Basic Guide to Understanding the E2 Controller

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Basic E2 Guide

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Getting Started

- The controller should be blank when first walking up to it.
- Pressing the 🏡 (Home Button) will light the screen up and show the Home screen.
- The 🏡 (Home Button) will always take you to the Home Screen no matter where you are in the menus.

Logging In

- Pressing the Log in/Log out key in the bottom right corner of the keyboard will bring up the Log in screen.
- Using the key board enter the Username and the press the key (Enter button). Then type the Password and hit the key (Enter button).
- User Name: REFRIG
- Password: R404A
- When logged in a icon will appear in the top left corner on the screen on the header.
- Pressing the key again after being logged in will log the user out
Alarms

- The upper Right corner of the Home screen will show if there are active alrams
- Alarm States as per the E2 Manual
  - ALARM - A high-priority warning, usually signifying a condition that requires attention.
  - NOTICE - A low-priority message, usually signifying a condition or a system change that requires no attention or may require attention in the future.
  - FAIL - A failure is a special message that signifies a failure in an E2 system, an application, or in an input or output device controlled by an application (such as a sensor or fan)

- To veiw the full list of alrams (Alarm Button). This will bring up the Alram Menu.
  - This menu will show the time, date and what is in alarm.
  - The state show if it is still in alarm, returned to normal or was forced to normal
To view more detail on the alarm press the **F4** button.

- **Return-To-Normal** – The condition that created the alarm, noticed or failure has returned to normal on its own. The alarm state will show “N-“in front of it.

- **Reset (Forced)-To-Normal** – The alarm condition was reset. This occurs when using the **F2** button. The alarm state will show “R-“before it.

### Alarm Acknowledge and Resetting

- When Acknowledging or Resetting the alarms there will be 3 options
  - (A) Acknowledge/Reset selected advisory
  - (B) Acknowledge/Reset All advisories in Alarm Log
  - (C) Cancel operation

- Acknowledging Alarms
  - Acknowledging alarms will stay in the alarm log but are silenced and will not realarm until the Alarm is reset.
  - To Acknowledge an alarm press the **F1** button while on the alarm screen

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### Alarms State

<table>
<thead>
<tr>
<th>Advisory Type</th>
<th>Condition Still Exists</th>
<th>Condition Returned To Normal</th>
<th>Condition Reset to Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarms</td>
<td>ALARM</td>
<td>N-ALM</td>
<td>R-ALM</td>
</tr>
<tr>
<td>Notices</td>
<td>NOTICE</td>
<td>N-NTC</td>
<td>R-NTC</td>
</tr>
<tr>
<td>Failures</td>
<td>FAIL</td>
<td>N-FL</td>
<td>R-FL</td>
</tr>
</tbody>
</table>

(Image from E2 Manual)
Resetting Alarms

- Resetting an Alarm will force the alarm back to normal.
  - If the alarm is still within the alarm conditions it will begin to count down to alarm again. This is based on the alarm delay.

- To Reset an Alarm, press the F2 button on the alarm screen.

**Viewing Suction Screen**

- From any Screen press the Menu button.
- Use the Arrow keys on the keyboard to scroll down to (5. Configured Applications) and press the Enter key or press the 5 key.
- Press the Enter key or the 1 key to enter the Suction Screen.
- The Suction Screen shows:
  - Suction Pressure and Temp
  - Suction Set point
  - Discharge Pressure
  - Compressor Status
  - Variable Compressor Status
Viewing Condenser Screen

- From any Screen press the Menu button
- Use the Arrow keys on the keyboard to scroll down to (5. Configured Applications) and press the Enter key or press the 5 key
- Use the down arrow once and hit Enter or press the 2 key (2. Condenser)
- The Condenser Screen Shows
  - Discharge Pressure
  - Discharge Set Point
  - Fan Status
  - Split Status
  - Out Side Air temp
  - Liquid Level
Viewing Circuits

- From any Screen press the button. Use the Arrow keys on the keyboard to scroll down to (3.Circuits) and press .
- Another way to get to the Circuits is from the Main Screen Press F3 .
- This Screen will show a List of the circuits along with the status of the circuit.
- For more detailed information on the circuit use the arrow keys to highlight the circuit and then press the key.
- This screen will show:
  - Average case temp
  - All the sensors temperatures in the circuit
  - The EEPR valve Status
  - Fan Status
  - Refrigeration Status
  - Defrost Status
  - It will also show the highest temperature that accured during defrost
Manual Defrosting

In some cases it is necessary to check the defrost operation.

- In the Circuit menu highlight the circuit name and press the F2 key. This will bring up the Actions Menu.
- Use the arrow keys to scroll down to Manual Defrost or press the number 7 key to bring up the Manual Defrost menu.
- Press the F4 key to bring up the Bypass options.
- Use the arrow keys to scroll through the options. Also typing the corresponding number will jump to that action.
  - No Action: Normal state
  - Defrost: Normal Defrost. The defrost will terminate base of the controller settings or termination time.
  - Emergency Defrost: Will run the full length of the defrost time. Will not terminate on temperature.
  - Clean: Will Disable both refrigeration and defrost so the case can be cleaned
  - End Manual Mode: Will end any defrost or clean cycle that was started manually.
Logging/Graphing

- To view logs/graphs of a input or output highlight the desired input or output and press \(\text{Enter}\). This will bring up the Actions Menu.
- To view a graph of the input/output press \(\text{Enter}\) or the \(\text{F1}\) key.
  - Pressing the \(\text{F5}\) key will zoom in to the latest section of the graph.
  - Use the Arrow keys to scroll through the time frame on the graph.
  - Pressing the \(\text{F4}\) key will zoom out.
- To view a Log of the input/output use the arrow keys to scroll down to Log and press \(\text{Enter}\) or the \(\text{F2}\) key.
  - Use the Arrow keys to scroll up and down the time frame.
  - Use Page up and Page down keys to move thought the pages of time frames.
  - Pressing \(\text{F1}\) will bring the cursor to the top of the table.
  - Pressing \(\text{F2}\) will bring the Cursor to the bottom of the table.
Viewing Network Summary

- From any Screen press the button.
- Use the Arrow keys on the keyboard to scroll down to (7. System Configuration) and press the key or press the key.
- Use the Arrow keys on the keyboard to scroll down to (7. Network Setup) and press the key or press the key.
- Press or the key to enter the Network Summary screen.
- The Network Summary screen shows all the connected boards to the controller. This also shows if the boards are online or offline.