



PrimeLINE Driver Guide to Simple Operational Checks



The display module and keypad are mounted on the control box door and serve to provide user access and readouts of controller functions and temperature control settings. The functions are accessed by keypad selections and viewed on the display module.

Display Module and Setpoint

The display module consists of seven LED indicator lights and two 5-digit displays.



LED Indicator Lights:

- COOL - White/Blue LED: Energized when the refrigerant compressor is energized.
- HEAT - Orange LED: Energized to indicate heater operation in heat mode, defrost mode or dehumidification.
- DEFROST - Orange LED: Energized when the unit is in defrost mode (HEAT LED on).
- IN RANGE - Green LED: Energized when the controlling temperature probe is within the specified tolerance of setpoint.
- ALARM - Red LED: Energized when a critical alarm occurs.
- SUPPLY - Yellow LED: Energized when the supply air temperature probe is the controlling probe in perishable range.
- RETURN - Yellow LED: Energized when the return air temperature probe is the controlling probe in frozen range.

Displays and Setpoint:

- The left display will show the setpoint that has been set.
- The right display will show the actual control temperature.
- To adjust the setpoint, use the keypad up/down Arrow keys until a required setpoint is displayed in the left display and press ENTER to confirm.

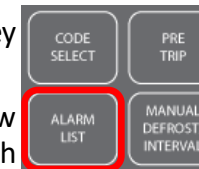
Alarms

The red ALARM light will illuminate for critical alarm codes that occur. If a detectable problem exists, its alarm code will be alternately displayed with the setpoint in the left display. The user should scroll through the alarm list to determine which alarms are active (AA) or inactive (IA).

All alarms must be diagnosed and corrected before they go inactive and can be cleared.

Viewing the Alarm List:

1. Press the ALARM LIST key on the keypad.
2. Use the up/down Arrow keys to scroll through active or inactive alarms.
3. Press the Arrow keys until "CLEAR" is displayed and press ENTER.

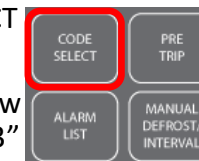


Dehumidification

Dehumidification reduces the humidity levels inside the container. The dehumidification setpoint range is between 50% and 95%. Dehumidification is activated when a humidity value is set at Cd33.

Activating Dehumidification:

1. Press the CODE SELECT key on the keypad.
2. Press the up/down Arrow keys to bring up "Cd 33" on the display, then press the ENTER key.
3. Use the Arrow keys to select a setpoint for dehumidification and press ENTER to fix the setpoint.



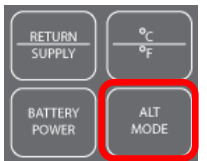
DataCORDER Alarms

"DataCORDER" is integrated into the controller. Its function is to record events and temperature. If an alarm occurs related to the DataCORDER (dC), it can be seen on the display. All dC alarms must be diagnosed and corrected before they go inactive and can be cleared.

Note: ML5 dC alarms are embedded within the controller alarms.

Viewing the dC Alarm List (ML3):

1. Press the ALT MODE key on the keypad.
2. Press the up/down Arrow keys to bring up "dC AL" on the display, then press the ENTER key.
3. Use the Arrow keys to scroll through the active or inactive alarms.
4. Press the Arrow keys until "CLEAR" is displayed and press ENTER.



Fresh Air Vent Position

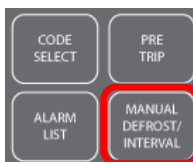
The function of the upper makeup air vent is to provide ventilation for commodities that require fresh air circulation. A manually operated venting system is located at the upper left access panel. The vent must be closed for all controlled atmosphere cargo. Air exchange depends on static pressure differential, which will vary depending on the container and how the container is loaded. To adjust the percentage of air flow, loosen the wing nut and rotate the disc until the desired percentage of air flow matches with the arrow. Tighten the wing nut.



Defrost Mode

Defrost is automatic by timer and can be set to Auto timer or to defrost every 3, 6, 9, 12 or 24 hours of compressor run time. Defrost will also start if required due to evaporator restriction caused by ice build up. A defrost can only start when the Defrost Temperature Sensor (DTS) senses a temperature less than 10°C. A manual override of defrost can be selected by the keypad.

Press and hold the MANUAL DEFROST key for five seconds to initiate manual defrost.



EverFRESH / XtendFRESH

If a unit has the option for controlled atmosphere, then O2 and CO2 levels can be adjusted inside the container.



WARNING

Potential hazardous atmosphere and low oxygen levels may exist inside the container in this mode of operation.

EverFRESH Setpoints:

- CO2: range is 1 - 19%, default of 5%.
- O2: range is 2 - 17%, default of 10%.

XtendFRESH Setpoints:

- CO2: range is 0 - 19%, default of 5%.
- O2: range is 3 - 21%, default of 10%.

EverFRESH / XtendFRESH Setpoints

Setting O2 and CO2 Setpoints:

1. Press the CODE SELECT key on the keypad.
2. For EverFRESH: Press the up/down Arrow keys until “Cd 71” is displayed, then press the ENTER key. For XtendFRESH: Press the up/down Arrow keys until “Cd 43” is displayed, then press the ENTER key.
3. Press the Arrow keys until “FrEsh” is in the right display, then press ENTER.
4. “CO2SP” appears in the left display with its setpoint value blinking in the right display. Press ENTER to keep this value. Or, use the Arrow keys to change the setpoint and press ENTER to confirm.
5. “O2 SP” appears in the left display with its setpoint blinking in the right display. Press ENTER to keep this value. Or, use the Arrow keys to change the setpoint and press ENTER to confirm.



EverFRESH CO2 Injection Option On/Off:

1. Press the CODE SELECT key on the keypad.
2. Press the Arrow keys until “Cd 76” is displayed, then press ENTER.
3. Use the Arrow keys to toggle between “On” or “OFF” in the right display and press ENTER to turn CO2 injection On/Off.

Viewing EverFRESH / XtendFRESH Values:

Code select Cd44 allows the user to view the following values:

- CO2 setpoint, CO2 percentage
- O2 setpoint, O2 percentage, O2 voltage

Pharma Mode

Pharma mode keeps cargoes at temperature setpoints of either 5°C or 20°C while maintaining lower humidity levels. The maximum allowable deviation in the transportation temperature for the 5°C and 20°C pharma cargoes are 2 to 8°C and 15 to 25°C respectively, and hence nominal temperature is used for their cargo setpoint.

When Pharma mode is On, the left display will alternate between setpoint and “PhArM” to indicate Pharma Mode is active. The right display will show the return temperature reading. When the keypad RETURN /SUPPLY key is pressed, it will show RTS or RRS.

Pharma Mode On/Off:

1. Press the CODE SELECT key on the keypad.
2. Press the up/down Arrow keys to bring up “Cd 75” on the display and press the ENTER key.
3. Use the Arrow keys to toggle between “On” or “OFF” in the right display and press ENTER to confirm.
4. If turning Pharma Mode On, use the Arrow keys to toggle between setpoints 5 or 20 in the right display and press ENTER to confirm.



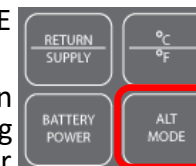
Cold Treatment Temperature Sensor

A special type of recording is used for USDA cold treatment purposes. Cold treatment recording requires three remote temperature probes to be placed at prescribed locations in the cargo. Provision is made to connect these probes to the DataCORDER via receptacles

Cold Treatment Temperature Sensor

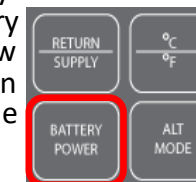
Viewing Sensor Readings:

1. Press the ALT MODE key on the keypad.
2. Press the up/down Arrow keys to bring up “dC3”, “dC4”, or “dC5” and press the ENTER key to see the current readings of the three USDA probes (1, 2, 3).



Battery Power

The controller may be fitted with standard replaceable batteries or a rechargeable battery pack, setup in the standard location on the controller or in a secure location near the controller. If fitted and the unit is not connected to AC power supply, press and hold down the BATTERY POWER key. This initiates battery backup mode to allow setpoint and function code selection to be seen in the display.



If on start up, alarm 53 (ML3) or 253 (ML5) occurs, allow a unit fitted with rechargeable batteries to operate for up to 24 hours to charge the batteries sufficiently. Once fully charged, the alarm will deactivate. If the alarm fails to deactivate, replace the battery. Note a failed battery does not impact the temperature control of the unit.

ContainerLINK™ App:



Contact Service Rep:

