DOOR LOCKS

This alarm is equipped with on-board door locking relays. The following is a guide to using these on-board relays with most popular door locking systems.



<u>3-WIRE POSITIVE TRIGGER TYPE</u>

- This type of door locking system is common on many GM's and other makes. If you were to look at the door lock/unlock switch in the driver's door, it would have 3 wires coming out of it. These are a lock wire, an unlock wire and a constant +12v wire.
- The lock and unlock wires will show a +12v positive pulse only while locking and unlocking the doors, otherwise they will "float".
 FACTORY FACTORY



<u>3-WIRE NEGATITVE TRIGGER TYPE</u>

- This type of door locking system is common on many vehicles. If you were to look at the door lock/unlock switch in the
- driver's door, it would have 3 wires coming out of it. These are a lock wire, an unlock wire and a constant (-) negative wire.
 The lock and unlock wires will show a (-) negative pulse only while locking and unlocking the doors, otherwise they will "float".



5-WIRE REVERSING POLARITY TYPE

- Reversing polarity is often confused with the 3-wire positive trigger type system. This happens because both systems show
 positive lock and unlock pulses. The difference is that in a reverse polarity system the lock and unlock wires rest at negative
 ground. Because of things like this, this type of system can be intimidating. However, if the directions are followed very
 carefully, then this system is not very difficult. Carefully observe that you do not accidentally reverse any of the connections
 and, most importantly, USE FUSES!
- In this type of locking system, there are no factory relays. The actual lock/unlock switch directly operates the motors. The switches do
 this by reversing the polarity of the motor wires.
- This system rests at negative ground, so if 12v positive is pulsed into the lock or unlock wire, there will be a short-circuit. This
 is why the internal relays are necessary to mimic the actions of the actual lock/unlock switch. Both the lock and the unlock
 wires will be cut (one wire at a time) and run through the internal relays which will momentarily interrupt the circuit. This
 allows a positive pulse to safely operate the system.

- As mentioned before, the connections are of supreme importance. If the connections are reversed by accident, severe damage can occur to both the vehicle and the unit.
- If you were to look at the lock/unlock switch inside of the driver's door, there would be 5 wires coming out of the switch. There
 will be a constant 12v positive wire, 2 wires showing constant negative ground, and 2 wires which rest at negative ground but
 invert polarity (show a positive pulse) when the lock/unlock switch is pressed.

For Example:

- When the lock button is being pressed, one wire will show 12v positive (this is the lock wire), while the second wire is still resting at negative ground. When the unlock button is being pressed, the polarity of the 2 wires will reverse.
- The wire that was still resting at negative ground will now show 12v positive. This is the unlock wire. The other wire will not
 be resting at negative ground. When the unlock button is being pressed, the polarity of the 2 wires will reverse. The wire that
 was still resting at negative ground will now show 12v positive. This is the unlock wire. The other wire will now be resting at
 negative ground.
- It is not necessary to actually catch the wires inside the door. They can usually be found in the kick panels.
- It is of upmost importance to figure out which of the 2 reversing wires is the lock wire and which is the unlock wire.
 A) <u>The lock wire</u> will be the one that shows 12v positive while the vehicle's lock button is being pressed.
 B) <u>The unlock wire</u> will be the one that shows 12v positive while the vehicle's unlock button is being pressed.

ONCE YOU HAVE DETERMINED THIS, WE CAN START

1) Cut the lock wire. At this time you will have 2 halves of the wire.

2) Press both the lock and unlock button. If you have cut the correct wire, the door locking system should not operate at all (the doors should not lock or unlock).

3) Next we need to determine which side of the cut wire is coming from the door lock switch and which side is gong to the actual motors. THIS IS VERY IMPORTANT. Once you have confirmed that this is truly a reversing polarity system and that you have cut the correct lock wire, press and hold the lock button down. (Be sure that you are pressing down the lock button and not the unlock.)

- The switch side will be the one that shows 12v positive when pressing the lock button (this will only be true if you have cut the lock wire). Now connect the switch side of the cut lock wire to the white/black wire on the 6-pin door lock harness.
- The other side of the cut lock wire will be the motor side. Now connect the motor side of the cut lock wire to the green/black wire on the 6-pin door lock harness.
- 4) Next cut the unlock wire. This will be the wire that shows 12v positive while pressing the unlock button. Note: after cutting the unlock wire, the entire locking system should not operate in either direction.

5) Repeat the procedure of finding which side is the switch side and which side is the motor side.

• The switch side will be the one that shows 12v positive when pressing the unlock button (this will only be true if you have cut the unlock wire.) Now connect the switch side of the cut unlock wire to the brown/black wire on the 6-pin door lock harness.

• The other side of the cut unlock wire will be the motor side. Now connect the motor side of the cut unlock wire to the blue/black wire on the 6-pin door lock harness.

THE DOOR LOCKING SYSTEM SHOULD NOW OPERATE NORMALLY







REPLACEMENT REMOTE PART NUMBER: #REMOTE-DLR4H THIS IS ONLY A GUIDE.

The applications shown are general guide lines of possible applications. Vehicle specifications may change. Always review the vehicle's service manual when performing an installation. Micro Alarm, Inc. does not assume any responsibility for damage to property or persons which may occur due to incorrect applications. Not responsible for typographical errors.

Warranty void if not installed by authorized dealer. Specification and date are subject to change or withdrawal without notice. © 2006 Micro Alarm, Inc. • DLR4HD_inst.051006.qx

5-WIRE REVERSING POLARITY TYPE:

The Micro DLR4HD remote control is a multi-channel, 4-button controller, capable of a variety of functions. This guide will describe its operation and serve as a quick reference manual.

HOW TO "CODE LEARN" A REMOTE CONTROL:

- 1) Turn ignition to the "on" position. Press emergency override button 5 times. The led will flash a total of 6 times then stay solid. The unit is now in code learning mode.
- 2) Once (1) is done, the parking lights and led will remain solid for about 10 seconds before exiting from code learning mode.
- 3) While the parking lights and led are solid, press any of 4 buttons on the remote control. The parking lights will shut off momentarily. This will confirm that the remote has been programmed. The led will flash up to 4 times depending on how many remotes will be programmed (up to 4) confirming the new code. Then the led will light solid again, awaiting the next remote to be programmed.
- 4) A total of 4 remotes can be programmed into the unit. If there is more than 1 remote being programmed, you will need to repeat step (3).
- 5) Once all of the remotes have been programmed into the system and ignition is shut off,

the unit will exit from code learning mode. Both led and parking lights will shut off.

ONE-TOUCH EMERGENCY OVERRIDE:

To activate override, the system must be armed. Turn ignition on, then press override switch one time. The system will disarm. Note: this is not a "valet" feature. This is simply an emergency override.

HIJACK FUNCTION:

• To disable HIJACK, press "unlock" before 60 sec.

• After 60 sec. to disable HIJACK, press override switch.

• To drive with HIJACK mode, press "unlock" before 60 sec.

WIRING GUIDE:

1) RED: MAIN + 12 VOLT POWER

Connect the red fused wire to a constant 12v positive source. Micro recommends direct connection to the battery. Be sure to fuse this wire. An amp atc fuse and holder are provided for this. Be sure all connections are fully insulated.

2) <u>BLACK: GROUD</u>

Connect to the negative terminal of the battery or to a solid chassis ground. Improper grounding will cause malfunctions. Be sure ground is clean and well insulated.

3) WHITE (+/-) 12 VOLT PARKING LIGHT OUTPUT (SELECTABLE)

Find the wire that supplies switched positive 12v to the ignition. This wire is usually located in the steering column harness. This wire will have positive 12v when key is in ignition position and when starter is cranking. <u>Note: For Neg. Output, Change Jumper 9</u>.

4) <u>YELLOW: +12 VOLT SWITCHED IGNITION</u>

Find the wire that supplies positive 12v to the parking lights only. This wire is located at the headlight/parking light switch or the light itself. <u>DO NOT CONNECT</u> <u>THE HEADLIGHT WIRE OR THE UNIT WILL BE DAMAGED!</u> Vehicles with indepedent left and right signal systems must use relay (Part# 5001) for proper operation.

5) BROWN: (-) 500MA SIREN/HORN HONK OUTPUT (SELECTABLE)

This wire should be connected to the vehicle's (-) horn trigger switch wire coming from steering column. Some vehicles may require relay to provide a stronger (-) pulse.

WIRING GUIDE (CONT.):

6) ORANGE: (-) STARTER DISABLE OUTPUT

Find the starter solenoid wire, usually located in the steering column harness. This will show positive 12v only when starter is cranking. This wire must be cut and connected to a relay. When cut, motor should not start. See starter disable circuit for wiring instruction.

7) GRAY: (-) 500MA AUXILIARY OUTPUT #1 (TRUNK POP OR REMOTE START)

Provides an one-time momentary negative output (optional) for trunk pop, remote start, windows roll up, etc.

8) GRAY/WHITE: (-) 500MA AUXILIARY OUTPUT #2 (UNLOCK 2)

This can be used for driver door priority door lock systems. Simply press "unlock" button twice to activate "unlock 2", activating remaining passenger doors.

9) DOOR LOCK HARNESS FOR ON-BOARD RELAYS

10) ORANGE/BLACK: (-) 500MA DOMELIGHT SUPERVISION OUTPUT

This wire allows you to turn on the vehicle's domelight for 30 sec. when you unlock your vehicle with keyless entry. (SEE DIAGRAM)

• This output will reset if the keyless entry is locked/unlocked or if the vehicle's ignition is turned on.

WARNING: Do not connect the orange/black wire directly to the Dome-Light circuit or severe damage will occur to the unit.



PROGRAMMABLE JUMPER OPTIONS:

- PIN# PIN IN (*DEFAULT)
- 1 ARM/DISARM HORN HONK ON* ARM DISARM HORN HONK OFF
- 2 ARM/DISARM HORN HONK .5 SEC. PULSE* ARM/DISARM HORN HONK 1 SEC. PULSE
- 3 N/A
- 4 IGNITION AUTO LOCK/UNLOCK* DISABLE IGNITION AUTO LOCK/UNLOCK

PIN REMOVED

DOUBLE PULSE LOCK/UNLOCK

- 5 NORMAL DOOR LOCKS (1.75 SEC)* VACUUM DOOR LOCKS (3 SEC)
- 6 NORMAL LOCK/UNLOCK*
- 7 DISABLE IGNITION HI-JACK* IGNITION HI-JACK N/A
- 8 SIREN

NOTE: YOU MUST POWER DOWN UNIT BEFORE CHANGING ANY OF THE JUMPER PIN SETTINGS.

HORN

DLR4HD WIRING DIAGRAM:

