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# Manual

**IR/RF Remote controller**

**HDL-MTIRW**



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## 1. Overview

HDL-MTIRW, IR/RF remote controller, support IR and RF remote control and IR learning. RF remote control must work with HDL-MWH6, after set the control targets in the HDL-Bus pro tools software, you can control any HDL-BUS device by the remote controller.

### 1.1 Features

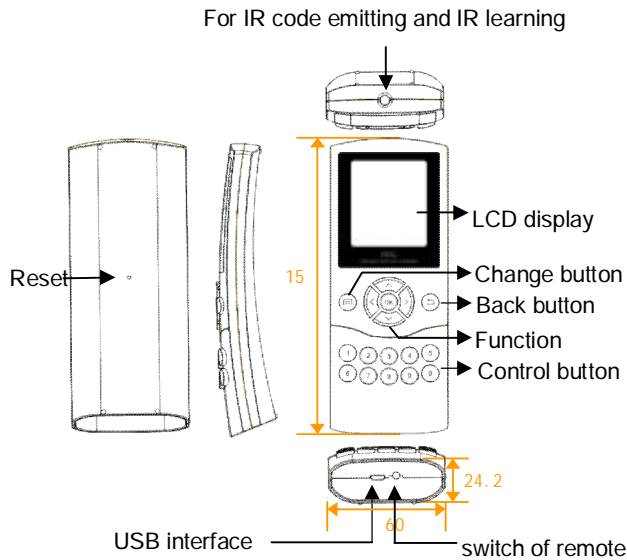
- u Support all HDL panels
- u The remote controller has embedded infrared codes of all HDL panels, No need to learn again.
- u It can learn 48 IR codes, control up to 48 targets.
- u Icon can be changed via PC-based tool software.
- u Support key tone
- u LCD display, menu-type operation, easy to use.
- u Support multiple pages, can hide/display page
- u Support upgrading by USB interface

### 1.2 Performance parameter

- u Frequency of IR: 38KHz
- u Frequency of RF: 433.1580MHz/433.92MHz
- u IR remote control distance:5m
- u RF remote control distance:100m
- u Battery : Lithium ( 3.7V,1050mA )
- u USB interface: Firmware upgrade and battery charging
- u Charge power supply:300mA/DC5V ( USB interface )
- u Working current: 45mA  
Standby current: 1mA
- u Dimension: 154.2×60×24.2 ( mm )
- u IP Protection : IP20
- u CE certificated
- u Working Temperature: 0°C ~ +45°C
- u Working Relative Humidity: 40% - 90%
- u Storage Temperature: -40°C- +55°C

u Storage Relative Humidity: 10% - 93%

### 1.3 Layout



#### Functions:

- ∅ IR remote control and IR learning: IR remote control and learn codes of other IR remote controller, effective IR remote control distance: 5m
- ∅ Reset: Can restart the remote controller
- ∅ USB interface: Battery charging and update firmware for remote controller.
- ∅ Switch: control the remote controller's state. In case no operation more than 10s, the LCD will darken, if no operation more than 13s, it will enter into standby state. In the off state, Press any button can restart the remote controller.
- ∅ Change button, change between home page and DLP panel.
- ∅ Return button, return to the previous step
- ∅ Control button: those No.1 to No.8 buttons can control corresponding buttons in HDL panel. NO.9 and.0 are inactive.
- ∅  $\wedge \vee$  : up and down change parameters need to set, and select HDL panel when you are control, there are 6 kinds of panel can select.
- ∅  $\langle \rangle$  : set parameters , and select page when you are control, some panel has many pages, each panel has different pages and different buttons, you can select by those two buttons.
- ∅ OK: confirm button, when you are set parameters, you should press OK to confirm.

## 2. Set parameters



Fig. 1 Home page

- ∅ BL Level: set the brightness of the LCD, the range is 0 to 10
- ∅ Sound EN: if there is a voice when press the button.
- ∅ Language: select Chinese or English of the remote
- ∅ PageDisp: hide or display page, the default is all display
- ∅ IR Learn: Toward other IR remote, can learn IR code.
- ∅ Wifi Add: set the wifi address of the remote. The address range is 1 to 65534, you can choice one address.
- ∅ Upgrade: connect USB to PC, then upgrade firmware, you must reset the remote after upgrade firmware.
- ∅ The 4 direction buttons are select functions and parameters.

### 2.1 Hide or display page

Now hide the 2nd page of DLP panel, setting as follow:

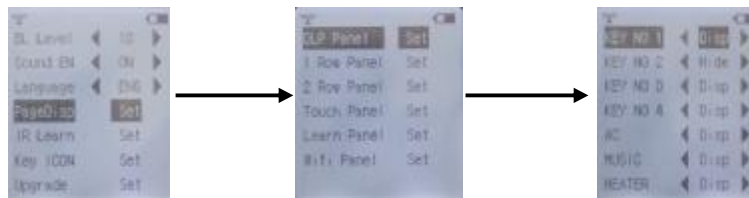


Fig. 2 Hide the DLP panel page

After that, you can't find the page on the remote controller, so you can't control the DLP panel's second page via remote controller.

### 2.2 IR code learning

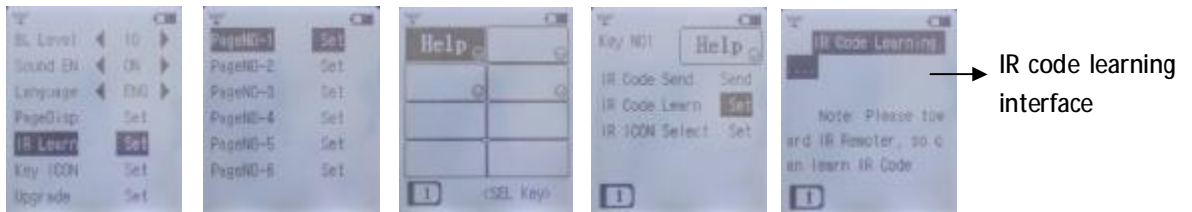


Fig.3 IR code learning

Step:

1. Enter into the interface of IR code learning, see Fig.3
2. Transmitter port of learned remote controller face to that remote controller within 1-2cm  
Press the button in learned remote controller to start learning IR code, If learn success will display“ Learn OK, Key enter try code. If failed will display“ Learn interfere, try again”.
3. Test Code: check if learned successfully, Press Test Code to back previous menu

### 2.3 Wireless address setting

Each wireless remote controller has an address, the address range is 1~65534.

You can set up to four "receiving address" in each wireless receiver, correspondingly, so the wireless receiver can receive control commands from maximum four matched wifi remote controllers.

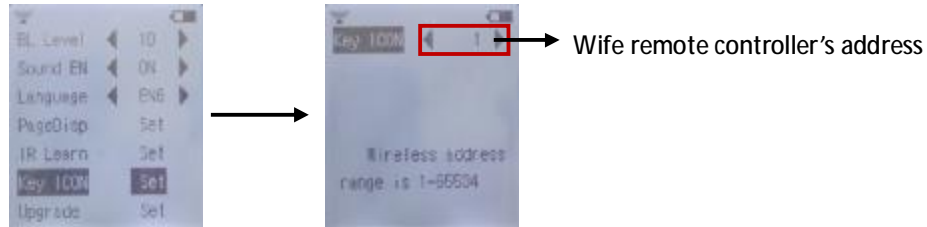


Fig.4 wifi remote controller's address setting

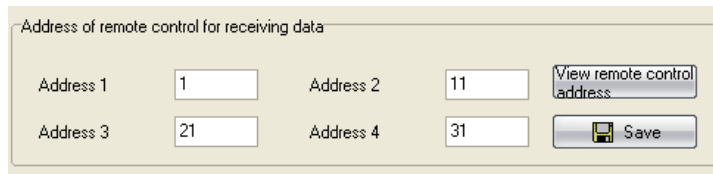


Fig.5 wireless receiver's address setting

### 2.4 Firmware Upgrade

When upgrading firmware, you need connect USB to PC. Double click to open Mobile devices "CRP DISABLED" in "my computer", then use the new ".Bin" file to replace existed "firmware.bin" . after that, reset the Remote controller to make your upgrading effective

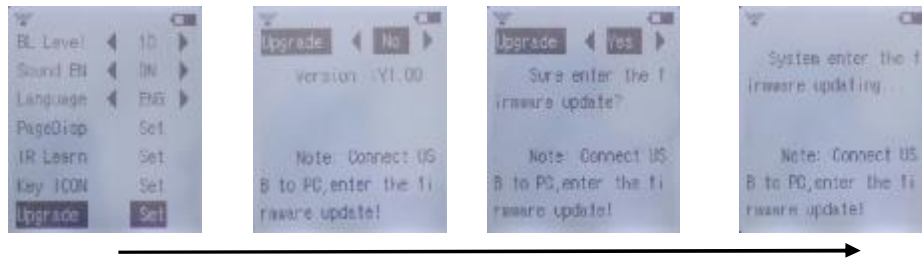


Fig. 6 Upgrade firmware

### 2.5 Universal code

The remote controller has been fixed infrared codes about HDL all panels, don't need to learn.

“DLP panel” page can't control other panel except DLP panel. we can use the "1 row panel" page of IR&RF controller to control 1 Row panels, 2 Row panels, touch panels and even LCD DLP panels, and those IR codes we call it Universal codes

The remote controller's Icon can be changed via HDL Easy Engineering Editor.

### 3. How to use Remote Controller

#### 3.1 DLP panel control

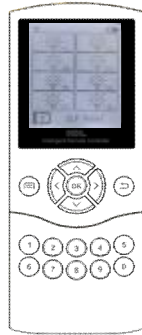


Fig.7 DLP panel interface

DLP panel control

- 1) Press the button ^ or v for select the DLP panel.
- 2) Press the button < or >, change DLP panel's page



- 3) Remote controller's button, those No.1 to No.8 buttons of Rmote controller can control corresponding buttons in wall panels
- 4) If the button's mode is sing on/off, the target is single channel lighting, long press the button increase or decrease the brightness



Fig.8 HVAC interface

Air-condition control:

- Ø Button 1/2: HVAC ON/OFF
- Ø Button 3/4: reduce/increase temperature
- Ø Button 5/6: change fan speed
- Ø Button 7/8: change mode



Fig.9 Z-audio interface

Music control:

- Ø Button 1/2: set sound source/ON or stop
- Ø Button 3/4: select previous/next play list
- Ø Button 5/6: select previous/ next song
- Ø Button 7/8: reduce/increase sound



press button 1 for 2 seconds, DLP panel will enter into the page of set parameters.

- Ø Button 1/2: **infirm button, when you are change parameter you must control these buttons.**
- Ø Button 3/4: change parameter
- Ø Button 5/6: change parameter
- Ø Button 7/8: exit, back to the previous page



Fig.10 Floor heating interface

Floor heating control:

- Ø Button1/2: switch floor heating
- Ø Button3/4: set temperature
- Ø Button5/6: display indoor or outdoor's temperature
- Ø Button7/8: change mode, Normal, Day, Night, Away, Time



Press button 1 for 2 seconds, DLP panel will enter into the page of set parameter.

- Ø Button1/2: confirm button
- Ø Button3/4: change parameter
- Ø Button5/6: change parameter
- Ø Button7/8: exit, back to the previous page

### 3.2 1Row, 2 Row and touch panel's control

1 Row panel contains: 1/2/3/4/6 button switch

2 Row panel contains: 2/4/6/8 button switch


Touch panel contains: 1/2/3/4 button switch



Fig.10 1/2Row panel interface

1Row/2 Row/Touch panel's control:

- 1) Press the button ^ or v for select the page of HDL panel (1Row, 2 Row or Touch panel).
- 2) Press the button < or >, change the panel with different button number

- 3)  press No.1 to No.8 buttons can control HDL panel

- 4) At last, you can press the button ^ or v control other panels.



### 3.3 Learn panel control

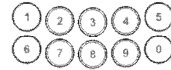
Before use learn panel, you must insure that the remote controller has learned the IR codes.



Fig .11 learn panel interface

How to use learn panel:

- 1) Press the button ^ or v for select the page of learn panel.
- 2) Press the button < or >, change the page of learn panel, the default is 6 pages and each page has 8 control buttons.



- 3) press No.1 to No.8 buttons can control the other devices (you must learn the device's IR code. eg. TV,DVD and so on)
- 4) At last, you can press the button ^ or v control other panels.

### 3.4 Wireless panel control

Before use wifi panel, you must insure that wireless receiver 's receiving address matched wifi remote controller's.



Fig.12 wifi panel interface

How to use wifi panel:

- 1) Select the page of wifi panel.
- 2) Press the button < or > , change the page of wifi panel, the default is 6 pages and each page has 8 control buttons.



- 3) press No.1 to No.8 buttons can control the HDL wireless receiver then control objects.
- 4) At last, you can press the button ^ or v control other panels.