

Instructions for the use of the YAH-A2209 BS

work pattern



- ① In gear mode, the gear can be adjusted within the range of 1~ 10 gear;
- ② In the temperature control mode, the setting temperature can be adjusted within the range of 8 ~36°C. The gear of the control switch changes with the temperature in the room of the cab. When the temperature rises or decreases, the control switch will automatically adjust the running gear, and reach the set temperature quickly, so that the heater can run more intelligent and economical.
- ③ When a fault occurs in operation, the fault code will be flashed through the control switch display window to find the fault location more accurately and intuitively.

operation declaration:

- | On / shutdown and mode switch: press under shutdown state [] Start on; press on startup [] Shutdown; press [knob] to switch the current gear / temperature control mode;
- | Shift adjustment: clockwise [knob] running gear / temperature + 1, maximum to 10 gear / 36°C, counterclockwise [knob] running gear / temperature-1, minimum to 1 gear / 8°C;
- | Basic Settings: After starting up, long press [Settings] for 3s to enter the basic Settings interface. Display the setting item in the upper left corner, and display the specific data under the Settings item:
 - F0: Current time F1: self-start time [after self-start] F3: self-start switch setting
 - F4: Language switch [Chinese (C), English (E), Russian (R)] (General version only supports Chinese voice) F5: temperature compensation
 - F6: Tank volume [5-50L (switch unit 5L) (default 10L)] [Display- -represents no tank monitoring] F7: pump type [16 / 22 / 28 / 32 UL (default 22 UL)]
 - F8: constant temperature heating (in temperature control mode, when the cab temperature reaches the set temperature, automatically shut down after the delay of 30s; when the cab temperature is lower than the set temperature, the delay is 30s)
 - F9: Temperature switch (°F / °C) FA: KM / Kft switch; FB: screen brightness (0~ 100);
 - FC: Bluetooth Mesh Network Settings (YAH-A2422) Fd: TP room temperature value (switch / controller) This function is used with YAH-A2422 (the default ON is YAH-A2422 Temperature control value) FE: carbon monoxide alarm switch; (C-ON / OF)
- | ◆Press [knob] to modify, and press [knob] again to confirm the current data modification;
- | ◆Rotate [knob] adjust the setting item, after all the adjustment is successful, press [Settings] 3s to save all the basic Settings;
- | Engineering mode: Press and hold simultaneously [Setup] [] 3s Enter the engineering mode, display the current project in the upper right corner, the interface displays the specific data under the project, and rotate the [knob] to adjust the project check
- | Look at the data:
 - En00: heater motherboard version number [scroll display]; En01: fault code; En02: shell temperature; En03: power supply voltage;
 - En04: heater running gear; En05: cab temperature; En06: altitude;
 - En07: Pump oil mode; En08: Remote control matching; En09: Bluetooth Match; En10: ventilation enabled [five-wire version];
- | Remote control matching: enter the En08 interface, the interface shows "rte" long press [knob] 3s to start matching, the screen shows "P-1" on the remote control you think can be set to "adjust" add"
 - Button, the screen shows "P-2" represents "adjustment plus" matching successfully P-2, P-3, P-4, P-4 matching successfully, automatically exit the project mode and return to the operation interface, the specific key definition is as follows:
 - P-1: adjust plus button; P-2: adjust minus button; P-3: mode switch button; P-4: switch button;
 - ◆Clear last remote matching data: Power on Btime press [] 7 The s interface displays "CLR" to clear, and successfully when the interface displays "SUC".
 - ◆Query the name of the local Bluetooth: press [Settings] [knob] for 3s, the screen displays bLE, the 6-bit character name (0-F) on the upper side of the Bluetooth version, "NULL" on the upper side of the non-Bluetooth version, and press any button again to exit.
- | Bluetooth matching:: open the mobile phone mini program, click to search the device, then the switch presses and hold [Settings] [knob] to display the Bluetooth name of the machine, and then the phone finds the last four Bluetooth names with the same as the switch, click matching, and return to the running interface after successful matching
- | Pump oil mode: Long press the [lower left corner pump oil] button in the first shutdown state until the screen flashes -P- and return to the initial interface (five-line version), and the countdown ends since
- | Move to exit or press [] End the oil pump, and turn it off;
 - Press the [lower left corner pump oil] button in the first power and shutdown state until the pump oil icon on the screen lights up, start the pump oil, and the pump oil automatically shut down or press [] End the pump oil and shut down (three-line version);
- | Ventilation mode: enter the En10 interface, the interface shows "vEN" long press [knob] for 3s to enter, then the fan icon flashes, and automatically return to the main interface after 20s (this function is only equipped with five-line version and only limited to fixed main board);
- | Fill the tank: after starting, long press the [pump oil] key for 7 seconds to fill the interface tank display icon; Intelligent CO controller connection: 1. Bluetooth Mesh network Settings: After successful connection, automatic update between switch and controller synchronization time: YAH-A2422-CO detector detects more than 300 PPM
 - (By default, the controller alarms every (10 seconds interval) for over 500 PPM for 60 seconds, the controller control switch off, and the switch continuously alarm flashing E11 fault code; Step 1: the switch on, into the basic setting mode: adjust to Fc: intelligent CO controller connection; adjust the rotary knob to n (network open state);
 - Step 2: Start YAH-A2422, press the switch key for 3 seconds to enter the basic setting mode; adjust the setting item to F05: Bluetooth Mesh network setting, and press YAH-A2422 [key] interface to display FFFF-> 0000 clear the network address, matching address code refresh, press the switch key to return to the running interface, the interface shows the Bluetooth icon from flash (return interface icon to wait for 20 seconds) to always bright, the signal of successful connection; after successful connection, second startup automatic connection, if not successful, perform the above steps again, (note the above steps again, press [set key] to clear the network address reconnection: YAH-A2422 will be re-boot self-test, self-test boot need to manually enter the F05 interface again press [key] to refresh match);
- | Disconnect: at this time YAH-A2422 adjust setting item to F05: Bluetooth Mesh network setting, then long press YAH-A2422 setting key interface to display 0000-> CLR clear network address (YAH-A2422 heavy after clearing New self-test); "When multiple controllers or switches are used at the same time and need to switch target equipment" long press [set key] to enter the basic setting, adjust to Fc: intelligent CO controller connection; press [knob] to switch to the subdevice address code; long press [switch key] to clear the address code, switch self-test, manual boot after self-test;
- | Note: If the second connection state is wrong or the data is not updated synchronously; (the data is updated for about 30 seconds); please disconnect the operation method according to the disconnect; reconnect in the steps; room temperature value (switch / controller): when the Bluetooth Mesh network connection is successful: (take the detection temperature of YAH-A2422 by default) room temperature value can switch detection temperature, or YAH-
- | Monitoring temperature of A2422; the switching method is as follows:
 - Step 1: Adjust the switch into the basic setting mode to: Fd: tP room temperature value, press the [knob] for setting, ON using YAH-A2422 detection temperature, OF using the switch itself detection temperature;
 - Step 2: When YAH-A2422 temperature is used, the CO icon of YAH-A2422 is always on, flashes when YAH-A2422 is off, and the Bluetooth network is off; the switch automatically switches to the self

Check the temperature to control the switch; Bluetooth network connection;

IFE: Carbon monoxide alarm switch: long press the setting button to enter the basic setting interface; adjust to FE: C-ON / OF; press the knob to set; rotate the knob to modify; adjust to ON-open long press the setting button

Save and return to the operation interface, when the opening of the carbon monoxide detector concentration exceeds the standard; switch broadcast E11 fault code;

Fault display: when the heater fails, the display area flashes the fault code, and the fault type is shown in the following table;

trouble light	fault type	troubleshooting
E-01	Startup failure	Check the fuel tank whether empty and add it or Check the fuel pipe whether blocked
E-02	Lack of fuel	Check the fuel tank whether empty and add it
E-03	Supply Voltage Overrun	check the battery output voltage whether between in 9V and 16V for the 12V Heater and between 18V and 30V for 24V Heater
E-04	Outlet sensor falut	Check the sensor plugin whether disconnected if not replace it with a new one
E-05	Inlet sensor falut	replace the ECU
E-06	pulse pump falut	Check the pump plugin whether disconnected if not replace it with a new one
E-07	Fan fault	Check the Fan plugin whether disconnected if not replace it with a new one
E-08	Ignition unit fault	Check the Ignition plugin whether disconnected if not Replace it with a new one
E-09	Overheating	Check the air inlet and outlet whether block
E-10	Overheat sensor fault	Check the sensor plugin whether disconnected if not replace it with a new one
E-11	CO concentration exceeds the standard	When the fault is broadcast, it is recommended to immediately stay away/ventilate to reduce the concentration, and check whether there is a false alarm caused by direct gas blowing in the detector range and sensor failure after troubleshooting. (when using YAH-A2422, use it in accordance with the specifications of the instruction manual to avoid false alarms caused by improper installation and use).



Wechat (WeChat) small program



The Apple (IOS) APP
APP Store Search for airHeaterBle



Android (Android) AP

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

The devices has been evaluated to meet general RF exposure requirement , the device can be used in portable exposure condition without restriction