acv 42XTY015 Steering Wheel Control Interface Installation Guide

Contents

acv 42XTY015 Steering Wheel Control Interface

Specifications

- **Product Name:** Steering Wheel Control Interface for Toyota Vehicles
- **Model Number:** 42XTY015-0
- **Vehicle Compatibility:** Various Toyota models (refer to the list in the user manual)

WIRING KEY

ISO Connector Wiring Key

- Purple Right Rear Speaker +
- Purple/Black Right Rear Speaker -Green Left Rear Speaker +
- Green/Black Left Rear Speaker –
- Orange – Illumination
- 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
- Standby Current <3mA
- Purple/White Reverse Gear – 250mA

- Operating Voltage 6V to 16V
- Red/White Acc 12V – 250mA Yellow RCA Camera
- Operating Temperature -20C to 85C

INSTALLATION GUIDE

- The 42XTY015-0 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

TOYOTA

- Auris (E15) 2010 – 2013
- Auris (E180) 2013 – 2019
- Avensis (T27) 2012 – 2015
- Corolla 2008 – 2014
- Corolla (E170) 2014 – 2016
- Fortuner 2011 – 2015
- Hilux (N25) 2011 – 2016
- Hilux (AN1P) 2016 – 2020
- Innova 2011 – 2015
- Prius ZVW30/ZVW35 (XW3) 2012 – 2016
- Prius+ (XW3/XW4) 2012 – 2015
- RAV4 (XA3) 2009 – 2013
- RAV4 (XA3/XA4) 2013 – 2018
- Verso (AR2) 2009 – 2018
- Verso-S (XP12) 2011 – 2015
- Yaris (XP13) 2011 – 2020
- Yaris (XP150) 2013 – 2023

KEY FEATURES

- RETAIN STEERING WHEEL CONTROL FUNCTIONALITY
- REPLACE FACTORY RADIO
- OUTPUTS FOR SPEED PULSE, PARK BRAKE & REVERSE GEAR
- RETAIN OEM AUX-IN
- REVERSE CAMERA INPUT
- 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.

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 EXTEND	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 KEY2

- 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.

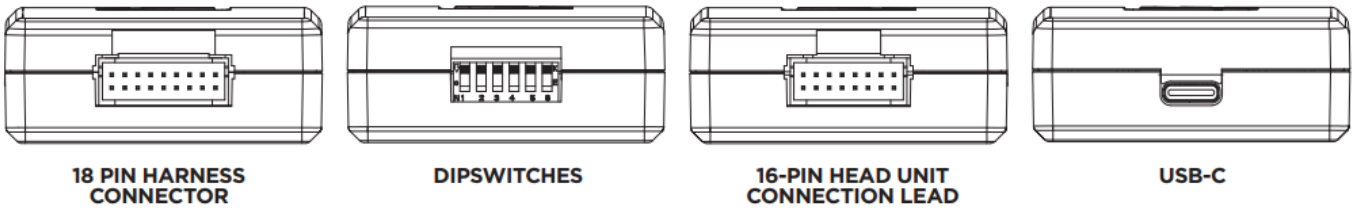
KEY1 and KEY2 EXTEND

- 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 feature addresses 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



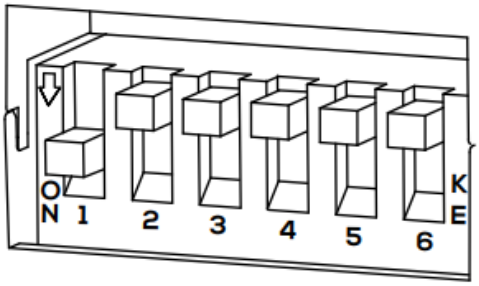
CONNECTION GUIDE

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 lead 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.

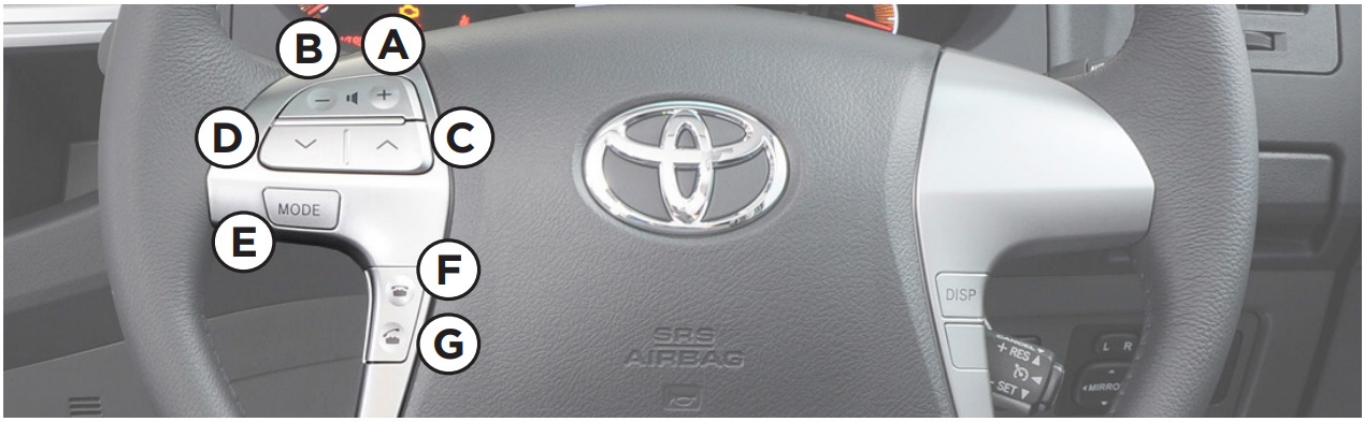
For specific connection guidance, refer to your aftermarket stereo's installation manual if not clearly labelled on the stereo harness.

1. 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.

1. Connect the vehicle-specific connectors from the interface harness to the corresponding connectors on the vehicle harness.
2. Connect the flying wires on the harness to the rear of the stereo (if applicable).
3. Connect the antenna adapter to the vehicle's existing connection at the rear of the aftermarket stereo.
4. 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)
5. When installing a DAB antenna, ensure to connect the DAB aerial connector to the rear of the new stereo.
6. 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



- Volume Up
- Volume Down
- Track Up
- Track Down
- Source
- Pick Up
- Hang Up

The provided diagram, while meticulously researched, serves as an example only. Actual steering wheel control configurations may vary depending on each vehicle.

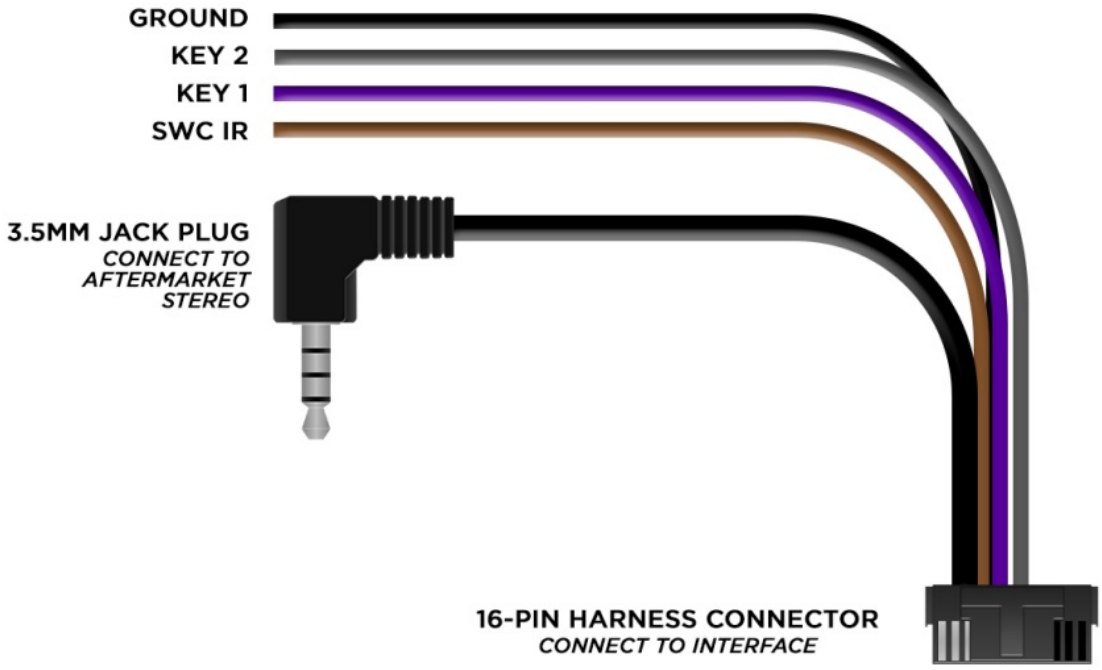
BUTTON REMAPPING

- 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.

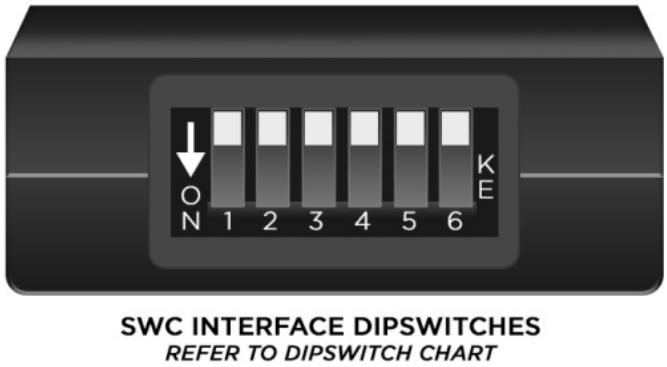
- You can also add your bespoke configuration. Button configuration can be done by PC, MAC and smartphone via the USB port.
- Button Remapping instructions can be found in a separate guide on our website.

CONNECTION DIAGRAM

HEAD UNIT CONNECTION LEAD

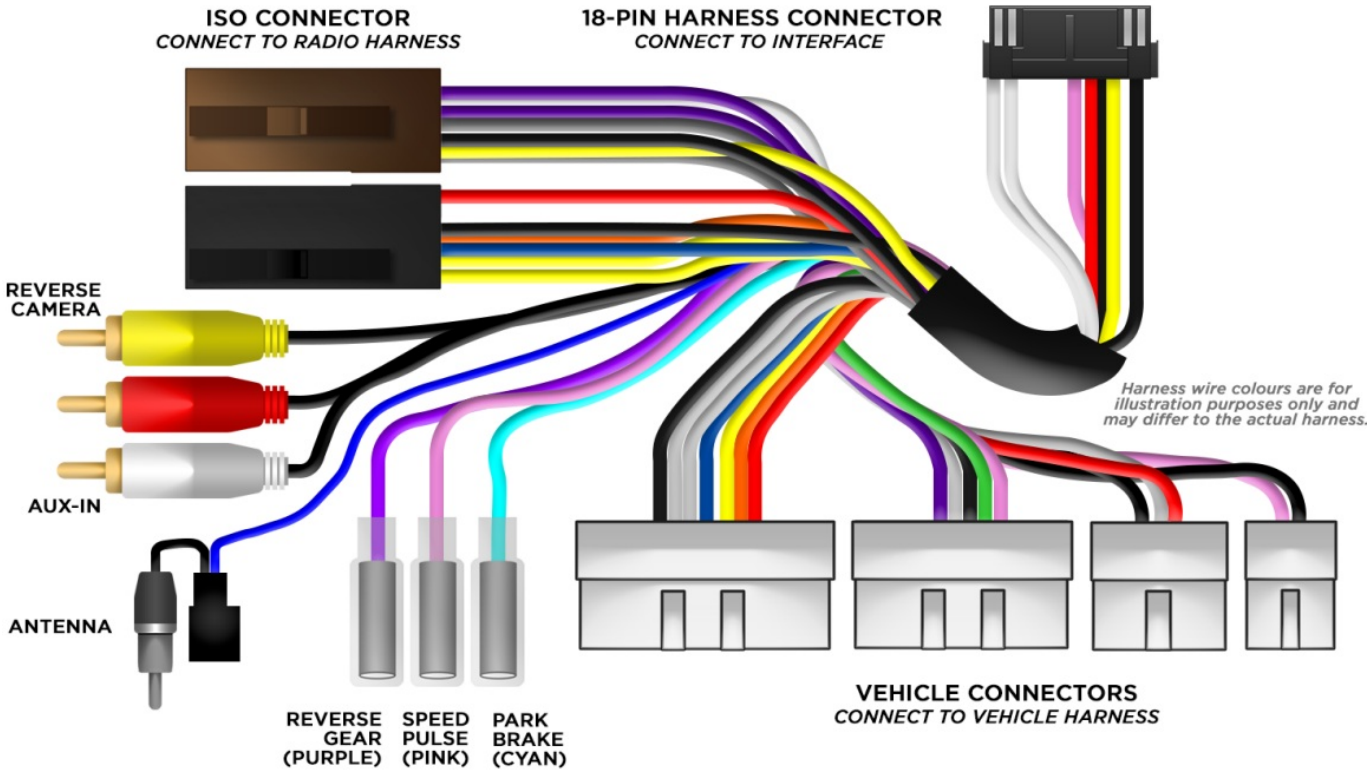


SWC INTERFACE



SWC INTERFACE DIPSWITCHES
REFER TO DIPSWITCH CHART

SWC VEHICLE HARNESS



FAQs

What Toyota vehicles are compatible with the 42XTY015-0?
The 42XTY015-0 is compatible with various Toyota models including Auris, Avensis, Corolla, Fortuner, Hilux, Innova, Prius, RAV4, Verso, and Yaris. Refer to the user manual for the complete list of compatible models and years.

Can I install the interface without prior technical knowledge?
Installation of the interface requires a certain level of technical knowledge. It is recommended to read the manual thoroughly before attempting installation to ensure proper integration and functionality.

Documents / Resources

	acv 42XTY015 Steering Wheel Control Interface [pdf] Installation Guide 42XTY015-0, 42XTY015 Steering Wheel Control Interface, 42XTY015, Steering Wheel Control Interface, Wheel Control Interface, Control Interface, Interface

References

- User Manual