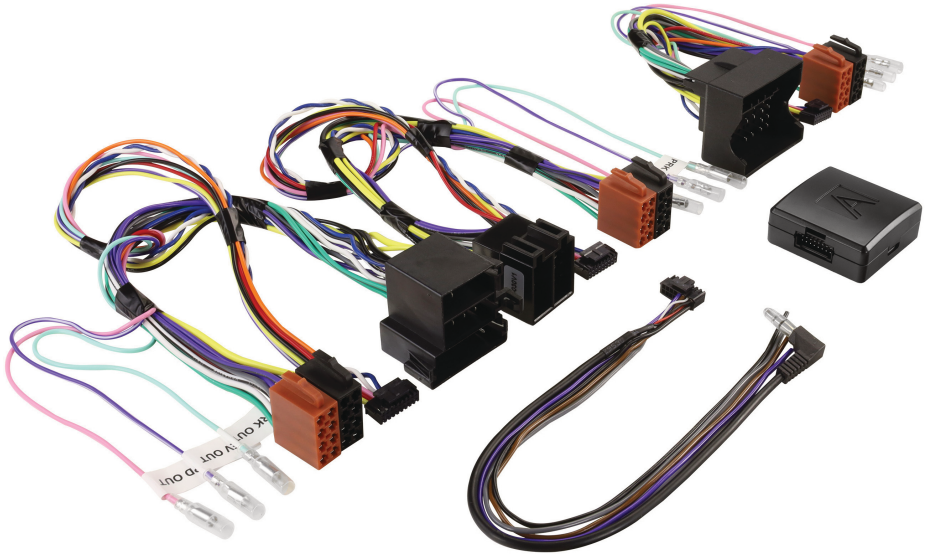
Aerpro
In-Car Tech Solutions

SWMC00C

RETENTION OF VEHICLE FACTORY STEERING WHEEL CONTROLS

TO SUIT MERCEDES VEHICLES



USER MANUAL

VEHICLE APPLICATION

To Suit MERCEDES-BENZ

A-Class	W169	2004-2012
B-Class	W245	2005-2011
C-Class	W203	2000-2007
R-Class	W251	2007-2013
CLK	W209	2004-2009
SLK	R171	2008-2011
ML	W164	2005-2011
Viano	W639	2004-2015
Vito	W639	2004-2015
Sprinter	W906	2006-2018
Smart ForFour	W454	2004-2006
VW Crafter		2006-2017

KEY FEATURES

- CAN BUS INTERFACE
- SOFTWARE UPDATEABLE
- REMAPPABLE BUTTONS
- RETAIN STEERING WHEEL CONTROL FUNCTIONALITY
- REPLACE FACTORY RADIO
- OUTPUTS FOR SPEED PULSE, PARK BRAKE & REVERSE

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. 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.

Before proceeding with installation, disconnect the negative battery terminal and ensure the key is removed from the ignition.

CONNECTION DIAGRAM

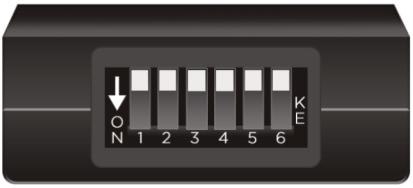
HEADUNIT PATCH LEAD

GROUND
KEY 2
KEY 1
SWC IR

3.5MM JACK PLUG
CONNECT TO AFTERMARKET STEREO

16-PIN HARNESS CONNECTOR
CONNECT TO INTERFACE

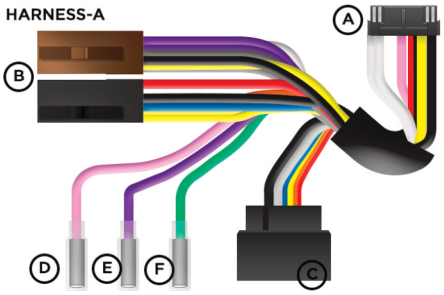
SWC INTERFACE



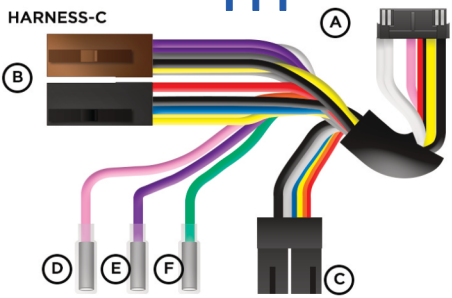
SWC INTERFACE DIPSWITCHES
REFER TO DIPSWITCH CHART

SWC VEHICLE HARNESS

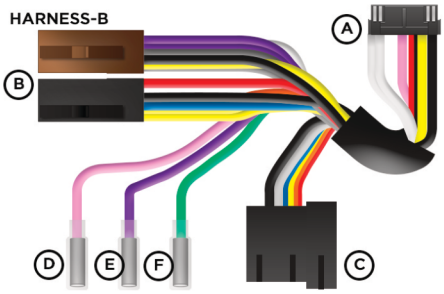
HARNESS-A



HARNESS-C



HARNESS-B



(A) 18-PIN HARNESS CONNECTOR
CONNECT TO INTERFACE

(B) ISO CONNECTOR
CONNECT TO RADIO HARNESS

(C) VEHICLE CONNECTORS
CONNECT TO VEHICLE HARNESS

(D) SPEED PULSE

(E) REVERSE GEAR

(F) PARK BRAKE

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

CONNECTION GUIDE

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. **

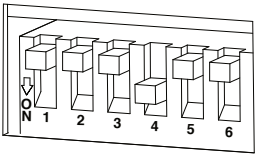
7. If you're interface has reverse camera retention, connect the yellow male RCA cable from the interface to the female RCA port on the rear of the aftermarket head unit. **

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.**



SETTING 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.

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 own bespoke configuration. Button configuration can be done by PC, MAC and smart phone via the USB port.

Button Remapping instructions can be found in a separate guide on our website (https://aerpro.com/remapper).

STEERING WHEEL CONTROL CONFIGURATION

A Volume Up
B Volume Down
C Track Up
D Track Down
E Pick Up
F Hang Up

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

DIPSWITCH CONFIGURATION

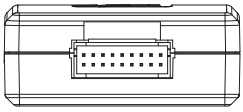
MANUFACTURER	DIPSWITCH CONFIGURATION						CONNECTION TYPE
	DIP 1	DIP 2	DIP 3	DIP 4	DIP 5	DIP 6	
AERPRO (3.5MM JACK)	OFF	OFF	ON	ON	OFF	OFF	3.5MM JACK
AERPRO (THREE WIRE)	OFF	ON	ON	OFF	OFF	OFF	KEY1 / KEY2 / KEY GND WIRES
ALPINE	OFF	ON	OFF	OFF	OFF	OFF	3.5MM JACK
CLARION	ON	OFF	OFF	ON	OFF	OFF	3.5MM JACK
GRUNDIG	OFF	ON	OFF	ON	OFF	OFF	BROWN SWC
JVC	OFF	OFF	ON	OFF	OFF	OFF	BROWN SWC
KENWOOD 1	ON	OFF	OFF	OFF	OFF	OFF	BROWN SWC
KENWOOD 2	ON	ON	OFF	OFF	OFF	OFF	BROWN SWC
PHILIPS	OFF	ON	OFF	ON	OFF	OFF	BROWN SWC
PIONEER 1	OFF	OFF	OFF	ON	OFF	OFF	3.5MM JACK
PIONEER 2	OFF	OFF	ON	ON	OFF	OFF	3.5MM JACK
SONY	ON	OFF	ON	ON	OFF	OFF	3.5MM JACK
CUSTOM	ON	OFF	ON	OFF	OFF	OFF	HEAD UNIT DEPENDANT
ANALOG SINGLE EXTEND	ON	ON	ON	ON	OFF	OFF	BROWN SWC
ANALOG SINGLE WIRE	ON	ON	ON	OFF	OFF	OFF	BROWN SWC
KEY1 / KEY2 / KEY GND WIRES	OFF	ON	ON	OFF	OFF	OFF	KEY1 / KEY2 / KEY GND WIRES
KEY1 / KEY2 / KEY GND EXTEND	OFF	ON	ON	ON	OFF	OFF	KEY1 / KEY2 / KEY GND WIRES
RESERVED	OFF	OFF	OFF	OFF	OFF	OFF	SOFTWARE UPDATE MODE

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

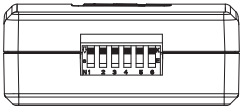
KEY1 and KEY2	KEY1 and KEY2 are specifically tailored for analog learning mode-style radios. Our SWC module is designed with a resistor chain that precisely matches the required resistance for seamless compatibility with this type of head unit.
KEY1 and KEY2 EXTEND	This mode extends every button press 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.

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

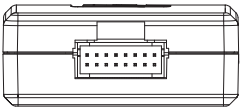
STEERING WHEEL CONTROL MODULE



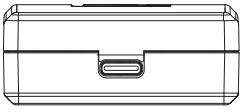
18 PIN HARNESS CONNECTOR



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 **TEL: 03 8587 8898** MON-FRI 9AM – 5PM AEST. If you would like to download a digital copy of this manual, or other Aerpro manuals/software, please visit the **http://aerpro.com** website.