

# Hotdog™

Temperature Monitoring/Alerting / Security System for Interior of Canine Vehicles

## Installation & Operation Manual

Congratulations! You have purchased the renowned **Criminalistics, Inc.** temperature monitoring system that has served K-9 units nationwide for more than 16 years. The proper installation is very important for reliable functioning.

**K-9 Officers & Installers please take time and read the instructions carefully.**

**Know your system and what it is capable of doing!**

**You must set your desired Maximum Temperature!**

### I. Overview/Operational Summary

The **Hotdog™** will alert you if the temperature inside your vehicle gets too hot. The **Hotdog™** system comes in two parts: a control unit and (if purchased) an optional radio paging device. The **Hotdog™** control unit evaluates data from a sensing probe then updates the display of the ambient temperature once every second. The backup temperature sensor (located on the rear of the control box) on your **Hotdog™** reacts and resets quickly. The sensor is fixed to activate at 94° F - 96° F and reset about 92° F, plus or minus 2 percent. The control unit alone may be used to monitor the temperature, activate a horn or siren or lights and roll down 2 electric windows when the programmed temperature level is exceeded. The optional pager and a vehicle intrusion detector may be added to enhance the alerting functions of your **Hotdog™** system.

**PROPER INSTALLATION BY QUALIFIED ELECTRONIC TECHNICIAN IS ADVISED, THIS IS A LIFE SAVING DEVICE, INSTRUCTIONS MUST BE ADHERED TO FOR SYSTEM TO FUNCTION CORRECTLY. BATTERY CONNECTION VIA THE IN-LINE FUSE LINK IS REQUIRED, DO NOT ALTER THIS CONNECTION.** Correct fuse is required and an extra one is enclosed.

### II. List of Contents

- |                                 |                             |   |
|---------------------------------|-----------------------------|---|
| - <b>Hotdog™</b> Control Unit   | - Ground wire black 14 Ga.  | - If purchased as an <b>OPTION</b>      |
| - Temperature Probe             | - Accessory wire Red 16 Ga. | - Pager Transmitter & Receiver (beeper) |
| - Power wire red 12 ga. w/fuse  | - Mounting Screws 2         | - Glass Mount Antenna for Pager         |
| - 2 Window wires (Clear & Blue) | - Extra <b>40-amp Fuse</b>  |   |

### III. Installation

Please follow all instructions carefully. Your **Hotdog™** system is warranted against defective components and faulty workmanship for 1 year. If you have any questions, do not hesitate to call. We have engineers and installers on staff to assist you.

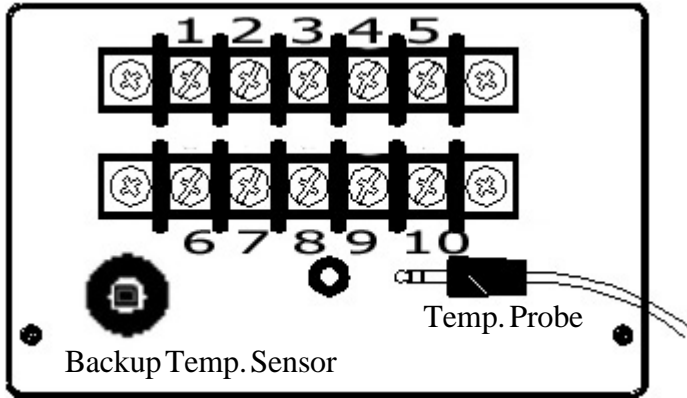
#### 1) **Hotdog™** Control Unit

Your **Hotdog™** Control Unit is housed in a Black and Silver™ case with On/Off Switch and LED indicator light located on the front of the case. Find a convenient place to mount your **Hotdog™** control unit. Most control units are mounted under the dash, on the cage screen between the driver and the canine area or on top of the cage. When determining the mounting position of the **Hotdog™** control unit consider the following:

- Accessibility of your **Hotdog™** control unit to the driver.
- An area of the vehicle that is dry at all times.
- Keep your **Hotdog™** control unit away from any heat source, i.e. heater vents, transmission, floor, sunlight!
- Keep your **Hotdog™** control unit away from direct sunlight.
- Do not install your **Hotdog™** control unit under vehicle hood.
- Do not install your **Hotdog™** control unit next to **radio equipment**.
- Place Temperature Probe wire near canine compartment but out of canine's reach.

**CAUTION: The Probe Wire must be handled gently.** Do not snatch, pull or jerk on the probe wire. The wires inside the cable are quite small, be careful. The **Back Up Heat Sensor** must be **handled with care**, do not crush or short the transistor style legs together, do not remove.

## Rear View of Hotdog™ Control Unit



Temperature Probe Wire is detachable and must be properly plugged into the unit for correct operation.

The following is a description of the terminals on rear of unit:

- Terminal #1** Ground for **Hotdog™** system.
- Terminal #2** Pager use only (White Wire) Ignition wire of pager system. Not used on 795T Pager.
- Terminal #3** Pager use only.  
Negative trigger wire of pager system.  
(Model DX: Gray Wire)(Model EX: Pink Wire)(Model 795T: Violet Wire).
- Terminal #4** Window input (A).
- Terminal #5** Window output (A).
- Terminal #6** Accessories, positive 12 Volt output (one second on, one second off)  
Connects to your selected alerting device: Lights, Siren, or Horn.
- Terminal #7** 12 volts, powers the **Hotdog™** system.  
Connects directly to vehicle battery **ONLY**.
- Terminal #8** Window input (B).
- Terminal #9** Window output (B).
- Terminal #10** En'garde input.

**CAUTION: DO NOT** tamper with the screws holding the terminal strip on the back of the unit.

## IV. Wiring

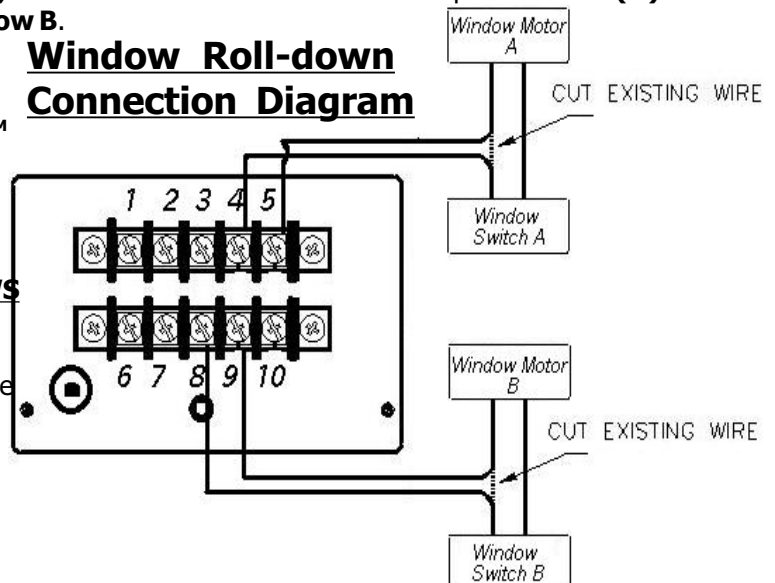
### DO NOT MAKE CONNECTION TO THE VEHICLE BATTERY UNTIL INSTALLATION IS COMPLETE.

Before completing the connection to the battery and inserting the fuse, make sure the unit is **OFF** by moving the both switches on the control box down. Failure to do so may spike the **Hotdog™** control unit and cause the system to lock up.

- 1) **Electric Window** (1-Clear and 1-Blue two-conductor zip wire) Windows A & B involving terminals 4, 5 and 8, 9. Use a **Voltmeter** at the electric window motor inside the door to locate the wire that has a positive 12 volts when the window is rolling down. The wire on the electric window motor reverses polarity depending on the function. Check carefully that you select the wire that has a positive voltage **during** the window roll-down function. Cut this wire between the window motor and the window switch **NOT BEFORE** switch and as close to the window motor (allow room for soldered connection) as possible. Use the **Clear** zip wire for **Window A**, connect the **Silver** wire to the **switch side of the wire you just cut**, then connect the **Copper** side of this wire to the **motor side** of the wire you just cut. Route back to control center and connect the **Silver** to **#4** and the **Copper** to **#5**. This same procedure and connection will be made in your other door for **Window B**, using the **Blue** zip wire marked with (-) connected to the switch side and **Blue** zip wire marked (+) to motor side respectively. (-) to **#8** and (+) to **#9** for **Window B**.

**NOTE:** A proper connection will allow the vehicle window switch system to act normal when **Hotdog™** is not in the alert mode, when **Hotdog™** does activate and go into the alert mode 12 volts will appear at terminal #5 and #9 for **6 seconds only, at the beginning of the alert cycle**, thus rolling down the windows one at a time. **WIRING WINDOWS INCORRECTLY WILL DAMAGE** the control center. Follow directions carefully and completely. **Do not** connect wire previous to window control switch! Make your connection as close to the window motor as possible.  
**Damage to the control system and vehicle may occur!**

### Window Roll-down Connection Diagram



## 2) **Accessory** (Red wire)

Locate the positive wire of the accessory you desire **Hotdog™** to activate. (Be sure that the accessory requires a positive voltage to activate.) It has been found that the easiest alerting device is the HORN. Splice into the wire that delivers +12 volts to the horn. Attach directly to the horn. Do not go through the horn relay. Solder and use heat shrink for the best connection. Connect the other end to **Hotdog™** Terminal #6.

**Horns with multiple positive wires:** Use a voltmeter to determine which wire is delivering the highest voltage. Remove wire clip from the horn. Attach positive lead of voltmeter to wire. Touch negative lead of voltmeter to the vehicle's metal surface. Have someone blow the horn while you read the voltmeter. Do the same test to the other positive reading wire. Attach the Red accessory wire to whichever one of these wires that has the highest voltage. Route the opposite end to **Hotdog™** Terminal #6.

**NOTE:** As shipped, your **Hotdog™** control unit is capable of alerting with ONE DEVICE ONLY.

For instance, do not patch into both horn and lights. To activate more than one alerting device from Terminal #6 you must use independent relays or barrier diodes for each device, using **Hotdog™** Terminal #6 to trip the relays.

## 3) **Hotdog™ Control Unit**

- **Terminal #1 - Ground** for Control Unit.  
Connect ground wire (Black wire) to chassis ground on vehicle, or directly to battery ground for BEST results.
- **Terminal #2 - Pager.** For those who purchased this option.  
Ignition wire of Pager System as instructed below. **Not used for pager Model 795T.** (See Step 4 - Pager)  
**DO NOT CONNECT TO VEHICLE IGNITION.**
- **Terminal #3 - Pager.** For those who purchased this option.  
Negative trigger wire as instructed below. (See Step 4 - Pager)
- **Terminal #4 - Window Input** as instructed above. (See Step 1 - Electric Windows)
- **Terminal #5 - Window Output** as instructed above. (See Step 1 - Electric Windows)
- **Terminal #6 - Accessory** as instructed above. (See Step 2 - Accessory)
- **Terminal #7 - 12 volt power supply** for **Hotdog™** control unit. (Red wire, with in-line fuse)  
Connect the shortest length of wire from in-line fuse to battery. Route the other end through the fire wall of the vehicle to the planned **Hotdog™** control unit mounting area. (This is a good time to also route the ground wire at the same time).
- **Terminal #8 - Window Input** as instructed above. (See Step 1 - Electric Windows)
- **Terminal #9 - Window Output** as instructed above. (See Step 1 - Electric Windows)
- **Terminal #10 - En'Garde Input.**

## 4) **Pager** (wire placement for those who purchased this option)

- **Terminal #1** - Ground wire for Pager operation. May also be connected to the negative terminal of the vehicle battery or to a good chassis ground.
- **Terminal #2** - The Ignition wire from the Pager. **Note:** Not used for pager model 795T.  
(**DO NOT connect to your ignition.** This will turn your Pager off when the ignition is on. We control the Pager with the **Hotdog™** System. The Pager must remain on when the ignition is on for **Hotdog™** to work with Pager.)
- **Terminal #3** - The Negative Trigger wire from the Pager. (Model DX: Gray Wire, Model EX: Pink Wire, Model 795T: Violet Wire). Upon temperature violation the **Hotdog™** will trigger the Pager.  
**CAUTION:** Keep this connection away from any Positive 12 Volt power source. You can damage your Pager and **Hotdog™** system.
- **Terminal #7** - 12 Volt power supply wire for Pager operation to **Hotdog™**.

Read the antenna connection information in the Pager instructions **carefully**. Newer model vehicle's AM/FM antenna will not accept the Pager signal. Glass laminated antennas (in the windshield) will not accommodate the Pager's transmitter. The Pager is operating at 27 MHz on the CB channels. You may attach it to a CB antenna or the supplied manufacturer's Glass Mount Antenna. Connection to the wrong antenna can damage your Pager and the **Hotdog™**. Examine carefully. For optimum range we recommend the use of a separate Glass Mount Antenna.

**NOTE:** A mis-matched antenna on your Pager can cause your **Hotdog™** to lose memory and/or act erratically.

## V. Front Switches and Programming Instructions

The following illustration shows the front face of the **Hotdog™** control unit after proper programming.



### 1) Switches and setting the **MAX** Temperature

The switches on the front of your **Hotdog™** have multiple functions. The Left-hand switch has two-positions.

- **Up position:** is for **programming** the High Setting. This position is used during programming and also reflects what your maximum high setting is.
- **Down position:** In this position the system displays the Ambient Temperature. This is the interior temperature of the vehicle at the location of the probe sensor.

The Right-hand switch has five (5) functions;

- When programming the temperature it is used to change the display.
- After the temperature is set and the Left-hand switch is back to the "Ambient Temperature" position, the Right-hand switch becomes your ON/ Pager as car alarm/ Off switch.
- In the down "Advance Temp. Set/Off" position everything is off.
- In the middle position, **Hotdog™** operates the car alarm function only! (if used with optional pager with alarm sensors).
- In the up position "Lock Max/ ON system is **ON**, LED will light.

**If the word 'MAX' does not appear on the display, your system is NOT programmed and will not alert!**

### 2) Programming

The maximum temperature measured by **Hotdog™** is 122° F. Your Maximum set point should be around 85°F to 90° F or below for your canine's safety.

Consider and observe the following when programming your **Hotdog™** for the first time:

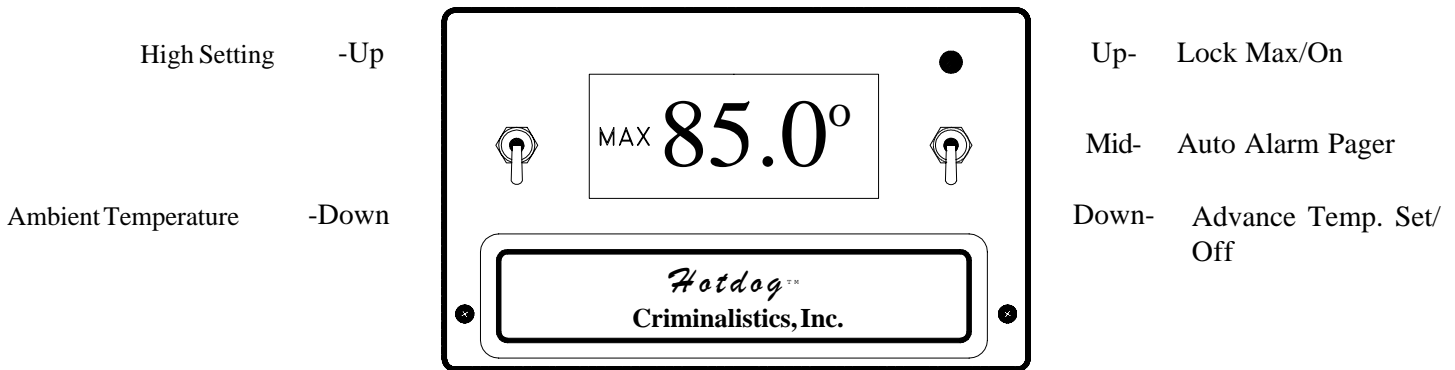
- What is the normal ambient temperature of your patrol vehicle?
- Note the ambient temperature reading on the **Hotdog™** during normal patrol or operating hours.
- Note the temperature when you return to your vehicle after it has been idling with the K-9 inside. You may notice that the idling vehicle's interior temperature rises because an idling vehicle generates more heat than when it is moving.

After the above observations, consider programming the maximum about 7 to 10 degrees higher than the normal temperature reading during idling. This will assist in setting a reasonable maximum temperature.

Your **Hotdog™** system will alert as follows. This means your alarm output will run as follows: First second: **Alarm is activated**. Next second: alarm pauses. Next second: **Alarm is activated**. This will continue in 1 second cycles until the system is deactivated. Deactivation occurs if the temperature returns to below Maximum Temperature Set point, by switching the **Hotdog™** control unit off or if the battery dies.

# Programming your Hotdog™

## Keep this Programming Guide with your unit



**To set the critical temperature:** Power up the **Hotdog™** control unit with both front switches in the **down** position. Flip the Left-hand switch **up** to the "High Setting" position. Next, flip the Right-hand switch **down** to the "Advance Temp Set/ Off." The **Hotdog™** control unit display will begin to cycle through the possible temperature settings. When you get near your desired set point, flip the Right-hand switch to the **middle** position to stop. To advance temperature one degree at a time toggle Right-hand switch **down** to "Advance Temp Set" and **up** to the **middle** position. Most users set the maximum temperature around 90°F.

**Lock in your critical temperature:** Flip the Right-hand toggle switch **up** to the "Lock Max/On" position and back to the **middle** position. You will see the word "**MAX**" appear in the display. If **MAX** does not appear, repeat the unlock up, Right-hand switch is in the **middle** position and toggle the Right-hand switch up to the "LOCK MAX/ON" position and back to **middle**.)

**Now flip the Left-hand toggle switch back down to the "Ambient Temperature" position.** Then flip the Right-hand toggle switch **up** to "Lock Max/On". The LED will light and your **Hotdog™** system is ready and on. You will not need to toggle the Left-hand switch again unless you need to reprogram the system. The display now shows the temperature of the vehicle interior as sensed by the **Hotdog™** program and the word **MAX**. Your probe will sample and update the ambient temperature reading every 15 seconds. **DO NOT LEAVE THE LEFT HAND SWITCH IN THE UP POSITION, YOUR SYSTEM WILL NOT ALERT AT THE SET MAXIMUM TEMPERATURE!** The back up sensor is still functional as long as you turn on the system! Make sure you return the LEFT HAND SWITCH TO THE DOWN POSITION AFTER LOCKING IN MAXIMUM PROGRAM (AMBIENT TEMPERATURE POSITION).

**NOTE:** The "**MAX**" abbreviation must appear in the display or the **Hotdog™** control unit will not alert at your desired maximum setting. (However, the back-up sensor will activate the system at 92° F.) **If "MAX" disappears from the display your programmed maximum temperature is lost. The unit must be reprogrammed.**

**WARNING:** If your vehicle is going to be serviced, jump started, the battery charged, or you are going to use your battery to jump start another vehicle **turn your Hotdog™ System off and remove the fuse.** Failure to do this could damage the system! REMEMBER TO RESET YOUR MAXIMUM TEMPERATURE AFTER REMOVING AND REINSERTING THE FUSE.

**Resetting/Reprogramming Maximum Temperature:** First, clear the "MAX" setting by toggling the Left-hand switch **up** to the "High Setting" position. Next, toggle the Right-hand switch **down** to the "Off" position and back **up** to the "Lock Max / On" position. "Max" will disappear from the **Hotdog™** display screen. Your **Hotdog™** control unit is now ready to be programmed once again.

The **Back Up Heat Sensor** must be **handled with care**, do not crush or short the transistor style legs together, do not remove.

**Notice:** Vehicle Manufactures will not supply us with complete data on the various switching systems for windows. Certain vehicles will require special ground (control) applying relay to supply ground as our system supplies 12 volts. Chevrolet and Dodge owners/installers pay special attention to circuits.

**Warning:** If the unit has engaged with a temperature above 92° F the backup sensor located on the back of the control unit must be cooled below 92° F before it will reset. Failure to do so will result in the unit deploying continuously until it is reset.

**To disarm or turn off the Hotdog™:** Toggle the Right-hand switch to the **down** position.

**Testing the Hotdog™ system:** If you set the High alarm temperature to around 90° F you should be able to activate the system with the heat from the palm of your hand. Hold the probe in your hand, and watch the temperature climb. When the temperature reaches your High programmed temperature, your alerting system will activate (You can manually deactivate the system by toggling the Right-hand switch to the down position to the OFF position.)

## **Trouble Shooting Guide**

### **Problem**

### **Possible Causes**

Display is jumpy, reads erratically	Control Unit and/or probe is too close to radio transmitter. Improper grounding of unit. Check your ground wire. Make sure you have a good grounding source.
Programming set point changes or MAX disappears from display.	Battery has lost power or is disconnected. Loose connection to the battery. Positive &/or Negative, check both!
Alarm does not sound	Set point is improperly programmed. Go through programming instructions again. If "MAX" is flashing and your horn, lights or siren are not activated, they are probably connected improperly.
Digital display is locked up. Stuck on one temperature or will not program to desired setting.	The unit has received a power surge. Turn the unit off and remove the fuse. Let the system discharge for about 30 minutes or more. Replace the fuse and reset the MAXIMUM in system.
Alarm remains on	Set point is improperly programmed. Make sure setting is 80° F or higher. At least higher than the room temperature in which you are installing. Back up sensor may have activated. If temperature has exceeded 92° F, cool physical body of back up sensor down below 92° F to reset. You may use a freeze spray to accomplish this quickly, do not allow the 3 legs on sensor to touch each other.
Display reading is LLL	If your display reads <b>LLL</b> and will not return to any number reading, the probe wire may be broken or disconnected. You may want to order a spare probe in case of this event.
Display reading is HHH	The temperature has exceeded 122° F. This is noticed most when you are both out of the vehicle and the system is not on. Cool the vehicle off and the reading will return. Also, probe may not be properly installed.
No reading on display at all	Check the fuse, battery connection, and Terminal #1 and Terminal #7 on the rear of the <b>Hotdog™</b> control unit for proper connection.
Fuse is blown or blows upon alerting.	Check the devices connected to the Terminals. Especially the window wire hook ups. Follow directions.
Unit has engaged without reaching maximum temperature.	Make sure that the unit is not located near a heat source or placed in direct sunlight. Back up sensor may have engaged unit. Cool back up sensor to below 92° F.

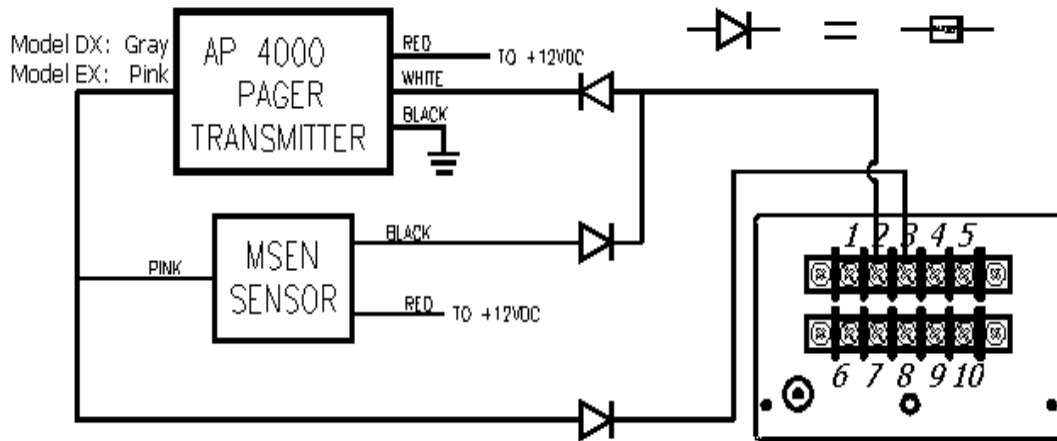
**Please call us if you have any questions. We will be happy to assist you.**

## VI. Hookup of Hotdog™ with Optional Pager and Vehicle Alarm Function Sensor

**Vehicle Alarm Installation Note:** To prevent false alarms caused by the canine moving inside the car, hook up the sensor and the pager according to this diagram with the diodes provided.

### ONLY FOR Pager as a Vehicle Alarm System

This Pager system is actually the heart of a **full-blown burglar alarm system** for your vehicle. Many options are available to you at this point such as glass breakage detectors, motion sensors, key lock alarm and starter kills. Please call us for further information regarding these products.



By installing the unit in this manner the alarm sensor is switched off when the **Hotdog™** is armed (Right-hand switch up). The vehicle alarm is activated with the switch in the middle position. Both are off with the Right-hand switch in the down position.

## VII. FINAL NOTES

Be sure that the system ground is a true **BATTERY OR chassis** ground. Improper grounding will adversely affect the unit. **DIRECT BATTERY GROUNDING IS RECOMMENDED!**

Have a good probe placement. Keep clear of radio transmitters, antennas, direct sunlight and air conditioning/heater vents. Also keep in mind that chewed, eaten, snatched, cut or damaged probes are not covered by the warranty.

**Test your system everyday.** When you enter the vehicle at the beginning of a shift and the vehicle is still hot, flip the **Hotdog™** System on and check to make sure it alerts. Do not assume that the vehicle or system has not been altered during your time away, this could have deadly consequences. Please test your system daily just as you would check your service revolver for bullets. When you enter the vehicle and the temperature is hot, just turn the **Hotdog™** control unit on and let it alert. This will confirm your maximum setting is still programmed and no one has serviced the vehicle or disconnected the battery.

You will lose your high setting if the car battery dies or becomes disconnected. Should this occur, simply reprogram the unit by following the programming instructions. Also be sure the unit is connected directly to the battery so the system has power even when the car is not running.

If you should ever have to jump start your vehicle, give someone a jump or need to charge the vehicle battery, you must first remove the inline fuse to the **Hotdog™** control unit. Failure to remove the fuse, may send a power surge to the unit and cause the system display to lock up. If your display is locked up turn the unit off and remove the fuse. Let the system discharge for about 30 minutes or more. Replace the fuse and reprogram the system.

Carefully follow all directions enclosed with your antenna. This antenna is designed and cut specifically for your **Hotdog™** system. Good range can depend on this antenna installation. Be sure the grounding sheath is in no way connected to the signal wire, either at the plug or at the antenna. A continuity tester will verify this. If you have a bad antenna installation the normal range for your Pager transmitter will decrease to approx. 60 to 70 feet.

## **X. Limited Warranty**

**Criminalistics, Inc.** warrants your **Hotdog™** system to be free from defects in material and workmanship for a period of 1 year from date of sale to the original purchaser. **Criminalistics, Inc.** will repair this product free of charge, when product is returned at customer expense to **Criminalistics, Inc.** and if in the judgment of our staff said product has proven to be defective within the warranty period. This warranty does not cover damage due to installation errors, any expenses incurred in the removal and reinstallation of this product.

This warranty does not apply to any product damaged by **improper installation**, accident, misuse, abuse, improper line voltage, fire, flood, lightning or other acts of God, or if the product was altered or repaired by anyone other than **Criminalistics, Inc.**

**PLEASE NOTE:** failure to follow installation guide, drilling into or opening control center, removal of any screws, addition of any screws and abusive use of the **Hotdog™** system voids the warranty. **DO NOT INSERT ANY SCREWS INTO THE CONTROL BOX!**

**Criminalistics, Inc.** shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the product malfunctioned. However if we are held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, our maximum liability shall not in any case exceed the purchase price of the product.

# **IMPORTANT**

**KEEP YOUR INVOICE WITH THIS WARRANTY STATEMENT!!!**