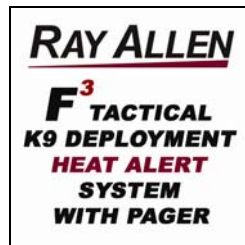


RAY ALLEN

PROFESSIONAL K-9 EQUIPMENT



USER'S MANUAL

System Serial No. _____

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
System Features	2
Starting Your System	3
Accessing System Menu	5
Programming Door Opener	6
Programming Window Drop	6
Programming Heat Alert Function	7
Becoming Familiar w/Interactive Intelligent Remote	8
Powering On Your Remote/Control Pager	9
High Temperature Alert Screens & Signals	10
Engine Stall Monitor – With So Much More	11
Additional Features & Information	12
Product Care & Service	13

RAY ALLEN F³ Tactical Deployment Heat Alert System with Pager - Features

Heads Up Display (HUD)

- In Vehicle Independent Temperature Read-Outs
- Displays System Status: "OK" & System Condition: "ARMED"
- Backlit Heads up Display (OFF plus 3 Levels of Brightness)
- Fully User Programmable Non-Volatile Memory (System retains your programmed settings if disconnected from vehicle battery)
- Fan Control Built Right-In (Off plus Low, Med, High)
- Plug to recharge Remote/Control Pager — wire pig-tail included

Interactive Intelligent Remote Control/Pager (RCP)

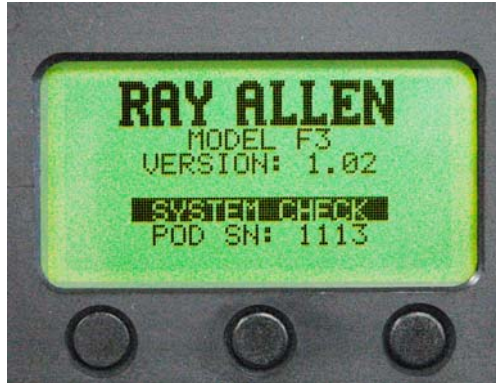
- No Larger Than a Typical Pager
- K9 Deployment at the Touch of a Button — Will Only Function with Vehicle in Park or Neutral
- Independent Temperature Read-Outs (Real Time)
- Reset Capability from Remote Control (In the event of a HEAT or VEHICLE POWER Alert)
- Signal Strength Indicator Bar
- RCP Battery Charge Level Indicator Bar
- System In-range Confirmation (Two (2) Short Vibrations)
- Out of Range Warning (One (1) Long Vibration)
- Backlit Display
- Built In Pager (Tone and Vibration for HEAT or VEHICLE POWER Alert)
- Tone / Mute Capability
- Fully Rechargeable (Wall-plug Charger Included)
- RCP can also be charged from the HUD – wire pigtail included
- Custom Belt Mounted Remote Control Holster Included

Control POD

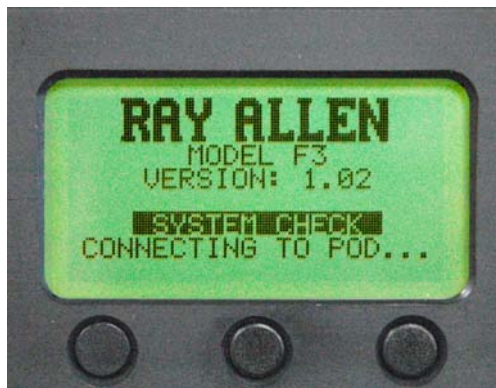
- "Brain-box" of the system in a small case
- Can be easily mounted anywhere in your vehicle
- Positive-lock wire harnesses – no more loose wires

STARTING YOUR SYSTEM

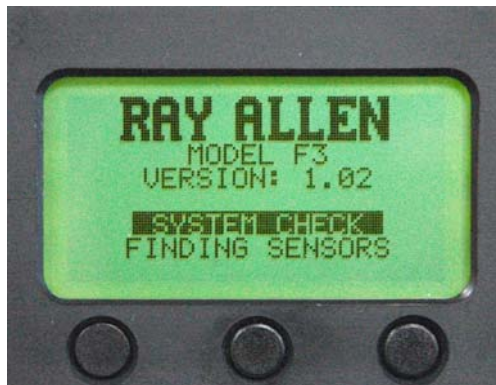
To Power-up the system, hold down the center button located on the Heads Up Display (HUD). The system will perform a complete self diagnostic and you will see the following on the display:



Note that Serial Number (POD SN: #) appears here.



System Check displays events taking place.



Model and Version are displayed throughout diagnostic routine.

STARTING YOUR SYSTEM (cont.)

Once the diagnostic is complete, the HUD will show displays similar to this:



Initial Display – Default Delay 1 Minute



Display After 1 Minute Delay – Ready to Go

After allowing for the 1 minute delay (default), the display will show two independent temperature readings, HEAT ALERT ARMED, SYS STATUS: OK. Along the bottom are BL: (Backlight), SET/PWR (menu access and power on/off), and FAN: 0-OFF, 1-LOW, 2-MED, 3-HIGH).

NOTE: THE DEPLOY K9 FUNCTION OPERATES ANY TIME THE SYSTEM IS TURNED ON AND THE VEHICLE IS IN PARK OR NEUTRAL – THIS FUNCTION IS NOT AFFECTED BY THE HEAT ALERT DELAY.

Adjusting the Backlight

To turn on and adjust the display backlight (BL), press the left button once to activate. There are three (3) levels of backlight adjustment (1, 2 or 3 — BL:0 is off).

Built In Fan Control

If you have chosen to integrate a fan with your system it is controlled by pressing the right button on the HUD. There are three (3) speed adjustments available for your K9's comfort (1-LOW, 2-MED, 3-HIGH — 0 is off)

Important Information

Your system uses non-volatile memory. That means even if power is lost for long periods of time your user programmed settings will be retained. This is an especially handy feature should your vehicle need to have the car battery disconnected during maintenance.

NOTE: YOUR SYSTEM IS POWERED BY DIRECT CONNECTION TO THE VEHICLE BATTERY AND WILL REMAIN ON AND FUNCTIONING EVEN WHEN THE VEHICLE IS TURNED OFF. THEREFORE WHEN YOUR VEHICLE IS NOT IN SERVICE AND/OR YOU NO LONGER REQUIRE THIS SYSTEM TO FUNCTION, YOU MUST MANUALLY TURN THE SYSTEM OFF (PRESS AND HOLD THE CENTER BUTTON OF THE HUD).

ACCESSING THE SYSTEM MENU

Access the particular system you wish to program by first pressing the center SET / PWR button on the HUD one (1) time (do not hold the button down). This brings you to the first level of your System Menu — SETUP.



Pressing SELECT one (1) time to access the DOOR OPENER menu. There are two (2) options in this menu.



****EXCLUSIVE PROGRAMMABLE FEATURE****

The system also has the ability to roll down either or both of the rear windows when using Remote Control Deployment. This is especially handy for situations where a secondary suspect is blocking the deployment door.

NOTE: TO TAKE FULL ADVANTAGE OF THIS FEATURE THE DEPLOYMENT DOOR MUST NOT HAVE A WINDOW GUARD INSTALLED.

TURNING DOOR OPENER ON/OFF



With the cursor on DOOR OPENER:, press the SELECT button one (1) time. The cursor will move to the right (as shown above) and highlight the on/off feature. Press the DN or UP button to toggle either ON or OFF. When the desired selection is displayed, press and hold the SELECT button until the cursor moves back to DOOR OPENER: (as shown below).



PROGRAM THE WINDOW DROP

Press the DN button to move the cursor to WINDOW DROP. Press the SELECT button one (1) time to move the cursor to the right. The system allows four (4) WINDOW DROP options when used with DOOR OPENER. These options are OFF (neither window will drop when the K9 is deployed), LEFT, RIGHT or BOTH and will scroll using the UP or DN buttons. When the desired selection is displayed, press and hold the SELECT button until the cursor moves back to the left.

To exit DOOR OPENER menu, press and hold the SELECT button to return to the SETUP menu.

To DEPLOY your K9 simply press the button on the back of the Remote Control/Pager.

NOTE: THE DEPLOY K9 FUNCTION OPERATES ANY TIME THE SYSTEM IS TURNED ON AND THE VEHICLE IS IN PARK OR NEUTRAL – THIS FUNCTION IS NOT AFFECTED BY THE HEAT ALERT DELAY.

PROGRAMMING HEAT ALERT FUNCTION



In the SETUP Menu, select HEAT ALERT then press the SELECT button one (1) time.



By manipulating the UP, DN, SELECT/XIT buttons as you did above, the HEAT ALERT menu allows you to:

Turn on/off the HEAT ALERT SYSTEM

Select TEMPERATURE MODE: F (Fahrenheit) or C (Celsius)

Select the TEMPERATURE at which you wish the system to ALERT

70-99 F or 21-37 C

Select the ALERT DELAY

(This feature prevents the Heat Alert System from activating when the vehicle is first started and the air conditioning hasn't yet cooled the interior of the vehicle. 1-10 minutes selectable)

NOTE: THE DEPLOY K9 FUNCTION OPERATES ANY TIME THE SYSTEM IS TURNED ON AND THE VEHICLE IS IN PARK OR NEUTRAL – THIS FUNCTION IS NOT AFFECTED BY THE HEAT ALERT DELAY.

Select rear WINDOW(s) to DROP in the event of a HEAT ALERT

(OFF, LEFT, RIGHT, BOTH)

ALERT MODES

(OFF, HORN, LIGHTS, BOTH)

NOTE: THERE IS A 30 SECOND DELAY (APPROXIMATELY) AFTER A HEAT ALERT BEFORE THE ACTIVATION OF THE LIGHTS AND/OR HORN OCCURS.

BECOMING FAMILIAR WITH THE INTERACTIVE INTELLIGENT REMOTE/CONTROL PAGER



Front

Back

The front of the Remote Control/Pager (RCP) houses the Interactive Display as well as the MUTE, ON-OFF buttons. The back of the RCP houses the recessed "Deploy K-9" remote control deployment button. Located on the side is the RCP charging port (not shown).

The RCP is designed to be carried on a law enforcement duty belt using the supplied custom holster. The RCP should be carried with the DEPLOY K-9 Button facing outward (away from the user). The supplied holster has a molded hole that will align perfectly with the DEPLOY K-9 button.

NOTE: THE HOLSTER HAS BEEN CONSTRUCTED OF A SPECIAL POLYMER THAT CAN BE CUT TO ACCOMMODATE LARGER FINGERS FOR ACCESSING THE DEPLOY K-9 BUTTON THROUGH THE HOLSTER.

POWERING ON YOUR REMOTE/CONTROL PAGER (RCP)

NOTE: THE HUD MUST BE POWERED ON BEFORE PROCEEDING. BE SURE THE REMOTE CONTROL/PAGER (RCP) HAS BEEN FULLY CHARGED PRIOR TO ITS FIRST USE.

To turn on the RCP, press and hold the ON/OFF button until the unit begins to power up. The RCP will go through a short diagnostic routine before making two short vibrations signaling connection with the in car system.



For Reference Only — Actual Display size .80 X 1.25 inches

RCP Display Properties (* Features Exclusive to Ray Allen)

- ***Sensor 1 & 2:** Two Independent Temperature Readings
Displays real time temperature from inside the vehicle — corresponding arrows show temperature trends as they occur.
- ***Left Vertical Bar:** Signal Strength - Between RCP and Vehicle
Provides instant verification of signal integrity and strength.
- ***Right Vertical Bar:** RCP Battery Charge Level
Be assured you have the power for communication — and to take action.
- ***System Condition:** Heat Armed
Verifies the HEAT ALERT SYSTEM is online and ready to respond.
- ***System Status:** System OK
The RCP and the HEAT ALERT SYSTEM are 100% all systems go.
- MUTE:** To MUTE the RCP beeper
When MUTED, the vibration alert will still function to inform you of HEAT ALERT SYSTEM activation and other features.
- BL/PWR:** Backlight/Power
Press once to turn on the Backlight (remains lit approximately 15 seconds then returns to normal). Press and hold to Power-Off the RCP.

* **Additional Exclusive Feature:**

The RCP will alert you when you are out of range of the vehicle by vibrating for 2 seconds and displaying an OUT OF RANGE message. When you come back into range of the vehicle, the RCP will give two short vibrations signaling you're now back in range and the display will show system information.

HIGH TEMPERATURE ALERT SCREENS AND SIGNALS



The above message is displayed on the HUD during a high temperature ALERT. All functions you have programmed into your system will now occur (window(s) rolling down, fan on high speed — refer to the PROGRAMMING HEAT ALERT FUNCTION to set these functions). The system will also send an immediate signal to the RCP alerting you remotely of the situation. To stop the audible and visual features (horn, lights, etc.), press the RESET button. This will put the system into Standby Mode for a period of time equal to the ALERT DELAY you programmed into your system. The windows that were programmed to roll down will remain down and the fan (if installed) will continue to run at high speed while the system is in Standby Mode.



Your RCP will alert you of a high temperature ALERT in a variety of ways. When the RCP first receives the alert, it will alternately vibrate and beep, while the display shows “ALERT! — HIGH TEMP ALERT”. You can clear the system remotely if you choose to, by pushing the RESET (ON/OFF button) once. The system will enter Standby Mode as noted above. This allows you to return to your vehicle and resolve the issue while silencing the ALERT in your vehicle and on the RCP.

You may also silence the beeper function of the RCP by pressing the MUTE button.

ENGINE STALL MONITOR — WITH SO MUCH MORE!



The above message is displayed on the HUD during a VEHICLE LOW VOLTAGE condition. This ALERT is caused by the battery voltage falling below the recommended level for normal operation. The voltage threshold is hard-coded into the system and cannot be altered. The cause of a VEHICLE POWER ALERT can be **engine stall**, over-taxing the vehicle's electrical system, a faulty battery or alternator, and/or many other issues.

The system will also send an immediate signal to the RCP alerting you remotely of the condition. To stop the audible and visual features (horn, lights, etc.), press the RESET button. This will put the system into Standby Mode for a period of time equal to the ALERT DELAY you programmed into your system.



Your RCP will alert you of a VEHICLE POWER condition in the same manner as a HIGH TEMP ALERT. The RCP will alternately vibrate and beep, while the display shows "ALERT! — VEHICLE POWER". You can clear the system remotely if you choose to, by pushing the RESET (ON/OFF button) once. The SYSTEM will enter Standby Mode. This allows you to return to your vehicle and resolve the issue while silencing the ALERT in your vehicle and on the RCP.

You may also silence the beeper function of the RCP by pressing the MUTE button.

ADDITIONAL FEATURES AND INFORMATION ABOUT YOUR HEAT ALERT SYSTEM™

Should a high temperature TEMP ALERT™ occur, your system is designed to be as purpose-based as possible. The following demonstrates additional features built into your system:

1. If your system informs you of a TEMP ALERT™ and you choose to RESET the system remotely from the RCP, the system will enter Standby Mode **for a period of time equal to the ALERT DELAY you have programmed**. If during this Standby Period the interior temperature of the vehicle drops below the ALERT TEMP setting, the system will reset and return to normal operation at the end of the Standby Period.

NOTE: IF THE VEHICLE WINDOWS WERE PROGRAMMED TO LOWER DURING THE ALERT, THEY WILL REMAIN OPEN UNTIL MANUALLY CLOSED. ALSO, IF YOU HAVE ADDED AN OPTIONAL FAN TO THE SYSTEM, IT WILL CONTINUE TO RUN AT HIGH SPEED UNTIL YOU MANUALLY CHANGE THE FAN SPEED ON THE HUD.

2. If the temperature does not drop below the ALERT TEMP setting you have programmed, the system will again ALERT you when the Standby Period expires.

NOTE: IF YOU MUTE THE RCP, YOU WILL BE NOTIFIED ONLY BY THE VIBRATION FUNCTION AND THE ALERT SCREEN DISPLAY ON THE REMOTE— BUT THE VEHICLE WILL CONTINUE TO REACT NORMALLY.

3. The vehicle's Lights and Horn (if wired into the system and selected in the ALERT MODE menu) will activate approximately 30 seconds after the TEMP ALERT™ occurs. The Lights & Horn will alternate when activated.
4. If you are OUT OF RANGE and do not receive a TEMP ALERT™ on your RCP, your in car system will react normally based on the selections you made during programming.
5. The moment you are OUT OF RANGE from the vehicle, the RCP will warn you with a 2 second vibration burst and "OUT OF RANGE" will appear on the RCP display. When you come back into range, the RCP will give two (2) short vibration bursts to signal reconnection with the vehicle system and the display will show system information.

NOTE: AS WITH ANY RADIO FREQUENCY (RF) DEVICE, THE ABILITY OF THE RF SIGNAL TO PENETRATE CERTAIN BUILDING MATERIALS VARIES. CELL PHONE AND PAGER SIGNALS DIMINISH GREATLY WHEN YOU ENTER BUILDINGS CONSTRUCTED WITH STEEL SUPERSTRUCTURES AND METAL BUILDINGS IN GENERAL. THESE SAME BUILDING STRUCTURES WILL AFFECT THIS SYSTEM'S RCP IN. LINE-OF-SIGHT READINGS TAKEN BY GPS HAVE SHOWN THE RF SIGNAL WILL WORK IN EXCESS OF ¾ OF A MILE. THIS RF SIGNAL HAS BEEN OPTIMIZED TO PROVIDE THE BEST POSSIBLE SIGNAL STRENGTH AND QUALITY, HOWEVER, SOME STRUCTURES WILL STILL ADVERSELY AFFECT THIS SIGNAL.

PRODUCT CARE AND SERVICE

Your system has been designed to give years of trouble free use. Great effort was given to the selection of the highest quality components and fixtures. Following are tips and suggestions that will help keep your system fully functional.

Heads Up Display

The Heads Up Display (HUD) can be cleaned with a soft, moist cloth. Do not use abrasive cleansers as they can damage the LCD panel and the housing. Your HUD requires no additional user maintenance.

Interactive Intelligent Remote Control/Pager

Your Remote Control/Pager (RCP) is designed to be carried on a law enforcement duty belt. Included with your system is a custom belt holster that is engineered to offer durability, ease of use, and comfort when carrying the RCP.

The RCP contains a high quality rechargeable memory-free battery. When connected to the charger for the first time (with the RCP turned OFF) the LCD display will read CHARGING BATTERY. If the battery is completely discharged it can take a minute or more for the display to show the CHARGING BATTERY message. When fully charged, the CHARGING BATTERY message will no longer be displayed.

Your RCP can be cleaned with a soft, moist cloth. Do not use abrasive cleaners as they can damage the LCD panel and the case. Do not submerge the RCP in water. However, if the RCP does become immersed in water, turn it off immediately. Allow the RCP to completely dry before attempting to turn it on again.

Disclaimer (cont.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that Interference will not occur in a particular installation, If this equipment does cause harmful Interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult an experienced technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution: changes or modifications not expressly approved by Ray Allen Mfg. Co., Inc. could void the user's authority to operate the equipment.