AceK9.com™

A division of Radiotronics, Inc.

K9 HEAT ALARM® PRO
INTELLIGENCE INSIDE ™

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K9 Heat Alarm
Pro  M# HA-2520
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HOT Status

AceK9.com™

POWER   MENU   ▲   ▼   SELECT OK

Model HA-2520

User Manual
Serial Number KC12422 and UP
Operating Instructions

Contents

Introduction

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

Standard Monitoring Features: The K9 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 and Safety 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

Overview of Settings

Factory default settings are based on the keeping the K9 safe in modern vehicles. Carefully consider how the vehicle operates before you change the setting to your needs. See menu choices sections.

K9 Heat Alarm® Operation

Default Menu Choice Setting "Car ON Man Off'.

Overview: This setting turns the alarm on with vehicle, requiring the handler to press the POWER button to turn the alarm off. The vehicles climate control should be set to maintain a safe environment for the canine. The canine should not be left unattended in the vehicle with the climate control off.

Before changing this setting to turn off with the vehicle, there should be a good understand of how the vehicle's ignition (accessory) **power operates.   The setting should not be changed if the vehicle automatically shut itself off or any accessory turns off the vehicle's ignition power.**

Default Settings

K9 Heat Alarm® Power: Car On/Manually Off.
Hot Set Point: 90°
Cold Set Point: Disabled
Stall Sensor   Disabled (if purchased must be turned on)
Auto Snooze Mode: Enabled
USA or Metric   Fahrenheit
Temperature Averaging   Enabled

Heat Alarm with Power "CAR ON/MANUALLY OFF":

• The heat alarm will turn on with the ignition.
• Snooze Mode, will automatically appear when the temperature is over the hot set point. This 10 minute period that allows your alarm to start up without premature alarm activation. THERE ARE OTHER SNOOZE MODES. See pages 6 and 7 for detail.
• Door Popper Settings will follow heat alarm setting.

Heat Alarm Menu Choices

Heat Alarm Menu Choice	Description
On/Off With Car	Turns on and off with Vehicle
Auto On Only	Turns on with vehicle, off from power button
ON/Off Manually	On and Off from power button
No K9 Left Behind	Turns on with vehicle, Off When Dog is removed*
Off All The Time	Off All The Time, can be changed from menu

* Additional hardware require
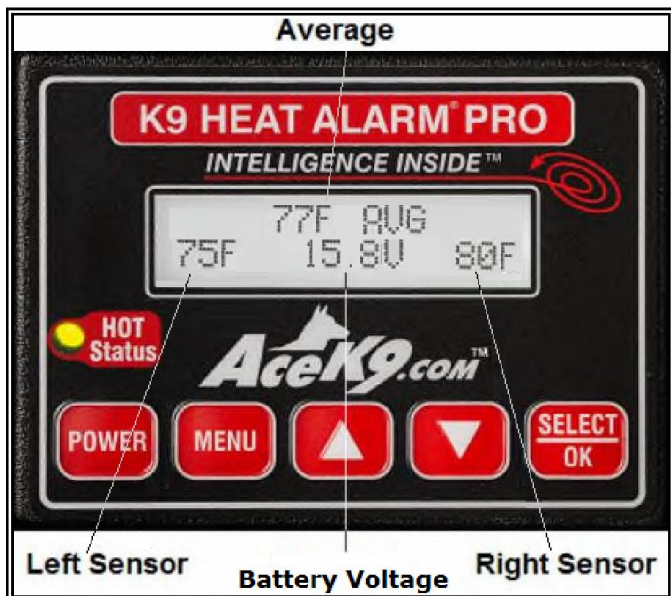
Operation Overview

Any time the vehicle off and the K9 is left in vehicle the windows should be open and K9 alarm set to stay on with vehicle off. Frequent checks of the of K9 should be made.

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 K9 Heat Alarm ® Pro does not detect a safe condition at the end of the Snooze period the Pre Alert 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 K9 for any signs of heat stroke.

Dual Temperature Sensor Averaging™: 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 temperature sensor readings must reach the alarm threshold setting (90° Hot Default). The heat alarm is activated if either temperature sensor reading goes 10 degrees above the "Heat Alarm Temperature" setting.

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.
Note: Sensors should not be within 18" of the headliner, in direct sunlight, or directly in front of a AC vent, See install manual.

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

4

Alarm Modes

"Pre-Alert". Pre-Alert allows time for the K9 handler to address the unsafe condition before the Full Alarm is activated. During Pre-Alert the display will show a description of the condition, the control heads lighting will flash and a warning tone sounds for 40 seconds. Review the trouble shooting section of this manual for more information.

In a temperature Pre-Alert condition, pressing the OK button to Snooze, allows the handler to adjust the climate control to a safe level. **During snooze it is vital that the K9 be monitored for any signs of heat stroke.**

Turning off the K9 Heat Alarm® will also cancel the alarm. Any time the alarm is turned off the K9 must be moved out of the vehicle to a safe location.

"FULL ALARM" 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 [POWER] 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 above hot set point or below cold set point is sensed the K9 Heat Alarm ® Pro goes into Pre Alert. If no action is taken and it remains so the unit will go into full alarm.

Temperature Sensors Diagnostics: Temperature Sensors are continuously monitored; if one of the sensors is damaged or a connection is lost, averaging will be replaced by "Sensor ERROR !" ("Open" or "Short" will be display in place of temperature on the left or right side) When a sensor is damaged the K9 Heat Alarm Pro will automatically disable averaging and utilize the working sensor, periodically a warning 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.

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. The Vehicle should be shut off and restarted to reset the stall sensor.

Low Battery Alarm, Vehicle Battery Sentinel™: The vehicle's battery is monitored and the voltage is 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. To extend available power, the alarm will activate again every few minutes as long as there is enough battery power.

AUX Input Error:
When a AceK9 Smoke Detector or Carbon Monoxide Detector Activates. the Alarm will sound, Remove the K9 from the vehicle immediately. Address the problem accordingly. See the manuals that were included with the Smoke or Carbon Monoxide Detector.

Control Head Not Seeing Data:
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 attempt to reboot, if the reboot fails the alarm goes into Full Alarm mode.

See Trouble shooting section at the end of the manual.

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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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Changing Settings

Light Intensity Adjustment.
The light intensity of the Status Lights and the Display's backlighting is controlled by using the up and down arrows. The lights automatically dim, when the vehicle's ignition is turned OFF. When in bright light with the ignition off the statis lights may not be visible, push the up arrow to brighten the display. When using *"On/Off with Car" the* display lighting shuts down.

Menu Mode: To enter the menu press the [MENU] . To scroll thru the menu items press the [UP] or [Down] Arrow. To select a menu item press the [OK].

Heat Alarm Power
The engine and climate control in the vehicle should be left ON to maintain the vehicle's interior temperature. If the climate allows the K9 to be left in the vehicle with the climate control off <u>Guarded</u> windows should be left open and K9 alarm set to stay on with vehicle off. Frequent checks of the of K9 must be made. It is always best to remove the K9 any time the vehicle is off.

! Heat Alarm Power Settings Safety Notice !
Before changing this setting to turn off with the vehicle, there should be a good understand of how the vehicle's ignition (accessory) power operates.   This setting should NOT be changed to *"On/Off with Car"* if the vehicle or any accessory automatically shut ignition power off.

Changing Heat Alarm Power Settings
Choose Heat Alarm Power from the Menu, press the [OK].
Scroll through the available choices using [DOWN] or [UP] Arrows.
Save a setting by press the [OK].
To exit without making changes press [MENU].

Heat Alarm Power Settings

***Default setting* is "Car on Manual off"**
The Heat Alarm will turn ON with ignition and OFF by pressing [Power]. This is the safest method. The unit will automatically turn ON with the vehicle but will turn OFF when you press [Power].
Alternative Setting *"On/Off with Car"* This will turn the Heat Alarm ON & OFF with vehicles ignition*. See safety notice above.*
Alternative Setting "On/Off Manually" The Heat Alarm will only turn ON or OFF from the [Power] key.
Alternative Setting "Off all the Time" The Heat Alarm feature is disabled requires re-enabling through the Heat Alarm Power Menu.
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)

"Heat Alarm Temp" Hot Set Point - *Default setting is "90°"*
The heat alarm will activate at 90° but can be adjusted as your needs require.
Press [OK] to change
Use the [DOWN] or [UP] Arrows to choose a temperature between 77° to 95°
(24°C to 32°C) See "menu choice "USA or Metric" to change to Celsius.
To save the setting, press the [OK] .

"Cold Alarm Temp" Cold Set Point - Default setting *"disabled".*
Press [OK] to change
Use the [DOWN] or [UP] Arrows to choose between 10° to 58° (-12°C to 12°C)
To save the setting, press the [OK] .
(note the windows will not drop if the temperature is below the freezing point).

Stall Monitor
The [DOWN] or [UP] Arrows let you choose ***"Enabled" or "Disabled"***
Default setting is "disabled".
Press [OK] to change
If a stall sensor is installed choose "Enabled", Press [OK] to change
Use the [DOWN] or [UP] Arrows to choose press the [OK] to save.

Temperature Averaging. *Default setting is "enabled"*
Temperatures of the both temperature sensors are AVERAGED reducing false alarms.
Alternative Setting: "disabled" This setting would be used if monitoring two separate locations in one vehicle (example one K9 in the bed of a pickup, and one in passenger compartment)
Press [OK] to change
Use the [DOWN] or [UP] Arrows to choose "disabled"
Press the [OK] to save.

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"
Press [OK] to change
Use the [DOWN] or [UP] Arrows to choose "disabled" (Not recommended)
Press the [OK] to save.

Low Voltage Set Point. *Default Setting*
"*10.5V*" *L*ow voltage can be set between 10V and 12V
Press [OK] to change
Press the [UP] or [Down] arrows to pick a voltage, press [OK] to save.

USA or Metric. *Default setting is USA* *Fahrenheit*
Press [OK] to change
To change to Celsius use the [UP] or [DOWN] arrow to choose Metric, press [OK] to save.

Previous Alarms Displays the 10 previous causes of the alarms and setting changes. Press [OK] and then use the [DOWN] arrow to view previous events.

Serial Numbers Press [OK] to Display the serial number of the Control Head Press the [Down] arrow to view the IntelaBox serial number. Note: A system test captures the serial of the IntelaBox.

Reset to Default pressing [OK] Resets all features to their factory default settings.(turns off the stall sensor, and changes the Heat Alarm power setting to "Car on Manual off") During a reset a System Self Check will Run, and the system will reboot.
Self Diagnostics: The K9 Heat Alarm Pro continuously runs System Self Checks to 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.

System Test
Pressing [OK] will begin a System Full Alert Test activating the window drop, SOS Horn honk, turn on Lights and Siren. Accessories such as pager and fan will also activate, if there is an AceWatchDog attached it will follow the test with "system test" text to the handlers phone[‡]. 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 Keys in the control head. If any of these tests fail contact you service provider or AceK9.com for further assistance.
‡AceWatchDog Has to be activate fo this test to work.

AceWatchDog Option information
The AceWatchDog is a add on to the K9 Heat Alarm Pro

When a New AceWatchDog System is Connected to the K9 Heat Alarm Pro the temperature screen will alternate with the AceWatchDog information screen. the screen shows the cellular signal percentage and the serial number of the AceWatchDog. This number is also the activation code that you use to register.

To activate your AceWatchDog go to https://acelogin.com.

Weekly System Test Procedure for K9 Heat Alarm® Pro
K9 should not be in the vehicle during these tests.

Turn the vehicle on, with the K9 Heat Alarm Pro powered up , check the temperatures and vehicle's battery voltage. Battery Voltage should be above 12.3V at start up.

Begin the tests with the Temperature in the vehicle at a comfortable level at start of this test procedure.

K9 Heat Alarm Output Tests

Press the [MENU] 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

Confirm that the displayed temperatures are below the Heat Alarm Hot Set Point, not in Snooze Mode with the hot status light on.

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 outside the K9 container, out of reach of the canine and not in direct sunlight.

Testing of Add on Options
See the test procedure outlined in the options manual.

- Stall Sensor
- No K9 left behind
- Fan Kit

- Pager Module
- AceWatchDog™

Trouble Shooting

Temperature sensors read different temperatures.

It is normal for temperature sensors in separate locations to read slightly different temperatures due to radiant heating of the sun, and air flow patterns. Sensor placement is critical. If the difference is extreme a relocation of the sensors may be necessary.

- Sensors should be in shaded locations
- Never within 18 inches of the head liner.
- Never In font of vents or near equipment that radiate heat
- To verify the accuracy TEMPERARILY Place the 2 sensors in the same location for 5 minutes. The temperatures should read within a less than a degree of each other.

Alarms when it's not too hot or cool in the vehicle.

A "Full" Alarm sounds the alarm displays the condition that set the alarm off, this is alarm is recorded in "Previous Alarms". Previous alarms can be reviewed from the menu.

Stall Alarm

1) If the stall sensor option is not present this is most commonly caused by a menu setting change, turning on of the stall sensor. Disable the Stall Monitor from menu.
2) If a stall sensor is installed, See the install manual or contact the installer for assistance with the stall sensor placement.

Aux Input Error Alarm

Auxiliary input Alarm occurs when the alarm senses a signal from a smoke or carbon monoxide detectors. The sensors are connected to the IntelaBox at a 3 pin connector.

- A bad ground on a detector.
- The carbon monoxide detector reaches the end of its life expectancy.

No display, Control head beeps and flickers

If when ignition is turned on CHECK ot the Control Haed Cable is pluged in.

- Check the battery power conections from the IntelaBox and Protective Relay Module, The 40A fuse should be connected directly to the main 12V starting battery, Check that the ground wire from the Proctive Relay Module is attached at a factory ground point.
- Check the control head cable and the connectors for damage or corrosion, If the cable is damaged a straight through network cable (eithernet or Cat5 or higher Cable).

Power UP/Down Problems

Before changing power setting to turn off with the vehicle, there should be a good understand of how the vehicle's ignition (accessory) **power operates. This setting should not be change if the vehicle automatically shut itself off or if any accessory is used that would turn off the vehicle's ignition power.**

The K9 Alarm powers up and turns off.

1) Check that the menu choice if "Off All The Time" has been selected.
2) If the Heat Alarm Menu seting "ON/Off With Car" is set Check ignition power conection at the Proctive Relay Module.

K9 Alarm powers up and does not power down when the key is turned off.

The default menu choice is Car On/Manually Off. This Setting can be changed see the "Heat Alarm Power" section for important safety information.

K9 Alarm powers off with the key in "No K9 Left behind" or with a manual off setting.

1) Check the Menu Setting
2) The battery power should be check that it is connected directly to the main battery of the vehicle, NOT a switched to Ignition source.

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Serial Numbers
Record your serial Numbers Here

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

To retrieve serial numbers from the Menu
1 Press Menu
2 Use arrow keys to locate "serial numbers" from the menu
2 Press (OK)
3 The serial number for the control head will display
4 Press Up or Down Arrow see IntelaBox serial number
Note The first time a System test is done the serial number is recorded in the head.