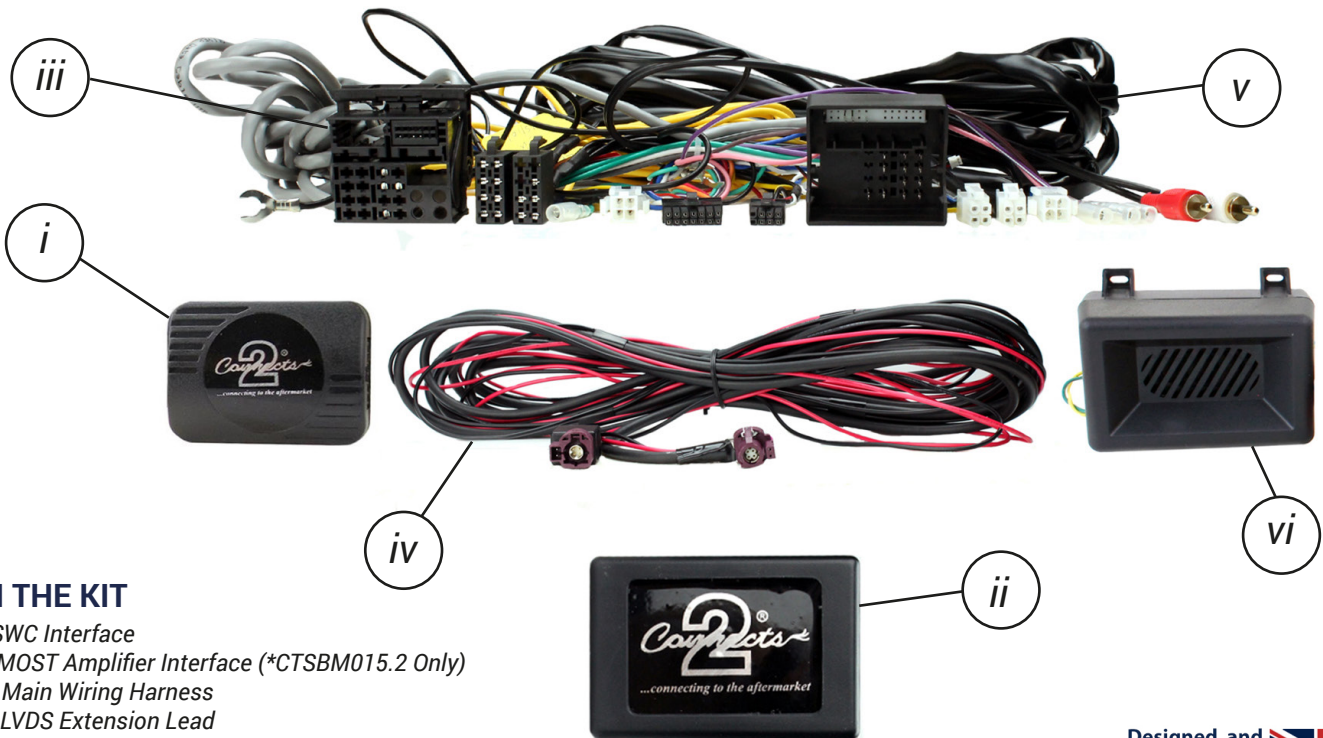# CONNECTS2 ®

CTSBM014.2/*015.2
Steering Wheel Control Interface *for BMW Vehicles*

IN THE KIT
i. SWC Interface
ii. MOST Amplifier Interface (*CTSBM015.2 Only)
iii. Main Wiring Harness
iv. LVDS Extension Lead
v. Data Extension Lead (4 Pin Molex -> 4 Pin Molex)
vi. Speaker Box

Designed and Engineered in the UK.

APPLICATION

Note: Application data is subject to change at any time

BMW 1 Series (F20/21)	2012 - 2016	
BMW 2 Series (F22/23/87)	2014>	
BMW 3 Series (F3**)	2012 - 2016	
BMW 4 Series (F3**)	2012 - 2016	

For Vehicles with MBT System Only (Not MBT Evo System)

FEATURES

- **Retains Factory Steering Wheel Control Functionality**
- **Retains Phone Button Functionality** (*if vehicle is equipped*)
- **Retains OEM MOST Amplified System** (*CTSBM015.2 Only*)
- **Retains Warning Chimes/Parking Sensor Audio** (*via integrated speaker*)
- **Retains Voice Commands from SWC** (*if head unit supports*)
- **Retains OEM Head Unit 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*)

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.

Before installing 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.

WIRING KEY

IN WIRING HARNESS

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

STEERING WHEEL CONTROL FUNCTIONALITY

*The following diagram, though based on careful research, is an example only
Individual steering wheel control configurations may differ.*
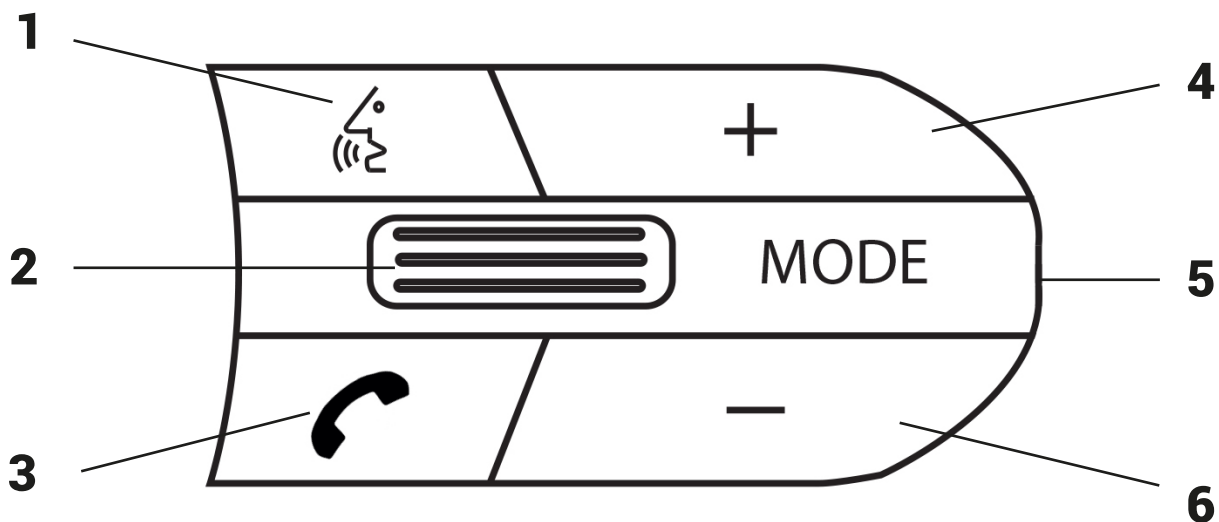
1. Voice Command *(if head unit supports)*
2. Track + / - (Push for Mute)
3. Pick Up (Short Press) Hang Up (Long Press)
4. Volume +
5. Mode / OEM Unit Control*
6. Volume -

Aftermarket Unit Control
If the OEM head unit 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 head unit. To revert back to aftermarket unit control, hold Mode for 8-10 seconds.

INSTALLATION GUIDE

A stereo connection (patch) lead is also required for the installation of this interface (supplied separately). Please ensure that you have the correct lead before proceeding. For universal patch leads, prepare the wiring loops in accordance with the instruction manual supplied with the product before installation.

PRELIMINARY CONNECTIONS

1. Firstly, connect the male and female ends of the Data Extension Cable to the corresponding male and female molex connectors on the Main Wiring Harness.

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

3. If the vehicle is amplified, connect the MOST Amplifier Interface to the 8 Pin Molex connector on the main wiring loom (CTSBM015.2 only)

CONNECTIONS AT REAR LOCATION *(OEM UNIT)*

5. Make the following connections at the rear location:

- **12V Permanent Blade Spur** (Connect to a desired 12V power source, for e.g. direct to battery or to an empty 12V permanent bay in fusebox)
- **40 Pin Female Vehicle Specific Connector** (Connect to OEM head unit)
- **LVDS Extension Cable - Female End** (Connect to OEM head unit)
- **Ground Fork** (Connect to a desired ground location)

CONNECTIONS AT FRONT LOCATION *(AFTERMARKET UNIT)*

6. Make the following connections at the front location behind the dashboard:

- Connect the 12 Pin Molex connector from the patch lead to the SWC Interface
- Connect the opposite end of the 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**

- Connect the 14 Pin Molex connector from the Main Wiring Harness to the SWC Interface.
- Connect the 16 Pin ISO Connector to the ISO Connector from the aftermarket head unit

NOTE: For aftermarket stereos which <u>do not</u> 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 ie. parking brake trigger, reverse gear and speed pulse. Details of these can be found under 'Additional Connections'.

- Connect the 40 Pin Male Vehicle-Specific Connector to the female connector from the vehicle.
- If desired, connect the Ground Blade Spur to a suitable ground point
- Connect the Male LVDS connector to the female OEM LVDS connector behind the dashboard (previously unplugged from the OEM head unit).
- If the vehicle is amplified, connect the Red/White Phono Connectors to the aftermarket head unit for amplifier audio retention

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

Need help? Visit support.connects2.com/tickets/technical

CTSBM014-2-15-2_IG_en-GB_V2

MALE LVDS
CONNECT TO OEM LVDS PORT
IN DASHBOARD AT FRONT LOCATION

MALE MOLEX (4 PIN)
CONNECT TO FEMALE MOLEX (4 PIN) ON MAIN WIRING LOOM

LVDS EXTENSION CABLE

FEMALE LVDS
CONNECT TO OEM HEAD UNIT IN REAR LOCATION

FEMALE MOLEX (4 PIN)
CONNECT TO MALE MOLEX (4 PIN) ON MAIN WIRING LOOM

DATA EXTENSION CABLE

FEMALE MOLEX (4 PIN)
CONNECT TO MALE MOLEX (4 PIN) ON
DATA EXTENSION CABLE

MALE VEHICLE SPECIFIC CONNECTOR (40 PIN)
CONNECT TO FEMALE VEHICLE SPECIFIC
CONNECTOR AT FRONT LOCATION

GROUND BLADE SPUR
(OPTIONAL) CONNECT
TO GROUND POINT AT
FRONT LOCATION

MALE MOLEX (2 PIN)
CONNECT TO SPEAKER BOX

MAIN WIRING HARNESS

MOLEX (12 PIN)
CONNECT TO PATCH LEAD

MOLEX (14 PIN)
CONNECT TO SWC
INTERFACE

MOLEX (8 PIN)
CONNECT TO MOST AMPLIFIER
INTERFACE (CTSBM015.2 ONLY)

ISO CONNECTOR (16 PIN)
CONNECT TO AFTERMARKET
HEAD UNIT

REVERSE GEAR
SPEED PULSE
PARK BRAKE
MUTE

FLYING WIRES
PURPLE/WHITE
PINK
LIGHT GREEN
BROWN

RED/WHITE PHONO CONNECTORS
CONNECT TO AFTERMARKET HEAD UNIT
FOR AMP AUDIO. (CTSBM015.2 ONLY)

RED
WHITE

12V PERMANENT BLADE SPUR
CONNECT TO A 12V POWER SOURCE
IN REAR LOCATION (IE. DIRECT TO
VEHICLE BATTERY OR TO AN EMPTY
12V PERMANENT BAY IN FUSEBOX)

GROUND BLADE SPUR
CONNECT TO GROUND POINT
IN REAR LOCATION

MALE MOLEX (4 PIN)
CONNECT TO FEMALE MOLEX (4 PIN) ON
DATA EXTENSION CABLE

**FEMALE VEHICLE SPECIFIC
CONNECTOR (40 PIN)**
CONNECT TO OEM HEAD UNIT
AT REAR LOCATION