Manuals+ — User Manuals Simplified.

acv
42XAD00C-0
Steering
Wheel Control
Interface

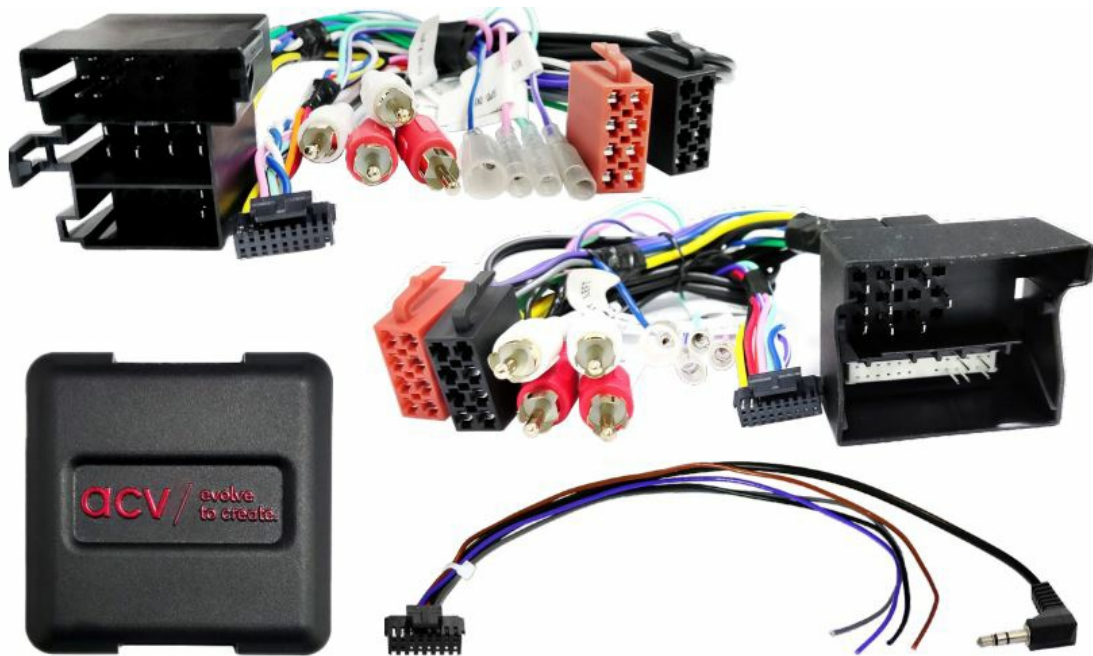# acv 42XAD00C-0 Steering Wheel Control Interface Installation Guide

Contents

acv

acv 42XAD00C-0 Steering Wheel Control Interface

Product Specifications

- **Product Name**: Steering Wheel Control Interface for Audi Vehicles
- **Model Number:** 42XAD00C-0
- **Compatibility:** Audi vehicles listed in the user manual
- **Features:**
  - Retains steering wheel controls and other vital features
  - Selectable dipswitches for dedicated applications
  - Compatible with Concert, Chorus, Symphony, RNS-E 16:9 OEM Sat Nav Head Unit
  - Works with non-amplified, half-amplified, and BOSE-amplified audio systems
  - Includes ISO and Quadlock connection looms
  - RCA audio connections for superior sound quality

Product Usage Instructions

Before Installation
Installation requires technical knowledge. Read the manual thoroughly. Choose a dry, heat-free installation location. Use correct tools to avoid damage to the vehicle or product. Disconnect the negative battery terminal and remove the ignition key before starting.

Installation Steps

1. Choose the appropriate loom (ISO or Quadlock) for your vehicle.
2. Discard the unused loom.
3. Wire according to the ISO Connector Wiring Key and Flying Wire Wiring Key.
4. Connect outputs as per the Wiring Key for speaker connections and other functions.
5. Ensure correct connections for Permanent 12V, Ground, Ignition 12V, Illumination, etc.
6. Connect RCA audio out connectors from the new radio to the interface.
7. Secure all connections and test functionality before finalizing installation.

Maintenance and Troubleshooting
Regularly check connections for any loose wires. If facing issues, refer to the troubleshooting section of the manual or contact customer support.

Frequently Asked Questions (FAQ)

- **Can this interface be used in other vehicle brands?**

  No, this interface is specifically designed for Audi vehicles as listed in the user manual. It may not work with other brands.

- **What should I do if I face issues after installation?**

  If you encounter problems post-installation, double-check all connections following the manual's wiring diagrams. Ensure compatibility with your aftermarket unit and contact customer support if needed.

The 42XAD00C-0 allows for the retention of the steering wheel controls as well as other vital features when installing an aftermarket unit into the vehicle. This interface features selectable dipswitches for dedicated applications, simply refer to the provided table for the correct configuration ensuring seamless integration.

VEHICLE APPLICATION

AUDI

- **Audi A1 (8X)** 2010 – 2018
- **Audi A2 (8Z)** 1999 – 2005
- **Audi A3 (8L)** 2000 – 2003
- **Audi A3 (8P)** 2003 – 2013
- **Audi A4 B6 (8E)** 2000 – 2005
- **Audi A4 B7 (8E)** 2004 – 2009
- **Audi A6 (C5/B4)** 2001 – 2006
- **Audi Q3 (8U)** 2011 – 2018
- **Audi R8 (42)** 2007 – 2015
- **Audi TT (8N)** 1998 – 2006
- **Audi TT (8J)** 2006 – 2014

1. For vehicles with Concert, Chorus, Symphony, RNS-E 16:9 OEM Sat Nav Head Unit
2. Compatible with non-amplified, half-amplified, and BOSE amplified audio systems (does not support vehicles with a digital amplifier)
3. Includes both ISO and Quadlock connection looms for flexible installation
4. RCA audio connections for superior sound quality

   (**Note**: The new radio must have RCA audio out connectors)

Installation Tip:
Before installation, select the appropriate loom (ISO or Quadlock) for your vehicle and discard the other.

KEY FEATURES

- RETAIN STEERING WHEEL CONTROL FUNCTIONALITY

- REPLACE FACTORY RADIO
- OUTPUTS FOR SPEED PULSE, PARK BRAKE, REVERSE & AMP REMOTE
- RETAINS BOSE/HALF AMPLIFIED SYSTEMS (IF EQUIPPED)
- CAN BUS INTERFACE
- SOFTWARE UPDATEABLE
- REMAPPABLE BUTTONS

BEFORE INSTALLATION

- Installation requires a certain level of technical knowledge. Before installation, it is important to read the manual. Select a location for installation that is dry and free from heat sources. It is essential to use the correct tools during installation to prevent any damage to the vehicle or the product itself. Please note that we cannot be held liable for any issues arising from improper installation.
- Before proceeding with installation, disconnect the negative battery terminal and ensure the key is removed from the ignition.

WIRING KEY

ISO CONNECTOR WIRING KEY

- **Purple Right** Rear Speaker +
- **Purple**/**Black** Right Rear Speaker –
- **Green Left** Rear Speaker +
- **Green**/**Black** Left Rear Speaker –
- **Grey Right** Front Speaker +
- **Grey**/**Black** Right Front Speaker –
- **White Left** Front Speaker +
- **White**/**Black** Left Front Speaker –
- **Yellow** Permanent 12V
- **Black** Ground
- **Red** Ignition 12V
- **Orange** Illumination

FLYING WIRE WIRING KEY OUTPUTS & RATINGS

- **Pink** Speed Pulse – 0 to 12V Square Wave @ 1Hz/Kph
- **Green** Park Brake
- **Purple/White** Reverse Gear – 250mA
- **Orange** Illumination – 250mA
- **Red/White** Acc 12V – 250mA
- **Yellow** RCA Camera
- **Standby Current** <3mA
- **Operating Voltage** 6V to 16V
- **Operating Temperature** -20C to 85C

DIPSWITCH CONFIGURATION

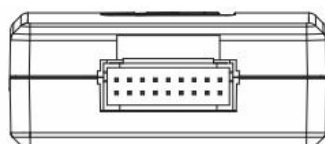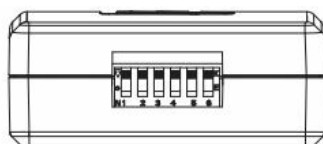| MANUFACTURER	SYSTEM	DIPSWITCH CONFIGURATION				CONNECTION
		1	2	3	4	
RESERVED	NA	OFF	OFF	OFF	OFF	SOFTWARE UPDATE MODE
ALPINE	IR DATA	OFF	**ON**	OFF	OFF	MALE 3.5MM JACK
ANALOG SINGLE E XTEND	Analog	**ON**	**ON**	**ON**	**ON**	BROWN SWC IR
ANALOG SINGLE W IRE	Analog	**ON**	**ON**	**ON**	OFF	BROWN SWC IR
CLARION	IR DATA	**ON**	OFF	OFF	**ON**	MALE 3.5MM JACK
CUSTOM	IR DATA	**ON**	OFF	**ON**	OFF	HEAD UNIT DEPENDANT
GRUNDIG	IR DATA	OFF	**ON**	OFF	**ON**	BROWN SWC IR
JVC	IR DATA	OFF	OFF	**ON**	OFF	BROWN SWC IR
KENWOOD 1	IR DATA	**ON**	OFF	OFF	OFF	BROWN SWC IR
KENWOOD 2	IR DATA	**ON**	**ON**	OFF	OFF	BROWN SWC IR
KEY 1 / **KEY 2**	Analog	OFF	**ON**	**ON**	OFF	KEY1 / KEY 2 WIRES
KEY 1 / **KEY 2 EXTE ND**	Analog	OFF	**ON**	**ON**	**ON**	KEY1 / KEY 2 WIRES
PHILIPS	IR DATA	OFF	**ON**	OFF	**ON**	BROWN SWC IR
PIONEER 1	Analog	OFF	OFF	OFF	**ON**	MALE 3.5MM JACK
PIONEER 2	Analog	OFF	OFF	**ON**	**ON**	MALE 3.5MM JACK
SONY	Analog	**ON**	OFF	**ON**	**ON**	MALE 3.5MM JACK
ZENEC	IR DATA	**ON**	**ON**	OFF	**ON**	BROWN SWC IR

DIPSWITCH 5 & 6
Dipswitch 5 & 6 are reserved for vehicle-specific configuration.

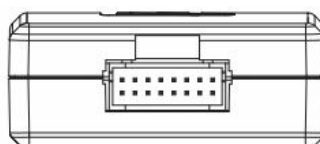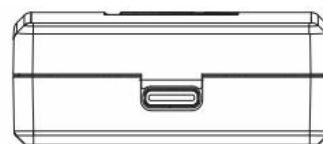| KEY1 and KEY 2	KEY1 and KEY2 are specifically tailored for analog learning mode-style radios. Our SWC module is designed with a resistor chain that precisely matches the required resistance for seamless compatibility with this type of head unit.
KEY1 and KEY 2 EXTEND	This mode extends every button press to 2 seconds during the learning process. However, with rolly wheel-designed steering wheel buttons, holding for 2 seconds isn't feasible. Our KEY1 and KEY2 extend features to address this by automatically prolonging each press, simplifying head unit programming even in such scenarios. Extend mode is not intended for normal use, it is only used in the teaching process.
ANALOG SINGLE WIRE and ANALOG SINGLE WIRE EXTEND	This function operates similarly to KEY1 and KEY2 but transmits all unique values through the IR SWC single wire. This is crucial for compatibility with learning-style head units featuring only one learning input wire. To ensure compatibility, we've incorporated this feature into our steering wheel control interface, ensuring seamless operation across various head unit setups. The Analog Extend mode functions identically to its counterpart within the KEY1 and KEY2 system but transmits through a single wire.

SWC INTERFACE

18 PIN HARNESS CONNECTOR   DIPSWITCHES   16-PIN HEAD UNIT CONNECTION LEAD   USB-C
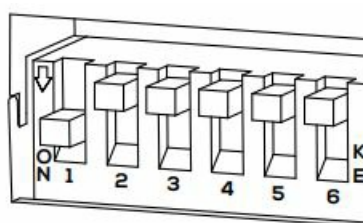
CONNECTION GUIDE

BEFORE INSTALLATION
Before installing the interface, it is essential to remove and disconnect the factory stereo. For guidance on this process, please refer to the vehicle owner's manual/handbook or seek assistance from a professional.

SETTING THE DIPSWITCHES
This interface includes a set of dip switches. Consult the dipswitch selection guide to select the appropriate configuration. To activate a dipswitch, press it downward into the 'ON' position. Refer to the diagram for an example of the 'KENWOOD1' dipswitch configuration.

INSTALLATION

1. Take the interface, then connect the 16-PIN head unit connection lead and the 18-PIN steering wheel harness connectors to their respective ports.

2. Connect the head unit connection to the steering wheel remote input on the rear side of the aftermarket stereo. Connection methods vary based on the stereo brand, utilizing either a 3.5mm jack connector SWC IR wire or wired inputs KEY1 and KEY2.

For specific connection guidance, refer to your aftermarket stereo's installation manual if not clearly labeled on the stereo harness.

3. Connect the power/speaker ISO connector from the interface to the corresponding power/speaker ISO connection on the aftermarket stereo.
   For aftermarket stereos lacking an ISO connector, refer to the "Wiring Key" on Page 2 for guidance on connecting wires. Certain interfaces may also include extra "flying" wires for additional functionalities such as parking brake trigger, reverse gear, and speed pulse. Further information on these wires is available in the "Flying Wire Wiring Key" section.
4. Connect the vehicle-specific connectors from the interface harness to the corresponding connectors on the vehicle harness.
5. Connect the flying wires on the harness to the rear of the stereo (iifapplicable).
6. Connect the antenna adapter to the vehicle's existing connection at the rear of the aftermarket stereo.
7. When installing an aftermarket reverse camera, connect the yellow RCA from the harness to the yellow RCA of the aftermarket camera. (If supported by the interface and vehicle)
8. When installing a DAB antenna, ensure to connect the DAB aerial connector to the rear of the new stereo.
9. After connecting all wires (along with any additional accessories), it's crucial to thoroughly test the stereo and steering wheel controls before reassembling the dashboard. If steering wheel controls are unresponsive, inspect connections and check dipswitch settings. Repeat the connection process if necessary, following the outlined steps.

STEERING WHEEL CONTROL CONFIGURATION

- A Volume Up (scroll Up)
- B Volume Down (scroll Down)
- C Track Up (scroll Up)
- D Track Down (scroll Down)
- E Source
- F Mute (Press)
- G Pick Up (Short Press)
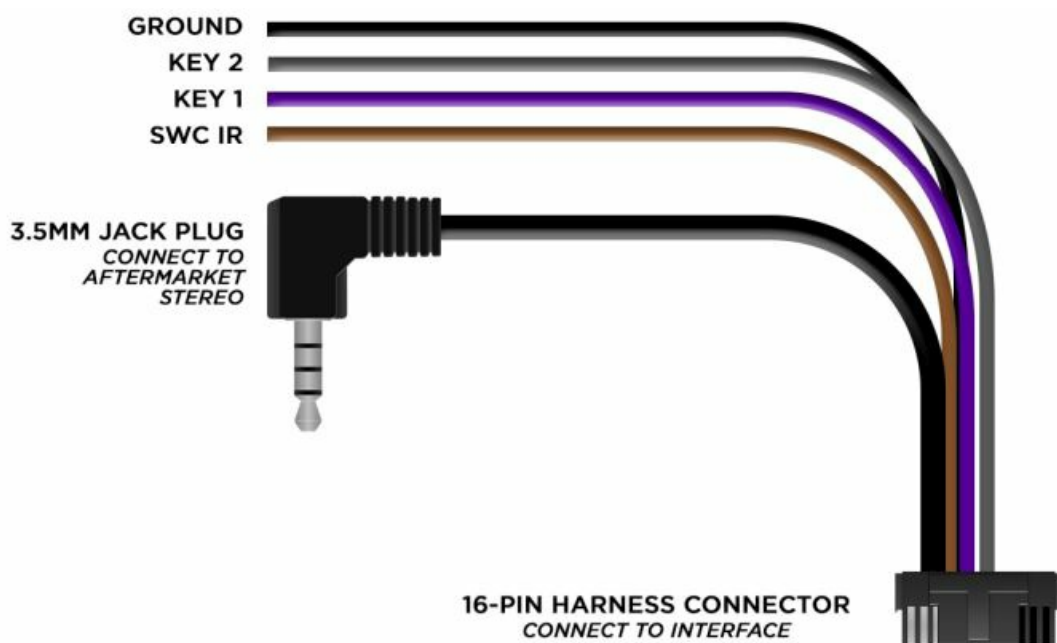- H Hang Up (Long Press)
  The provided diagram, while meticulously researched, serves as an example only. Actual steering wheel control configurations may vary dedependingn each vehicle.
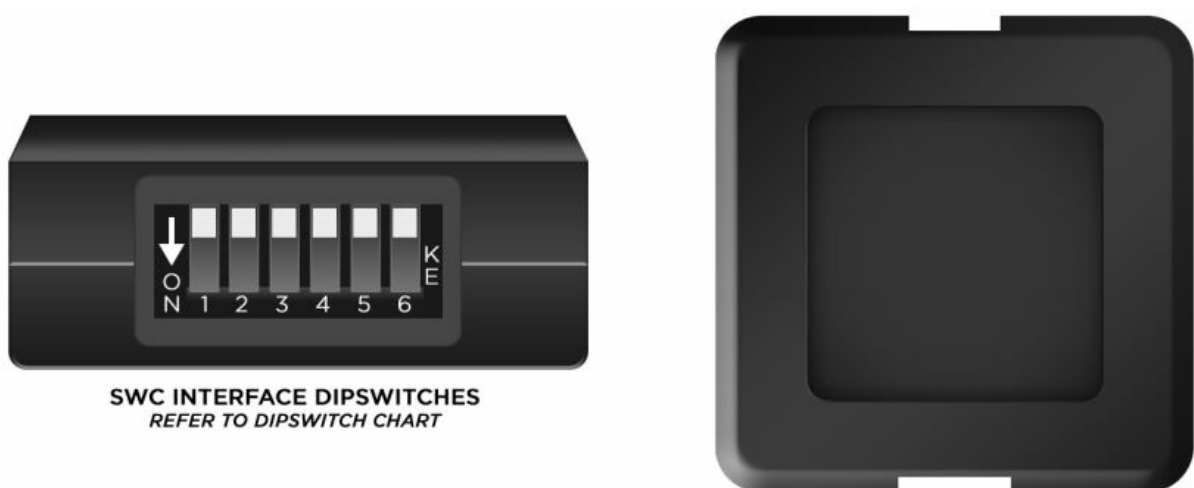
BUTTON REMAPPING

- The steering wheel buttons listed offer the flexibility of being re-configured or assigned dual functions. The availability of these buttons depends on the specific vehicle to which the interface is being installed and if the aftermarket radio supports them.
- In addition to button remapping, we offer the option to assign dual functions to each button on the steering wheel. This means that every button can be programmed to execute both a short press command and a long press command.
- You can also add your bespoke configuration. Button configuration can be done by PC, MAC, andsmartphonee via the USB port.
- Button Remapping instructions can be found in a separate guide on our website.

CONNECTION DIAGRAM
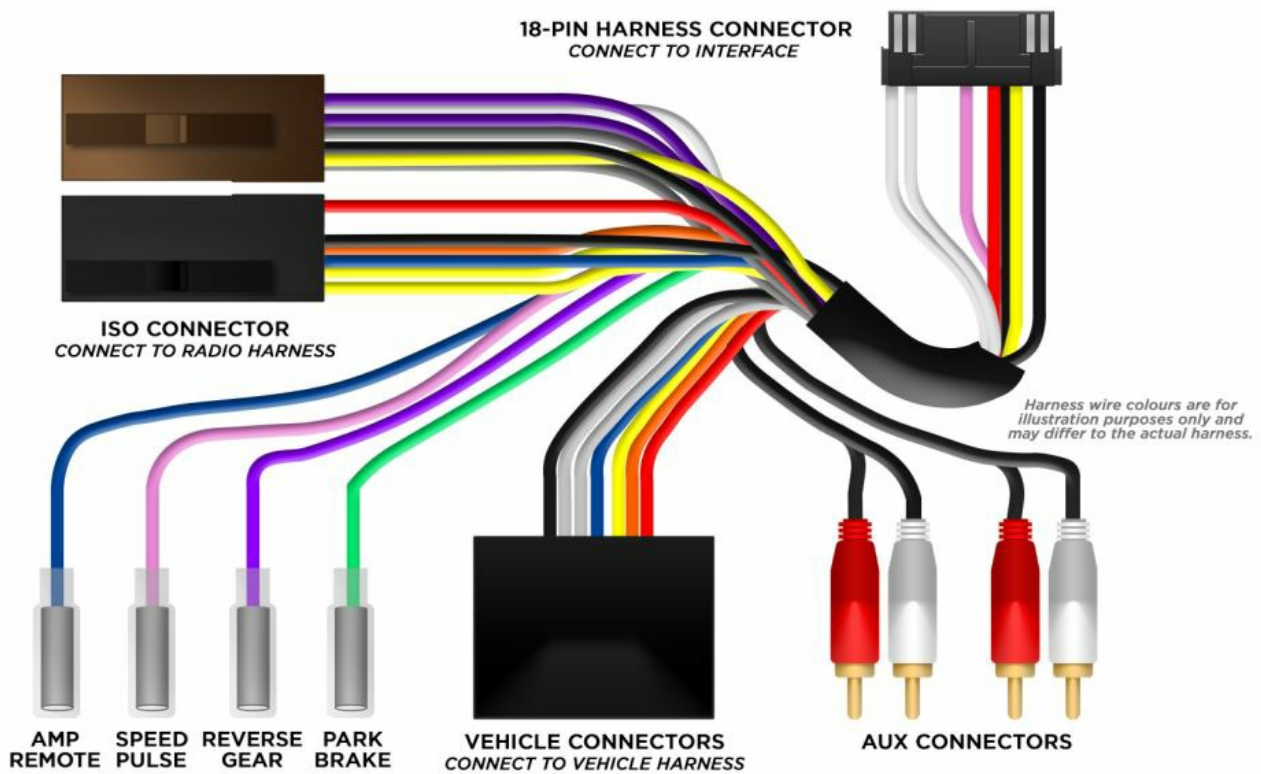
HEAD UNIT CONNECTIO0N LEADS

SWC INTERFACE

SWC VEHICLE HARNESS

18-PIN HARNESS CONNECTOR
CONNECT TO INTERFACE

ISO CONNECTOR
CONNECT TO RADIO HARNESS

Harness wire colours are for illustration purposes only and may differ to the actual harness.

AMP REMOTE · SPEED PULSE · REVERSE GEAR · PARK BRAKE

VEHICLE CONNECTORS
CONNECT TO VEHICLE HARNESS

AUX CONNECTORS

Documents / Resources

acv 42XAD00C-0 Steering Wheel Control Interface [pdf] Installation Guide
42XAD00C-0 Steering Wheel Control Interface, 42XAD00C-0, Steering Wheel Control Interface
, Wheel Control Interface, Control Interface, Interface

References

- **User Manual**