

## BC107W-4DM User Manual

### Main Display

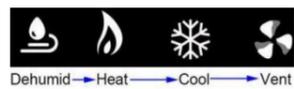


- 1, WIFI indicator: Display when connected to a WIFI Network
- 2, Run time history: Run time history data
- 3, Optional settings: Adjusting the optional settings
- 4, Day/Time: Displays day of weeks & Time
- 5, System mode: Dehumidification/Heat/Cool/Ventilation
- 6, Fan speed: High/Medium/Low/Auto
- 7, Air humidity: Room air humidity
  - (1) If humidity value<30%, the pointer will be in the Red area.
  - (2) If humidity value is 30% ~60%, the pointer will be in the Green area.
  - (3) If humidity value is >60%, the pointer will be in the Blue area.
- 8, Power ON/OFF: switch the thermostat ON/OFF
- 9, Holiday mode: Displays when thermostat is in holiday mode
- 10, Schedule: Weekday /Weekend, 7 Days and 24Hours programming.
- 11, Setup button: Enter the parameter setting
- 12/13 Up/Down: Set your desired temperature
- 14, Temperature setpoint: Your desired temperature
- 15, Room Temperature: Displays the current room temperature
- 16, °C/°F display: Temperature display in °C/°F
- 17, Mode display: Display Dehumidification / Heat / Cool / Ventilation

**Thank you for buying our product with your great support and trust**  
This Fan coil thermostats are widely used in all commercial and residential buildings temperature control, accuracy temperature control provides you comfortable environment, and have the effect of saving energy and reducing power consumption.

### Main Display Operation

#### Working Mode Selection



\*The words below: RT=Room Temperature, ST= Set point temperature\*

#### Dehumidity Mode

Press system mode button to "Dehumid" to enter the de-humidity mode, the main screen will display symbol.

1) Fan logic:

High speed, medium speed output closed

If the humidity is greater than 80%: the fan starts at low speed;

If the humidity is less than 60%, all three speed fans will be turned off;

The fan status does not change when the humidity is between 80% and 60%;

2) valve logic

If the room temperature is higher than 21 degrees, the valve will follow the normal logic of the temperature controller. If the room temperature is less than 21 degrees, the valve will close;

#### Heat Mode

Press system mode button to "Heat"

- ★If  $ST > RT$ , the heat mode will be activated with symbol on the screen.
- ★If the  $RT \geq ST$ , the will be disappeared and heating output will be cut off

#### Cool Mode

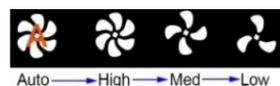
Press system mode button to "Cool" you will hear the click after 5 sec.

- ★If the  $ST < RT$ , the cool mode and cooling output will be activated with symbol on the screen.
- ★If the  $RT \leq ST$ , the will be disappeared, and cooling output will be cut off

#### Ventilation Mode

Press system mode button to "Vent" to enter the ventilation mode

**Three Speed & Auto Fan can be selected during all modes above**



#### Schedule

- ★Press icon to enter the Feature Settings.
  - ★Find and press the "Schedule" option to entry the setting interface.
- There are four Options:

**Weekday/Weekend, 7Days, 24Hrs, None**

- ★For example, Set the program Mode to 7Days.

- ※Press the icon to save and press again return to the main screen.
- ※Press the "Schedule" and Monday to Sunday can be selected to edit.
- ※Press "Monday" and there are Four Time Period can be selected:

#### Morning/Day/Evening/Night

Each Time Period has ON/OFF Options

- ※Press the column of "Hour", use the icon to set desired "Hour"
- ※Press the column of "Minute", use the icon to set desired Minute.

For Example: 7 (Hour):30 (Minute) means 07:30AM in the morning

- ※Press the column of "Degrees", use the to set desired temperature.
- For Example: The Setting Temperature is 20°C

- ※ Repeat the steps above to set the 4 periods of each day
- ※Press the icon to exit and save, repeat the steps above to set each day. Or you can also press "Copy To" to select any date to copy the period setting you just set and press icon to exit and save.

#### Holiday

- Thermostat will maintain this temperature for the duration of the holiday and automatically return to the preset program mode after your return.
- ※Press the "Holiday" and entry in setting interface.
  - ※Press the to enable the Holiday mode, and press the column of Year/Month/Day, Use the icon to set the Year/Month/Day values of your holiday start date and holiday end date.
  - ※Press the icon to save and exit. "Holiday will start at \*\*/\*\* \*\*:\*\*" will display on the top of main screen

### Parameter Settings:

Press the to enter the parameter setting menu

#### Language

9 languages can be selected.

#### Clock & Date Time

##### Time Zone Selection

Press Up or Down key to select your current Time Zone

##### Clock & Date Time

Select each column to set your current Year, Month, Day, Hour and Minute.

##### Daylight Saving Time

##### Auto DST ON/OFF Options

- ★There are three options:  
European Union/ US&Canada/ Australia&New Zealand
- Select one option and Press the icon to save and exit

#### Backlight Setting

- ★Ambient Light Dimming ON: Automatically adjust the backlight brightness.
- ★Ambient Light Dimming OFF: Manually adjust the backlight brightness.
- ★Use the to adjust to the desired brightness
- ★Press the Keys to save and return to main display

#### Standby Screen

- ★ Select your desired option to control the Standby Screen Time.
- ★ Select your desired standby type
- ★Press the to save and return to main screen.

#### Screen Lock

##### Lockout Pin on/off Options

- ★For example, Set the Lock Pin to 5209
- ※Press the First Column ,use the keys to adjust to 5
- ※Press the Second Column , use the keys to adjust to 2
- ※Press the Third Column ,use the keys to adjust to 0
- ※Press the Fourth Column ,use the keys to adjust to 9
- ★Press the Keys to save and return to main screen.

**Note: User needs to input the password every time before operation**

### Feature Settings

Press to find the "Feature Settings" option and enter to edit

- ※**Temperature Format:** can be selected between °C and °F.

#### Temperature Limit

- ★Press the icon to enter Feature Settings.
- ★Press "Temperature Limit" and enter setting interface.
- ★Press the First Column and use the keys to adjust Minimum Temperature between 5-34°C
- ★Press the Second Column, use the keys to adjust Maximum Temperature between 6-35°C
- ★Press the icon twice to save and return to main screen

#### Switch Diff

- ★Press "Switch Diff" and entry in setting interface.
- ★There are four Options: 0.5, 1, 2, 3
- ★Select desired number and Press the icon to save and exit.
- if  $ST=20^{\circ}C$ , switch diff value=0.5. Under heating mode: the thermostat gives heating output at 19.5°C and cut off at 20.0°C. Under cooling mode: the thermostat gives cooling output when  $RT=20.5^{\circ}C$  and cut off at 19.5°C.

#### DeadBand Temperature

Deadband temperature only available if the mode is selected to AUTO  
The cool mode activate when  $RT-ST \geq$ Swich Diff+Deadband Temperature/2

The heat mode activate when  $ST-RT \geq$ Swich Diff+Deadband Temperature/2

- ※**Output Delay:** To prevent rapid switching between cool & heat. Output delay can be set from 0-15 minutes. The default is 0 which means no delay.

#### Defrost

The thermostat automatically enter the defrost mode when the room temperature drops below the defrost temperature.  
The range is 7-17°C.The default is 7°C and is suitable for most applications.

- ※**Built in Sensor:** Room temperature can be calibrated from -5°C to 5°C

- ※**Humidity Sensor:** Room humidity can be calibrated from -25% to 25%

#### Open Window Function

The thermostat turns the heat/cool off for 15minutes if it detects the RT drops/raises more than 3 degrees in less than 1 minute

#### Fan Setting

Fan type:3-speed fan

Fan Work Mode(when  $RT=ST$ ):

Value closed, Fan stop

Valve closed, Fan continue

#### Fan type in Heating mode

You can enable or disable fan working under 4-pipe heating Fan coil unit

- ※ **Temperature Bar Setting:** you can select white or color

#### Hold Temp

The temperature hold function will allow you to manually override the current running program and set a different temperature for a desired period. You can select the temperature and Hold Time

- ※**Window/Door Dry Contact:** if the window/door switch is open, the thermostat will shut off the valve and fan output and show the main screen display only.

#### System Information

- ★Press "System Information" to enter interface, and it shows Version Number: x.xx and press the icon to exit

#### Reset To Factory Settings

**Warning: Reset will make you lost All Current Settings and return to the factory default settings.**

- ★Press the icon and then press to enter setting interface.

- ★Press "Reset" to factory settings

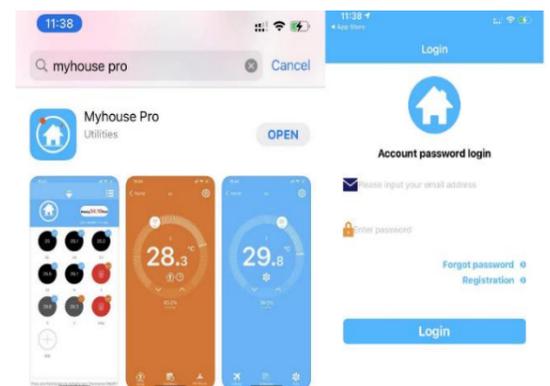
- ★Press the to exit

### WIFI CONNECTION

#### Pairing Thermostat with the APP (Model Number with W ONLY)

The router needs to be 2.4G band only

Download the free App from the Apple Store or the Google Play Store by searching "Myhouse Pro" as below



- 01 Open the APP and register your account
- 02 Log into your account.
- 03 Press the icon on app home screen
- 04 Press "location name" to add the location, for example home/office etc.
- 05 Press icon to confirm the property.
- 06 Press icon to go back to the main screen.
- 07 Press the arrow on the top and select the location name you just set

**Note:** Please enable the "location" to "Myhouse Pro" app in your mobile settings before any operation, or else the geo distance will not correct.

### Connection Method:

There are two connection methods:

#### 1 Smart Config

##### App Operation

- 01 Press the icon Add
  - 02 Select the correct device type, BC107W-4DM series select "HVAC thermostat"
  - 03 Select device location name or create a new location name and confirm
  - 04 Select "smart config" and press the bottom button "next" to enter WIFI configuration.
  - 05 Enter your wi-fi password
- #### Thermostat Operation
- 01 Press the icon on the thermostat and press "Network settings"
  - 02 Press 01 WI-FI Setup to select and connect your WIFI network. If it can't

browse quickly, please exit the interface and re-enter the 01 WI-FI Setup to refresh

03 Back to Modus and press "pair to app (smart config) "

04 Press" Next" on the bottom to enter "pairing device" screen.

Wait for the devices to pair, (this may take several minutes to activate).

## 2 Scanning Thermostat QR Code

### App Operation

01 Press the icon on app home screen to enter the "Add device" home screen.

02 Select the correct device type, BC107W-4DM series select "HVAC thermostat"

03 Select device location name or create a new location name and confirm

04 Select "Scan QR Code", Then click the "Add device location" button.

### Thermostat Operation

01 Press the icon on the thermostat and press "Network settings"

02 Press 01 WI-FI Setup to select and connect your WIFI network. If it can't browse quickly, please exit the interface and re-enter the 01 WI-FI Setup to refresh

03 Press and then→ Press "System Information", find the code

04 Use App to scan the code, then App will show "Add device successful"

**Notice: If WIFI can't connect quickly, please press "Reset to factory setting", then re-connect WIFI**

Put thermostat front panel on the backplane, Connect the bottom first, then connect the top, Then fasten the screws.



**Flush Mounting**

## Technical Specification

Power Supply: 220VAC,50/60 Hz

Setting temp range:5-35°C

Working temp range: -10-45°C

Temp accuracy:±1°C

Power consumption:1W

Max Switch Current: 3A

Fan type: Three-speed fan

Fan Work Mode: Value closed, Fan stop/Valve closed, Fan continue

LCD screen size: 3.5 Inch

The LCD resolution: 480\*320

Touch: Capacitive Screen

Hole Pitch: 60mm

Grade of protection: IP 40

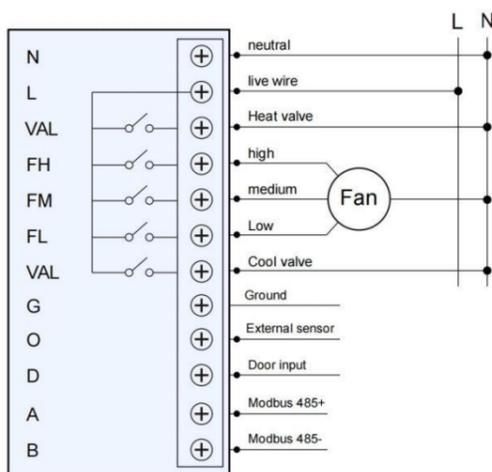
Sensor type: NTC10k

Installation type: Europe Flush Mounting

Dimension: 96mm \* 86 mm\* 13mm (without back power box 25mm)

## Wiring Diagram

### AC 3-Speed Fan & On/Off Valve



For 4 Pipe fan coil unit

FH: High-speed fan

FM: Middle -speed fan

FL: Low-speed fan

CV: cooling valve, HV: heating valve

A/B: Modbus

Dry contact(Window/door contact)

External sensor

**When connecting wires, please follow the label on the machine terminals strictly.**

## Installation

Install the thermostat at the visual level.

Please read the instructions in order to better understand our products.

Do not install in areas close to the heat source, which will affect its function.

This flush mounting thermostat requires a 35mm power box in the wall.

### Step 1

Using a flat-blade screwdriver to loose the screw from the bottom of the thermostat, and take off the front part from the backplate.

### Step 2

Place the front panel of the thermostat in a safe place.

Follow the wiring diagram above for connecting terminals.

### Step 3

Screw the thermostat backplate into the mounting box in the wall.

### Step 4