

EasyStart

MR-1
1-Bit MOBILE RECORDER

MR-1000
1-Bit PROFESSIONAL MOBILE RECORDER

KORG

MR-1 / MR-1000 Main Features

- The hand-held **MR-1** provides high quality 1-bit/2.8 MHz recording and playback in a shirt-pocket portable package – perfect for location recording, broadcast journalism, podcasting, music performance recording – and it's great for recording rehearsals and song-writing sessions!
- The mobile/tabletop **MR-1000** delivers an astonishing 1-bit/ 5.6 MHz, doubling industry DSD recording quality standards. This new super-rate spec delivers a “true to what you heard” fidelity that will amaze even the most jaded audio enthusiast. Perfect for critical live recording as well and studio mastering applications.
- The MR Recorders support multiple recording formats, including DSDIFF, DSF and WSD 1-bit formats, as well as multi-bit PCM format (BWF) with resolutions up to 24-bit. 192 kHz
- High-speed USB 2.0 connectivity provides for fast and easy transfer of files between the MR and your computer!
- Both MR Recorders come with Korg's innovative and powerful AudioGate™ software for Mac and PC. AudioGate can convert 1-bit recordings into WAV and AIFF formats at various bit rates (and vice versa), and offers real-time conversion and playback of 1-bit files using your computer's audio hardware



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Note: Be sure that your MR recorder is running the latest software. Visit www.korg.com/mr1000 or www.korg.com/mr1 to download the newest version. This guide assumes you are running OS 1.5 or later.

Navigating the MR-1 and MR-1000 Recorders

When you power-on the MR-1 or MR-1000, the display will show the level meter screen. Press the **MENU** button to show the list of various menus. You'll use the **P-DIAL** from this screen to select specific menus and functions. Each time you press the **MENU** button, you will alternate between the menu list screen and the level meter screen.

MR-1: The **P-DIAL** is located on the right of the unit, below the **MENU** button. Press **IN** on the **DIAL** to execute commands.

MR-1000: The **P-DIAL** is located on the front of the unit, below the **MENU/ESC** button.

Playing song files

When you power-on the MR Recorder for the first time, it will default to the demo recording. Press the **PLAY** button (>) to listen to the demo.

To access additionally-recorded files...

1. Press the **MENU** button, and then use the **P-DIAL** to navigate to **Library>MR_PROJ**.
2. Select the folder that matches the file type of the recording you wish to play. A list of recordings will be displayed.
3. Rotate the **P-DIAL** to select the recording that you want to play, and then press the **PLAY** button to start playback.

Recording on the MR-1

First, choose the type of input (Mic/Line) you will be using for your recording. Refer to page 15 in the MR-1 Owner's Manual for detailed instructions.

Next, select the recording format by pressing the **MENU** button > **REC MODE** > **NEW Project Type**.

Note: *DFF, WSD and DSF are all 1-bit DSD formats. Use WAV if you wish to record using conventional PCM technology. MP3 recording was added in Version 1.5 to facilitate fast-to-web content delivery and longer recording times. Refer to page 36 in the Owner's Manual for more information on project formats.*

A pro-quality stereo electret condenser microphone is included with the MR-1. In addition to using the included mic (CM-2M) for convenient recording, you can record via a commercially-available mic. Use stereo 1/8" mini-plugs if you're connecting balanced devices to the input jacks, or monaural 1/8" mini-plugs if you're connecting unbalanced devices. Adapter cables to connect XLR to 1/8" are readily available from companies such as:

Hosa Model XVM-101 MSRP: \$12.00

Description Cable, Shielded XLR (F) ~ 3.5mm TRS (M), 1 ft.

Application Mic or Line In. Accepts an XLR cable from microphone or line for input into the MR-1. Two pcs. required for stereo.

Recording with the included mic:

1. Connect the white-banded mic plug to the **L** input jack.
2. Connect the black-banded mic plug to the **R** input jack.
3. On the top of the MR-1, move the left switch to the **MIC** position.
4. Move the **Plug in Power** switch to the **ON** position.

Manually adjust the input gain:

1. Press the **REC** button, and then press the **MENU** button > **REC LEVEL**. The screen will indicate Input Gain: Stereo/Indiv./Auto.
2. Press the **P-DIAL** to make the selection field active and then rotate it to select Stereo if it is not already selected..
3. Press the **P-DIAL** to exit from that field, and rotate it to select **InL** gain (left).
4. Press and then rotate the **P-DIAL** to set the desired input gain. Notice that both inputs adjust to the same value.
5. Start recording from record ready mode, by pressing the **PLAY** button. If needed, pressing the **P-DIAL** during recording will take you back to the **REC LEVEL** screen to adjust levels further.
6. When finished recording, press the **STOP** button.

Note: *Pressing STOP will close the current file, and pressing REC again create a new file. If you want to interrupt recording and not create a new file, press the PLAY/PAUSE button.*

Note: *If you wish to use the Auto Gain function instead of manually-setting your record levels, refer to page 19 in the Owner's Manual for more information.*

Recording on the MR-1000**Recording using the line inputs:**

If you're recording from a device whose line output level is low (consumer level), set the **GAIN** switch to high (**H**).

If you're recording from a high level (professional) source, set the **GAIN** switch to low (**L**).

You can use balanced or unbalanced ¼" phone jacks to make connections.

Note: *If the level is too low even when the input level L/R knob is turned up, set the GAIN switch to the H position.*

Recording using the mic inputs:

Use the XLR connectors to make connections.

Note: *The XLR inputs always go through the mic pres – do not use them to connect a line-level balanced input to the MR-1000, use the TRS ¼" connectors. These do not go through the onboard mic pres. This is also how you would connect an external mic pre if desired.*

If you need phantom power for your condenser mic, set the phantom power switch (48V) located on the back panel to the **ON** position. **Make sure that your microphone is already connected BEFORE you turn phantom power on!**

Selecting the recording format:

Select the recording format by pressing the **MENU** button > **REC MODE** > **NEW Project Type**.

Note: *Refer to page 36 in the Owner's Manual for more information on project formats.*

Adjusting the recording level:

1. Press the **REC** button to enter record-ready mode. The LED will blink.
2. While watching the level meter screen, use the recording level **L** and **R** knobs to set the level as high as possible without allowing the signal to clip when the volume is loudest.

3. Adjust the level so that the signal does not exceed the “0” marking on the level meter. If clipping occurs, the peak LED will light red.

Note: *If you want to prevent clipping caused by unexpected high levels, turn the back panel limiter switch ON. Refer to page 20 in the Owner’s Manual for more information on using the limiter.*

Creating Markers on the MR-1 and MR-1000 Recorders

If you’ve made an extended recording of a live performance or rehearsal session, you can move to a desired location (or between songs) by fast-forwarding or rewinding according to the counter time.

The MR-1000 also allows you to add mark points to a project during recording or playback. You can locate to these marks quickly by using the FFW and REW buttons.

Adding a mark:

Press the **REC** button **during** recording or playback – you can add up to 100 marks per song, and edit their locations afterwards, if desired.

Note: *Markers are automatically added at the beginning of a project, and at locations where you resume recording after pausing recording. You can only add marks to a project that was originally recorded on the MR Recorder.*

Using marks to move:

1. Press the **MENU** button, and then use the **P-DIAL** to select and confirm “PLAY MODE” in the screen. The playback mode select screen will appear.
2. Use the **P-DIAL** to select and confirm “Current Proj/File” as the playback mode.
3. Press the **MENU** button, and use the **P-DIAL** to select and confirm “LIBRARY” – the library select screen will appear.
4. Select and confirm a project that contains marks. Now you can move to the locations where you added the marks, using the **FFW** and **REW** buttons

Using the MR-1 and MR-1000 Recorders with your Computer

You can use the MR-1 or MR-1000 as a USB 2.0 storage device. This allows you to copy files from the MR to your computer, or copy files (WAV, DSDIFF, etc.) from your computer to the MR-1 or MR-1000.

Note: *There are some limitations regarding the type of audio files that the MR recorders can recognize (see the Owner’s Manual for more information). Also note that you must use the included AC adaptor when either MR recorder is in USB mode.*

Working in USB mode:

In USB mode, the MR will be detected by your computer as an external hard disk. Note that the MR will not operate as a recorder while in USB mode.

Entering USB mode:

Connect the MR-1 or MR-1000 to your computer with a USB cable.

Windows ME/2000 or later users:

1. Press the **MENU** button, and from the MENU screen, use the **P-DIAL** to select and confirm “USB MODE”.

Note: *The MR will start up in USB mode if a USB cable is connected when you power-up the unit.*

Macintosh Mac OS 9.0.4 or later users:

With the MR powered-off, connect a USB cable to the Mac. Now, when you power-in the MR, it will automatically enter USB mode.

1. "USB MODE" will appear in the MR screen, and a drive named "KORG MR1" or "KORG MR1000" will be added to your computer's desktop. When you open this new drive on your computer, the MR's hard disk contents will be displayed, and you can copy the desired data onto your computer.

Note: *DO NOT disconnect the USB cable or turn off the computer power in this mode!*

Note: *When you connect the MR to your computer for the first time, the device driver will be installed automatically.*

Exiting USB mode:**Windows users:**

1. Left-click the icon shown in the right side of your computer's taskbar, and in the menu that appears, left-click "Safely remove USB mass storage device (drive name)".
2. Verify that a message indicating "you may safely remove the USB mass storage device" is displayed.
3. Now you can disconnect the USB cable from your PC.

Mac users:

1. Drag the drive from the desktop into the Trash, or highlight the drive and choose "Eject KORG MR1" from the File menu.
2. Press the P-DIAL or MENU button to return to the menu list screen – after returning to the menu list, disconnect the USB cable.

Transferring files:

The files you record on the MR recorders are saved in automatically-create project folders for each recording format (WAV, DFF, DSF, WSD) within the MR-PROJ folder. You can backup your files by copying them to your computer.

If you want to transfer AUDIO data (.wav, .dff, .dsf, .wsd) created on your computer or other device, copy it into the AUDIO folder of the MR recorder.

Working with AudioGate Software

The audio files of a project recorded on the MR-1 or MR-1000 can be copied to your computer, and then the including AudioGate software can be used for audio format conversion, to playback DSD files and to do basic editing and playlist functions. After you install the software from the included CD, you can refer to the AudioGate operating manual (PDF) that is located on the CD.

Installing AudioGate software:

Before installing, make sure to check the MR manual for information on system requirements. Also check www.korg.com/mr1 or www.korg.com/mr1000 to download the latest version of AudioGate.

Windows users:

1. Insert the CD-ROM into your computer's CD-ROM drive. Normally, the "AudioGate Application Installer" will start up automatically. If your PC is set so that the installer will NOT start up automatically, double-click "KorgSetup.exe" on the CD-ROM.
2. Follow the on-screen instructions to proceed with the installation. When finished, exit the installer.

Mac OS-X users:

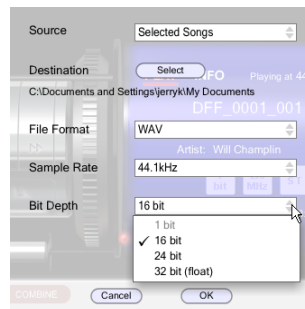
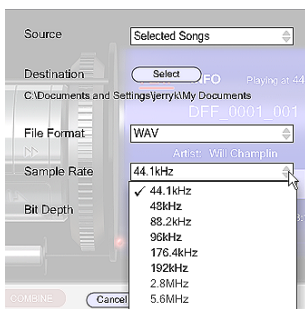
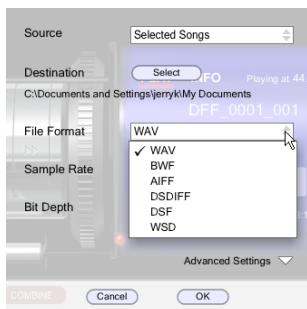
1. Insert the included CD-ROM into the CD-ROM drive of your computer, and double-click the AudioGate Installer (.pkg) to begin installation.
2. Follow the on-screen instructions to proceed with the installation, and when finished, exit the installer.

Note: *In order to use AudioGate for the first time, you must make sure that the MR is connected to your computer via USB. Once the software is verified you will not need to have the MR attached for each subsequent AudioGate editing session.*

It is recommended that you archive your important recordings in DSD format to maintain the highest possible recording quality. Once you have recorded your file, you can convert it to the PCM format of your choosing. This can be useful when using your files in third party sequencers and audio editors.

Converting a DSD file to PCM using AudioGate:

1. Transfer your files from the MR recorder to your computer. *See page 4-5 of this guide for more info.*
2. Launch the AudioGate software
3. Click on the **Add** button to include your file(s) in the session – alternatively, you can just drag and drop files onto the Project Playlist if desired.
4. Choose the DSD file you wish to convert by clicking on the **No.** column with your mouse.
5. Click the **Export** button
6. Choose the destination for your converted file.
7. Choose the File Type, Sampling Rate, and Bit Depth that is appropriate.



8. You now have a PCM audio file that can be used in other applications.

Note: *Recordings over 2 GB will automatically be split up into multiple files in the MR recorders. They will play back seamlessly within the recorder, but when brought over into the computer they will show up as separate files (DFF_000_1, DFF_000_2, DFF_000_3 etc.). AudioGate can be used to merge these segments back into one continuous file using the Combine command. See page 14 of the AudioGate User's Guide for more info.*

For more information, read the MR-1 or MR-1000 Owner's Manual, and be sure to visit www.korg.com for more support, tips and tricks!