



**REC-12**  
**DELUXE KEYLESS ENTRY SYSTEM**

**OWNER'S & INSTALLATION MANUAL**

(production manual has full color cover)

*This product is designed for professional installation only!*

## System Overview (cont'd)

**The Valet/Override Switch:** This switch can be used to temporarily turn “off” certain automatic locking, anti-carjacking, and optional starter interrupt operations of the system, should they be programmed to operate, by placing the system into “Valet Mode”. If the optional starter interrupt is installed, the Valet/Override Switch can also be used, in conjunction with the vehicle’s ignition key, to perform a “System Override”, allowing you to start the engine, should the transmitter not be available. The Valet/Override Switch is also used to program features and transmitters.

**The Status Light:** This light shows the status of the system at a glance, and its presence offers a visual deterrent to break-ins and theft. The Status Light’s operation is described on pages 10-11.

## Transmitter Functions Reference Guide

**LOCK:** Press and release the “LOCK” button.



- THE HORN WILL HONK ONCE
- THE LIGHTS WILL FLASH ONCE
- THE DOORS WILL LOCK
- THE OPTIONAL STARTER INTERRUPT WILL ARM

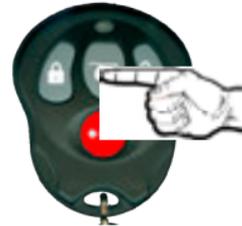
**UNLOCK:** Press and release the “UNLOCK” button.



- THE HORN WILL HONK TWICE
- THE LIGHTS WILL FLASH TWICE THEN TURN ON
- THE DOORS WILL UNLOCK\*
- THE OPTIONAL STARTER INTERRUPT WILL DISARM

\* IF THE SYSTEM IS CONFIGURED FOR DRIVER'S PRIORITY, ONLY THE DRIVER'S DOOR WILL UNLOCK. PRESS A 2ND TIME TO UNLOCK THE OTHER DOORS.

**TRUNK RELEASE:** Press and hold the “TRUNK” button for 3 seconds.



- THE HORN WILL HONK TWICE
- THE TRUNK WILL OPEN (IF CONNECTED)
- THE LIGHTS WILL FLASH TWICE THEN TURN ON
- THE DOORS WILL UNLOCK
- THE OPTIONAL STARTER INTERRUPT WILL DISARM

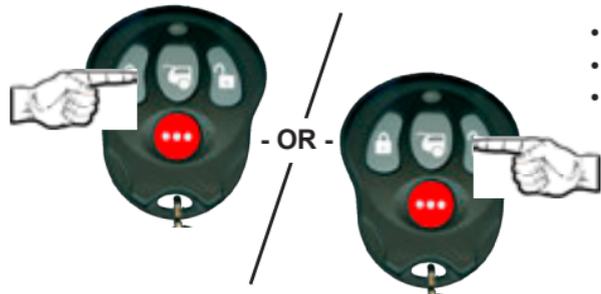
**ACTIVATE 3RD CHANNEL:** Press and hold the “...” button for 3 seconds.



- THERE IS NO VISUAL OR AUDIBLE INDICATION FROM THIS SYSTEM. IF CONNECTED TO AN OPTIONAL ACCESSORY, THAT ACCESSORY MAY PROVIDE VISUAL/AUDIBLE CONFIRMATION UPON ACTIVATION.

## Transmitter Functions Reference Guide (cont'd)

**PANIC:** Press and hold the “LOCK” or “UNLOCK” button for 3 seconds.



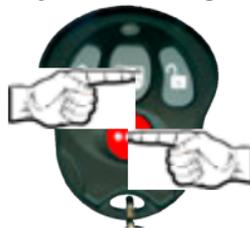
- THE SYSTEM WILL ARM OR DISARM
- THE HORN WILL HONK CONTINUOUSLY
- THE LIGHTS WILL FLASH CONTINUOUSLY

**ACTIVATE 4TH CHANNEL:** Press and release the “LOCK” & “UNLOCK” buttons simultaneously. **Consult your installer about this optional feature.**



- THERE IS NO VISUAL OR AUDIBLE INDICATION FROM THIS SYSTEM. IF CONNECTED TO AN OPTIONAL ACCESSORY, THAT ACCESSORY MAY PROVIDE VISUAL/AUDIBLE CONFIRMATION WHEN ACTIVATED.

**ACTIVATE 5TH CHANNEL:** Press and release the “TRUNK” & “...” buttons simultaneously. **Consult your installer about this optional feature.**



- THERE IS NO VISUAL OR AUDIBLE INDICATION FROM THIS SYSTEM. IF CONNECTED TO AN OPTIONAL ACCESSORY, THAT ACCESSORY MAY PROVIDE VISUAL/AUDIBLE CONFIRMATION WHEN ACTIVATED.

**ACTIVATE REMOTE ANTI-CARJACK:** While the ignition is ON, press and hold the “...” button for 3 seconds.

**See programmable feature #10 about enabling this feature**



- THERE IS NO VISUAL OR AUDIBLE INDICATION FROM THIS SYSTEM. IF CONNECTED TO AN OPTIONAL ACCESSORY, THAT ACCESSORY MAY PROVIDE VISUAL/AUDIBLE CONFIRMATION WHEN ACTIVATED.

## Using The Valet / Override Switch

The **Valet/Override Switch** can be used to place the system into **Valet Mode**, which is used to stop or interrupt any automatic system functions which may be programmed to operate. The Valet/Override Switch, in conjunction with your ignition key, also permits **System Override**, which allows starting the vehicle if the optional starter interrupt is installed, and the transmitter becomes lost or damaged.

**Valet Mode:** You may activate the Valet Mode at any time by pressing and holding the Valet/Override Switch for 3 seconds, unless the doors have been locked by the transmitter (in which case the Status Indicator will be flashing slowly). When the system enters Valet Mode, the Status Light will illuminate solid steady Red. If the REC-12 is installed with audible confirmation, the system will chirp twice when it enters Valet Mode. Remember to check the Status Light - if it is not lighted or flashing fast, the system may be placed into Valet Mode. If the Status Light is on steady, the system is already in Valet Mode. If it's flashing slowly, a System Override must first be performed (see next page).

While the system is in the Valet Mode, the Status Light will remain solid Red (not flashing) at all times. If the audible confirmation is connected, every time the ignition switch is turned "off", the system will chirp once as a reminder of this condition. Also, the transmitter will operate normally while the system

is in Valet Mode, i.e., it will still lock and unlock the doors, and the transmitter's "TRUNK" and "... " Buttons will still operate - but the optional Starter Disable will not operate, and any programmed automatic functions are suspended.

**To exit Valet Mode** simply press and release the Valet Switch at any time; the Status Light will change from being on solid steady Red to being off.

**System Override:** If the last system operation was locking the doors by the transmitter, a System Override is required before then placing the system into Valet Mode, or starting the engine if the optional Starter Disable is installed. To obtain a System Override:

**Step 1** Enter the vehicle normally.

**Step 2** Using your key, turn the ignition "ON".

**Step 3** Within 5 seconds, press and release the Valet Switch once. The Status Light will turn off.



## The Status Light

The REC-12 includes a Status Light to inform you of the system's operational condition. If your system includes a Starter Disable circuit, its condition is also reflected in this light's operation, along with any automatic features which may have been programmed to operate.

**Light Off** - Ignition switch is "on" **OR** the system is "at rest", or standby, awaiting a transmitter command, and is also indicating that no automatic functions are occurring or will occur.

**Light On Solid Red** - The system is in "Valet Mode".

**Light Flashing Rapidly** - An automatic function, such as automatic locking or automatic starter disable, is in progress.

**Light Flashing Slowly** - This slow flashing will occur whenever the transmitter has been used to lock the doors, and also that the Starter Disable (if installed) is engaged.

**Light Flashes 1 to 4 Times after Ignition "On"** - This is the number of operating transmitters stored in the system's memory. These indicators are part of the Automatic Transmitter Verification operation. This indicator will flash for 10 seconds after the vehicle's ignition is turned ON.

## Visual Confirmations

The REC-12 is capable of flashing the vehicle's parking lights and interior domelight to provide visual confirmation of system operations.

**Flash Once** - The doors have been locked and the (optional) starter interrupt is enabled.

**Flash Twice, Then Illuminate for 30 Seconds** - Doors have been unlocked via the transmitter and the (optional) starter interrupt is disabled.

The parking and dome lights staying on for 30 seconds after the transmitter was used to unlock the doors helps to light the way to the vehicle when dark and allows inspection of the vehicle's interior before entering. The lights will turn off as soon as the ignition switch is turned "ON".

## Audible Confirmations

The REC-12 is capable of honking the horn whenever the transmitter is used or to indicate the activation of other automatic operations.

**Chirp Once** - The doors have been locked by the transmitter

**Chirp Twice** - Doors have been unlocked via the transmitter

## Audible Confirmations (cont'd)

If the system is in Valet Mode, it will also chirp once when the ignition is turned "OFF" as a reminder. Should any automatic locking options be enabled, the system will chirp once to indicate the doors locking.

**Remote "PANIC":** Connecting the audible output to the vehicle's horn adds a valuable safety feature. Pressing and holding the "LOCK" or "UNLOCK" button on the transmitter for 3 seconds will activate PANIC. The vehicle's horn will honk and the lights will flash. Using "LOCK" will lock the doors before activating PANIC to keep an offender out of the vehicle. Using "UNLOCK" will unlock the doors before activating PANIC to allow you to enter the vehicle when in PANIC mode.

Panic can be configured to operate by pressing the "... " button for 3 seconds. See programmable feature #12 for more information. When activated using this method, the doors will neither lock or unlock.

## Starter Disable - OPTIONAL

The Starter Disable output activates whenever the doors are locked via the transmitter (except in valet mode). It can be configured to activate automatically by configuring programmable feature #9.

## Programmable Features

The REC-12 has 12 programmable features for maximum system customization. The following pages describe each feature and its available options.

### Feature #1 Doors lock 90 seconds after the ignition is turned OFF

**Default setting:** OFF (press UNLOCK)

**Option:** ON (press LOCK)

This feature will automatically lock the doors 90 seconds after the ignition key is turned off.

### Feature #2 Doors relock 90 seconds after remotely unlocking

**Default setting:** OFF (press UNLOCK)

**Option:** ON (press LOCK)

This feature will automatically lock the doors 90 seconds after the transmitter is used to unlock the doors.

### Feature #3 Ignition activated doorlock control

**Default setting:** ON (press LOCK)

**Options:** Lock with ignition ON only (press UNLOCK)

Unlock with ignition OFF only (press TRUNK)

OFF (press ...)

This feature will automatically lock the doors when the ignition key is turned on and/or unlock the doors when the ignition key is turned off.

## Programmable Features (cont'd)

### Feature #4 Doors unlock when trunk release is activated

**Default setting:** ON (press LOCK)  
**Option:** OFF (press UNLOCK)

This feature will automatically unlock the doors whenever the trunk release is activated to offer extra convenience. It can be turned off if the output is used for another function.

### Feature #5 Door lock/unlock pulse timing

**Default setting:** 0.8 Second (press LOCK)  
**Options:** 3 Seconds (press UNLOCK)  
Double 0.8 Sec. Unlock Pulse (press TRUNK)

This feature adjusts the pulse length of the door lock/unlock outputs. The required setting is determined by your vehicle and this should only be configured by the installer.

### Feature #6 Domelight relay output

**Default setting:** Domelight supervision (press LOCK)  
**Options:** 4th Channel Single Pulse (press UNLOCK)  
4th Channel Latch/Unlatch (press TRUNK)  
2nd Parking Light Output (press \*\*\*)

This feature changes the operation of the domelight supervision output. It can be configured as a 4th channel output for additional accessories if needed and you can select from a pulsed or latching output. It can also be configured as an additional light flash output for vehicles with split parking light systems. This should only be configured by the installer.

### Feature #7 Flashing light relay output

**Default setting:** Flashing lights (press LOCK)  
**Options:** 5th Channel Single Pulse (press UNLOCK)  
5th Channel Latch/Unlatch (press TRUNK)  
Horn Honk Output (press \*\*\*)

This feature changes the operation of the flashing light output. It can be configured as a 5th channel output for additional accessories if needed and you can select from a pulsed or latching output. It can also be configured as a horn honk output for vehicles requiring a high amperage and/or positive output. This should only be configured by the installer.

### Feature #8 Confirmation chirps

**Default setting:** Low volume (press LOCK)  
**Options:** High volume (press UNLOCK)  
On demand (press TRUNK)  
OFF (press \*\*\*)

This feature configures the way the system's confirmation chirps operate. They are defaulted on with low volume chirps. You can change it to have high volume, operate on demand, or stay permanently off. On demand requires 2 presses of LOCK or UNLOCK to hear the confirmation.

### Feature #9 Automatic starter disable

**Default setting:** OFF (press \*\*\*)  
**Options:** 90 Seconds After Ignition OFF (press LOCK)  
90 Seconds After Unlock By Transmitter (press UNLOCK)

*continued->*

## Programmable Features (cont'd)

### 90 Seconds After Ignition OFF & Unlocking By Transmitter (press TRUNK)

This feature allows the system to automatically engage the starter disable whether or not the doors are locked. You can select it to engage 90 seconds after turning the ignition OFF and/or 90 seconds after pressing UNLOCK on the transmitter.

### Feature #10 Anti-Carjacking

**Default setting:** OFF (press **•••**)

**Options:** Ignition Activated Anti-Carjacking (press LOCK)

Remote Activated Anti-Carjacking (press UNLOCK)

Ignition & Remote Activated Anti-Carjacking (press TRUNK)

This system offers 2 forms of anti-carjacking protection. One is automatically activated when the ignition is turned on. The other is activated when you press and hold the “•••” button for 3 seconds while the ignition is on. You can even select to have both forms enabled for maximum security.

When activated, the carjacking sequence operates as follows:

- Under normal operation, pressing the valet switch once after activating the sequence (as selected by the feature), will cancel the sequence immediately.
- If the sequence is not canceled, the horn will start chirping 53 seconds after activation. During the next 7 seconds, the sequence can still be canceled with 1 press of the valet switch.
- At 60 seconds, it enters anti-carjacking mode and will honk the horn and flash the lights.
- At 90 seconds, the starter disable will engage. The only way to cancel the sequence is to turn the ignition OFF, back ON, then within 10 seconds, press the valet switch. If you plan to utilize this feature, it is ideal to mount the valet switch in a discreet location. Consult with the installer about this. **NOTE: if the “•••” button is configured for Panic, remote anti-carjack is re-assigned to pressing “LOCK” and “UNLOCK” simultaneously.**

### Feature #11 Parking lights for 30 seconds after unlock by transmitter

**Default setting:** ON (press LOCK)

**Options:** OFF (press UNLOCK)

This feature is defaulted so the flashing light output will stay on for 30 seconds after remotely unlocking the doors.

### Feature #12 “•••” button operates 3rd channel or panic

**Default setting:** 3rd Channel Pulse (press LOCK)

**Options:** 3rd Channel Latch/Unlatch (press UNLOCK)

3rd Channel 30 second output (press TRUNK)

PANIC (press •••)

This feature configures the timing of the 3rd channel output. Alternatively, the “•••” button can be configured to operate the PANIC feature. The 3rd channel output options should only be configured by the installer.

## Changing The Programmable Features

- STEP 1** - Make sure the system is in an unlocked state, not in valet mode, and turn the vehicle's ignition ON, then back OFF.
- STEP 2** - Within 7 seconds of STEP 1, press the valet switch 5 times. The horn will honk and the status light will turn on.
- STEP 3** - Press the valet switch the number of times that corresponds with the feature you'd like to access (5 times = feature #5). The horn will chirp and the status light will flash the same number of times to confirm.

## Changing The Programmable Features (cont'd)

**STEP 4** - Press the transmitter button that corresponds to the setting you desire. The horn will honk 1 time for **LOCK**, 2 times for **UNLOCK**, 3 times for **TRUNK**, and 4 times for "...".

**STEP 5** - Repeat steps 3 and 4 if you need to change more than one feature.

The system will exit feature programming if 10 seconds passes with no activity OR if the vehicle's ignition is turned on. This is indicated by two horn honks and the status light will turn off.

### FULL SYSTEM RESET

You can return all programmable features to their factory default by entering features programming (STEP 1 & 2), then immediately press the **LOCK** and **UNLOCK** buttons simultaneously. The system will respond with 3 horn honks.

## Programming Transmitters

**STEP 1** - Make sure the system is in an unlocked state, not in valet mode, then turn the vehicle's ignition ON.

**STEP 2** - Within 7 seconds of STEP 1, press the valet switch 5 times. The horn will honk and the status light will repeatedly flash 1 time.

**STEP 3** - Press the **LOCK** button on the 1st transmitter to be programmed.

The horn will honk once and the status light will flash 2 times (once to indicate transmitter learn mode & once to indicate the 1st transmitter)

**STEP 4** - Repeat STEP 3 for each additional transmitter. The horn will honk 2 times for the 2nd transmitter, 3 times for the 3rd, etc. & the status light will flash once to indicate learn and twice for the 2nd remote, etc.

The system will exit transmitter programming if 10 seconds passes with no activity OR if the vehicle's ignition is turned off. This is indicated by two horn honks and the status light will stop flashing. A maximum of 4 transmitters can be learned into this system.

### ORDERING REPLACEMENT TRANSMITTERS

Replacement transmitters are available for this system and can be purchased from your installing dealer or directly from Omega R & D, Inc. To purchase directly from Omega R & D, Inc. visit us at [www.caralarm.com](http://www.caralarm.com) or call us at 800-554-4053. This system uses transmitter model #4410-07 which is powered by a CR2032 battery.

**Purchasing direct from Omega offers a number of benefits:**

- Get the latest factory authorized versions of our products.
- All products carry a limited lifetime warranty.
- Receive full customer support services when you have questions or issues.

## Installation Considerations

### MOUNTING COMPONENTS

**The Control Module:** This contains electronic components so always mount this module at a secure location inside the vehicle like under the dash. Ensure that the module is not susceptible to moisture, excessive vibration, or excessive temperatures (like next to heater hoses).

**The Status Light:** This may be custom mounted or placed within the included combination holder with the valet switch. To custom mount, select a suitable surface panel in the vehicle with high visibility from all windows and away from moving part of the vehicle. Drill a 9/32" hole in the chosen panel, route the light's harness through the hole and snap the light into place. Then, plug the status light's 2 pin plug into the corresponding port on the control module.

**The Valet Switch:** This may be custom mounted or placed within the included combination holder with the status light. To custom mount, select a suitable surface panel in the vehicle that is easily accessed by the driver and, ideally, not in plain sight. Clean the surface well and adhere the switch to the surface using its adhesive pad. A 1/4" hole can be drilled to route/hide the wire harness if desired. Route the harness to the control module and plug it into the corresponding port.

## Wiring Connections

### MAIN 5 PIN HARNESS

**BLACK: (-) Chassis Ground-** This wire supplies ground for all of the system's operations. Connect this wire to the metal structure of the vehicle preferably using an existing machine screw or bolt. Cut the wire to the shortest practical length and crimp on a proper sized ring terminal. Be sure the metal surface is bright and clean of paint, dirt, or grease.

**RED: (+) 12 Volt Constant Power-** Connect this to a constant +12 volt supply in the vehicle like the ignition switch's supply circuit or the vehicle's battery.

**YELLOW: (+) Ignition Power-** Connect this to the primary ignition circuit. It will show +12 volts when the ignition is in the ON/RUN & START positions only.

**GRAY: (-) Trunk Release/2nd Channel Output-** This wire has a 1 second 250mA negative output whenever trunk release is activated by the transmitter. In some cases, a relay is required to "step up" the output to have higher current or positive polarity. This is vehicle dependent.

**ORANGE: (-) Starter Disable Output-** This wire provides a constant 500mA negative output whenever the system is LOCKED by the transmitter or when anti-carjacking mode is activated. Connect it to the included starter disable relay socket. **SOCKET CONNECTION:** Cut the vehicle's starter wire, connect the socket's **RED** wire to the side of the wire that still shows +12V when the key is in the start position, then connect the **WHITE** wire to the starter side of the wire.

## Wiring Connections (cont'd)

### SECONDARY 7 PIN HARNESS

**YELLOW/GREEN: (-) OEM Alarm Disarm Output-** This wire mimics the BLUE unlock wire and is used for disarming factory installed alarm systems. It is a 250mA negative output.

**BROWN: (-) Horn Honk Output-** Connect this to the vehicle's horn switch circuit. It is a 1A negative output that is directly compatible with most horn circuits. Add a relay if the vehicle requires higher amperage or positive polarity.

**WHITE/RED: (+/-) Flashing Light Polarity Selection-** This is the input to the flashing light relay. Connect the bullet connector on the end of this wire to the mating connector on either the RED (+) or BLACK (-) wire to select the desired polarity. The polarity is determined by the vehicle's light circuit.

**PINK: (-) 3rd Channel Output-** This wire, by default, has a 1 second 250mA negative output whenever the "...“ transmitter is held for 3 seconds. The timing is configurable with feature #12. It is typically used to activate accessories like a remote start unit.

**WHITE: (+/-) Light Flash Output-** By default, this wire is connected to the vehicle's parking light circuit. It's polarity is determined by the WHITE/RED wire. If flashing lights are not desired, this output can be configured to operate as 4th channel using feature #7.

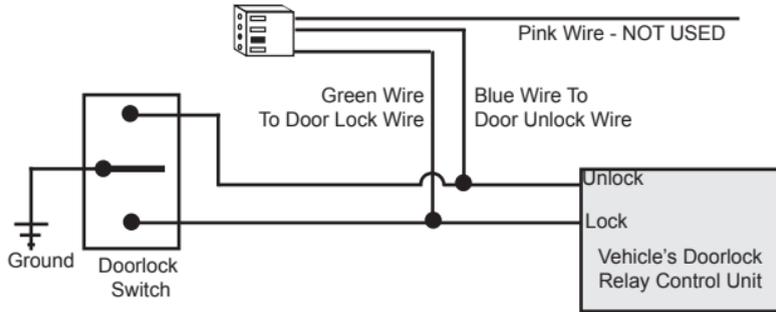
**WHITE/BLACK wires: (+/-) Domelight Supervision Output-** By default, these wires will turn on the vehicle's interior lights for 30 seconds after unlocking by the transmitter. Connect the FUSED wire to either +12v or ground, depending on the vehicle's light circuit requirements. Connect the NON-FUSED wire to the domelight circuit in the car.

### DOOR LOCK CONNECTIONS

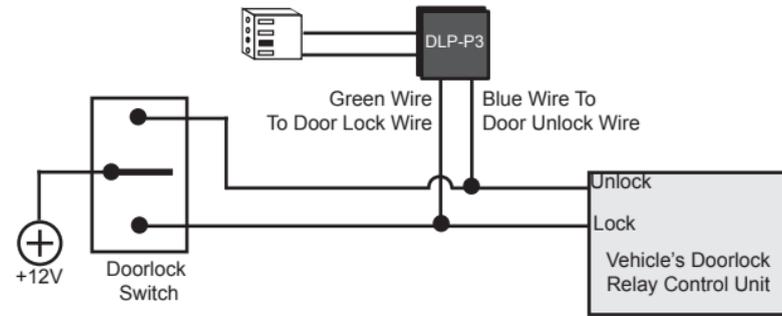
The REC-12 has a 4 pin plug-in door lock/unlock port. It provides 3 250mA outputs for LOCK, UNLOCK #1 (driver's OR all doors), and UNLOCK #2 (all doors for driver's priority). It also has a constant +12V output for powering optional relay coils. It offers installation flexibility because every doorlock interface available from Omega R & D, Inc. will plug directly into this port. There are 4 primary types of analog doorlocking systems used in vehicles today. Additionally, there are digital databus driven systems that require an interface module. Refer to vehicle specific information to determine which doorlocking system is used.

**Multiplex Doorlocks:** This is the newest type of analog doorlock control system developed for vehicles. It typically uses only 1 wire for lock and unlock control. It can be positive or negative and the vehicle's body computer looks for multiple signals on this wire. Each signal differs in voltage. This is controlled by resistors in the doorlock switch which must be mimicked by the doorlock interface. Refer to vehicle specific information for more details.

## Wiring Connections (cont'd)

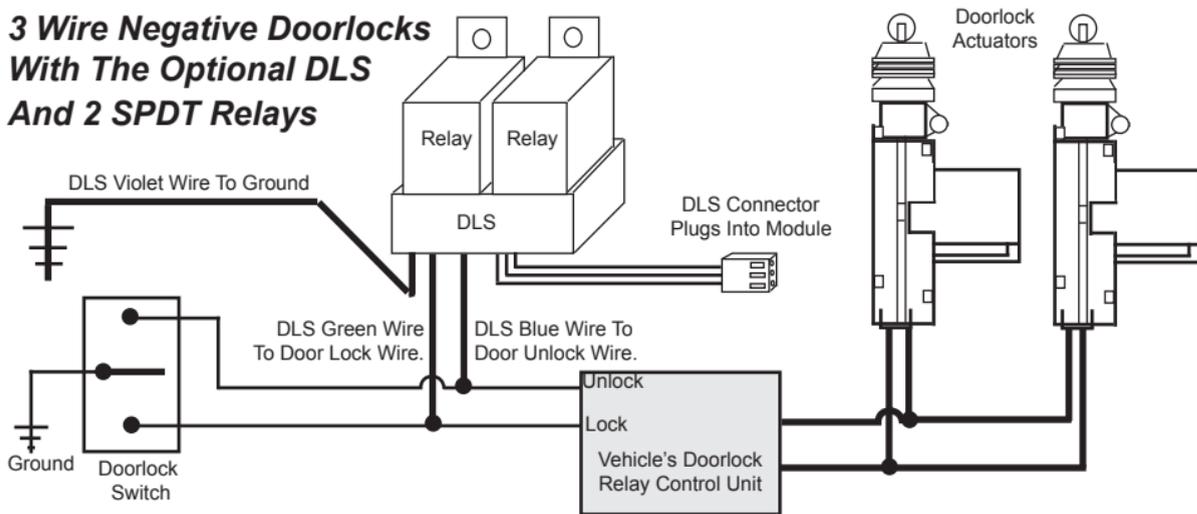


**3 Wire Negative Doorlocks  
With All Unlock Function  
Using Included DLP-N4  
(Standard Installations)**

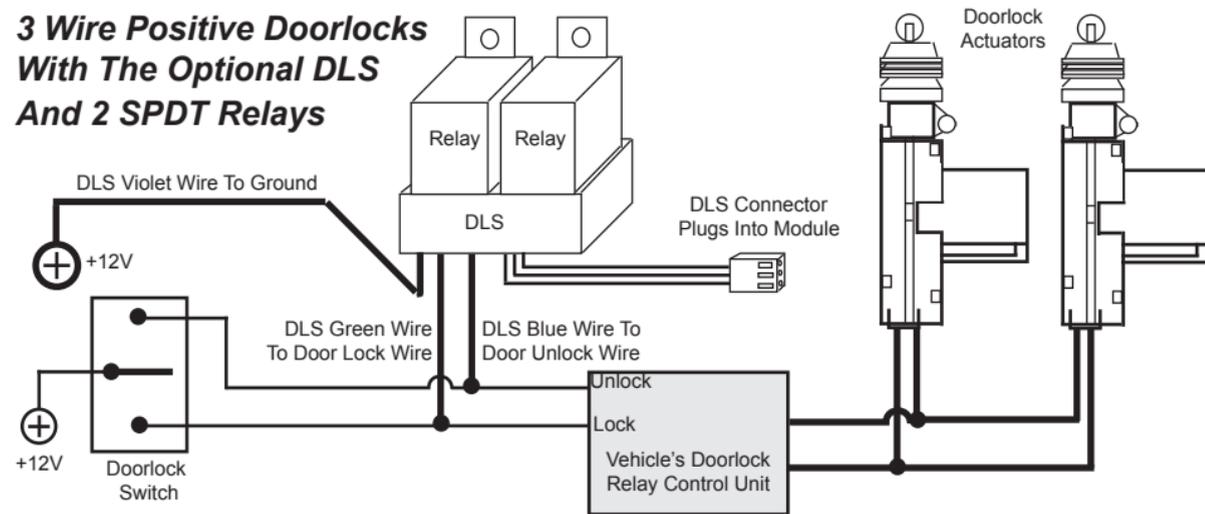


**3 Wire Negative Doorlocks  
With All Unlock Function  
Using Optional DLP-P3**

**3 Wire Negative Doorlocks  
With The Optional DLS  
And 2 SPDT Relays**

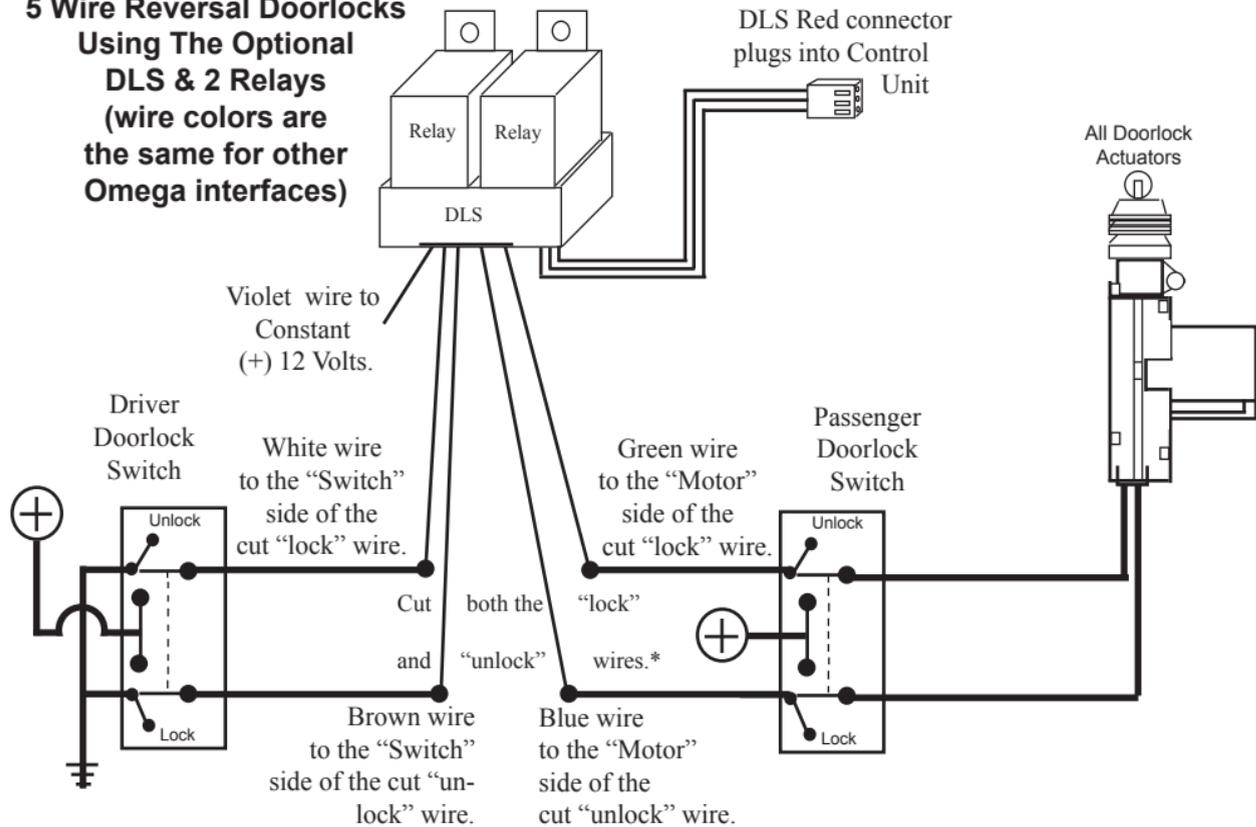


**3 Wire Positive Doorlocks  
With The Optional DLS  
And 2 SPDT Relays**



## Wiring Connections (cont'd)

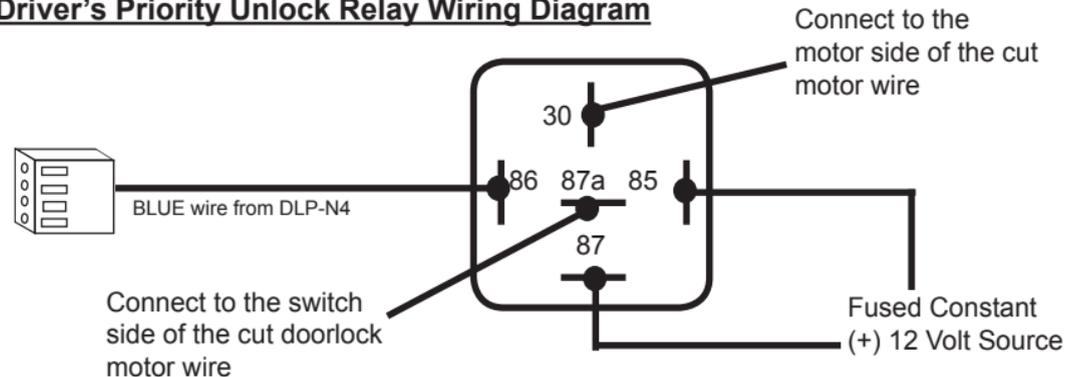
### 5 Wire Reversal Doorlocks Using The Optional DLS & 2 Relays (wire colors are the same for other Omega interfaces)



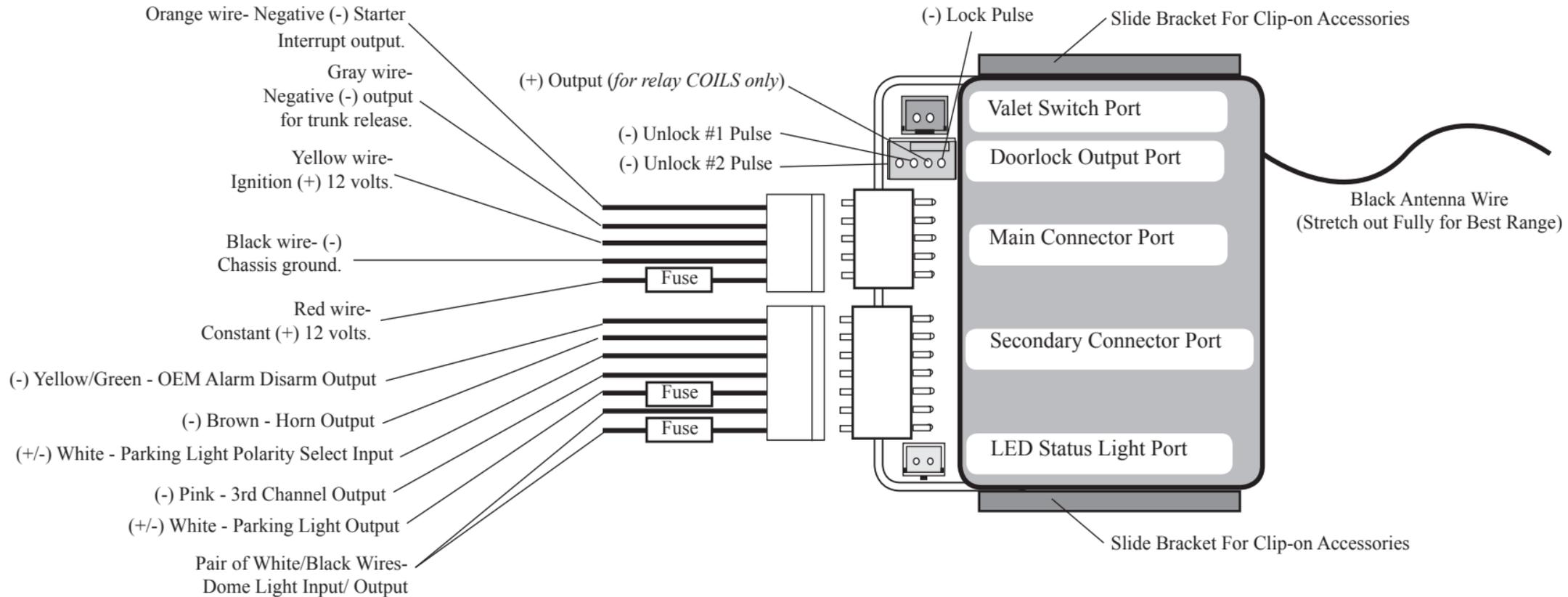
## DRIVER'S DOOR PRIORITY CONNECTION

Everything described in the previous section also applies to configuring the driver's door priority option. You would still connect the LOCK circuit as described but would utilize the **PINK UNLOCK #2** output wire instead of the **BLUE UNLOCK #1** output wire to activate the vehicle's UNLOCK circuit. The **BLUE** wire would then be used to activate the driver's door unlock. In almost all cases, this requires configuring the driver's unlock output to be a 5-wire/reversal rest at ground circuit. PLEASE REFER TO THE VEHICLE'S SCHEMATICS AND CONFIRM BEFORE CONFIGURING THIS WAY. The diagram below shows only the driver's door unlock configuration which should be applied to the standard doorlock interface as described in the previous section.

### Driver's Priority Unlock Relay Wiring Diagram



# REC-12 Wiring Overview



# Programmable Features List

## Complete Programmable Features Matrix

Feature Programming: Ignition on, off, press valet 5 times (horn honks, status light turns on)				
# Feature	Lock Button	Unlock button	Trunk button	“...” button
1 Lock 90 Sec After Ign Off	ON	OFF		
2 Lock 90 Sec After Unlock	ON	OFF		
3 Ign Controlled Lock/Unlock	Lock & Unlock	Lock Only	Unlock Only	OFF
4 Unlock w/ Trunk Release	ON	OFF		
5 Lock/Unlock Pulse Time	0.8 Sec	3 Sec	Dbl Unlock	
6 Domelight Relay Function	Domelight	4th Ch Pulse	4th Ch Latch	Light Flash
7 Light Relay Function	Light Flash	5th Ch Pulse	5th Ch Latch	Horn Honk
8 Confirmation Chirps	Quiet	Loud	On Demand	OFF
9 90 Sec Auto Starter Disable	After Ign Off	After Unlock	Ign Off & Unlock	OFF
10 Anti-Carjacking	Ignition	Remote	Ign. & Remote	OFF
11 Lights On After Unlock	ON	OFF		
12 “...” Button Function	3rd Ch Pulse	3rd Ch Latch	3rd Ch - 30 Sec	Panic