



### MENU:1

Press  to Enter Clip Settings, Then Press  to Switch Menus,

as Shown in The Figure Below:





**2021**  
**--06--16**

← Year  
← Month-Day

Press +/- keys to adjust date value, Press OK to save  
Note: Press the Left/Right key to Move the Date Cursor.



**TIME**  
**08:30:39**

← Time  
← Hour—Minute—Second

Press +/- keys to adjust date value, Press OK to Save  
Note: Press the Left/Right key to Move the Date Cursor.



**BRIGHT**  
**= 100%**

← Total Brightness  
← Brightness Percentage

Press +/- Keys to Adjust The Brightness Percentage;



**A= 100%**  
**B= 100%**

← A Brightness Percentage  
← B Brightness Percentage

Press +/- keys to Adjust the Brightness Percentage;  
A Brightness Percentage: 0~100%;  
B Brightness Percentage: 0~100%;  
C Brightness Percentage: 0~100%;  
D Brightness Percentage: 0~100%;  
Press OK to Save.



**C= 100%**  
**D= 100%**

← C Brightness Percentage  
← D Brightness Percentage



**Fix ID**  
**001→002**

← ID Number  
← Fixed Range

Press +/- keys to Adjust the ID Number;  
Press OK to Save.  
Note: Press the Left/Right Key to Move the ID Number Selection Cursor.

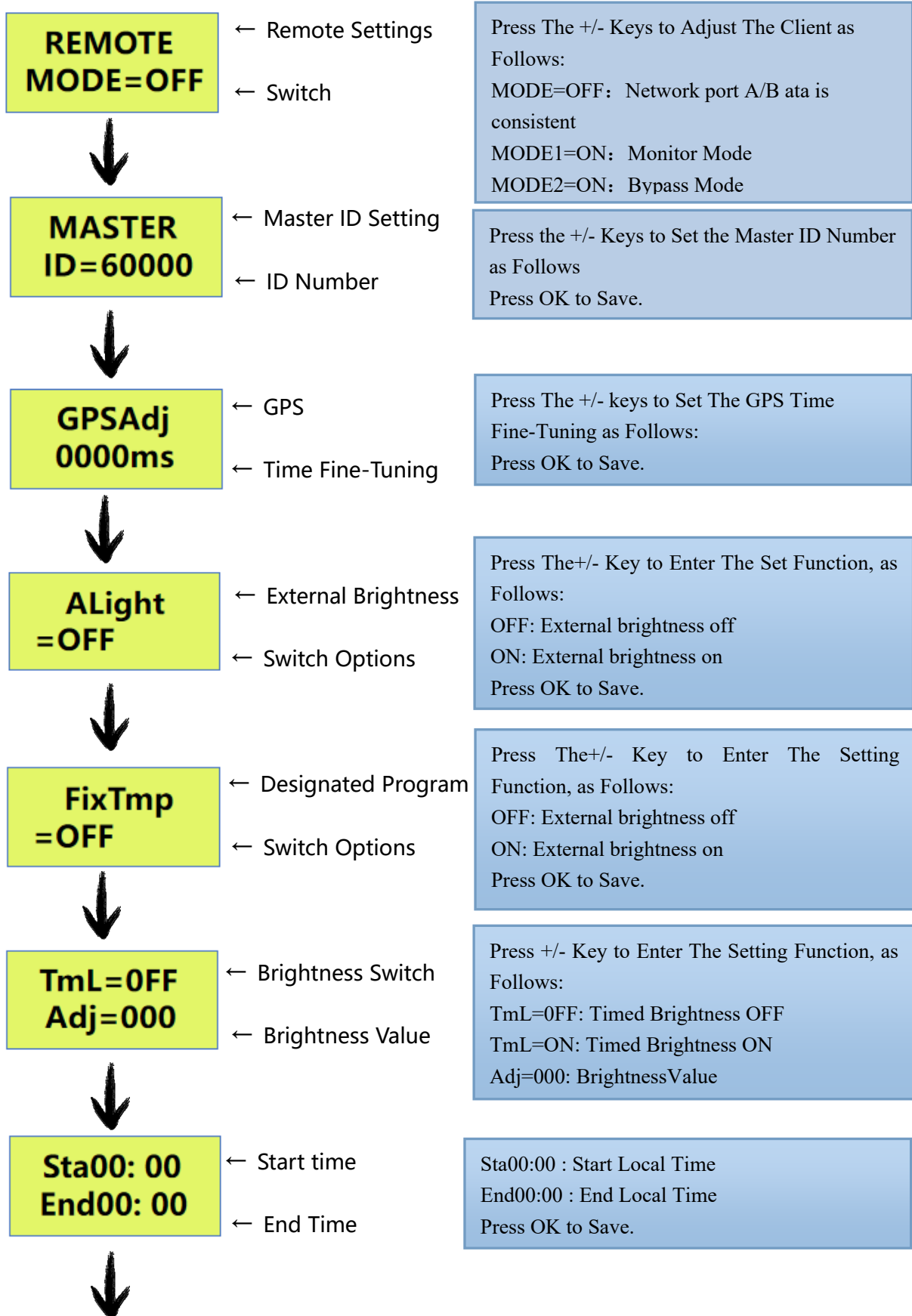


**Fix ID**  
**Clear**

← ID Number  
← Clear Fix ID

Press OK to Clear The Fixed ID With One







**DEVIVE  
ID=000**

← UDP Protocol ID

← Fixed ID

In this interface, Press +/- Key to Enter The Setting Function, as Follows:  
ID=000: Set a Fixed ID  
Press OK to Save.

## MENU:2

Press  to Enter enter Set DMX Address, Then Press  to Switch Menus,

as Shown in The Figure Below:

**—MENU:2—  
\*DMXAddr**

← MENU: 2

← Set DMX Address





**DMX512AP  
TD03S001**

**UCS512  
TD03S001**



← DMX Chip Selection...

← Set DMX Channel and Start Address

Press  in Turn to Switch to Select DMX512AP/UCS512/MR-DMX05/TM512/SM16512/UCS512C and Other Driver Chip Models, Press the Plus/Minus Key to Set the Number of Channels or Initial Channels of its Unit Lamps, Press  to Edit Address Write.

Note: In the Normal State of the Video Player, Long Press it to Directly Enter The Access interface of DMX512 Drive Chip, and Switch to Select DMX512AP / UCS512 / MR-DMX05 / T M Drive Chip Model / T 512 / SM16512 / UCS512C, Set the Number of Channels or Starting Channels of its Unit Lamp, and Press the Address Writing.

## MENU:3

Press  to Enter the Animation Test, Then Press  to Switch Menus,

as Shown in The Figure Below:

**—MENU:3—  
\*Test**

← MENU: 3

← Built-in Self-Test Effect



<b>01-Test3</b> <b>VLIN0001</b>	<b>02-Test3</b> <b>R 000</b>	<b>03-Test3</b> <b>G 000</b>	<b>04-Test3</b> <b>B 000</b>
Point By Point	Red	Green	Blue
<b>05-Test3</b> <b>W 000</b>	<b>06-Test3</b> <b>RGBW</b>	<b>07-Test3</b> <b>COLOR</b>	<b>08-Test3</b> <b>R 001</b>
White	Jump	Colorful Gradient	Red Grayscale
<b>09-Test3</b> <b>G 001</b>	<b>10-Test3</b> <b>B 001</b>	<b>11-Test3</b> <b>W 001</b>	<b>12-Test3</b> <b>A 001</b>
Green Grayscale	Blue Grayscale	White Grayscale	RGBW Grayscale
<b>13-Test3</b> <b>HLIN0001</b>			
Port by Port Test			

Note: MC01 Press  nter The Self-Check interface;

In The TEST interface, Click  to Switch the Number of Colors:

In LINE Point-by-Point Test Mode, Click   to Switch to Manual Mode;

In HLIN Port by Port Test Mode, Click   to Switch to Manual Mode;

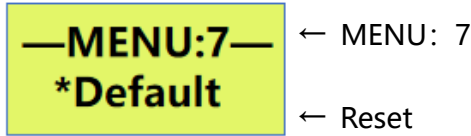
In The TEST Self-Check interface, Press  in Sequence to Switch Between Multiple Self-Check Modes;

In The TEST Self-Test interface, Press  in Sequence to Exit The Self-Test Mode.

## MENU:7

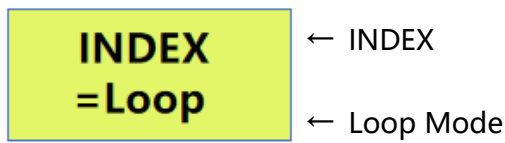
Press  to Enter the Factory Reset, Press   in Turn to Switch The Settings Menu,

as Shown Below:



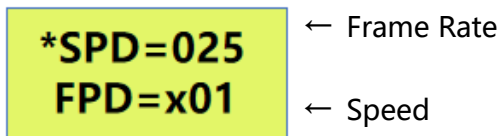
## I. System Button Settings

MENU:1 interface, Press **OK** to Enter The Segment Setting interface, Press **MU** in Turn to Switch The Setting Menu,As Shown Below:



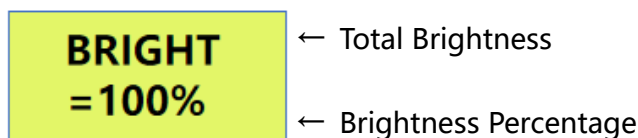
In This interface, You Can Press **↑** **↓** to Adjust The Program Number and Cycle Mode, and Press **OK** to Save and Exit The Settings.

Press **MU** Again to Enter The Playback Speed Selection interface, as Shown Below:



In This interface, You Can Press **↑** **↓** to Set The Playback Speed, and Press **OK** to Save and Exit The Setting.

Press **MU** again to Enter The Lighting Brightness Setting interface, as Shown in The Following Figure.

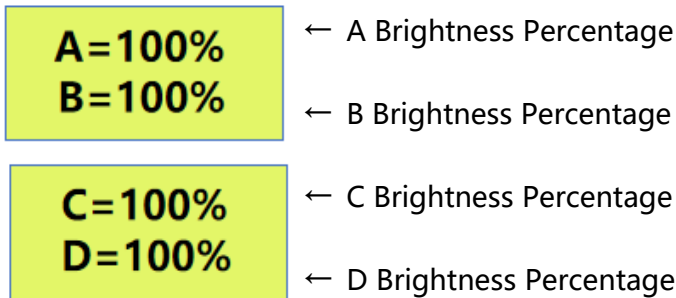





In This interface, You Can Press **↑** **↓** to Set The Brightness, and Press **OK** to Save and Exit The Settings.


Press **MU** Again to Enter The Setting interface for Brightness Adjustment of A, B, C, and D

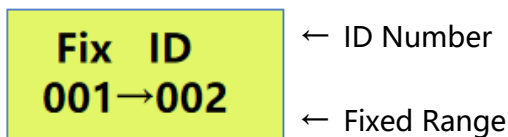
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Channels, as Shown in The Following Figure:



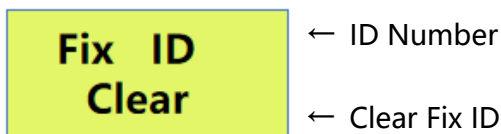
In This interface, You Can Press   to Set The Brightness, and Press  to Save and Exit The Settings.



Press  Again to Modify The Sub-Control Fixed ID Number interface, as Shown Below:




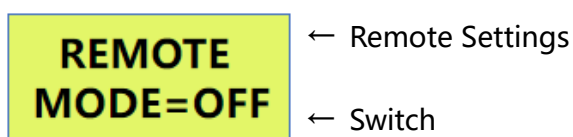
In This interface, You Can Press   to Fix All The Sub-Control ID Numbers Connected to The Main Control.




6. Press  Again to Clear The Sub-Control Fixed ID Number interface, as Shown Below:



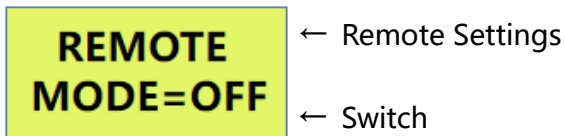
In This interface, You Can Press   to Clear all Sub-Control ID Numbers Connected to The Master.



7. Press  Again to Enter The Client Setting interface, as Shown Below:



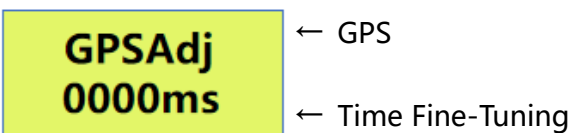
In This interface, You Can Press   to Set The Client, and Press  to Save and Exit The Settings.



8. Press **MU** Again to Enter The Master ID Setting interface, as Shown Below:



In This interface, You Can Press   to Set The Master ID, and Press **OK** to Save and Exit The Settings.

9. Press **MU** Again to Enter The Wireless Synchronization Setting interface, as Shown Below:



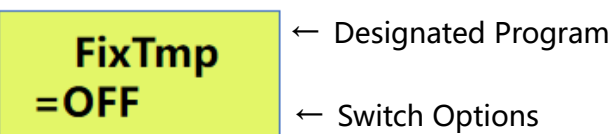
In This interface, You Can Press   to Fine-Tune The GPS Sync Time Settings, and Press **OK** to Save and Exit The Settings.


10. Press **MU** Again to Enter The External Brightness Switch Setting interface, as Shown Below:




In This interface, You Can Press   to Set The External Brightness Switch, and Press **OK** to Save and Exit The Setting.

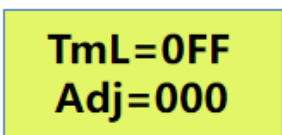
11. Press **MU** Again to Enter The Specified Program Switch Setting interface, as Shown Below:

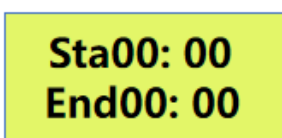





In This interface, You Can Press   to Set The Specified Program Switch, and Press to

 Save and Exit The Settings.

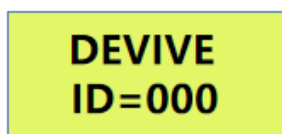
12. Press  gain to Enter The Local Brightness, Brightness Value and Time Setting interface, as Shown Below:




 ← Brightness Switch  
← Brightness Value

 ← Start time  
← End Time

In This interface, You Can Press   to Set The Timer Switch, Brightness, and Time, and Press  to Save and Exit The Settings.


13. Press  Again to Enter The UDP Protocol ID Setting interface, as Shown Below:

 ← UDP Protocol ID  
← Fixed ID

In This interface, You Can Press   to Adjust The ID Value Settings, and Press  to Save and Exit The Settings.

## II. How to Set WAIT Mode

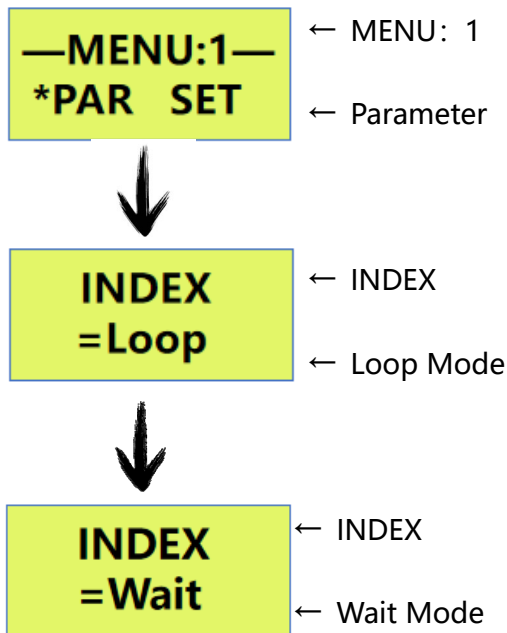
The MC01 Offline Player Will Enter The Loop Playback of Multiple Clips or Play a Single Clip After Being Powered on. But it is Required That The MR-3F12 Offline Player Does Not Play any Clips After Power-On, and Selects The Playing Clips Through The Remote Control. Such a Playback Mode is The WAIT Mode.

In The Main interface of MC01, Press  to  The Menu Selection and Setting interface, in This interface, You Can Press   Select Different Function Options;

**MENU:1** interface, Press  to Enter The Clip Setting, and Press   to Switch The



Setting Menu, as Shown in The Figure Below:



In This interface, Press  to Save and Exit The Settings.





### III. The Remote Operation of Playing

#### 1. Close Master Controller Playing

When MC01 Playing Press  Switch Master Controller Play . LCD Display Screen

Shows : "PLAY OFF" , The Lamps Become Black.

#### 2. Adjust The Program Fragment

When Some of The Fragment Paving , Can Pre:   or   Remote Controller

Number Key to Adjust Playing Fragment .

#### 3. Check The Master Controller Current Time

In The MC01 Master Controller Playing interface Press  Current Master Time

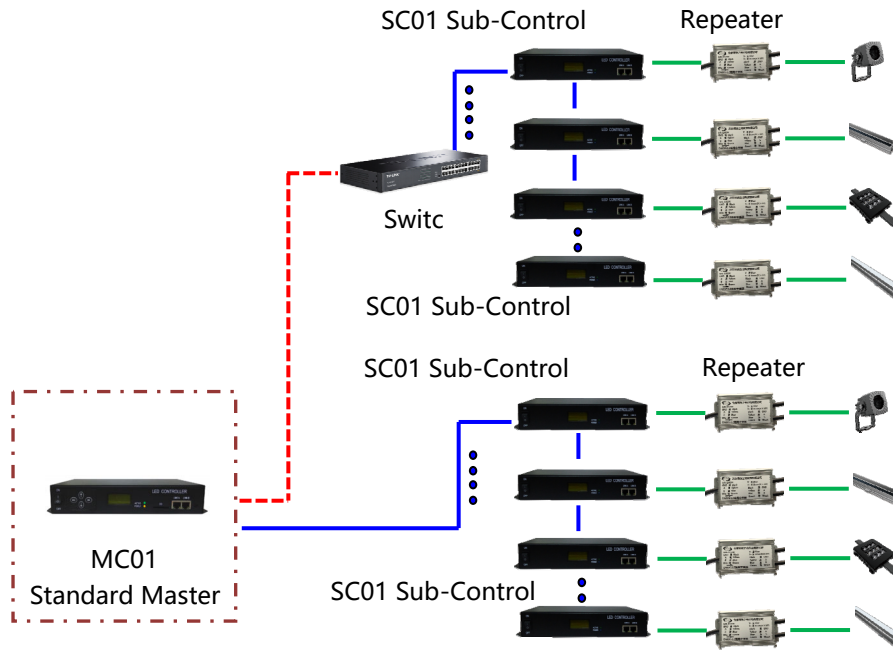
Can be Displayed on The LCD Display.

## Install and Use

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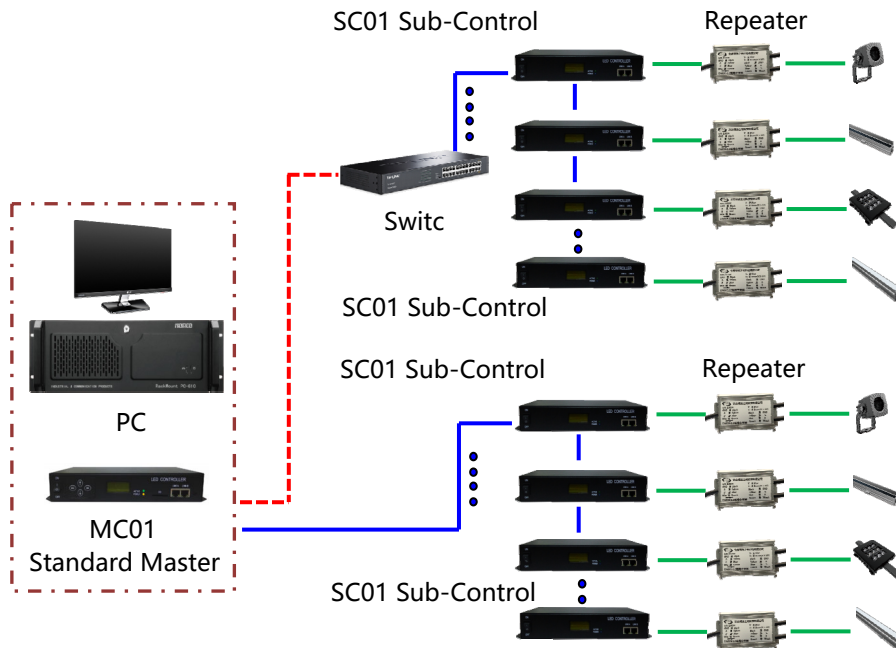
### I. Offline Mode

MC01 is Connected to The Sub-Controller, as Shown in The Following Figure:



## II. Online/Offline integrated Mode

Connected With PC and Controller ( Online Signal Priority, If No Online Signal it Can Automatic Switch to Offline Signal ) as Follows :



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## Attentions

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### 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. MC01 Controller SD Card Application Notes

MC01 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

MC01 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.