

Keep Alive™

Version 2007.03

K-9 VEHICLE SAFETY SYSTEM
INSTALLER'S GUIDE w/OPERATING INSTRUCTIONS
for Version 2006.08

By IC CUBED™

Read This Manual Completely
Before Beginning Installation!

LIMITED WARRANTY

IC Cubed warrants that all IC Cubed products are free from defects in workmanship and materials from the factory. IC Cubed will repair or replace any part or parts that IC Cubed has examined and that IC Cubed is satisfied were originally defective. Defective parts must be returned to IC Cubed accompanied by a copy of the corresponding IC Cubed 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 IC Cubed. This warranty does not cover service or labor charges that may be incurred during replacement or repair.

IC Cubed will not be responsible for expense, loss, or damage caused indirectly or directly by the use of IC Cubed 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 IC Cubed.

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.

IC Cubed reserves all rights to design of logic and hardware configurations used in all IC Cubed products. All components used in IC Cubed products are protected by patents held by or licensed to IC Cubed.

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For assistance call 877-ICCUBED

1. BLACK, Chassis Ground

2. ORANGE, HI temperature output 200mA Negative

3. BLUE, Aux circuit output 200mA Negative

4. BROWN, Brake switch input Positive

5. YELLOW, In park safety input Negative

6. PINK, Switched ignition "KEY" output

Keep Alive™

Patent Pending, IC Cubed
Version 2004.03

Large 6 Pin

Small 6 Pin

Small 3 Pin

Alert On/Off
Red Switch

Small 4 Pin

Engine Run
Orange Switch

Remote Temperature Probe
Part# RP03

Small 2 Pin

Small 4 Pin

Small 3 Pin

Large 3 Pin

Alert Plug
Connects to
Pager

Programmable Temperature Display
Part# Display

888

Orange Accessory 2 Output 30Amps

Red 3rd Battery Positive Input

Red 1st Battery Positive Input

Orange Accessory 1 Output 30Amps

Red 2nd Battery Positive Input

Yellow High Amp 2nd Ignition Output

Red 4th Battery Positive Input

Brown 1st Ignition Output 30Amps

Stripped
Wire

This system comes with the hardware necessary to work properly in a fuel injected gas or diesel powered vehicle. You can call us toll free at 877-422-8233 (877-IC-CUBED). Information can also be found at our web site at www.iccubed.net

The Keep Alive Kit comes with the following;

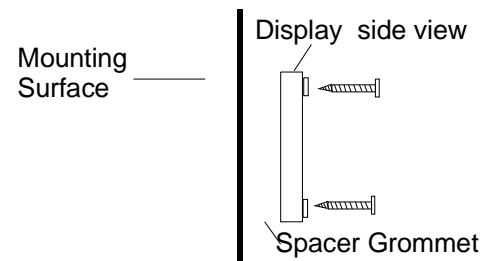
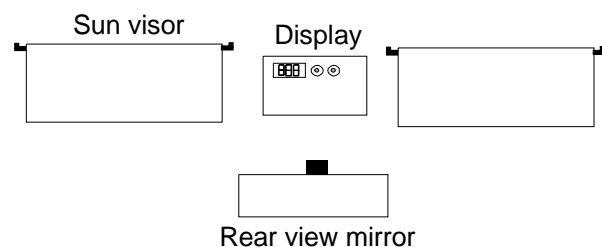
Main Control Unit
Programmable Temperature Display w/mounting hardware
Extension harness for the Display
Orange Illuminated Push button switch for Engine Run
Red Illuminated Push button switch for Alert On/Off
Switch Mounting Bracket
Primary Wire Harness
Ignition Switch Relay Harness
Safety Contact Reed Switch
Installer's guide w/Operating Instructions

Installing the Main Control Unit (MCU)

Find an accessible location inside the vehicle cabin to mount the MCU keeping in mind how you will run the cables for the ignition harness and for the programmable temperature display (Display). Planning your installation will ultimately save time and help to avoid service returns in the future.

Installing the Programmable Temperature Display (Display)

If you are not using a remote temp probe (RP03) in your install, you will need to locate the Display in an area that is not directly in front of an air conditioner vent, or that is not exposed to direct sun light as either of these positions will cause the on board sensor probe to cool off or heat up inaccurately. Typically you can locate the Display on the headliner above the rear view mirror. This gives good coverage and also makes it accessible for the driver for activating and programming of the system.

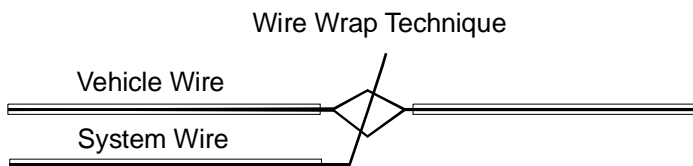


Installing the Remote Temperature Probe (RP03)

If you are using an RP03 the Display can be located in any location giving consideration to driver accessibility to On/Off switch and temperature programming buttons. You must however, take care not to locate the RP03 in front of a vent or in direct sunlight as this again will cause the system to have an inaccurate temperature reading.



When connecting system wires to vehicle wires it is recommended that you use the wire wrap technique.



Strip away 1" of the insulation on the vehicle wire. Evenly part the strands of the vehicle wire. Strip away 1.5" of insulation at the end of the system wire. Thread the uninsulated portion of the system wire between the parted strand of the vehicle wire. Wrap the threaded uninsulated system wire around the uninsulated vehicle wire. Wrap electrical tape to cover the uninsulated system and vehicle wire connection.

Wire Connections Explained

1. BLACK, Chassis Ground

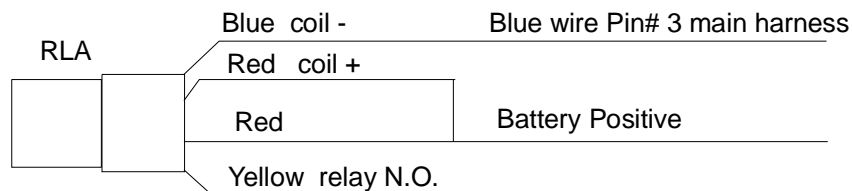
Connect this wire to a good source of chassis ground. It is preferred to use a factory ground bolt as opposed to an aftermarket screw.

2. ORANGE, HI temperature output 200mA Negative

This wire will supply a 200mA negative output while the cabin temperature is at or above the HI temperature threshold setting. It can be connected to the trigger wire of the optional horn honk, pager, window roll-down module, or any negative triggered alerting device.

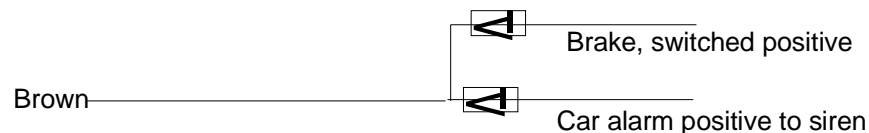
3. BLUE, Aux circuit output 200mA Negative

This wire supplies a 200mA negative output while the system is in Activation mode. It can be used to bypass anti-theft devices and can energize a 555 bypass module and 2 RLA relays to operate addition ignition circuits.



4. BROWN, Override input Positive Shutdown

A positive input at this wire will shutdown the automatic mode of the system. You can connect this wire to vehicle wire that shows a positive output when the brake pedal is pressed. The system will not go into activation mode while this wire has a positive input. It can also be used to override the system from a car alarm's positive siren output in case of forced entry or attempted theft. Use diodes to isolate multiple input connections.



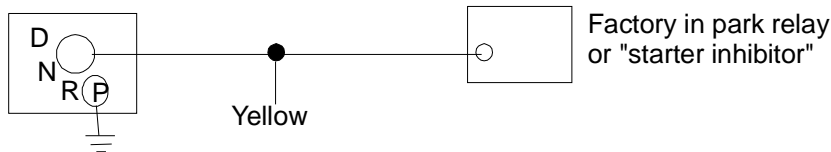
5. YELLOW, In park safety input Negative

Connect this wire to a circuit that provides a negative signal when the vehicle is in park. This can be done by connecting to a factory park safety circuit or by using the provided SFT contact set. This wire must be connected for the system to work properly.

Connecting to a Factory Park Safety Circuit

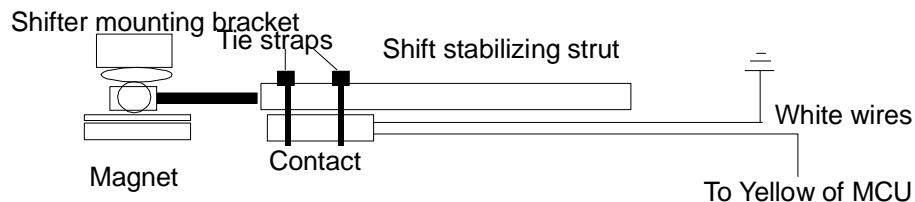
Determine if the vehicle is factory equipped with an "in park" output. To work properly it must supply a 12 volt negative signal with a 500mA headroom capacity. This means that in addition to the load of the circuits it is designed to supply this signal must be capable of supporting an additional 500mA.

NOTE, if you are uncertain about the capacity or functionality of a factory "in park" circuit DO NOT TIE INTO IT. On many newer vehicles the side effects will not be realized right away and can cause undesired operation. It is wiser and easier to use the park safety contact set that is supplied in the kit then to track down problems later!



Installing the SFT contact set

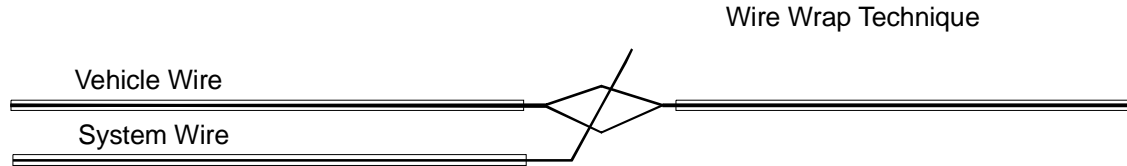
Under the driver's side dash, or at the steering column, find the automatic transmission shift mechanism or strut. Find a mounting location in the park position in which the safety contact and magnet can be located 1/4in apart, tip to tip. Remove the cover to expose the adhesive backing on the magnet & stick in place. Use silicon or epoxy glue to form a permanent hold and let it set until tacked. Use tie straps to attach the contact to the shift stabilizing strut. With a multi-meter attached to the white wires of the contact, you should read a closed circuit when the vehicle is in park. If your meter does not read a closed circuit, gradually move the contact closer to the magnet unit you have a closed circuit. Now move the transmission from the park to the reverse position, the meter should now show an open circuit. If the circuit is still closed, gradually move the contact away from the magnet until the circuit shows open. If you have made this adjustment test again that the circuit shows closed when in park. Once properly aligned you can permanently fix the contact in place with silicone or epoxy glue. Connect one of the white contact wires to chassis ground.



6. PINK, Key Switched ignition output

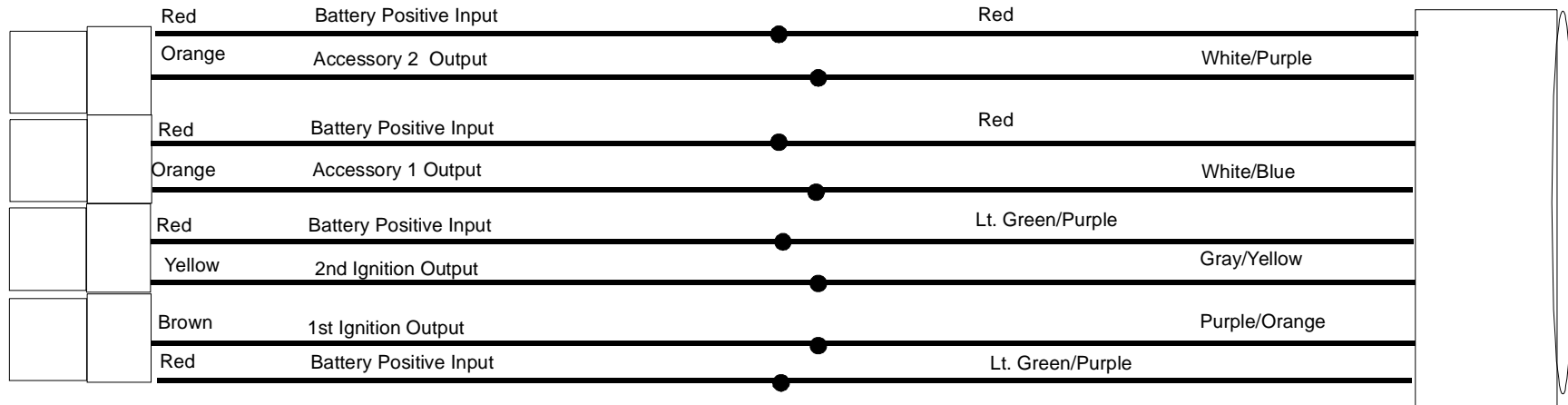
This wire supplies a positive ignition output when the vehicle's ignition key is switched to the run position. It can replace the ignition/accessory input to a car alarm so the car alarm ignition sense will not trigger and sound the alarm when the system automatically starts the vehicle. It can also be used via an RLA to control access to weapons release or trunk pop button.

Keep Alive Ignition Relay Harness Connection



Strip away 1" of the insulation on the vehicle wire. Evenly part the strands of the vehicle wire. Strip away 1.5" of insulation at the end of the system wire. Thread the uninsulated portion of the system wire between the parted strand of the vehicle wire. Wrap the threaded uninsulated system wire around the uninsulated vehicle wire. Solder the uninsulated system wire to the uninsulated vehicle wire. Wrap electrical tape to cover the uninsulated system and vehicle wire connection.

Example for a 2005 Ford Crown Victoria



Ignition Switch

Installing the Ignition Switch Relay Harness

The vehicle's ignition harness contains many of the wires that are necessary to start and run the vehicle. This includes power, starter signal, ignition feed, and accessory feed to the AC blower and fan. Even though the vehicle may start and run it may be necessary to energize multiple ignition/accessory feeds for the system to work properly.

On certain Chevy models you must connect a second ignition wire or you will damage the transmission control module!
Please consult with us if you are unsure any wire connections.

Programming the Temperature Thresholds

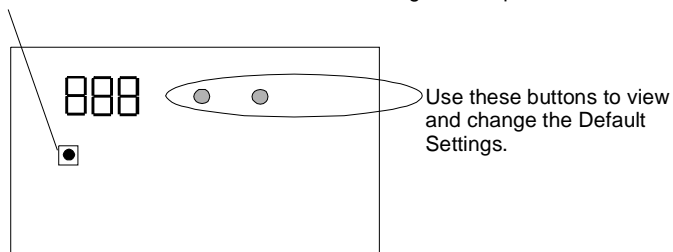
There are two independent temperature settings that trigger Activation Mode (Local High Start Output 1), and trigger Alert Mode (Remote High Alert Output 2).

The factory default settings are Local Start 79, and Remote Alert 99.

To enter Programming Mode;

Remove the Display cover.

Press and release the programming button located on the Display.
Press and release this button to scroll through the 15 parameters.



There are 15 total programmable parameters for the Display. If no RP03 remote probe is used, the Display will default with 12 parameters. If remote probe is selected the other three parameters will be viewable (*).

Parameter	Display	Default	Min	Max
Fahrenheit or Centigrade	F-C	F	F	C
Remote Probe Enabled	rEn	n0	n0	YES
* Display Local or Remote Probe	dSP	rPr	LC	rPr
Set Local Low Limit	LL0	32	32	140
Set Local High Limit	LH1	140	32	140
* Set Remote Low Limit	rLO	0	-40	140
* Set Remote High Limit	rHI	95	-40	140
Select Output Mode	Out	n0	n0	nC
Map for Output 1-See Table	Out1	1-	1-	1-
Map for Output 2-See Table	Out2	2-	2-	2-
Set Alarm Delay for Relay 1	dL1	0	0	255
Set Alarm Delay for Relay 2	dL2	0	0	255
Enable Local Buzzer	Aud	n0	n0	YES
Local Buzzer Silence Time	SIL	0	0	255
Reset Degrees	HYS	2	0	10

Operating Instructions

The Keep Alive is designed to allow the vehicle's engine and air conditioner to continue to run while the ignition key is removed from the ignition cylinder. The Keep Alive will report to the handler if the interior temperature exceeds the Alert temperature limit.

To activate the vehicle must be started via the vehicle ignition key. While the engine is running the handler must press the orange pushbutton switch that is mounted on the dashboard area. Ask your installer for the location of this switch. The handler must make sure the vehicle's break pedal is not pressed during this step. Once activate, the orange pushbutton switch will illuminate and the handler indicating the system is in activated mode. The handler can now remove the vehicle ignition key. Pressing the vehicle break pedal at any time will deactivate the engine run feature.

The handler must push in the on/off switch located on the Display for the High temperature Alert feature to function.

The Alert feature has three modes of operation;

(1) Alert Ready, (2) Alert.

(1) Alert Ready Mode

The system is in Alert Ready Mode when the Orange On/Off switch is pressed on and the vehicle's transmission is in park. The Orange On/Off switch will light when ready.

In this mode the system monitors the vehicle's cabin temperature and reports high temperature trouble. The factory default setting is 97 degrees Fahrenheit..

(2) Alert Mode

The system is in Alert Mode when the programmed Local High temperature threshold is reached or exceeded. A negative signal will be generated at the Orange wire, pin #2, and can be connected to a number of trouble reporting devices including a horn honk module, remote pocket pager, and window drop module.

Factory Air Conditioner Setup

The vehicle's factory air conditioner must be configured in order for the Chilly Dog to operate properly.

A manually adjustable controller is the most common type found on vehicles today. This type requires the operator or user to activate a lever and or button to select whether or not the AC will be on while the engine is running. It can also include a lever or switch that allows the user to adjust the intensity or output. For this type the AC must be left in the on position and the intensity should be set to maximum.

An electronically programmable controller requires the user to program the desired interior temperature into memory. Again the controller must be set to the on position, and the AC controller should be programmed to a low setting.