GROM-USB3 MP3 car stereo adapter kit

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Chapter 1 – Introduction

1.1 Subject
Thank you for purchasing the GROM-USB3 adapter. To ensure that your GROM-USB3 interface performs correctly in your vehicle, we recommend that you read this entire manual before attempting to install the GROM interface.

1.2 Functionality Highlights
- Easily access media collection in your car, including shuffling songs, skipping between tracks, and adjusting the volume—all with your factory car stereo head unit or multifunction steering wheel controls.
- Listen to your favorite music directly from virtually any **USB mass storage device**, flash stick or portable hard drive, requiring no dedicated media player.
  - **Android® phone** (most supported) play, charge and control through USB port via standard USB to Android cable.
  - **iPod®/iPhone®/iPad®** play, charge and control via standard USB to iPod cable (supports both 30-pin and Lightning style connectors).
  - **Bluetooth, HD Radio or AUX-IN** integration. To get AUX-IN you will need GROM MiniDin to 3.5mm audio and 5V USB charging cable, to get the **Bluetooth** hands free and wireless functionality you will need GROM-BTD Bluetooth Dongle, to get the HD Radio you will need GROM-HDR1 HD Radio Dongle (**GROM-HDR1, GROM-BTD and GROM aux cable are sold separately**).

1.3 Main Features in USB, iPhone/iPod/iPad or Android mode
- Ability to listen to the songs in the car on USB mass storage device (such as flash drive), iPhone/iPod/iPad or Android phone (using DashLinQ app for Android from Google® Play Store).
- Ability to control music from car stereo or steering wheel buttons.
- Folders on the USB drives are mapped to an individual “Disc” button on car stereo’s dashboard (different for **SAT emulation** – please refer to your installation manual). Music playlists on Android phone within DashLinQ and iPhone (iTunes and stored music) are mapped to Discs.
- Android phone and iOS devices are charged while in car.

1.4 Bluetooth Hands Free and Wireless Audio, AUX-IN, and HD Radio Features
- With hands free (HFP) you can receive the phone calls through the factory car stereo, answer or reject the phone calls using car stereo or steering wheel controls, speak to the other person using microphone provided with GROM Bluetooth Dongle. Wireless music play from your phone to the factory car stereo (A2DP), control the music or Pandora® internet radio with the car stereo or steering wheel buttons (AVRCP) (**GROM Bluetooth Dongle is required**).
- HD Radio integration is available with GROM HDR1 Dongle, and AUX-In is possible with GROM aux cable

1.5 Precautions
Proper mounting location securely installs the interface in a location free from heat, humidity, moving parts, or direct sunlight. Beware of hot-air flow from your vehicle’s climate control system. The interface should be secured in a suitable location, free of sharp metal edges, using double-sided tape, Velcro, or wire ties. The adapter’s operating temperature range is -30°C to +70°C (-24°F to +158°F)

1.6 Disclaimer
- This product is not affiliated with any of the OEM manufacturers
- Modifying the stereo may void any existing warranty
- The purchase of this product carries no warranties, either expressed or implied
- GROM Audio has confirmed the listed stereo and vehicle application to the best of our ability. Due to uncontrollable factors and various factory options, GROM Audio cannot 100% guarantee every listed application. These factors
include variables such as inconsistencies within a factory stereo, factory stereo models unknown to GROM Audio and any partial model year changes.

- Keep your eyes on the road while driving!
  - We are not liable for the misuse of this product, including improper installation, damage to the board or stereo during installation, and the illegal use of the stereo

1.7 Completeness and connection of the set

a) The GROM audio adapter set consists of the GROM-USB main interface, one automotive grade USB cable 3FT, and one vehicle-specific cable.

![GROM USB3 interface](image1)

2. One Automotive grade USB 3FT (or USB to Android or iPhone cable)

3. One Vehicle specific cable

**Figure 1. Package contents**

b) The basic package does not include the optional accessories that you can purchase separately:

![HDR1 HD radio Dongle](image2)

![AUX MiniDin 3.5mm USB charge cable](image3)

![GROM Bluetooth Dongle](image4)

**Figure 2. Optional Accessories (sold separately)**

c) The basic wiring diagram of the GROM Audio adapter is detailed in Figure 3 (some installs may differ):

![Basic wiring diagram](image5)

**Figure 3. Basic wiring diagram**
1.8 Important Compatibility Notes
- If your vehicle is equipped with an external factory CD changer, you must disconnect it in order to be able to install the GROM interface. You will lose the use of the external CD changer to gain the use of your USB device, iPod, Bluetooth or MP3 player. The built-in CD changer will remain operational.
- If your vehicle has factory SAT and GROM adapter is using SAT emulation, you must disconnect factory SAT to gain the use of your USB device, iPod, Bluetooth or MP3 player. This is applicable to Nissan/Infinity with SAT emulation, Honda/Acura 03 and up with SAT emulation, Ford/Lincoln/Mercury, Mazda 3,5 08-09 and Subaru 07-09. For a full version of the GROM compatibility guide, please visit http://gromaudio.com/grom_application_guide.pdf or contact GROM Audio at http://gromaudio.com/support.html.

1.9 USB/EXT1/EXT2 ports
It is recommended for you to use GROM automotive grade USB extension cable. It will ensure better connection using the latch system that withstands the moving vehicle conditions. In addition it will prevent the wear-out of USB port of GROM-USB3 adapter.

Please refer to the Figure 4 below for the proper connection of the accessories to the EXT1/EXT2 ports of GROM-USB3 module.

Figure 4. EXT ports, accessories connection
Chapter 2 – General Installation

2.1 Installation location
Most installations will require removing the factory stereo in order to plug in the vehicle specific harness. For some vehicles, you will also have the option to connect the interface to the factory pre-run CD changer cable located in the trunk or glove box.

2.2 Tools needed
In most cases, there are no special tools required in order to remove the stereo. For some stereos (e.g., VW, Audi), it is better to use car stereo removal tools. Please consult your local car audio shop or your vehicle’s dealership for instructions or assistance as necessary. If you are unsure how to install the interface properly, we recommend contacting your local car stereo shop for assistance. Some installation examples can be found at www.gromaudio.com.

2.3 Preparation and adapter installation
1. Turn off car engine and remove key from ignition
2. If your stereo uses a Security Code, make sure that you have the code before unplugging the stereo.
3. Remove your stereo from the dash in order to gain access to the back of the stereo. Some vehicles require special tools to remove the stereo. Please consult your vehicle’s dealership or a local car audio professional, if necessary.
4. Attach the car harness connector to the CD changer port in the back of the stereo. Be sure to make a secure connection with no bent pins, but do not force it. Connect the other end to the interface.

For VW/Audi/Seat/Skoda with dashboard cable only:
There is a black single cable on the vehicle-specific harness (Figure 5) that you will need to attach to the back bolt of the car stereo or the stereo chassis stereo.

Figure 5. VW/Audi/Seat/Skoda Connection Scheme
Remove the PVC from the end of the black wire (2)
   ▶ Connect the end of the black wire (2) to the metal part of the car stereo chassis. You can connect it under the bolt (3) if it is present
   ▶ Make sure that solid contact is made between the striped black wire and the metal part of the car stereo body.
   ▶ Note: Failure to attach the black cable to the chassis of the stereo will result in the GROM adapter not working! All of the specified vehicles require this black cable to be attached.

5. For Audi vehicles only: Some Audi head units require an additional part (AUDS cable) or harness modification to gain the access to the CD changer port. A solid 20-pin connector occupies the 8-pin CD changer port on such stereos. Please refer to the instructions at http://gromaudio.com/docs/grom-audi-how-to.html for more information.
6. For BMW, Ford, Nissan, Infiniti, Volvo, Mazda 08-12 vehicles only: Please refer to the installation insert for the special guidelines for BMW, Ford, Nissan, Volvo and Mazda installation.

7. For Toyota and Honda (03 and up) vehicles: On some Toyota/Lexus/Scion vehicles and Honda/Acura (03 and up) vehicles, the CD changer port is occupied by a factory harness (such as NAV or audio harness). The GROM package for Toyota and for Honda/Acura (HON1) includes a Y-shaped vehicle cable. In order to connect the interface properly, please refer to Figure 5. If stereo port is already empty, simply plug GROM cable into stereo.

![Figure 6. Connection Toyota/Lexus/Scion and Honda/Acura](image)

8. Turn your car stereo on and switch it over to CD Changer mode using the Disc/Mode/CD/AUX buttons on your car stereo (depending on the stereo type). You may have to press CD/Disc twice to access CD Changer mode. Your display should now show Disc 1, Track 01 or similar.

9. Connect the USB cable to the USB device. Turn on your car stereo and play some music from your USB device (folders need to be setup). You should hear the sound coming from the car stereo speakers.

10. Once you confirmed the operation of the interface, continue with the installation. If you have trouble with the installation, please see our troubleshooting section.

11. Find a place for the GROM USB adapter. In many cars, the dash offers sufficient room for installation. Note: Make sure you mount the GROM USB adapter in a place with sufficient room so that, when you remount the car stereo, you do not break the adapter. We strongly recommend you mount unit in easy access location

12. You may use the glove box or other spaces on the dash to direct the USB cables away from the unit.

13. Remount your car stereo, making sure it fits securely.

14. Adapter mounting in the trunk (for VW and BMW only)

   (1) Locate trunk mounting cable in your car (usually located in the left side of the car in the back) (2) Disconnect existing CD changer, if any. (3) Attach matching cables

| Note for BMW trunk installations: Some BMW are factory wired for the cellular phone. Except for wire location, the factory cellular phone connector looks identical to the factory 3-pin connector used for the CD changer. The CORRECT 3-pin connector for the CD-Changer has a BROWN wire (ground) in the #1 pin position. Please make certain you use this connector. The INCORRECT factory cellular phone connector has a BROWN wire in the center position – DO NOT USE THIS CONNECTOR. |

V.2.0.1
Congratulations! You have installed the GROM USB adapter and may use it immediately with your USB device, MP3 player, Android phone, or iPod/iPhone/iPad.

2.4 Installation Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereo is not recognizing the GROM USB adapter</td>
<td>Some Honda, Toyota, and Lexus car stereos have to be restarted before the stereo catches the signal</td>
<td>After connecting the adapter, turn the stereo on; turn the ignition off and then back on</td>
</tr>
<tr>
<td>Stereo is not recognizing the GROM USB adapter</td>
<td>External CD changer is present and not disconnected</td>
<td>Make sure to disconnect the external CD changer</td>
</tr>
<tr>
<td>The sound is distorted</td>
<td>External CD changer is present and not disconnected</td>
<td>Make sure to disconnect the external CD changer</td>
</tr>
<tr>
<td>Stereo is not recognizing the GROM USB adapter</td>
<td>Bad cables or cables are not connected properly between the interface box and car stereo.</td>
<td>Check connection and cables making sure they are secure with no bent pins.</td>
</tr>
<tr>
<td>No music is audible from the MP3 player</td>
<td>CD changer is not selected</td>
<td>Make sure CD changer, SAT mode, or AUX is selected (correct key depends on your stereo)</td>
</tr>
<tr>
<td>No power</td>
<td>Bad connection</td>
<td>Check the cable connections.</td>
</tr>
<tr>
<td>For VAG only:</td>
<td>Single black wire on the vehicle-specific harness is not grounded properly.</td>
<td>Make sure black cable is properly grounded</td>
</tr>
<tr>
<td>Stereo is not recognizing the GROM USB adapter</td>
<td>Bus wire may have become loose. Sometimes, when using Posi-Tap clips, the Bus wire may not receive proper connection due to its wire size.</td>
<td>Make sure the Bus wire is securely attached by using a multimeter or slightly tighten the Posi-Tap connector. Refer to the BMWS cable manual.</td>
</tr>
<tr>
<td>Audio is not coming from the speakers.</td>
<td>10-pin audio cable on BMWS harness is not inserted properly.</td>
<td>Make sure that the 10-pin audio cable on BMWS harness is inserted properly, with white stripe or arrow facing up. If radio has 12-pin connector, make sure to skip “1” column of pins when connecting 10-pin GROM connector. Make sure that the 10-pin sound connector on the vehicle cable is correctly aligned. Please refer to the BMWS harness manual.</td>
</tr>
<tr>
<td>Audio is coming only from one speaker</td>
<td>The 10-pin sound connector is not correctly aligned.</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 3 – Usage manual

3.1 Different MODES of GROM-USB3

3.1.1 Different Modes for CD changer emulation only

Please read this part entirely before attempting to change the modes. You will need to perform all the steps below **quickly within 1-2 seconds interval**.

Depending on your GROM firmware version, GROM-USB3 can work in three modes: USB, AUX or RADIO.

**Note**: **RADIO mode will only appear if there is HDR1 detected on EXT2 port**

**Step I.** When you need to switch between the MODES, first you will need to enter into the “MODE CHANGING” state on your car stereo. There are two possible scenarios:

1. The stereo is already in the CD changer mode (GROM USB is activated). **Press FM/AM** -> wait 1-2 second -> **press CD (DISC)**.
2. The stereo is in any other mode (FM, SAT, etc...): **press CD (DISC)** -> wait 1-2 second -> **press FM/AM** -> wait 1 second -> **press CD (DISC)**.

**Step II.** You will hear the voice announcing the currently playing mode (USB or AUX). To switch to the next mode, press **Next Track** button **quickly** (>, ^ or respective button on your car stereo) while the voice prompt is announcing. The next
mode will be announced right after. If you need to select another mode, simply press Next Track button again and so on until you select the desired mode.

**Note:** If you do not hear the voice announcement, it means that you did not press quickly enough and the adapter is not in the “MODE CHANGING” state anymore. Please perform STEP I again.

Once you hear the desired mode announcement, simply wait for 1-2 seconds and the adapter will start operating in that mode.

### 3.1.2 Different MODES of GROM-USB for SAT emulation only

Please read this part entirely before attempting to change the modes.

Depending on your GROM firmware version, GROM-USB can work in three modes: USB, AUX or RADIO.

**Note:** RADIO mode will only appear if there is HDR1 detected on EXT2 port

**Step I.** When you need to switch between the MODES, Simply move to the next SAT band.

i.e. XM1 -> XM2 or XM preset A -> XM preset B -> XM Preset C or SAT1 -> SAT2 -> SAT3

**Step II.** You will hear the voice announcing the currently playing mode (USB or AUX). If you need to select another mode, simply switch to next XM/SAT preset Band again, i.e. XM2 -> X1 until you are in the mode you would like to be in. Once you hear the desired mode announcement, simply wait for 1-2 seconds and the adapter will start operating in that mode.

**Note:** The USB mode and/or AUX mode is not restricted to just one Satellite Radio Band. (i.e. XM1 only USB)

Both can flip places with each other while changing through the modes. Please listen for the announcement to know what MODE you are in.

**Note:** If your car is Nissan/Infinity (with SAT/CAT), Ford/Lincoln/Mercury, Mazda 3,5 08-12, Subaru 08-09, or Honda/Acura with SAT emulation – please use the special instructions that came with your package for the usage/operation instructions.

### 3.2 USB MODE - Android Device Operation

#### 3.2.1 Android Setup and Operation

The GROM-USB3 adapter when in USB mode allows you to connect your Android device directly to the GROM USB port. Scan QR code with your phone to download DashLinQ app from Google Play store. DashLinQ is the car mode app that allows you to integrate your Android phone to car stereo. Play and control, charge while in use. Digital music transmission via standard MicroUSB cable. Once you have DashLinQ installed on your Android device, you can connect your Android to the USB port using your own USB Android connector cable. If the version of your Android software is 2.3 and newer, you may or may not need to have USB Debugging enabled to allow DashLinQ to communicate between your Android and the GROM-USB3. **If DashLinQ does not work with the USB Debugging off, try to turn it on.** If the version of your Android software is older than 2.3, you will need to enable USB Debugging function on your phone.

- To enable/disable USB Debugging, on Android device go to Settings ◊ Applications ◊ Development

V.2.0.1
- Once you connect your Android device to GROM-USB3 and the GROM unit is in USB playback mode, DashLinQ should automatically start playing a song from your Android device. (first time connection message will appear, “Use by default for this USB accessory” please check mark this option.)

- Android Playlists in DashLinQ Local Music/Web Radio/Google Music plugins will be mapped to discs on the stereo. Skip tracks, change disc, fast forward, random, scan controls are identical to USB controls. Text of current song is displayed for stereos that support text for GROM mode.

![Diagram of Android operation]

**Figure 7. Android operation**

- Disc 1 = On The Go
  - Disc 2 =
  - Disc 3 =
  - Disc 4 =
  - Disc 5 =
  - Disc 6 =

**Current Song =**

06_Thriller - King of Pop
Michael Jackson

- Disc 1 will play On The Go playlist on the DashLinQ Local Music plugin. Disc 2 or higher are your regular playlists.
- The files are played in ascending order of the file creation date/time.
- The playlists are sorted in ascending order of the playlist creation date/time, and assigned to a respective virtual disc.
- DashLinQ music plugins can be controlled using the screen of your phone or car stereo/steering wheel controls. It also responds to the gestures. To check what gestures are available go to DashLinQ Music Plugin → Settings → Gestures.

Song/Track info is supported on selected stereos

**USB Audio Streaming** is available for most Android devices with Jelly Bean and newer, Android (4.1+) software. In the case of USB Audio Streaming you will be able to use the media player of your choice, or stream the music through any Android music apps, such as Pandora, TuneIn, Spotify and so on.

- To Stream from other Application, In DashLinQ Application, select “Exit” to exit out of DashLinQ application. Once DashLinQ app is closed, open other music application you wish to listen to and music should play through stereo instead of phone speakers.
- USB Streaming supports Track (previous/next) control from the stereo control buttons
- USB Streaming does NOT support display of Song/Track info.

<<Some HTC model phones are known NOT to support USB Audio streaming. If the music is not playing via USB Audio streaming – it is possible that your phone does not support it.>>

### 3.2.2 Android Operation Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No music is coming from the car speakers or sound is distorted</td>
<td>GROM-USB3 is in the wrong mode</td>
<td>Make sure that you are in the USB playback mode</td>
</tr>
<tr>
<td>You can’t hear the music in DashLinQ</td>
<td>An empty album or playlist is selected on the DashLinQ</td>
<td>Make sure that you select a playlist that has songs and it is not empty.</td>
</tr>
<tr>
<td>Music is not playing</td>
<td>You do not have USB Debugging enabled</td>
<td>To enable USB Debugging, on Android device go to Settings → Applications → Development</td>
</tr>
<tr>
<td>The music is distorted or not playing at all</td>
<td>The external CD changer is present and not disconnected</td>
<td>Make sure to disconnect external CD changer</td>
</tr>
<tr>
<td>The music is playing sporadically, or not playing</td>
<td>The phone’s name contains special characters such as # &quot; ' ? /</td>
<td>Remove special symbols from phone name by going to Settings &gt; General &gt; About &gt; Name</td>
</tr>
</tbody>
</table>

### 3.3 Operation in USB MODE with USB stick

#### 3.3.1 Supported USB Storage Devices

All FAT16/32 formatted storage:
- USB sticks/hard drives

The GROM USB supports only FAT16/32 formatted storage. NTFS is NOT supported!

#### 3.3.2 Supported formats

The GROM-USB supports the following formats:
- MP3 with bitrates up to 320Kbps
- FLAC Lossless up to 24 bits, 48 khz
- WMA with bitrates up to 389Kbps
- AAC / iTunes with bitrates up to 389Kbps
- OGG/Vorbis with bitrates up to 389Kbps
- VBR/CBR

**Note 1:** No digital rights management (DRM)-protected content purchased through major online stores will play directly through the USB-MP3 adapter as such content is encrypted and signed by the media publisher. This includes but is not limited to iTunes, Rhapsody, Zune Marketplace, and MSN. You need to burn such files to a CD and then rip them back with any capable software.

The music purchased from Amazon and iTunes+ is compatible with GROM-USB2 without any modifications.

**Note 2:** AAC files stored on USB Flash Drives may have a delay of 5-10 seconds before the music starts playing.

### 3.3.3 Directories Setup

On your USB portable data medium, create one directory (folder) for each disc your stereo supports; name them with numbers i.e., 1-Pop, 2-Rock, 3-Classic, etc); save all of your music into these directories.

- As soon as you connect the GROM USB adapter to a USB portable data medium, the GROM will translate root directories into virtual discs. Their number depends on the number of discs supported by the specific car stereo.
- We recommend that you have as many directories as possible on a root level as the car stereo will not recognize subdirectories. The GROM itself will enumerate sub-directories and turn them into a flat list of tracks.
- If file names in a certain directory begin with digits, they will be played in ascending order based on the order of those digits in the file names. For example:
  \1-Dance\My songs\  
  1. Track.mp3  
  2. Track.mp3 (will play first according to the number )
- If file names begin with letters, they are played in ascending order of the file creation date/time.
- If root directory starts with the number, the directory will be assigned to a respective virtual disc.

All MP3, WMA, iTunes, and OGG tracks will be enumerated and found once you select the appropriate disc.

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Check USB Drive Setup guide at [http://gromaudio.com/docs/Grom_USB_Setup.pdf](http://gromaudio.com/docs/Grom_USB_Setup.pdf)
3.3.4 Basic Features

The GROM USB adapter has the following functionality:

- All audio files within the root directory are enumerated and treated as TRACKS.
- Only six (6) discs are supported on most car stereos.
- Up to 99 discs are supported on some stereos with DISC UP and DISC DOWN buttons. Note that not all stereos will have this feature.
- The following operations are supported by the GROM USB:
  - Change virtual disc/playlist
  - Change tracks forward and backward
  - Change +/- 10 tracks in SCAN mode
  - Display track # and track title where available
  - Display current track playing time
  - Random and Repeat functionality
  - Restore last positions for up to 4 USB sticks
  - Restore last playlist positions in up to 20 virtual discs

3.3.5 Detailed Operation Instructions

Once the GROM USB is active and playing, the following operations are available:

- Next track
- **Previous track**
- **Fast Forward**
- **Fast Reverse**
- **Play/Pause:** when the stereo is switched to the CD changer mode, the GROM will automatically start playing the last track played on the current USB stick from the last played position.
- **Scan:** allows the skipping of tracks by 10 when set. The next track will jump to current track +10. The previous track will jump to current track -10. This is helpful for skipping through an entire album (usually ~10 songs)
- **Disc Change:** selecting Disc 1-6 or using Disc ^/Disc v will cause the GROM to change the current root directory to the appropriate one based on the disc number.
- **Mix/Random:** plays songs in a shuffle mode through the whole playlist. The track enumeration will show the currently playing track number. When switched off, the playback will continue from the currently playing track.
- **Repeat:** when turned on, it will play the first track in the playlist after the last track is played. If switched off, the playback will continue to the next playlist once the current one has played the last song.
- **Text:** on some stereos, this button will switch over to show the disc or artist of the current track playing.

### 3.3.6 USB Operation Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No music is coming from the speaker</td>
<td>GROM-USB is in the wrong mode</td>
<td>Make sure that the correct mode (USB, iPod or AUX) is selected. Please refer to the chapter 3.1 page 5 of this manual.</td>
</tr>
<tr>
<td>You can’t hear the music from USB</td>
<td>An empty album or playlist is selected on the USB</td>
<td>Make sure that the non-empty album or playlist is selected on the USB</td>
</tr>
<tr>
<td>You can’t hear the music from USB, or the music is distorted</td>
<td>External CD changer is present and not disconnected</td>
<td>Make sure to disconnect external CD changer</td>
</tr>
<tr>
<td>The player is skipping playlists</td>
<td>You have unsupported files and bitrates</td>
<td>Make sure all files in playlist/folder are in supported format and bitrates</td>
</tr>
<tr>
<td>The player is skipping the playlists on USB</td>
<td>You have empty playlists</td>
<td>Make sure there is no empty playlists on the USB drive</td>
</tr>
</tbody>
</table>

### 3.4 USB Operation for the music stored on the iPhone/iPod/iPad or iTunes

The GROM adapter has two modes of operation for the music stored on iPod/iPhone/iPad or iTunes:

#### A. Simple mode:
iOS device stays unlocked. Your iPod/iPhone/iPad can be controlled via its own or via car stereo controls. There is no need to prepare your iPod/iPhone/iPad to play in this mode. The simple mode is always selectable by choosing CD1 (DISC1) from the car stereo. To switch to **advanced mode**, just select any disc other than one. Text is also available for certain stereos.

#### B. Advanced mode:
If your iOS device is iOS8 and up, it will stay unlocked. It the iOS is older than iOS, the iOS device will be locked for the control, and you will use the car stereo/steering wheel controls to change songs/playlists. If your iOS device will be locked, its display will show “OK to disconnect”. In this mode all data is synced between the stereo and iOS device which allows you to see current information such as track time, number and playlist (disc) number. Text is also available for certain stereos. In order to use this mode you have to prepare your iOS device as explained in section 3.4.3. The advanced mode is always on for discs 2-9. To switch to **simple mode** just select DISC 1.
Volume control is available from the steering wheel and from the car stereo controls in both modes.

3.4.1. SIMPLE MODE
In simple mode, your iPod/iPhone/iPad music player behaves in its usual fashion, with the clickwheel and display being functional.

The following controls are possible from the car stereo:
- Next track
- Previous track
- Fast Forward
- Fast Reverse
- Play/Pause

When the stereo is turned to the CD changer mode, the iOS device will automatically start playing.

Turning the stereo off or switching to another source (FM, AM, etc.) or MODE (AUX, RADIO) will cause the iOS device to pause the current track.

- Disk Change

When changing the disk other than 1 the iOS device will switch to the Advanced Mode.

None of the information displayed during the simple mode is related to the song currently playing. The display will show: DISC 1 TRACK xx TIME 00:00. Track information can change from 00-99. Text is supported on some stereos.

3.4.2. ADVANCED MODE
In advanced mode the following operations will be supported:
- Next track
- Previous track
- Fast Forward
- Fast Reverse
- Play/Pause

When stereo is turned into CD changer mode the iOS device will automatically start playing in simple mode at the last position it was left.

- Scan

Allow to skip tracks by 10 when set. Next track will jump to current track+10. Previous track will jump to current track-10.

It is helpful to skip the whole album (usually ~10 songs)

- Disk Change

When you select Disc 2-9, iOS device will stay in Advanced Mode and will resume last playing track in a playlist. Once DISC 1 is selected, your iOS device will switch over to **Simple Mode**

- Mix/Random

When turned on it will allow playing songs in a shuffle mode through the whole playlist. The track enumeration will start from 1. When switched off, track enumeration will be restored to the real order in the playlist.

- Repeat

When turned on, will play first track in the playlist after the last track is played.

The display will show disk number, track number and track time of the currently playing track.

3.4.3 PLAYLIST SET UP FOR ADVANCED MODE for the music stored on iPod/iPhone/iPad or iTunes

To use your iOS device in Advanced Mode you have to define playlists. The number of playlists depends on the stereo (usually 5-8).

We recommend naming the playlists starting with the number:
1- Andy’s songs

V.2.0.1
2-Disco dance
3-Favorites
4-House rhythms
5-Blues

“1- Andy’s songs” will be mapped to DISC 2, “2-Disco dance” will be mapped to DISC 3, and so on. Therefore selecting DISC 2 on car stereo will play “2- Andy’s songs” playlist, DISC 3 will select “3- Disco songs” and so on.

Note: Depending on your stereo, you may set up from 5 to 99 playlists.

We strongly recommend that you organize your songs into playlists and enumerate them for proper operation of this unit.

EMPTY PLAYLISTS MAY ALSO CAUSE UNPREDICTABLE BEHAVIOURS, ESPECIALLY EMPTY PLAYLISTS THAT ARE LOCATED IN THE MIDDLE OF ALL OTHER PLAYLISTS.

All iPod/iPhone/iPad models are compatible with GROM-USB3.

3.5 USB iOS OPERATION FOR THE MUSIC FROM ANY MUSIC APP (such as Pandora, Spotify and others)
When you connect your iOS device to the car stereo via GROM USB connection, you can play the music from any available music application such as Pandora, Spotify or TuneIn. The GROM should be in Simple Mode all the time. You will select Simple Mode by selecting DISC 1 on your car stereo. Next track and previous track controls will be available using car stereo or steering wheel controls. Text will be available on some stereos.

Note that if you are using the media app such as Pandora, Spotify and others – always use DISC 1 of your stereo. If you select DISC 2 and others, the GROM will be placed in Advanced mode, and will try to play the iTunes or music stored on iOS device.

3.6 WHEN CAR IGNITION IS OFF
When you turn your car stereo or car ignition off, the iPod/iPhone/iPad will automatically will go into sleep mode. In the sleep mode, the iPod/iPhone/iPad will still consume power—although very little—from the car battery. There is no need to disconnect the iPod every time you turn off your car. However, it is strongly advised that you disconnect the iPod if you do not plan to operate your car for long periods of time.

3.7 IPOD/IPHONE/IPAD OPERATION TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No music is coming from car speakers</td>
<td>GROM-USB3 is in the wrong mode</td>
<td>Make sure that the correct mode (USB) is selected. Please refer to step 3.1 of this manual</td>
</tr>
<tr>
<td>No music is coming from car speakers</td>
<td>The music player is off</td>
<td>Turn on the music player on your device</td>
</tr>
<tr>
<td>No music is coming from car speakers, or the music is distorted</td>
<td>The external CD changer is present and is not disconnected</td>
<td>Make sure to disconnect external CD changer</td>
</tr>
<tr>
<td>You can’t hear the music from the iPod</td>
<td>An empty album or playlist is selected on the iPod</td>
<td>Make sure that the non-empty album or playlist is selected on the iPod</td>
</tr>
<tr>
<td>The stereo is switching between songs stored on the iOS device and Pandora</td>
<td>While playing Pandora or other music app, you accidentally placed GROM in iOS Advanced mode by switching to DISC 2 and up.</td>
<td>If you are playing Pandora or other music apps, make sure that your stereo is always on Disc 1- Simple GROM iOS Mode</td>
</tr>
<tr>
<td>The music is playing sporadically, or not playing</td>
<td>The phone’s name contains special characters such as # &quot; ' ? /</td>
<td>Remove special symbols from phone name by going to Settings &gt; General &gt; About &gt; Name</td>
</tr>
</tbody>
</table>
3.8 AUX Mode -- AUX-IN, HD Radio or Bluetooth Operation

3.8.1 AUX-IN input – EXT2 port
You can connect any audio source via GROM MiniDin to 3.5mm phone jack cable (please refer to the section 1.6 of this manual, “optional accessories”). The GROM 3.5mm cable connects to the EXT2 port on the GROM-USB3 adapter and provides AUX-IN for any audio device. The charging USB connector on the GROM auxiliary cable (if available) provides 5V USB charging for most mobile devices.

To start using GROM as the auxiliary adapter, simply connect your audio source to the 3.5mm phone jack and then turn the audio source ON. You are using EXT2 for GROM AUX cable. Your stereo should be in the AUX GROM mode. Please refer to the Chapter 3.1 of this manual on the MODE changes.

If the stereo is ON and in the CORRECT MODE – the device will be ready to play. You can control the connected device using its own controls. Please regulate and adjust the volume on the connected device for proper audio levels.

You can connect MP3/DVD player, Satellite and many other audio devices that have 3.5 mm plug. If your device has a different type of connector (RCA, 2.5mm, etc.) you can buy an extension adapter at your local stereo store or on GROM website.

Note: When the ignition is OFF the adapter will not automatically shut down the AUX-IN device. Please make sure to turn off the AUX-IN audio source manually. If you plan not to operate your car for one week and more, please disconnect AUX-IN audio source from the adapter. When you are using GROM-USB in a different mode other than AUX, please turn off AUX-IN audio source.

Please make sure to connect GROM MiniDin to 3.5mm phone jack cable to the correct Extension port (EXT2) on GROM module.

3.8.2 BLUETOOTH Dongle – EXT1/EXT2 port
You can also connect GROM Bluetooth Dongle to the EXT1 or EXT2 port on the GROM-USB adapter for the hands free use of your mobile phone and wireless music play. Please refer to the GROM Bluetooth Dongle manual that is supplied with your Bluetooth Dongle. You can also access the manual online at GROM Audio website:

Note: There is not a select-able Bluetooth MODE when going through the changing of GROM modes. When Bluetooth A2DP (advanced audio distribution profile) music starts playing, other audio will mute/pause automatically and A2DP will play. When Bluetooth A2DP music playback is stopped on your phone, previously selected source will resume playback.

3.8.3 HD Radio Dongle (HDR1) – EXT1/EXT2 port
You can also connect GROM HD Radio Dongle (HDR1) to the EXT2 or EXT2 port on the GROM-USB adapter for HD radio capability integration. With GROM-HDR1 HD radio Dongle you will get the crystal clear sound from compatible FM stations, and access to additional HD sub-stations (HD1, HD2 and so on). For Usage Guide please refer to the GROM HD Radio Dongle manual that is supplied with your HDR1 Module. You can also access the manual online at GROM Audio website: http://gromaudio.com/docs/grom_hd_radio_tuner_manual.pdf

Chapter 4 – Support

Chapter 5 – Warranty

5.1 ONE (1) YEAR LIMITED WARRANTY

This warranty covers any supplied or manufactured parts of the product that, upon inspection by GROM Audio authorized personnel, is found to have failed in normal use due to defects in the material or workmanship. This warranty does not apply to the installation expenses. Attempting to service or modify this unit, operating this unit under conditions other than the recommended will render this warranty void.

Unless otherwise prescribed by law, GROM Audio shall not be liable for any personal injury, property damage and or any incidental or consequential damages of any kind (including water damage) resulting from malfunctions, defects, misuse, improper installation or alteration of this product.

All parts of this product are guaranteed for a period of 1 year as follows:

Within the first 12 months from the date of purchase, subject to the conditions above, GROM Audio will repair or replace the product at their discretion, if it is defective in the material or workmanship.

All customers should contact GROM Audio support team at http://gromaudio.com/support.html and obtain an RMA number and Return Instructions. All defective adapters returned to GROM Audio within warranty period must be accompanied by the original invoice (or copy). All shipping handling charges are non-refundable. Warranty does not cover normal tear and wear, damages due to negligence, improper installation, and operation.

WITHOUT RMA NUMBER THE RETURNS ARE NOT ACCEPTED!

5.2 LICENSE AGREEMENT AND DISCLAIMER

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Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty Disclaimer and Limitation of Liability shall not be applicable to the extent that any federal, state, or local law, which cannot be preempted, prohibits any provision of this Warranty.

Any use of the PRODUCTS where it is illegal to do so, may be used against you as evidence of negligence in the event of an auto accident or other traffic infraction.

5.5 OTHER PROVISIONS

A. INDEMNIFICATION OF GROM AUDIO, ITS AGENTS AND EMPLOYEES. By Purchasing, Installing and Using the Products, You, the End-User, agree to indemnify, defend and hold harmless, GROM AUDIO, and it's Affiliates, Directors, Officers, Agents and Employees from any Liabilities, Damage, Loss, Claim and Expense (including reasonable Attorney's Fees) arising out of the installation and use of the Products.

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You agree that the Courts of California shall have exclusive jurisdiction over the Parties, for all disputes.

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5.6 GROM Audio Compatibility Disclaimer

GROM Audio strives to provide you with a high-quality product while maintaining competitive pricing. We continuously work to test and develop our product, however, in some cases; our interfaces may not be compatible with your application. Due to the wide range of electronics / anomalies found in car stereos, compatibility and/or controls may vary. Should you experience incompatibility issues, you may contact us via our support page. Grom Audio also carries a standard 30 day return policy

5.7 Engine/System Noise Disclaimer

Engine / system noise may occur in some installations and is not easily predictable. Should noise occur with your system, we will take commercially-reasonable steps to diagnose the source of the noise. Depending on the situation, noise suppressors and filters may need to be installed in order to correct the problem. Due to the nature of electronics, noise may not be correctable in all cases.

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