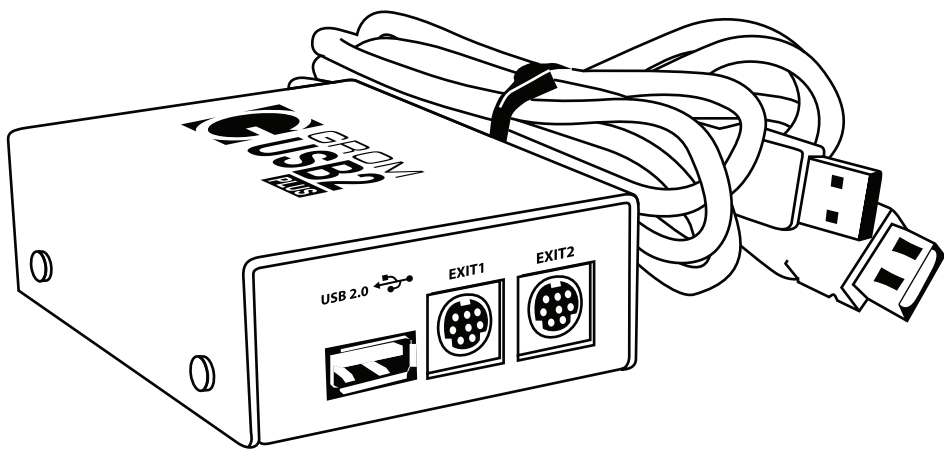


GROM-USB2P

MP3 USB Android car stereo adapter kit

Optional Bluetooth, AUX-In and iPod / iPhone extensions



WWW.GROMAUDIO.COM

[SUPPORT: GROMAUDIO/SUPPORT.HTML](http://SUPPORT:GROMAUDIO/SUPPORT.HTML)



GROM
AUDIO

Car Audio
Integration Solutions



GROM-USB2P MP3 car stereo adapter kit

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Chapter 1 – Introduction

1.1 Subject

Thank you for purchasing the GROM-USB2P adapter. It has been designed to provide endless hours of listening pleasure through most vehicle factory stereos. To ensure that your GROM-USB2P 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 your media collection in your car, including shuffling songs, skipping between tracks, and adjusting the volume—all with only 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 cable.
- **iPod®/iPhone®** play, charge and control via additional iPod cable (sold separately).
- **Bluetooth 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 (both sold separately).

1.3 Main Features in USB or Android Phone Mode

- Ability to listen to songs in car on USB mass storage device (such as flash drive) or Android phone (using free AALinQ app 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). Play lists on Android phone are mapped to Discs.
- Number of “Discs” limited to the car stereo (up to 99 on select stereos).
- Last listened song position within the Playlist is remembered and time position is restored upon ignition cycle.
- Android phone is charged while in car.

1.4 Main Features in iPod/iPhone Mode

- Ability to play, charge and control iPod/iPhone – all using your factory car stereo.
- Playlists on the iPod/iPhone are mapped to an individual “Disc” button on car stereo’s dashboard (different for SAT emulation – please refer to your installation manual).
- Number of “discs” limited to the car stereo (up to 99 on select stereos)
- Last listened song position within the playlist is remembered (may not apply to some iPod)
- Last listened song time position is restored upon ignition cycle (may not apply to some iPod)

1.5 Bluetooth Hands Free and Wireless Audio, AUX-IN 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).
- AUX-IN 3.5mm audio connector for any audio source, and additional 5V charging port.

1.6 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)

1.7 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

1.8 Completeness and connection of set

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



1. GROM USB2P interface



2. One USB 3FT 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:



GROM compatible iPod cable



AUX MiniDin 3.5mm USB charge cable



GROM Bluetooth Dongle

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):

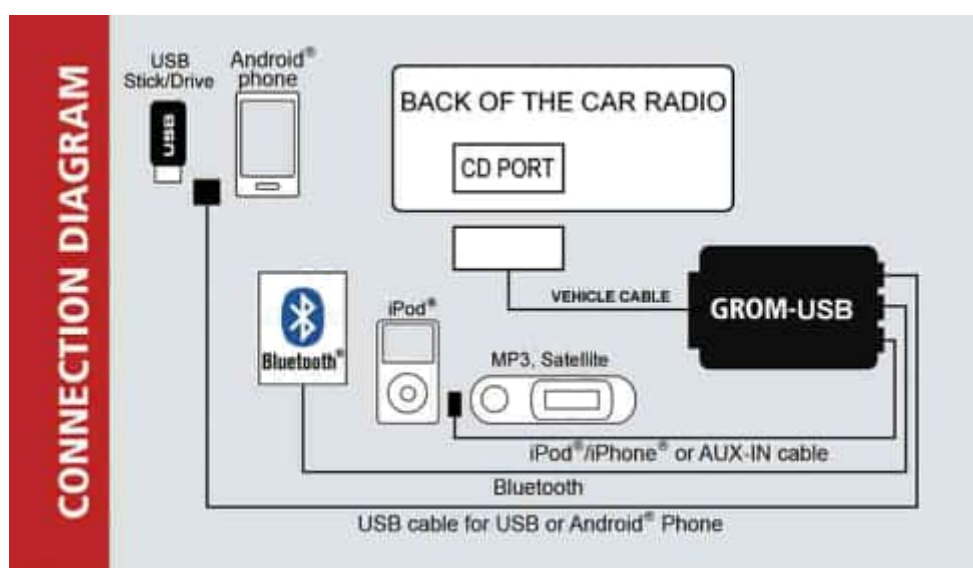


Figure 3. Basic wiring diagram.

1.9 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. SAT if present may need to be disconnected in some case.
- 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/Infiniti 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>.

1.10 EXT1/EXT2 ports

Please refer to the picture below for the proper connection of the accessories to the EXT1/EXT2 ports on GROM-USB2P module.

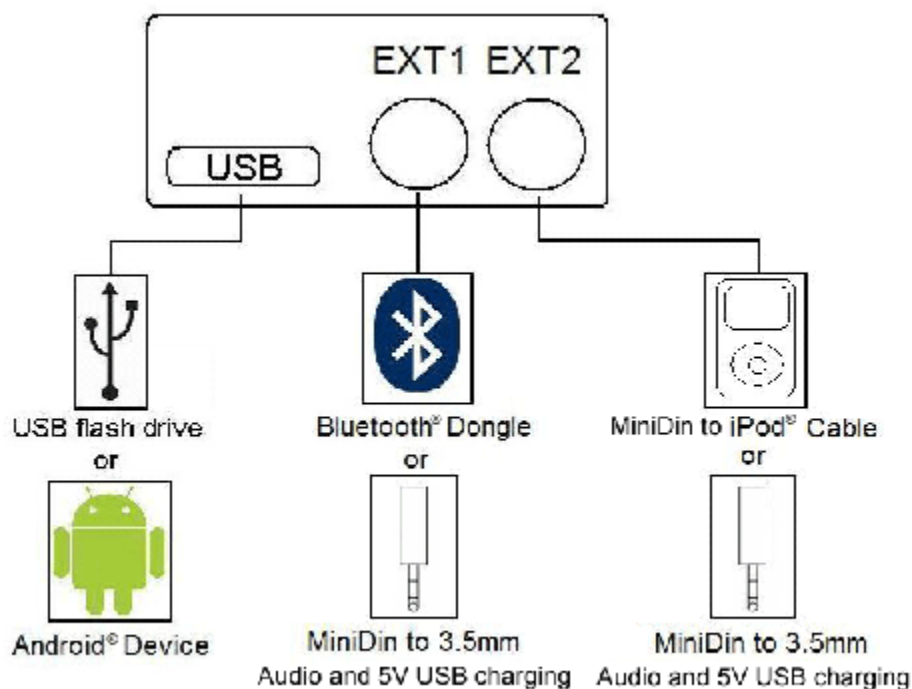


Figure 4. EXT ports, accessories connection.

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.

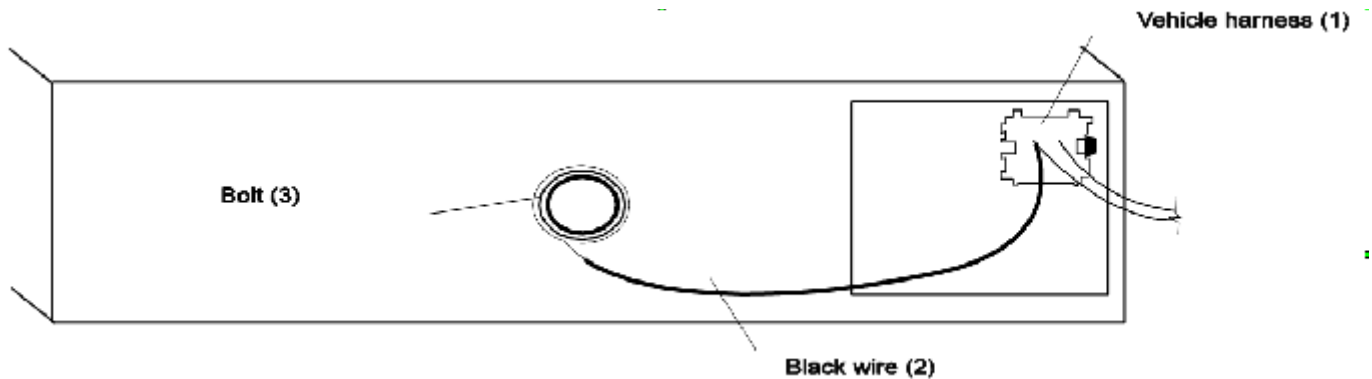


Figure 5. VW/Audi/Seat/Skoda Connection Scheme

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.

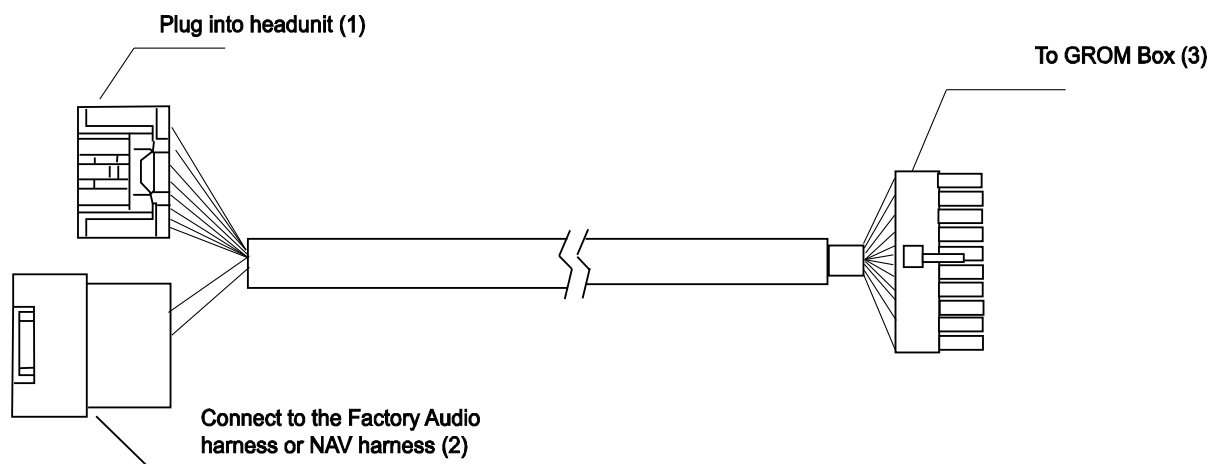


Figure 6. Connection Toyota/Lexus/Scion and Honda/Acura

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)

- Locate trunk mounting cable in your car (usually located in the left side of the car in the back)
- Disconnect existing CD changer, if any.
- 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.**

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

Symptom	Cause	Remedy
Stereo is not recognizing the GROM USB adapter	Some Honda, Toyota, and Lexus car stereos have to be restarted before the stereo catches the signal	After connecting the adapter, turn the stereo on; turn the ignition off and then back on
Stereo is not recognizing the GROM USB adapter	External CD changer is present	Make sure to disconnect the external CD changer
Stereo is not recognizing the GROM USB adapter	Bad cables or cables are not connected properly between the interface box and car stereo.	Check connection and cables making sure they are secure with no bent pins.
No music is audible from the MP3 player	CD changer is not selected	Make sure CD changer, SAT mode, or AUX is selected (correct key depends on your stereo)

Symptom	Cause	Remedy
No power	Bad connection	Check the cable connections.
For VAG only: Stereo is not recognizing the GROM USB adapter	Single black wire on the vehicle-specific harness is not grounded properly.	Make sure black cable is properly grounded
For BMW S (dash install) only: Stereo is not recognizing the GROM USB adapter	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.	Make sure the Bus wire is securely attached by using a multimeter or slightly tighten the Posi-Tap connector. Refer to the BMW S cable manual.
Audio is not coming from the speakers.	10-pin audio cable on BMWS harness is not inserted properly.	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.
Audio is coming only from one speaker	The 10-pin sound connector is not correctly aligned.	Make sure that the 10-pin sound connector on the vehicle cable is correctly aligned. Please refer to the BMWS harness manual.

Chapter 3 – Usage manual

3.1 Different MODES of GROM-USB (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-USB can work in two or three modes: USB, AUX (EXT) or iPod.

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, iPod 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.

Note: If your car is Nissan/Infiniti (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 Operation

3.2.1 Android Setup and Operation

The GROM-USB2P adapter when in USB mode allows you to connect Android device directly to the GROM USB port. You will need the GROM AALinQ app available on the Google Play store / Android marketplace at <https://play.google.com/store/apps/details?id=com.gromaudio.aaling> . Once you have AALinQ installed on your Android device, you can connect your Android to the USB port using your own or provided USB Android connector cable. If the version of your Android software is 2.3 and newer, you will need to have USB Debugging disabled (off) to allow AALinQ to communicate between your Android and the GROM-USB2P. The USB port will also charge most Android devices (not all supported). If the version of your Android software is older than 2.3, you will need to enable USB Debugging function on your phone.

USB Audio Streaming is available for most Android devices with Jelly Bean Android software. In the case of USB Audio Streaming you will not need AALinQ media player, 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 enable USB Debugging, on Android device go to Settings → Applications → Development
- Once you connect your Android device to GROM-AND2 and the Grom unit is in USB playback mode, AALinQ should automatically start playing a song from your Android device.
- Android and USB stick functionality is essentially identical. Playlists on AALinQ 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.
- **Disc 1 will play on the GO platlist on the AALinQ app, Disc 2 or higher are your other premade playlists.**
- If filenames in a certain playlist begin with digits, they will be played in ascending order based on the order of those digits in the filenames. For example:
V2-kpop\
02. Alive.mp3
01. Blue.mp3 (will play first according to the number)
- If filenames begin with letters, they are played in ascending order of the file creation date/time.
- If playlist starts with a number, the playlist will be assigned to a respective virtual disc.

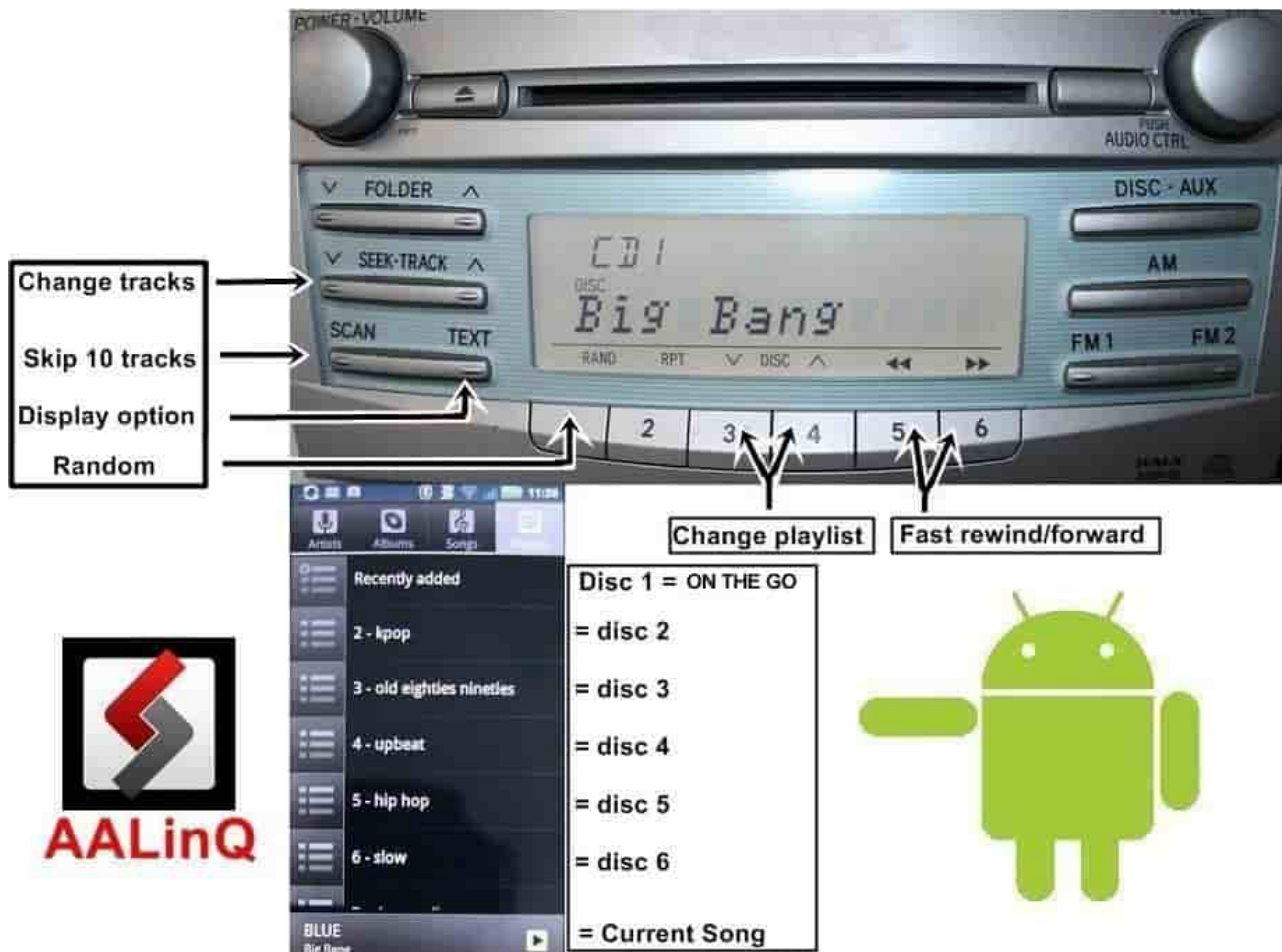


Figure 7. Android operation

3.2.2 Android Operation Troubleshooting

Symptom	Cause	Remedy
No music is coming from the car speakers or sound is distorted	GROM-USB2P is in the wrong mode	Make sure that you are in the USB playback mode
You can't hear the music in AALinQ	An empty album or playlist is selected on the AALinQ	Make sure that you select a playlist that has songs and it is not empty.
The music is distorted	You have more than one device (USB or AUX) connected at the same time	Please make sure that you connected only one device to GROM interface. Disconnect all other devices if present.
Music is not playing	Wrong USB Debugging settings	To enable/disable USB Debugging, on Android device go to Settings → Applications → Development

3.3 Operation in USB MODE

3.3.1 Supported USB Storage Devices

All FAT16/32 formatted storage:

- USB sticks/hard drives
- Android phone with AALinQ app (most supported)

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:

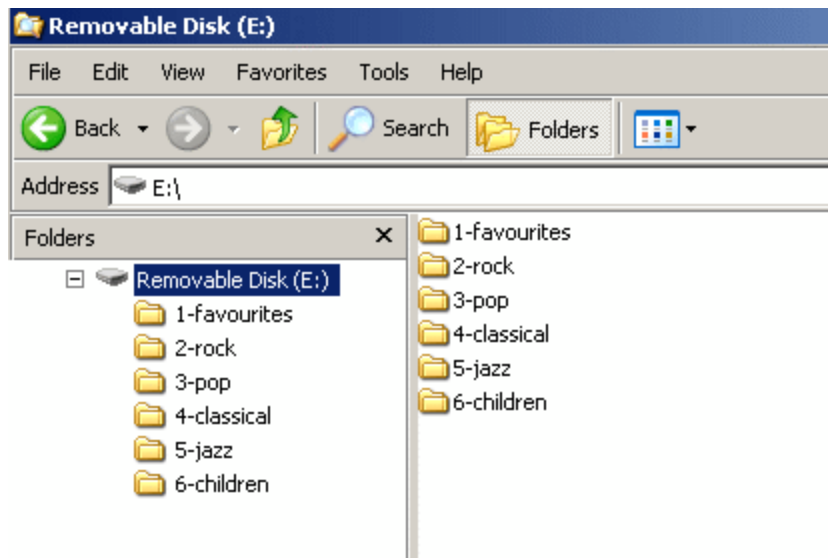


- MP3 with bitrates up to 320Kbps
- WMA with bitrates up to 389Kbps
- AAC / iTunes with bitrates up to 389Kbps
- OGG/Vorbis with bitrates up to 389Kbps
- VBR/CBR

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 filenames in a certain directory begin with digits, they will be played in ascending order based on the order of those digits in the filenames. For example:
 \1-Dance\My songs\
 1. Track.mp3
 2. Track.mp3 (will play first according to the number)
- If filenames 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.

Check USB Drive Setup guide at http://gromaudio.com/docs/Grom_USB_Setup.pdf

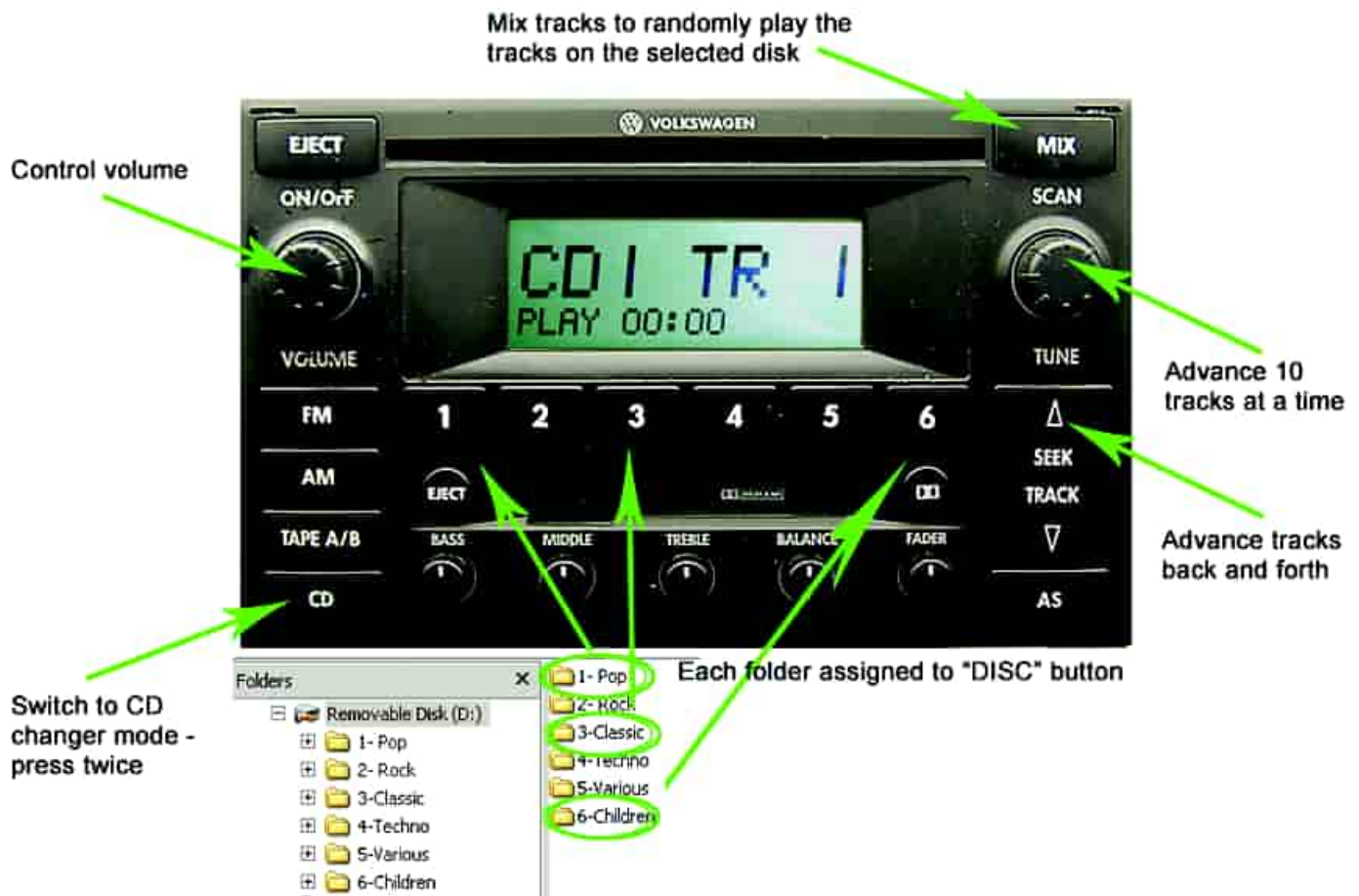


Figure 8. Modes operation

Note: The **Figure 8** picture is for reference only; different stereos may have different operational buttons. Please check your manual or contact tech support at <http://gromaudio.com/support.html>

3.3.4 Basic Features

The GROM USB adapter has the following functionality:

- Every directory in a root of the USB portable data medium becomes a virtual disc. Playlist on Android become virtual disc. Please note: directories with non-audio files (e.g., pictures, documents) located in the root will be recognized as empty virtual discs.
- 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:
 - o Change virtual disc/playlist
 - o Change tracks forward and backward
 - o Change +/- 10 tracks in SCAN mode
 - o Display track # and track title where available
 - o Display current track playing time
 - o Random and Repeat functionality
 - o Restore last positions for up to 4 USB sticks
 - o 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:** playback will switch to the next song and the car stereo track number will represent the song number from the current playlist.
- **Previous track:** playback will switch to the previous song and the car stereo track number will represent the song number from the current playlist.
- **Fast Forward:** the GROM will start fast forwarding the current track forward. The time on the car stereo will represent the actual position within the audio track.
- **Fast Reverse:** the GROM will start rewinding the current track backward. The time on the car stereo will represent the actual position within the audio track.
- **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.

3.3.7 USB Operation Troubleshooting

Symptom	Cause	Remedy
No music is coming from the speaker	GROM-USB is in the wrong mode	Make sure that the correct mode (USB, iPod or AUX) is selected. Please refer to the chapter 3.1 page 5 of this manual.
The music is distorted.	GROM-USB is in the wrong mode	Make sure that the correct mode (USB, iPod or AUX) is selected. Please refer to the chapter 3.1 page 5 of this manual.
You can't hear the music from USB	An empty album or playlist is selected on the USB	Make sure that the non-empty album or playlist is selected on the USB
The music is distorted	EQ or BASS boost options are turned ON on the iPod	Make sure all EQ and BASS boost options are turned OFF on your iPod
The music is distorted	You have more then one device (USB or AUX) connected at the same time	Please make sure that you connected only one device to GROM interface (USB, iPod or AUX). Disconnect all other devices if present.
The player is skipping the playlists on USB	You have empty playlists	Make sure there is no empty playlists on the USB drive

3.4 iPod/iPhone MODE Operation

The GROM adapter has two modes of iPod/iPhone operation:

A. Simple mode:

iPod stays unlocked. Your iPod can be controlled via its clickwheel or via car stereo controls. The information displayed on your car stereo does **not** represent the actual song position on the iPod (the song's number). There is no need to prepare your iPod 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. Please refer to the section 3.9.1. of this manual for the description of the supported operations in the Simple Mode.



B. Advanced mode:

Your iPod is locked for control and only operated via car stereo buttons. In this mode all data is synched between the stereo and iPod 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 iPod as explained below.

The advanced mode is always on for disks 2-9. To switch to **simple mode** just select DISC 1

“Ok to disconnect” is shown on the iPod display while it is connected to this unit. The clickwheel of the iPod is disabled when in this mode.

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 behaves in its usual fashion, with the clickwheel and display being functional.

The following controls are possible from the car stereo:

- Next track

When pressed on the car stereo, the iPod will jump to the next song and the car stereo track number will increase by one number (1).

- Previous track

When pressed on the car stereo, the iPod will jump to the previous song and the car stereo track number will decrease by one number (1).

- Fast Forward

When pressed, the iPod will start moving quickly through the current track.

- Fast Reverse

When pressed, the iPod will start rewinding the current track.

- Play/Pause

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

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

- Disk Change

When changing the disk other than 1 the iPod 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.

3.4.2. ADVANCED MODE

In advanced mode iPod controls will be locked and the following operations will be supported:

- Next track

When pressed on car stereo, iPod will jump to the next song and car stereo track number will represent song number in a current playlist

- Previous track

When pressed on car stereo, iPod will jump to the previous song and car stereo track number will represent song number in a current playlist

- Fast Forward

When pressed iPod will start rewinding current track forward. Time on car stereo will represent actual position within the audio track

- Fast Reverse

When pressed iPod will start rewinding current track backward. Time on car stereo will represent actual position within the audio track

- Play/Pause

When stereo is turned into CD changer mode the iPod 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, iPod will stay in Advanced Mode and will resume last playing track in a playlist. Once DISC 1 is selected, iPod 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

To use your iPod 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
- 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.

If your iPod does not have playlists/songs, it may cause unpredictable outcomes and improper operation of the unit.

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

Note for iPhone users: Once connected to the GROM adapter, your iPhone may register a message stating "This accessory is not made to work with iPhone." It may ask if you want to "Turn ON the Airplane Mode." Please answer "NO". If the stereo still does not recognize the iPhone, please restart the iPhone

Note for iPhone with iOS4 and up: Once connected to the GROM adapter, your iPhone will register a message stating "This accessory is not optimized for this iPhone. You may experience noise caused by cellular interference and a decrease in the cellular signal strength ". Please hit "Dismiss". If the stereo still does not recognize the iPhone, please restart the iPhone.

iPod/ iPhone with "Lightning style" connector are compatible with the GROM car kits. To use the GROM-MST3P kit with such iPhone or iPod you will need to get the 30-pin to Lightning style converter adapter from Apple®.

3.4.4 WHEN CAR IGNITION IS OFF

When you turn your car stereo or car ignition off, the iPod will automatically will go into sleep mode. In the sleep mode, the iPod 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.**

3.4.5 IPOD/IPHONE OPERATION TROUBLESHOOTING

Symptom	Cause	Remedy
No music is coming from car speakers	GROM-USB is in the wrong mode	Make sure that the correct mode (USB, iPod or AUX) is selected. Please refer to step 3.1 of this manual
The music is distorted.	GROM-USB is in the wrong mode	Make sure that the correct mode (USB, iPod or AUX) is selected. Please refer to step 3.1 of this manual

You can hear the music from the iPod but you can't control it from the stereo	iPod cable connected to wrong port	Connect ipod cable to EXT2 port on the RIGHT
You can't hear the music from the iPod	An empty album or playlist is selected on the iPod	Make sure that the non-empty album or playlist is selected on the iPod
The music is distorted	EQ or BASS boost options are turned ON on the iPod	Make sure all EQ and BASS boost options are turned OFF on your iPod
The music is distorted	You have more then one device (USB or AUX) connected at the same time	Please make sure that only iPod/iPhone is connected to GROM interface. Disconnect all other USB/AUX devices (if present).

3.5 AUX Mode -- AUX-IN or Bluetooth Operation

3.5.1 AUX-IN input

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 EXT1 or EXT2 port on the GROM-USB2P 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.

A. You are using EXT1 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.

B. You are using EXT2 for GROM AUX cable. Your stereo should be in the **iPod** 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.

3.5.2 BLUETOOTH Dongle – EXT1 port

You can also connect GROM Bluetooth Dongle to the **EXT1** 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: http://gromaudio.com/docs/bluetooth_manual.pdf

Please make sure to connect Bluetooth Dongle to the correct Extension port (EXT1) on GROM module.



Chapter 4 – Support

For technical support please visit us at <http://gromaudio.com> and fill out the form. Someone will get back to you shortly.

Please check our FAQ at <http://gromaudio.com/support/faq.html>, videos and installs at <http://www.gromaudio.com/installs/index.html>

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.

B. GOVERNING LAW. THIS AGREEMENT and all Purchases hereunder shall be governed by, and construed under the laws of the State of California, without regard to conflicts of law rules.

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

C. FORCE MAJEURE. GROM shall not be liable for any delay or failure in performance caused by or resulting from acts of God, fire, flood, storms, earthquakes, tornado, other acts of nature, any accidents, riots, wars, government intervention, embargoes, strikes, labor difficulties, equipment failures, or any other causes beyond the control of GROM AUDIO. Quantities are subject to availability.

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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.

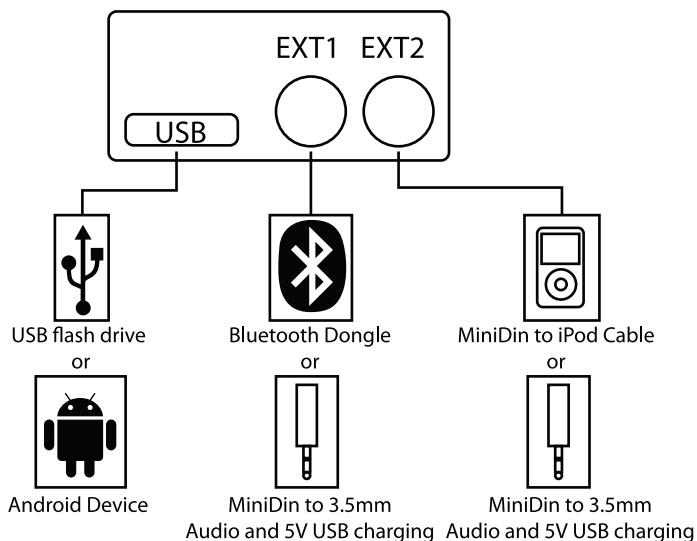
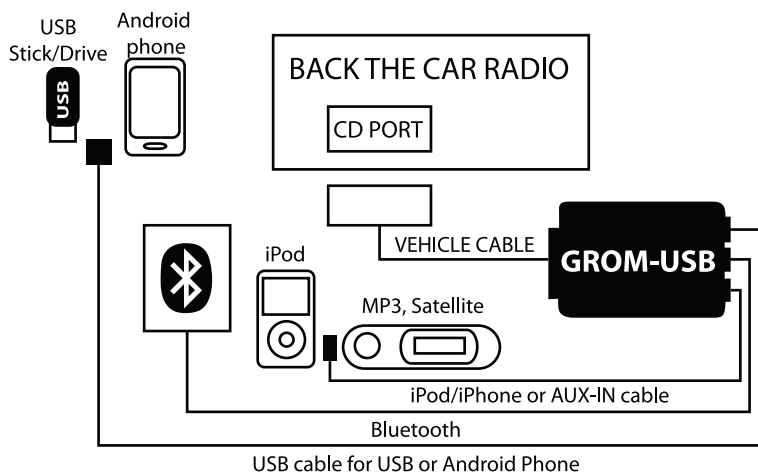
5.7 Engine/System Noise Disclaimer

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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CONNECTION DIAGRAM



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