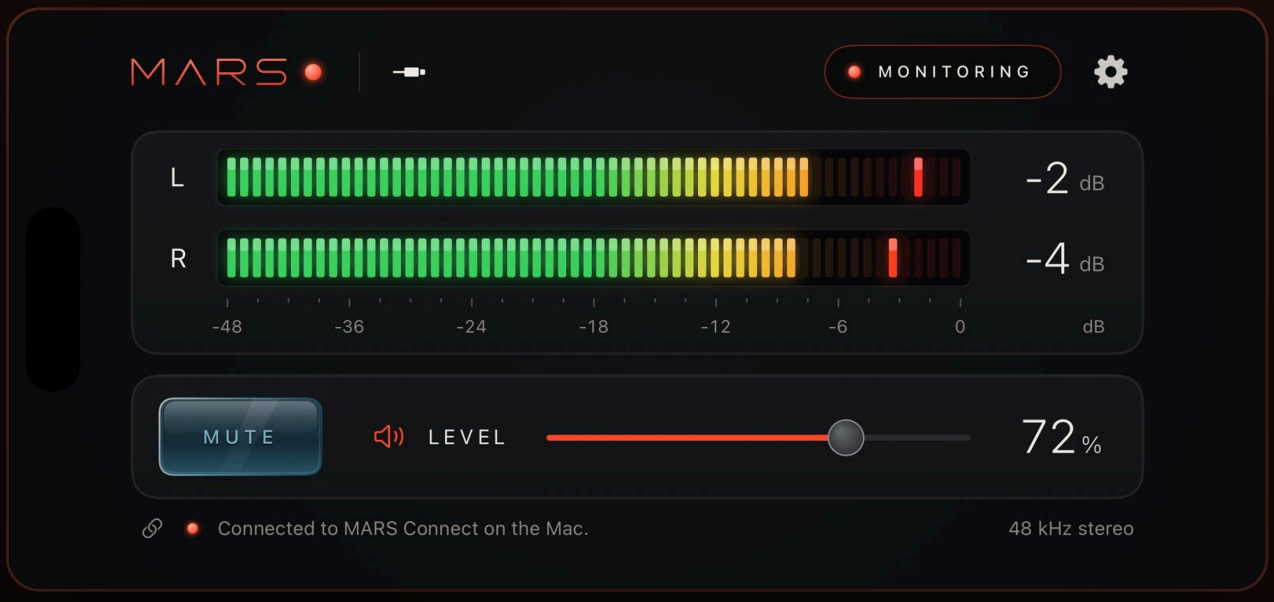
MARS

MOBILE AUDIO REFERENCE SPEAKER

User Manual

Hear your mix on a phone.

MARS plays the output of your DAW live on the built-in speaker of an Android phone, an iPhone or an iPad, through a USB cable from your Mac.



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1 What MARS is

Most music and video is heard on a phone. Checking a mix there usually means exporting a file, sending it to the phone and playing it, again for every change. MARS removes those steps: the phone becomes a speaker for your Mac, and you hear the mix on it while you work, as often as you like, switching between your studio monitors and the phone.

There are two free apps:

- **MARS** on the phone or iPad: it plays the audio on the device's own speaker and shows a stereo level meter.
- **MARS Connect** on the Mac: it installs an audio output called **MARS**. Whatever your DAW or your Mac plays to that output goes to the phone over the USB cable.

The audio travels at 48 kHz stereo with low latency. MARS always plays on the built-in speaker, never on headphones, Bluetooth or AirPlay: the point is to hear what a listener hears on that speaker.

2 What you need

- **A phone or tablet:** an Android phone with Android 7.0 or later, or an iPhone or iPad with iOS or iPadOS 16 or later.
- **A Mac** with macOS 13 Ventura or later, Apple silicon or Intel, with MARS Connect installed.
- **A USB data cable** between the phone and the Mac. Charge-only cables do not carry data and do not work.

On Android you can also skip the Mac and feed MARS from an audio interface connected to the phone: see chapter 9.

3 Install MARS Connect on the Mac

Download the installer from marcoaugustocomba.com/mars/#mac. One package installs both MARS Connect and the MARS audio device. It is signed and notarized, so it opens like any Mac app.

1. Close your DAW: while the audio device is installed, audio stops for a moment in every app.
2. Double-click the package, follow the installer and confirm with your password.
3. At the end MARS Connect opens in the menu bar. When macOS asks, **allow it to use the microphone**: this is how MARS Connect reads what your apps play to the MARS output. It never listens to a microphone.

The same package also updates an earlier version.

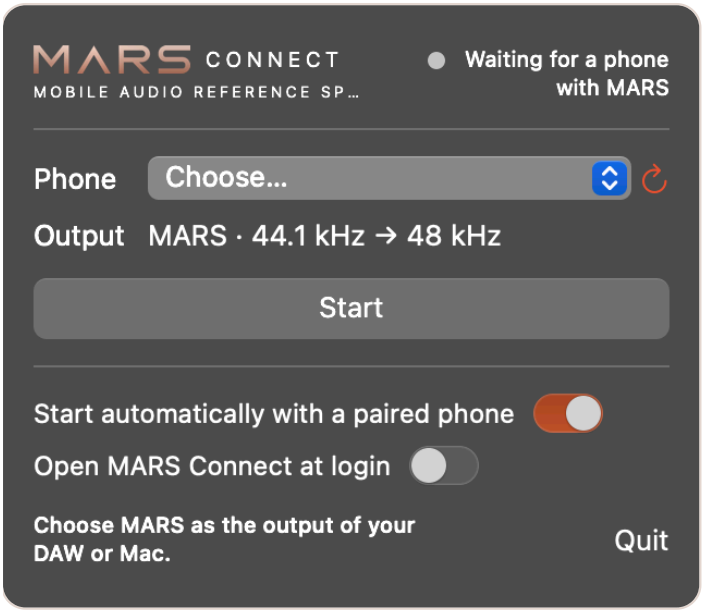
4 Install MARS on the phone or iPad

- **Android:** install **MARS Mobile Reference Speaker** from Google Play.
- **iPhone and iPad:** install it from the App Store.

The app is free, has no ads and needs no account. Until the phone has connected to MARS Connect once, MARS reminds you to install MARS Connect on the Mac. **Email me the link** sends the download link to yourself, so you can open it on the Mac.

5 Connect and play

1. Open MARS on the phone or iPad and unlock it.
2. Connect it to the Mac with the USB data cable.
3. On an **iPhone or iPad**, tap **Trust** if it asks whether to trust this Mac. On **Android**, allow MARS when the phone asks to open it for the USB device.
4. Click the MARS Connect icon in the menu bar. Under **Phone**, choose your device (an iPhone or iPad is marked *(iOS)*) and press **Start**.
5. Play something to the MARS output (next chapter). The status on the phone turns to **MONITORING** and the meter moves.



MARS Connect in the menu bar: the phone, the output with its sample rate, Start and the two options.

> With **Start automatically with a paired phone** on, MARS Connect starts by itself when a phone it already knows is plugged in with MARS open. You only press Start the first time.

6 Choose MARS in your DAW

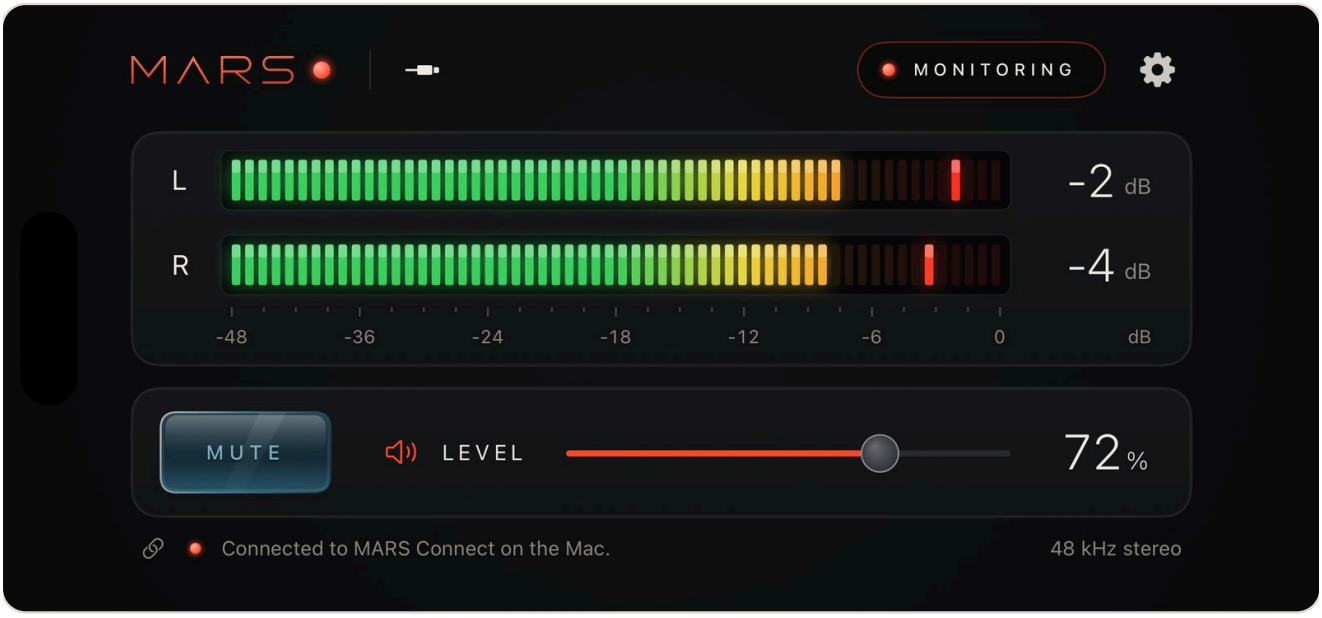
Send the mix to the output called **MARS**. You can choose it in your DAW or for the whole Mac:

WHERE	HOW
Pro Tools	**Setup** › **Playback Engine**: choose MARS.
Logic Pro	**Logic Pro** › **Settings** › **Audio** › **Devices**: Output Device MARS.
Ableton Live	**Settings** › **Audio**: Audio Output Device MARS.
Other DAWs	The audio or playback device settings: choose MARS as output.
The whole Mac	**System Settings** › **Sound** › **Output**: MARS. Every app then plays on the phone.

MARS accepts 44.1, 48, 88.2 and 96 kHz. The phone always receives 48 kHz: at other rates MARS Connect converts, and its **Output** line shows it, for example *MARS · 44.1 kHz → 48 kHz*.

> To switch between your monitors and the phone, many engineers use an aggregate device or a second output in the DAW, or simply change the output when they want to listen on the phone.

7 The MARS screen



MARS on an iPhone while a mix plays. The Android screen has the same controls.

CONTROL	WHAT IT DOES
Source symbol, next to the logo	Where the audio comes from: the Mac via USB, or on Android the audio interface.
Status	**MONITORING** plays, **STANDBY** is connected and waiting for audio, **CONNECTING** waits for the Mac, **PAUSED** means a call or another audio app took over (it resumes by itself), **OFFLINE** is stopped by you, **ERROR** shows a message below. Tap the status to stop or start.
Meter	Stereo level in dB, from –48 to 0, with peak hold and the peak value of each channel.
MUTE	Silences the speaker while the meter keeps moving.
LEVEL	The speaker volume. On Android it is the media volume, on iPhone and iPad the system volume: the volume buttons move it too.
Bottom line	The link to the Mac, and the format: always 48 kHz stereo.
Gear	Preferences: the source (Android), **Send feedback**, version and credits.

While MARS is connected, the screen stays on.

8 MARS Connect

MARS Connect lives in the menu bar. Its panel shows:

ITEM	MEANING
Status, top right	For example *Waiting for a phone with MARS*, *Ready*, *Playing on the phone*, or what to do next.
Phone	The phones and iPads connected over USB. The round arrow refreshes the list.
Output	The MARS audio device and its sample rate, with the conversion to 48 kHz when needed.
Start / **Stop**	Starts or stops sending audio to the chosen phone.
Start automatically with a paired phone	Starts by itself when a known phone is plugged in with MARS open.
Open MARS Connect at login	Opens MARS Connect when you log in to the Mac. macOS may ask you to approve it in **System Settings › General › Login Items**.
Quit	Quits MARS Connect. The MARS output stays installed, but nothing reaches the phone.

9 Analog input (Android)

On Android, MARS can also play the signal of an audio interface connected to the phone, without a Mac. In the gear menu choose **External audio input**, then tap **STANDBY** to listen.

- The phone's headset input is a mono microphone input. To connect your DAW's line-level output, use an interface that brings it down to microphone level.
- Phones without a headphone jack can use a USB-C to 3.5 mm adapter with microphone support (TRRS), or a class-compliant USB audio interface.
- MARS never uses the phone's own microphone. If the input falls back to it, MARS stops, to avoid feedback.

The analog input is not available on iPhone and iPad.

10 Troubleshooting

MARS and MARS Connect explain most problems in a sentence. The most common ones:

YOU SEE	WHAT TO DO
The phone does not appear in MARS Connect	Use a USB *data* cable, unlock the phone, open MARS, then press the round arrow to refresh the list.
On the iPhone, tap Trust for this Mac	Unlock the iPhone or iPad and tap **Trust**.
The phone does not answer: unlock it, open MARS and allow USB access	Open MARS on the phone, unlock it and accept the USB prompt.
Another app is using the phone over USB	Close Android File Transfer, adb or similar tools, then try again.
Choose MARS as the output of your DAW or Mac	MARS Connect is ready but nothing plays to MARS: see chapter 6.
Microphone permission message on the Mac	Allow MARS Connect in **System Settings › Privacy & Security › Microphone**. It only reads the MARS output.
Cannot convert the sample rate	Set MARS to 48 kHz in your DAW or in Audio MIDI Setup.
Headphones or another output are connected	Unplug the headphones or disconnect Bluetooth and AirPlay: MARS plays on the speaker only.
PAUSED on the phone	A call or another audio app took over. MARS resumes by itself.
MARS on the phone is too old	Update MARS from Google Play or the App Store.
Cable unplugged or *The phone stopped answering*	Plug the phone back in. With automatic start on, MARS Connect resumes by itself; otherwise press Start.

If something still does not work, open **Send feedback** in MARS: it prepares an email with the details of your device, which you can read and edit before sending.

11 Privacy, uninstalling, support

Privacy

MARS works offline. It has no account, no ads and no analytics, and it collects no data. The Android app has no internet permission, the iPhone and iPad app makes no internet connections, and MARS Connect never goes online. The audio goes from the Mac to the phone over the cable and nowhere else. Full policy: marcoaugustocomba.com/mars/privacy.

Uninstall MARS Connect

Quit your DAW, then run this command in Terminal. It removes MARS Connect and the MARS audio device:

```
sh "/Applications/MARS Connect.app/Contents/Resources/uninstall.sh"
```

On the phone, uninstall MARS like any other app.

Support

Write to contact@marcoaugustocomba.com, or use **Send feedback** in the app.

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