

# **HD-3F12B Master Controller Manual**

Version:V4.1

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### Overview

- I. Features
- 1. HD-3F12B Supports a Maximum Load of 450,000 Channels;
- 2. HD-3F12B Support Unlimited Cascade Transmission, Unlimited Number;
- 3. The System Supports Automatic, Timing, Holiday Preset Effect Play back;
- 4. Support Buttons and External Remote Control, Program Selection, Brightness Adjustment, White Balance Adjustment, Playback Speed Adjustment and etc;
- 5. Support Switch Parallel Scheme: improve Stability;
- 6. Support Offline Fix, Clear Device ID Number;
- Support Multi-Loop Ring Backup, One Controller is Broken or The Network Cable is Broken and The Display is Not Affected;
- 8. Support Real-Time Hot Backup of Multiple Master Controllers;
- Support DMX512AP-N / NB UCS512 TM512 WS2821 and Other Drive Chip Offline Writing Addresses;
- 10. Independent Brightness Control of 3 Primary Colors, Easy to Adjust White Balance;
- 11. Support R,RB,RGB,RGBW,RGBWY, and Multi-Color Mixing Control;
- 12. Using Ethernet Interface and UDP Protocol, The Distance is 100 Meters;
- 13. LCD Display Module Displays Controller Parameters and Status in Time;
- 14. SD Card Storage, Can Support 64G, Can Preset 99 Program Files;
- 15. Support Multiple Devices LAN Remote Online Download and Update Programs;
- 16. Built-in Animation Test Program;
- 17. Supports Mixed use of Different Types of Lamps and Lamps of Different Protocols;



- 18. Equipment Network Port, Surge Protection: 1.5KV;
- 19. Support Severe Working Environment -40°C-80°C, Normal Operation Without Failure.

### **II. Design Concept**

- 1. 1000Mbps/ 100Mbps Optional, Adapt to Different Project Schemes;
- 2. Two-way Redundancy of The System Signal, Doubled Stability;
- 3. Integrated Control, Online Priority, Automatic Switching Offline Effect Without Signal;
- 4. Self-developed Playback and Wiring Software, More Adaptable;
- 5. Support Mainstream 32Bit and 64Bit Systems: Win 7, Win 8 Win 10and so on;

### **III. Expansibility**

- 1. Can Play Video and Picture File Content in Various Formats;
- 2. All Current Windows Systems and Multiple Languages Can be Installed;
- 3. Leave The Interface for Compatibility With International Common Protocols

## **Specifications and Parameters**

### I. Controller Appearance

HD-3F12B Front view:





#### HD-3F12B Rear view:

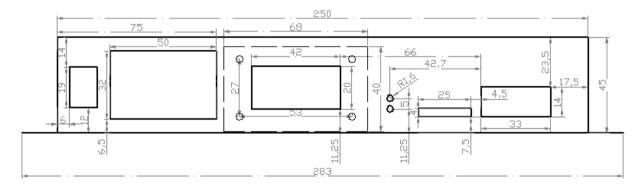


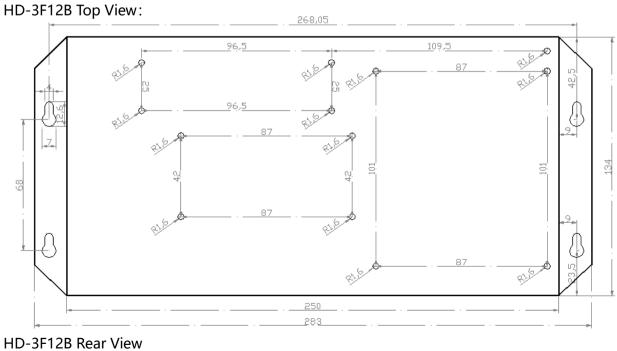
① Power Switch ② Key Control Panel ③ LCD Display ④ Power Lights ⑤ Signal Lights

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

# II. Controller Three View Size Chart

HD-3F12B Front View:









A( W



Remark: Above Three Views The Size Unit is mm.

## **III.** Controller panel buttons



Menu
Menu
Plus



ОК

### IV. Controller basic Parameter Table:

Product Name	Standard Master	
Product Model	HD-3F12B	
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)	
Assessation	Power Cord x1/Warranty Card x1/Foam Paper Box x1/	
Accessories	Screwdriver x1/Card Reader x1/SD Card x1	

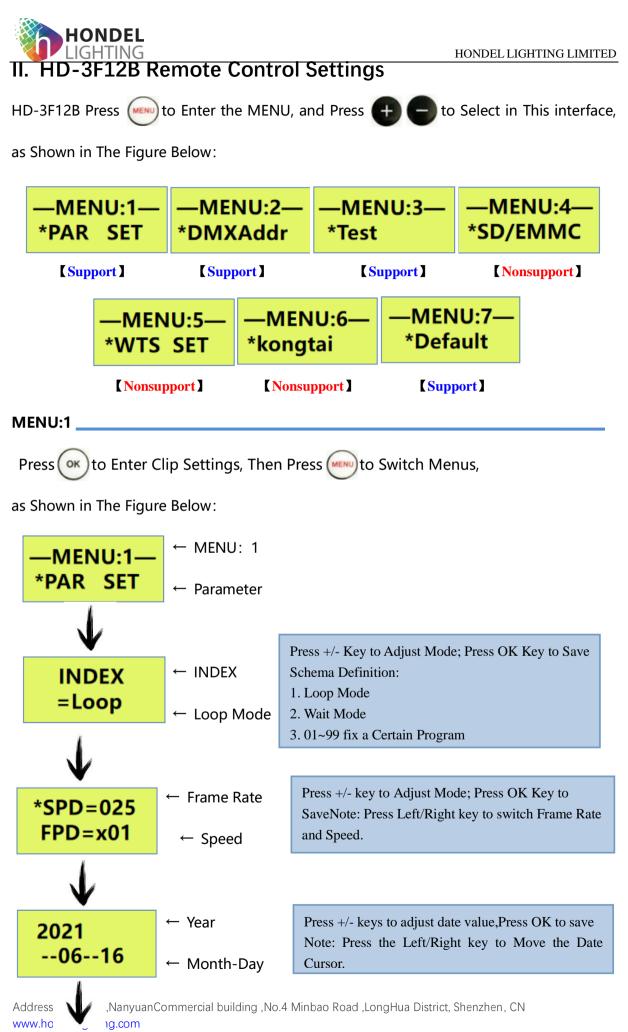
## Key Definition



# **Display Description**

I. LCD Main interface After HD-3F12B is Turned on

	MR-3F12B	← Model
	NO CARD	← Status: SD Card Not Detected
	MR-3F12B	← Model
	NO File	← Status: Invalid File or SD Card Format Error
	SD 01/08	← The Number of Programs and The Current Play Number
LoopPlay		← Status: Loop Play Status
	SD 01/08	← The Number of Programs and The Current Play Number
TFixPlay		← Status: Temporary Play Status
	CD 01/00	← The Number of Programs and The Current Play Number
	SD 01/08 TimePlay	← Status: <u>Timing Play Status</u>
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TIME	← Time		Press +/- keys to adjust date value, Press		
08:30:39	← Hour—Minute—Second		OK to Save		
			Note: Press the Left/Right key to Move		
			the Date Cursor.		
V					
BRIGHT	← Total Brightness				
=100%	-		Press +/- Keys to Adjust The Brightness Percentage;		
-100%	← Brightness Percent	age			
1					
$\mathbf{V}$					
•	← A Brightness Percentage				
A=100%		intage	Press +/- keys to Adjust the Brightness		
B=100%	← B Brightness Perce	ntage	Percentage;		
4			A Brightness Percentage: 0~100%;		
		B Brightness Percentage: 0~100%;			
			C Brightness Percentage: 0~100%;		
C=100%	← C Brightness Percentage		D Brightness Percentage: 0~100%;		
D=100%			Press OK to Save.		
	← D Brightness Percentage				
V		_			
Fix ID	← ID Number		+/- keys to Adjust the ID Number;		
001→002			OK to Save.		
001 002	← Fixed Range	Note: Press the Left/Right Key to Move the Number Selection Cursor.			
	Number Selection Cursol.				
V					
Fix ID	← ID Number				
Clear			Press OK to Clear The Fixed ID With One		
	← Clear Fix ID				
V		Press The +/- Keys to Adjust The Client as			
REMOTE	← Remote Settings MO		ollows:		
			IODE=OFF: Network port A/B ata is		
MODE=OFF	← Switch		sistent		
	MODE1=ON: Monitor Mode				
	Commercial building ,No.4 Min	bal nour	DE2=ON: Bypass Mode		
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MASTER ID=60000	← Master ID Setting ← ID Number	Press the +/- Keys to Set the Master ID Number as Follows Press OK to Save.	
$\checkmark$			
GPSAdj 0000ms	← GPS ← Time Fine-Tuning	Press The +/- keys to Set The GPS Time Fine-Tuning as Follows: Press OK to Save.	
$\checkmark$		Press The+/- Key to Enter The Set Function, as	
ALight =OFF	← External Brightness ← Switch Options	Follows: OFF: External brightness off ON: External brightness on	
J		Press OK to Save. Press The+/- Key to Enter The Setting Function,	
FixTmp =OFF	<ul> <li>← Designated Program</li> <li>← Switch Options</li> </ul>		
		Press OK to Save. Press +/- Key to Enter The Setting Function, as	
TmL=0FF Adj=000	← Brightness Switch ← Brightness Value	Follows: TmL=0FF: Timed Brightness OFF TmL=ON: Timed Brightness ON	
$\checkmark$		Adj=000: BrightnessValue	
Sta00: 00 End00: 00	← Start time ← End Time	Sta00:00 : Start Local Time End00:00 : End Local Time Press OK to Save.	
$\checkmark$			
DEVIVE ID=000 ← Fixed ID		In this interface, Press +/- Key to Enter The Setting Function, as Follows: ID=000: Set a Fixed ID Press OK to Save.	

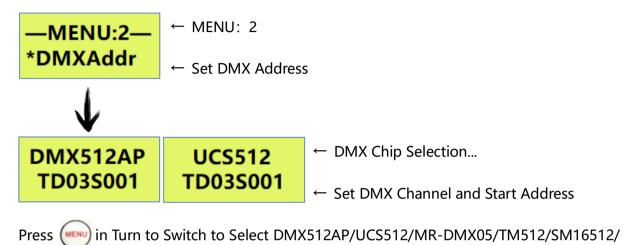
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#### MENU:2



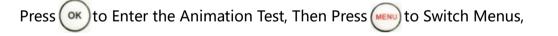
as Shown in The Figure Below:



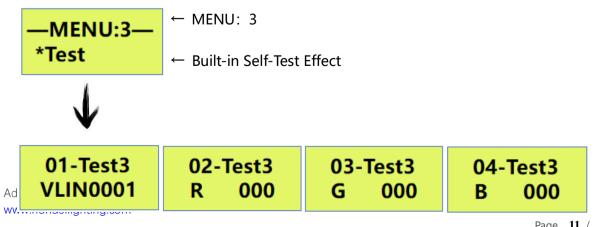
UCS512C and Other Driver Chip Models, Press the Plus/Minus Key to Set the Number of Channels or Initial Channels of its Unit Lamps, Press (or )to Edit Address Write.

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



as Shown in The Figure Below:





	Point By Point	Red	Green	Blue	
	05-Test3 W 000	06-Test3 RGBW	07-Test3 COLOR	08-Test3 R 001	
	White	Jump	Colorful Gradient	Red Grayscale	
	09-Test3 G 001	10-Test3 B 001	11-Test3 W 001	12-Test3 A 001	
_	Green Grayscale	Blue Grayscale	White Grayscal	RGBW Grayscale	
	13-Test3 HLIN0001				
	Port by Port Test				
Not	e: HD-3F12B Press	to Enter The Self	-Check interface;		
	In The TEST interface, Click or Switch the Number of Colors:				
	In LINE Point-by-Point Test Mode, Click 🛨 😑 to Switch to Manual Mode;				
	In HLIN Port by P	ort Test Mode, Click	to Switch to	) Manual Mode;	
	In The TEST Sel	f-Check interface, Pi	ress (TEST) in Sequence	e to Switch Between	
	Multiple Self-Check	< Modes;	$\bigcirc$		
	In The TEST Self-Test interface, Press 🕥 in Sequence to Exit The Self-Test Mode.				
ME	MENU:7				
Press 💽 to Enter the Factory Reset, Press 🛨 🕞 in Turn to Switch The Settings Menu,					
as Shown Below:					
<pre> —MENU:7 *Default ← MENU: 7 ← Reset </pre>					

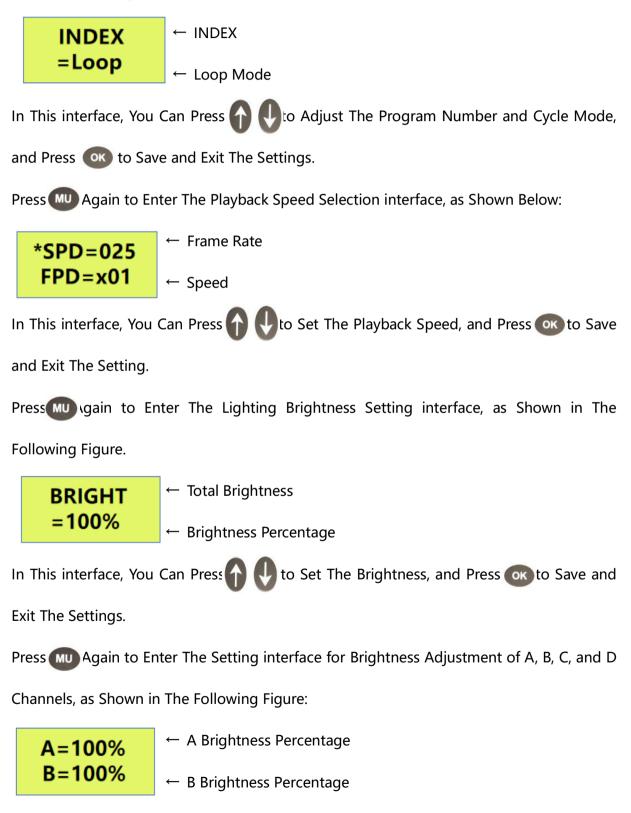
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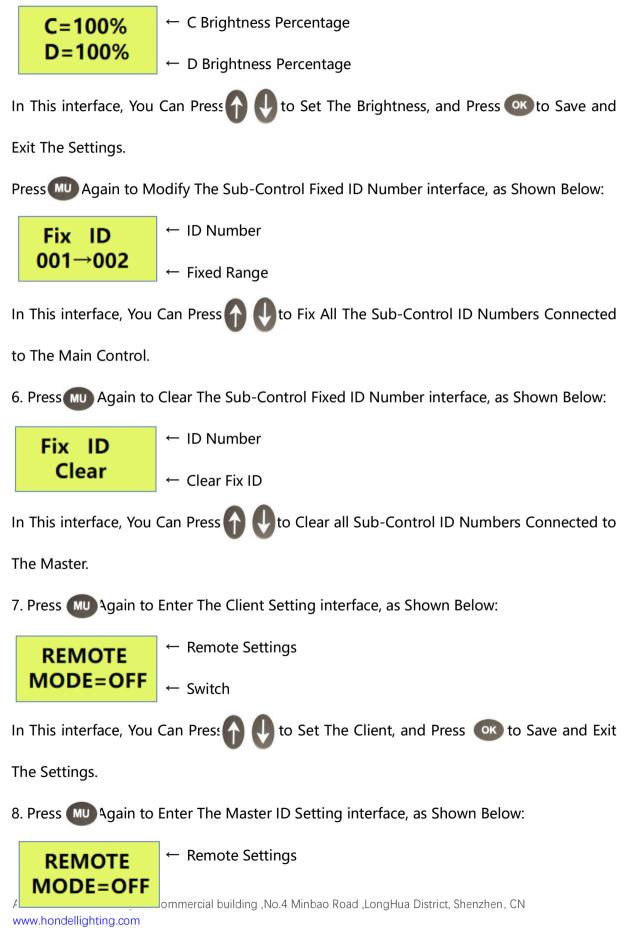
### I. System Button Settings

MENU:1 interface, Press or to Enter The Segment Setting interface, Press win Turn to

Switch The Setting Menu, As Shown Below:





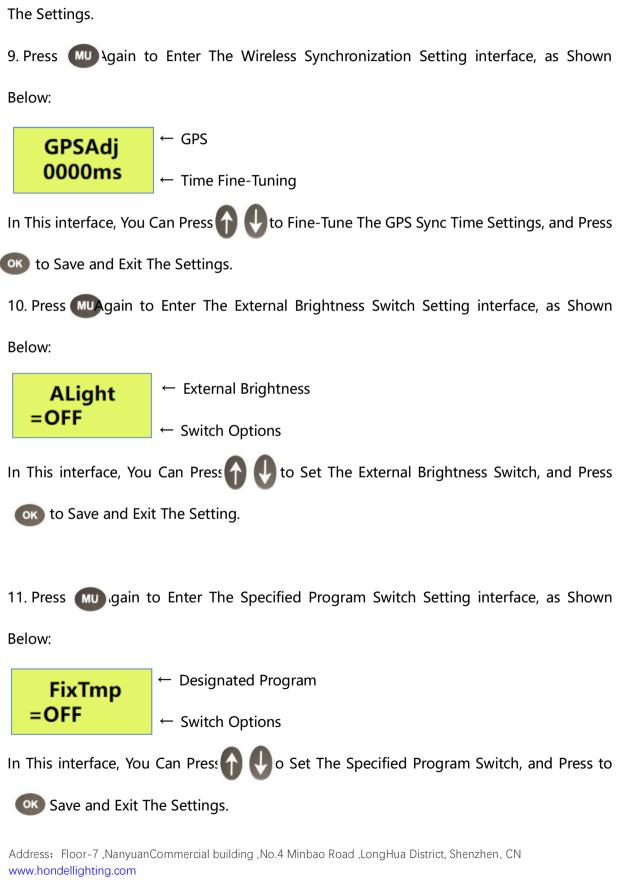




In This interface, You Can Press

U to Set The Master ID, and Press on to Save and Exit

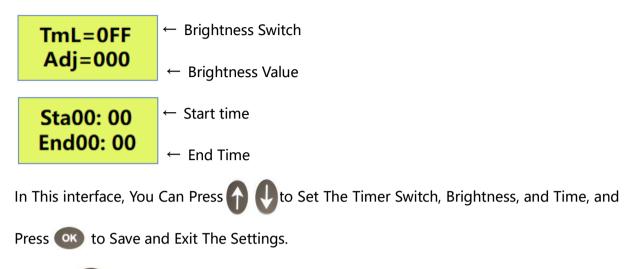
← Switch





12. Press wu gain to Enter The Local Brightness, Brightness Value and Time Setting

interface, as Shown Below:



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



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

### III. How to Set WAIT Mode

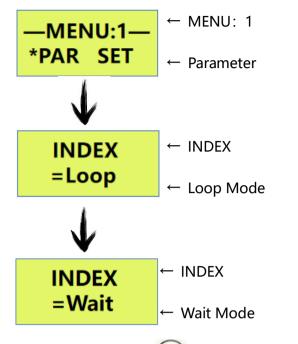
The HD-3F12B Offline Player Will Enter The Loop Playback of Multiple Clips or Play a Single Clip After Being Powered on. But it is Required That The MR-3F12 Offline Player Does Not Play any Clips After Power-On, and Selects The Playing Clips Through The Remote Control. Such a Playback Mode is The WAIT Mode.

In The Main interface of HD-3F12B, Press Conter The Menu Selection and Setting interface, in This interface, You Can Press Conter The 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 or to Save and Exit The Settings.

# IV. The Remote Operation of Playing

1. Close Master Controller Playing

When HD-3F12B Playing Press Ocan Switch Master Controller Play . LCD Display

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

2. Adjust The Program Fragment



Number Key to Adjust Playing Fragment .

- 3. Check The Master Controller Current Time
  - In The HD-3F12B Master Controller Playing interface Press The Current Master

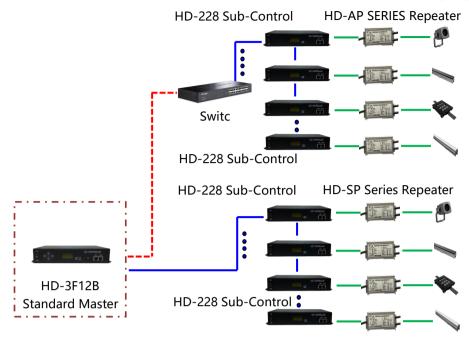
Time Can be Displayed on The LCD Display.

# **Install and Use**

I. Offline Mode

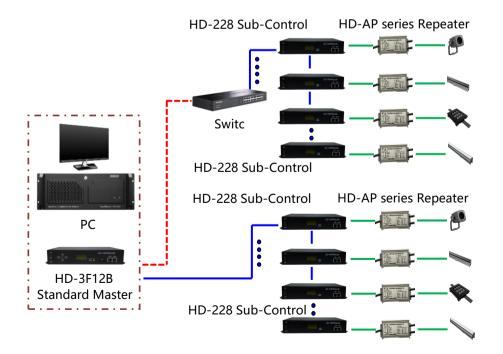


HD-3F12B is Connected to The Sub-Controller, as Shown in The Following Figure:



## 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 :





## Attentions

# I. Cat.5e Twisted Pair Application Notes

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

 ${\tt 568A: green-white/green/orange-white/blue/blue-white/orange/brown-white/brown}$ 

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. HD-3F12B Controller SD Card Application Notes

HD-3F12B 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

HD-3F12B 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.

