

# **#AVSREC8**



8-CHANNEL REMOTE SYSTEM



4555 N CEDAR AVE PHONE (559)486-5444 FAX (559)486-5155 info@avsontheweb.com



## THIS IS ONLY A GUIDE!!!

THE APPLICATIONS SHOWN ARE GENERAL GUIDE LINES OF POSSIBLE APPLICATIONS. VEHICLE SPECIFICATIONS AND AFTERMARKET EQUIPMENT MAY CHANGE. ALWAYS REVIEW THE VEHICLE'S SERVICE MANUAL AND/OR EQUIPMENT INSTALLATION MANUALS WHEN PERFORMING AN INSTALLATION. AVS MOBILE SPECIALIST DOES NOT ASSUME ANY RESPONSIBILITY FOR DAMAGE TO PROPERTY OR PERSONS WHICH MAY OCCUR DUE TO INCORRECT APPLICATIONS. NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

# LIMITED 1-YEAR WARRANTY

UNDER THE CONDITIONS OF THIS WARRANTY. AVS MOBILE SPECIALIST WILL REPAIR THE CONTROL MODULE IF FOUND TO HAVE A DEFECT IN MATERIAL OR FACTORY WORK-MANSHIP FOR ONE YEAR FROM THE ORIGINAL DATE OF PURCHASE BY THE ORIGINAL PURCHASER. THIS WARRANTY IS OFFERED TO THE ORIGINAL PURCHASER AND IS NOT TRANSFERABLE. THIS WARRANTY WILL BE VOID IF THE PRODUCT HAS BEEN ABUSED, ALTERED, IMPROPERLY INSTALLED OR SUBJECTED TO ANY OTHER FACTOR THAT IS BE-YOND THE MANUFACTURER'S CONTROL. THIS WARRANTY DOES NOT COVER LABOR COSTS FOR REMOVAL OR REINSTALLATION NOR REPLACEMENT COSTS OF CONSUMA-BLE ITEMS SUCH AS BATTERIES, FUSES, ETC. AVS WILL DETERMINE IF ANY COMPONENTS ARE DEFECTIVE. IF A COMPONENT IS FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD, AVS RESERVES THE RIGHT TO REPAIR OR REPLACE SAID COMPONENT AT THEIR DISCRETION. SHIPPING ANY MERCHANDISE TO AVS IS THE RESPONSIBILITY OF THE CON-SUMER AND IS ADVISED TO PAY FOR SHIPPING INSURANCE THROUGH THE CARRIER OF THE CONSUMERS CHOICE. AVS WILL NOT BE HELD RESPONSIBLE IF INSURANCE IS NOT PURCHASED AND THE PACKAGE IS LOST OR DAMAGED. AVS WILL PAY THE SHIPPING BACK TO THE CONSUMER\* ONLY IF THE PRODUCT WAS FOUND TO BE DEFECTIVE. IF THE PRODUCT IS FOUND DAMAGED DUE TO MISUSE. AND/OR ABUSE THEN THE CONSUMER IS RESPONSIBLE FOR RETURN SHIPPING COST.

**NOTE:** THE 8 NEGATIVE OUTPUTS ON THE RECEIVER HAVE A 500MA OUTPUT. THESE OUTPUTS MAY BE USED TO TRIGGER A BOSCHE STYLE RELAY.

<u>NEVER</u> CONNECT DIRECTLY TO A DOOR LOCK MOTOR, POP DOOR SOLENOID, AIR VALVE, ETC. THIS TYPE OF ERROR WILL CAUSE DAMAGE TO THE RECEIVERS OUTPUTS AND VOID YOUR WARRANTY! PLEASE USE THE FOLLOWING DIAGRAMS TO GUIDE YOU. FAILURE TO FOLLOW THIS STEP WILL RESULT IN THE MELT DOWN OF THE RECEIVER AND WILL VOID THE WARRANTY!!!

PLEASE READ THIS MANUAL IN ITS ENTIRETY! DUE TO THE COMPLEXITY OF SOME OF THE DIAGRAMS, WE STRONGLY SUGGEST THAT YOU HAVE YOUR AVSREC8 REMOTE SYSTEM INSTALLED BY A REPUTABLE STEREO OR ACCESSORY SHOP THAT IS USE TO INSTALLING THESE TYPES OF PRODUCTS. YOU CAN EASILY WIRE SOMETHING WRONG AND BURN OUT THE RECEIVER, YOUR VEHICLE OR THE COMPONENT(S) THAT YOU ARE INTERFACING WITH. YOU HAVE BEEN WARNED!

TRANSMITTER BATTERIES SHOULD BE REPLACED AT LEAST EVERY 6 MONTHS FOR BEST OPERATION.

\*USPS OR UPS GROUND ONLY. CONSUMER IS RESPONSIBLE FOR THE PRICE DIFFERENCE OF FASTER SHIPPING METHODS

## Programming A Replacement Remote

PLEASE NOTE: your new AVS remotes have already been programmed at the factory for you. Anytime a new remote is to be programmed, you will also have to reprogram the existing remote otherwise it will be erased from the receivers memory. For instance, if you lose a remote and think that there is a chance of someone else finding it and using it on your vehicle do the following steps:

- Reprogram the remote that you still have in your possession as instructed below.
   This will delete the lost remote from the receivers memory so it can not be used by an unauthorized party. Your system will now only respond to the one remote that is in your possession.
- 2. Order a replacement remote from www.airbagparts.com or an AUTHORIZED AVS DEALER.
- 3. Once you receive your new remote locate the black push button and red LED light that is next to the main harness on the receiver. DO NOT unplug the harness!!! It must be plugged in and powered up in order to be programmed with the remote codes.
- Have both remotes ready (your new one and old one). Now hold down the black button
  on the receiver for around 10 seconds or until the LED light turns on solid red and let
  go.
- Immediately press the top left button on the first remote until the LED light flashes off then back on. This confirms that it has received the transmitter code.
- Immediately press the top left button on the second remote until the LED flashes off then back on.
- Do not press any buttons on the receiver or remote until the LED has completely turned off. Once it is off check each remote to make sure that the programming was successful. If not, repeat steps 4-7 again.



PROGRAMMING BUTTON & LED LIGHT

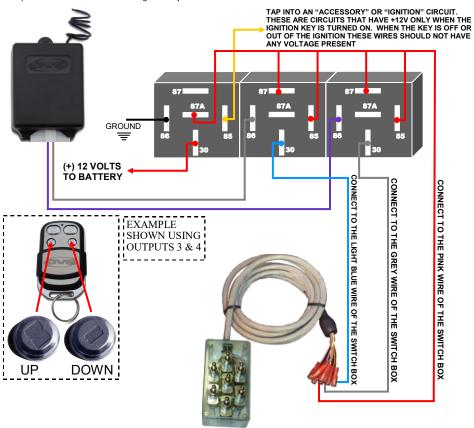
PLEASE NOTE: the AVS remotes included in this kit have already been programmed at the factory for you!!!

Even if the battery on your vehicle dies, the receiver will still remember the remote codes. If you find that your remote(s) do not work after you have jump started your vehicle or after using a battery charger try this first:

- 1. Remove the 15-amp fuse from the harness and make sure that it not blown. NEVER REPLACE WITH A LARGER FUSE OR DAMAGE WILL OCCUR!!!
- Leave the fuse out and unplug the harness from the receiver.
- 3. Let the receiver stay unplugged for 10 minutes.
- 4. Plug the harness back onto the receiver and reinsert the fuse.
- Now try to see if the receiver responds to the remotes. If not, then try the steps above to reprogram the remotes.

#### Wiring The Receiver To Any AVS ARC-7, ARC-T7 Or ARC-T9 Air Ride Controller

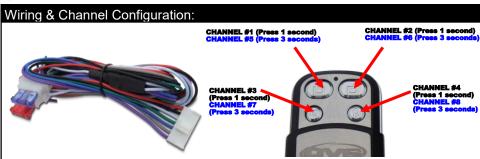
Connecting the AVSREC8 receiver to any of our AVS ARC-T7, ARC-T9 or ARC-7 switch boxes requires three relays, one which is for safety purposes. If for some reason the receiver was to malfunction while the vehicle is in motion, an accident could result from it and cause property damage, personal injury or even death! INSTALL THE SAFETY RELAY!!! Adding the safety relay will disconnect power to the switch box while the ignition key is on.



Compatible With All ARC-T7, ARC-T9 And ARC-7 Air Ride Controllers







**RED -** Main +12V input. Fused at 15-amps. *DO NOT* put a larger fuse or you will void your warranty!

BLACK - Ground -12V input.

WHITE (2) - Parking light outputs (+12V). Left & right output for European vehicles. Twist these two wires together for all other vehicles (10-amp load max.)

GREEN - Output #1, channel #1.

BLUE - Output #2, channel #2.

GREY - Output #3, channel #3.

PURPLE - Output #4, channel #4.

GREEN/WHITE - Output #5, channel #5.

**BLUE/WHITE** - Output #6, channel #6.

GREY/WHITE - Output #7, channel #7.

PURPLE/WHITE - Output #8, channel #8.

\*Quickly pressing a button (channels 1-4) will give you an approximate 8 millisecond pulse on the corresponding output. Pressing any button down for 3 seconds will activate corresponding outputs 5-8. These outputs will pulse for approximately 8 milliseconds. If you continue to hold down the button longer than 3 seconds the output will continue to stay activated until you release the button (channels 5-8 only).

Uses for channels 1-4: Remember, outputs 1-4 are only capable of an approximate 8 millisecond output. These outputs would be perfect for controlling door locks, shaved doors, trunk pops, remote starts, air suspension and more.

Uses for channels 5-8: Channels 5-8 will also work perfect with the same items mentioned above, but since you can keep these outputs activated by holding down the buttons, you can also control linear actuators, power window modules, sunroof open/close modules, accent lighting,

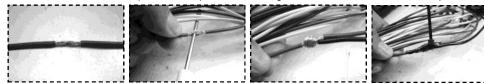
9

#### Installation:

Plug in the harness to the receiver and find a suitable location high up in the dash to mount it. Use cable ties to strap it in place. DO NOT wedge the receiver into the dash and expect it to stay without securing it! This is dangerous as the unit can fall and wedge itself behind the brake pedal and cause an accident. To mount the antenna, use the included 2-sided tape and secure it on the windshield along the pillar or at the top of the glass towards the roof. Modifying the antenna or antenna cable in any way, as well as mounting the antenna under the dash, in the center console or under a seat will degrade the reception from the remote and yield a very poor operating range! WARNING!!! The receiver and antenna are not weather proof! Do not mount outside or in the engine compartment. Doing so will void your warranty.

2 Ground the BLACK wire to the body of the vehicle using a soldered or crimp on ring terminal. The ring terminal should be against bare metal so remove any paint or primer as necessary. The best location is on a bare metal part under the dash such as a reinforcement brace. Look for an existing bolt that you can remove and install the ring terminal on to. WARNING: in some vehicles there are metal reinforcement braces running under the dash that do not connect to the vehicles ground. Be sure that the bolt that you are securing the ring terminal to is actually a ground source!

If you are not very familiar with the factory wiring under your dash then we strongly suggest that you extend the RED wire and route it directly to the vehicles battery. Extend the RED wire with at least 16 gauge wire. A fuse holder with a 15-amp fuse will also need to be installed within the first 18" of the battery. If you are familiar with the factory wiring of your vehicle then tap into the main constant power wire of your ignition harness. We suggest that you strip back the insulation on the power wire that you are tapping into and carefully pierce a hole through the copper strands of wire with a pick or front of a test light. Now strip the RED wire from the receiver harness about 1.5" and gently twist the wires in a clockwise motion so that you have a clean tidy wire with no stray strands popping out. Now insert the stripped red wire into the hole of the vehicles wire then wrap it around tightly. Using a pair of pliers, or other flat jawed tool, gently squeeze all the bare wires so that they "mesh" together. If you have a soldering iron handy you can now solder this connection but it's not necessary. Take about a 5" strip of electrical tape and wrap it around the bare connection tightly. Once you have the connection entirely covered secure the tape by installing a cable tie around it. This will prevent the tape from unraveling in extreme summer and winter temperatures.



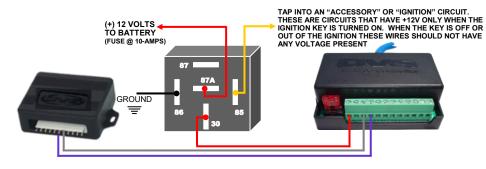
4 If you are working on a European vehicle such as a BMW, Volkswagen, Mercedes, etc. then you will be using both of the WHITE wires on the parking light circuits. These vehicles have separate left and right parking light circuits. For all other vehicles you will need to simply twist the two white wires together forming one single wire. After you have located the factory +12V parking light wire tap into it using the same method as instructed above for the power wire. Note: DO NOT tap into the parking lights at the dimmer switch! This could cause damage to the vehicle. Also, do not connect this wire to your headlights as it will burn up the receiver! The +12V parking light wire can usually be found at the headlight switch, fuse panel or drivers kick panel. Now any time that you press a button on either remote transmitter, the parking lights will flash one time to confirm that the receiver is working and that it received the signal. Let's say that you're upstairs in an apartment and you just pressed the button to open the driver's door for your friend whose waiting to get an item you left in the vehicle. When you press the appropriate button for the driver's door pop the parking lights will flash letting you know that it has received the signal. Even though you might not be able to see the door from your angle, you know that the door opened because the lights flashed. It's also an awesome diagnostic tool. Let's say you walk up to your vehicle and press the button to pop the driver's door and it doesn't open. Did the parking lights flash? If they did, then you might have a problem with the connection of your shaved doors or it could be something mechanically wrong in the door. But if the lights did NOT flash then you can probably guess that your vehicles battery may be dead. There are many ways you can use this if you think about it.

5 Outputs 1-8. See diagrams on the following pages. Read thoroughly as you can cause damage to the receiver if wired improperly and void your warranty!!! If you are not comfortable wiring your system after reading this manual in its entirety, we strongly suggest that you have it installed at a reputable stereo/alarm shop.

# Wiring The Receiver To Any AVS ARC-9 Air Ride Controllers

Connecting the AVSREC8 receiver to any of our AVS ARC-9 switch boxes is as simple as plugging in 2 wires and adding a relay for safety. If for some reason the receiver was to malfunction while the vehicle is in motion, an accident could result from it and cause property damage, personal injury or even death! INSTALL THE RELAY!!! Adding the safety relay will disconnect power to the switch box while the ignition key is on. In most states it is illegal to adjust a hydraulic or air suspension system while the vehicle is in motion anyways.

WARNING!!! DURATION OF OUTPUTS: when you activate any of the 8 outputs on your AVSREC8 they will be on for approximately .8 seconds. While that does not sound like a very long amount of time, it can be to an airbag or air cylinder. If you have a medium to fast responding air ride system, then you chance blowing up your airbag or cylinder if the AVSREC8 activates the valve too long. Consult the company that designed or installed your air suspension system before attempting this type of installation or damage and/or injury may occur.







# Compatible With All ARC-9 Air Ride Controllers

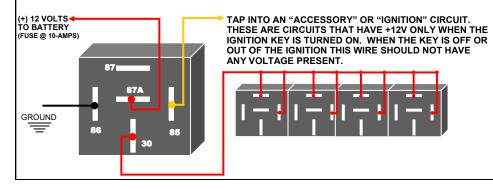


3

#### WARNING & SAFETY RELAY DIAGRAM FOR AIR SUSPENSION

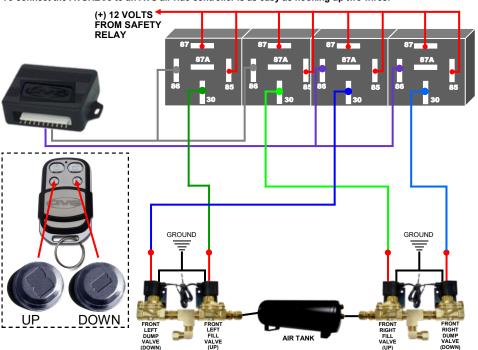
WARNING!!! WARNING!!! WARNING!!!

If you plan on wiring the AVSREC8 to control an adjustable air suspension system, you MUST install a relay to inhibit control of the suspension while the vehicle is running. You will only be able to control the air suspension from the AVSREC8 while the vehicles ignition is turned off. In the unlikely event that someone has the same transmitting code as you or the AVSREC8 simply malfunctions, this safety relay will disconnect power from the other relays while the key is turned on. If you do not install the safety relay or if it is not installed properly, serious injury, property damage and/or death may occur! WARNING #2, DURATION OF OUTPUTS: when you activate any of the 8 outputs on your AVSREC8 they will be on for approximately .8 seconds or 8 milliseconds. While that does not sound like a very long amount of time, it can be to an airbag or air cylinder. If you have a medium to fast responding air ride system, then you chance blowing up your airbag or cylinder if the AVSREC8 activates the valve too long. Consult the company that designed or installed your air suspension system before attempting this type of installation or damage and/or injury may occur.



### Wiring The Receiver To Air Suspension Valves (Example given for controlling front up and down using 2 channels)

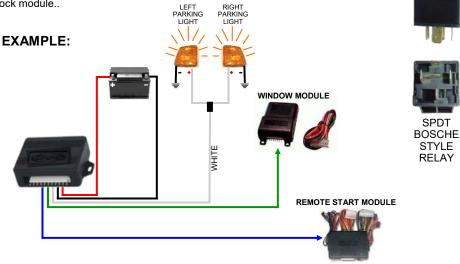
If you would like to have up/down control over the rear air suspension then copy the diagram below by adding an an additional 4 relays and tie them into the rear valves using channels 1 & 2 to control them. For pancake up/down install an AVS 9-switch controller which has compatible inputs with the AVSREC8 system. To connect the AVSREC8 to an AVS air ride controller is as easy as hooking up two wires!



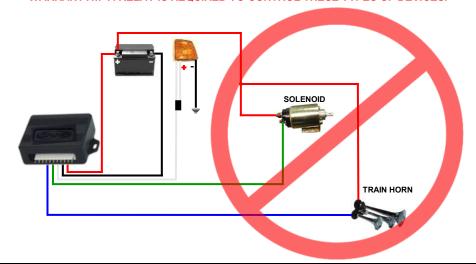




For most applications you will need a Bosche style relay (pictured >>>). These are known as SPDT 12V relays. The only time you will not use a relay is if you are using a "module" such as a window roll up/down module, remote start module or power door lock module



DO NOT!!! DO NOT!!! DO NOT!!! DO NOT!!! DO NOT INSTALL THE RECEIVER DIRECTLY TO ANY DEVICE THAT REQUIRES MORE THAN 500ma OF CURRENT!!! DOING SO WILL DAMAGE THE RECEIVER AND VOID YOUR WARRANTY!!! A RELAY IS REQUIRED TO CONTROL THESE TYPES OF DEVICES.



SPDT

STYLE **RELAY** 



