A division of Radiotronics, Inc.

Model HA-2520
User Manual
Operating Instructions

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Introduction

The Heat Alarm® Pro is a state of the art product designed and developed by the AceK9.com™ division of Radiotronics, Inc. It is microprocessor controlled with a unique blend of positive features taken from field use of our K9 Heat Alarm®

Standard Monitoring Features: The K9 Heat Alarm® Pro monitors the vehicle's interior temperature and battery Voltage. When the alarm sounds, The handler will be alerted by honking the horn, activating emergency lights, siren and rolling down both rear windows to allow air flow through the vehicle.

- ✓ Temperature Sensor Averaging –Reduces false alarms.
- ✓ Exclusive S.O.S Horn Honk™.
- ✓ Non-Volatile Memory – Temperature and other settings are maintained in memory when power is disconnected.
- ✓ Dual Window Drop. *Rear windows do not drop in cold alarm
- ✓ Menu allows you to adjust settings to your needs.
- ✓ Temperature Sensors Monitor – Warns of damaged sensor and sets off alarm if both temperature sensors are damaged.

Optional Monitoring features:
- o AceWatchDog System - Smart Phone Monitoring System & App.
- o E.S.M. Engine Stall Monitor™ – Alerts of Engine Stall BEFORE the vehicle's interior gets too hot or cold.
- o No K9 Left Behind - K9 removal reminder system
- o Smoke Detector
- o Carbon monoxide detector

<u>Overview of Settings</u>

Factory default settings are based on the most commonly requested settings selected by K9 handlers. However you can customize them to your needs. See menu choices sections.

Defaults Setting

K9 Heat Alarm® Power:	On/Off with vehicle.
Door Popper Power:	On/Off with vehicle.
Hot Set Point:	90°
Cold Set Point:	Disabled
Stall Sensor	Enabled (Disable if not purchased)
Auto Snooze Mode:	Enabled
USA or Metric	Fahrenheit
Temperature Averaging	Enabled

Safest Setting

K9 Heat Alarm® Power:	Car on Manual off.
Door Popper Power:	On By Arming.
Hot Set Point:	90°
Cold Set Point:	Enabled (in Cold Climates)
Stall Sensor	Enabled (Disable if not purchased)
Auto Snooze Mode:	Enabled
Temperature Averaging	Enabled (Disabled with separated K9s)

K9 Heat Alarm® Operation

Heat Alarm Power: The heat alarm will turn on with the ignition. When the ignition is powered off the heat alarm will power down. This requires you to leave the vehicle running with the air conditioner ON to maintain a safe environment for the canine, and remove the K9 if the vehicle is off.
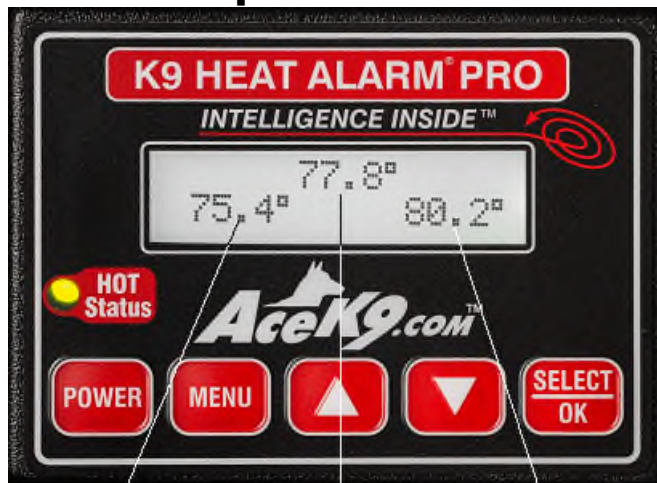
Settings are customizable to your working environment. See changing settings section if manual.

Snooze Mode: At start up, Snooze Mode will automatically appear if there is an over temperature or another condition that requires attention. A Snooze period of approximately 10 minutes allows time to get the vehicle running and cooled down for the safety of your K9. When the Heat Alarm ® Pro does not detect a safe condition at the end of the Snooze period the Pre Alert alarm will activate. During Pre alert Snooze can be manually reactivated (By pressing OK). Only 3 snooze periods are allowed.

Note: During Snooze, the handler is responsible to monitor the conditions of the canine.

Stop Alarm   Snooze Pre Alert

Dual Temperature Sensor Averaging™:

Left Sensor   Average   Right Sensor

The individual temperature sensor readings are displayed along with the average temperature. This enables the K9 Heat Alarm® Pro to obtain a much more accurate reading of the vehicles interior temperature. With averaging enabled, unnecessary false alarms are avoided when one of the temperature Sensors is in a warmer location. (Example: direct sunlight or open window). In order to activate the alarm, the AVERAGED (center) temperature sensor readings must reach the alarm threshold setting (90° Hot Default). As an additional safety measure the heat alarm is activated if either temperature sensors reading goes 10 degrees above the threshold setting (90° Hot Default).

Disable Temperature averaging if monitoring two separated locations. For example a pickup where one K9 is in the cab and the other in covered bed. To change see the menu choices section.

Temperature Monitoring : The left, average, and right temperatures are displayed in the primary screen; the vehicle's battery voltage is displayed periodically. When the K9 Heat Alarm ® Pro has detected safe conditions the HOT status light will illuminate, indicating that temperature is being monitored.

Alarm Modes

Pre-Alert Mode. During Pre-Alert a description of the unsafe condition will be Displayed, along with flashing light and warning tone for 40 seconds. This allows the K9 handler to put the unit into Snooze Mode or turn Off the K9 Heat Alarm® before the Full Alarm is activated.

"FULL ALARM" Mode   During full alarm all installed alert features are activated. The K9 Heat Alarm ® Pro will continue the Full Alert Alarm Mode until the temperature or other condition in the vehicle returns to a safe condition or until the [MENU] key is pressed. If a safe condition is detected by the system; the Full Alert Alarm stops and the display will periodically show a reminder note to advise the K9 Handler that an alarm has occurred.
Clearing reminder: To clear the alarm reminder, press [OK] while the reminder is being displayed. **Reminders will also clear when the unit is restarted**

Types of Alarms

Temperature Alarm: When an averaged temperature that is above hot set point or below a selected cold set point is sensed K9 Heat Alarm ® Pro goes into Pre Alert. If no action is taken and it remains so the unit will go into full alarm.

Engine Stall Alarm, Engine Stall Monitor™Option (Purchased separately): With the stall sensor option installed and enabled in software, the K9 Heat Alarm® Pro will monitor the engine. When the engine stalls "Engine Stalled/Pre-Alert Mode" is displayed allowing the K9 handler to restart the engine or press Snooze to start 10 minute snooze. If no action is taken the Full Alarm is activated.

Low Battery Alarm, Vehicle Battery Sentinel™: The vehicle's battery is monitored and the voltage is periodically displayed. The Battery Sentinel sets the alarm off before the battery dies. Battery Voltage below 10.5 Volts (default) will display a warning and the unit enters Low Voltage mode. The Full Alarm is activated for a short period of time lowering rear Windows providing ventilation for the K9. The Alarm will activate again every few minutes as long as there is enough battery power.

Temperature Sensors Diagnostics: The Temperature Sensors are continuously monitored; if one of the sensors is damaged or a connection is lost, (Open or Short will be displayed in the place of left or right sensor) When a sensor is damaged the K9 Heat Alarm Pro will automatically disable averaging and utilize the working sensor, periodically a warning message and beep will occur to notify the handler. If both Temperature Sensors are damaged, a warning message is displayed, pre alert starts, followed by full alarm activating.

Self Diagnostics: The K9 Heat Alarm Pro continuously monitors its internal systems. If a detectable problem exists that would prevent the system from operating properly the system will go into Full Alarm mode.

Changing Settings

Light Intensity Adjustment.
The light intensity is controlled by using the arrow keys. The lights automatically dim, when the vehicle's ignition is turned OFF (press the OK key to return it to the original intensity).

Menu Mode: To enter menu mode, power up the K9 Heat Alarm® Pro, press the [MENU] key. To view Menu items Press the [DOWN] key for the next item or the [UP] key for the previous item. To change a Menu item press the [OK] key. The [DOWN] and [UP] Keys let you scroll through the available settings. To choose a setting, press the [OK] key. (saving will appear). To exit without making changes press the [MENU] key. Additional Menu changes can be made or exit the menu by pressing the [MENU] key again. When returning from the Menu Mode, the system will enter into the selected operating configuration.

Heat Alarm Menu Choices

Heat Alarm Power

Default setting* is *"On/Off with Car" This will turn the Heat Alarm ON & OFF with vehicles ignition, most commonly the engine and A/C are usually left ON to maintain the vehicle's interior temperature. Remove the K9 if the vehicle is off.

Alternative Setting "Car on Manual off" The Heat Alarm will turn ON with ignition and OFF by [POWER] key. This is the safest method. The unit will automatically turn ON with the vehicle but will only turn OFF when you depress and the [POWER] key.

Alternative Setting "On/Off Manually" The Heat Alarm will only turn ON or OFF with [POWER] Key.

Alternative Setting "Off all the Time" The Heat Alarm feature is disabled requires re-enabling through the Heat Alarm [POWER] then [MENU] to make changes.

Alternative Setting "No K9 left behind" the Heat alarm will turn on with ignition and off when ignition power is off **and** once the Door is opened to remove the K9. See user supplement sent with this option (Sold separately)

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"Heat Alarm Temp" Hot Set Point

Default setting is 90° The Heat Alarm will activate at 90° but can be adjusted from 77° to 95° as your needs require.(24°C to 32°C)

"Cold Alarm Temp" Cold Set Point

Default setting *"disabled".* The cold Alarm can be turned on and can be set between 10° to 58° as your needs require.(-12°C to 12°C)

Stall Monitor

Default setting is "Enabled".
When an optional stall sensor is not purchased this feature should be disabled.

Temperature Averaging

Default setting is "enabled" so the temperatures of the both Temperature Sensors are AVERAGED thus reducing false alarms.

Alternative Setting: Disabled This setting would be used if monitoring two separate locations in one vehicle (example on K9 in the bed of a pickup, and one in passenger compartment)

Auto Snooze Mode

Default setting is "enabled"'. Auto Snooze Mode temporally disables the Heat Alarm to allow time for the vehicle to cool down during start up.
Alternative Setting: Disabled

Low Voltage Set Point

Default Setting 10.5V Low voltage can be set between 10V and 12V

USA or Metric
Default setting is Fahrenheit (USA)
Alternative Setting is Celsius

Previous Alarms Displays the 10 previous causes of the alarms and setting changes.

Serial Numbers Displays the serial numbers of the control head and the IntelaBox. See additional information in back of manual.

Reset to Default Resets all features to their factory default settings.(turns on engine stall sensor, if the engine stall sensor option was not purchased Disable it in Menu)

System Test

When in this menu function Pressing [OK] will begin a System Full Alert Test activating the window drop, SOS Horn, Lights, and Siren. Accessories such as Pager, and fan will also activate. Followed by a Pixel test, that will fill all the pixels in the display, both top and bottom. Ending with a Push button test will allow testing of each of the Menu Keys. If any of these tests fail contact you installer or AceK9.com for further assistance.

(The K9 watchdog system will not activate using this feature see watchdog Manual).

AceK9.com Two (2) Year Limited Warranty
For details visit http://www.AceK9.com/Warranty

IMPORTANT safety reminder: It is the responsibility of the Installer and the Handler to confirm that all safety features are installed and working properly at the time of installation.

Weekly System Test Procedure for K9 Heat Alarm® Pro

K9 should not be in the vehicle during these tests.

Turn the system on, observe the feature settings during power up, Check the temperatures and vehicle's battery voltage.

K9 Heat Alarm Output Tests

Confirm that the displayed temperatures are below the Heat Alarm Hot Set Point and the system is not in Snooze Mode. Press the [MENU] key to enter menu mode. Move down to the menu choice "System Test", press [OK] to activate all the installed heat alarm alert options. Verify that ALL the installed Heat Alarm alert accessories and options worked.

Temperature Sensors Test

Turn the vehicle's climate control to the heat position to manually raise the temperature inside the vehicle. Monitor the temperatures displayed on the heat alarm and confirm that the alarm activates when the Hot Set Point is reached. Visually inspect the wiring and electronic components and confirm that the location of the temperature sensors are just outside the K9 container and not in direct sunlight and out of canine reach.

Testing of Add on Options

See the test procedure outlined in the options manual.

Popular add on Options

- o Stall Sensor
- o No K9 left behind
- o Fan Kit
- o Pager Module
- o AceWatchDog™

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*** *It is important to remember that, while every effort to monitor the system is taken, there is no substitute for doing the Weekly tests outlined in this manual.* ***

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Visit www.AceK9.com for more options available.

Serial Numbers

Record your serial Numbers Here

Control Head (display) KC_____
IntelaBox (wired box) HI_____

To retrieve Serial Numbers from the Menu
1 Select Serial numbers from the menu
2 Press (OK)
3 The Serial number for the control head will Display
4 Press any button to see IntelaBox serial number

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