Premier Canine System[™] Plus

Remote Door Opening and Temperature Monitoring/Alerting System for Canine Vehicles

Congratulations! You have purchased the most advanced door opening and temperature monitoring system available today. Your **Premier Canine SystemTM Plus** incorporates the acclaimed one-button door release features of the distinguished Bail OutTM system and the proven reliability of the HotdogTM temperature monitoring system. *Criminalistics, Inc.* is committed to providing the best in reliability, quality and support at an affordable value.

K-9 Officers & Installers: PLEASE take time to read the instructions carefully. This is a life saving system, proper installation and operating procedures must be taken seriously.

Familiarize yourself with all system functions and operational modes. TEST YOUR SYSTEM DAILY!

Overview/Operational Summary

Your **Premier Canine System™ Plus** door opening system is supplied with 40-pounds of pneumatic push power (a gas spring). This unique system will unlock, unlatch and push open your vehicle door with the press of a single button from up to 500 feet away. The door unlatch solenoid is rated for 15 pounds. Most door latches typically require a 5-pound pull. This unit has the strength to operate the door of most standard patrol vehicles. Your **Premier Canine System™ Plus** is individually coded for a specific vehicle to ensure that the door with the corresponding code will open. A necessary advantage when multiple systems are used within an agency.

As an added safety feature, there is a Door Opener interlock, where the vehicle must be in Park, Neutral or a VSS (Vehicle Speed Sensor) sensor connection, which will disable the door opening function when the vehicle is moving.

If your programmed maximum temperature is exceeded and/or the back up sensor maximum temperature is exceeded (92° F - 94° F) your **Premier Canine System™ Plus** will lower **two** electric windows, activate the Accessory output (typically a horn or lights), summon you via a *optional* pager, from up to 1 mile away, and turn on the high volume fan. Your system will cycle/alert continuously until the interior temperature decreases below the programmed maximum temperature or below the back up sensor reset temperature of (91°) unless the unit is turned off by the user, or if the vehicle battery dies.

The optional pager can also function as a vehicle burglar alarm with the addition of *options* that include glass breakage detectors, motion sensors, key lock alarms and starter kill functions. Please feel free to contact Criminalistics, Inc. for additional information regarding these products.

Operation and Programming:

To turn the unit on, lift the "Lock/On" switch lever up (*this is a locking switch and the lever has a slide collar, lift the collar to change it's position*). The LED should illuminate steady "green". Place the switch lever to the center position to turn the unit off. With the "Lock/On" switch in the down position only the *optional pager* system is turned on (for optional vehicle alarm motion sensors, if installed).

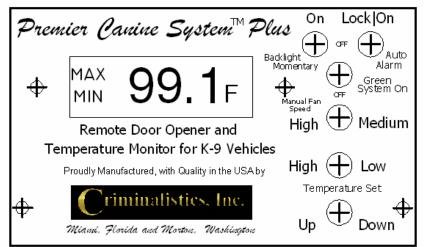
Placing the switch lever in the down position will turn on the "optional" pager system ONLY. The Premier Canine System will NOT be powered on. (Only with the switch lever down). With the switch lever up both the Premier Canine System and the "optional" pager system (if installed) will be powered on.

To set "High" temperature alarm point:

- A) With the system (Lock/On) switch set to the middle (off) position (LED off)
- B) Select "high" temperature set. (switch is momentary, press and release) The temperature will blink the last programmed high alarm temperature.
- C) Using the up/down switch select the new desired "high" temperature alarm point. The up/down switch will increase or decrease in one degree steps or if the switch is held over the temperature will scroll up or down until released. Once the desired "high" temperature is reached, press the "high" temperature set switch one more time. High temperature alarm point is now set. (Blinking will stop).

Note: You can confirm the setting with the Lock/On switch centered. Press the "high" temperature set switch once, it will display the current setting, press the "high" temperature set switch one more time to return to ambient temperature. When a MAX or MIN temperature is recorded, and the "Lock/On" switch is centered, MAX and/or MIN will be displayed on the LCD.

D) If desired, program the Low temperature, using step B & C above, using "Low" temperature.



Programmed temperature settings are maintained with a NiMh re-chargeable battery. In the un-likely condition the battery needs to be replaced. Please refer to instructions on page 18.

Turning Unit On:

Lift the "Lock/On" switch up. The LED should illuminate steady "green" and MEM will appear on the Temperature LCD. If the temperature reaches the High set point, MAX will appear on the LCD just below MEM. If Low temperature point is set and the temperature drops below the set point, MIN will appear below MAX on the LCD. The LED will blink and MEM, MAX, or MIN will blink. *If the LED blinks there is an alarm condition present. (Refer to alarm LED condition codes on the next page)*

With the "Lock/On" switch up, pressing the High (or Low) temperature set switch once will display the Highest (or Lowest) recorded temperature. Pressing the High (or Low) switch one more time will return to ambient temperature. The Temperature unit has a NiMh rechargeable battery to retain settings for approximately 6 months of nonuse. With normal use the Premier Plus unit will recharge the battery automatically.

Criminalistics, Inc. 7560 NW 82nd St., Miami, FL 33166, (305) 885 6444, Fax (305) 885 3330 1391 Main Ave., Morton, WA 98356, (360) 496 6363, Fax (360) 496 6210 http://www.criminalisticsinc.com

Alarm LED condition codes:

Steady Green: All's well, system on and active.

Blinking Green: ALARM, Temperature (High or Low), either the primary or backup sensor. (The Primary sensor will also blink the MAX or MIN on the LCD)

Alternating Red/Orange: ALARM, Low Voltage, and possible Temperature sensor.

Switch Descriptions:

Backlighting: This switch is used to turn on and off the Temperature LCD back lighting. Up is constant On, Center is Off, and Down is Momentary On.

Lock/On: Used to turn on the Premier Canine System and for programming the temperature alarm points.

Manual Fan Speed: This switch turns on the fan, either High (full) speed or a lower (medium) speed. This switch will NOT override the Alarm function. In an Alarm condition the fan will run at high (full) speed until the temperature drops below the high temperature alarm point.

Temperature Set, **High/Low:** Selects either the High or Low temperature alarm set point. It is recommended that the **low** temperature not be set unless it is *specifically* to be used. If the temperature drops to the low setting (or below), it will trigger the Premier Plus into the below alarm sequence.

Up/Down: Changes the display alarm temperature set either up or down. Momentary pushing the toggle changes the set temperature in single degree steps. Holding the toggle will scroll the temperature in the direction held. The temperature scroll will also "wrap around" and start from the most minimum limit.

Temperature Alarm Sequence of Events: When a Temperature Alarm situation occurs 3 things happen simultaneously: Audio/Visual indicators are activated (typically Horn Honk, Light bar, or Brake lights). Window A rolls down for 5 seconds and the Fan comes on at high speed. After Window A rolls down Window B will roll down for 5 seconds (if connected).

Bailout (door opener) Function:

This function is activated when the button is pressed on the remote transmitter.

If the vehicle is using any of the vehicle motion sensors the door unlatch function will not function until the sensor is in an "armed" condition. Sensor can be VSS (Vehicle Speed Sensor), Park + (a 5vdc signal when the vehicle is in Park or Neutral), or Park – (a ground, when the vehicle is in Park or Neutral).

Sequence of events on a Door Opener button press: Door unlocks, then unlatches. The gas spring pushes the door open allowing the K-9 partner to exit the vehicle.

Note: The Green front panel LED must be on steady for the Premier Canine System[™] Alarm function to operate properly.

WARNING: If jump starting the vehicle the Premier Canine System[™] is installed in or using the vehicle to jump start another vehicle, turn off the Premier Canine System[™]. Failure to do so could possibly damage your Premier Canine System[™] and is not covered by warranty.

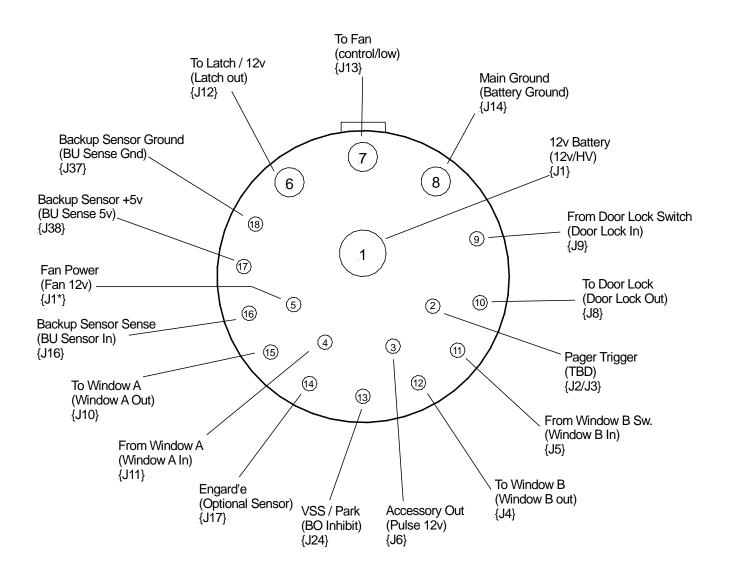
Installation

Below is the pin out of the rear panel connector.

Premier Plus Deutsch Connector Pinout

Base Description (Schematic Description) {PCB "J" Connection}

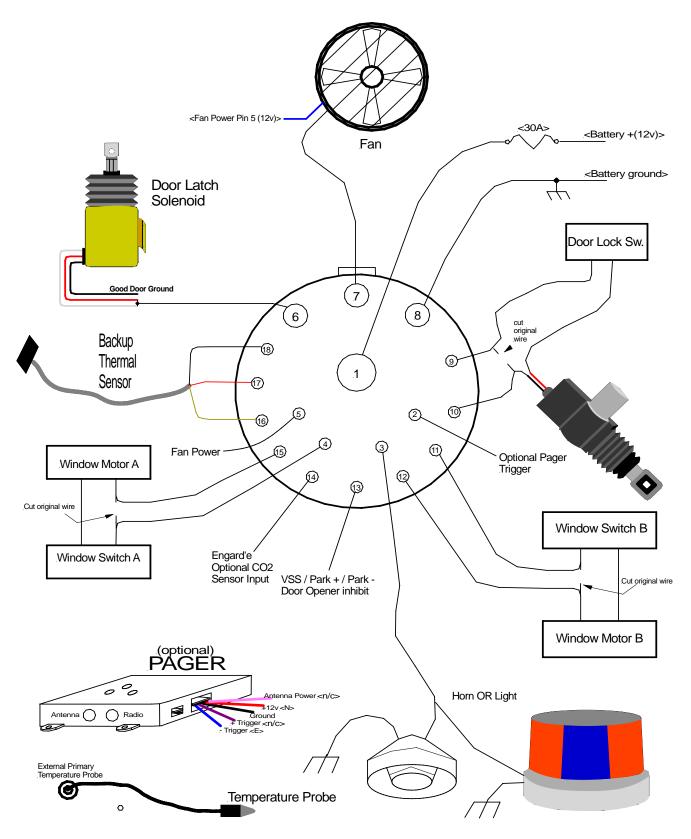
(Looking at connector from the outside of the box)



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Connection Layout

Note: Many Late 08 and newer vehicles are using dual action switches for Doors, Locks and Windows. For these Vehicles you will need to use a DPDT interface relay. *(Both the ground and power to the device are switched)*



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Connection List

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Pin # Description

- 1 Primary DC In from Vehicle Battery
- 2 Optional Pager Trigger
- 3 Pulse Output, to Horn or Lights
- 4 Window A, in from switch
- 5 Fan Power
- 6 Output to Latch Solenoid
- 7 Output (ground) to Fan
- 8 Ground, Battery, Chassis
- 9 From Door Lock Switch (Door for Dog Exit)
- 10 To Door Lock Motor
- 11 From Window B Switch
- 12 To Window B Motor
- 13 Door opener inhibit (VSS / Park + / Park –) Input
- 14 Optional Engard'e input
- 15 Window A, Out to Motor
- 16 Backup Sensor (Sense) in
- 17 Backup Sensor +5v
- 18 Backup Sensor Ground

List of Package Contents

Each **Premier Canine System™ Plus** includes the following hardware:

- Premier Control Unit
- Gas Spring (DO NOT expand until installing)
- Hand-held Remote
- Antenna Kit
- 6ft Probe Cable (Black) (3.5mm jack Primary probe)
- 10" Maxi Thin Fan (15" fan optional)
- Fan twin lead 12awg power/control wire with reset able 15A fuse
- Wire Harness composed of:
 - Power Wire (+ Battery, 10awg) w/in-line fuse link & 40A Fuse Ground Wire Black 14 ga.
 - 2 Window wires Clear & Blue zip wire 16 ga. Accessory Wire Red 16 ga. Unlatch Solenoid Red 12
- ga.
- VSS wire Green 16 ga. Door Unlock Wire (Red/Black zip wire 16 ga.)
- 8ft Backup Probe (Grey), with 1 foot plug in backup sensor on the end (custom lengths available).
- Mounting Screws for Control Unit
- Spare 40 Amp Fuse

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Installation Guideline

Please follow all instructions carefully. Your Premier Canine System[™] Plus is warranted against defective components and faulty workmanship for 1 year. Do not hesitate to call if you have any questions. Our engineers and installers are ready to assist you. You will need a DVM (Digital Volt Meter) for this installation. The 40 amp fuse is required.

INSTALLATION BY QUALIFIED ELECTRONIC TECHNICIAN IS HIGHLY RECOMMENDED.

Premier Canine System[™] Plus Control Unit

Your Premier Canine System^M Plus control unit is housed in a black and silver case with 5 switches and a LCD on the front panel. Find a functional place to mount your Premier Canine System^M Plus control unit. Most control units are mounted on top of the K-9 cage (centered) or on top of cage (on the passenger's side) angled toward driver. When determining the mounting position of the control unit, consider the following:

- Accessibility of your Premier Canine System[™] Plus On/off switch for the operator.
- An area of the vehicle that is dry at all times.
- Keep your Premier Canine System[™] Plus <u>unit away from any heat source</u>; i.e. heater vents, transmission, floor, sunlight!
- The **Back Up Heat Sensor** must be **handled with care.** Do not crush, crimp, or twist the Backup Sensor Black end piece.
- Do not install your Premier Canine System[™] Plus control unit under the vehicle engine hood or in direct sunlight.
- Do not install your Premier Canine System[™] Plus control unit near any **radio equipment**.
- Choose placement of your Premier Canine System[™] Plus control unit near the selected door for ease of installation.
- Place Temperature Probe wire near canine compartment but out of canine's reach.

Door Unlatch Solenoid:

Select the door to open (traffic or curb side) and remove door panel, and any other obstacles, that block your access to the door's internal unlatch mechanism. Examine (with the door open) and operate the door with the <u>outside door handle</u> as if you were opening it, reach inside the door cavity up to the 3/16" rod that is being <u>pushed down</u> by the outside door handle operation. Observe/feel the downward action of the rod that is connected to the outside door handle. Working from the inside of the door, use your fingers and pull down on this rod to manually unlatch the door several times. (Engage the latch using a screw driver to simulate the door being closed and latched around the post. Remove the screw driver before trying to unlatch.)

Near the end of this rod is a factory connector; place the supplied clip lock hook, located at the end of the solenoid pull cable, over the end of the (external door handle) 3/16" rod directly at the connection point at the latch mechanism (piggy back solenoid cable clip lock hook on existing rod). *DO NOT mistakenly attach this solenoid to the inner door handle rod for it will not operate properly.*

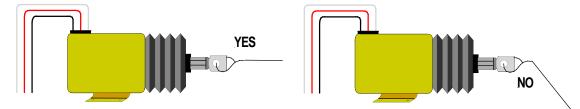
Some doors may require you to use an inspection mirror to see this rod and a pair of long needle nose pliers to apply the clip.

Note: A door latch lever typically travels a total of 5/8" beginning with 1/4" free movement and then as it moves to 3/8", it unlatches the door completely. The lever requires a minimum of 4 pounds pull and a positive travel of 3/8" to unlatch, which fits well within the solenoid travel of 1" and its pulling power of 15 pounds. The solenoid power is supplied by the vehicle battery and should be maintained by leaving the vehicle engine running during testing of door opening operations to prevent excess battery drain.



Mounting Solenoid:

Let the solenoid hang free from the door latch rod and use it as a positioning guide for mounting. In the standard Ford Crown Victoria the solenoid mounts below the latch. With the door open looking at the latch end, under the latch, measure from the base of the latch opening down approximately 12" and move as far out to the outside door skin as possible. Not too far out because you will not be able to get the nut on the outer bolt of the solenoid mount. One bolt of the solenoid will be under the rubber weather strip. The actual mounting takes place inside the door cavity, only the bolt heads will show on the outer portion of the door end. Lay the solenoid in this position and *slowly* lower the window to check for clearance. Also, some door curvatures will not permit the mounting of the solenoid directly under the latch. The latch solenoid will work positioned off to one side as long as the "pulling end" points directly towards the door latch. Angle the solenoid mount accordingly.



The solenoid cable may be manually pulled while hanging. This will easily release the door latch, which may be manually reset to study the release action caused by pulling the solenoid cable. Keep in mind that a binding solenoid plunger from a sideways pull will not perform properly.

CAUTION: IF YOU ARE INSTALLING IN A GM VEHICLE, DO NOT make the solenoid cable tight. If there is too much tension in the line *the lock will jam and not release even after removing the solenoid cable*. You must test the latch setup several times by locking and unlocking the door. Then pull the outer door handle to check for proper exterior opening of the door. Ensure that the cable has a small degree of slack available. It is highly recommended to double check window and latch clearances before drilling and mounting the solenoid.

NOTE: Final adjustment should only be made after several test openings. Ensure the brass cable lock nut is tight. **All doors should be thoroughly tested before reinstalling the interior cover panel.**

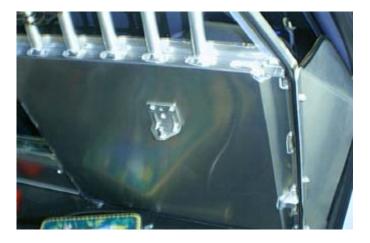
WARNING: The solenoid is designed for momentary use. Do not activate power to the solenoid for extended periods of time or use the remote in rapid succession. The solenoid should not be activated more than four times (within 4 min's) before allowing the solenoid to cool. The solenoid weakens as it heats up and eventually damage will result after continued use in an overheated condition. A solenoid damaged in this manner is easy to identify and will not be covered under the warranty.

Gas Charged Spring:

NOTE: DO NOT open the spring before your installation position has been marked.

Your Premier Canine System[™] Plus is supplied with a 40lb (push rated) Gas Charged Spring, two (2) ball mounting brackets, and bolts. The gas spring location is paramount; failure to plan ahead will hinder the door from opening correctly. The black cylinder attaches to the door frame at a position slightly higher than the pushrod (accommodating the internal oil flow of the gas spring). This position can be reversed if need be. The bracket may be fastened about 6" to 8" out from the front, hinged edge, of the door with the bottom measuring 18" across.

Gas Spring mounted photos in Crown Victoria.







With the door skin removed; enter the vehicle and close the door that you are attempting to open with the gas spring. Position the closed spring on the floor of your cage and examine which location is most suitable for attaching it to door.

If it is desired to mount the spring on the floor of the cage, position it as close to the vertical wall behind the front panel as possible. This will provide a wider passage area and remove the spring from the K-9's path while being deployed from the vehicle.

While the door is closed; examine the **DOOR FRAME** for an attachment point, usually located midway up the door frame. You may attach the gas spring to the door frame with one mounting bolt for testing. Do not drill the door's interior cover panel prematurely. Make a small cut in the door panel to allow the door gas spring bracket to pass through with the ball removed. Drill two holes in the door frame to temporarily hold the spring in place while the rear inside mounting position is being determined. Bolt the spring bracket to the door frame, but never to the aluminum cover.

Once you are satisfied with the spring position and installation remove the ball, mark your position on the cover, and cut aluminum/plastic/carpeted door panel. Mount the spring, remount the door panel, and reinstall the ball. Apply silicone sealant to fill the open hole in the door panel.

Electrical Connections:

It is strongly recommended to double check wire connections for proper termination, shorts, and pinched wires for clearances before connection to the battery and fuse insertion.

NOTE: Vehicle Manufacturers typically will not provide complete data on the various switching systems for window lock and unlock functions. Many Late 08 and newer vehicles are using dual action switches for Doors, Locks and Windows. For these Vehicles you will need to use a DPDT interface relay. (Both the ground and power to the device are switched) Chevrolet and Dodge owners/installers pay special attention to your circuits.

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Unlatch Solenoid:

Attach the positive wire from the unlatch solenoid to **Premier Canine System™** connector pin #6. This will route the positive 12 Volts DC output necessary to enable the solenoid to unlatch the door. Connect the negative lead of the unlatch solenoid to a good ground point on the vehicle chassis.

Notes: Most doors have weak or poor vehicle grounds. Also remove paint/coatings from the surface around these connections to ensure a proper ground has been established. It may be necessary to run the vehicle engine during repetitive testing of the door opening function of your **Premier Canine System**^M, to help prevent a low battery voltage condition from interfering with the testing process. The **Premier Canine System**^M has a low voltage detection system which will trigger the alarm system.

Electric Door Locks:

Use a voltmeter at the electric door lock actuator inside the door to locate the vehicle **positive 12 volt door unlocks trigger line**. The input on the electric lock/unlock actuator reverses polarity depending on the lock/unlock function. Verify that positive voltage is present during the unlock function. Cut the wire between the unlock switch and the electric door lock actuator. Route the Red/Black, two-conductor wire provided to the subject door lock. Connect the Red wire to the wire that is attached to the **switch side** of the cut wire. Connect the Black wire to the door unlock actuator side of the cut wire.

NOTE: Do not split the Red/Black two-conductor wire, it is recommended to route them together as they are attached.

Electric Windows (A & B):

Use a Voltmeter at the electric window motor inside the door, locate the electric window motor input (**positive 12 volts when the window is rolling down**). The input to the electric window motor reverses polarity depending on the function. Verify that the input that has a positive voltage during the window roll-down function. Cut the wire between the window motor and the window switch. Make your connection close to the motor. Route the **Clear twin lead** (Window A, Fan window) and **Blue twin lead** (Window B), zip wire provided. Connect the clear zip **Copper** colored wire to the wire that is attached to the door window motor. Connect the clear zip **Silver** colored wire to the switch side of the wire. Connect the blue zip **labeled (win B in)** wire to the switch side of the wire.

NOTE: Proper connections will enable the vehicle window switch system to operate normally when your Premier Canine System[™] Plus is not in the alert mode. When your Premier Canine System[™] Plus system is activated in a heat alert mode, **12 volts will be present on the copper colored wire(s) for 5 seconds at the beginning of the alert cycle**, rolling down the windows one at a time.

Accessory:

Locate the positive wire of the desired accessory the Premier Canine System[™] Plus has been designated to activate. The accessory must require a **positive voltage** for activation. Route the "Green" accessory wire to the alerting accessory, typically the horn. Tap into the wire that delivers +12 volts to the accessory. If the horn is used, attach the accessory wire directly to the horn wire (do not go through the horn relay). Solder and apply heat shrink as necessary.

In case of 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 to the vehicle's ground and activate the horn while you read the voltmeter. Repeat the test to measure additional positive reading wires. Attach the green accessory wire to the input where the highest voltage measurement was recorded.

NOTE: As shipped, your Premier Canine System[™] Plus control units accessory output is capable of driving **ONE DEVICE ONLY**. For example, do not connect to both horn and lights. To activate more than one alerting device you must use independent switching relays. Many Late 08 and newer vehicles are using dual action switches for Doors, Locks and Windows. For these Vehicles you will need to use a DPDT interface relay. *(Both the ground and power to the device are switched)*

Thermal Probes:

NOTE: The **Back Up Heat Sensor** must be **handled with care**. Do **NOT** mount in a hot area. This sensor will trigger the heat alert functions of the Premier Canine System[™] Plus at 92 to 94 degrees and reset at 91 degrees. **Do not mount** in an area that could exceed these temperatures during *normal operation* of the vehicle or in an enclosed console, dashboard, direct sunlight, or in front of an A/C heater vent.

This is the most critical part of the installation for the K-9 protection system to work properly. The Premier Canine System[™] Plus uses two temperature probes: The **primary probe**, which connects via the 3.5mm rear panel jack, and a **backup sensor** probe (gray 8 foot cable) in the wire harness.

The primary probe drives the temperature LCD on the front panel of the Premier Canine System[™] Plus and records the maximum and minimum temperatures. The probe should be located in a place that best measures the K-9 environment air temperature. *Caution should be observed in keeping the probe away from the K-9's access to it and near heat or air conditioning sources (vents).*

The Backup probe is a safety device that is preset to activate the Premier Canine SystemTM Plus if the K-9 area reaches approximately 92 degrees F. Since this is a backup probe it should not be placed in close proximity of the primary probe. *Keep the probe away from the K-9's access to it and heat or air conditioning sources (vents).* The backup probe is part of a detachable 1 foot pigtail, in case it is damaged, for easy and quick field replacement.

VSS/Park+/Park-:

The Premier Canine System[™] Plus is capable of sensing ONE of the following:

VSS (Vehicle Speed Sensor), a vehicle developed signal, varying amplitude, square wave or sine wave, 20mvpp minimum. Park +, a positive voltage, 5v or greater, when the vehicle is in Park or Neutral Park –, a ground when the vehicle is in Park or Neutral

A label is placed on the back of the Premier Canine System^M Plus at time of manufacture with its configuration. This configuration can be changed, contact us if this is necessary.

Vehicle Speed Sensor (VSS) Hookup:

The vehicle speed sensor connection will disable the door latch solenoid if the vehicle is in motion. Please note; the vehicle must be in motion to test this operation. Consult your service manual for the color code of the VSS or utilize the enclosed charts. If you are still unable to locate the VSS color code please feel free to contact our engineering staff for assistance. Typical turnaround time for common vehicles is usually one day or less.

Vehicle Speed Sensor Hookup

The green 16 gauge conductor should be connected to the VSS. Normally the VSS vehicle wire is in the dash wire bundle (which varies with make and model) or it will need to be passed through the firewall and connected to the **Vehicle Speed Sensor**. There is also a rear differential sensor and on the drivers side (two wires entering the rear transmission housing prior the drive shaft.) The location and wire color combinations may vary depending on the make, model, and year of your vehicle.

<u> Park + or – Hookup</u>

The green 16 gauge conductor should be connected to the park status wire in the dash bundle, shift sensor, MCU, or an installer supplied switch to detect that the unit is positively shifted to the Park or Neutral position. Park + is a positive voltage, greater than 5vdc, when the vehicle is in Park or Neutral. Park – is a ground when the vehicle is in Park or Neutral.

Verify the configuration label on the rear of the Premier. It should state VSS, Park + or Park -

In the event that the configuration label is missing, the configuration can be verified by contacting Criminalistics, Inc., or by removing the rear panel to gain visual access to the configuration switch. Looking at the rear panel, the switch is on the main PCB, left side, and is light blue in color with 3 positions. Position settings are with the switch up, (on condition). Settings are Position 1 - **VSS**, position 2 - **Park** + and positions 1,2 & 3 - **Park** -.

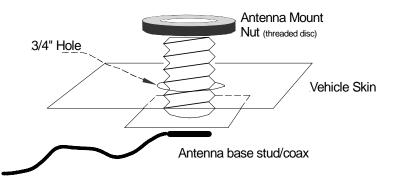
CAUTION: If you change the switch setting, verify the door opener only works for the mode selected, this is critical for the protection of the canine and the officer.

Antenna Installation:

For ease of installation, and practicality purposes, we recommend mounting the antenna on the trunk lid. Choose a mounting location that is not between, or next to, other antennas and a **minimum of 14 inches away from any other antenna**.

Mounting the antenna closer to other antennas can cause damage to the Premier Canine System[™]Plus' internal receiver.

- 1) Drill a 3/4" hole in the body metal skin of the vehicle at the desired mounting location. Remove padding, or other thick material, from the inside of the vehicle at least 1/4" from the hole's edge.
- 2) Remove all burrs in and around both sides of the hole. Remove paint in a narrow ring around the hole on the underside for surface contact area. Metal to metal contact between the vehicle and the lower square-cornered mount is essential for the best performance and range.
- **3)** Remove the circular black insulator nut from the lead. Route the bare end of the cable to the control center and slip the mounting screw through the hole from the underside. Tighten the black nut while centering the mounting surface from the underside of the vehicle. Use the enclosed Allen wrench to tighten.
- 4) Make sure that there is **NO metal to metal** contact between the center-threaded bolt sticking up and the car metal skin. This will limit the radio range. All systems are range tested before shipment.



FAILURE TO COMPLY WITH THE ABOVE STEPS CAN AFFECT YOUR RANGE!!! PLEASE FOLLOW THE INSTRUCTIONS!!!

Antenna Connector Instructions:

Step 1

a = 1.25 (31.8) b = .687 (17.4) c = .625 (15.9)



Slide coupling ring onto cable. Cut end of cable even and strip jacket, braid and dielectric to dimensions shown in table. All cuts are to be sharp and square. Do not nick braid, dielectric or center conductor. Tin exposed center conductor and braid, avoiding excessive heat.

Step 2



Screw the plug subassembly on cable. Solder assembly to braid through solder holes making a good bond between braid and shell. Solder conductor to contact. Do not use excessive heat.

Step 3



For final assembly on straight plugs move coupling ring forward and screw in place on plug subassembly.

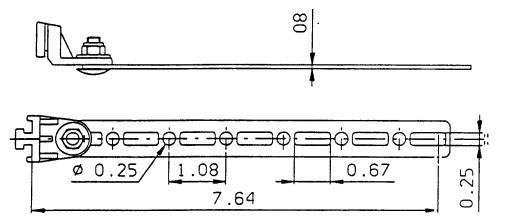
Final assembly and test:

When everything is complete, connect the system to the battery terminals as mentioned previously to power up your Premier Canine System^M Plus. Follow the directions enclosed with your antenna carefully. This antenna is cut specifically for your Premier Canine System^M. Poor range can be directly attributed to faulty antenna installation practices. Be sure the grounding sheath is in no way connected to the signal wire, either at the plug or at the antenna (we recommend verifying this with an ohm meter). You may now program your Maximum alerting temperature and test the unit.

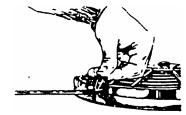
Continuous pressure on the remote button is not necessary; a single firm press and release will do the job. Failure to heed these simple instructions will cause damage to the unlatch solenoid.

NOTE: Failure to follow the installation guide: **drilling into or opening the control unit**, removal of any screws, improper mounting of the solenoid, or abusive use of the Premier Canine System[™] <u>voids the warranty</u>. Please do not remove mounting brackets and/or reinsert the screws. You can pierce the circuit board causing permanent damage to your system.

Fan Mounting Overview

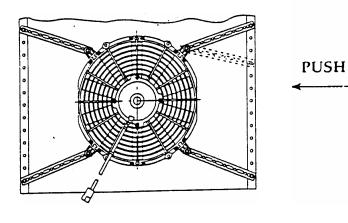






Mounting brackets - slide into place on 4 locations around the fan.

Mounting Bracket Kit Consists of 4 brackets, 4 rods, and 4 fixing bolts.



The Brackets and rods are adjustable and facilitate the most convenient position for mounting.

General Operation:

When the system fan is turned on manually (not an alarm condition) it will run at either high or a lower preset speed. You must flip the toggle switch **left** for **high** and **right** for **lower**. Center is off.

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If the fan is triggered by the Premier, it will run at "High Speed" only until the temperature falls below the high temperature set point or if Premier control box is switched off.

Note: If the Premier control unit is in an alarm condition it is not possible to override fan speed control with the manual front panel switch.

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Air Flow Direction

Fan Diameter that can be joined	Max. diameter
10″	25″
14″	30″

The chart above depicts the max diameter that can be connected with the mounting kit and size of fan selected. Example: a 10" fan with mounting brackets attached can span a maximum area of 25 inches.

Mounting of the Thin Fan:

The Maxi Thin Fan can be surface mounted to the dog cage or window grill covers.

- 1) Remove the front metal grill cover from the Maxi Thin Fan.
- 2) Remove the mounting bracket kit (if attached to the fan).
- 3) Find the desired location on the metal window grill (on the glass side) so that it will leave enough room for the window to freely move up and down without hitting the fan.
- 4) Place one flat washer between the fan and the grill for each of the four mounting bracket holes.
- 5) Place one flat washer on the top of the fan-mounting hole to protect the mounting bracket holes from damage.
- 6) Use four nuts and bolts to secure the fan to the window grill.
- 7) Utilize a flat washer on the mounting bolt to prevent it from going through the grill.
- 8) It may be necessary to notch the top of the door cover in order to run the Maxi Thin Fan power wires to the control unit through the door cavity and boot. Be sure to route the fan wires so that they are out of the K-9's reach.
- 9) Secure the wiring to the grill with tie wraps as needed to prevent them from being damaged.
- 10) Connect the Deutsch 2 pin connector to the fan power cable connector. A de-pinning tool is provided, in case the connector is too large for routing. If the pins are removed, re-insert the pins in the correct positions. (red to blue, black to black)

Maxi Thin Fan (Mounted directly to window grill)



Troubleshooting Guide

Warning: If the unit has been engaged with a temperature reading above 94⁰ F, the backup sensor must be cooled below 91⁰ F before it will reset. Failure to do so will result in the unit deploying continuously until it can be reset.

To disarm or turn off the Premier Canine System[™] Plus: Toggle the upper Right hand switch to the center position.

Testing the Premier Canine SystemTM Plus: If you set the High alarm temperature to around 85° F, you should be able to activate the system with body heat generated in the palm of your hand. Hold the primary probe in your hand and observe the temperature increase on the front panel LCD. When the temperature reaches your high programmed temperature, your alerting system will be triggered, displaying MAX on the LCD screen accompanied by a blinking green LED. You can manually deactivate the system by toggling the upper right-hand switch to the center (OFF) position.

Symptom or Issue	Possible Causes / Solutions
Display is jumpy, reads erratically	
	Unit has engaged without reaching maximum Temperature
Programming set point changes.	Improper grounding of the unit. Check your ground wire. Make sure system is grounded to the car battery!
Alarm does not sound	Control Unit and/or probe are too close to radio transmitter. Battery has lost power or has been disconnected. Loose battery connection.
Digital display is locked up. Stuck on one temperature or will not program to desired setting.	Set point is programmed improperly. Go through programming instructions again. If "MAX" is flashing and your horn, lights or siren are not activated, improper connections could be the culprit.
Alarm remains on	
	The unit has received a power surge. Turn the unit off and remove the fuse (at vehicle battery). Let the system discharge for about 30 minutes or more. Replace the fuse and reset the system. Set point is programmed
	improperly. Make sure setting is 75 ⁰ F or higher (must be higher than ambient room temperature in your current location). Back up probe may
	have been activated, If the temperature has exceeded 94 ⁰ , cool physical
	body of back up sensor below 91 ⁰ F for it to reset. You may use a freeze spray to accomplish this quickly.
Display reading is LLL	If your display reads LLL and will not return to any numbered reading, the primary probe wire may be broken or disconnected. You may want to consider ordering a spare probe to avoid this situation.
Display reading is HHH	
	The temperature has exceeded 200 ⁰ F. This can be observed when you are both out of the vehicle and the system is not enabled. Cool the vehicle off and the reading will return. Check for proper installation of the probe.
No Displayed Temperature	Internal rechargeable NiMh battery is discharged; Turn on the
Euso is blown or blows upon plorting	premier for approximately 8 hours to recharge the battery.
Fuse is blown or blows upon alerting.	Short in output control wires, windows or latch solenoid
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Please contact us with any questions. We are here to assist you.

Final Notes

Make sure that the system ground is connected to ground terminal of vehicle battery. Improper grounding will adversely affect the unit. After everything is complete, and the final battery connection has been made, power up your Premier Canine System[™] Plus. Make sure a maximum temperature is programmed.

Ensure that the locations designated for both of the system's primary and back up temperature probes are not in direct sunlight or over/under the vehicle's heater vents, thus causing false alerts. Be mindful that chewed, eaten, snatched, cut, or otherwise damaged probes are not covered by the warranty.

<u>Please test your system daily</u>. When you enter the vehicle at the beginning of a shift and the vehicle is still hot, flip the Premier Canine System[™] Plus 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 result in deadly consequences.

You will lose your high setting maximum temperature set point if the LCD does not display ambient temperature. Should this occur, simply reprogram the unit by following the programming instructions. Also, ensure that the control system is connected directly to the battery enabling power at all times, even when the car is not running. Some vehicles will shut down the accessory fuse block if they are overheating. Always connect to vehicle battery with the supplied fuse link. A minimum 30 amp fuse is required, but 40 amps is recommended.

Should you should ever have to **jump start your vehicle**, provide someone with a jump, or need to charge the vehicle battery, you must **turn the Premier control unit off prior.** Failure to turn the unit off may send a power surge to the unit and cause the system damage.

Carefully follow the instructions enclosed with your antenna. This antenna is designed and cut specifically for your Premier Canine System[™] Plus. Degradation of range can usually be attributed to faulty antenna installation practices. Ensure that the grounding sheath does not come in contact with the signal wire at either the plug or at the antenna base. A continuity tester can verify this. Poor antenna installation practices can decrease normal range for your remote door opener.

Limited Warranty

Criminalistics, Inc. warrants your Premier Canine System[™] Plus system to be free from defects in materials and workmanship for a period of one 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 any expenses incurred in the removal and reinstallation of this product.

<u>This warranty does not apply to any product damaged by improper installation</u>, 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**.

NOTE: Failure to follow installation guide, drilling into, opening the control unit, removal of any screws, improper mounting of the solenoid, or abusive use of the Premier Canine System[™] Plus voids the warranty. It is not necessary to hold down the button on the remote; a single firm press and release will do the job. Failure to comply with these instructions can damage the unlatch solenoid.

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.

Thank you for purchasing Criminalistics, Inc. Products

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Please keep this Warranty Statement with your Invoice

Rechargeable memory battery replacement

The internal battery has been found to have a shelf life of over 6 months. With normal use, the internal battery should not need to be replaced.

The symptom for a dead battery is no temperature display, when the Premier unit is turned off. If the temperature display comes on when the Premier is turned on, the battery may simply need re-charging, which takes about 8 hours of normal use. If after the re-charging time has elapsed and the temperature display is off when the Premier is turned off, please follow these instructions for it's replacement or return the unit to Criminalistics, Inc. and we can replace the battery for you, for a nominal service charge.

- 1) Remove the 2 securing screws for the front panel.
- 2) Gently tilt the front panel forward, the AA NiMh battery will be visible with a securing tie wrap.



3) Cut the tie wrap, remove the AA battery and replace with either a NiCd or NiMh AA cell. Do not use an alkaline cell, except for emergency situations. Alkaline cells are not rechargeable.



- 4) Replace the cut tie wrap (using 2 small tie wraps recommended) to secure the AA cell in place.
- 5) Carefully reseat and resecure the front panel to the unit.