# Mr12Volt MOST CarPlay interface for BMW CIC Quick User Guide

Model No: P2000-CICMD



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# 1 - All you need to know before Installation



- Mr12volt interface emulates CD changer function of a BMW radio and is connected through MOST bus of its function. Once successfully installed, CD1 will appear and operate within. (Picture illustrated above)
- Coding of a CDC option is needed, there are handful of software available in the market which can code in CDC option.
- If there is an external CD changer fitted in your car, it must be bypassed with a FO loop.
- For 1 & 3 series with a CD changer fitted in the trunk. Use a Optical Bypass connector to disable and it can be purchased from mr12volt website.

#### **DIP SWITCH CONFIGURATION**

	DIP.1	DIP.2	DIP.3	DIP.4	DIP.5
8.8 " / 10.25"	OFF	OFF	OFF	OFF	OFF
6.5 "	OFF	OFF	OFF	OFF	ON
F01/F02 CIC	OFF	ON	OFF	OFF	OFF

#### 2 - Product Features



- CarPlay
- Android Auto
- Mirroring
- Music & Video Playback (Through USB Flash)
- Bluetooth HF & Music Streaming
- Reverse Camera Input (Support up to AHD720P)
- Front Camera Input
- Passenger Side L/R Camera Input (For the use of Blind Spot)
- Reverse Grid Line
- Digital Sound Processor (DSP) with 15 Band Equalizer Adjustment
- Software Update available

# 3 - Main Feature Operations

# CarPlay/Android Auto

- Support both wired and wireless CarPlay connection
- To connect to wireless CarPlay, both Bluetooth and Wi-Fi connection are required
- For wired CarPlay & Android Auto: Use a genuine cable to connect through the USB / Lightening connector. Both Wi-Fi & Bluetooth connections are NOT required in this case.
- How to Connect CarPlay: Search for Mr12volt\_xxxx and pair to make a Bluetooth connection ---> Turn on Wi-Fi and & Use CarPlay ---> it will start CarPlay on your screen after few seconds, it could take longer for a first time connection
- How to Connect Android Auto: Search for MR12volt\_xxx and Pair to make a Bluetooth connection, Wi-Fi on phone will be on automatically and connected to Android Auto

# **Mirroring**



#### **iPhone**

- 1. Disable CarPlay by turning off Bluetooth & Wi-Fi Connection
- 2. Enter Mirroring menu on Car display and Choose iPhone

- 3. Turn on Wi-Fi on phone connect network "carplay\_xxxx" ( PW is 88888888)
- 4. Go to iPhone Control Center, select Screen Mirroring and select Mirroring again
- 5. Phone display will appear on Car Display now

#### **Android Phone**

 It is necessary to install "MLink" application on your Android phone, it can be downloaded on <a href="www.mr12volt.com">www.mr12volt.com</a> (Go to SUPPORT ---> Download ---> P2000 mirroring)



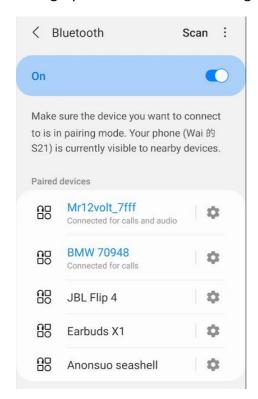
- Both Bluetooth & Hotspot connection are needed at all time for mirroring
- ♦ Hotspot Setting :
- 1. 5GHz band must be selected
- 2. Enter Mirroring menu on car display and choose "Android"
- Network name & Password on phone must be set same as shown on Mr12volt "Mirroring" menu
- 4. Open MLInk app-->turn on Bluetooth and Hotspot
- 5. When both Bluetooth and Hotspot are successfully connected, phone display will appear on the car Display
- It is always best to open mirroring menu on car display prior to the connection of Bluetooth, so that Android Auto does not overtake the function of mirroring when first connected to Bluetooth

# Bluetooth

- Phone contact list
- Contact history
- Dial Pad
- Audio Streaming

#### BT Hands-free

- When a call is incoming, answer and reject button will appear on display, use MMI/i-Drive/Rotary button to select.
- ♦ BMW factory Bluetooth HF and Mr12volt Bluetooth can be connected at the same time. (see below picture) When both are connected and a call is incoming, BMW HF will take over Mr12volt HF and it can be answered through phone button on steering wheel.



 Mr12volt does not support the integration of OEM microphone even with the installation of a Y-cable. if you need to use Mr12volt HF or Voice Command such as Siri, the 3.5mm jack microphone supplied in the package must be installed.

# 4 - Car Settings

### Car Setting



#### "Reverse Camera" settings

- OE Camera (Default) Select this when car is fitted with factory camera
- AfterMarket 360 Select this when car is installed with a aftermarket camera (support up to AHD720 only)



#### "Reverse condition" settings

- Gear Position (Default) Detects through CAN bus when reverse.
- Reverse state Detects through 12v reverse light signal when reverse (requires the manual wiring connection of a car reverse signal)



#### When do i select "Reverse State"?

Mr12volt detects car CAN bus with most of the car models in the market, however in some cases particularly in older generation cars, when a CAN bus can't be detected, it is necessary to manually detect camera through car reverse light signal.

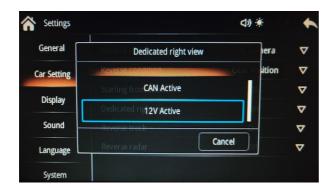
(Refer to the BMW CIC Installation Diagram for more details)

"Starting front view" - Front Camera timer setting with 5s, 10s, 30s



"Dedicated right view" - L/R Side camera setting (Blind Spot camera)

- Can Active Detects through CAN bus
- 12v Active Detects through 12v side L/R light



"Reverse track" - Option to turn ON / OFF of a Parking Grid (For AfterMarket camera only)

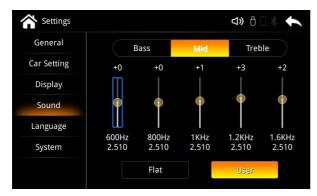
"Reverse radar" - Option to turn ON / OFF of a Reverse Sensor (For AfterMarket Reverse sensor only)

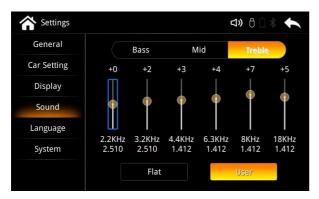
# 5 - Sound Settings

# Sound Settings

- DSP Built-In
- Bass/Mild/Treble level adjustment with 15 bars customization
- Factory default at Flat







# 6 - USB Supported Formats & Other Specs

# Music and Video Playback File Format

- USB file format FAT32
- Support USB2.0 , Hard disk memory
- Supported music format : MP3, WMA, AAC, AC3, DTS, OGG, FLAC, APE,
   AMR
- Supported video format: mkv, mp4, avi, wmv, rmvb, rm, mpg, mpeg, ts, dat, asf, flv, vob
- Supported Photo format : BMP, JPG, GIF, PNG
- DOES NOT support folder management when browsing USB Music and Video files

# Other Data

- Support Phone Charging through USB connector @ 500mAh
- Support Hi-Resolution Loss-less Apple music Wireless

#### 7 - FAQ

#### Q: I have a Harman & Kardon system, does it work?

A: It works on all sound systems regardless its Harman & Kardon, Hi Fi or Standard system.

#### Q: Do i need any coding?

A: coding of a CDC option is needed if there is no factory fitted CD changer, and on the other hand, if there is CD changer fitted, it must be disabled.

# Q; Can i use my BMW Bluetooth HF while connected to Mr12volt Bluetooth?

A: Yes, they can be connected at the same time, BMW factory HF will take over Mr12volt when a call is received and it can be answered through phone button on steering wheel.

# Q; I have a factory microphone in my BMW car, can i connect this to Mr12volt instead of the microphone in the package. ?

A: NO, Mr12volt does not support the integration of OEM microphone even with the installation of a Y-cable. if you need to use Mr12volt HF or Voice Command such as Siri, the 3.5mm jack microphone supplied in the package must be installed.