TOUCH SCREEN INTELLIGENT CONTROLLER
FOR ENERGY RECOVERY VENTILATION SYSTEM

Model LH-13001

Thank you for choosing Cooper&Hunter energy recovery ventilation system, please read this service manual carefully before operation and retain it for future reference.

Controller Dimension
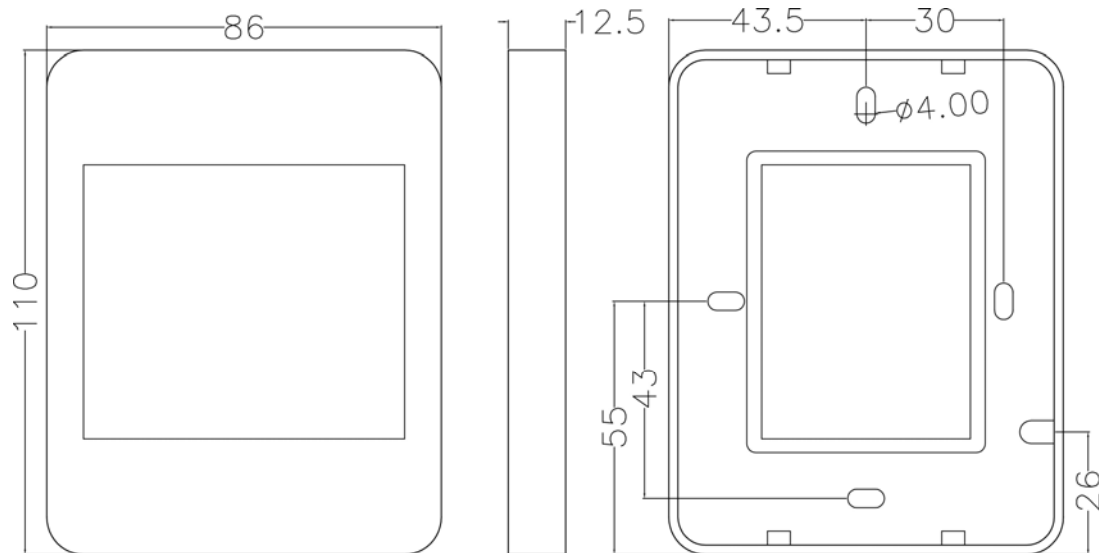
Main Functions

All units on/off control
All units timer on/off control
Single unit on/off control
Single unit fan speed control
Single unit temperature setting (only available on some of latest PCB)
Single unit error display
All the other functions remain the same as the original ventilator tech. manual

Ventilator Setting

1) Cut off the ventilator power, refer to the ventilator user manual, all units switched the SW4-4 to the same Baud rate, like the below figure A.
Note: some PCB models have the Baud rate switch of 4800 or 9600, for the details, please refer to the ventilator manual.

2) Turn on the ventilator, refer to the ventilator user manual, set the correct ID address of each ventilator (parameter number 08) , available ID number from 1 to 16, refer to below figure B. In the same network, it is not allowed to set same ID address in different units, or communication error will happen.
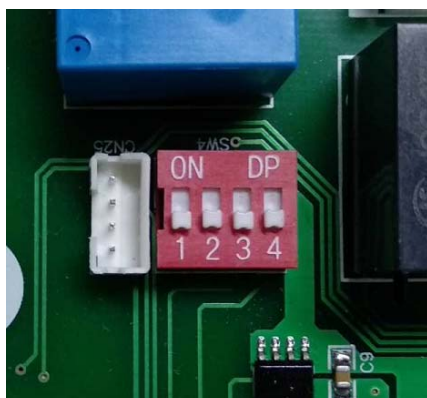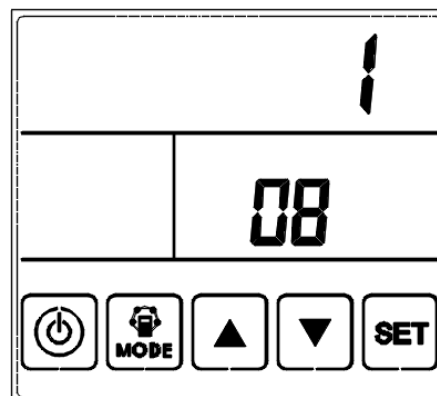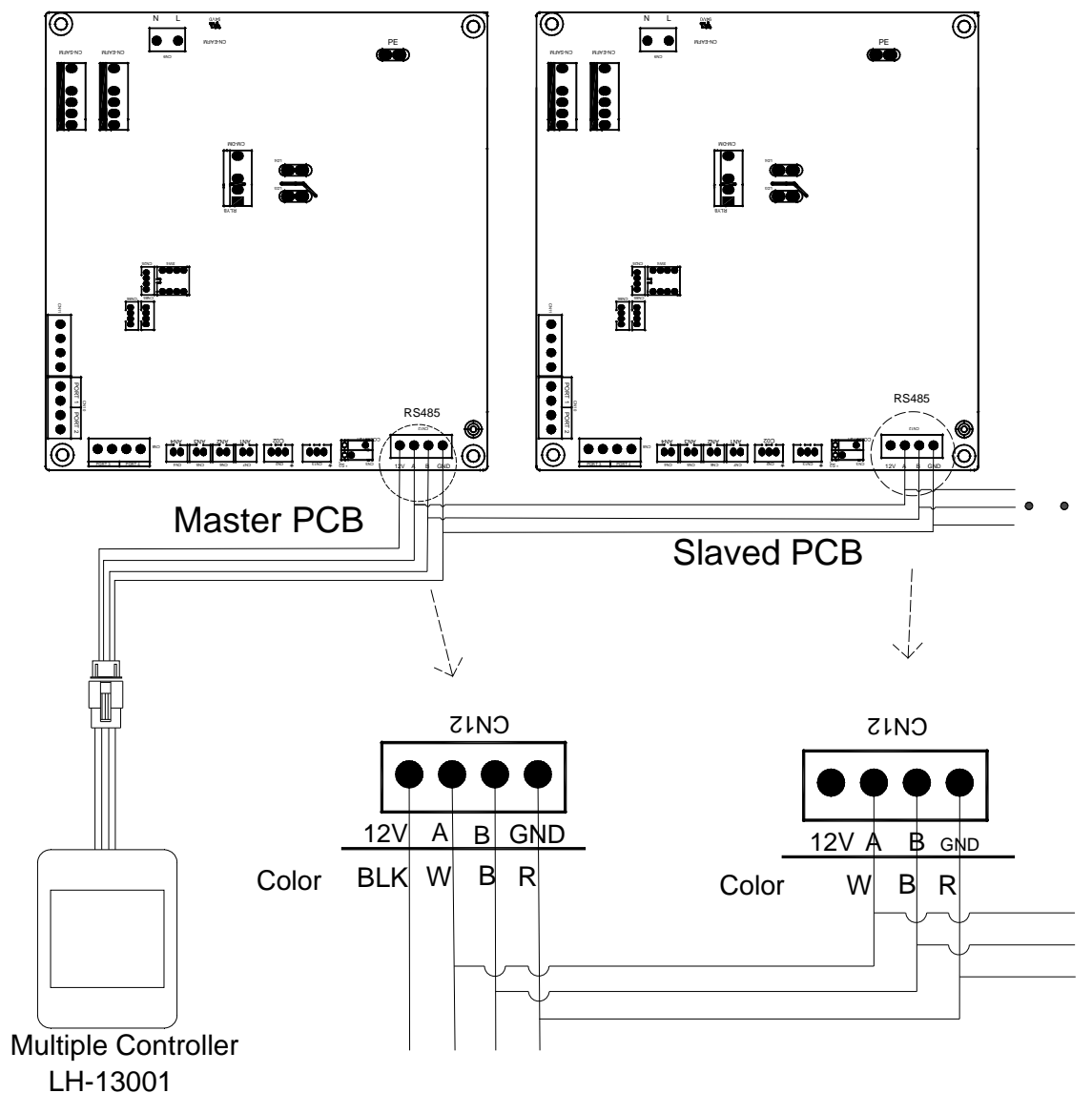

Figure A

Figure B

Wiring Diagram

Master PCB

Slaved PCB

CN12

12V	A	B	GND
Color	BLK	W	B	R

CN12

12V	A	B	GND
Color		W	B	R

Multiple Controller
LH-13001

Note:
1) The multiple controller adjusts the baud rate automatically according to the master PCB, so, please ensure all the slaved units in the same net with same baud rate of the master unit, different baud rate units can not be recognized by the multiple controller.

2) Up to 16 sets ventilators can be controlled by one multiple controller.

3) It is suggested the communication wire to be shielding layer wire, and it should not be laid together with the strong current line, otherwise it may cause signal interference.

4) Total length of communication wire should not be over 1km, in order to minimize the signal attenuation, please try to shorten the communication wire.
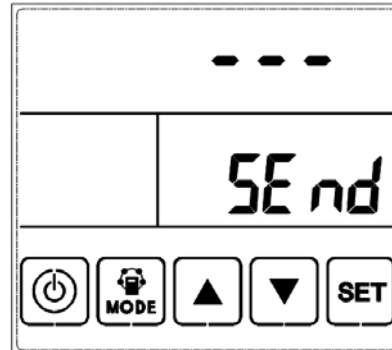
All Units on/off

Press the on/off button ⏻ over 6 seconds until hear buzzing of the controller, to enter all ventilators on/off setting, press ⏻ again shortly, to switch turn on or turn off all the ventilators, press SET button to confirm setting.
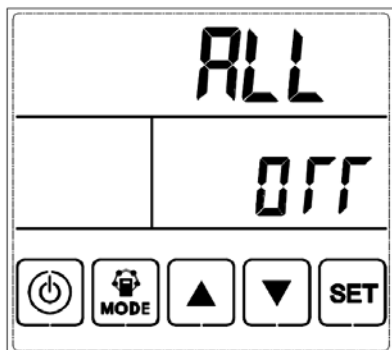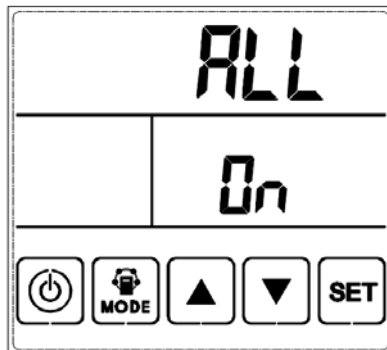
|		
ALL **OFF**	**ALL** **On**	**- - -** **5End**
All units off	All units on	Setting confirmed

All units fan mode setting

After turns on all the ventilators, press Mode button 🎛 for over 6 seconds to enter the parameter setting, by press the SET button to switch the parameter number to be P0, fan mode setting, at this time to press Mode button again, enter P0 setting, available value number from 0 to 2, which means 2 speeds control, 3 speeds control and 10 speeds control. Default value is 2, 10 speeds control. Use the Up and down button to change the value number, press SET button again to confirm.

Note: for the same BMS network, it is suggested to connected all AC ventilators, or all DC ventilators, the mixing AC and DC ventilator versions in the same network may cause fan speed control confusion.

| Value number	Fan mode	Ventilator
0	2 speeds	/
1	3 speeds	AC ventilator
2	10 speeds	DC ventilator

Parameter number

2
P0
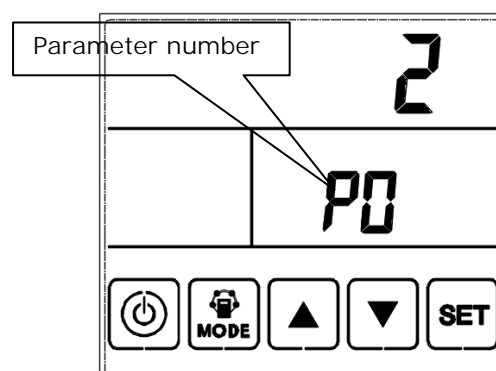
Default setting

Single Ventilator Setting

By press the Set button [SET] to switch to the very ventilator, in the middle of the controller it displays no. 1 to no. 16, at this time, can press the mode button shortly to switch to OA/RA/EA mode and set the fan speed by UP and DOWN button, after setting for 2 to 3 seconds, control system will automatically confirm the setting. It is also available via the multi controller to set the heater temperature (only available in some of latest PCB).
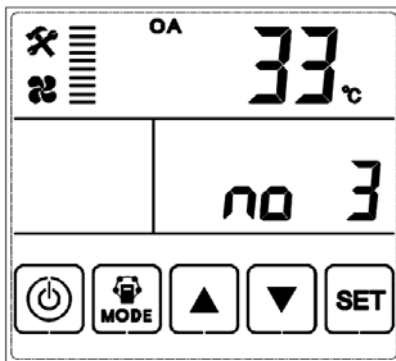
No. 3 ventilator OA interface
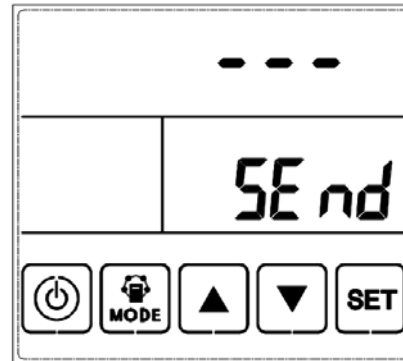
System confirm setting

Timer On/Off Setting

The multiple controller can control all the ventilators on/off via timer function, it is allowed to set on/off 2 periods per day, and 7 days per week, the function and setting is same like the touch screen intelligent controller, please refer to the manual.

Note: there is no priority between the multiple controller or the original standard intelligent controller, ventilator will execute instruction according to the later setting by either controller.

Error Code

The multiple controller displays error code when there is error of the ventilator, a symbol if ✗ will be shown at the top left corner, by pressing SET button [SET] to switch to different ID ventilator can check all the ventilator error status. Error code list as below.
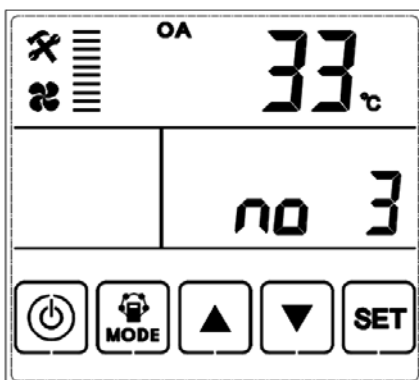
No. 3 ventilator error
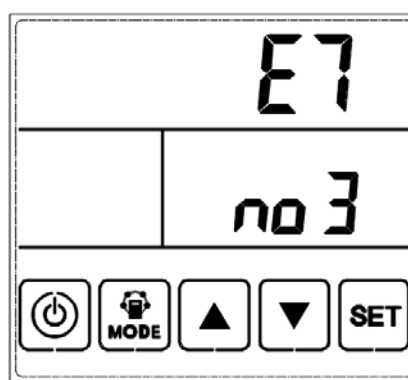
Error Code E7

Code	Error
E1	Fresh air temperature sensor error
E2	EEPROM error
E3	Return air temperature sensor error
E4	Exhaust air temperature sensor error
E5	Communication error
E6	Supply air temperature sensor error
E7	Exhausted fan error
E8	Supply fan error

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