## Model K10

# installation guide

**NOTE:** This product is intended for installation by a professional installer only! Any attempt to install this product by any person other than a trained professional may result in severe damage to a vehicle's electrical system and components.

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## primary harness (H1) wire connection guide

#### primary harness (H1) wiring diagram

The primary harness supplied with this unit is the standard 12-pin harness used. Two wires in the plug are not used. The upgrade from this unit to a security system would simply require unplugging and exchanging control units and connecting the necessary wires to the vehicle. The functions of all the wires that are used in the primary harness are outlined in the following wiring diagram and the wire connections are described in the wire connections are described in the wire connection guides.



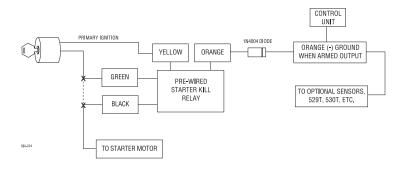
primary harness wire descriptions

#### H1/1 ORANGE (-) Ground-When-Armed Output

This wire supplies a (-) 500 mA ground as long as the system is armed. This output ceases as soon as the system is disarmed. The orange wire is pre-wired to control the starter kill relay.

**NOTE:** if using the H1/1 Orange wire to activate an add-on accessory such as window automation, pager or voice module a 1Amp diode must be installed to ensure proper operation. Insert the diode as shown in the following diagram.

**Important!** Never interrupt any wire other than the starter wire.



#### H1/2 WHITE (-) Parking Light Output

This wire provides a (-) 200mA output to flash the parking lights. This is suitable for driving (-) light control wires in Toyota, Lexus, BMW, some Mitsubishi, some Mazda, etc. If the vehicle has a positive parking light circuit, a relay must be used to flash the parking lights.

#### H1/3 WHITE/BLUE (-) Channel 3 Output

(+) 12V CONSTANT FUSED

This wire provides a (-) 200 mA output whenever the transmitter code controlling Channel 3 is received. This output will continue as long as that transmission is received. Use for options such as a start system, or power window controllers, etc.

**IMPORTANTI** Never use this wire to drive anything but a relay or a low-current input! The transistorized output can only provide 200 mA of current, and connecting directly to a solenoid, motor, or other high-current device will cause it to fail.

#### H1/4 BLACK/WHITE (-) 200 mA Domelight Supervision Output

Connect this wire to the optional domelight supervision relay as shown in the following diagram:

IMPORTANTI This output is only intended to drive a relay. It cannot be connected directly to the domelight circuit, as the output cannot support the current draw of one or more bulbs.

H1/4 BLACKWHITE

DOMELIGHT SUPERVISION POLARITY (+) OR (-)

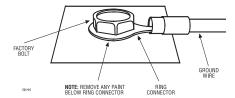
DOMELIGHT WIRE

#### H1/6 BLUE (-) 200 mA Second Unlock Output

The H1/6 BLUE output is used for progressive unlock. A progressive unlock system unlocks the driver's door when the unlock (disarm) button is pressed and unlocks the passenger doors if the unlock (disarm) button is pressed again within 15 seconds after unlocking the driver's door. The BLUE wire outputs a low current 200 mA (-) pulse on the second press of the unlock button of the transmitter. This negative unlock output is used to unlock the passenger doors.

#### H1/8 BLACK (-) Chassis Ground Connection

Connect this wire to a clean, paint-free location (driver kick panel), or use a factory bolt that DOES NOT have any vehicle component grounds attached to it. A screw should only be used when in conjunction with a two-sided lock washer. Under dash brackets and door metal are not acceptable ground points. It is recommended that all security components be grounded at the same location.



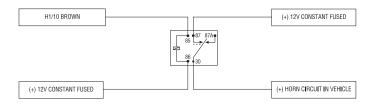
#### H1/9 YELLOW (+) Ignition Input

Connect this wire to the main ignition source. This input must show (+)12V with the key in run position and during cranking. Make sure that this wire cannot be shorted to the chassis at any point. This wire will trigger the system if the ignition is turned on before the unit is disarmed (doors unlocked with the remote). It will also honk the vehicle's horn and flash the parking lights (if connected).



#### H1/10 BROWN (-) Horn Honk Output

This wire supplies a (-) 200 mA output that can be used to honk the vehicle horn. It outputs a single pulse when locking the doors with the remote, and two pulses when unlocking with the remote. This wire will also provide an output pulse for 30 seconds when the panic mode is activated. If the vehicle has a (+) horn circuit, an optional relay can be used to interface with the system, as shown below.



#### H1/11 RED (+)12V constant power input

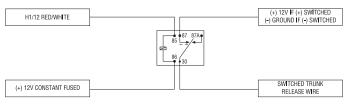
Before connecting this wire, remove the supplied fuse. Connect to the positive battery terminal or the constant 12V supply to the ignition switch.

**NOTE:** Always use a fuse within 12 inches of the point you obtain (+)12V. Do not use the fuse in the harness for this purpose. This fuse protects the module itself.

#### H1/12 RED/WHITE channel 2, 200mA (-) output

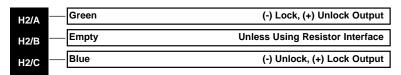
When the system receives the transmitter code controlling Channel 2 for longer than 1.5 seconds, the red/white wire will supply an output as long as the transmission continues. This is often used to operate a trunk/hatch release or other relay-driven functions.

**IMPORTANTI** Never use this wire to drive anything but a relay or a low-current input! The transistorized output can only supply 200 mA of current. Connecting directly to a solenoid, motor, or other high-current device will cause it to fail.



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## door lock harness (H4), wire connection guide



Important! The door lock outputs are low current and should not be attached directly to any high current device; they are only to be used to activate relays

## peripheral plug-in harnesses

LED, 2-pin WHITE plug

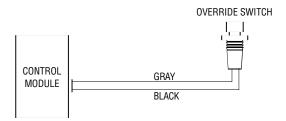
The LED operates at (+) 2 volt DC and plugs into the two-pin WHITE port. Make sure the LED wires are not shorted to ground as the LED will be damaged. Multiple LED's can be used, but they must be wired in series. The LED fits into a 9/32-inch mounting hole. Be sure to check for clearance prior to drilling the mounting hole.

NOTE: Never use a BLUE LED in combination with a RED LED.



override switch, 2-pin BLUE plug

The override switch should be accessible from the driver's seat. It plugs into the BLUE port on the side of the unit. Consider how the button will be used before choosing a mounting location. Check for rear clearance before drilling a 9/32-inch hole and mounting the button.



#### Pro Security Programmer interface, 3-pin port



The BLACK three-pin port is provided for programming of the unit. When using the Pro Security Programmer, it is possible to configure any and all of the programmable functions. For more information please refer to the guide packaged with the programmer.

#### module programming

The System Features Learn Routine dictates how the unit operates. It is possible to access and change any of the feature settings using the Override switch. However, this process can be greatly simplified by using the Pro Security Programmer. Any of the settings can be changed and then assigned to a particular transmitter, up to four, a feature called individual recognition. Each time that particular transmitter is used to disarm the system, the assigned feature settings will be recalled. Individual recognition is only possible when programming the unit via the Pro Security Programmer.

If the system was previously programmed using the Pro Security Programmer, the learn routine may be locked. If the horn generates one long honk when attempting to program the unit, the learn routine is locked and must be unlocked using the Pro Security Programmer before proceeding.

#### To enter the learn routine:



1. Key. Turn the ignition on and then back off.



2. Choose. Within 10 seconds, press and release the Override switch the number of times corresponding to the feature number you want to program. (See Feature Menus.) Once the Override switch has been pressed and released the desired number of times, press it once more and hold it. After a second, the LED will flash and the horn will honk to indicate which feature you have accessed.



3. **Transmit.** The transmitter is used to select the desired setting. As shipped, the unit is configured to the LED ON settings. These are the default settings. Pressing the lock button will set it to the LED ON setting. The LED will light solid (stop flashing) to indicate the setting. The horn will honk once (if connected). Pressing the unlock button will change the setting to the LED OFF setting. The LED will go out indicating the change and the horn will honk twice (if connected).



4. Release. The Override switch can now be released.

For example, to program the arming mode from active to passive, within 10 seconds of turning the ignition off, and press and release the Override switch once. Then press it again and hold it. The LED will flash in groups of one and the horn will honk once (if connected). While holding the Override switch, press the unlock button. The LED will stop flashing and go out. The horn will honk twice if connected. Passive arming is now programmed. If that was not the desired setting, without releasing the Override switch, press the lock button. The LED will light solid and the horn will honk once if connected. Active arming is now programmed. Release the Override switch after the selection has been made.

You can advance from feature to feature by pressing and releasing the Override switch the number of times necessary to get from the feature you just programmed to the feature you wish to access. For example, if you just programmed Feature 2 and you next want to program Feature 3 to off, release the Override switch. Press and release it once to advance from Feature 2 to Feature 3. Then press it once more and hold it. The LED will flash in groups of three and the horn will honk three times (if connected) to confirm that you have accessed Feature 3.

#### The learn routine will be exited if:

- The ignition is turned on.
- The Override switch is pressed too many times.
- More than 15 seconds elapses between programming steps.

One long horn honk (if connected) indicates that the learn routine has been exited.

#### system features menus

Feature Number	Default LED ON Setting (Press Channel 1)	LED OFF Setting (Press Channel 2)
1	Active arming	Passive arming
2	Chirps ON	Chirps OFF
3	Ignition-controlled door lock ON	Ignition-controlled door lock OFF
4	Ignition-controlled door unlock ON	Ignition-controlled door unlock OFF
5	Active locking	Passive locking
6	Ignition-controlled domelight ON	Ignition-controlled domelight OFF
7	0.8 second door lock pulses	3.5 second door lock pulses
8	Double pulse unlock OFF	Double pulse unlock ON
9	Security features ON	Security features OFF
10	Code Hopping ON	Code Hopping OFF

## feature descriptions

- 1 ACTIVE/PASSIVE ARMING: When active arming is selected, the starter kill will arm (if connected) only when the transmitter is used. When set to passive arming, the starter kill will arm (if connected) 30 seconds after the ignition key is turned off.
- **2 CHIRPS ON/OFF:** This feature controls the chirps that confirm arming and disarming of the system. A siren or horn must be connected to the H1/10 BROWN wire.
- **3 IGNITION CONTROLLED DOOR LOCK ON/OFF:** When turned on, the doors will lock three seconds after the ignition is turned on.
- **4 IGNITION CONTROLLED DOOR UNLOCK ON/OFF:** When turned on, the doors will unlock when the ignition is turned off.
- **5 ACTIVE/PASSIVE LOCKING:** If passive arming is selected in Feature 1, then the system can be programmed to either lock the doors when passive arming occurs, or only lock the doors when the system is armed with a transmitter. Active locking means the doors will not lock when the system passively arms. Passive locking means that the doors will lock whenever the system passively arms the starter kill (if connected).
- **6 IGNITION CONTROLLED DOMELIGHT:** If turned on, the system will turn on the domelight for 30 seconds when the ignition is turned off. The domelight supervision output (H1/4) wire must be connected to an optional relay as described in the Primary Harness Wire Connection Guide.
- **7 DOOR LOCK PULSE DURATION:** Some European vehicles, such as Mercedes-Benz and Audi, require longer lock and unlock pulses to operate the vacuum pump. Programming the system to provide 3.5 second pulses will accommodate the door lock interface in these vehicles. The default setting is 0.8 second door lock pulses.

- **8 DOUBLE PULSE UNLOCK OFF/ON:** Some vehicles require two pulses on a single wire to unlock the doors. When the double pulse unlock feature is turned on, the BLUE H2/C wire will supply two negative pulses instead of a single pulse. At the same time, the GREEN H2/A wire will supply two positive pulses instead of a single pulse. This makes it possible to directly interface with double pulse vehicles without any extra parts.
- 9 SECURITY FEATURES ON/OFF: In the ON setting the (-) ground-when-armed output will be active and can be used to operate starter kill. The unit will also trigger a panic sequence if the ignition is turned on before disarming the system. Turning the security features off will turn off both the starter kill feature and the triggered sequence with ignition.

**10 CODE-HOPPING ON/OFF:** The system features Code-Hopping as an option. To use Code-Hopping technology, this feature must be programmed on.

#### remote coding

The system comes with two remotes that have been taught to the receiver. The receiver can store up to four different remote codes in memory. Use the following learn routine to add remotes to the system or to change button assignments if desired.

If the system was previously programmed using the Pro Security Programmer, the learn routine may be locked. If the horn generates one long honk when attempting to program the remote, the remote coding is locked and must be unlocked using the Pro Security Programmer before proceeding.



1. Key. Turn the key to the ON position.



- 2. **Choose.** Within 10 seconds, press and release the Override switch the number of times corresponding to the desired channel listed below. Once you have selected the channel, press the switch once more and HOLD it. The LED will flash and the horn will honk ( if connected) to confirm the selected channel. Do not release the Override switch.
- 3. **Transmit.** While holding the Override switch, press the button from the remote that you wish to assign to the selected channel. The unit will chirp indicating successful programming. It is not possible to teach a remote button to the system more than once



4. Release. Once the code is learned, the Override switch can be released.

Channel Number	Function	Wire Color	
1	Arm/Disarm/Panic		
2	Silent Mode/Remote Override/Trunk Release	RED/WHITE	
3	Remote engine start or Other Accessory		
4	Arm only		
5	Disarm only		
6	Panic only		
7	Auto-learn Single Button Arm/Disarm Configuration*		
8	Auto-learn Standard Configuration*		
9	Delete all remotes		
*NOTE: For Auto Learn Configurations, see <i>Remote Configurations</i> section of this guide.			

Channels #4-6: Channels 4 through 6 are used to assign the arm, disarm and panic functions to separate buttons on the remote control. Teaching a button to Channel 4 erases all information about that remote from memory. Any auxiliary functions that are desired will have to be reprogrammed. Similarly, if the remote is set up to use the separate arm, disarm and panic channels and a button from that remote is entered into channel one, the remote will be erased from memory, and the system will only recognize the button that was entered into Channel 1.

**Channel #9:** If any button from a known remote is programmed to Channel 9, all remotes will be erased from memory and the system features will revert to the default settings. This is useful in cases where the one of the customer's remotes is lost or stolen. This will erase any lost or stolen remotes from the system's memory. It can also be used to start from scratch if the remote buttons were programmed incorrectly.

#### To exit the learn routine:

One long horn honk indicates that programming has been exited.

- ➤ Ignition is turned off.
- ➤ Override switch is pressed too many times.
- More than 15 seconds elapse between steps.

## remote configurations

The transmitters can be programmed with the standard or single button arm/disarm configurations by using the Auto Learn functions in the Remote Coding.

#### standard configuration

A remote that uses the standard configuration operates similarly to many factory keyless entry remotes. A standard configuration remote allows arming, disarming, and panic mode activation with separate buttons. When programmed for standard configuration using the Channel 8 Auto-learn configuration, the transmitter buttons are assigned to the following functions:



#### single button arm/disarm configuration

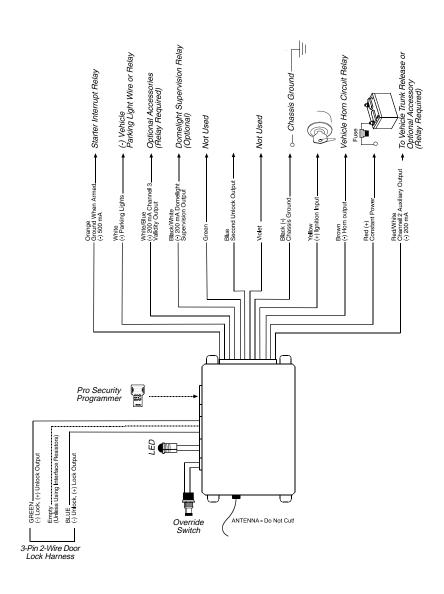
When programmed for single button arm/disarm configuration using the Channel 7 Auto-learn configuration, the remote buttons are assigned to the following functions:



## power-up

Power-up ensures that the when the system is powered up it will return to the same state it was in when power is disconnected. For a full description of power-up refer to the owner's manual.

## wiring quick reference guide



# Get Started Get Protected



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