# Dakota Digital

### REM-3D REMOTE CONTROL DOOR LATCH OPENER SYSTEM

#### INTRODUCTION

Thank you for purchasing the REM-3D Remote Control Door Latch Opener System from Dakota Digital, Inc. This, along with many other products that Dakota Digital, Inc. has to offer, represents the latest in electronics technology for the street rod, classic car and truck, and any custom vehicle.

The REM-3D Remote Control Door Latch Opener system comes complete with receiver module, two key chain transmitters, a sealed push-button switch, wiring harness, and two door opener motors. It is installed to remotely release the driver's and passenger's door independently. A safety feature disables the system when the ignition is on to avoid accidental door opening during vehicle operation. Two internal door release buttons can be wired into the system for removal of inside door handles as well. An emergency release switch can be concealed on the underside of the vehicle should the door ever be closed with the motor running and you on the outside. Pressing this button will allow vehicle reentry even though the remote control system is disabled.

#### **INSTALLATION**

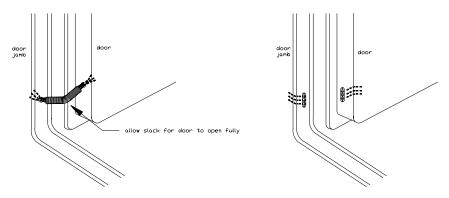
While installation of the REM-3D is very straightforward, paying a little attention here and planning out how the system will fit into your specific vehicle will save some time in the long run. First, determine the best mounting method for the door motors within the doors. The pull (or push) on the original door latch or newer bear claw latch should be as straight as possible. Securely mount the motor and route the connecting rod as pertains to your specific situation. Use #6 self tapping screws for securing the motor to your door panel. A steel rod or light cable may be used to attach the motor arm to your latch.

The receiver should be mounted under the dash up on the fire wall for best access to wiring. The kick panel is also another good location for the receiver.

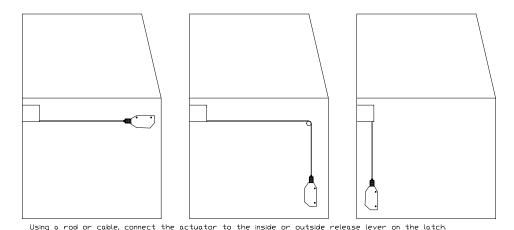
Connect the REM-3D system as is shown in the wiring diagram. While the wiring diagram is self explanatory, there are several key areas to pay particular attention to. First, the 12 volt source should be able to supply up to 10 amps (needed if both motors are activated simultaneously) and should not be connected to a feed that is shared with a high current device such as a power window, power seat, or fan. Connecting to a source shared by a device such as this may cause improper operation due to the surge current and subsequent voltage drop caused by the high current devices.

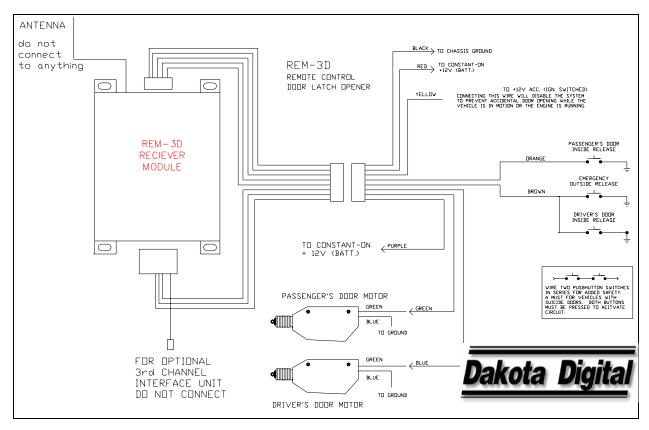
The only wires that need to be passed to the doors are the two wires running to each door motor. This should be done using a flexible rubber tube or rubber grommet

to protect the wires, or by using the optional **DAKOTA DIGITAL**, **INC. MAGNUM SHOOTERS**. **MAGNUM SHOOTERS** will eliminate the wires running through the door jambs entirely for the cleanest appearance possible. When these highly conductive brass contacts are mounted to the door and to the door jamb they eliminate the wires completely. If you would like to use MAGNUM SHOOTERS they can be ordered directly from DAKOTA DIGITAL, INC. by calling toll free 1-800-852-3228. Route the remaining wires under the dash for the best location and appearance.



The brown and orange wires can be wired to interior switches and an emergency outside release switch (interior switches not supplied) as shown in the diagram. In the event that you are installing this system into a vehicle that has suicide doors, you may want to use two switches wired in series so that both switches must be pressed to activate the door motor. The insert on the wiring diagram shows how to do this. In any event, you should always use a safety latch mechanism to securely lock the door closed while in motion.





#### **OPERATION**

Each key chain transmitter contains two push buttons. Each button will activate its own independent channel when pressed. To release the driver's door, press the button labeled I. For the passenger door, press the button labeled II. The door release motors will stay activated for as long the key chain transmitter button is pressed. Only hold the button down for one or two seconds to avoid any damage to the motor from having power applied for an excessive period of time.

When the ignition key is "ON", the remote system is disabled. This safety feature will not allow the doors to accidentally release while the vehicle is in motion. This disables the key chain transmitters only. The "override" switches will not be disabled. If you chose to wire the internal release switches, pressing the switch by each door will electrically release the respective door, just as pressing the remote transmitter will. If the outside door release switch was installed, pressing it will release the driver's door, even if the ignition is on and the remote system is disabled. This will allow you reentry to the vehicle should the door ever be closed while the engine is running.

On vehicles with suicide doors, we recommend using a mechanical sliding dead bolt lock to ensure that there is no way for the doors to open while the vehicle is going down the road.

#### **BATTERY REPLACEMENT**

Should the transmitter function become weak or erratic, the battery in the key chain transmitter may be weak. An indication of a weak battery is that the red indicator may have a dim glow to it when either button is pressed. If this occurs, first check the system by using the second transmitter provided. If the second transmitter function properly, replace the battery in the defective transmitter by the following method:

- A. Remove the small screw on the back of the transmitter case.
- B. Carefully separate the two case halves.
- C. Remove the battery noting the (+) and (-) position.
- D. Replace the battery with a new 12 volt type GP23A battery which is available at most electronic stores (Radio Shack, etc.).
- E. Carefully replace the top cover and refasten the screw.
- F. Check transmitter function. Should the transmitter still fail to function, it is possible the transmitter frequency is out of adjustment. To correct this problem, refer to "Transmitter Adjustment".

#### TRANSMITTER ADJUSTMENT

Should one of your transmitters fail to operate properly while the second works correctly and battery replacement has not corrected the problem, the transmitter frequency may be out of adjustment. To correct this, perform the following:

- A. Open the defective key chain transmitter as explained in battery replacement.
- B. Locate the small blue frequency fine-tune adjustment trimmer on the circuit board inside the transmitter.
- C. Using a small non-metallic adjustment tool, turn the adjusting screw inside the blue trimmer a 1/8 turn clockwise.
- D. Depress button II and check if the driver's door releases. If not, turn the adjustment screw an additional 1/8 turn clockwise and re-check. After turning the screw a total 1/2 turn clockwise, return to its starting position and repeat the adjustment by turning it counter-clockwise in the same manner.
- E. Once the system releases the door, stop and re-close the case. If the adjustment fails to correct the problem, return the transmitter for servicing.

## REM-3D REMOTE CONTROL DOOR OPENER SYSTEM LIMITED LIFETIME WARRANTY

**DAKOTA DIGITAL, INC.** (the Company) warrants to the ORIGINAL PURCHASER of this remote control product that should any included control relay(s), electronic module, or transmitters under normal use and condition, be proven defective in material or workmanship DURING THE LIFETIME OF THE CAR IN WHICH IT WAS ORIGINALLY INSTALLED, such defect(s) will be repaired or replaced (at the Company's option) without charge for parts or labor directly related to repairs of the defect(s).

To obtain repair or replacement within the terms of this Warranty, the product is to be delivered with proof of warranty coverage (e.g., dated bill of sale), specification of defect(s), transportation prepaid, to the factory. This Warranty is valid for the original purchaser only and may not be transferred.

This Warranty does not cover batteries, nor extend to damage to vehicle electrical system. This Warranty does not apply to any product or part thereof which in the opinion of the Company has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident.

This Warranty is in lieu of all other express warranties or liabilities. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY MUST BE BROUGHT WITHIN A PERIOD OF 30 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

The Company does not warrant that this product cannot be compromised or circumvented. THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY THE PURCHASER FOR THE PRODUCT.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation if incidental or consequential damage so the above limitations or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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