

A..VS Double-Range™ Series RF Set

INSTALLATION INSTRUCTIONS

Item: 4714_AVS (A5DS)

Description

The AVS-22 is a high technology RF (Radio Frequency) remote control set for wireless control applications. Coding is implanted by Rolling Code with Learn (or teach) feature that saves the coding switch and provides fast and simple coding, with high-security against violation. The Double Range™ circuitry provides long range and high stability. Transmitters (remote also quote as TX) with a crystal-controlled element (type AVS-4T) are standard for international frequencies. Each AVS-22 receiver supports up to 160 different code transmitters (remote type AVS-4T). The receiver has two output relays; to get four channels (four relays) use two receivers. For covering a large area, replace the internal wire antenna with high gain type or use few receivers. Range depends on environment and temperature. In open area, range is over 200 meters.

Step One: Receiver Installation

Place the receiver in open area, as high as possible and at least 30 centimeters far from metal objects and high voltage devices. Do not place receiver in a metal box.

A..VS Series antenna: On the receiver backside, the antenna is a wire, stretch-up the wire, keep it as high as possible. To increase the receiver range add an Omni or directional antenna (optional).

- Never run Receiver wires alongside telephone wires, high voltage wires, or transmitters
- Locate Receiver as high as possible and far from metal objects
- Use regulated power supply, 12V-200 mA. AV-21 Power Supply is recommended

Step Two: Wiring

Use a power supply or Alarm Control Panel with filtered 12 VDC power supply. Do not use low-cost plug-in wall power supply. The power supply affects receiver range.

The receiver activates two relays. Each relay is capable to switch up to 5 amperes, at 24V DC maximum. For higher voltage switching add an external relay. By default: The remote key marked as "I" activates relay 2 at receiver.

Step Three: Receiver Modes

Each channel has one changeover relay output.

Open the receiver cover (two screws on backside) to set the relay mode and coding.

Three different relay modes are available:

Momentary - When valid signal received the relay is activated for 2 seconds. **Momentary mode is factory default.**

Latch - When valid signal received, the relay is changing status until the next valid signal received.

Pulse - When valid signal received, the relay is activated as long as the transmitter key is pressed.

To select the relay mode, use the three jumpers as figure 1 shows. Select relay mode by inserting or removing jumpers.

Step Four: Transmitter Coding

The AVS set supplied with two remotes those are compatible to the supplied receiver.

To add transmitters to the same receiver, new transmitters need to be identified by the receiver.

For new transmitters learn, first erase memory.

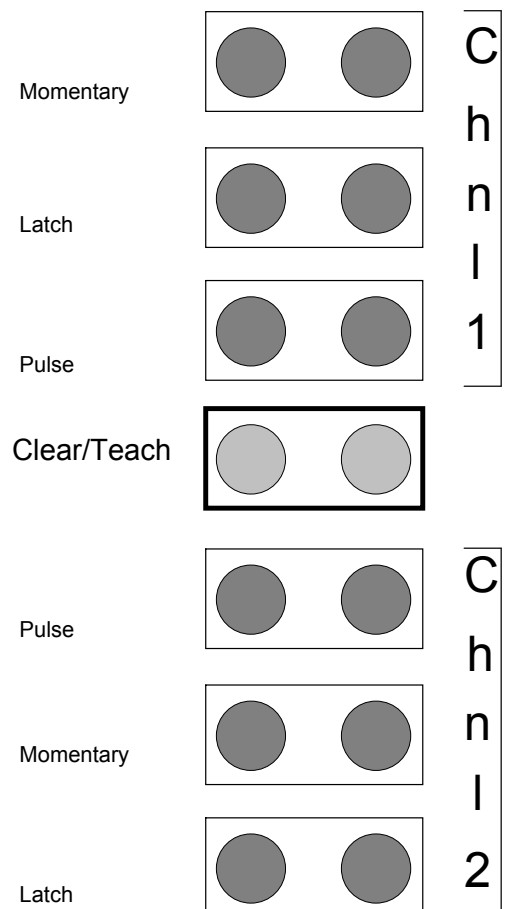


Figure 1: AVS jumpers

Erasing the TX from the receiver: In case you lost the remotes or need to learn new ones, you have to erase the previous TX's to prevent access by un-permitted persons.

To erase the receiver memory: Disconnect the receiver power, wait 5 seconds, remove the CT jumper, power up the receiver, one relay click is heard, return CT jumper immediately, in confirmation you get click from both relays. The receiver memory is cleared.

Automatic Teach: In the receiver remove the Clear/Teach (CT) jumper, on the TX press Key I, now key I will activate channel 1 Relay, key II will activate channel 2 Relay. Return the CT jumper.

Specific Channel Teach: Remove the Clear/Teach (CT) and the relay mode jumpers of the specific channel you want the TX to activate, press one of the TX key you selected than return the two jumpers. These learn operation required for each button in each TX.

Step Five: Receiver wiring to EasyLoader alarm panel

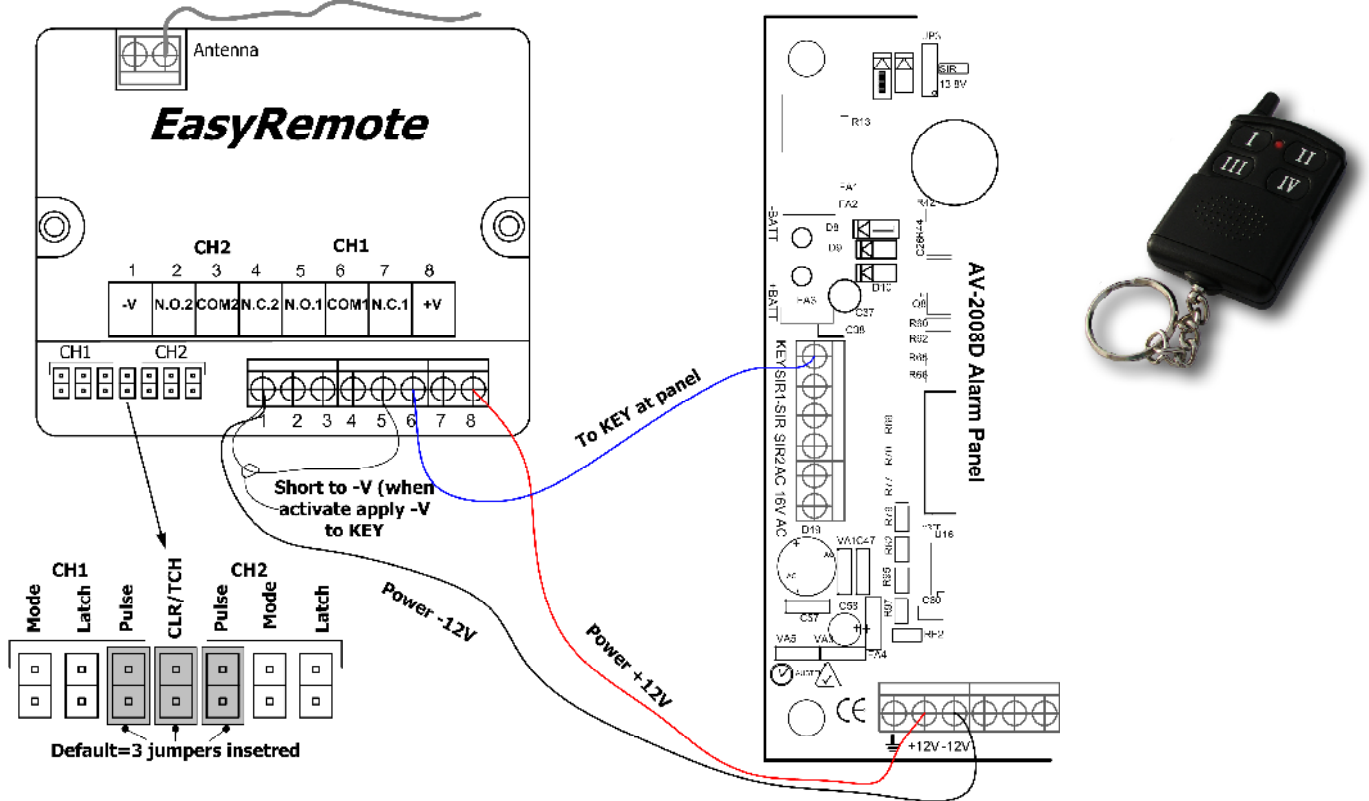


Figure 2: TX Photo & AVS-22 connected to Alarm Panel for Remote Arm & Disarm

For security alarm panel remote control follow the wiring diagram as described in figure 2. The relay contacts C (common) and NO (Normally Open) connected to KEY and -V terminals in the alarm panel. Refer to panel manual for few programmable options (070-2, 073-5, 073-6). For security systems, the A..VS is applicable as remote arming and the 2nd channel for panic call or other applications. For using the AVS-22 as Panic connect the relay to a zone defined as Panic or 24H type, each press cause alarm. Notice the slider keys cover.

Specifications

Receiver Power: 11-16 VDC	Coding: Rolling Code, Pulse Width Modulation
Standby consumption: 18 mA. Operating: 40 mA	RF Carrier: 433.92 MHz
Output Capability: Relay. N.O. or N.C. 5A, 24V DC max.	Radiated Output: According to FCC rules
Receiver Coding: Learn mode. NVM memory	Selectivity: 5 MHz at 6 uV
Operating Temperature: 0 to +40 °C	Remote TX Battery: 12V (Alkaline) type 23A
Receiver Size (mm): 80 (L) x 67 (W) x 28 (H)	Transmitter Size (cm): 5 (L) x 3.5 (W) x 1(H)