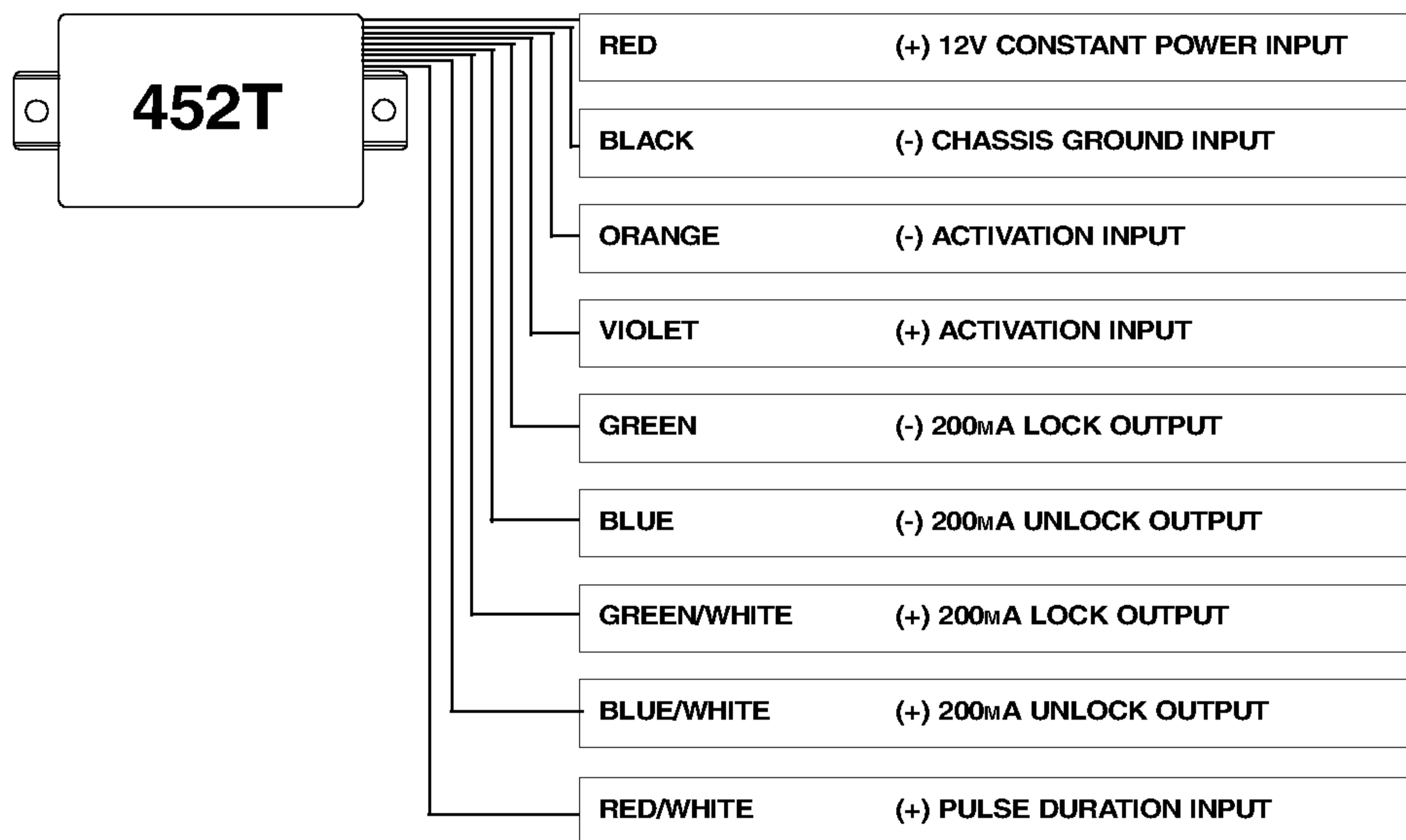


# 452T Door Lock Pulse/Double Pulse Generator

The 452T is a versatile unit that can meet several unique installation needs. It can be used as a door lock pulse generator to convert a positive or negative latching input to door lock and unlock pulses. The 452T can provide either 200mA (-) or 200mA (+) pulses for door locks, making it possible to control any relay driven factory lock system without any additional parts. Common applications include adding door locks to a unit that has a ground-when-armed output, or generating pulses for ignition controlled door locks.

The 452T can also generate two separate pulses from a single pulse input. Some newer vehicles require two pulses to unlock the doors such as: 1995 and newer Nissan Maxima, 1994 and newer Infiniti Q45, and 1995 and newer Volkswagen Jetta III, Golf III and Passat.



## WIRE CONNECTION GUIDE

**RED** (+) 12V constant power input: Connect this wire to a fused source of constant (+) 12V.

**BLACK** (-) chassis ground input: Connect this wire to a paint free surface on the vehicle chassis.

**ORANGE** (-) activation input: If the 452T is being used to generate lock and unlock pulses, connect this wire to the ground-when-armed output of the security system. If the 452T is being used to create a double (-) pulse, connect the ORANGE wire to the (-) unlock output from the security system.

**VIOLET** (+) activation input: If the 452T is being used to generate lock and unlock pulses for ignition controlled door locks, connect this wire to a source of (+) 12V switched ignition in the vehicle. If the 452T is being used to create a double (+) pulse, connect the VIOLET wire to the (+) unlock output from the security system.

**NOTE:** The ORANGE and VIOLET inputs cannot be used at the same time. Damage to the module will result.

## WIRE CONNECTION GUIDE, CONT.

**GREEN (-)** 200mA lock output: The GREEN wire supplies a 0.8 second output whenever the ORANGE or VIOLET activation wires receive input. This happens when any input duration is supplied to the ORANGE or VIOLET. The input can be a latch such as ground-when-armed or a pulse, such as a lock or unlock pulse.

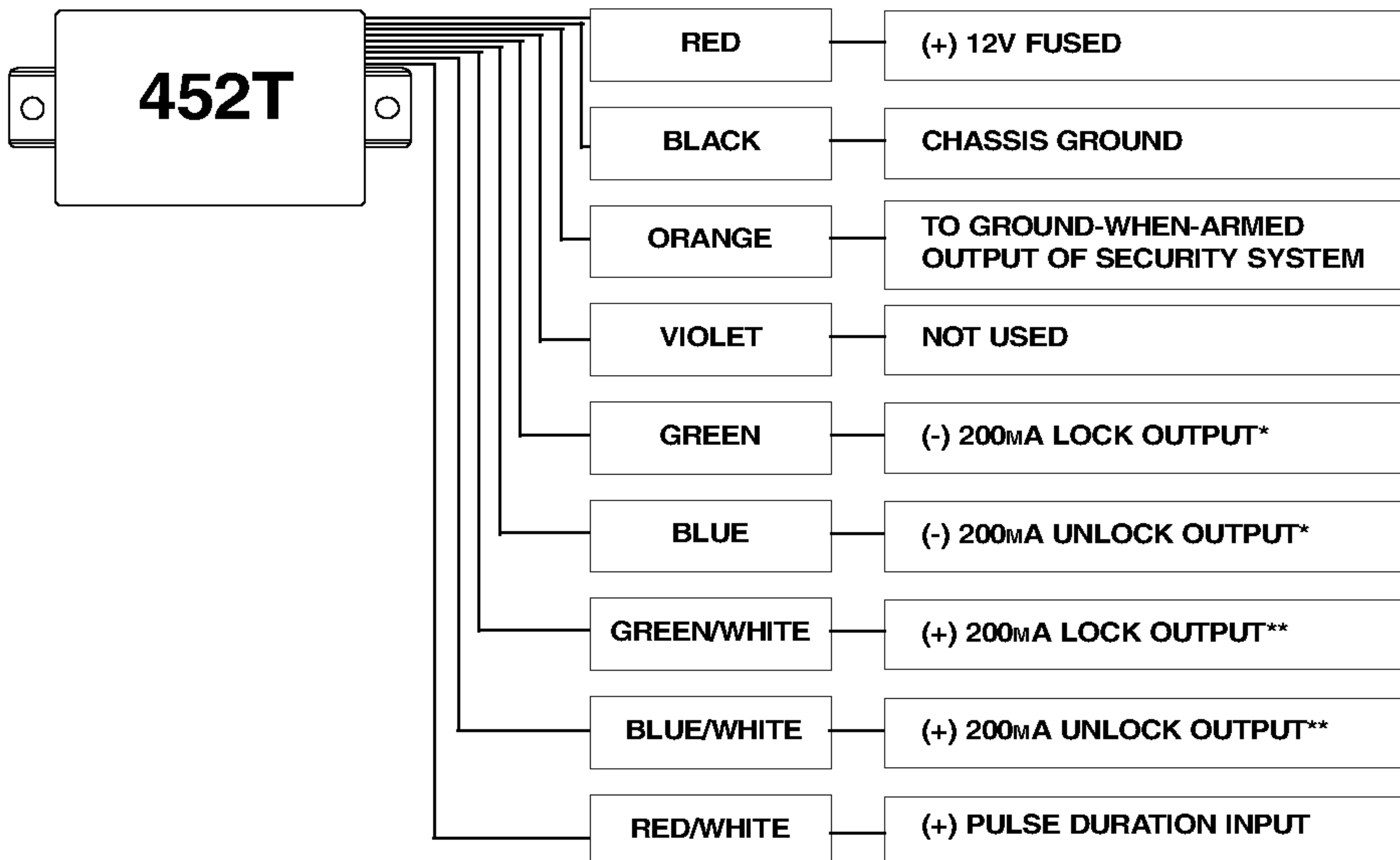
**BLUE (-)** 200mA unlock output: The BLUE wire supplies a 0.8 second output whenever the ORANGE or VIOLET activation wires stop receiving input.

**GREEN/WHITE (+)** 200mA lock output: This wire behaves exactly like the GREEN wire, except for the polarity of the output. This output is not designed to drive high current loads and will be damaged if connected directly to a motor.

**BLUE/WHITE (+)** 200mA unlock output: This wire behaves exactly like the BLUE wire, except for the polarity of the output. This output is not designed to drive high current loads and will be damaged if connected directly to a motor.

**RED/WHITE (+)** pulse duration input: When this wire is NOT connected, the output wires have a duration of 800 milliseconds. The 800 millisecond pulses will control most power door lock systems. To decrease the duration of the output pulses to 250 milliseconds, connect this wire to constant (+) 12V. This shorter output pulse can be used to disarm the factory security system in certain vehicles, such as the Chrysler minivan. This shorter pulse duration allows the factory alarm system to be disarmed without unlocking the doors in remote start applications. This will affect the output of both the (-) output wires, BLUE and GREEN, and also the (+) output wires, BLUE/WHITE and GREEN/WHITE.

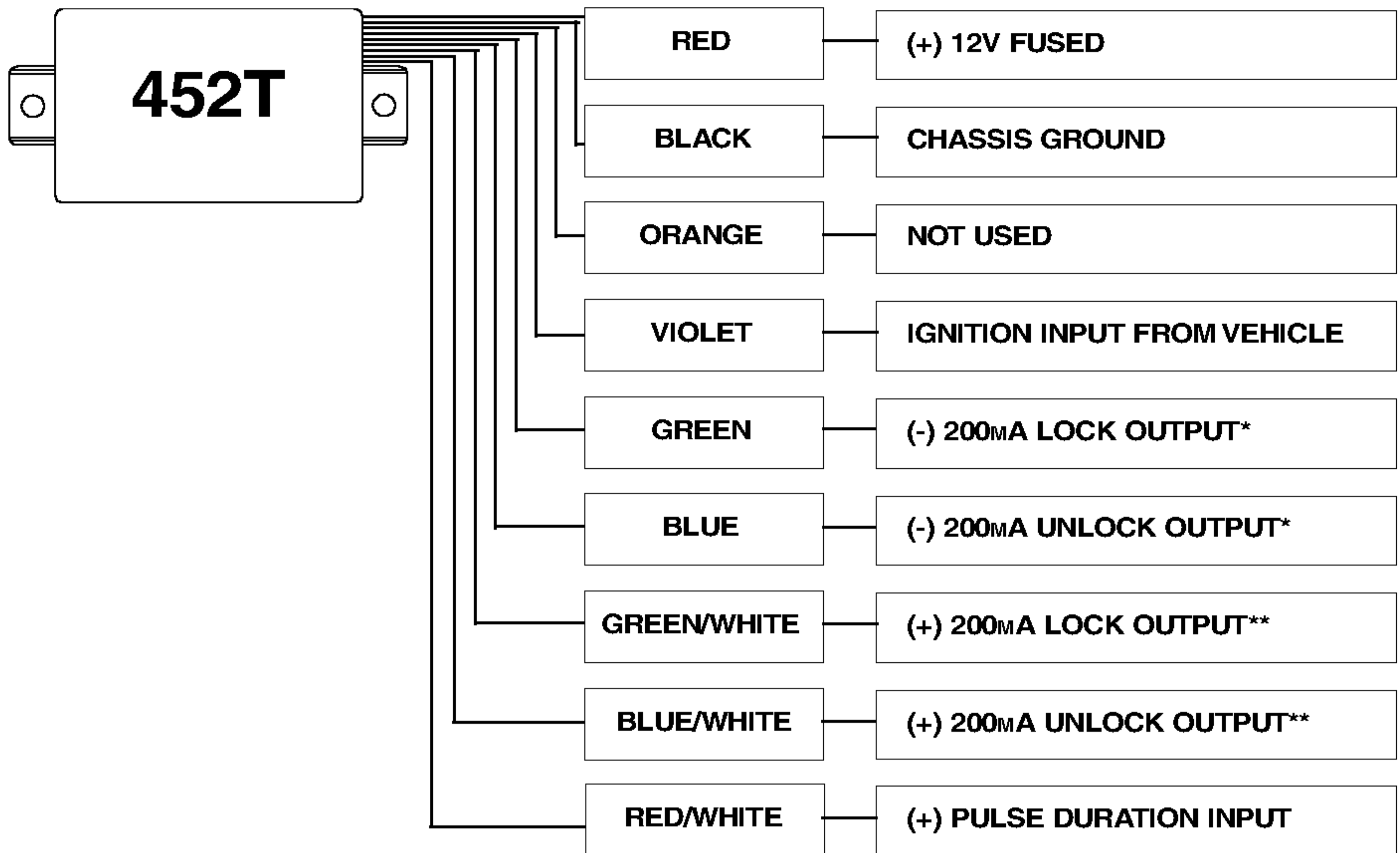
### Generating Lock/Unlock Pulses From a Ground-When-Armed Input



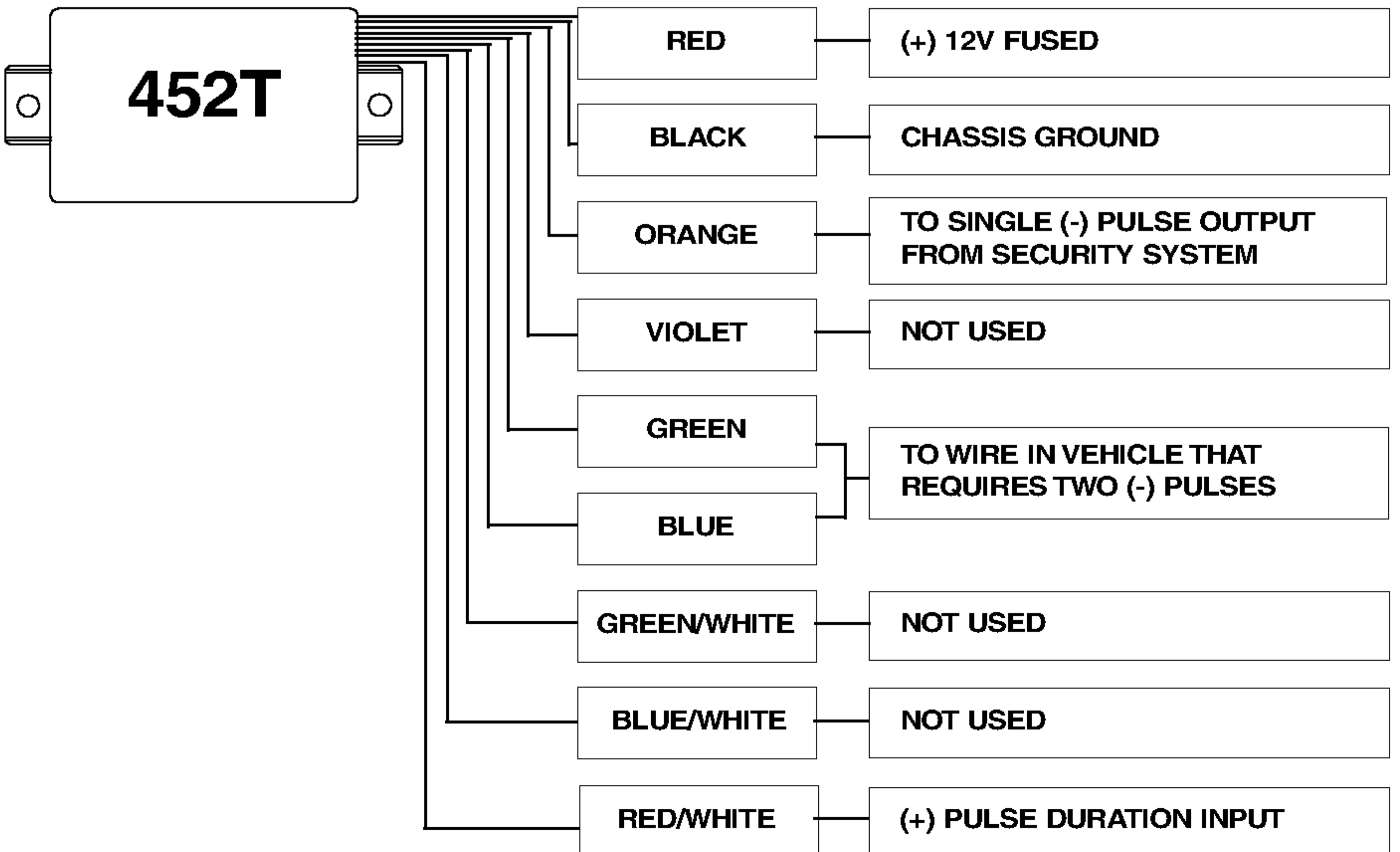
\* Use these outputs if the vehicle has (-) triggered locks or if adding separate relays

\*\* Use these outputs if the vehicle has a (+) triggered lock system using relays. Do not connect directly to motors.

**Generating Lock/Unlock Pulses From an Ignition Input**



**Generating Two (-) Pulses From Single (-) Input Pulse**



**Generating Two (+) Pulses From Single (+) Input Pulse**

