DEI-758SCNE Operational Manual

Version 02

5INSLL20503

1. CAUTION:

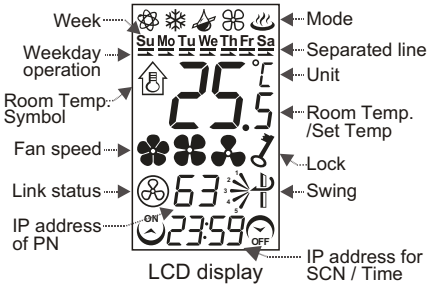
1.1 Please install according to the wiring diagram to avoid incorrect wiring, any improper wiring or installation is beyond our warranty.

1.2 Please do not install it in humid environment to ensure good signal communication.

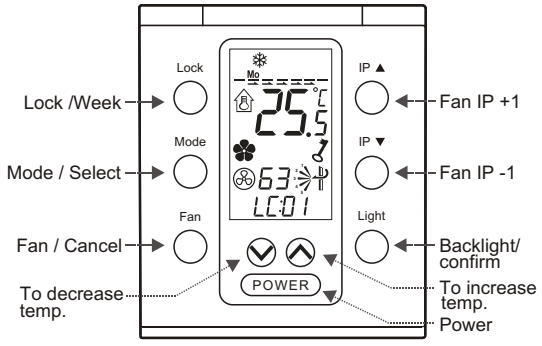
1.3 Please use the communication wire UL2464/24AWG or 26AWG 3C communication isolated wire.

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：DC 12V
(If communication wire is over 100 meters, an extra power DC12V is required)

2.5 Temperature display range：0℃～50℃ in 0.5℃ steps.

2.6 Communication wire：2 wires(pdes) + isolated wire (connect GND), UL2464 / 24AWG with isolated wires.

2.7 Communication protocol：Modbus-RTU (RS485)

2.8 Max communication distance1200M

2.9 Max control qty.：Can control 63 sets of Pns：*DEI-758PN/758FPN/100A/100D/201NAHU/ 201NVAV*

2.10 Alarm contact：buzzer

2.11 District control：Divide FCUs into 4 districts control (group control/ schedule). *DEI-201N AHU/ VAV* can't be divided into district control.

3. FUNCTION DESCRIPTION :

3.1 Buttons description：

3.1.1 POWER：To switch on / off the power, set district control/ schedule of power status.

3.1.2 ⏶：Set temp./ max limit for heating/ min limit for cooling/ room temp. calibration (0.5℃) or into max limit for heating setting.

3.1.3 ⏷：Set temp./ max limit for heating/ min limit for cooling/ room temp. calibration (-0.5℃) or into min limit for cooling setting.

3.1.4 IP▲ & IP▼：To select the fan IP, or into group control status.

3.1.5 Mode：To setup the mode of fan coil unit (in single or group), or daily schedule setting.

3.1.6 Fan：To setup the fan speed (in single or group), or into room temp. calibration setting.

3.1.7 Light：To switch on/ off the LCD backlight or into parameter setting.

3.1.8 Lock：To lock or unlock the panel.

3.2 Function：

3.2.1 IP address of PN：It displays the monitored and controlled PNs' address from 01~63; displays AL or A1~ A4 for the district control; displays AC for controlling all of PNs. When icon is not illuminated, it means there is abnormal communication between SCN and PN.

3.2.2 Power：Control the selected PN or all PNs or district PNs (schedule), power on / off status.

3.2.3 Temperature setting：

3.2.3.1 When setting temperature, the panel shows the setpoint (it back to room temperature if the up / down buttons have not been pressed within 5 seconds). In normal situation, the display shows the room temperature of the monitored PN (icon of room temperature shows on)

3.2.3.2 Temperature setting range：
heating: 0℃~max limit of heating, cooling: min limit of cooling ~35℃ (0.5℃ in step)

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

3.2.4 Mode control：

3.2.4.1 To setup the mode status of the single PN or group PNs (Auto, cooling, fan, he ating and humidity).

3.2.4.2 When changing to auto air conditioning, cooling or heating mode, fan speed will be changed to Auto.

3.2.4.3 When changing to fan or dehumidifying mode, fan speed will be changed to Low.

3.2.5 Fan speed control：To setup 4 fan speeds for the single or district (all districts) PNs (Auto, High, Medium and Low). No auto speed under the fan and dehumidifying mode.

3.2.6 Lock function：

3.2.6.1 Press Lock button, the display will show the lock icon and the sub controller will be locked. To unlock the panel, press Lock button again.

3.2.6.2 Press Lock button within 3 seconds, the display shows LC. Under this mode, the main controller is locked; besides Power, IP selection, Light and Lock, other buttons are not available to operate. Press lock again within 3 seconds, to unlock the panel. Under group control, only setting power status.

3.2.6.3 Once setup lock from PC, the display shows LP. Under this mode, the main controller is locked; besides Power, IP selection, Light and Lock, other buttons are not available to operate, only can be unlocked by PC operation. In Group control, only the power button is available.

3.2.7 Max limit heating setting：(***DEI-758FPN / 201NAHU / 201NVAV***)
When ***DEI-758FPN/201NAHU / 201NVAV*** in OFF status, press ⏶ for 3 seconds into max limit heating setting (show HS) and adjust by ⏶ ⏷.
Setting range：0℃~ 35℃. Under setting status, press IP ▲ to into AL-HS setting.
After completing setting, press Light to save or press Fan to cancel.

3.2.8 Min limit cooling setting：(***DEI-758FPN / 201NAHU / 201NVAV***)
When ***DEI-758FPN/ 201NAHU / 201NVAV*** in OFF status, press ⊘ for 3 seconds to into min limit cooling setting (show CS) and adjust by⊘.
Setting range：0℃～35℃; Under setting status, press IP ▲ into AL-CS setting.
After complete setting, press Light to confirm or press Fan to cancel.

3.2.9 Temperature calibration setting：(***DEI-758FPN/201NAHU/201NVAV***)
OFF status in single fan, press Fan for 3 seconds into temperature calibration (Ot) mode, and press⊘ to adjust value, setting range -8℃～8℃. Press Light to confirm or press Fan to cancel after setting.

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

3.3 Group control function：press IP▲ for 3 seconds to into or exist group status (fan address shows all district (AL) or district A1~A4.

3.3.1 Press IP▲ to select district, can select AL for all districts, or A1~A4 district (only fans in district accept command).

3.3.2 Under group control, press Power to set all districts (district) power status.

3.3.2.1 Show Pr：On, is meaning set all districts (district) start operating.

3.3.2.2 Show Pr：OF, is meaning set all districts (district) stop operating.

3.3.2.3 The condition of group controller switch on power：
Group commend switch off controller power in advance.

3.3.3 Under the group control, press Mode to set all districts (district) group mode status.

3.3.4 Under the group control, press Fan to set all districts (district) group fan speed status.

3.3.5 Under the group control, press Lock to set all districts (district) group lock status.

3.3.6 Under the group control, press ⊘ to set all districts (district) group set temp.

3.3.7 Under the group control, the separated line is blinking is meaning Group Control setting is waiting confirm; press Light to confirm or IP▲ to cancel setting.

3.3.8 Under the AL-HS, press⊘ to set all districts Max limit heating setting.

3.3.9 Under the AL-CS, press⊘ to set all districts Min limit cooling setting.

3.4 Main control parameter setting: under normal mode, press Light for 3 seconds to into / exist main control parameter setting; in the parameter, press Mode to select below parameter.

3.4.1 IP (IP setting)：press IP▲ to select main controller IP=01~99, press Light to confirm, press Fan to cancel.

3.4.2 br (Baud rate setting)：press IP▲ to select baud rate 4800~1152, press Light to confirm, press Fan to cancel.

3.4.3 Pr (Parity bite setting)：press IP▲ to select n81/O81, press Light to confirm setting, press Fan to cancel.

3.4.4 AC (All group control)：press IP▲ to select AC：ON/OF, press Light to confirm setting, press Fan to cancel.

3.4.5 rtc (Alarm clock setting)：setting ***DEI-758SCN*** time (retain timing in 72 hours after power off)

3.4.5.1 Lock：set weekday (Sun~Sat).

3.4.5.2 IP▲：set hour (0~23).

3.4.5.3 IP▼：set min (0~59).

3.4.5 4 Light：confirm setting / Fan：cancel setting.

3.4.6 Ar：district setting, press IP▲ to select IP1~63, press IP▼ to set district (0A~4A), press Light to confirm, press Fan to cancel.

3.4.7 Sch.dE：weekday schedule, press IP▲ to select weekday operation schedule, press Light to confirm setting, press Fan to cancel.

3.4.8 Sch.SP01：schedule point select, press IP▲ to select district and schedule points: 01~08,11~16,21~26,31~36,41~46, press Light to into setting.

3.4.8.1 Lock：weekday select (can't change when parameter blinking).

3.4.8.2 IP▲：Schedule hour setting (0~23).

3.4.8.3 IP▼：Schedule minute setting (0~59).

3.4.8.4 Mode：Schedule points and operation setting (schedule time is no display when no schedule).

3.4.8.5 ⊘：Schedule setting (0~35.0)

3.4.8.6 POWER：Sechedule power (On/Off)

3.4.8.7 Light：Confirm setting.

3.4.8.8 Fan：Cancel setting / return to 3.4.8 schedule point selection.

3.5 All group control mode (AC=ON)：

3.5.1 Under this mode, can't into district mode.

3.5.2 Under this mode, can't set the Max limit heating setting(HS)/ Min limit cooling setting (CS)/ Temp. calibration(OT).

3.5.3 Under this mode, fan address show AC. When change fan, show fan IP 2 seconds.

3.5.4 Under this mode, operated model/ fan speed/ setpoint/ lock/ power are the controlled command for all fan.

3.6 Link display

3.6.1 Product model and connection check in 20 seconds after power on.

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

3.6.3 To remove the display of IP connection interruption, press POWER button to remove link status.

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 occurred (except EC). No any button pressed in 5 seconds, it comes to display the status of 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.