

USER MANUAL FOR AC SEQUENCER PANEL

INSTALLATION:

The AC Sequencer Panel used to equalize the runtime of Air Conditioners. Up to 4 ACs can be controlled by the panel. Connect power (230 Volt AC supply) to the panel. The panel can be mounted on the wall. Connect the 3 - Wire RTD (PT100) to the terminal CH1, CH2 and GND. Connect RED wire of RTD to the CH1 and other two wires to the CH2 and GND respectively. Fix the RTD sensor in the centre of the room where the temperature to be monitored. Four potential free outputs, named AC - 1, AC - 2, AC - 3 and AC - 4, are provided on the right side of panel to connect the ACs.

OPERATION:

The runtime of all ACs connected to the panel, are equalized and the room temperature is measured and displayed by this panel. All the parameters that are related to the operation of the panel are programmable.

The parameters are listed below.

- Total AC (tAC)
- Active AC (AAC)
- Set Point (SPt)
- Time To Read (ttr)
- Runtime Equalization (rtE)

The short form of parameter name, which is mentioned in the braces are displayed. Find the short definition of each parameter below.

<i>Total AC:</i>	Refers the total number of ACs to be connected with this panel. This value should be greater than the value of Active AC. The range of Total AC is from 2 to 4.
<i>Active AC:</i>	Refers the number of ACs to be turned ON for the period of preconfigured time (The time entered in the parameter, named Runtime Equalization - rtE). This value should be less than the value of Total AC. The range of Active AC is from 1 to 3.
<i>Set Point:</i>	Refers the set point of the temperature. When the actual room temperature exceeds the set point, successive ACs will be turned ON in order to maintain the room temperature. If the room temperature is not maintained below the set point even after switching ON the all programmed ACs, A buzzer will be activated to warn the user.
<i>Time To Read:</i>	Refers the time interval to compare the actual room temperature and set point. The range of Time To Read is from 1 minute to 15 minutes.
<i>Runtime Equalization:</i>	Refers the ON time duration of ACs. In the edit screen, first two digits are hours and second two digits are minutes, the two values are separated by a dot symbol. Only one value can be edited at a time. Press Mute key to navigate through Hours and Minutes. For example, if value set as 01 in hour parameter and 30 in minute parameter, then the ON duration of ACs will be one and half an hour. The range of Runtime Equalization is from 00 hours and 30 minutes to 23 hours and 59 minutes.

For example, if Total AC is 4 and Active AC is 2, then AC – 1 & AC – 2 will be turned ON, AC – 3 & AC – 4 will be turned OFF for the period programmed in the rtE. When the rtE duration exhausts, AC – 1 & AC – 2 will be turned OFF, AC – 3 & AC – 4 will be turned ON. This operation continues endlessly. For every 'Time To Read' time period, the actual room temperature and set point will be compared and if the actual room temperature is greater than set point, successive ACs will be turned ON. If the actual room temperature falls below the set point, for every 'Time To Read' time period, successive ACs will be turned OFF.

When the RTD (PT100) is not connected or the RTD fails, the error message will be displayed and internal buzzer will be activated. The MUTE Key serves two purposes.

1. Mute the internal buzzer.
2. In the rtE edit screen, to navigate Hours and Minutes.

To set parameter:

- Press 'ENTER' key to see the parameters.
- Press 'UP' or 'DOWN' key to navigate the parameters.
- If the desired parameter is displayed, press enter key to see the value of that parameter.
- Press 'UP' key to increase the value of that parameter.
- Press 'DOWN' key to decrease the value of that parameter.
- If the desired value is reached, press 'ENTER' key to save that value and press 'EXIT' key.
To abort any change / to exit without saving, press 'EXIT' key.