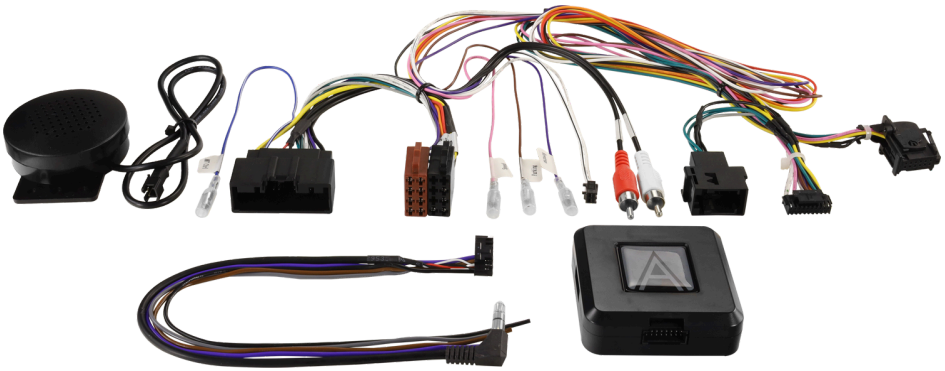
Aerpro
In-Car Tech Solutions

INSTALLATION GUIDE

SWFO7C

Steering Wheel Control Interface

For Ford vehicles



- Retain steering wheel control functionality
- Replace factory radio
- Outputs for speed pulse, reverse & park brake

OVERVIEW

Before you start

Vehicle application

FORD

Ecosport (BK)	2013 - 2017
Fiesta (WT, WZ)	2012 - 2018
Focus (LW, LWII)	2012 - 2014
Kuga (TF)	2012 - 2015
Ranger (PX)	2012 - 2015
Transit Custom	2013 - 2017
Transit (VO)	2014 - 2017

Vehicles with steering wheel OK and/or speech button. Vehicles with OEM display. Vehicles with CD player under the display.

vehicles with SYNC: SYNC function not supported

Key features

- Retain steering wheel control functionality
- Replace factory radio
- Outputs for speed pulse, reverse & park brake
- Retains time & date settings
- Software updateable

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

Prior to installation

- Installation requires a certain level of technical knowledge.
- Prior to installation please read this manual in its entirety.
- 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.

Installation at a glance

1

Set

Set the dipswitches for your stereo brand (page 3)

2

Connect

Remove the factory stereo and connect the interface (page 5)

3

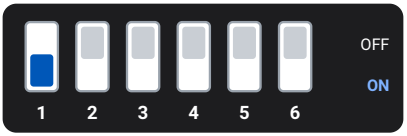
Test

Check the stereo and steering wheel controls (page 7)

STEP 1

Set the dipswitches

This interface includes a set of dipswitches. 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 'AERPRO' dipswitch configuration.



Example: Kenwood Type 1

MANUFACTURER	SYSTEM	DIP					CONNECTION
		1	2	3	4	5	
AERPRO TYPE 1	Analog	OFF	OFF	OFF	**ON**	**ON**	3.5MM JACK PLUG
AERPRO TYPE 2	Learning	OFF	**ON**	**ON**	OFF	OFF	KEY 1 / KEY 2 / KEY GND WIRES
ALPINE TYPE 1	IR Data	OFF	**ON**	OFF	OFF	OFF	3.5MM JACK PLUG
ALPINE TYPE 2	Learning	OFF	**ON**	**ON**	OFF	OFF	KEY 1 / KEY 2 / KEY GND WIRES
ANALOG SINGLE WIRE	Learning	**ON**	**ON**	**ON**	OFF	OFF	BROWN SWC/IR WIRE
ANALOG SINGLE (EXTEND)	Learning	**ON**	**ON**	**ON**	**ON**	OFF	BROWN SWC/IR WIRE
BLAUPUNKT	Learning	**ON**	**ON**	**ON**	OFF	OFF	3.5MM JACK PLUG
CLARION	IR Data	**ON**	OFF	OFF	**ON**	OFF	3.5MM JACK PLUG
ESX	Learning	OFF	**ON**	**ON**	OFF	OFF	KEY 1 / KEY 2 / KEY GND WIRES
GRUNDIG	IR Data	OFF	**ON**	OFF	**ON**	OFF	BROWN SWC/IR WIRE
JBL	Learning	OFF	**ON**	**ON**	OFF	OFF	KEY 1 / KEY 2 / KEY GND WIRES
JVC	IR Data	OFF	OFF	**ON**	OFF	OFF	BROWN SWC/IR WIRE
KENWOOD TYPE 1	IR Data	**ON**	OFF	OFF	OFF	OFF	BROWN SWC/IR WIRE
KENWOOD TYPE 2	IR Data	**ON**	**ON**	OFF	OFF	OFF	BROWN SWC/IR WIRE
KEY 1 / KEY 2	Learning	OFF	**ON**	**ON**	OFF	OFF	KEY 1 / KEY 2 / KEY GND WIRES
KEY 1 / KEY 2 (EXTEND)	Learning	OFF	**ON**	**ON**	**ON**	OFF	KEY 1 / KEY 2 / KEY GND WIRES
PHILIPS	IR Data	OFF	**ON**	OFF	**ON**	OFF	BROWN SWC/IR WIRE
PIONEER TYPE 1	Analog	OFF	OFF	OFF	**ON**	**ON**	3.5MM JACK PLUG
PIONEER TYPE 2	Analog	OFF	OFF	OFF	**ON**	OFF	3.5MM JACK PLUG
SONY	Analog	**ON**	OFF	**ON**	**ON**	OFF	3.5MM JACK PLUG
ZENEC	IR Data	**ON**	**ON**	OFF	**ON**	OFF	BROWN SWC/IR WIRE

Shaded cells are ON. Find your stereo brand, then set the switches to match that row.

DIPSWITCH 6
Dipswitch 6 are reserved for vehicle specific configuration.

*** PHONE BUTTONS RETAINED WITH COMPATIBLE AFTERMARKET HEAD UNITS.**
**** MAY NOT BE REQUIRED FOR YOUR VEHICLE / HEAD UNIT FITMENT.**

REFERENCE

Stereo modes and wiring

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.

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

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

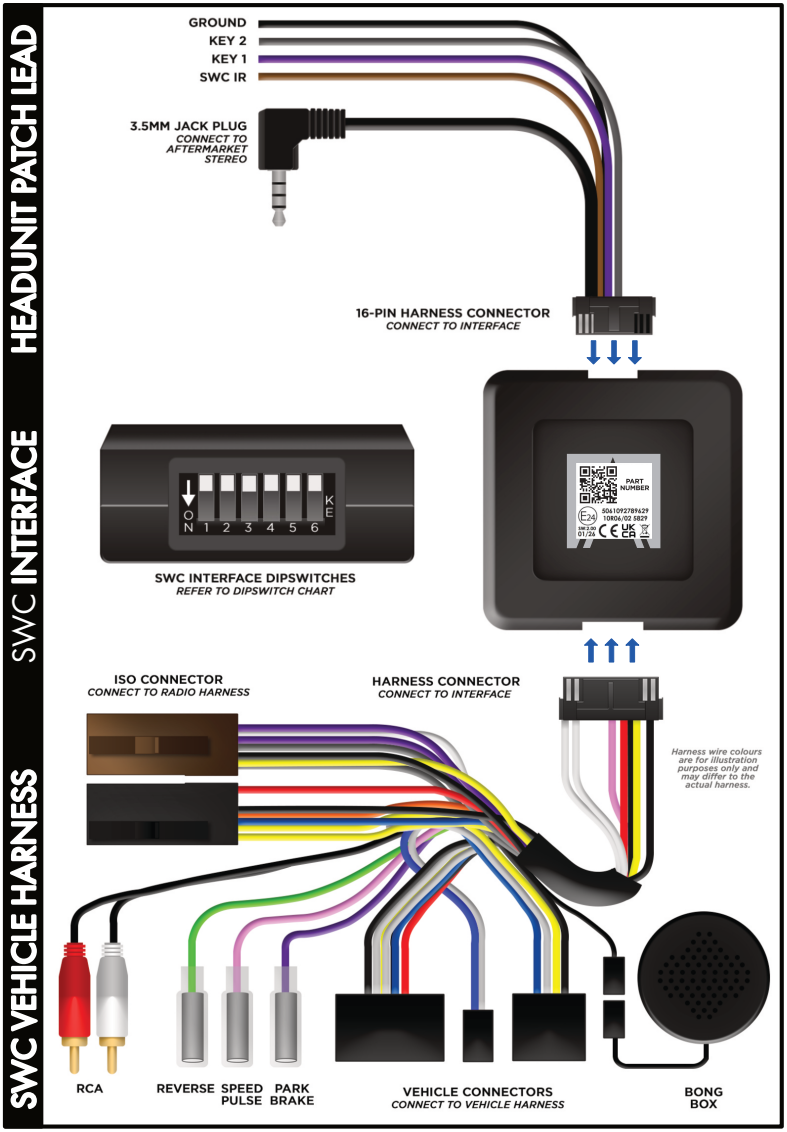
Outputs & ratings

Standby Current	Operating Voltage	Operating Temperature
<3mA	**6V to 16V**	**-20C to 85C**

*rated at 25 degrees Centigrade

STEP 2

Connect the interface



Installation process

1. Take the module and attach the 16-pin patch lead connector for steering wheel control retention, then make the required connections to the aftermarket head unit.
   Different stereo brands might use different ways to connect, like a 3.5mm jack, an SWC IR wire, or two wired inputs (KEY1 and KEY2). If you're unsure, check your stereo's manual for details, or look for labels on the stereo cables.
2. Connect the 18-pin connector for power and steering wheel controls from the vehicle.
3. Connect the ISO to the head unit or Aerpro head unit specific harness.
4. Plug in the car-specific leads from the main interface harness to the matching connectors in your vehicle.
   Depening on the vehicle not all connectors from the factory head unit will be used.
5. If your interface has extra leads connect them to the back of the aftermarket head unit's specific harness.**
6. Attach the antenna adapter to the vehicle's existing antenna port from the back of the factory head unit. **
7. If you're interface has reverse camera retention, connect the yellow male RCA cable from the interface to the female RCA port on the rear of the aftermarket head unit. **
8. If you're aftermarket head unit requires a DAB antenna, plug the DAB antenna connector the head unit.
9. After connecting all cables and extra parts, make sure to test the stereo and the steering wheel controls before putting

* PHONE BUTTONS RETAINED WITH COMPATIBLE AFTERMARKET HEAD UNITS.

** MAY NOT BE REQUIRED FOR YOUR VEHICLE / HEAD UNIT FITMENT.

STEP 3

Steering wheel controls



A Volume Up
B Volume Down
C Track Up
D Track Down
E Mute

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

Test before you reassemble the dash

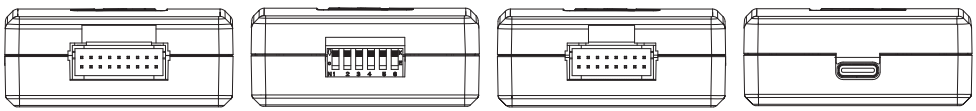
With everything connected, test the stereo and every steering wheel button before you put the dash back together.

Setting time & date

1. Press the Speech button to turn on the vehicle display.
2. Press and hold the Speech button for two seconds to enter the menu mode.
3. Use the Volume + / - buttons to navigate to the “Clock Settings” menu and press Speech to select it.
4. Adjust the time by using the Volume + / - buttons, then press Speech to confirm.
5. Repeat the process to set the date.
6. Once the time and date are set, press Speech to save the settings.

Note: The menu will automatically exit after 10 seconds of inactivity.

Steering wheel control module



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

Technical support

If you need assistance setting up or using your Aerpro product now or in the future, call Aerpro Support Australia.

03 8587 8889

Mon to Fri, 9am to 5pm AEST. If you would like to download a digital copy of this manual, or other Aerpro manuals/software, please visit aerpro.com