DEI-758LCNE (Modbus) Operation Manual
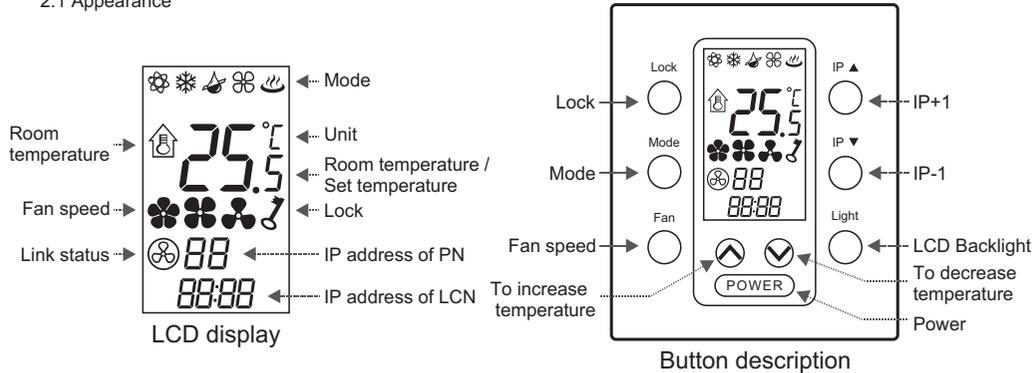
Version 01

5INSLL00244

1. CAUTIONS：

1.1 Read the wiring diagram and operation manual before installation; Any damages caused by improper installation is beyond our warranty.

1.2 Please do not instal the power boardl at the humid environment to advoid signal interference.

1.3 Use the communication wire UL2464 / 24AWG or 26 AWG 3C twin-wire braid shield.

2. SPECIFICATION：

2.1 Appearance

LCD display

Button description

2.2 Operation temperature：0℃～50℃，＜ 90% RH (Non - Condensing)

2.3 Storage temperature：-10℃～60℃，＜ 90%RH (Non - Condensing)

2.4 Power supply：Power supplied by power board - DC12V.

2.5 Temperature control range：From 0℃ to 50℃ in 0.5℃ steps.

2.6 Communication wire：2 cords (with poles) ＋ isolation wire (Ground), UL2464 / 24AWG braid shield wire.

2.7 Communication format：Modbus

2.8 Maximum communication distance：1200M

2.9 Maximum control units：63 power units at maximum.

2.10 DIP1 function selection switch x 1 (DIP1 - 1 auto air conditioning option)

2.11 Alarm output：buzzer

3. FUNCTION DESCRIPTION：

3.1 Buttons description

3.1.1 (POWER) Power：To switch on or off the power.

3.1.2 ⊗ Increasing：To increase the setpoint (0.5℃).

3.1.3 ⊗ Decreasing：To decrease the setpoint (0.5℃).

3.1.4 IP▲, IP▼ IP address selection：To select the IP, or enter the group control.

3.1.5 Mode：To setup the mode of fan coil unit in single or in group.

3.1.6 Fan speed：To setup the fan speed of single fan coil unit or the mode of fan coil unit in group.

3.1.7 Light：To switch ON / OFF the LCD backlight.

3.1.8 Lock：To lock or unlock the panel.

3.2 Function

3.2.1 IP address of PN：It displays the PN location which is under the monitoring, from 01 to 63; displays AL when under the group control. When this icon is not illuminated, it means there is abnormal communication between LCN and PN.

3.2.2 Power ：To Power ON / OFF the PN which is under monitoring or all PNs (group control).

3.2.3 Temperature setting：

3.2.3.1 While setting temperature, the display shows the setpoint (the display backs to show the room temperature if the up / down buttons have not been pressed within 5 seconds).In normal situation, the display shows the temperature of return air of the PN which is under monitoring and the icon of room temperature shows on.

3.2.3.2 Temperature setting range：10℃～35℃ (± 0.5℃)

3.2.3.3 Whenever set temperature is adjusted (by LCN or PC), the display shows the current setpoint for 5 seconds.

3.2.4 Mode contro：

3.2.4.1 To setup the mode status of the single PN or all PNs (Auto, cool, heat, and humidity).

3.2.4.2 When switching to auto air conditioning, cooling or heating mode, fan speed will be switched to AUTO.

3.2.4.3 When switching to fan or dehumidifying mode, fan speed will be switched to LOW.

3.2.4.4 Auto air conditioning is only available when DIP1 - 1 ON.

3.2.5 Fan speed control：To setup the 4 fan speeds of the single or all PNs (Auto, High, Medium and low). Auto fan speed is not available under fan and dehumidifying mode.

3.2.6 Lock function：

3.2.6.1 Press Lock ◯ within 3 seconds, the display shows the icon of lock. Under the this mode, the LC panel is locked; besides power, backlight and timer, other buttons are not available to operate. To unlock the panel, press once this buttom.

3.2.6.2 Press Lock ◯ for 3 seconds, the display shows lock of LC. Under this mode, LCN panel is locked, besides the buttons of power, IP address, backlight and lock are still available. Press again and hold it for 3 seconds to unlock LCN panel. When LC in group control, only the power button is available.

3.2.6.3 Once setup lock from PC, the display shows lock of LP. Under this mode, LCN panel is locked, besides the buttons of power, IP address and backlight are still available. Unlock button of LCN is unavailable, only can be unlocked by PC. When LC in group control, only the power button is available.

3.2.7 Auto air conditioning while power off：When under this mode, the display shows the room temperature and it blinks.

3.3 Group control function (IP address of PN shows AL)

3.3.1 To have group control, press the IP address button and choose "AL".

3.3.2 Under the AL status, press power ON / OFF to control the power of group.

3.3.2.1 shows Pr：OF or Pr：On (blinks),it means the power of group has not been setup.

3.3.2.2 shows Pr：On, it means the power of all PNs has been switched ON.

3.3.2.3 shows Pr：OF, it means the power of all PNs has been switched OFF.

3.3.2.4 The conditions to power ON in group, must follow the below instruction：

a. Power off by group control.

b. Under the power off status, if the power is unsupplied, it must unsupply for at least 5 seconds before resupplying the power.

3.3.3 Under AL status，Press Mode ◯ to control the mode of all PNs.

3.3.3.1 While the icon of mode is blinking, it means the group control mode has not been setup.

3.3.3.2 While the icon of mode is illuminated constantly, it means the group control mode has been setup.

3.3.4 Under AL status,press Fan ◯ ,to control the fan speed of all PNs.

3.3.4.1 While the icon of fan speed is blinking, it means the fan speed of group control has not been setup.

3.3.4.2 While the icon of fan speedis illuminated constantly, it means the fan speed of group control has been setup.

3.3.5 Under AL status,press Lock ◯ , to setup lock of all PNs.

3.3.5.1 While the icon of lock is blinking, it means group control lock has not been setup.

3.3.5.2 While the icon of lock is illuminated constantly, it means group control lock has been setup.

3.3.5.3 While the icon of lock is not illuminated, it means group control is unlocked.

3.3.6 Under AL status,press ⊗ and ⊗ to setup the setpoint of all PNs.

3.3.7 After setup, if there is no any button pressed, the system will send the current parameters to PNs and operates after the setting delay time.

3.4 Link display

3.4.1 Proceeding link status check in 20 seconds after power on.

3.4.2 If the IP has connected succesfully, IP address is able to select, even if any connection failure.

3.4.3 To remove the display of IP connection interruption, press mode button to remove link status.

3.5 Main controller IP setup：While power is supplied, the display shows latest version, then the icon of main controller IP is blinking. At this moment, press IP▲ or IP▼ to select the IP, setting range is from 01 to 99.If DEI-758LCN is not be used with DEI-950, the network control by PC, the main controller IP may not be set.

4. FAILURE ELIMINATION：

4.1 E1：Sensor failure.

4.2 EE：Memory failure.

4.3 EC：Abnormal communication of power board (no any linking situation of power board).

4.4 FA：Exceeding temperature alarm.

4.5 PN location is still able to be selected, even if there is any alarm occured (except EC). No any button pressed in 5 seconds, it comes to display the status of the alarmed PN.

4.6 If there are multi - PN in alarm simultaneously, display shows each alarmed PN in turns for 5 seconds.

4.7 LCD backlight is illuminated constantly when under failure alarm.

4.8 When in failure alarm, buzzer ON for 0.8 seconds and OFF for another 0.8 seconds.