

Endicate®

Users Guide

Table of Contents

STARTING AN ENDICATE DEVICE	2
Click to Start	2
Click and Hold	2
READING AN ENDICATE DEVICE	2
ADVANCED TIME AND TEMPERATURE FUNCTIONALITY	3
How It Works	3
FAIL SAFE PROTECTION	4
Storage and Shelf Life	4



STARTING AN ENDICATE DEVICE

Endicate offers two customized start options – click to start or click and hold.

CLICK TO START:

- 1) A single click will start a sequence on the LCD screen – OK, 1, 2, 3, 4, X.
- 2) The device will then blink “OK” while in soaking (delayed start) mode.
- 3) Once the “OK” stops blinking, the device is actively monitoring (Figure 1).

CLICK AND HOLD:

- 1) Press and hold Start button for length of time defined in profile.
- 2) This will start a sequence on the LCD screen – OK, 1, 2, 3, 4, X.
- 3) The device will then blink “OK” to show it’s in soaking mode.
- 4) Once the “OK” stops blinking, the device is actively monitoring (Figure 1).

READING AN ENDICATE DEVICE

- 1) Once the monitoring is complete, remove the Endicate device.
- 2) If the LCD displays “OK”, no alarms have been triggered.
- 3) If the LCD displays an “X” and any of the numbers (1, 2, 3, 4), then an alarm has been triggered (Figure 2).
- 4) If an alarm is triggered, the user should follow the appropriate protocol for handling of the shipment.



Figure 1



Figure 2

ADVANCED TIME AND TEMPERATURE FUNCTIONALITY

If configured, Endicate's advanced time and temperature functionality allows you to determine when a temperature breach has occurred within your supply chain. This feature is available to track all 4 alarms and is available as long as your device is configured with **stop mode enabled**.

HOW IT WORKS:

- 1) Upon receipt, the device will need to be put in STOP mode by holding the Start button for 2 seconds. STOP mode can be confirmed when the display shuts off.
- 2) Hold the Start button again for 2 seconds to allow the device to enter the tracking mode to display the following information:
 - a) If none of the alarms were triggered, the device will blink "OK" twice with the associated alarm then proceed to STOP state.
 - b) If any of the alarms were triggered, 2 things would be shown:

The alarms that didn't trigger would blink 2 times with an OK status.

Alarms that were triggered would blink twice with an "X", followed by a sequence of 6 digits. These 6 digits are important to note to determine the time of excursion. By visiting support.americanthermal.com and selecting Endicate Electronic Temperature Monitoring, you can easily enter these digits into the 4 blank fields to determine when each alarm was triggered within a 1 hour window.



FAIL SAFE PROTECTION

- 1) Endicate performs a system check during operation and enters fail-safe mode to alert the user of device malfunction.
- 2) If the Endicate™ device has detected a faulty temperature sensor or the operating temperature range has been exceeded, the device will discontinue temperature monitoring and display only an "X" on the LCD display screen (Figure 3).

STORAGE AND SHELF LIFE

The Endicate device has a shelf life of 2 years in the off status. Extreme ends of the operating temperatures will affect the overall shelf life. To achieve 2 years, store at 70°F.

Device is not to be submerged in water.



Figure 3