456G GM Full-Size Truck and SUV Interface

IMPORTANT! *Please read this installation guide thoroughly before installing the 456G. Use only a high quality digital multi-meter for testing. This product connects to the vehicle's low voltage signal wire and improper installation or testing can result in damage to the vehicle. Never use a test light or logic probe to test wires in this vehicle!*

The 456G interface operates many functions of the lock/security system in the 2003 model year GM full-size trucks and SUVs. The 456G converts the signals from keyless entry, alarm, and remote start systems into signals that can be understood by the vehicle's data bus. This allows interfacing with the factory security and lock system through the data wire in the vehicle. The 456G controls door lock operation including locking, unlocking, and driver's door only unlocking. The 456G also provides control of the factory security system. The factory security system can be armed and disarmed when locking or unlocking the doors or disarmed when remote starting while leaving the doors locked. The dome light and headlights will illuminate when the unit unlocks the doors depending on the vehicle model and trim level.
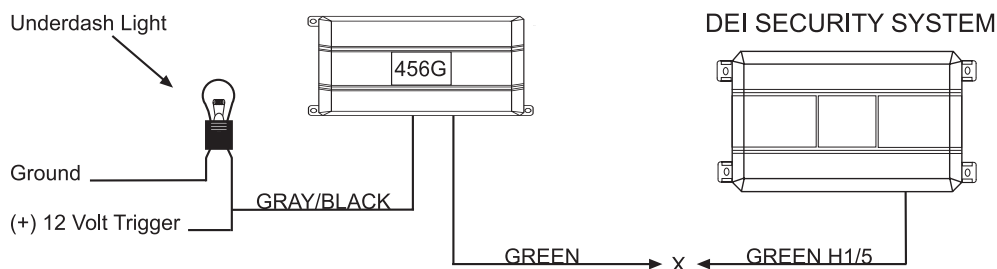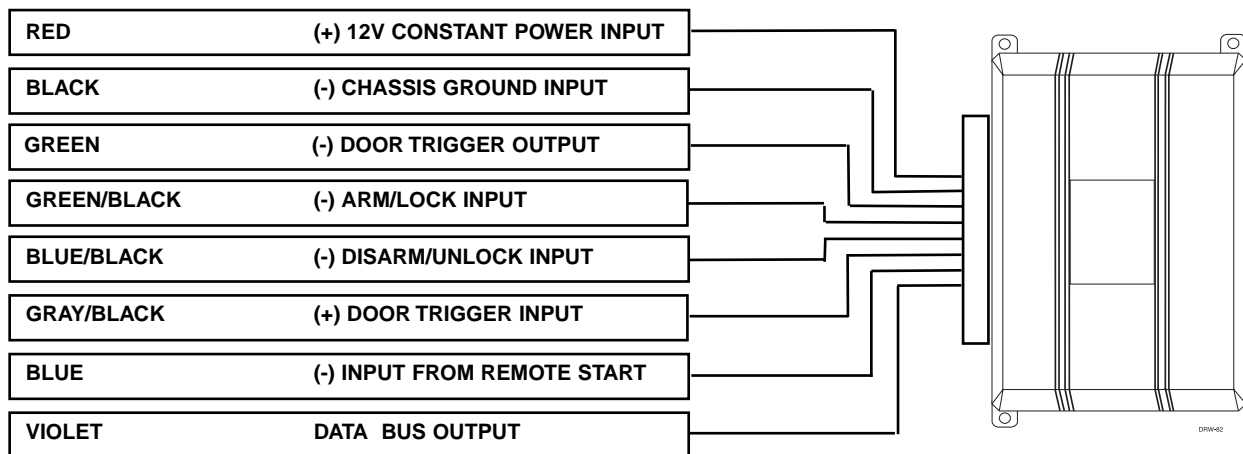
programming

NOTE: Unit comes programmed in keyless mode.

For non-keyless entry vehicles:

1. Connect the power, ground, and data wires before inserting the harness into the module.
2. Ground the GREEN/BLACK wire then insert the harness into the 456 module.
3. The door locks will cycle once for confirmation.
4. Connect the GREEN/BLACK lock input wire to the lock output of the security system, and then complete all connections.

wiring diagrams

RED	(+) 12V CONSTANT POWER INPUT
BLACK	(-) CHASSIS GROUND INPUT
GREEN	(-) DOOR TRIGGER OUTPUT
GREEN/BLACK	(-) ARM/LOCK INPUT
BLUE/BLACK	(-) DISARM/UNLOCK INPUT
GRAY/BLACK	(+) DOOR TRIGGER INPUT
BLUE	(-) INPUT FROM REMOTE START
VIOLET	DATA BUS OUTPUT

DRW-82

Underdash Light

456G

DEI SECURITY SYSTEM

Ground

(+) 12 Volt Trigger

GRAY/BLACK

GREEN   X   GREEN H1/5

For keyless entry

5. Connect the power, ground, and data wires before inserting the harness into the module.

6. Ground the BLUE remote start input wire, then insert the harness into the module.

7. Door locks will cycle twice for confirmation.

8. Connect the BLUE remote start input wire to remote start output of the security system.

driver's door priority

The 456G will perform driver's door priority when in keyless mode. The first pulse on the unlock wire will unlock the driver's door and an additional pulse within five seconds will unlock the other doors. If driver's door priority is not desired, this can be done by switching the alarm to double pulse unlock. Unfortunately, non-keyless models do not have the driver's door priority option.

Wire Connection Guide

8-Pin Main Harness

■ **RED (+) Constant Power Input:** Connect to a fused source of constant (+) 12 volt.

■ **BLACK (-) Chassis Ground Input:** Connect this wire to a paint-free surface on the vehicle chassis. Use a factory bolt if possible.

■ **GREEN (-) Door Trigger Output:** This connection is only necessary when installing a security system. The GREEN wire should be connected to the (-) door trigger input of the security system (see diagram).

   ❑ **Dome Light Bypass:** When the 456G sends either a lock/arm, unlock/disarm, or remote start factory security arm/disarm signal to the vehicle the dome light will turn on temporarily. The 456G stops the (-) output on the GREEN wire until the dome light turns off before reconnecting the circuit to ensure full coverage from the security system.

NOTE: If a door is open when arming a Directed security system, the 456G Dome Light Bypass will not allow a Door Error Bypass by the alarm. When the Dome Light Bypass ceases the alarm will trigger informing the customer to close the vehicle doors.

■ **GREEN/BLACK (-) Arm/Lock Input:** Connect this wire to the (-) lock output of the keyless entry or security system.

■ **BLUE/BLACK: (-) Disarm/Unlock Input:** When the BLUE/BLACK wire receives a single (-) pulse the factory security system will disarm and the driver door will unlock. When it receives a second (-) pulse (within five seconds) the passenger doors will unlock.

   ❑ **Standard Door Locks (all doors unlock):** Connect the BLUE/BLACK wire to the (-) unlock output of the keyless entry or security system and program to double pulse unlock.

NOTE: If using a 551R Valet remote start system the Directed 452T Double Pulse Generator must be used to unlock all doors.

   ❑ **Progressive Door Locks (driver door unlocks first):** Connect the BLUE/BLACK wire to (-) unlock output and (-) second unlock or (-) auxiliary output of the keyless entry or security system. Program the auxiliary output to second unlock output when applicable.

■ **GRAY/BLACK (+) Door Trigger Input:** This connection is only necessary when installing a security system. The GRAY/BLACK wire should be connected to the under dash light wire that tests (+) 12 volt when a door is open (see diagram). When this wire receives a (+) 12 volt input, the GREEN wire will send a (-) output to the security system, except during Dome Light Bypass mode.

NOTE: The 456G converts the GRAY/BLACK (+) door trigger input to GREEN (-) door trigger output internally.

■ **BLUE: Remote Start Input:** If installing a remote start product, connect this wire to the BLUE status output of the remote start which provides a (-) negative output when the remote start is active. This will disarm the factory security system (if the system is armed) when the vehicle is started with the remote start. When the remote start is shut down (input goes away) the factory security system will rearm.

   ❑ **Horn Honk Bypass:** If the vehicle battery voltage drops too low the factory security system may emit one short honk of the horn when remote starting the vehicle. If the customer considers this unacceptable, use TechTip #1054 to bypass the horn output temporarily during remote start.

■ **VIOLET: Data Buss Input:** Connect the VIOLET wire to the Violet data buss wire at the OBD connector under the driver side dash. Make this connection at least six inches from the OBD connector.

IMPORTANT! The data bus wire is a wire that connects the vehicle's network of control modules and allows communication throughout the vehicle. This wire carries a low voltage data signal and CANNOT be tested.