

I. Installing the SoundRacer in your Car

1. Apply the parking brake and set the gear selector in neutral.
2. Place the SoundRacer in the cigarette lighter 12/24V socket and turn on the ignition key. The digital display, indicating the FM frequency, should light up automatically.
3. Connect the included stereo cable to the car AUX input and the SoundRacer AUX output.

*If your car doesn't have an AUX input, select the Radio's FM band and find an empty frequency. Tune the SoundRacer to the same frequency by pressing the + or – buttons. At this point, you should hear an idling engine sound through the car speakers. Adjust the volume in order to clearly hear the sound.
4. Start the car and rev up to 2500 – 3000 rpm by quickly pressing down the pedal and then releasing it. You should hear a short beep in the speakers when the engine is slowing down. The beep indicates that the SoundRacer has found the alternator signal. After about 3-5 seconds, when the engine is down to the idling rpm, you should hear two more beeps indicating that SoundRacer has detected the idling rpm.
5. If you heard these beeps, you are “good to go” and have successfully connected SoundRacer to your vehicle.

II. Tips and Tricks

Engine sound: Adjust volume, treble and bass on the radio to get the best sound experience in your car. More bass brings more powerful sound effect. Just be careful not to blow the speakers.

Engine speed: If you want the SoundRacer “engine” to run on lower rpm, you can adjust this by locking the idling to a higher rpm. This is done by not releasing the throttle fully during startup, after the first beep you need to keep the rpm at approximately 1500 – 2000 rpm. This is useful for highway driving.

III. How SoundRacer works

The technology in SoundRacer is based on signals (electrical noise) in the electrical cables from the AC alternator that is used in most cars today. The signal's frequency follows the engine speed and the SoundRacer detects the signal and transforms it to a simulated rpm. The increase in simulated rpm is then multiplied with a factor in order to produce a more exciting impression of acceleration without running the car's engine at high rpm. Based on the changes in rpm, SoundRacer produces different sounds; idling, acceleration at lower rpm, acceleration at higher rpm and deceleration.

The engines sounds are transferred to the car radio by the built-in FM transmitter.

IV. Streaming music from your mobile phone or tablet

Use the included 3.5mm stereo cable to connect your mobile phone, tablet, or MP3 player to the SoundRacer unit. The SoundRacer will transmit the music to your car radio system. Engine sound is almost totally muted during music streaming.

V. Troubleshooting

SoundRacer works fine in most car models on the market. It will not work in hybrid or electric cars.

If you, however, should experience any problem try the following:

RPM Tracking

If you do not hear a first beep or two beeps, then the SoundRacer is having a problem detecting the alternator signal and rpm. This can happen if the alternator signal is too weak compared to other electrical noise on the 12 V system.

If there is no electrical load on the alternator, the signal may be too weak. (It may happen that the SoundRacer is working fine a few minutes after the start-up of the engine while the alternator is still charging the battery and then fails to follow the engine's rpm when the battery gets fully charged)

If there is no electrical load on the alternator, the signal may be too weak in certain cars. It may help to turn on the rear window heater, headlights, A/C, or other electric equipment in order to put load on the alternator.

In other cars, the noise level can be too high on the 12V system. In such case, try to switch off any unnecessary electric equipment.

FM radio reception

The SoundRacer's engine sound may be weak or interrupted in some cars. One reason can be that the SoundRacer is too far away from the radio antenna or that the windows have a metallic coating that prevents the radio signal at the antenna from reaching the SoundRacer.

If problems persist, one solution to resolve reception problems is to relocate the SoundRacer to a different position in the car. Occasionally, a radio station will be too close to the frequency you have selected on the SoundRacer, if that is the case, try to find a frequency further away from any present radio station.

The best solution is to connect the SoundRacer direct to the radio's 3.5mm AUX input jack. Just connect the provided cable to the AUX output/input socket on the SoundRacer.

This is also helpful in areas with many FM radio stations where it can be difficult to find a free FM frequency. It may also provide for a better sound quality in some cars. AUX output is implemented on all SoundRacer V10J and on V8, V12 manufactures 2012.

By government regulations, the FM transmission power has to be below a certain level in products such as SoundRacer. SoundRacer meets these requirements.