



TECHLINE

AN EXCHANGE OF TECHNICAL INFORMATION

Number: TL009 - 2026

Subject: PrCO₂ Controlled Atmosphere Setup

Released: September 2, 2026

ML5 software versions 6330 (PrimeLINE) added a new option for EverFRESH controlled atmosphere (Cd 71) that prioritizes Carbon dioxide (CO₂) control over Oxygen (O₂) control. This option is called "CO₂ Priority" (PrCO₂) and is recommended for commodities that benefit more from high CO₂ than low O₂, such as blueberries.

To activate PrCO₂:

1. Press the CODE SELECT key on the keypad.
2. Press the Arrow keys until "Cd 71" is displayed and press the ENTER key.
3. Press the Arrow keys until "PrCO₂" is in the right display, and press ENTER.
4. "CO₂SP" is now in the left display with the setpoint value flashing in the right display. Arrow to the desired CO₂ setpoint and press ENTER to accept.
5. "O₂ SP" is now in the left display with the setpoint value flashing in the right display. Arrow to the desired O₂ setpoint and press ENTER to accept.

When PrCO₂ mode is active, the display alternates between the message "PrCO₂ ACTiV" and the default display of setpoint with supply/return temperature.



To view current CO₂ and O₂ setpoints and values, navigate to function code Cd 44 and press ENTER to scroll through the different values (CO₂SP, CO₂, O₂SP, O₂, O₂v, EF Pt).

After setting the temperature and atmosphere setpoints (for example from the Controlled Atmosphere Handbook, -0.5°C to 0.5°C, 12-20% CO₂ and 2-5% O₂ for blueberries) and loading the cargo, the atmosphere of the container can be adjusted by injecting Nitrogen (N₂) and CO₂ following the steps below:

1. Using an external source of N₂, inject until the unit's O₂ level is 2-3% above setpoint.
2. Then, using an external source of CO₂, inject until the unit's CO₂ level is within 1% of the CO₂ setpoint.
 - a. Do not exceed 2% CO₂ setpoint to avoid potential damage to cargo.
3. Wait 1 hour to ensure the gases have mixed. If necessary, add N₂ or CO₂ to reach setpoint.
4. After levels have stabilized, verify PrCO₂ setpoints before releasing unit.

PrCO₂ is targeted for OptimaLINE in Q1 2027.

If you have any questions, please contact your local Field Service Manager.