HDL®

Datasheet

Parameters

Electrical Parameters:

Rated voltage	AC220V 50Hz
Voltage range	AC220V±20% 50HZ
Slave interface	6P internet port
Rated power	70W
Rated torque	1.0Nm
Rated speed	112rpm
Rail belt speed	16cm/s
Communication	Wireless
Wireless transmit power	+10dbm
Wireless receive sensitivity	-90dbm
Indoor communication distance	30m(barrier free)
RSSI receive signal intensity	>-80dbm
Factory frequency	Band, PSK (Suggestion: your setting should not be same as the factory setting)

Environmental Conditions:

Working temperature	-5℃~45℃
Working relative humidity	<95%
Storage temperature	-20℃~+60℃
Storage relative humidity	<93%

Approved:

CE
RoHS

Product Information:

Dimensions	284×70×50 (mm)
Weight	1352g
Housing material	ABS, aluminum
Installation	Wall hanging
Protection	IP41
Insulation	E

Wireless central frequency:

(China) WPAN	780MHz to 786MHz
(Europe) SRD	864MHz to 870MHz
(North America)	904MHz to 928 MHz
Default band	780MHz
Default PSK	HDL-SecurityKey0

Overview

HDL-MWM70-RF.12 is the wireless curtain motor, which is configured by HDL-MCIP-RF.10. It can control the curtain to open, close, stop and percentage control. And it has over load protection and over heat protection.

Functions

- The distance testing of curtain.
- Drag mode: No action, Long drag, short drag.
- Percentage control.
- Communication: wireless.
- Supports online upgrading.
- Supports easy programming.
- Built-in new generation clutch, precise planetary. And noise level is 40dB.
- Dry contact switch, it can control the curtain to open, close, stop.
- Suitable for all small to medium-scale curtain applications, linear and arched, one-and two-side opening.
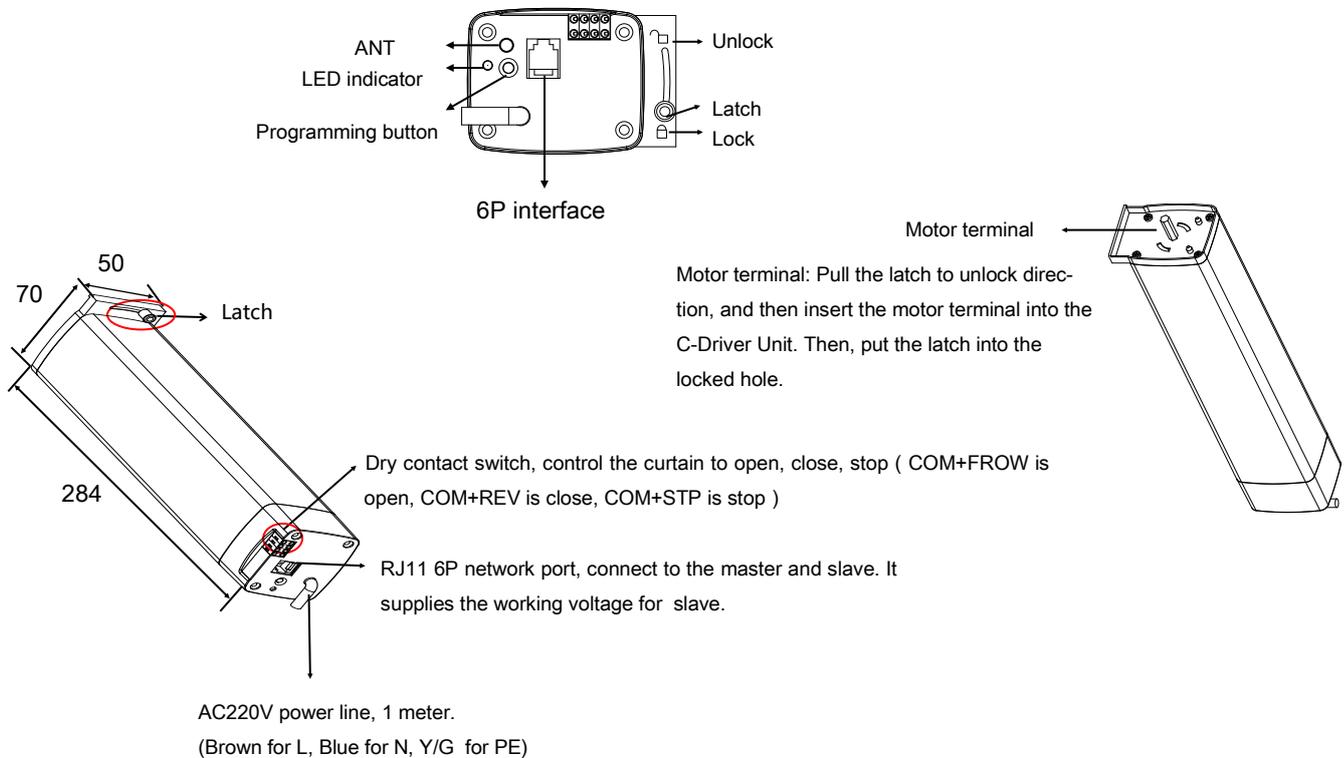
Important Notes

- Horizontal pull is 8Kg, maximum load is 50Kg.
- It should configure by HDL-MCIP-RF.10.

Installation Steps

- Install the rail
- Install the curtain motor
- Connect with MCIP-RF.10
- Curtain setting

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Dimensions and wiring

ANT
LED indicator
Programming button

Unlock
Latch
Lock

6P interface

Motor terminal

Motor terminal: Pull the latch to unlock direction, and then insert the motor terminal into the C-Driver Unit. Then, put the latch into the locked hole.

50

70

Latch

284

Dry contact switch, control the curtain to open, close, stop (COM+FROW is open, COM+REV is close, COM+STP is stop)

RJ11 6P network port, connect to the master and slave. It supplies the working voltage for slave.

AC220V power line, 1 meter.
(Brown for L, Blue for N, Y/G for PE)

LED indicator

Function	LED status	Enter into the status	Exit the status
Working properly	LED flashes, 1 time/2s	- -	- -
Modify the address of motor	LED flashes	Long press the button for 3s	Long press the button for 3s / no operation for 2minutes
Testing for installation	LED flashes, 1 time/2s	Long press the button for 5s	Long press the button for 5s / no operation for 20minutes
Easy programming	LED flashes, 2 times/2s	Long press the button for 10s	Long press the button for 10s / no operation for 20minutes
Wireless setting	LED flashes	Press the button 3 times and the pressing interval times should not exceed 2S	Press the button 1 time/ no operation for 4 minutes

Note: The above operations are carried out in normal work.
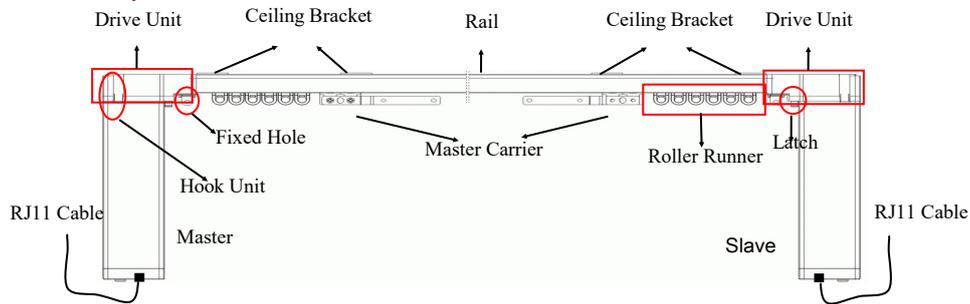
Safety Precautions ⚠ WARNING

- Do not make wrong connection on Bus interface, it will damage the Bus interface of this module.
- Never let liquids get into the module, it will damage this device.
- Ensure good ventilation
- Avoid contact with liquids and aggressive gases
- When you install the motor to the drive unit, please check and make sure that the latch is pushed into locked hole, otherwise the motor will fall down to cause personal injury and product damage
- When the motor is installed, please do not pull the curtain with too mush force, and do not put any additional weight on the rail, do not climb the curtain and do not hang anything on the curtain.

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Step 1 Install rail and motor

Installation effect picture

Drive Unit   Ceiling Bracket   Rail   Ceiling Bracket   Drive Unit

Fixed Hole   Master Carrier   Roller Runner   Latch

Hook Unit
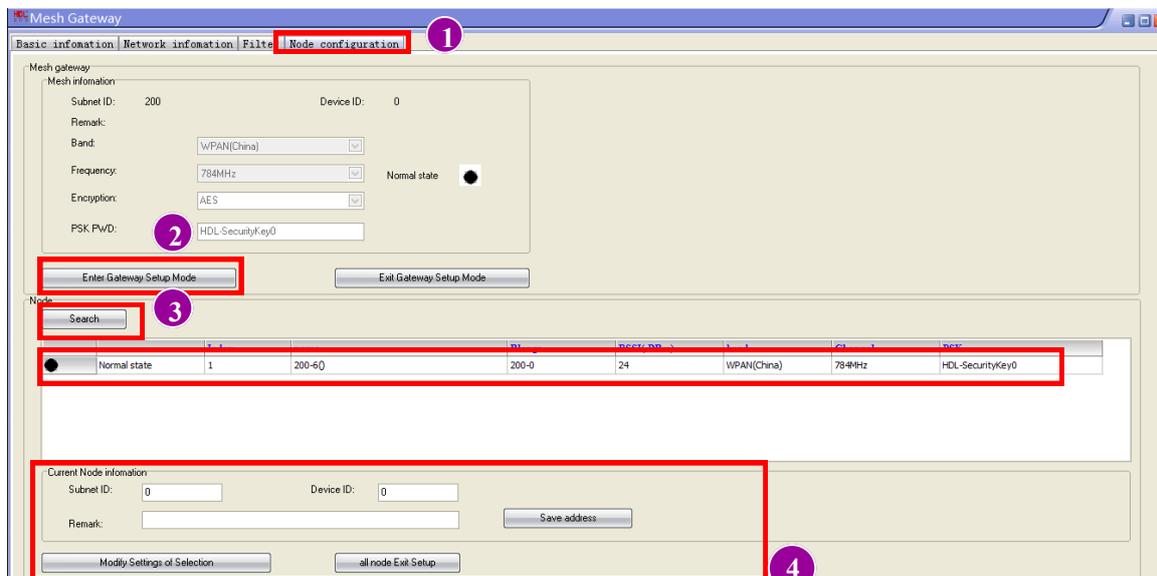
RJ11 Cable   Master   Slave   RJ11 Cable

■ The curtain hook mounting position:

Hook unit —> Fixed hole—> Roller runner—> Master carrier and its handle.

■ Master, Slave:

The host is connected to AC220V, and it provides the power supply to the slave by the 6-core RJ11. The standard length of

RJ11 wire is 1 meter.

■ Ceiling bracket's mounting distance :

From both ends to the middle, it recommends to install a ceiling bracket and the distance is 600mm per (cannot exceed

600mm). In the middle rail, the ceiling bracket distance can be slightly long, the recommended distance is 800mm. (Because

the load in the ends is big, the mounting distance of ceiling bracket should to be short, and the load in the middle rail is small,

the distance of ceiling bracket can be slightly long)

Step 2   Wireless setting

■ Press the programming button 3 times, green LED will flash quickly and the wireless curtain motor enters gateway setup mode.
■ Open HDL-BUS Pro Setup Tool, search wireless gateway, choose Node configuration.
■ Click the "enter gateway setup mode".
■ And then, search, gateway and curtain will connect, check the curtain, modify the subnet ID and device ID, finally save address-
modify settings of selection-all node exit setup.

Note: The subnet ID of wireless curtain should be same as the gateway.

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Step 3 Curtain basic information

Remark: indicate some information.

Modify subnet ID: can read and modify the subnet ID and device ID of curtain,

and the subnet ID of curtain should be same as the gateway.

Step 4 Motor running

Motor running mode: Forward or backward.

According to the windows, choose the motor running.

Auto off when power on: If choose, when the motor power off and then power on again, the motor will close automatically.

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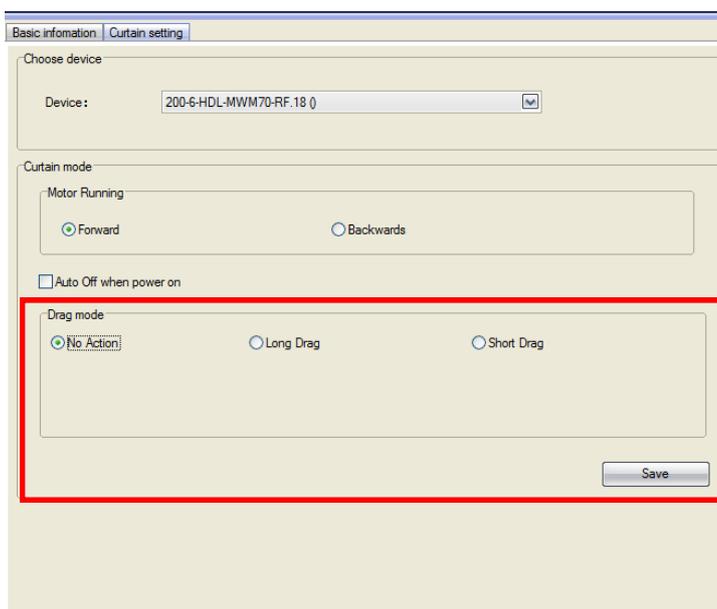
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Step 5   Testing for installation

Method one:

（1）Keep pressing the button for 5S, the LED will flash 1 time/2S, the curtain enters into the testing mode.

（2）The motor will measure moveable distance for the rail automatically (Open-close), when the motor stops, finish.

（3）Short press the button, change the curtain status, if you press the button 1 time, the curtain will open, stop or close.

（4）If it works properly, keep pressing the button for 5S, it will exit the testing mode.

Method two：

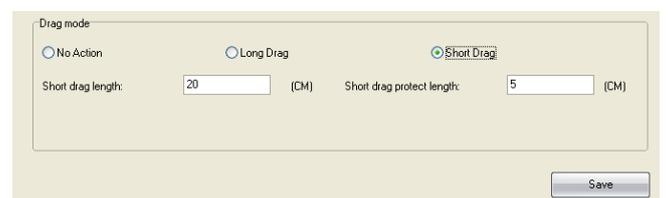Click "Start", the motor will measure moveable distance for the rail automatically, when it stops, will exit.

Step 6 Drag mode

No action

Long drag

Short drag

Drag mode: long drag, short drag, no action.

Long drag: Draw the curtain, the curtain will fully open or close automatically, the default distance is 20cm.

Short drag: Draw the curtain, the distance will be more than the safe distance and less than the short drag distance, the curtain will open or close automatically , the default safe distance is 5cm , in order to avoid misoperation or curtain flap, you can set the safe distance. The default distance is 20cm.

No action: Free mode, end-user can manually drag the curtain to any position freely.

Note: Long drag and short drag are depend on your habit. When pulley is moving, the length should not less than 5cm, and no more than the half of total length.

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Step 7   Test

Curtain switch: set the curtain status. (stop, open, close or percentage)

After testing, when the curtain opens or closes, casement is maybe extruded or the opening position is wrong (the curtain has stopped even if it is not fully opening.) Now, you should adjust the opening and closing position again by "Adjust ON/OFF".

Operation: Take the opening position as an example. At first, you should make sure the opening position, control the curtain to close to the opening position. And then, select "Open" (shown as above). If displays " command error", means the opening position has confirmed. The closing position setting is same as the opening. General condition, the closing position needn't set.

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Step 8 DLP panel setting

The wireless curtain motor can work with DLP panel, there are two ways for control:

Setting 1: The button setting is shown as follows.(HDL-BUS Pro Tool Setup)

Operation: (Parameter 1 is "1(switch no.)", parameter 2 is "on", "off", "stop" or "percentage"

Long press the button, open or close the curtain, if loosen the button, it will stop running . If fully open or close, it will stop running automatically.

Short press the button, it will be based on the percent to control the curtain

Key no.	Remark	Mode
1		Single on/off

Function no.	Subnet ID	Device ID	Type	Parameter 1	Parameter 2	Paramete
1	3	10	Curtain switch	1(Switch no.)	41 %(Switch Status)	N/A

Setting 2: The button setting is shown as follows.(HDL-BUS Pro Tool Setup)

Operation: short press the button, control the curtain open, close or stop.

Key no.	Remark	Mode
1		Single on/off
2		Single on/off

Function no.	Subnet ID	Device ID	Type	Parameter 1	Parameter 2	Paramete
1	3	10	Universal switch	1(Switch no.)	On(Switch Status)	N/A

Step 9 Easy Programming

Keep pressing the button for 10S,the LED will flash 2 times/2s. The device will enter into easy programming mode. Now, the panel will display "programming" , then keep pressing the shift buttons (button 9 and 10) of DLP switch at the same time, the panel will display "external programming".

In this mode, you can control the motor by PROG button. Keep pressing any panel button, it will cover the original target. Short press the button, it will add the motor control.

Long press the button of motor for 10s, it can exit this status. If it is no action, it will exit automatically after 20min without operation.

Packing List

- ■　HDL-MWM70-RF.12　　*1
- ■　Datasheet　　　　　*1

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