

**HDL**<sup>®</sup>



**Integration  
AC System**

# Overview

This doc is created to show all the possibilities of integration with 3<sup>rd</sup> party AC system.

CoolMaster, DAKIN Modbus AC, Media AC, Gelingsi, Samsung, Board AC,

Gree Modbus AC,

HDL products mentioned in this doc:



HDL-MRS232.431

# CoolMaster

Use CoolMaster module to control AC system:



2. Current firmware version for HDL-MRS232.431  
FW\_HDL-CM\_V4.05U(2015-07-23)

# CoolMaster

Use CoolMaster module to control AC system:

3. Note.

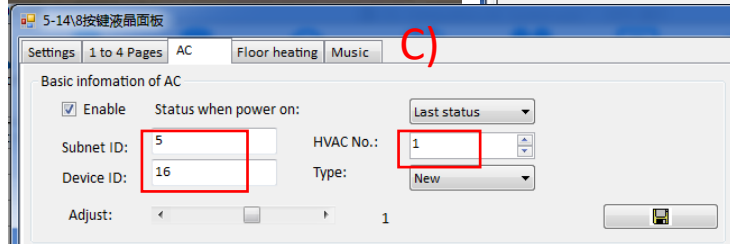
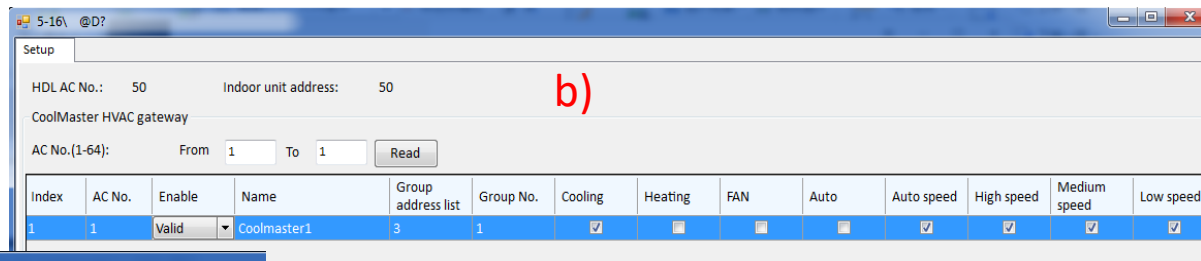
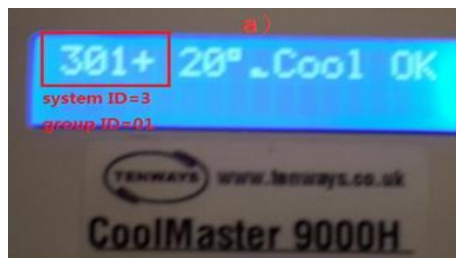
- a) Different brand AC system needs different CoolMaster module, e.g., module 1000D is for Daikin AC, 2000S is for Sanyo AC, 3000T is for Toshiba AC, etc. For more info, please visit CoolMaster official website <http://coolautomation.com/> , all CoolMaster modules have unified interface (RS232) to interface with HDL-MRS232.431.
- b) “FW\_HDL-MCM\_V04.06U(Coolmaster\_2015-07-23)” supports 64 AC indoor units.
- c) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
  - Disable the option “Control AC Running” in DLP.

# CoolMaster

Use CoolMaster module to control AC system:

Application: use DLP to control CoolMaster 9000H.

- Check the CM System ID and CM Group ID on CoolMaster 9000H(System ID=3,Group ID=01);
- In HDL-MRS232.431, fill in the CM System ID and CM Group ID;
- In DLP AC page, fill in the ID of SB-MCM, and set AC number as 1.



# DAIKIN Modbus AC

Control DAIKIN AC via Modbus module (DTA116A51)

1. Based on Daikin spec “Programmer’s Manual Home Automation I/F adaptor for VRV, 26 May 2011”



HDL buspro system

DAIKIN Modbus model: DTA116A51  
DIII-NET/Modbus Communication adaptor

# DAIKIN Modbus AC

## Control DAIKIN AC via Modbus module (DTA116A51)

### 2. Current firmware version for HDL-MRS232.431:

FW\_HDL-MRS232-AC\_V01.04U(Modbus Daikin\_2017-05-27).bin

### 3. Note:

- a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
- b) Disable the option “Control AC Running” in DLP.
- c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.



# Media AC

## Control Media AC via RS485 port

1. Based on a Chinese spec “美的商用空调网络控制通讯协议V1.4 邓永忠2006-12-4”;

If the Media AC used this protocol, then can use HDL-MRS232.431 (Media AC version) to control.

2. Current firmware version for HDL-MRS232.431:

FW\_HDL-MRS232-AC\_V01.02U(Media\_2014-05-06).bin

3. Note:

- a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
- b) Disable the option “Control AC Running” in DLP.
- c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

# Gelingsi AC

## Control Gelingsi AC via RS485 port

1. No standard spec (doc ref. no.) from Gelingsi company

2. Current firmware version for HDL-MRS232.431:

FW\_HDL-MRS232-AC\_V01.02U(Gelingsi\_2014-05-06).bin

3. Note:

- a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
- b) Disable the option “Control AC Running” in DLP.
- c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

# Samsung AC

## Control Samsung AC via RS485 port

### 1. Based on spec “Samsung RS485 communication protocol V1.1”

If the Samsung AC used this protocol, then can use HDL-MRS232.431 (Samsung AC version) to control.

### 2. Current firmware version for HDL-MRS232.431:

FW\_HDL-MRS232IP-AC(Samsung\_2013-07-16).bim

### 3. Note:

- a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
- b) Disable the option “Control AC Running” in DLP.
- c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

# Board AC

## Control Board AC via RS485 port

1. Connect to RSM-B4 module, based on a Chinese spec “远大RSM-B4 485通信协议.pdf”,  
<http://en.broad.com/index.html>
2. Current firmware version for HDL-MRS232.431:  
FW\_HDL-MRS232-AC\_V01.02U(Broad\_2014-05-06).bin
3. Note:
  - a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
  - b) Disable the option “Control AC Running” in DLP.
  - c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

# HITACHI AC

## Control HITACHI AC via RS485 port

1. Based on a Chinese spec “HLRSCON与上位机通信制御仕様书”, doc ref. no. is HAPQ图号H7X00007 made by Qingdao Hisense Hitachi Air Conditioning Company
  
2. Current firmware version for HDL-MRS232.431:  
FW\_HDL-MRS232-AC\_V03.01U(Hitachi Gateway\_2015-09-02)
  
3. Note:
  - a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
  - b) Disable the option “Control AC Running” in DLP.
  - c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

# Gree Modbus AC

## Control Gree Modbus AC via RS485 port

1. Based on a Chinese spec “多联机Modbus通讯协议V1.2”
2. Current firmware version for HDL-MRS232.431:  
FW\_HDL-MRS232-AC\_V01.02U(Modbus Gree V1.0\_2017-06-12).bin
3. Note:
  - a) Functionalities (DLP AC page): AC On/Off, Room temperature (sensor in DLP panel), setpoint, High/Medium/Low/Auto wind, Cooling/Heating/Auto/Dry mode.
  - b) Disable the option “Control AC Running” in DLP.
  - c) There is no RS485 interface soldered on the HDL-MRS232.431 by default, need to specify when order.

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