# Mr12Volt CarPlay interface for NTG4.5/4.7
# Quick User Guide

## Model No : P2000-NTG45MM

| | | |
|---|---|---|
| W212/207 E-class | W204 C | W176 A |
| W246 B | W218 CLS | W166 ML |
| X166 GL | W463 G | W172 SLK |
| W231 SL | C197/R197 SLS | |
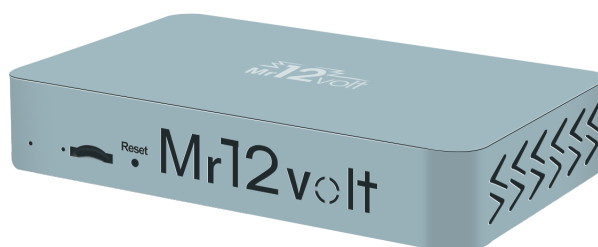


**1 - All you need to know before Installation**

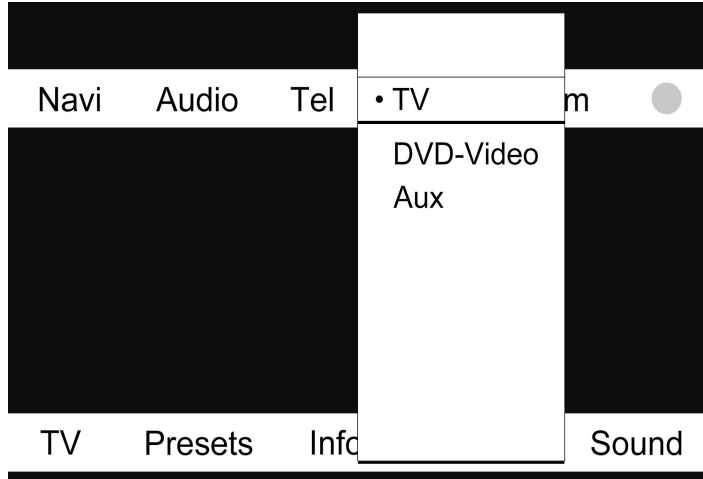**2 - Product Features**

**3 - Main Feature Operations**

**4 - Car Settings**

**5 - Sound Settings**

**6 - USB Supported Formats & Other Specs**

# 1 - All you need to know before Installation

| Navi | Audio | Tel | • TV | m | ⬤ |
|------|-------|-----|------|---|---|

DVD-Video
Aux

| TV | Presets | Info | | Sound |
|----|---------|------|---|-------|

● Mr12volt is selected through TV features of Mercedes NTG4.5/4.7

● No coding tools or Factory TV module is needed, once Mr12volt CarPlay module is installed successfully (pressing both "Return" and "C" buttons will activate the "TV" option in menu)

● Dip Switch Configuration

| Merceds-Benz | 1 | 2 | 3 | 4 | 5 |
|--------------|-----|-----|-----|-----|-----|
| NTG 4.5/4.7 | OFF | OFF | OFF | OFF | OFF |

# 2 - Product Features
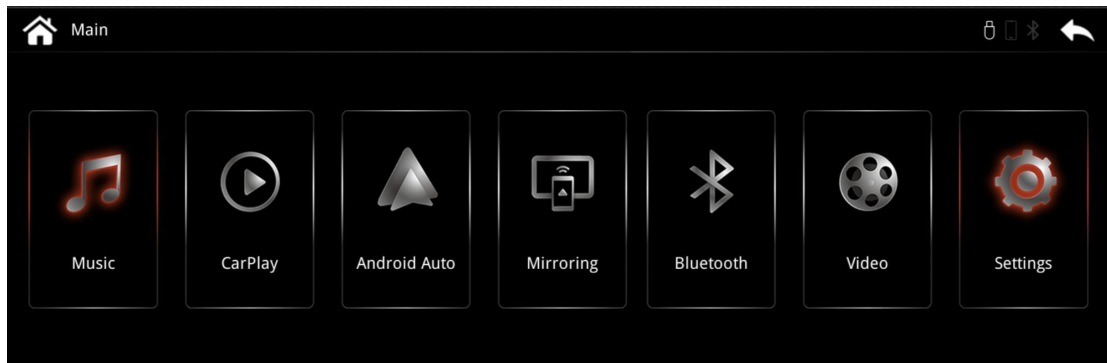


- Music & Video Playback ( Through USB Flash )
- CarPlay
- Android Auto
- Mirroring
- Bluetooth HF & Music Streaming
- Reverse Camera Input ( Support up to AHD720P )
- Front Camera Input
- Passenger Side L/R Camera Input ( For the use of Blind Spot )
- Reverse Grid Line
- Digital Sound Processor (DSP)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

# 3 - Main Feature Operations

## CarPlay/Android Auto

- Support both wired and wireless CarPlay
- To connect to CarPlay wirelessly, both Bluetooth and Wi-Fi connection are required
- For wired CarPlay & Android Auto : Use a genuine cable to connect through the USB/Lightening connector. Wi-Fi & Bluetooth connections are NOT required in a wired connection.

- ◇ **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 up to a minute 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 connected to Android Auto

## Mirroring
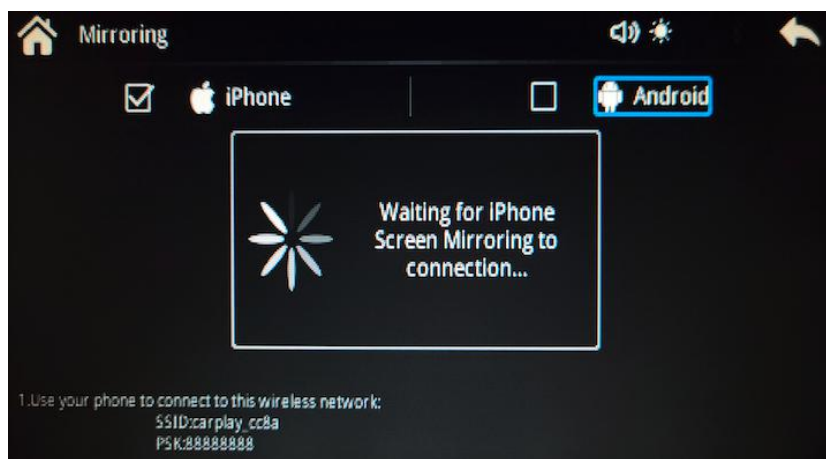


## iPhone

1. Disable CarPlay by turning off Bluetooth & Wi-Fi Connection on your phone
2. Enter Mirroring menu on car display and choose iPhone

3. Turn on Wi-Fi on phone, connect to "carplay_xxxx" ( PW is 88888888)

4. Go to Apple quick menu bar, 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 www.mr12volt.com ( 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"

3. Network name & Password on phone must be set same as shown on Mr12volt "Mirroring" menu

4. Open M-LInk app-->turn on Bluetooth and Hotspot

5. When both Bluetooth and Hotspot are successfully connected, Phone display will appear on 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.

◇ Merceds-Benz Bluetooth HF and Mr12volt Bluetooth can be connected at the same time. ( see below picture) When both are connected and a call is received,Merceds-Benz HF will take over Mr12volt HF and it can be answered through phone button on steering wheel.
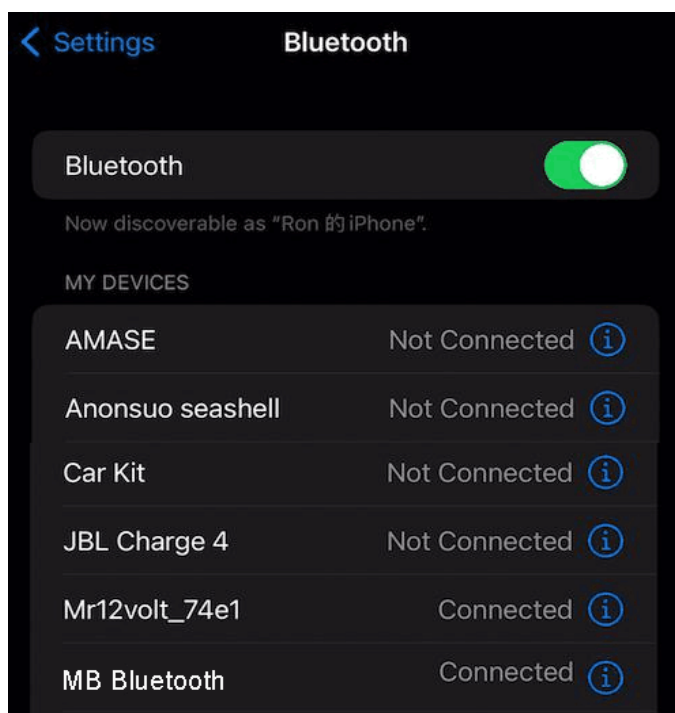


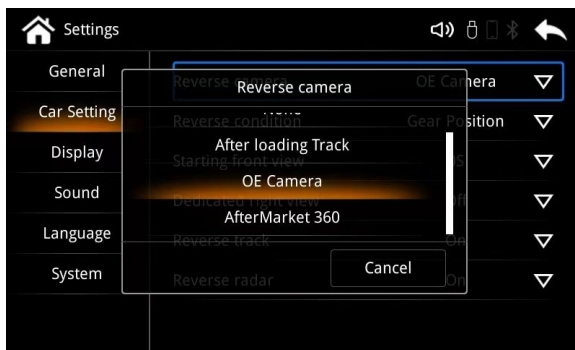- Mr12Volt supports the integration of OEM microphone

# 4 - Car Settings

## Car Setting
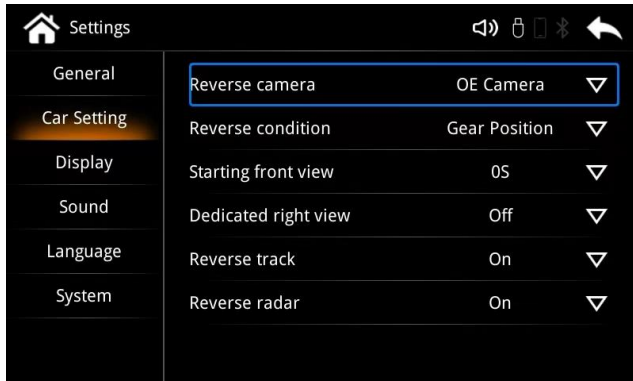


**"Reverse Camera" settings**

- 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 car is in reverse.
- Reverse State - Detects through 12v reverse light signal when reverse (requires the manual wiring connection of a car reverse signal)
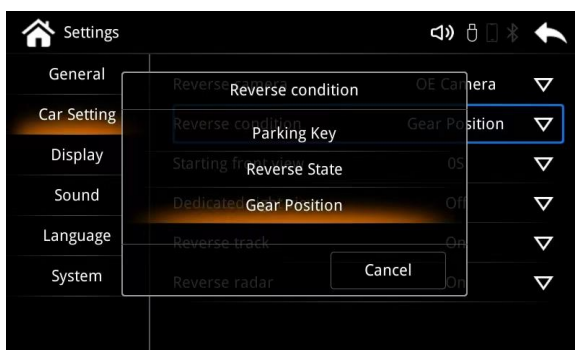
<u>When do i select "Reverse State" ?</u>

Mr12volt detects Car CAN bus with most of the car models in the market,

however in some cases particularly in older generation cars,

when CAN bus can't be detected,

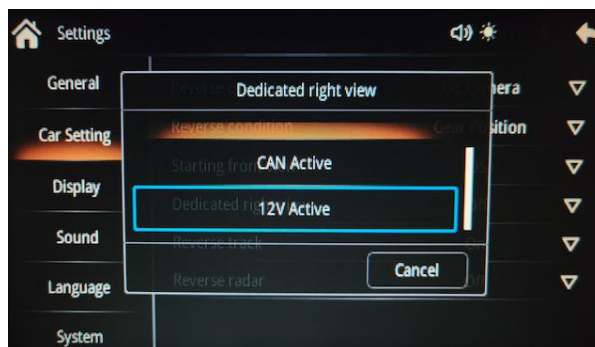it is necessary to manually detect camera through car

reverse light signal.

(Refer to the Mercedes Benz NTG4.5/4.7Installation Diagram for more detail)

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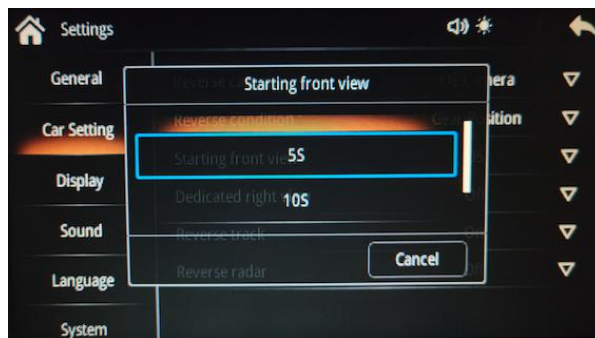


**"Dedicated right view"** - L/R Side camera setting (Blind Spot camera)

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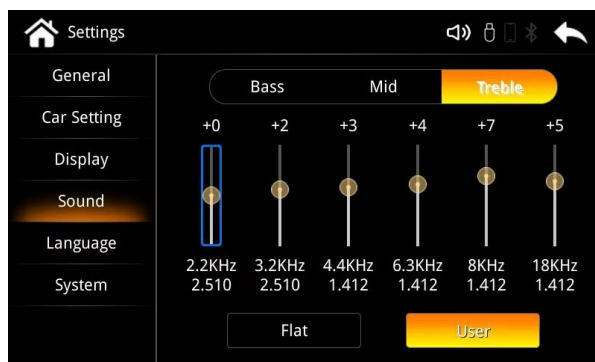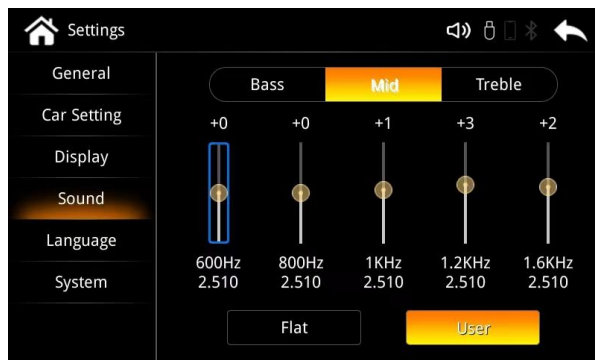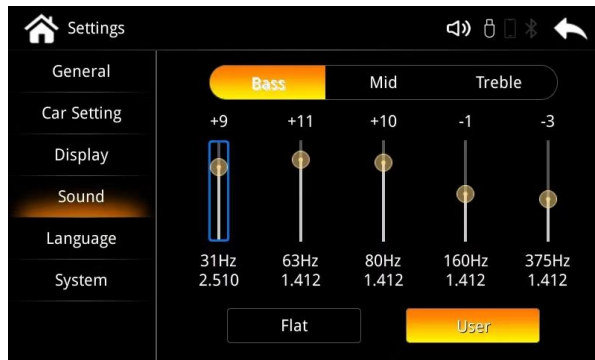- 12v Active - Detects through 12v side L/R light



**"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 / Mid / 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 Loss-less Apple music through wireless