

SIMPLE TO DEFROST

Initiate Manual Defrost

Defrost cycles are usually initiated automatically based on time and demand. The operator can also initiate a manual defrost if necessary. Manual defrost is only available if the unit is running and the evaporator coil temperature is less than or equal to 7.2C (45F) and either one of the following conditions are met:

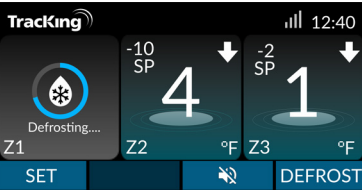
- Unit/zone is running
 - Unit is permitted to run (i.e. no shutdown alarms), unit Zone is NULL.
- Note:** Other features such as door switch settings may not allow manual defrost under certain conditions.
- If the defrost parameters are met — HMI will display “DEFROST INITIATED” followed by “DEFROST COMPLETED”
 - The zone box temperature will be replaced by the defrost icon.
 - A progress ring around the defrost icon will indicate the remaining defrost range on the zone standard screen.
 - The zone box controlling sensor text will be replaced with “DEFROSTING”.

To Initiate the Manual Defrost:

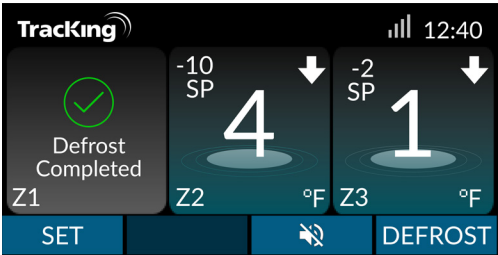
- Click the DEFROST button from the Standard Display.



2. Use the Up/Down arrow buttons to choose the zone you want to defrost.
Example: If Zone 1 is selected, HMI will display “Zone 1 - Defrost Initiated”. On the Standard Display, a Defrosting Symbol will appear under the selected zone while defrost is in progress.



3. When the defrost cycle is finished, “Defrost Completed” will be displayed on the Standard Display under the selected zone.



SIMPLE TO VIEW AND DETERMINE

Clearing the Alarms

Alarms display as an alert icon on the main screen when generated. The icon is red if the alarm requires action to clear before the unit can run again. The icon is yellow if it will clear itself and resume the operation. The alarm can be cleared using the CLEAR button. After clearing the alarm condition, press and release the SELECT key to remove existing ALARM codes. The standard display will appear once the ALARM codes have been cleared.

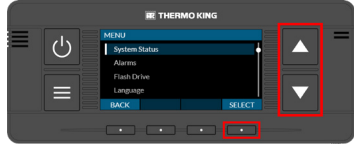
Note: It is very important to clear alarms to keep the unit operating.

In order to view and clear alarms:

1. Select “MENU” button.



2. Use the Up/Down buttons to select the Alarms menu. Press the SELECT button to view the information or modify unit operation.



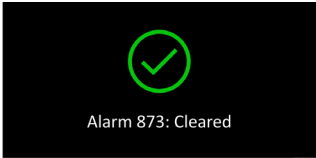
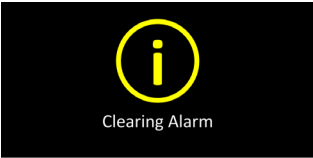
- Code represents by Alarm Code
- Name represents by Fault Alarm Information
- FMI represents by FMI Reference Number
- Alarm Icon corresponding to the Alarm severity

You should now see the alarm description. This alarm code can be noted in driver’s log. It is recommended to clear immediately so the unit can continue operating. If the alarm keeps generating try shutting down system, first TK HMI power down, then key on truck, then TRU switch and finally truck 24V switch off. Then power on with truck 24V switch, TRU 24V switch, HMI on, then key on.

3. Select the active alarm to press to CLEAR button. When successful, the following screens will appear.



4. When successful, the following screens will appear. The alarm icon should no longer be present on the HMI home screen.



Unsuccessful Alarm Clearing

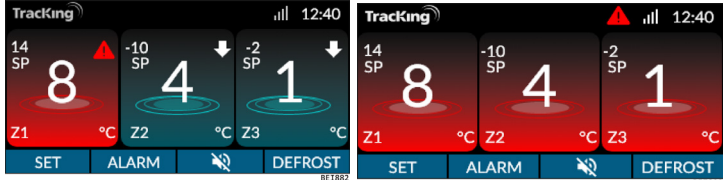
Some alarms conditions may not be clearable in the event the alarm condition remains present. In this case, the following screen will appear.



SIMPLE TO VIEW AND DETERMINE

Alarms

The Alarms submenu allows the user to display any existing alarms and clear most alarms.
Note: Some alarms are clearable in Main Menu Plus user level only.
When an alarm is present, the alarm icon will appear on the home screen.



The severity of the alarm is indicated by the icon’s color: Shutdown (Red), Check (Amber), and Log (black/white) alarms.
Press the ALARMS button (this option is only present when an alarm is active).
Use the Up/Down buttons to browse through the alarms. Press SELECT for more information on the alarm.



This screen provides information on the active alarm:



Navigate to “Recommended Action” and press SELECT:



The recommended action screen contains information on how to deal with the alarm. Press BACK to return to the previous screen.

There are several options for viewing the Alarm Codes list pertaining to your particular unit:

- By visiting our www.europe.thermoking.com/tools for a link to the Thermo King Alarm Codes App.
- By downloading our Truck, Trailer, Cryo and DAS Alarm Codes Booklet for all Alarm Codes. This can be downloaded from the following link: www.emea-user-manuals.thermoking.com/ or at the QR code below.
- A printed copy can also be obtained from your Thermo King Dealer Representative.



www.emea-user-manuals.thermoking.com

For more information or tutorial sessions, please contact your Thermo King Service Manager



E-1200e and E-1600e



Driver’s Guide to Simple Operation

If no action is taken, the ACTIVE ALARM icon will appear in the setpoint window.

AR•BG•CS•DA•DE•EL•ES•FR•HU•IT•LA•ES•NL•PL•PT•RO•RU•TR•SV



www.emea-user-manuals.thermoking.com

HMI OVERVIEW

HMI Control Panel



Risk of Injury!
Do not operate the HMI Control Panel until you are completely familiar with its function.

The Human/Machine Interface (HMI) Control Panel is used to operate the Evolution unit and display information. The HMI Control Panel consists of a display, four buttons with dedicated functions, and four multi-function soft keys. The display is capable of showing both text and graphics.



HMI Details

1. Power On/Off Button
2. Menu Button
3. Up/Down Button
4. Display Screen
5. Soft Key 1 - "Set" - Used for accessing configuration of zone setpoint and zone ON/OFF status
6. Soft Key 2 - Alarm Notifications
7. Soft Key 3 - Enabling/disabling "low noise mode"
8. Soft Key 4 - Zone Defrost Selection (manual zone defrost requests)

SIMPLE TO START/STOP

Turning the unit On/Off

1. Press the power button located on the left side of the HMI Controller.
2. Wait for the system to complete its start-up sequence.
3. Select Language: When prompted, choose your preferred language from the display options.



4. After selecting the language, the standard display screen will appear. The Evolution unit is now ready to start. The temperature setpoint or other system changes can now be configured if required.

To turn the HMI Controller Off, press the power button from any screen. The screens below will appear, with an option to cancel the shutdown request.



Once the shutdown sequence is completed, the HMI will turn off and the unit will shutdown. The compressor may run longer for a soft shut down of the compressor.

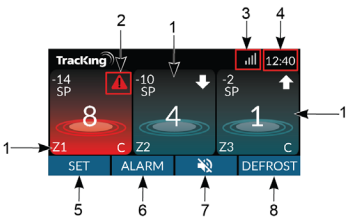
HMI OVERVIEW

Standard Display

The Standard Display is the "base" from which all other display operations are launched. The Standard Display appears after the unit start-up sequence is completed. The Standard Display shows the zone box temperature(s) and zone setpoint(s). The Standard Display is shown when the unit is operating normally. All menus are accessed from the Standard Display.



- The zone box temperature displayed is the return air temperature.
 - If zone has single evaporator, return air temperature is displayed.
 - If zone has dual evaporator, the average of both return air temperature measurements is displayed.
 - If zone has dual evaporator and one evaporator is performing defrost, the HMI will display return air temperature of other evaporator (not in defrost).
- The zone setpoint(s) can be changed using the soft key "SET".
- "Low Noise Mode" can be enabled/disabled using the soft key "Audio Icon".
- Manual zone defrost can be requested using the soft key "DEFROST".



Standard Display

1. Z1/Z2/Z3 — Displays Zone 1/ Zone 2 and Zone 3 temperature defined by user depending on the configuration. Critical Alarm is active.
2. TrackKing Signal — Displays telematics signal strength.
3. Time — Displays current time.
4. Set — Used for accessing configuration of zone setpoint and zone ON/OFF status.
5. ALARM — Shows alarm notifications.
6. Low Noise Mode — enabled/disabled using the soft key audio icon.
7. DEFROST — Manual zone defrost can be requested using the soft key DEFROST.

Display Icons

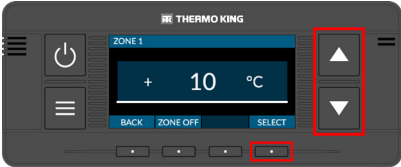
Display symbols or icons are used to present additional unit information.

	When this icon is present in the status bar, it indicates an Information (log) Alarm.
	When this icon is present in the status bar, it indicates a Check Alarm is active. Option will be available for quick selection using the soft key "ALARM" button.
	When this icon is present in the status bar, it indicates a Critical Alarm is active. When the icon is present in status bar, it indicates a SYSTEM level critical alarm (affecting all zones). When the icon is present in top right corner of zone box temperature, it indicates ZONE specific critical alarm active. Option will be available for quick selection using the soft key "ALARM" button.
	This icon indicates the unit is (whisper pro) "noise constraint" active.
	When this icon is present in status bar, it indicates a USB flash drive is connected to the system. This icon indicates a USB flash drive is connected to the Controller when illuminated. When not illuminated, the USB flash drive is not connected/detected.
	This icon indicates the TK telematics GSM signal strength. 5 illuminated bars indicates full signal strength. No illuminated bars indicates no signal strength (or not known).

SIMPLE TO SET

Changing the Setpoint

1. From the standard display, press the soft key 1 under the SET. It will take you to the setpoint screen.
2. Press Up/Down arrow key to choose the zone and press the button under SELECT to change the setpoint.
3. Use Up/Down buttons to adjust the desired temperature and press SELECT.



Note: The zone can also be switched OFF at this point.

4. Press the BACK button to return to the home screen. The confirmation of the change will appear before returning to the home screen.



SIMPLE TO SET

Low Noise Mode

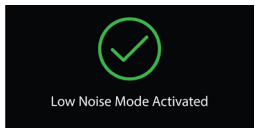
Activating Low Noise Mode

1. From the standard display, press the Low Noise Mode button using soft key 3 (located below the audio icon).
2. The screen will display "Low Noise Mode Activated," and the audio icon will appear on the standard display.



Deactivating Low Noise Mode

1. To deactivate Low Noise Mode, press soft key 3 (below the audio icon) again.
2. The screen will display "Low Noise Mode Deactivated," and the audio icon will disappear from the standard display.



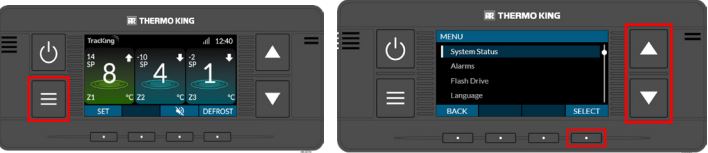
Caution: This is a quick reference guide.
Always refer to the operating manual for detailed instructions.

SIMPLE TO ACCESS

Main Menu

The Main Menu contains several additional submenus that allow the operator to view information and modify unit operation.

1. Press the MENU button to access the Main Menu from the display.
2. Use the Up/Down buttons to browse through the menu. Press the SELECT button to view the information or modify unit operation.



The following submenus can be accessed from the Main Menu:

- System
- Alarms
- Flash Drive (visible when USB flash drive connected to USB port)
- Language
- Brightness

When finished, press the BACK button or the MENU button to return to the Home screen.

SIMPLE TO ACCESS

Main Menu Plus

To access the main menu and HMI user level:

- Select the main menu soft key to enter the main menu.
- Press and hold the two center buttons (buttons 2 and 3) located below the HMI screen simultaneously for approximately 5 seconds.

Menu Plus consists of informational, operational, control, and diagnostic functions used to help the service technician maintain and diagnose the unit.

The following submenus can be accessed from Menu Plus:

- System
- Alarms
- Flash Drive (if USB connected)
- Languages
- Brightness
- Test
- Evacuation Mode

SIMPLE TO SET

LANGUAGE

The Language submenu can be accessed by pressing the soft key Menu and scrolling to Language using the soft keys Up/Down arrows.

Language allows the user to select a language from a list of up to four languages at one time. All subsequent displays are shown in the selected language. English is the default language.

