



# CoolMasterNet

Universal HVAC Bridge

Quick Installation Guide



# Warning

Read these **Safety Precautions** carefully to ensure correct installation.

This manual classifies precautions into **WARNING** and **CAUTION**.



**Failure to follow WARNING is very likely to result in such grave consequences as death or serious injury**

## **WARNING**

Only qualified personnel must carry out the installation work.

Ask your dealer or technical representative to install the unit.

Any deficiency caused by your own installation may result in an electric shock or fire.

All electrical work must be performed by a licensed technician, according to local regulations and in accordance with the instructions in the installation manual.

Any lack of electric circuit or any deficiency caused by installation may result in an electric shock or fire.

Do not relocate or reinstall the **CoolMasterNet** by yourself.

Any deficiency caused by your own re-installation may result in an electric shock or fire.

Make sure that all wiring is secured, that specified wires are used and that no external forces act on terminal connections or wires. Improper wiring connections or installation may produce heat and result in fire.

Before touching electrical parts, turn off the unit.

To dispose of this product, consult your dealer.

# Caution



Failure to follow CAUTION may result in serious injury or property damage, and in certain circumstances, may result in a grave consequence.

## CAUTION

Do not allow children to play with the **CoolMasterNet** and supervise them not to get access to the appliance.

CoolMasterNet is not to be used by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

Do not disassemble, modify or repair the **CoolMasterNet**.

Any deficiency caused by your modification or repair may result in an electric shock or fire.

Never let the **CoolMasterNet** to get wet.

Water can cause damage to the **CoolMasterNet**, and may cause an electric shock or fire.

Do not use flammable materials (e.g. hairspray or insecticide) near the **CoolMasterNet**.

Do not clean the **CoolMasterNet** with organic solvents such as paint thinner. The use of organic solvents may cause cracking, damaging the **CoolMasterNet**, causing electrical shock or fire.

**Do not apply AC110V or AC220V to the CoolMasterNet. The maximum voltage that can be applied to the unit directly is 24V DC.**

If damaged **CoolMasterNet** can generate heat and cause a fire.

# Caution

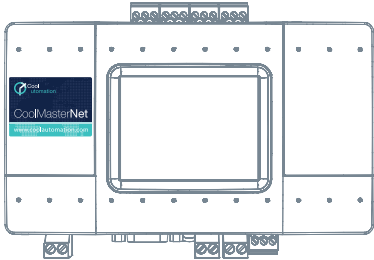


Failure to follow CAUTION may result in serious injury or property damage, and in certain circumstances, may result in a grave consequence.

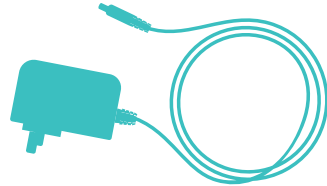
## DO NOT INSTALL THE COOLMASTERNET IN THE FOLLOWING LOCATIONS:

- a. Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen  
Plastic parts may deteriorate and fall off or result in water leakage.
- b. Where corrosive gas, such as sulfurous acid gas, is produced.
- c. Near machinery emitting electromagnetic waves.  
Electromagnetic waves may disturb the operation of the **CoolMasterNet** and cause the unit to malfunction.
- d. Where flammable gas may leak, where there is carbon fiber or ignitable dust suspensions in the air, or where volatile flammable such as thinner or gasoline are handle  
Operating the **CoolMasterNet** in such conditions can cause a fire.
- e. High temperature area or directly flamed point.  
Heating and/or fire can occur.
- f. Moist area, where there is exposure to water.  
If water enters the inside of the **CoolMasterNet**, it may cause electric shock and electrical components may fail.

# What's in the box



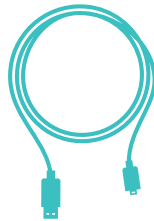
CoolMasterNet



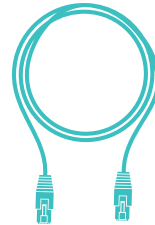
AC Power supply adapter  
100V-240V 50/60hz to 12V DC



1 RS232 DB9  
Male to Female  
cable

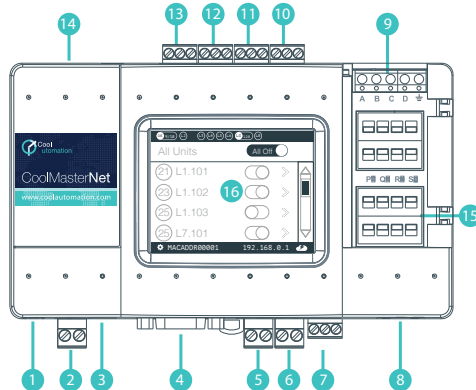


1 USB-Mini USB  
cable



1 Ethernet  
cable

# CoolMasterNet



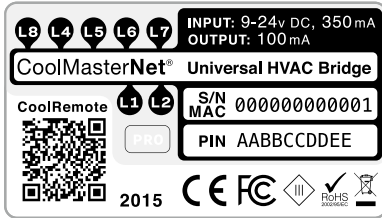
- |                               |                     |                            |
|-------------------------------|---------------------|----------------------------|
| 1 L8 – HVAC Line 8 (USB Host) | 7 RS485             | 13 L4 – HVAC Line 4        |
| 2 Power                       | 8 Ethernet Port     | 14 USB Device Port         |
| 3 Power Plug                  | 9 GPIOs             | 15 DIP Switches P, Q, R, S |
| 4 RS232 Port                  | 10 L7 – HVAC Line 7 | 16 LCD Touch Screen        |
| 5 L1 – HVAC Line 1            | 11 L6 – HVAC Line 6 |                            |
| 6 L2 – HVAC Line 2            | 12 L5 – HVAC Line 5 |                            |

# Preconfigured CoolMasterNet

## Type label

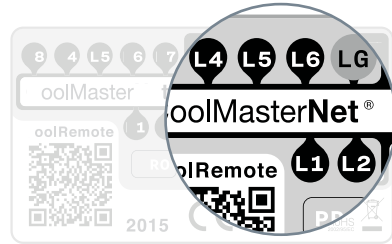
This label uniquely identifies the manufacturer's configuration of CoolMasterNet.

Located on the back of the enclosure.



## Type label with Configuration sticker

A preconfigured label example: configured for LG L6 on L7



Changing HVAC System setup requires activation

For more info, see <http://coolautomation.com/support/coolmasternet/activation>



# HVAC Line configuration

## Configuration stickers for HVAC line L1

- DK Daikin **PRO**
- ME Mitsubishi Electric **PRO**
- PN Panasonic
- SN Sanyo
- TO Toshiba
- HT Hitachi (JCI) **PRO**
- YK York (US)
- YK York
- HA Haier

## Configuration stickers for HVAC line L7

- LG LG
- MH Mitsubishi Heavy
- GR Gree
- MD Midea
- SM Samsung
- TR Trane
- TR Trane (US)
- KT Kentatsu
- DK Chigo

## Configuration stickers for HVAC line L8

- FJ Fujitsu
- RH Rheem (US)
- GR Gree (GMV 5)

# HVAC Hitachi (JCI) VRF — on L1

## 1 HVAC Communication Terminals

Connect to the communication terminals on the HVAC equipment:

HVAC communication terminal's names\*



\* For Heat Recovery systems the connection is at outdoor units only.

\* Polarity is not required on the HVAC communication line.

## 2 Connecting to the line plug

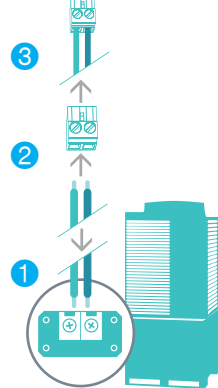
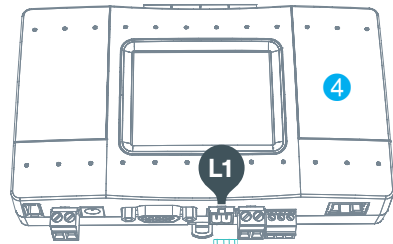
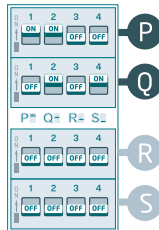
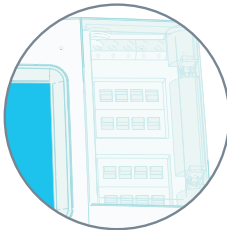
Secure the cables in the L1 line plug.

## 3 Plugging to the CoolMasterNet

Insert the plug in to the CoolMasterNet L1 socket

## 4 Check DIP Switches are set correctly

Dip switches setup for VRF HVAC system on L1



Hitachi (JCI) HVAC Terminal

# HVAC York (US) VRF — on L1

## 1 HVAC Communication Terminals

Connect to the communication terminals on the HVAC equipment:

HVAC communication terminal's names\*



\* For Heat Recovery systems the connection is at outdoor units only.

\* Polarity is not required on the HVAC communication line.

## 2 Connecting to the line plug

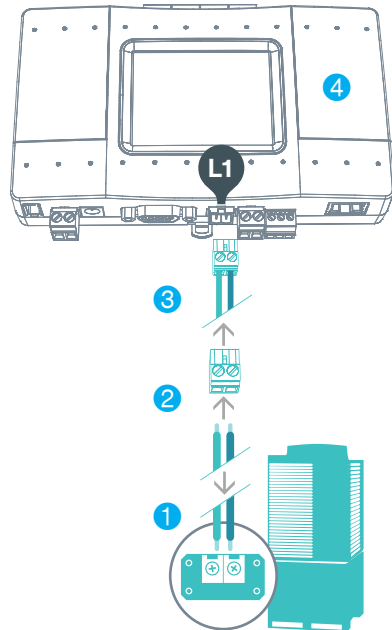
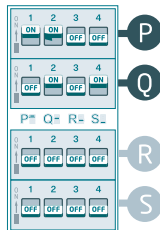
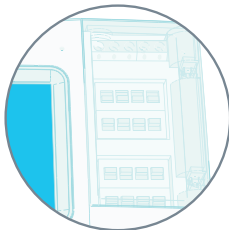
Secure the cables in the L1 line plug.

## 3 Plugging to the CoolMasterNet

Insert the plug in to the CoolMasterNet L1 socket

## 4 Check DIP Switches are set correctly

Dip switches setup for VRF HVAC system on L1



York (US) HVAC Terminal

# CoolMasterNet installation complete

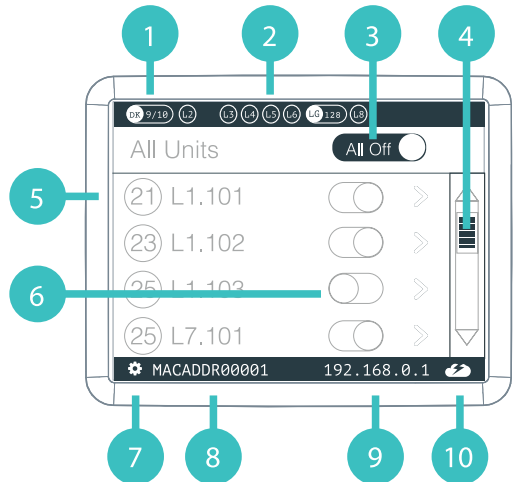


To download the latest firmware [www.coolautomation.com/support/coolmasternet](http://www.coolautomation.com/support/coolmasternet)  
Firmware update FAQ [www.coolautomation.com/support/faq/coolmasternet](http://www.coolautomation.com/support/faq/coolmasternet)

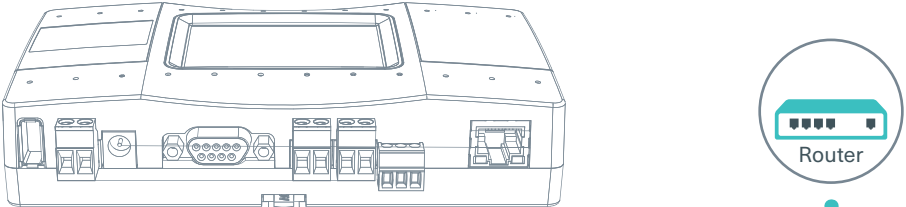
## CoolMasterNet Unit screen

After successful installation, units screen will show all the detected indoor units and their statuses.

- 1 Active HVAC line (DK 9/10) (Groups/Units)
  - 2 Inactive HVAC line
  - 3 All ON/OFF operation button
  - 4 Scrollbar
  - 5 Connected indoor unit with its address and Set-Point temperature indication.
  - 6 Indoor unit operation button (on/off)
  - 7 Service settings button
  - 8 CoolMasterNet MAC address
  - 9 CoolMasterNet IP address
  - 10 CoolRemote connectivity status
- Connected - Communicating
  - Connected - Idle
  - Disconnected - with error code



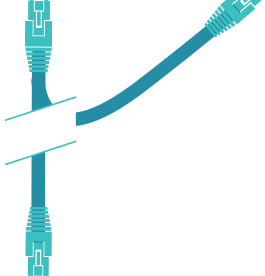
# Home Automation, BMS & CoolRemote



RS232

RS485

Ethernet



Home Automation / BMS



Router



Internet

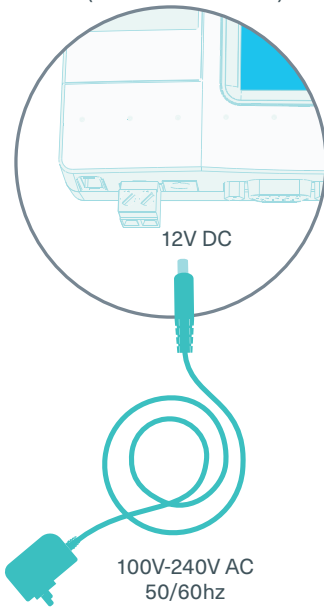


CoolRemote App

# Power supply

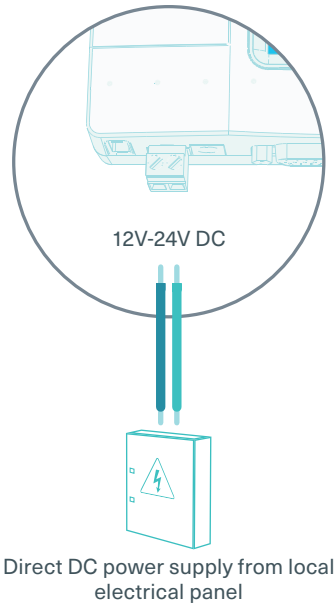
## Option A

AC Power supply adapter  
(Included in the Box)



## Option B

Direct DC power supply

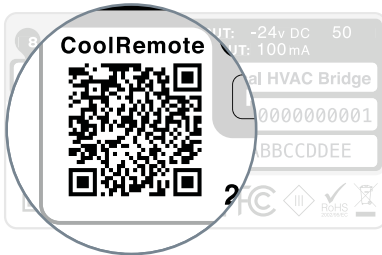


# CoolRemote App



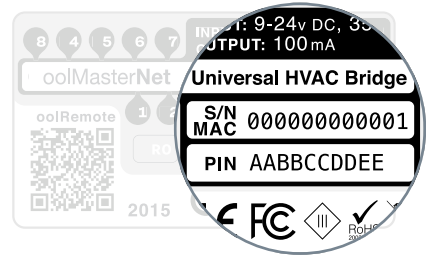
Please connect the device to the Internet for successful registration and setup

## Option A - Automatic



- 1 Scan the QR code from the type label to auto fill in all the CoolMasterNet details for CoolRemote App.
- 2 Register your user-name (email) and password to remotely control & monitor all your HVAC units.

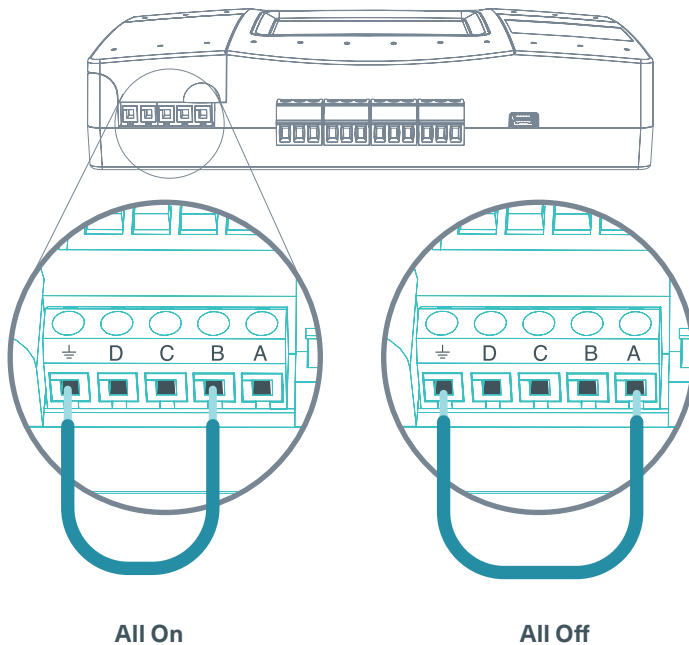
## Option B - Manual



- 1 Go to: <https://coolremote.net/register>
- 2 Enter CoolMasterNet S/N number and PIN code, printed on the sticker.
- 3 Register your user-name (email) and password to remotely control & monitor all your HVAC units.

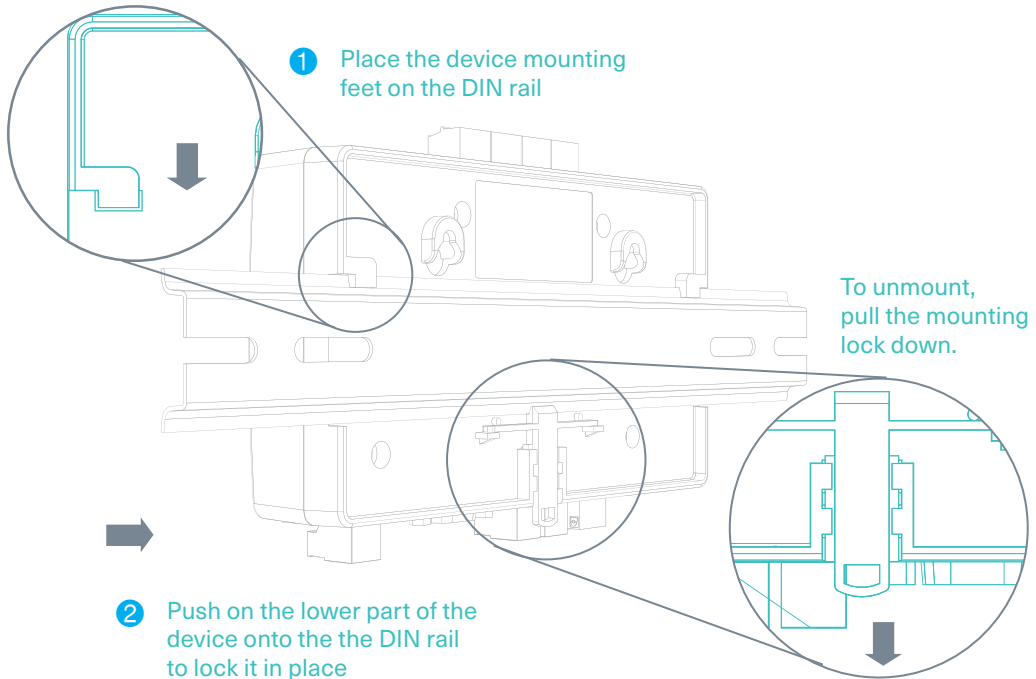
Appendix: GPIOs application

## All On/Off operation by external signal



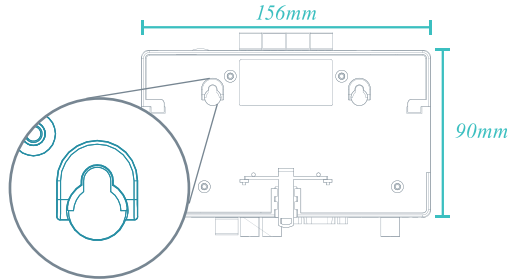


# Mounting on a DIN rail

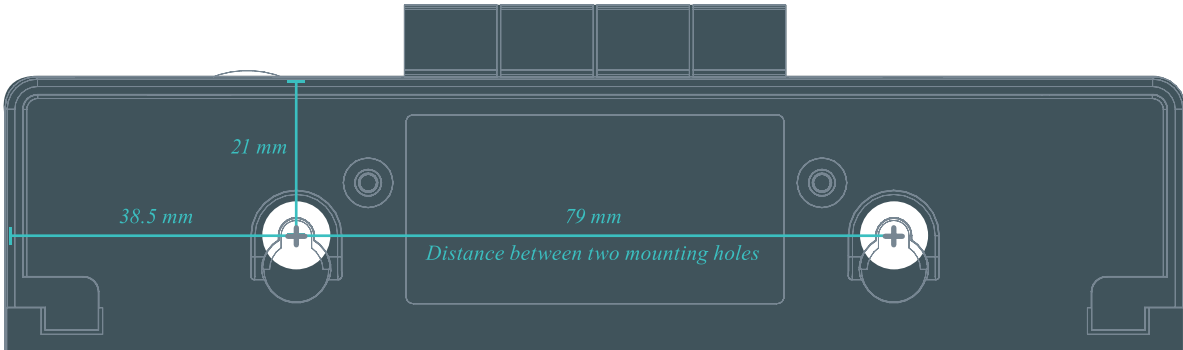


# Mounting on a wall

For mounting the CoolMasterNet with wall screws, please see attached template with 1:1 dimensions.



**1:1 SCALE MOUNTING TEMPLATE  
FOR WALL SCREWS**





## Need more help?

Visit us <http://coolautomation.com/support>

Email us [support@coolautomation.com](mailto:support@coolautomation.com)



