

K9Caller™ Version 1

Operators Manual

Rev 3





www.K9Safety.com

Copyright K9Safety 2009

Table of Contents

Page 1 Cover

Page 2 Table of Contents

Page 3 Overview

Page 4 & 5 Selecting Features and Connections

Page 6 User Controls

Page 7 Keychain Remote

Page 8 Remote Button 5 Menu

Page 9 Remote Button 5 Menu Continued

Page 10 Remote Settings

Page 11 K9 Functions Described

Page 12 K9 Functions Described Continued

Page 13 Alarm Functions Described

Page 15 Branch Programming Options

Page 16 Blank

Page 17 Warranty Info

Important

Please remember to apply the yellow warning sticker to an area inside the vehicle that would be easily noticed by a vehicle technician. The sticker is taped to the front of this manual. If you do not have a sticker, please contact support for a replacement.

Standard Package Contents

Main Control Unit, 2-Way Antenna, LCD Remote (2-Way), LCD Leather Case, AAA Battery, 1-Way Remote with Batter, Compact Siren, Combo Status & On/Off Button, Hood Switch, Magnetic Park Safety Contact Set, Ignition Harness, Door Lock Harness, Main Harness, Auxiliary Harness, Temperature Probe, Starter Disable/AntiGrind Relay, Installation & Operators Instructions.

Overview

The K9Caller is the most advanced vehicle mounted canine safety system available. You should take time to review the information in this manual as it provides details regarding available features and operational characteristics. There are many features which can be configured simply by changing the feature setting selection. Review the table on the following page and select which functions are best suited to your daily operation. Once selected, inform your installation technician so that the functions can be programmed for you. We can also store the settings for emergency service agencies and pre-configure them before shipping future shipments.

The system is divided into three distinct systems in terms of operation which are independently controlled from each other. First and foremost, the system is a K9Safety system which can be turned on/off and activated separately from the secondary functions of a vehicle security system and the functions of a remote door pop. In some cases the system may be installed in a way which does not allow the operation of all the listed functions.

The K9Safety functions can include, Hot temperature alert via honking horn or remote notification, remote temperature notification, automatic engine run, temperature controlled engine start, window and fan control to name some.

The security system features can include, remote keyless entry, entry detection for doors, hood, trunk, and other sensors, remote trunk pop or other auxiliary functions, engine disable, and remote alarm indication.

The door pop feature is designed to deploy a K9 typically from a passenger rear door while the vehicle is not moving to aid a handler in suspect apprehension or quick response. The door pop feature is typically ready when the K9Safety system is ready.

The system features vary based on feature programming selection and components installed. Program Example, the system can be programmed to either start or not start the vehicle based on temperature. (See Programming Branch 7 in the installers guide) Installation Example, the system can roll down windows to allow outside air in the vehicle in case of hot temperature but a window module must be installed to allow this operation. (See Options)

Valet Mode:

The user should always put the system in Valet mode whenever the vehicle is taken in to be serviced. See page 4 for details.

Selecting Features and Connections.

In the following section we will identify the connections and programming for the most common system configurations that are being used by our K9Caller customers.

The two most common uses of the K9Caller are found in but not restricted to Police Patrol K9 Vehicle (Professional Handler) & Privately Owned Vehicle (Dog Enthusiast).

The K9Caller can be configured to operated in a number of fashions depending on the user or agencies needs. Some of the system's features can be selected from the remote at any time while others are selected through the programmable branches. Your preferences may also require the system to have some of the connections wired to the vehicle in a particular fashion or with optional modules to achieve the desired results though most of the connections are standard from vehicle to vehicle. Some of the features that would require specific wiring or optional modules include connecting any of the three aux channel outputs, Aux1, Aux2 and Trunk/ Door pop, or window modules, fans, and cellular messenger. Optional hardware is typically necessary to achieve door pop functionality (door pop kit upgrade) which will receive a command from the system to pop open the door.

It is helpful to review the options available in the programmable branches to make the best determination as to the features that are desired and the wires or options that will be connected on your vehicle.

Some of the features should only be changed by a qualified technician. These features are denoted with Tech.

Other feature can be changed by the user and they are denoted with User.

See Branch Programming for details

Selecting Features and Connections Continued.

Police Patrol K9 - Professional Handler

This is the most common configuration for police agencies across the country. By default the system comes programmed to operate in this fashion. Features

The K9 systems will automatically turn on and monitor for temperature whenever the vehicle arrives at a destination. If the temperature inside the vehicle reaches the start temperature, the engine will start allowing the AC to operate. If the vehicle reaches the alert temperature, the vehicles horn will honk and an alert message will be sent to the LCD remote. If the optional window module is installed, the windows will roll down during hot temperature alert. If the optional window fan is installed, the windows fan will turn on during hot temperature alert. The remote can also be used to manually turn on/off the car alarm and lock and unlock the doors. If the door pop kit is installed the LCD or 1 way remote can be used to pop the door. Aux1 can be wired with an optional relay to pop the trunk open.

Another feature is the starter disable/starter anti-grind which requires the connection of the included relay and will disable the vehicle from being started when the security alarm is active and will also prevent the starter from grinding if the vehicle is "auto-started" and the user turns the ignition key to the start position. **Note**, police K9 vehicles normally have fixed inserts and window screens that would prevent the dog from jumping out of the window and would also keep the vehicle secure from intrusion.

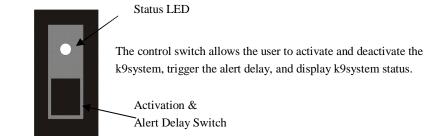
Privately Owned Vehicle -Dog Enthusiast)

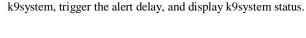
This is the most common configuration for users of privately owned vehicles that have a canine companion travel with them. The default settings are typically changed in branch programming to have manual K9 system activation selected. Features

Consumer installations can be slightly different in nature as most consumers do not want windows to roll down automatically as this could put their canine at risk of injury or their vehicle at risk of unlawful entry. This simply means that an optional window drop module would not be installed on the vehicle. The more likely option would be the bidirectional window controller that can be connected to the aux outputs to remotely roll up and down the windows. Many consumer vehicles are equipped with additional features such as automatic door sliders and rear hatch or trunk pops that can also be connected to one of the three aux outputs.

User Controls Described

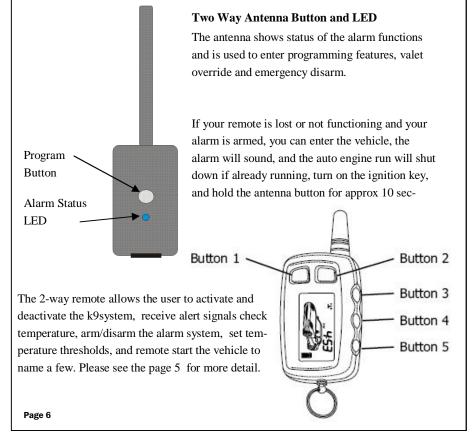
There are three user controls that operate the various features of the system. Some features can be control by more than one devices. The user control devices are the control switch, the remote control (2-way & 1-way) and the antenna.





System Valet Mode:

Valet mode should be used whenever the vehicle is sent for maintenance or repair as it will prevent the auto start, door pop, and alarm from functioning. After service, remember to take the system out of Valet Mode. To put the system in or out of Valet, Turn on the ignition and press and hold the antenna button for 5 seconds. The control switch LED will flash while in valet. Repeat the process to take the system out of Valet mode.



Keychain Remote

The K9 features can be activated and deactivated by pressing and holding the control switch button for 2 seconds while the ignition is on. This will toggle activation/deactivation each time. While activated the K9 features such as hot temperature alert, hot temperature start, and door pop are ready to be triggered and the blue L.E.D. on the control switch will light steady. While deactivated the K9 features will be turned off and the L.E.D. will not be lit. The control switch will also trigger the alert delay if the system has triggered the hot temperature alert (horn honk, window down, etc) which will delay the alert from triggering for 5-10 minutes depending on programming.

The Keychain remote is used to receive high temperature alert notification, turn On/Off the security system tied to all four doors, remote check vehicle cabin temperature, or remotely auto start the vehicle (Alert receive range is up to 1500ft and keychain transmit range is up to 1000ft depending on environment).

There are five buttons and several icons on the keychain remote which perform certain functions on the system or indicate system status.

Button #1 is used to turn On the vehicle security system which is connected to all entry doors.

Button #2 is used to turn Off the vehicle security system.

Button #3 is used for door pop or trunk pop.

Button #4 is used to remotely auto start the vehicle.

Button #5 is used to check the last signal including, security armed/disarmed, engine auto start active, and cabin temperature.

This button can also be used to change the ECU state in/out of valet which will affect the normal operation of the security system. It will not affect the system's ability to normally operate the temperature auto start or temperature alert. Pressing and holding button # 5 will scroll through the options at approximately 1 per second. To access you must hold button # 5 until the desired parameter is displayed then release button # 5

Note the following features are not accessible in remote lockout mode and no changes can be made via the remote.

PSV, VAL, Setting the Call Temperature, Setting the Hot Start Temperature

Remote Button 5 Menu

Pressing and holding button # 5 will scroll through the six available options at approximately 1 per second. To access you must hold button # 5 until the desired parameter is displayed then release button # 5

It is recommended that you check con before changing any of the parameters using button 5. This will insure that you are in range and that the system is not "busy"

CON : reports ECU conditions; auto start running/off, security system on/off. To display system status:

1. Press and hold Button 5 until the display shows CON.

· The transmitter will beep once.

2. Release Button 5.

• The transmitter will beep once.

The LCD panel will display the current system status.

deg : reports the cabin temperature.

1. Press and hold Button 5 until the display shows DEG

The transmitter will beep twice.

2. Release Button 5.

The transmitter will beep four times.

The LCD panel will display the temperature inside the vehicle

CHP : Turns on/off the siren chirp. This feature has no effect as no siren is installed. The vehicle horn is used as an audible alert.

1. Press and hold Button 5 until the display shows CHP.

The transmitter will beep three times.

2. Release Button 5.

The transmitter will beep once.

• The LCD panel will show a siren if the chirps*/honks are enabled or "off" if the chirps*/ honks are disabled.

SND : Selects between audible sound or vibrate on the Keychain Remote.

Set the transmitter confirmation tones ON or OFF:

1. Press and hold Button 5 until the display shows SND.

• The transmitter will beep four times.

2. Release Button 5.

· The transmitter will beep once.

• The LCD transmitter will beep 5 times and display "on" if the sounds are enabled or vibrate and display "off" for the Remote to vibrate.

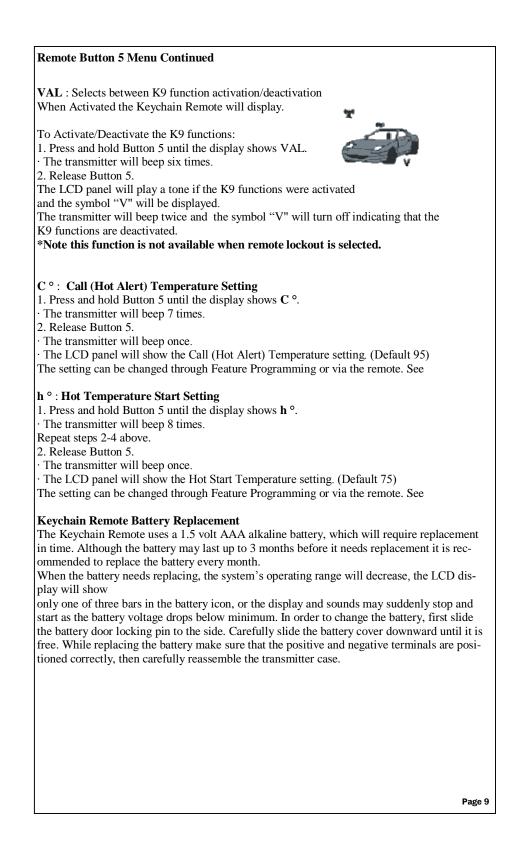
PSU : Selects between the K9 functions activating manually or passively arm after arrival. 1. Press and hold Button 5 until the display shows PSV.

• The transmitter will beep five times.

2. Release Button 5.

• The transmitter will beep once.

• The LCD panel will play a tone and display "on" if enabled or "off" if disabled. *Note this function is not available when remote lockout is selected.



Remote Settings

Setting Keychain Remote Time

The LCD display is equipped with a 12-hour clock that in addition to displaying the time, offers an alarm clock function as well as a remote activation timer.

To set the time:

1. Press and hold Buttons 2 and 3 for three seconds.

• The remote will beep two times and three bars will be shown indicating time set mode is entered.

2. Press and release Button 2 until the correct hour is displayed. (hold button to scroll).

3. Press and release Button 3 until the desired minute is displayed. (hold button to scroll).

4. When the desired time is displayed, press Button 5 to store.

• The remote will beep 3 times to indicate the time has been set.

Setting Keychain Remote Alarm Clock

The alarm clock function can be set to play an alert melody at a specific time of day. To set the alarm clock function:

1. Press and hold Buttons 2 and 3 until the remote beeps three times.

• The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.

2. Press Button 2 until the desired hour is displayed.

3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.

4. When the desired time is displayed, press Button 5 to store.

• The remote will beep 3 times to indicate the alarm clock has been set.

To disable the alarm clock function:

1. Press and hold Buttons 2 and 3 until the remote beeps three times.

• The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.

2. Press Button 1 to disable the alarm clock.

The remote will beep 3 times and show OFF to indicate the alarm clock has been disabled.

Setting The Call (Hot Alert) Temperature

To change the Call temperature:

1. Press and hold Buttons 2 and 3 until the remote beeps five times.

 \cdot C ° will be shown indicating call temperature set mode is entered.

2. Press Button 2 to increase the temperature. The button may be held down to scroll faster.

3. Press Button 3 to decrease the temperature. The button may be held down to scroll faster.

4. When the desired temperature is displayed, press Button 1 to store the value.

The remote will display the temperature and beep 3 times then 4 times to indicate the set temperature.

*Note this function is not available when remote lockout is selected.

Setting The Hot Start Temperature

To change the Hot Start temperature:

1. Press and hold Buttons 2 and 3 until the remote beeps six times.

 \cdot h $^{\circ}$ will be shown indicating automatic hot start temperature set mode is entered.

2. Press Button 2 to increase the temperature. The button may be held down to scroll faster.

3. Press Button 3 to decrease the temperature. The button may be held down to scroll faster.

4. When the desired temperature is displayed, press Button 1 to store the value.

The remote will display the set temperature and beep 3 times then 4 times to indicate the set temperature.

*Note this function is not available when remote lockout is selected.

K9 Features Described

The K9 functions operate independently of the alarm functions even though they share a common remote control. The K9 functions can be activated while the alarm functions are disarmed and vies-versa. The K9 functions and alarm functions can also be activated and armed at the same time. The K9 functions can be broken down into the following features; Engine control, Temperature Alert, and Door Pop.

Auto Start Engine Control Enabled (See Programming Branch 7 in the installers guide) With auto start enabled the system will start the vehicle's engine whenever the following conditions are present.

The vehicle must be in park in order to activate the K9 functions

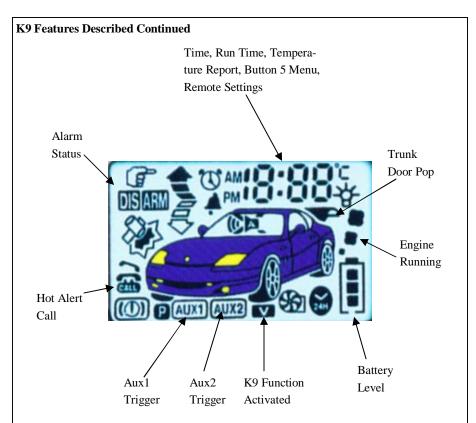
K9 functions are activated (control switch LED is solid)

The temperature is at or above the Hot Start Temperature Setting (Default 75)

With auto start disabled the system will trigger the engine to automatically run whenever the vehicle arrives. Pressing the brake pedal again will shut down the engine run.

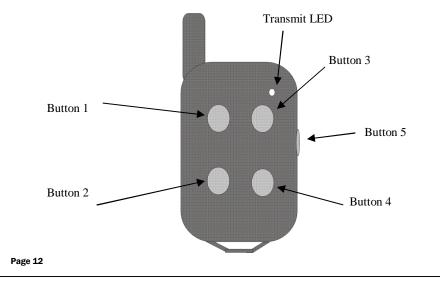
The system will send a Call and sound the hot temperature alert when the K9 functions are activated and the temperature is at or above the Call temperature. Typically the alert will cause only the horn to honk, but this feature is also programmable.

In addition, if the system is set to passive K9 feature (Default) the system will automatically activated every time the vehicle transmission is shifter into park and the brake pedal is released. It will further keep the vehicle's engine running if the temperature is above the Hot Start setting and will automatically delay the alert if the temperature is at or above the Call (Hot Alert) setting for 5-10 minutes. (Default 5 Min, See Branch 5)



1-Way Remote

The 1-Way Remote is supplied to you as a back-up incase your LCD remote is lost or stolen. You can still operate the alarm functions, remote start, and programming features with this remote. Note, the 1-Way remote will not receive alert signals and does not have all of the functions of the LCD remote.



Alarm Functions Described

The Alarm functions operate with the same features that are available on most of the car alarms available today and include many auxiliary features as well as remote start.

Functions include

Separate Arm and Disarm buttons on the remote that also can lock and unlock the vehicles doors.

Forced entry detection while armed with separate inputs for doors, hood, trunk/camper shell, and for sensors such as impact or motion detectors. Note, the sensor inputs can also be configured to have different functions. Please consult with your installer or review the installation options for details. Typically the alarm trigger will cause the alarm siren to sound and the horn to honk, but this feature is also programmable.

Remote Start with a 15 minute run time

Auxiliary 1 Can trigger slider doors, windows, etc.

Auxiliary 2 Can trigger slider doors, windows, etc.

Auxiliary 3 Can be used as a door pop output (K9 functions activated), trunk pop output

The Keychain remote

Button #1 is used to turn On the vehicle security system which is connected to all entry doors. Pressing and holding button 1 for 4 seconds triggers the panic mode and sound the alarm.

Button #2 is used to turn Off the vehicle security system.

Button #3 When button 3 is held for 2 seconds it can to trigger the auxiliary 1 output at the ECU. This is usually a door pop or trunk pop output.

Button #4 When button 3 is held for 2 seconds it will remotely auto start the vehicle.

Button #5 Shift Key. When button 5 is pressed momentarily it acts as a shift key which can be used in combination with buttons 1-4 to trigger more functions or to arm/disarm a second vehicle.

For two vehicle operation the remote must first be programmed to the second vehicle. Once programmed you can momentarily press button 5 then momentarily press button 1 to arm the second car alarm. You can likewise momentarily press button 5 then momentarily press button 2 to disarm the second car alarm.

To trigger auxiliary 1 you can momentarily press button 5 then momentarily press button 3.

To trigger auxiliary 2 you can momentarily press button 5 then momentarily press button 4.

// Button1/ Button2/ Button3/ Button4		
Branch1 // Passive/ Manual K9System Activation *	User	
Branch2 // 95f/ 90f/ 100f/ Hot Alert Temperature *	User	
Branch3 // Horn/ Siren/ Both Temperature Alert Warning	User	
Branch4 // 15min/ 5min/ 10min/ Disable Remote Temperature Poll	User	
Branch5 // 5Min/ 7Min/ 10Min Alert Delay Timer	User	
Branch6 // Enable/Disable K9SystemAutoOn Pin S4	Tech	
Branch7 // TemperatureAutoStart/ EasyIdle Engine Controller	User	
Branch8 // 75f/ 80f/ 85f Hot Start Temperature *	User	
Branch9 // No Selection		
Branch10 // Door Pop/ Trunk Pop Output Selection Pin M1	Tech	
Branch11 // 5deg/ 10deg/ 2deg Hot Start Hysteresis.	User	
Branch12 // External Pop receiver/ Sensor Input Pin 2	Tech	
Branch13 // Disable/ Enable Remote Feature Lockout	Tech	
Branch14 // Enable/ Disable Disarm before PinM1	Tech	
Branch15 // Disable/ Enable Rearm after PinM1	User	
Branch16 // FactoryAlarmDisarm/ Ignition Output Pin M10	Tech	
Branch17 // Pulse/ Timed/ Latched/ HotStart Aux1 Output Pin A7	Tech	
Branch18 // Pulse/ Timed/ Latched/ Hot Alert Aux2 Output Pin A6	Tech	
Branch19 // Manual/ Passive Alarm Arming	User	
Branch20 // Disable/ Enable Auto Alarm Rearm	User	
Branch21 // Siren/ Both/ Silent Arming Chirps *	User	
Branch22 // No Selection		
Branch23 // Single/ Double Door Unlock Pulse	Tech	
Branch24 // 1 Second/ 3 Seconds Door Lock Pulse Length	Tech	
Branch25 // Disable/ Enabled Passive Door Locking	Tech	
Branch26 // Disable/ Enable Lock After Start	Tech	
Branch27 // Disable/ Enable Lock After Shutdown	Tech	
Branch28 // Normal/ Extended/ SuperExtended Smart Start Crank	Fime Tech	
Branch29 // Enable/ Disable Smart Start Temperature Compensati	ion Tech	
Branch30 // SmartStart/ Tach Engine Sense Mode	Tech	
Branch31 // RPMLearnTach/ GasEngine/ DieselEngine Program En	gine Tech	
Branch32 // Acc/ Ignition Pin i3 Output Type	Tech	
Branch33 // Negative/ Positive Wait to Start Input Type	Tech	
Branch34 // Enable/ Disable Turbo Timer	Tech	
Branch35 // Enable/ Disable Open Door Report	Tech	
*Asterisk denotes that the feature can be changed on the remote menu		
User denotes that the feature can be changed by the user.		
Tech denotes that the feature can be changed by the user.		
Page 14	ł	

		Page 15

K9Safety warrants that all K9Safety products are free from defects in workmanship and materials from the factory. K9Safety will repair or replace any part or parts that K9Safety has examined and that K9Safety is satisfied were originally defective. Defective parts must be returned to K9Safety accompanied by a copy of the corresponding K9Safety invoice with transportation charges prepaid within one year of the date of purchase.

This warranty is void if the products or parts have been subject to improper installation, misuse, accident, negligence, or unauthorized service. This warranty is void if the unit(s) have been modified or if the unit(s) are used in a fashion not intended by K9Safety. This warranty does not cover service or labor charges that may be incurred during replacement or repair.

K9Safety will not be responsible for expense, loss, or damage caused indirectly or directly by the use of K9Safety products, or any other cause.

No person, dealer or agent is authorized to make modifications or additions to this warranty or to assume any other liabilities on behalf of K9Safety.

Removing or defacing serial numbers or other identification, or accessing internal components will void the warranty stated above.

The rights granted to you by this warranty may be supplemented or restricted by state law.

Copyright K9Safety 2009

