ADR Audi ∞ Interface Install Guide

Version 1.0



Prepared By:



Links

Automotive Data Research (ADR): <u>http://audi.caughtbluehanded.com</u>

Valentine One (V1) Radar Locator: <u>www.valentinel.com</u>

If you have any questions or comments, big or small, please feel free to email me, lee@nsxjr.com

The most recent version of this document can be downloaded from the web at www.nsxjr.com

🚹 Warning - Disclaimer

- The installer shall indemnify the author and editors for any claims or liability arising from the vehicle modifications described in this document.
- To follow this guide requires alterations to the electrical system of the vehicle.
- Read and understand the entire document before beginning work.
- Disconnect the negative battery terminal before altering vehicle electronics.

This document describes the installation of the VI interface box made specifically for Audi vehicles and available only from Automotive Data Research (ADR). This interface acts as the remote display for the Valentine One radar locator and uses the top two lines of the DIS (driver's information system) in Audi vehicles to display the visual alerts. It does this by emulating the standard VI remote display then communicating the alert data over the CANbus network similar to the way the radio headunit displays station and track information in the instrument cluster. The CANbus network is available in the vehicle if the clock in the tachometer dial is digital. If the vehicle has an analog clock then stop here, the wiring in this document will not apply to that vehicle. The prerequisite to this document is the installation of the Valentine One Radar Locator unit. This unit can only be obtained directly from Valentine One (new) or from a private seller (used).

Step 1: Mount the Interface Unit

A good location to mount the unit is based on two factors. It must be relatively easy to access to allow for firmware upgrades in the future, and it must be somewhat close to a CANbus connection. One example in the C5 A6 is the mounting bracket behind the glove box (see picture below). This bracket mount is only used for power tilt steering wheel control units. This location is accessible in one step by removing the glove box, and it is also close to a source of CANbus behind the headunit.



Step 2: Connect to the V1 Direct Wire Remote Port

The ADRVI will have two exterior connection ports: one RJ-11 (telephone) port and one RJ-45 (network) port. The RJ-11 port is to be connected to the VI direct wire power adapter. This adapter has two ports that are clearly labeled for the VI main unit and remote module. The ADRVI must be connected to the remote port.

Any typical telephone cord can be used as long as it has at least four conductors. The number of conductors (2, 4, or 6) in a telephone cord can be found by looking at the plug ends. The two conductor type will not work for this application.

Step 3: Connect to CANbus

I recommend installing the CANbus Distribution Panel as described in my downloadable guide for quick and easy access to the CANbus for this project and any future projects that involve CANbus connections. <u>www.nsxjr.com</u>

The last connection to be made is the RJ-45 port to CANbus. ADR supplies a modified network cable for this connection with instructions on which wires to connect to CAN H and CAN L. This connection can be made in any number of places but must be connected to the infotainment CANbus. Typically, the only devices on the infotainment network are the instrument cluster, radio headunit, satellite radio tuner, trunk-mounted CD navigation unit, and telephone/telematics module. Behind the radio headunit is the suggested location to gain access to the CANbus wires. To remove the headunit, follow the instructions on the next page. The top of the radio will have a wiring label that gives descriptions of each wire in the harness plugs. Using this label, find the wires for CAN H and CAN L and splice in the correct wires from the cable supplied by ADR. These will be very small wires and it will likely be necessary to remove some of the fabric wire wrap to gain access to enough wire to make a splice connection. Once complete, make sure all wiring is secure and reinstall the headunit.

Interface Operation

Once installed, the ADRV1 will send the visual alerts from the VI main unit to the top two lines of the DIS. This information is only displayed if there is an active alert. This is illustrated in the pictures to the right both with the trip computer and navigation compass displays in the center portion. When no alert is present, the typical radio information is displayed. To mute the VI audio alerts (if traveling above the auto mute speed) quickly press VOL UP then VOL DOWN on the steering wheel.

For more information on the function, use, and programming of the ADR V1 interface, please visit them on the web at <u>http://audi.caughtbluehanded.com</u>

Appendix: Removing the Headunit

Have the radio security code in hand before disconnecting the battery.

Insert the four radio removal tools as shown. Cover the top of the climate control unit with painter's tape to prevent accidental scratches while removing and installing the radio.

Pull the headunit straight out without pulling on the radio removal tools. If necessary, push the radio out from behind by reaching around under the passenger's side dash in the area revealed by removing the glove box. Alternatively, place as many fingers as possible in the cassette slot, wiggle and pull.

Once the radio is out, unplug all connectors. Remove the radio keys from the face by pressing in the locking tab and pulling the key straight out. This is illustrated in the picture to the right. Set the radio aside in a safe place.

