Cabinet Operation

Startup

- The compressor is ready to operate when the unit is purchased. All you need to do is plug in the cooler.

- Excessive tampering with the control could lead to service difficulties. If replacing the temperature control is ever needed, be sure to order the replacement from your TRUE dealer or recommended service agent.

- Good air flow inside your TRUE unit is critical. Take care to prevent product from pressing against the sides or back wall and coming within 4" (101.6 mm) of the evaporator housing. Refrigerated air off the evaporator coil must circulate throughout the cabinet for even product temperatures.

NOTE: If the unit is disconnected or shut off, wait 5 minutes before restarting.

RECOMMENDATION – Before loading product, run your TRUE unit empty for 24 hours to verify proper operation. Remember, our factory warranty **DOES NOT** cover product loss!

Temperature Control & Light Switch Location

The light symbol shows the approximate location of the light switch.

Light Switch on Glass Door Models
Inside the top ceiling.

Electronic Temperature Control
On the front of grill.

FOR MORE INFORMATION

For more information regarding a cabinet's temperature control adjustment or general sequence of operation, please see our **Temperature Control Adjustment—Sequence of Operation Manual** in our resource library at **https://www.truemfg.com/Service-Manuals/Sequence-of-Operation** or follow the QR code.

Cabinet Operation (cont.)

Sequence of Operation

When the cabinet is plugged in…

1. Interior lights will illuminate on glass door models (see previous page for light switch location).
2. An electronic control with digital display will illuminate.
3. The display will alternate between **hSt** and **dLY**, indicating a delay. This delay allows the cabinet to reach temperature without a false alarm. For more information, see "Health Safety Timer: Operation" on page 14.
   - Total Freezer Delay: 105 minutes
   - Total Refrigerator Delay: 60 minutes
4. There may be a short delay before the compressor and/or evaporator fan(s) start. This delay may be determined by time or by temperature, which could be the result of an initial defrost event that will last at least 6 minutes.
   a. At the start of every compressor cycle, the condenser fan(s) will reverse for blow dirt off the condenser coil.
5. The temperature control cycles the compressor and evaporator fan(s) on and off together as determined by the set-point and differential temperatures.
   a. The set-point is the **adjustable** pre-programmed temperature designed to match the average cabinet temperature.
   b. The differential temperatures are the **non-adjustable** pre-programmed temperatures used to determine when the compressor shuts off and turns on.
6. The temperature control/thermostat senses either an evaporator coil temperature or air temperature, **NOT product temperature**.
7. An analog thermometer, digital thermometer, or electronic control display may reflect the refrigeration cycle swings of up and down temperatures, NOT product temperature. **The most accurate method to determine a cabinet's operation is to verify the product temperature.**
8. Every cabinet requires a defrost event to ensure the evaporator coil remains clear of frost and ice buildup. The electronic control is preprogrammed to initiate defrost by interval.
9. An electronic control with a digital display will show **dEF** during defrost.
   NOTE: The electronic control with a digital display will alternate between **hST** and **dLY** for at least 30 minutes after defrost has terminated.

   a. A refrigerator will use the evaporator fans to clear the coil during defrost.
   b. A freezer will use heaters to clear the evaporator coil during defrost.
   NOTE: The evaporator coil heater and drain tube heater are only energized during defrost. Defrost is terminated when a specific evaporator coil temperature is reached or by a time duration.

Cabinet Operation (cont.)

Health Safety Timer (HST)

The health safety timer (HST) mechanically locks the cabinet when the electronic control detects the cabinet temperature has been above a preset temperature for 30 minutes. This prevents the sale of unsafe food product.

Battery Backup

The cabinet has a battery backup that ensures the electronic control can still monitor the cabinet temperature and actuate the lock during a power outage. This battery backup provides power to the control for a minimum of 2 hours. For more information, see "Battery Backup" on page 11.

NOTE: The battery backup system ships with the power switch toggled to **OFF**. Turn the battery backup system on during installation. In the event of power failure, the control display will show **PF**.

NOTE: The cabinet will lose cooling capabilities when the power is lost.

NOTE: If "Lock on power fail" is enabled, the door will lock immediately when the power is lost.

Startup

During the initial startup, the electronic control display alternates between **hSt** and **dLY** to indicate a delay. In addition to the timer delay, the control automatically enables a loading delay. These delays allow the cabinet to reach temperature without a false alarm.

- Total Freezer Delay: 105 minutes
- Total Refrigerator Delay: 60 minutes

NOTE: If additional time or a delay event is needed, see "Enable the Product Loading & Servicing Delay" on page 18.

Operation

The HST cabinet's operation is determined by the electronic control, which constantly monitors the cabinet temperature. If the control detects the preprogrammed temperature parameters (see below) for 30 minutes, it triggers the HST alarm.

- Freezer: 0°F (-17.78°C)
- Refrigerator: 41°F (5°C)

When the HST alarm triggers, the door mechanically locks and the control provides an audio/visual alarm. The control emits a series of beeps and the display alternately shows **Loc** and **hLA**.

To open the door during an active HST alarm, unlock the cabinet with the provided key. The HST Alarm will remain active. For information on returning the door to its pre-alarm state, see "Clear the Health Safety Alarm or Product Loading & Servicing Delay" on page 19.

NOTE: To order a replacement key, please contact our parts department at 800-424-8783 or PartsInquiries@TrueMfg.com.

NOTE: In case of emergency, the door may be opened from the inside with the emergency release pull cord. See "Emergency Release Pull Cord Operation" on page 3.

If the door switch determines the door has remained open for 5 minutes, the control provides an audio/visual alarm. The control emits a series of beeps and the display flashes **do**. For more information, see "Silence the Door Open Alarm" on page 19.

Silence the HST or door open alarm by pressing any button on the control. The alarm will remain displayed and the door will remain locked until its condition has been corrected or the alarm has been cleared via password entry.

HST ACTION / RESULT	
User Action	**Result**
Unlock door with key	Door unlocks, alarm still active
Press any button on the control	Silences alarm, alarm still active
Clear the alarm through the control (see page 19)	Door returns to pre-alarm state; alarm no longer active

![True logo]

Electronic Temperature Control

LAE CONTROL LEGEND

❄ Compressor Running

🌀 Evaporator Fan Running

❄🌓 Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

i ↕ Info/Set Point

▲M Manual Activation/Up Arrow

🌓▼ Manual Defrost/Down Arrow

✕⏻ Stand-By/Cancel

DISPLAY CODES

Display	Definition	Display	Definition
hSt	Health Safety Timer password entry	dEF	Defrost in progress
dLc	Door Lock / Unlock password entry	oFF	Controller in stand-by
Loc	Keypad state lock	do	Door open alarm
t1	Instant probe 1 temperature	hi	Cabinet high temperature alarm
t2	Instant probe 2 temperature	Lo	Cabinet low temperature alarm
t3	Instant probe 3 temperature	E1	Probe t1 failure
min	Minute of the real time clock	E2	Probe t2 failure
hrS	Hours of the real time clock	E3	Probe t3 failure
Stt	Start time for timed actions	hSt/dLY	Delays checking of Health Safety Timer conditions
Edt	End time for timed actions	hSt/tSt	Testing the Health Safety Lock
thi	Maximum probe 3 temperature recorded	hLA/Loc	Health Safety Alarm / lockout active
tLo	Minimum probe 3 temperature recorded	PF	Power failure

Electronic Temperature Control (cont.)

LAE CONTROL LEGEND

❄ Compressor Running

🌀 Evaporator Fan Running

❄ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

i ⬍ Info/Set Point

▲M Manual Activation/Up Arrow

❄▼ Manual Defrost/Down Arrow

✕⏻ Stand-By/Cancel

Lock / Unlock the Control

1. Press info **i ⬍** to show **hSt**.

2. Press the down arrow **❄▼** until the display shows **Loc**.

3. Press and hold info to show the current lock status.
   DO NOT RELEASE THE BUTTON!

YES = Locked   **no** = Unlocked

4. Press the arrows to change the lock setting.

5. Release all buttons and wait for the control to display the cabinet temperature.

Turn Off / On the Control

Turning off the control will deactivate all electronic components connected to the control. The lights will remain powered.

CAUTION – Turning off the control will not shut off power to the cabinet. Be sure to remove power to the cabinet prior to servicing.

Turn Off
Press and hold cancel **✕⏻** until the display shows **oFF**.

Turn On
Press and hold cancel until the display shows **on**.

Electronic Temperature Control (cont.)

LAE CONTROL LEGEND

❄ Compressor Running

🌀 Evaporator Fan Running

❄️ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

i ⬍ Info/Set Point

▲M Manual Activation/ Up Arrow

❄️▼ Manual Defrost/ Down Arrow

✕⏻ Stand-By/ Cancel

Lock / Unlock the Door – Button Combo

The door can be locked and unlocked by pressing a combination of buttons. The cabinet ships with the button combination lock enabled. To disable this feature, please contact Technical Service.

1. Press and hold info **i ⬍** and the up arrow **▲M** until the door locks / unlocks (about 5 seconds).

2. Release all buttons.

Lock / Unlock the Door – Password Entry

The door can be locked and unlocked by entering a password.

NOTE: The default password is 01. To customize this password, please contact Technical Service.

1. Press info **i ⬍** to show **hSt**.

2. Press the up arrow **▲M** until the display shows **dLc**.

3. Press and hold info until the display shows **00**. **DO NOT RELEASE THE BUTTON!**

4. While holding info, press the up arrow until the display shows **01** or your custom password.

5. Release all buttons and wait for the control to display the current cabinet temperature.

Electronic Temperature Control (cont.)

LAE CONTROL LEGEND

❄ Compressor Running

🌀 Evaporator Fan Running

❄◗ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

i ⬍ Info/Set Point

▲ M Manual Activation/ Up Arrow

❄◗ ▼ Manual Defrost/ Down Arrow

✕ ⏻ Stand-By/ Cancel

Enable the Product Loading & Servicing Delay

The Product Loading & Servicing Delay extends the 30-minute window before the health safety timer activates. This feature prevents the door from locking when loading or servicing the cabinet. It is enabled automatically upon powering the unit and following defrost events.

- Total Freezer Delay: 105 minutes
- Total Refrigerator Delay: 60 minutes

The Product Loading & Servicing Delay can also be manually initiated with the instructions below.

1. Press info **i ⬍** to show **hSt**.

2. Press and hold info until the display shows **00**. **DO NOT RELEASE THE BUTTON!**

3. While holding info, press the up arrow until the display shows **01** or your custom password.

4. Release all buttons and wait for the control display to alternate between **hSt** and **dLY**.

Test the Health Safety Lock

The Health Safety Lock locks the cabinet door when the electronic control detects the cabinet temperature has been above a preset temperature for 30 minutes.

1. Press info **i ⬍** to show **hSt**.

2. Press and hold info until the display shows **00**. **DO NOT RELEASE THE BUTTON!**

3. While holding info, press the up arrow until the display shows **23**.

4. Release all buttons. If operational, the Health Safety Lock will activate.

5. Clear the Health Safety Alarm. See "Clear the Health Safety Alarm or Product Loading & Servicing Delay".

Electronic Temperature Control (cont.)

LAE CONTROL LEGEND

❄ Compressor Running

✿ Evaporator Fan Running

❄❄ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

[i ↕] Info/Set Point

[▲M] Manual Activation/Up Arrow

[❄▼] Manual Defrost/Down Arrow

[✕⏻] Stand-By/Cancel

Clear the Health Safety Alarm or Product Loading & Servicing Delay

NOTE: Clearing the Health Safety Alarm through the display will return the cabinet to its state prior to the alarm activation (locked or unlocked).

1. Press info [i ↕] to show **hSt**.

2. Press and hold info until the display shows **00**.
   DO NOT RELEASE THE BUTTON!

3. While holding info, press the up arrow until the display shows **01** or your custom password.

4. Release all buttons and wait for the control to display the current cabinet temperature.

Silence the Door Open Alarm

If the door remains open for 5 minutes, the control emits a series of beeps and the display flashes **do**.

To silence the alarm, shut the door or press **ANY** button on the control. The display will continue to flash **do** until the door closes.

Electronic Temperature Control (cont.)

❄ Compressor Running

🌀 Evaporator Fan Running

❄ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

[i ↕] Info/Set Point

[▲M] Manual Activation/ Up Arrow

[❄▼] Manual Defrost/ Down Arrow

[✕⏻] Stand-By/ Cancel

Change the Set Point

Changing the set point adjusts the cabinet temperature to keep optimal product temperature.

NOTE: The set point value is NOT the cabinet holding temperature. To maintain proper operation within a safe temperature range and prevent an alarm activation, it is recommended to only change the value by a few degrees.

1. Press and hold info [i ↕] until the display shows the current set point. **DO NOT RELEASE THE BUTTON!**

2. While holding info, press the up [▲M] or down [❄▼] arrows to adjust the setting.

3. Release all buttons and wait for the control to display the current cabinet temperature.

Initiate Manual Defrost

A manual defrost clears accumulated frost and ice from the evaporator coil. The defrost will only terminate when a specific preset temperature or duration has been met.

Press Manual Defrost [❄▼] until the display shows **deF**.

Electronic Temperature Control (cont.)

❄ Compressor Running

🌀 Evaporator Fan Running

❄🌀 Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

i ↕ Info/Set Point

▲M Manual Activation/ Up Arrow

❄▼ Manual Defrost/ Down Arrow

✕⏻ Stand-By/ Cancel

Change Defrost Intervals

The defrost interval is the duration between defrost cycles,

NOTE: The defrost interval **can only be changed** if the defrost mode parameter **dFm** is set for **tim** or **Fro**.

1. Press and hold both info **i ↕** and cancel **✕⏻** until the display shows **hSt**.

2. Press the up arrow **▲M** until the display shows **dFt**.

3. Press and hold info until the display shows the current defrost interval time. **DO NOT RELEASE THE BUTTON!**

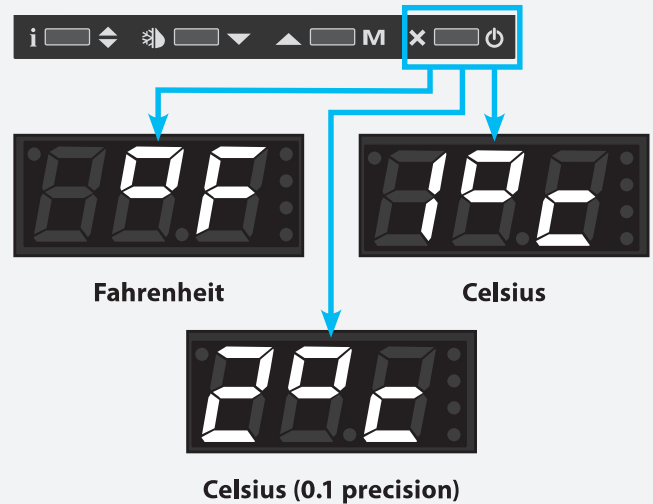4. While holding info, the up or down **❄▼** arrows to adjust the setting.

5. Release all buttons and wait for the control to display the current cabinet temperature.

Change Display Readout

The display can show the temperature in either Fahrenheit or Celsius.

Press cancel **✕⏻** to cycle through the display readout options.

- **°F**: Fahrenheit (no decimal)
- **1°C**: Celsius (0.1 precision)
- **2°C**: Celsius (no decimal)

Fahrenheit

Celsius

Celsius (0.1 precision)

Electronic Temperature Control (cont.)

L A E   C O N T R O L   L E G E N D

❄ Compressor Running

🌀 Evaporator Fan Running

◗ Cabinet in Defrost

II° Activation of 2nd Parameter Set

🔔 Alarm

[i ⇕] Info/Set Point

[▲M] Manual Activation/ Up Arrow

[◗▼] Manual Defrost/ Down Arrow

[✕⏻] Stand-By/ Cancel

Display Probe Temperatures

The display shows the temperature probe readings in different locations of the cabinet.

- **t1**: Thermostat
- **t2**: Defrost
- **t3**: Display Temperature

1. Press info [i ⇕] to show **t1**.

2. Press and hold info to show the current **t1** probe temperature.

3. Release info to show **t2**.

4. Press and hold info to show the current **t2** probe temperature.

5. Release info [i ⇕] to show **t3**.

6. Press and hold info to show the current **t3** probe temperature.

   NOTE: If the t3 probe is not activated, **t3** will not appear.

7. Release all buttons and wait for the control to display the current cabinet temperature.