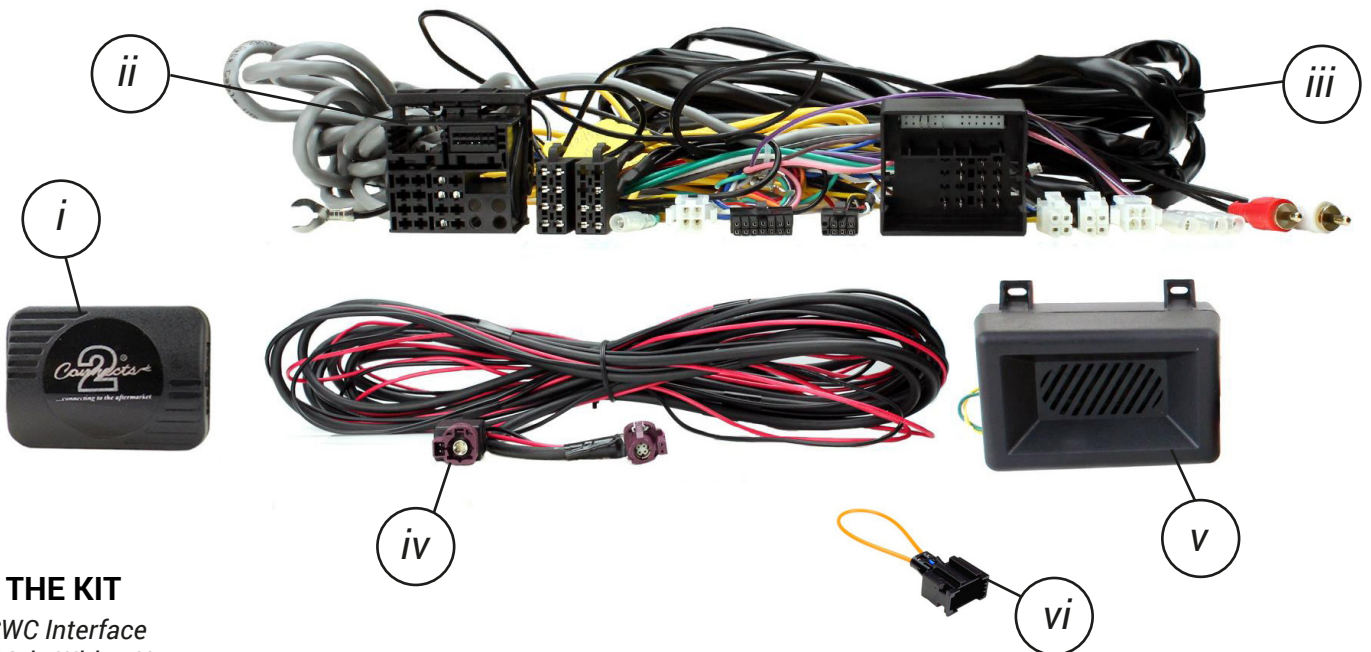




# CTSBM017.2

## Steering Wheel Control Interface for BMW Vehicles



### IN THE KIT

- i. SWC Interface
- ii. Main Wiring Harness
- iii. Data Extension Lead (4 Pin Molex -> 4 Pin Molex)
- iv. LVDS Extension Lead
- v. Speaker Box
- vi. MOST Loop

Designed and  
Engineered  
in the UK. 

## APPLICATION

Note: Application data is subject to change at any time

**BMW X5 (F15/85) 2013 - 2018**

For non-amplified vehicles with NBT system only (not NBT Evo system).

**The use of a MOST extension lead (sold separately) is needed in order to retain select features relating to i-Drive/trip meter.**

## FEATURES

- Retains Factory Steering Wheel Control Functionality
- Retains Phone Button Functionality (if vehicle is equipped)
- Retains Parking Sensor Audio (via integrated speaker)
- Retains Voice Commands from SWC (if stereo supports)
- Retains OEM Stereo for Vehicle Settings via Top Display
- Provides Output Feeds for Park Brake, Speed Pulse, Reverse Gear & Mute
- Updateable via USB (contact supplier for more information)

### DISCLAIMER

The information provided in this document is subject to change without notice due to manufacturer changes and/or improvements to the product/s. This instruction manual is based on documented data and research. The manufacturer of this product cannot be held responsible for any changes made to the vehicle by the manufacturer or damages that may occur through the installation of this product in accordance with the steps outlined herein.

# PRODUCT INFORMATION

## CTSBM017.2

The CTSBM017.2 aids the installation of an aftermarket stereo into an OEM dashboard. It helps retain steering wheel control presets as well as retaining vital features and functions which include parking sensor audio and phone button functionality (if applicable). Our interface also allows for the retention of the original head unit for the purpose of retaining key vehicle settings menus via the original display.

**Please note: this product is for non-amplified vehicles only. Although the interface works to retain most settings, some will remain "grey". For these settings, the use of a MOST extension harness is needed (sold separately).**

## WIRING KEY

### IN ISO CONNECTOR

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

### ADDITIONAL CONNECTIONS

Lt. Green	Park Brake
Pink	Speed Pulse
Purple/White	Reverse Gear
Brown	Mute

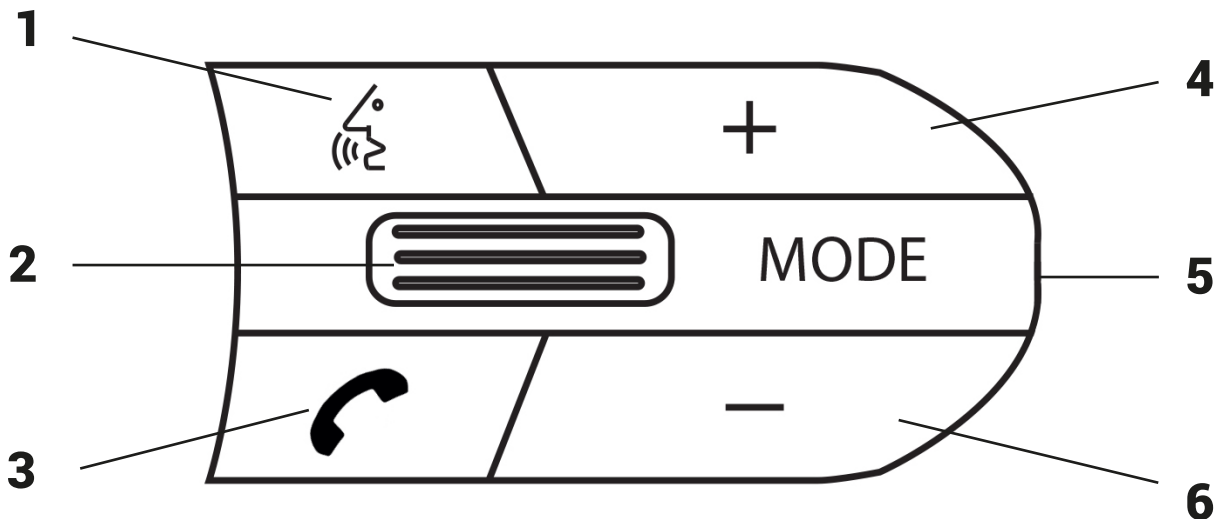
### ADDITIONAL DIPSWITCH SETTINGS

Chime Volume	DIP1	DIP2	DIP3	DIP4
Low	ON	OFF	OFF	OFF
Medium	OFF	ON	OFF	OFF
High	OFF	OFF	OFF	OFF

*DIP4 is to be turned on if using a Pioneer head unit.*

## STEERING WHEEL CONTROL FUNCTIONALITY

*The following diagram, though based on careful research, is an example only. Individual steering wheel control configurations may differ.*



1. Voice Command (if stereo supports)
2. Track + / - (Push for Mute)
3. Pick Up (Short Press) Hang Up (Long Press)
4. Volume +
5. Mode / OEM Unit Control\*
6. Volume -

#### Aftermarket Unit Control

If the OEM stereo has been retained during the installation, hold Mode for 8-10 seconds until a chime is heard from the interface speaker. The SWC button will now control the OEM stereo. To revert back to aftermarket unit control, hold Mode for 8-10 seconds.

# PRIOR TO INSTALLATION

Read the whole manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources. Please ensure that the correct tools are using during the installation to avoid damage to the vehicle or product. **Connects2 can not be held responsible for the installation of this product.**

## INSTALLATION GUIDE

See wiring diagram on Pg.4 for more information

**Before installation of the interface, the factory stereo must be removed, disconnected and relocated to a suitable location in the rear of the vehicle.**

**To do this, please consult the vehicle owner's manual/handbook or contact a fitting professional.**

### CONNECTIONS AT REAR LOCATION (OEM UNIT)

1. Make the following connections at the rear location:

- **12V Permanent Blade Spur** (Connect from main wiring harness to a desired 12V power source, e.g. direct to the battery or to an empty 12V permanent bay in fusebox)
- **40 Pin Female Vehicle Specific Connector** (Connect from main wiring harness to OEM stereo)
- **Ground Fork** (Connect from main wiring harness to a desired ground location)
- **LVDS Extension Cable - Female End** (Connect to OEM stereo)
- **Data Extension Cable - Female End** (Connect to the *male* molex located on the main wiring harness)

### CONNECTIONS AT FRONT LOCATION (AFTERMARKET UNIT)

2. Connect the 12 Pin connector from the desired stereo connection (patch) lead to the SWC interface.

3. Connect the opposite end of the stereo connection (patch) lead to the steering wheel control input on the back of the aftermarket stereo.

*NOTE: This may be a 3.5mm jack connector or a wired input depending on the brand of aftermarket stereo being fitted. Please consult the aftermarket stereo installation manual for further information on where to make the connection*

- **IMPORTANT: THIS STEP MUST BE COMPLETED BEFORE CONNECTING POWER TO THE INTERFACE.**
- **FAILURE TO DO SO MAY RESULT IN A LACK OF FUNCTIONALITY AND THE NEED TO REINSTALL THE PRODUCT**

4. Connect the 14 Pin Molex connector from the main wiring harness to the SWC interface.

5. Connect the MOST Loop to the vehicles pre-existing fibre optic connection to retain the vehicles original menus.

6. Connect the power/speaker ISO connector to the power/speaker ISO connector at the rear of aftermarket stereo.

*Note: For aftermarket stereos which do not have an ISO connector, please see 'Wiring Key' on Pg.2 for information on which wires to connect. Some interfaces may also have additional 'flying' wires which can be connected to the vehicle to support various features i.e. parking brake trigger, reverse gear and speed pulse. Details of these can be found under 'Additional Connections'.*

7. Connect any/all additional flying wires to the back of the stereo.

8. Connect the 2 Pin Molex connector on the main wiring harness to the Speaker Box.

9. Connect the Ground Fork to a suitable ground point.

10. Connect the male molex on the Data Extension Cable to the corresponding female molex connector on the Main Wiring Harness.

11. Connect the Male LVDS connector to the OEM LVDS connector behind the dashboard (previously unplugged from the OEM stereo).

12. Connect the 40 Pin Male Vehicle-Specific Connector to the female connector from the vehicle.

13. Test the stereo and steering wheel control functionality for the correct operation before reassembling the vehicle dashboard. If steering wheel control functions are unresponsive, uninstall the interface as well as the wiring and then reinstall carefully in accordance with the above steps.

# WIRING DIAGRAM

