The Sollatek **FFD** Remote Display

User Instructions

Important: This manual contains important safety instructions.
Keep this manual handy for reference.

• Before using this product please read all instructions carefully.
• Keep these instructions for future reference.
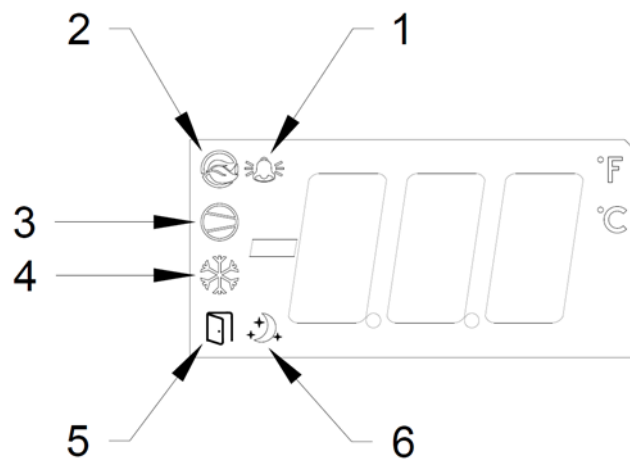• All specifications are subject to change without prior notice.

Remote Display FFD

FFD Features

- 4 Multifunctional Buttons
- 3 x 22mm digits
- °F/°C indication
- Compressor ON indication
- ECO mode indication
- SUPERFROST mode indication
- NIGHT mode indication
- Door Open indication
- Master Alarm indication

Display Indicators

1. Master Alarm
2. ECO Mode Activation
3. Compressor On
4. Super Frost Mode Activation
5. Door Open
6. Night Mode

Display Operation

Day Mode

- Temperature Reading of the Regulator Sensor.

Night Mode

- Temperature Reading of the Regulator Sensor.
- NIGHT indication lit (stable).

Eco Mode

- Temperature Reading of the Regulator Sensor.
- ECO indicator lit (stable).

Superfrost Mode

- Temperature Reading of the Regulator Sensor.
- SUPERFORST indicator lit (stable).

Door Open

- Temperature Reading of the Regulator Sensor.
- Door Open indicator lit (stable).
- If door remains open for more than **d1** in Mins , it is considered as Door Open Alarm Event:
  - Main display toggles between the Regulator Sensor and "dOP".
  - Door Open indicator stays lit (stable).
- If door remains open for longer than (**d1+d2**) in Mins, it is considered as Door Malfunctioning Event:
  - Main display cycles between the Regulation Sensor, "dOP" (Door Open) and "dSF" (Door Switch Failure).
  - Door Open indicator stays lit (stable).
  - Master Alarm indication lit (stable).

Compressor On

- Compressor ON indicator lit during "ON" cycles (stable). This indicator is On whenever the compressor is On.

Buttons Functionality

1. POWER ON/OFF – SET button

- SET function is triggered by momentarily press.
- Power ON/OFF function is triggered by continuous press of 3 Secs.

On button momentarily press during any mode:

- Display shows : PAS
  - If ON/OFF-SET button pressed again → Resume Normal operation.
  - If 10 Secs has elapsed with no button press → Resume Normal Operation.
- Controller expects Passcode entering
  - Passcode consists of a number of digits entered as subsequent key presses. This is hard-coded in the display firmware by the OEM manufacturer: For example, a valid passcode could be:
    - 1 press of lower right button.
    - 1 press of upper left button.
    - 1 press of lower right button.
    - 1 press of upper right button.
    - 1 press of lower left button.
- If PASSCODE not valid
  - Controller reverts to previous mode; display reverts to previous mode.
- If PASSCODE entered correctly
  - The first menu item will be displayed "tPS".
  - Upper right and bottom right buttons are used for moving between individual parameters
    - To change the value of a parameter
      - SET button activates Parameter and show its value
      - Right UPPER and BOTTOM buttons are used to manipulate parameter value. The software will react based on the newly updated value but it will not save it unless the SET button is pressed. This allows testing the unit's behavior upon changing some of the parameters values without needing to save the values. If the menu item is exited without being saved, then the original value will be reverted.
      - SET Button is pressed to register new value.
    - To EXIT Parameter Listing and go back to normal display mode:
      - Press upper left button. The unit will go back to the normal display mode from any menu levels (ESC function).
      - No button press for 30 Secs. If menu item value changes and no button is pressed afterwards for 30 Secs, then the unit goes back to normal display mode without saving the previously altered value (ESC function).

On Button continuous press (more than 3 sec)

- Display shows: OFF (flashing)
    - If ON/OFF-SET button pressed → enter OFF Mode:
        - Compressor STOPS
        - Lights ON (operational by the Lights button)
        - Fans OFF
        - HEATER (if present) OFF
        - Display shows solid "OFF" during OFF Mode
        - All buttons apart from ON/OFF and LIGHT buttons are not functional when in OFF Mode
    - No key press for 3 Secs → Exit OFF Mode
        - Resume Normal Operation

To EXIT OFF mode: Press ON/OFF button momentarily.

2. *LIGHTS BUTTON OPERATION*

- Lights Switching OFF: Press LIGHTS button momentarily
- Lights Switching ON : Press LIGHTS button momentarily

3. *ECO BUTTON (momentarily press function)*

IMPORTANT: if ECO mode activated through keypress, door opening is NOT deactivating it.

If Controller in NORMAL or SUPERFROST mode

- Display shows "ECO" flashing 5 times; then reverts to Temperature indication
- ECO indicator lit (stable)
- Controller switches to ECO mode settings
- dEI/dEO and nEI/nEO will be used as cut-in/cut-out values for DAY and NIGHT modes respectively

(will stay on if ON, or remain OFF at night mode)If Controller in ECO mode

- Display shows "NOR" flashing 5 times; then reverts to Temperature indication
- ECO indicator switches OFF
- Controller switches to NORMAL mode settings
- dnI/dnO and nnI/nnO will be used as cut-in/cut-out values for DAY and NIGHT modes respectively

If Controller in WINTER MODE (HEATER operation)

- Display shows "ECO" flashing 5 times; then reverts to Temperature indication
- ECO indicator lit (stable)
- Controller switches to ECO or back to NORMAL mode settings
- CONTOLLER CONTINUES WINTER MODE OPERATION

This functionality is applicable for ALL operation modes (NORMAL, ECO and SUPERFORST)

If ECO button is pressed for more than 3 Secs, then this will toggle the unit between the DAY mode and NIGHT mode:

If controller is in DAY mode:

- Controller switches to NIGHT mode operation. This is to force a NIGHT Mode, and the unit should learn this, and therefore next week it should go to NIGHT Mode at the same time.

If controller is in NIGHT mode

- Controller switches to DAY mode operation. This is to force a DAY Mode, and the unit should learn this, and therefore next week it should go to DAY Mode at the same time.

5. *SUPERFROST BUTTON (momentarily press function)*

If Controller in NORMAL or ECO mode

- Display shows "SFR" flashing 5 times; then reverts to Temperature indication
- SUPERFROST indicator lit (stable)
- Controller switches to SUPERFROST mode settings
- dSI/dSO and nSI/nSO will be used as cut-in/cut-out values for DAY and NIGHT modes respectively

If Controller in SUPERFROST mode

- Display shows "NOR" flashing 5 times; then reverts to Temperature indication
- SUPERFROST indicators switches OFF
- Controller switches to NORMAL mode settings
- dnI/dnO and nnI/nnO will be used as cut-in/cut-out values for DAY and NIGHT modes respectively

If Controller in WINTER MODE (HEATER operation)

- Display shows "SFR" flashing 3 times; then reverts to Temperature indication
- SUPPERFROST indicator lit (stable)
- Controller switches to SUPERFORST or bacl to NORMAL mode settings
- CONTROLLER CONTINUES WINTER MODE OPERATION

6. *LEARNING ALGORITHM RESET*

Learning Algorithm reset operation is needed in order to reset the learning algorithm timers . It does NOT change any of the registered parameter values.

- Menu items "LrS" is used to reset the Learning Algorithm matrix.
- Go to the menu list, navigate to item "LrS" and preset SET button, the displayed value will be "no".
- Change to "yes", and then press "SET" to confirm.

7. PARAMETERS RESET

- Menu items "PrS" is used to reset the parameters settings back to the default (factory-set) value.
- Go to the menu list, navigate to item "PrS" and preset SET button, the displayed value will be "no".
- Change to "yes", and then press "SET" to confirm.

Display Indicators

Long with °C/°F indicator, there are 6 more indicators to indicate various operational status of the controller:

Indicator	Description
Compressor ON	ON when compressor is ON
ECO	ON when unit is in ECO mode
SUPERFORST	ON when unit is in SUPERFROST mode (Note1)
NIGHT	ON when unit is in NIGHT mode
Door Open	ON when door is open
Master Alarm	ON when any main alarm exist (Note2)

Note1: For coke configuration, the SUPERFROST button does not exist and the indication indicates the evaporator fan operation.

Note2: For coke configuration, the ECO button is only used for long press use, for entering in the night mode operation

Note3: Refer to the rest of the manual for further information about this indication and which alarms trigger this indicator

Display Alarms

Different alarms indications will be shown on the display when various faults are detected by the unit:

Alarm	Displayed Code
Probe1 Faulty	PF1
Probe2 Faulty	PF2
Probe3 Faulty	PF3
Probe4 Faulty	PF4
Door Switch Alarm	dOP
Door Switch Failure/Malfunction	dSF
Refrigeration Failure	rFF
Condenser Over Temperature	COt
Condenser Under Temperature	CUt
Ambient Over Temperature	AOt
Ambient Under Temperature	AUt

The display will cycle between the Regulation Temperature and any of the currently existing alarms. For example, if the current temperature is 3.3, and both probe#1 & 2 are faulty, then the display will cycle between the following codes: "3.3", "P1" and "P2".

Sollatek

Intelligent Controls

RoHS

ISO9001: 2008 accredited company

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