



# **RS-1 Owner's Manual**

for the

## **Mercedes-Benz CM2191 Radio**



Document Version: 0.1

June 8, 2025

# Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Limited Warranty</b>	<b>2</b>
<b>3</b>	<b>Quick Start Guide</b>	<b>3</b>
<b>4</b>	<b>Operating Instructions</b>	<b>4</b>
4.1	Audio Source Selection . . . . .	4
4.2	Bluetooth Connection . . . . .	4
4.3	Playback Controls . . . . .	4
<b>5</b>	<b>Settings</b>	<b>5</b>
5.1	Status Sounds Enabled . . . . .	5
5.2	5-Band Equalizer . . . . .	5
<b>6</b>	<b>Diagnostics Collection</b>	<b>6</b>
<b>7</b>	<b>Firmware Updates</b>	<b>6</b>

## 1 Introduction

Thank you for purchasing an RS-1 Bluetooth Retrofit Kit from Cantaloupe Radio. The RS-1 is a first-of-its-kind product designed to bring high-quality Bluetooth audio to a wide number of classic radios without sacrificing any of their period charm.

If your RS-1 kit is not yet installed in your radio, scan the QR code below to view our installation guides, or seek professional installation from Cantaloupe Radio or an official dealer. After installation, keep the retrofit notice card that was included in your kit with your vehicle owner's manual in the globebox. This way, the modification is documented for future owners of the vehicle.

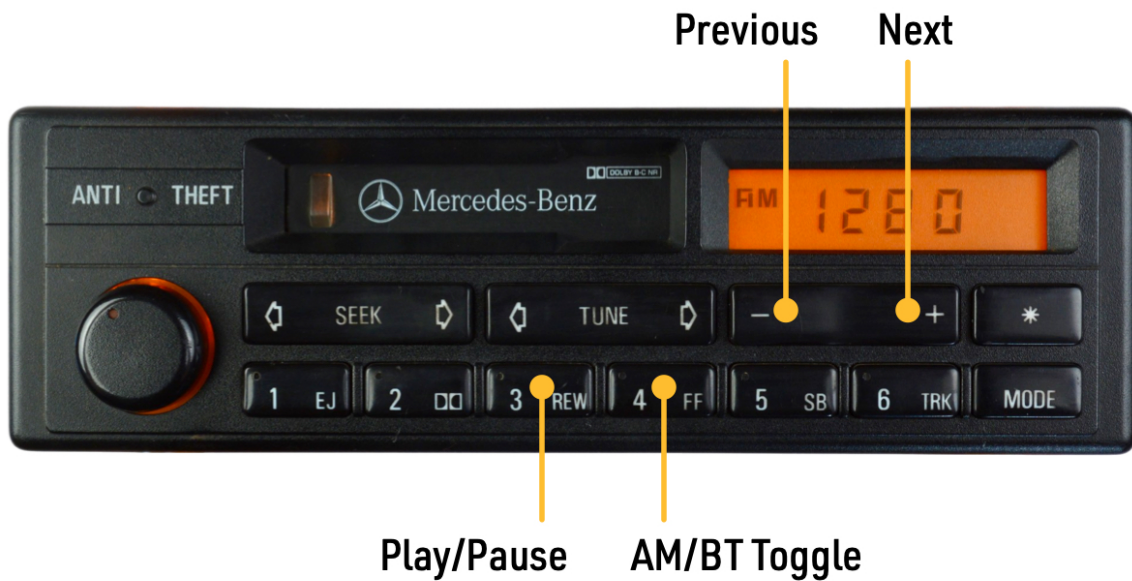


## 2 Limited Warranty

Your RS-1 is covered by a limited warranty for 1 year from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by incorrect installation, misuse, or modifications. If you have any issues with your RS-1, please contact Cantaloupe Radio for assistance at [support@cantalouperadio.com](mailto:support@cantalouperadio.com).

### 3 Quick Start Guide

1. Power on the radio.
2. Open your phone's Bluetooth settings and connect to "Cantaloupe Radio RS-1".
3. Turn your phone's volume all the way up.
4. Press the "MODE" button on the radio to select AM.
5. Start playing media from your app of choice. Use the buttons below to control playback and the radio's source.



## 4 Operating Instructions

### 4.1 Audio Source Selection

The RS-1 is designed to preserve all original audio sources in the radio. This means AM, FM, cassettes, and WB all function alongside Bluetooth.

This is achieved by Bluetooth and the actual AM tuner "sharing" the AM source selection on the radio. When the "MODE" button is pressed such that "AM" is shown on the display, the audio source will either be Bluetooth or the actual AM tuner. To toggle between the two, press the number "6" button on the radio while the AM source is selected. This selection is retained through power cycles.

Insertion of a cassette automatically switches to the cassette source as it did originally. Selection of FM and WB sources is also unchanged.

### 4.2 Bluetooth Connection

The RS-1 does not require any special pairing mode to enter before connecting a mobile device. The module is always ready to connect whenever a device is not already connected. To connect, open your device's Bluetooth settings and connect to "Cantaloupe Radio RS-1".

After initial connection, the RS-1 will automatically connect to the last device used when the radio is powered on, and stores the 5 most recently connected devices to try if the last device is not available.

### 4.3 Playback Controls

For convenience, the RS-1 supports Bluetooth playback controls using the radio's buttons while the Bluetooth source is selected. The following functions are supported:

- **Play/Pause:** Press the number "3" button to play or pause the current track.
- **Previous:** Press the "-" button to skip to the previous track.
- **Next:** Press the "+" button to skip to the next track.

Note that the previous and next buttons are shared with the radio's EQ settings menu (bass, treble, etc.). When the EQ menu is activated by pressing the star button at the top right, the "-" and "+" buttons will adjust the EQ settings as normal. When the EQ menu goes away, they function as previous and next track.

## 5 Settings

There are a few user settings that can be changed on the RS-1. To adjust these settings, you'll need our desktop application, *Dashboard*, available for Mac and Windows.

It's best to install *Dashboard* on a laptop since you'll need to bring it near the vehicle to connect over Bluetooth. The laptop needs to support Bluetooth 4.0 or higher - anything from the last 10 years should be fine. Download and install the *Dashboard* app from our website:

[cantalouperadio.com/dashboard-app](http://cantalouperadio.com/dashboard-app).

Once installed, launch the app and bring your computer to the vehicle. Power on the radio. Within a few seconds, the app should detect the RS-1 and connect to it. Under the "Settings" tab, you'll see a few settings:

### 5.1 Status Sounds Enabled

Since the RS-1 has no control over the radio's display, it makes use of a few sound and speech to help indicate its status. These are:

- **Bluetooth Connected:** A short sound plays when a device connects.
- **Bluetooth Disconnected:** A short sound plays when a device disconnects.
- **Source Toggled to AM:** A verbal "AM" is spoken when the AM/BT toggle button is pressed to switch to AM.
- **Source Toggled to Bluetooth:** A verbal "Bluetooth" is spoken when the AM/BT toggle button is pressed to switch to Bluetooth.

These sounds can be disabled by unchecking the "Enable Status Sounds" checkbox in the *Dashboard* app if you'd prefer them be silent.

### 5.2 5-Band Equalizer

The RS-1 includes a built-in 5-band equalizer to give you more sound-shaping options than the factory EQ and help you get the most from your radio and speakers. The EQ controls are available under the "Settings" tab in the *Dashboard* app.

The equalizer contains the following bands with gains that can be adjusted from -20dB to +20dB. Each band's corner or center frequency can also be adjusted.

1. **Bass:** Low-shelf filter
2. **Low Mid:** Peaking filter
3. **Mid:** Peaking filter
4. **High Mid:** Peaking filter
5. **Treble:** High-shelf filter

The equalizer is applied to all audio sources (Bluetooth, AM, FM, and cassette). To disable the equalizer, deselect the "Enable EQ" checkbox in the *Dashboard* app. This will bypass EQ processing.

## 6 Diagnostics Collection

The RS-1 has the ability to collect diagnostics information and save crash data should a crash ever occur. If you are experiencing issues with your RS-1, please contact Cantaloupe Radio at [support@cantalouperadio.com](mailto:support@cantalouperadio.com). If diagnostics are needed, we may ask you to collect them. Diagnostics collection is performed using the *Dashboard* app by doing the following:

1. Launch the *Dashboard* app and bring it to the vehicle.
2. Power on the radio and wait for *Dashboard* to connect.
3. Select the "Utilities" tab then click "Collect Diagnostics".
4. Diagnostics will be collected and retrieved from the RS-1. The collection status will be shown as the collection progresses. Once complete, a small form will appear asking for your name, email, and brief description of the issue. Please fill these in and press "Submit".

## 7 Firmware Updates

To support future features or improvements, the RS-1 can be updated wirelessly using the *Dashboard* app. See the *Dashboard* app page linked above for information on the latest firmware version available.

In the *Dashboard* app, you can check your current firmware versions in the upper right corner, shown in the "Firmware Version" and "Coprocessor Version" fields.

When a new firmware version is available, do the following to install it:

1. Download the firmware .zip file from the firmware downloads page. Unzip the file and you'll have a file ending in ".crbin".
2. Launch the *Dashboard* app and bring it to the vehicle.
3. Power on the radio and wait for *Dashboard* to connect.
4. Select the "Utilities" tab then click "Update Firmware" and then "Select File". Select the .crbin file you downloaded and press "Open".
5. The update will begin. It can take several minutes to complete and will go through a few phases. The status is shown as the update progresses. Do not power off the radio or disconnect the RS-1 during this time.
6. When the update completes, the radio will automatically restart, and *Dashboard* will reconnect and show the new firmware versions.