REC-43T Keyless Entry System
REC-43 Auxiliary Receiver with 2 Pre-Coded Transmitters

OPERATIONS AS PRE-PROGRAMMED:

The REC-43T as received is configured for basic keyless entry; follow these instructions. The remainder of this sheet has the comprehensive instructions for the REC-43's complete operations.
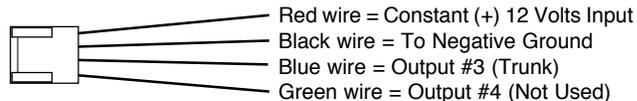
Pressing the **Large button** locks the doors

Pressing the **Small button** unlocks the doors.

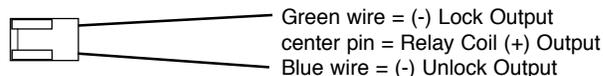Pressing **Both buttons** is used for Trunk release

WIRING:

4-pin plug

Red wire = Constant (+) 12 Volts Input
Black wire = To Negative Ground
Blue wire = Output #3 (Trunk)
Green wire = Output #4 (Not Used)

Red wire: Connect this wire to a constant source of power.
Black wire: Connect this wire to Negative Ground.
Blue wire: (-) output when both buttons are pressed

3-pin plug

Green wire = (-) Lock Output
center pin = Relay Coil (+) Output
Blue wire = (-) Unlock Output

The **Green Lock and Blue Unlock** wires are (-) outputs. These can be connected directly to #201-type 3-Wire Negative doorlock system. An optional DLS or other Omega doorlock interface can plug directly into the REC-43's 3-pin port for other doorlock types.
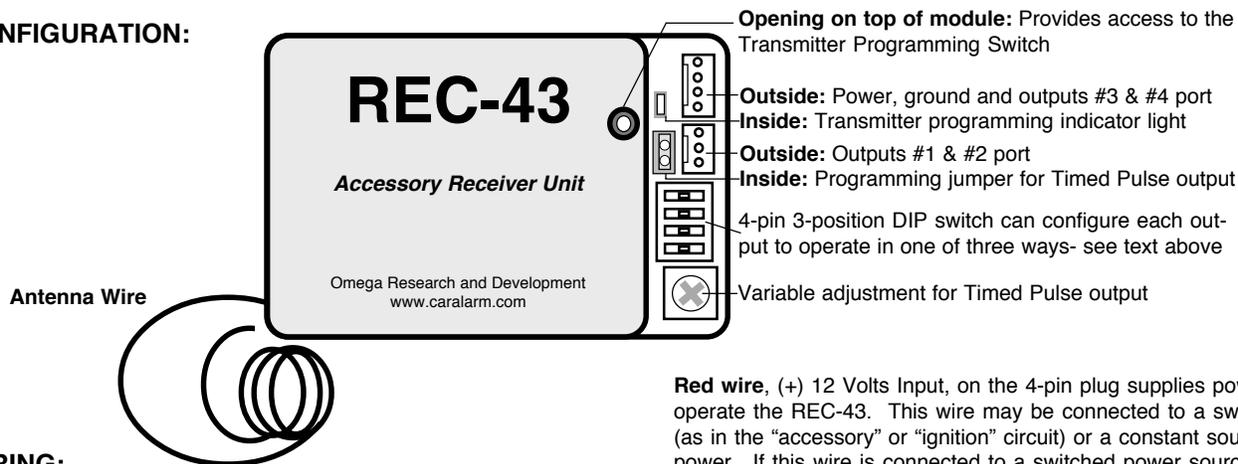

COMPLETE INSTRUCTIONS FOR THE REC-43:

The REC-43 is a "stand-alone" universal receiver unit for 12 Volt applications. It has 4 outputs, which are independently assignable to the controlling transmitter's buttons via a learning programming procedure. When the REC-43 receives a previously-programmed signal from the transmitter, it activates the appropriate output in the fashion in which it has been configured.

When activated the outputs supply 500mA (-)Negative ground (500 milliamps = 1/2 amp of ground). Each of the outputs may be configured as:

a) "TIMED PULSE"   = When the output is activated, it will last for a preset period of time, from @ 1/5 of a second to @ 30 seconds.

b) "ON DEMAND"   = When the output is activated, it will last for as long as the transmitter's button is pressed.

c) "LATCH / UNLATCH" = When the output is activated, it will remain activated until an additional signal is received from the transmitter.

CONFIGURATION:

REC-43
Accessory Receiver Unit

Omega Research and Development
www.caralarm.com

Opening on top of module: Provides access to the Transmitter Programming Switch

Outside: Power, ground and outputs #3 & #4 port
Inside: Transmitter programming indicator light

Outside: Outputs #1 & #2 port
Inside: Programming jumper for Timed Pulse output

4-pin 3-position DIP switch can configure each output to operate in one of three ways- see text above

Variable adjustment for Timed Pulse output

Antenna Wire

WIRING:

4-pin plug:

Red wire = (+) 12 Volts Input
Black wire = Negative Ground
Blue wire = Output #3
Green wire = Output #4

3-pin plug:

Green wire = Output #1
center pin = (+) 12 Volts Output
Blue wire = Output #2

Red wire, (+) 12 Volts Input, on the 4-pin plug supplies power to operate the REC-43. This wire may be connected to a switched (as in the "accessory" or "ignition" circuit) or a constant source of power. If this wire is connected to a switched power source, the REC-43 will only operate when the source circuit is turned on (transmitter codes and output settings will not be affected).

Black wire, Negative Ground, must be connected to the negative side of the power source. In vehicle applications, it may connected to the chassis, or metal structure, of the vehicle.

The Outputs are numbered as #1, #2, #3, and #4 in reference to their sequence within the transmitter programming procedure (see "Programming Transmitters" and "Configuring Outputs"). Specific connection of these wires is contingent upon the application. When the REC-43 is used to operate other controlling devices (remote engine starter, for example), connection is typically wire-to-wire directly to the device's activation wire. The other most common interface method is connecting the output wire to activate a relay to control the vehicle's circuit (an example would be locking or unlocking the doors).
Note: the center pin on the 3-pin plug is (+) 12 Volts Output, provides power to relay coils only of an optional interface. The REC-43's 3-pin allows an optional Omega service part, the DLS (a dual relay socket), to plugged directly into the REC-43 for installation convenience.

PROGRAMMING TRANSMITTERS:

The REC-43 needs to be connected to power and ground, and all of the transmitters which are to operate the unit need to be present. A small instrument, such as screwdriver or toothpick, is needed to press the Transmitter Programming Switch which is located below the small opening on the top of REC-43's case.

Your Action:	Unit's Reaction:
STEP 1: Press and hold the Transmitter Programming Switch for 2 seconds.	The Transmitter Programming Indicator Light will illuminate, and the REC-43 will softly chirp 4 times, then chirp louder one more time. It is ready to receive the first transmitter's button codes.
STEP 2: Release the Transmitter Programming Switch.	
STEP 3: In sequence of desired operation, press the buttons on the first transmitter. Only one button, or up to four buttons, on each transmitter may be coded into the REC-43.	The unit will beep once and the indicator light will flash once when the first button code is learned, then 2 times for the second button code, 3 times for the third button and 4 times for the fourth button. The REC-43 has four button code "slots" for each transmitter, the code slots' numerical order in the programming procedure equals the output number- slot #1 is output #1, slot #2 is output #2, slot #3 is output #3, and slot #4 is output #4.
STEP 4: To program the button codes of an additional transmitter, press and hold the Transmitter Programming Switch.	The REC-43 will chirp twice to indicate that it's ready to learn the second transmitter's button codes (or chirp 3 times for a third transmitter, or four times for a fourth transmitter).
REPEAT Step 2 and Step 3.	

TRANSMITTER PROGRAMMING NOTE #1: Exit transmitter programming mode by waiting 10 seconds, without transmitting any button codes. Upon exiting, the unit chirps 5 times and the LED goes out.
TRANSMITTER PROGRAMMING NOTE #2: a transmitter code must be entered into a slot in order to access the next slot, even if the first output(s) are not planned to be used.

CONFIGURING THE OUTPUTS:

Each output can operate as a Timed Pulse, On Demand, or Latch / Unlatch type. The way in which the operation is determined is by a 3-position switch; each output has its own switch, as shown below.

On Demand and Latch / Unlatch programming:
To configure On Demand or Latch / Unlatch operation, simply place the selected output's switch in the center or outboard position.

Timed Pulse programming:
Placing an output's switch in the inboard position will configure the output for Timed pulse operation. The length of time of the output is adjustable from 1/10 second to 30 seconds.
To change an output's pulse time, remove the programming jumper, then operate the output and adjust the output pulse more or less by turning the variable adjustment. When the desired output pulse time has been properly set, reinstall the programming jumper.

Programming jumper for Timed Pulse output

Output #3 (4-pin plug, blue wire)
Output #4 (4-pin plug, green wire)

Output #1 (3-pin plug, green wire)
Output #2 (3-pin plug, blue wire)

4-pin 3-position DIP switch

Switch controlling output #3
Switch controlling output #4
Switch controlling output #2
Switch controlling output #1

Switch inboard = Timed Pulse
Switch centered = Latch / Unlatch
Switch outboard = On Demand

Variable adjustment for Timed Pulse output-clockwise is longer duration pulse, counter-clockwise is shorter duration pulse.