

M-AUDIO

ENGLISH

MicroTrack 24/96

Professional 2-Channel Mobile Digital Recorder

User Guide

English

1 - Introduction

Congratulations on your purchase of the M-Audio MicroTrack 24/96. The MicroTrack 24/96 is a portable recorder that can record stereo audio signals directly to CompactFlash media in either WAV or MP3 format. The MicroTrack 24/96 can be connected to a computer via the USB connection to transfer audio files. The USB port is also used to recharge the internal battery of the MicroTrack 24/96. Typically, a computer's USB port will supply enough power to recharge the MicroTrack 24/96's battery, though a USB power supply is also provided for charging without a computer.

The MicroTrack 24/96 has an 1/8" microphone port which supplies 5V for electret microphones like the included stereo "T" microphone. Two 1/4" TRS inputs accommodate mic or line level inputs, and can supply phantom power for condenser microphones. A coaxial SPDIF input is available for recording from a digital source; the MicroTrack 24/96 automatically sets the sample rate to match the incoming stream. An 1/8" headphone port and RCA line outs can be used for monitoring recordings and playback.

While the MicroTrack 24/96 is simple to use, we still suggest that you read through this entire manual to familiarize yourself with all the functions contained within this portable unit.

What's in the Box

You should have received the following items in your MicroTrack 24/96 box:

- MicroTrack 24/96 unit
- USB cable
- Stereo "T" microphone
- Earbuds
- Protective bag
- USB power supply
- CompactFlash card
- Printed Quick Start Guide
- CD-ROM containing this User Manual and Audacity editing software

Product Features

- Records stereo WAV and MP3 files
- 16- or 24-bit recording and playback
- Supports common sample rates from 44.1kHz to 96kHz
- Built-in rechargeable battery*
- Back-lit LCD display
- 2 x 1/4" TRS mic/line inputs with phantom power
- 1 x 1/8" stereo electret mic input with 5V power
- 1 x 1/8" headphone output
- 2 x RCA line outputs
- 1 x S/PDIF input
- 1 x USB connector
- Uses CompactFlash or Microdrives of any size (64MB minimum)

* Battery life is dependent on the usage scenario. For example, a stereo recording from two condenser mics with phantom power switched on will deplete the battery quicker than just listening to audio playback.

Minimum System Requirements

PC:

- Windows 2000 (SP4) or Windows XP (SP1)
- Available USB port

Mac:

- Mac OS X 10.2.8, Mac OS X 10.3.7, or Mac OS X 10.4
- Available USB port

Manual Conventions

There are a few conventions used in this manual to differentiate buttons, actions, and displays from one another. Names of buttons on the MicroTrack 24/96 are shown in brackets, such as [MENU]. Actions performed by the user are shown in italics, such as *press in and hold the [NAV] wheel*. Finally, text shown on the LCD screen of the MicroTrack 24/96 is shown in quotes, such as "Battery Charged."

2 - Installation Procedure

No Drivers Required

The MicroTrack 24/96 is a self-contained portable recorder that is ready to use right out of the box. The MicroTrack 24/96 is class-compliant, meaning that you do not need to install any special drivers when connecting the MicroTrack 24/96 to your computer.

Charging the Battery with the USB Power Supply

Before you begin using your new recorder, it is essential that you fully charge the MicroTrack 24/96 battery. **Failure to fully charge the battery before first use can limit the capacity of the battery, lowering the total recording time of the MicroTrack 24/96.** Connect the MicroTrack 24/96 to the USB power supply using the included USB cable to begin charging the MicroTrack 24/96. When done, "Charging Complete" will be displayed on the MicroTrack 24/96 screen.

You will have to recharge the battery from time to time as you use the device. There is a battery meter icon in the upper-left corner of the MicroTrack 24/96's playback screen that shows the estimated battery power remaining. When the battery power is nearly depleted, "MicroTrack 24/96 battery very low" will be shown on the LCD display. When this message appears, you should recharge the MicroTrack 24/96 immediately. If you continue to run the MicroTrack 24/96 on battery, the unit will eventually turn off. You will then have to recharge the battery before the MicroTrack 24/96 can be turned on again.

If you recharge the battery before the unit becomes inoperable, the charge time will be approximately 2.5 hours. If you drain the battery to a point where the MicroTrack 24/96 will no longer turn on, a full charge can take approximately 6.5 hours.

Formatting the Recording Media

The MicroTrack 24/96 records directly to CompactFlash cards or Microdrives. In both cases, these mediums must be formatted before they can be used. The MicroTrack 24/96 can format the media with the following procedure:

NOTE: *Formatting a CompactFlash card or Microdrive will erase all of its data. Thus, formatting can be used as a method for deleting the entire contents of a card or drive.*

1. Insert your media, either a CompactFlash card or Microdrive, into the MicroTrack 24/96. The unit will reboot.
2. After the MicroTrack 24/96 has rebooted, press down on the [NAV] wheel until "System" is selected and press in on the [NAV] wheel.
3. Press down on the [NAV] wheel until "Format Media" is selected, then press in on the [NAV] wheel.
4. The screen will show "Format Media." Press in on the [NAV] wheel to continue.
5. When the process is finished, "Format complete!" will be shown on the display. Press the [MENU] key twice to return to the main menu.

3 - Hardware Controls and Indicators

Front



1. **Power Button:** Press and hold this button for approximately one second to turn the MicroTrack 24/96 on and off.
2. **LCD Display:** Shows the current status of the MicroTrack 24/96.
3. **Clip Indicators:** Will light when an input signal exceeds the headroom of the MicroTrack 24/96.
4. **Input Levels Adjust:** These control the individual record levels of the MicroTrack 24/96's left and right inputs. The current input level is represented by triangles in the L/R level meters on the main screen.
5. **Signal Indicators:** Will light when a signal is detected at the associated input.
6. **Delete Button:** In normal player/recorder operation, the delete button deletes the current (or selected) audio file. The delete button is also used to stop the MicroTrack 24/96 USB drive mode (known as "host mode") and return to normal player/recorder functionality.
7. **Output Level Adjust:** Controls the output volume of the MicroTrack 24/96.
8. **Record Button:** Used to start recording new files.

Top

9. **Stereo Mic Input Jack:** This 1/8" stereo mini-jack is used for connecting a mono or stereo electret microphone.
10. **Mic/Line Input Jacks:** These 1/4" TRS jacks accept microphone and line-level signals.
11. **Headphone Jack:** Connect a pair of headphones with an 1/8" plug for monitoring the MicroTrack 24/96.

Bottom

12. **RCA Outputs:** Line-level outputs from the MicroTrack 24/96.
13. **S/PDIF Input:** Allows a S/PDIF format digital signal to be recorded by the MicroTrack 24/96.
14. **USB Input:** Connect the MicroTrack 24/96 to a host computer with this input. Will also charge the MicroTrack 24/96 battery when connected.

Left



15. **Menu Button:** Toggles between the Main Menu and record screen, or acts as an exit button when in a sub menu.
16. **Hold Switch:** When active, all buttons on the MicroTrack 24/96 will be disabled. If you attempt to operate the MicroTrack 24/96 while the Hold switch is on, "HOLD switch on" will be shown on the LCD display.
17. **L/M/H Switch:** Sets the operating mode of the 1/4" TRS and 1/8" inputs. Use the 'L' position for line-level devices. The 'M' position should be used when recording from microphones. The 'H' position uses a higher gain stage on the 1/4" TRS inputs, which can help when recording quiet signals or using microphones with low output levels. The 'H' position does not boost the input gain of the 1/8" input.
18. **Ph Pwr Switch:** Switches on the phantom power for the 1/4" TRS inputs. When active, a "Ph" icon will be shown on the LCD display. Phantom power should only be used with condenser microphones.

IMPORTANT: Phantom power should be disengaged when connecting or disconnecting microphones to prevent possible damage to the microphone's internal electronics.

Right

19. **Nav Wheel:** This is a multi-function control that is dependent on the current screen you are in.
 - a. In a menu, moving up or down navigates the selections on the screen, and pressing in selects the current function
 - b. In the main playback screen, pressing in toggles between play and pause, while moving up and down acts as fast forward and rewind. Pressing in and moving up or down acts as next or previous song.
20. **Memory Slot:** Insert CompactFlash cards or Microdrives here.
21. **Eject Button:** This button folds flat into the housing of the MicroTrack 24/96 to prevent it from breaking or being pressed accidentally. (The hinge is on the Memory Slot side.) Flip this button out and press it to remove the CompactFlash card and/or Microdrive.

Main Menu

Pressing the [MENU] button will display a list of menu categories (the Main menu) on the MicroTrack 24/96's display. You can then push up and down on the [NAV] wheel to move through the selections (the selected menu item will be shown in bold print). Pressing in on the [NAV] wheel will activate the current selection or enter a sub-menu. The [MENU] button is used to exit a sub-menu.

When first entering the Settings menu, you will be presented with the following options, each explained in detail in the following sections:

1. **Files:** Will present a list of all the files and folders contained in memory. You can choose a file to play or delete from this list.
2. **Record Setting:** Used to set the recording parameters for the MicroTrack 24/96.
3. **Back Light:** Contains timing options for the backlight.
4. **System:** Provides access to advanced features and settings of the MicroTrack 24/96.

Files Menu

This menu displays a list of all the folders and files contained on the current CompactFlash card or Microdrive.

- Press up and down on the [NAV] wheel to move the selection up and down through this list.
- To open a folder, select it and press in on the [NAV] wheel.
- To exit a folder, press the [MENU] button.
- To play a file, select it and press in on the [NAV] wheel.
- To delete a file, select it and press the [DEL] button.

Record Settings Menu

This menu lets you determine the recording input, format, and resolution for subsequent audio recordings; changing these settings will have no effect on any of the files currently stored in memory. This menu will show a list of parameters with their values after them. To change the values, first select the parameter by pressing up or down on the [NAV] wheel then press in on the [NAV] wheel to select the parameter. Once selected, pressing up or down on the [NAV] wheel will change the value of the parameter. Once the desired value is shown, press in on the [NAV] wheel to confirm your selection and return to the previous menu. The options in this menu are as follows:

1. **Input Source:** This is where you select which input of the MicroTrack 24/96 to use for recording.
 - 1/8"Chooses the 1/8" mic input as the recording source.
 - 1/4" TRSChooses the 1/4" TRS jacks as the recording source. You will also need to use the [L/M/H] switch to set the operating mode for these inputs.
 - S/PDIFSelects the S/PDIF digital input as the recording source. When S/PDIF is selected, the [LEVELS] buttons will have no effect.
2. **Input Monitoring:** Input Monitoring is the ability to listen to the incoming audio signal while recording is in progress. This signal will be heard at the headphone and RCA outputs.
 - On.Turns Input Monitoring on.
 - Off.Turns Input Monitoring off.
3. **27dB TRS Input Boost:**When this option is set to on, incoming microphone signals will be digitally boosted 27dB before being recorded. This is helpful when recording quiet sound sources or when using mics with low output levels. Tip: For best results, make sure you've exhausted the L/M/H switch range before engaging this digital boost.
4. **Encoder:**
 - WAV.Chooses WAV as the recording format. This format is uncompressed and will yield the highest quality recordings. Be aware that the files created in this format can be quite large.
 - MP3.Selects MP3 as the recording format. This format compresses the audio data to yield smaller file sizes.
5. **Sample Rate:**The options available in this menu will depend on the Encoder selected above. Keep in mind that file sizes will increase as the sample rate is increased.
 - Tips:
 - 44.1kHzis the standard Audio CD rate.
 - 96kHzyields the best sound quality.
 - 44.1 / 48 / 88.2 / 96 These will be the available sample rates when WAV is selected as the encoder.
 - 44.1 / 48These will be the available sample rates when MP3 has been selected as the Encoder.

6. **Bit Depth:** Like Sample Rate, the options shown in this menu will depend on the Encoder selected above. Keep in mind that file sizes will increase as this setting is increased.
- Tips:
- 16-bit WAV is the standard audio CD rate.
 - 24-bit WAV yields the best sound quality.
 - 96kbps MP3 will effectively capture voice dictations.
 - 160kbps MP3 offers reasonable quality of popular music.
 - 16 / 24 When WAV is selected as the encoder, this menu will allow you to set the bit-depth of your recording.
 - 96 / 112 / 120 / 160 / 192 / 224 / 320 When MP3 is selected as the encoder, this value will determine the bit-rate of the file.
7. **Channels:** Stereo The Stereo option will cause the MicroTrack 24/96 to record both the left and right inputs into discrete channels. This is the default setting for the MicroTrack 24/96.
- Mono In a later version of firmware, this option will cause the MicroTrack 24/96 to only record one channel of audio instead of two. Please check the M-Audio website at <http://www.m-audio.com> for the free update. Instructions for loading the update will be included with the update itself.
8. **Record Time Available:** This is not an adjustable parameter—it merely shows the space available on the media in the MicroTrack 24/96. When you select this option, it may take a moment to calculate the available time and display on the screen. This information is provided to help you verify you will have enough recording space before recording, and make a choice of which recording parameters to use. If you see that you're getting low on memory space, you can choose to use MP3 encoding instead of WAV to yield smaller recordings. Keep in mind this feature only accounts for recording space when determining record time—it does not account for battery life.

Back Light Menu

This menu sets the automatic shutoff time for the MicroTrack 24/96's back light. Since the backlight drains more battery power, you have the ability to automatically turn the light off to maximize your battery life.

When set to "always off," the back light will never turn on. When "always on" is selected, the back light will be on whenever the MicroTrack 24/96 is powered on. The other three settings available on this menu determine the amount of time the back light will stay on after the last control is pressed on the MicroTrack 24/96. For example, if "5 seconds" is selected, the back light will turn on any time a button is pressed on the MicroTrack 24/96. The back light will then turn off 5 seconds after the last button is pressed.

System Menu

1) Connect to PC

This menu option is used to place your MicroTrack 24/96 in "host mode," effectively turning the MicroTrack 24/96 into a USB Compact Flash card reader. This allows quick and easy transfer of audio and firmware files between your computer and the MicroTrack 24/96.

While the MicroTrack 24/96 is in host mode, the MicroTrack 24/96 cannot play nor record audio files. The screen will simply display the "M-Audio" logo and USB icon to indicate it is in host mode.

CAUTION: It is suggested that you close the connection from the computer BEFORE disconnecting the MicroTrack 24/96 USB connection or exiting host mode on the MicroTrack 24/96. If you fail to do this, there is a slight chance that information on the CompactFlash card might get corrupted. Refer to the section entitled "Disconnecting the MicroTrack 24/96 From Your Computer" for instructions how to unmount and disconnect your MicroTrack 24/96 from Windows XP and Macintosh OS X computers.

To enter host mode:

- 1 Connect a USB cable from the computer to the MicroTrack 24/96.
- 2 Select "Connect to PC" from the "System" menu. The "M-Audio" logo will appear on the screen to indicate it is in host mode.

Another method to enter host mode:

- 1 Turn off the MicroTrack 24/96.
- 2 Connect a USB cable from the computer to the MicroTrack 24/96. The MicroTrack 24/96 will automatically power up and enter host mode. The "M-Audio" logo will appear on the screen to indicate it is in host mode.

2) Format Media

This menu allows you to format the inserted CompactFlash media. It is necessary to format your media before you can begin recording. Be aware that formatting a medium will erase any data it contains. Because of this, formatting can be used as a quick way to delete all files on the CompactFlash media.

1. When you first enter this menu option, the screen will read "Format media?"
2. Press in on the [NAV] wheel to continue.
3. You'll then see a message that says "Are you sure?" This is your last chance to cancel the process if you do not want to format (press [MENU] to exit). Otherwise, press in on the [NAV] wheel to start formatting.
4. During the formatting process, "Formatting" will be shown on the MicroTrack 24/96 display. Larger media will take longer to format than smaller media.
5. "Media formatted" will be shown once the formatting process is finished.

3) Link L+R

This is a simple on/off menu selection. When this option is set to on, the recording levels of inputs L and R will be matched. If you use the left or right [LEVEL] buttons to adjust the record level of one of the inputs, the other input will automatically be matched to the same level. This is especially useful when making stereo recordings as this setting will preserve the stereo image. When this option is turned off, the input levels of the channels will become independent.

4) Playback EQ

This menu provides access to the six EQ curves built into the MicroTrack 24/96. These curves affect playback only—all recordings are made without EQ. To activate an EQ preset, use the [NAV] wheel to select the curve, then press in to activate it. The EQ has the following settings:

1. Normal: This defeats the EQ and provides flat playback response.
2. Bass Boost: Increases the low frequencies during playback.
3. Bass Reducer: Decreases the low frequencies during playback.
4. Treble Boost: Increases the high frequencies during playback.
5. Treble Reducer: Decreases the high frequencies during playback.
6. Bass and Treble Boost: Increases both the low and high frequencies during playback.

5) Scrub Audio Menu

In a future firmware update, this is an on/off setting will allow you to hear audio as you rewind and fast-forward through an audio file. When set to on, you will be able to hear bits of the file as you seek. When off, the MicroTrack 24/96 will be silent while seeking.

6) Verify Delete

This is a simple on/off menu preference that enables or disables the delete confirmation message. When this feature is on, you will be asked to confirm a file delete any time you press the [DEL] key. This helps prevent accidental erasure of files you wish to keep. When this feature is off, files will be deleted as soon as the [DEL] button is pressed.

7) Auto Off

When the MicroTrack 24/96 is running on battery power, it can automatically turn off if it is idle for a given period of time. Any button presses are considered activity, resetting the Auto-Off countdown. Put simply, the Auto-Off feature turns off the MicroTrack 24/96 if:

- a) The MicroTrack 24/96 is running on battery
- b) The transport reads STOP (record pause is not stop)
- c) No buttons have been pressed

Options range from "Never" to "60 minutes." With "Never" selected, the MicroTrack 24/96 will only turn off if you press the Power button. Any other value will cause the MicroTrack 24/96 to turn off after the specified time of non-use.

8) Language

This menu allows you to select the language to be used on the MicroTrack 24/96 display. More languages will be added in later firmware updates.

9) Factory Defaults

Entering this menu option will allow you to reset all of the MicroTrack 24/96's internal settings to the original factory defaults. (This also resets the internal counter for file names, so the next file you record will attempt to be "File0001.wav".) When you enter this menu, you will be presented with a confirmation message stating "Return all setting to factory defaults? Press the NAV wheel to confirm." Press in on the [NAV] wheel to restore the defaults. If you want to cancel this operation, press [MENU] to exit.

10) Firmware Update

From time to time, M-Audio may release updates to the operating system for the MicroTrack 24/96. Directions for using this feature to update the firmware will be included with the update files you download from the M-Audio website (www.m-audio.com).

11) Version

Entering this menu will show the current operating system version. There are no adjustable settings in this menu option.

12) Contrast

This setting adjusts the contrast of the MicroTrack 24/96 display. Simply press up or down on the [NAV] wheel to adjust this value. Higher values will result in a darker display. Press in on the [NAV] wheel when finished.

13) About

Contains copyright notices about technology used in the MicroTrack 24/96.

4 - Operating Instructions

The MicroTrack 24/96 is an easy-to-use, portable audio recorder. Its emphasis is on creating high-quality recordings that can be transferred easily to a computer. As such, the steps for operating the MicroTrack 24/96 are few and simple to understand.

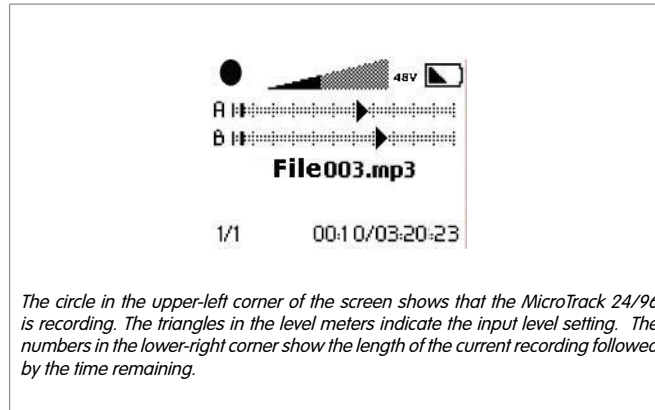
In essence, the MicroTrack 24/96 has two functions: Recording audio files and playing audio files. Because a file needs to be recorded before it can be played back, we will explain the recording process first, followed by playback and file management functions.

Recording

To begin recording a new audio file, you'll need to connect an audio source to the MicroTrack 24/96, select the proper input source, select your recording format and resolution, adjust your recording levels, then initiate the recording. The MicroTrack 24/96 will automatically assign a name to the file in the format "FILExxx.eee" where xxx is a number from 0001 to 9999 and eee is either "wav" or "mp3." The procedure is outlined below:

1. Null your phantom power and gain values before connecting inputs to this device:
 - On the side of the MicroTrack 24/96
 - i. set the "L/M/H" switch to "L".
 - ii. set the "Ph Pwr" switch to Off (towards the bottom of the unit)
 - Turn off the internal 27dB TRS Boost. by using the [MENU] key and [NAV] wheel to select "Record Settings" > "27dB TRS Boost" and choosing "Off."
2. Connect an audio source to the MicroTrack 24/96. This can be any one of the following:
 - A mono or stereo electret microphone connected to the 1/8" input.
 - One or two professional microphones to the 1/4" TRS inputs. As most professional microphones have XLR connectors, you'll need to use XLR-to-TRS cables to make your connections. Set the [L/M/H] switch to the M, or microphone, position. If you are using a condenser microphone, switch the [Ph Pwr] switch to on.
 - A mono or stereo line-level source to the 1/4" TRS inputs. The [L/M/H] switch should be moved to the L position.
 - A digital source connected to the S/PDIF input.
3. Select the INPUT SOURCE of the MicroTrack 24/96. Use the [MENU] key and [NAV] wheel to select "Record Settings" > "Input Source." Select the proper input and press the [NAV] wheel in again to make your selection.
4. Select the ENCODER of the MicroTrack 24/96. Use the menu key and [NAV] wheel to select "Record Settings" > "Encoder." Select MP3 or WAV and press the [NAV] wheel in again to make your selection.
5. Select the SAMPLE RATE of the MicroTrack 24/96. Use the Menu key and [NAV] wheel to select "Record Settings" > "Sample Rate." Select the appropriate sample rate and press the [NAV] wheel in again to make your selection.
6. Select the BIT RATE of the MicroTrack 24/96. Use the menu key and [NAV] wheel to select "Record Settings" > "Bit Rate." Select the appropriate bitrate and press the [NAV] wheel in again to make your selection.
7. If needed, select PHANTOM POWER. If you are using condenser microphones that require phantom power, turn on the "Ph Pwr" switch on the side of the MicroTrack 24/96. Note that phantom power should be disengaged while connecting or removing microphones to prevent damage to the microphone's internal electronics.
8. Enable INPUT MONITORING. This will allow you to see the level of your incoming signal on the MicroTrack 24/96's on-screen meters before you start to record. This option is enabled by default, but you can manually adjust it by using the [MENU] key and the [NAV] wheel to select "Record Settings" > "Input Monitoring." Select "On" and press in on the [NAV] wheel to activate.
9. Set input levels appropriately for this source.
 - Setting the "L/M/H" switch on the side of the MicroTrack 24/96:
 - i. If you are using a line level device, leave the switch set to "L."
 - ii. If you are using a microphone, use the "M" setting.
 - Press [REC] to engage recording. Now play the loudest sound you wish to record. You will be able to delete the file as soon as you are done, if you wish.
 - Use the [LEVEL] controls on the surface to adjust the input level so that it is as high as possible without going over the maximum. The input level settings are represented as triangles in the level meters on the main screen.
 - To stop recording, press [REC] again. To immediately delete the file, press [DEL].

- Tips:
 - i. If the signal is still too low and you are using a microphone at the 1/4" TRS input, lower the input level with the [LEVEL] control, and set the "L/M/H" to "H." Now engage recording then use the [LEVEL] controls to set the signal again. Stop recording then delete the files.
 - ii. If the signal is still too low, lower the input level with the [LEVEL] controls. Then, use the [MENU] button and [NAV] wheel to select "Record Settings" > "27dB TRS Boost." Select "On" and press in on the [NAV] wheel to engage a digital signal boost. Now engage recording and use the [LEVEL] controls to set the signal again. Stop recording then delete the files.
10. Once the recording levels and parameters are set, you may begin recording. Press the [REC] button to start recording a new file.

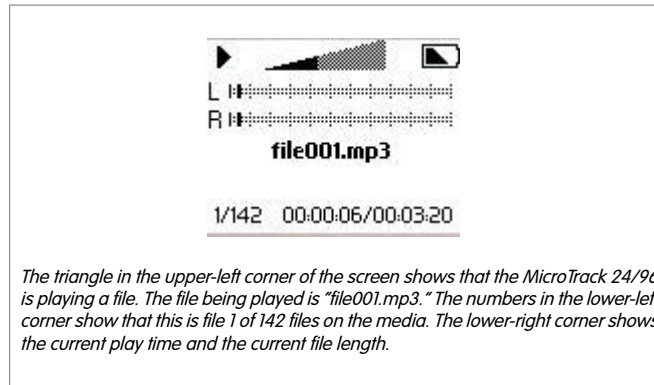


11. While a file is recording, you can:
- make adjustments to the record levels if necessary using the [LEVELS] buttons.
 - pause the recording by pushing in on the [NAV] wheel once. To resume recording, push in on the [NAV] wheel again.
 - stop the recording by pressing the [REC] button again.
 - delete the file being recorded by pressing the [DEL] button.
12. Once the recording is stopped, the MicroTrack 24/96 will finish writing the file to memory.

Playback

Now that a file has been recorded, you can play it back to check the recording.

1. **Connect the outputs** of the MicroTrack 24/96 so you can hear the playback. You can use any combination of the following:
 - Plug a pair of headphones into the 1/8" jack on the MicroTrack 24/96.
 - Connect the RCA outputs to an amplifier or mixer.
2. Use the [MENU] button and [NAV] wheel to navigate to the "Files" menu.
3. Use the [NAV] buttons to select a file to play. Press in on the [NAV] wheel to **begin playback** of the current file.



4. While an audio file is playing, you can:
 - adjust the volume using the [VOLUME] button.
 - pause playback by pressing in on the [NAV] wheel. Press in again to resume playback.
 - fast-forward through the file by holding up the [NAV] wheel.
 - rewind the file by holding down the [NAV] wheel. If you are within the first three seconds of a file, pressing down will skip back to the previous file.
 - skip ahead to the next file by pressing in and up on the [NAV] wheel.
 - return to the beginning of the file by pressing in and down on the [NAV] wheel.
 - delete the file by pressing the [DEL] button.
 - immediately begin recording a new file by pressing the [REC] Button.
 - loop playback of the file using the procedure explained below.

Loop Playback

The MicroTrack 24/96 will allow you to loop a section of an audio file. This can be useful when practicing parts or studying dictation. The method for looping a file requires setting a start and end point, and is accomplished as follows:

1. To engage Loop Playback, press and hold the [MENU] button for over 2 seconds while the file is playing.
2. Press the [MENU] button once when you reach the start point of the loop.
3. Press the [MENU] button a second time when you reach the end point of your loop. The section will begin to loop immediately.
4. Pressing the [MENU] button a third time will exit loop mode.

While using the Loop Playback mode, you will not be able to skip to other files using the up and down action of the [NAV] wheel. You will only be able to fast-forward or rewind the current file by holding the [NAV] wheel in your desired direction.

5 - Using the MicroTrack 24/96 with a Computer

The MicroTrack 24/96 will interact with a computer for two purposes. First, the MicroTrack 24/96 will charge its battery with power it receives from the computer. Second, the contents of the MicroTrack 24/96's CompactFlash card or Microdrive can be transferred to the computer. Additionally, files can be uploaded to the MicroTrack 24/96 for use later.

Please refer back to the section titled "Connect to PC" to learn how to properly connect the device.

Charging the MicroTrack 24/96 from the Computer

The MicroTrack 24/96 will automatically begin recharging the internal battery any time power is received at the USB port. Depending on the manufacturer of your computer, your computer may need to be powered on to provide power to the USB port.

While charging, "CHG" appears in the battery icon. Once the battery is fully charged, "Charging Complete" or battery full icon will be displayed on screen.

If your MicroTrack 24/96 was powered off when you plugged in the USB cable, the MicroTrack 24/96 will turn itself on, and enter host mode. It is suggested that you close the connection from the computer BEFORE disconnecting the MicroTrack 24/96 USB connection or exiting host mode on the MicroTrack 24/96.

Transferring Audio Files

To transfer files from the MicroTrack 24/96, simply drag them from the MicroTrack 24/96 to the desired destination on your computer. Your computer will then begin copying the files. To send files back to the MicroTrack 24/96, simply drag the files back into the MicroTrack 24/96 window.

You can also create and delete file folders, rename files, and move them to new locations when connected to the computer. These features allow you to organize your collection of recordings with ease.

Using the MicroTrack 24/96 as a Portable Data Drive

While the MicroTrack 24/96 can only play and record WAV and MP3 files, you can store any file you wish on the MicroTrack 24/96's CompactFlash card or Microdrive. This allows you to use the MicroTrack 24/96 as a portable memory card or hard drive. Any unsupported files in memory will be hidden from the Files menu when using the MicroTrack 24/96, but they will still be there when the MicroTrack 24/96 is reconnected to a computer.

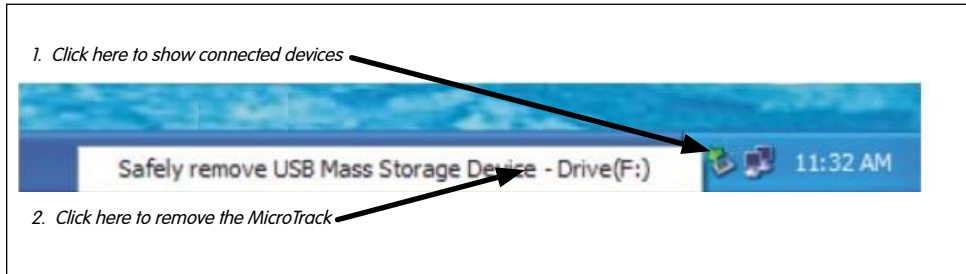
Disconnecting the MicroTrack 24/96 from Your Computer

When you want to disconnect your MicroTrack 24/96 from your computer, it is important to properly exit host mode to prevent corrupted data on the drive. This procedure only applies if the MicroTrack is currently in host mode – meaning the “M-Audio” logo and USB icon are displayed on the screen.

If you use the traditional shut down procedure on your computer, all drives will automatically be unmounted. If you wish to leave your computer on, follow the procedures below for Windows XP or Macintosh OS X.

Disconnecting from Windows XP

To disconnect the MicroTrack 24/96 from Windows XP, click on the “Safely Remove Hardware” icon located in the System Tray.

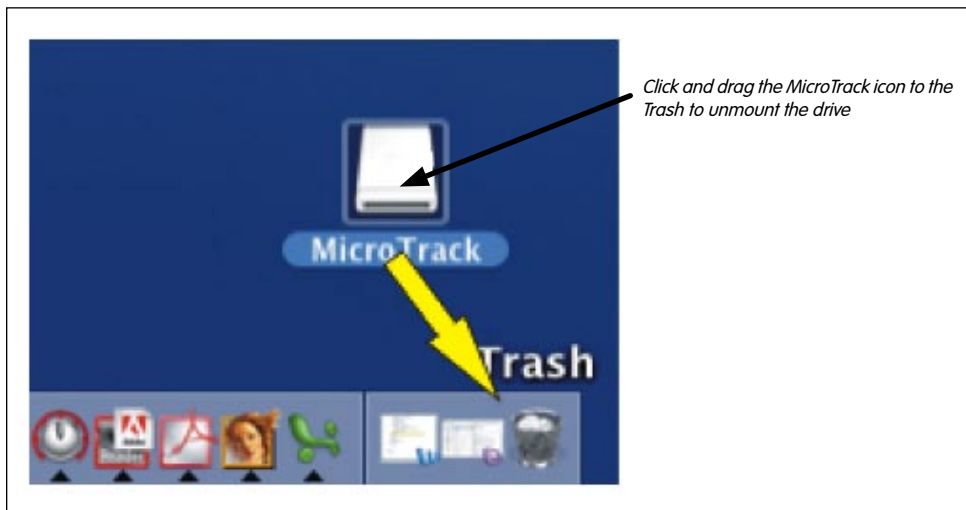


A list of connected devices will be shown. The MicroTrack 24/96 will be listed as a “USB Mass Storage Device.” Click this device and Windows will attempt to unmount the MicroTrack 24/96. Windows will only be able to unmount the MicroTrack 24/96 if there are no programs trying to use files contained on the MicroTrack 24/96’s CompactFlash media. If Windows says that it cannot remove the MicroTrack 24/96, quit your running programs and try again.

Once the MicroTrack 24/96 has been unmounted, you can press its [DEL] key to exit host mode and return to normal operation.

Disconnecting from Mac OS X

To disconnect the MicroTrack 24/96 from Mac OS X, simply drag the MicroTrack 24/96 icon on your desktop to the trash can. The MicroTrack 24/96 icon will disappear once the unit has been successfully unmounted.



Once the MicroTrack 24/96 has been unmounted, you can press its [DEL] key to exit host mode and return to normal operation.

Swapping CompactFlash or Microdrive Media

If you wish to change out the CompactFlash card or Microdrive while the MicroTrack 24/96 is connected to the computer, you will have to disconnect the MicroTrack 24/96 using the procedure above before changing out the media. Once you’ve changed the media, you can reconnect the MicroTrack 24/96 to the computer.

6 - Contact

If you have any questions, comments or suggestions about this or any M-Audio product, we invite you to contact us by using the following information:

<p>M-AUDIO U.S. - 5795 Martin Road, Irwindale, CA 91706-6211, U.S.A.</p> <p>Sales Information: (626) 633-9050 Sales (fax): (626) 633-9070 Sales Information (email): info@m-audio.com Tech Support (phone): (626) 633-9055 Tech Support (email): techsupt@m-audio.com Tech Support (fax): (626) 633-9060 Internet Home Page: http://www.m-audio.com</p>	<p>M-AUDIO Deutschland (Germany) - Kuhallmand 34, D-74613 Ohringen, Germany</p> <p>Sales Information: +49 (0)7941 987000 Sales Information (email): info@m-audio.de Technical Support: +49 (0)7941 9870030 Technical Support (email): support@m-audio.de Technical Support (fax): +49 (0)7941 98 70070 Internet Home Page: http://www.m-audio.de</p>
<p>M-AUDIO U.K. - Floor 6, Gresham House, 53 Clarendon Road, Watford, WD17 1LA, United Kingdom</p> <p>Sales Information (phone): 44 (0) 1923 204010 Sales Information (fax): 44 (0) 1923 204039 Sales Information (email): info@maudio.co.uk Technical Support (PC): 44 (0) 1309 671301 Technical Support (Mac): 44 (0) 1765 650072 Technical Support (email): support@maudio.co.uk Internet Home Page: http://www.maudio.co.uk</p>	<p>M-AUDIO Canada - 1400 St-Jean Baptiste Ave. #150, Quebec City, Quebec G2E 5 B7, Canada</p> <p>Technical Support (e-mail): techcanada@m-audio.com Technical Support (PC): (418) 872-0444 Technical Support (Mac): 1-800-638-2120 Technical Support (fax): (418) 872-0034 Sales (e-mail): infocanada@m-audio.com Sales (phone): (866) 872-0444 Sales (fax): (514) 396-7102 Internet Home Page http://www.m-audio.ca</p>
<p>M-AUDIO France - Floor 6, Gresham House, 53 Clarendon Road, Watford, WD17 1LA, United Kingdom</p> <p>Assistance Technique (aucune questions reliées aux ventes) courriel (assistance PC): support@m-audio-france.com courriel (assistance Mac): mac@m-audio-france.com téléphone (assistance PC): 0820 000 731 (0,12 Euros par minute) téléphone (assistance Mac): 0820 391 191 (0,12 Euros par minute) télécopieur/fax: 01 72 72 90 52</p> <p>Ventes (aucun appels d'assistance technique) téléphone: 0810 001 105 (Numero Azur) courriel: info@m-audio-france.com télécopieur/fax: 01 72 72 90 52</p>	<p>M-AUDIO Japan - 株式会社エムオーディオジャパン : 460-0002 愛知県名古屋市中区丸の内 2-18-10</p> <p>テクニカルサポート (電話) : 052-218-0859 テクニカルサポート (Macintosh 環境での email) : mac-support@m-audio.co.jp テクニカルサポート (Windows 環境での email) : win-support@m-audio.co.jp テクニカルサポート (OS に依存しない製品での email) : win-support@m-audio.co.jp テクニカルサポート (英語での email / English Only) : e-support@m-audio.co.jp テクニカルサポート (Fax) : 052-218-0875 Web サイト (ホームページ) : http://www.m-audio.com</p>

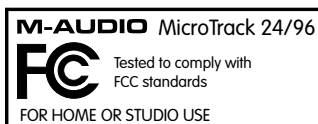
7 - Warranty Terms and Registration

Warranty Terms

M-Audio warrants products to be free from defects in materials and workmanship, under normal use and provided that the product is owned by the original, registered user. Visit www.m-audio.com/warranty for terms and limitations applying to your specific product.

Warranty Registration

Thank you for registering your new M-Audio product. Doing so immediately both entitles you to full warranty coverage and helps M-Audio develop and manufacture the finest quality products available. Register online at www.m-audio.com/register to receive FREE product updates and for the chance to win FREE M-Audio gear.



8 - Appendix

Recording Time vs. Media Chart

Media Capacity (MB)	MP3 Recording Time in Seconds						MP3 bit rate
	96000	128000	160000	192000	224000	320000	
64	5592	4194	3355	2796	2397	1678	
128	11185	8389	6711	5592	4793	3355	
256	22370	16777	13422	11185	9587	6711	
512	44739	33554	26844	22370	19174	13422	
1024	89478	67109	53687	44739	38348	26844	
2048	178957	134218	107374	89478	76696	53687	
4096	357914	268435	214748	178957	153392	107374	
6144	536871	402653	322123	268435	230088	161061	
8192	715828	536871	429497	357914	306783	214748	

Media Capacity (MB)	MP3 Recording Time in [Days]:H:M:S					
	96000	128000	160000	192000	224000	320000
64	[0]:1:33:12	[0]:1:9:54	[0]:0:55:55	[0]:0:46:36	[0]:0:39:57	[0]:0:27:58
128	[0]:3:6:25	[0]:2:19:49	[0]:1:51:51	[0]:1:33:12	[0]:1:19:53	[0]:0:55:55
256	[0]:6:12:50	[0]:4:39:37	[0]:3:43:42	[0]:3:6:25	[0]:2:39:47	[0]:1:51:51
512	[0]:12:25:39	[0]:9:19:14	[0]:7:27:24	[0]:6:12:50	[0]:5:19:34	[0]:3:43:42
1024	[1]:0:51:18	[0]:18:38:29	[0]:14:54:47	[0]:12:25:39	[0]:10:39:8	[0]:7:27:24
2048	[2]:1:42:37	[1]:13:16:58	[1]:5:49:34	[1]:0:51:18	[0]:21:18:16	[0]:14:54:47
4096	[4]:3:25:14	[3]:2:33:55	[2]:11:39:8	[2]:1:42:37	[1]:18:36:32	[1]:5:49:34
6144	[6]:5:7:51	[4]:15:50:53	[3]:17:28:43	[3]:2:33:55	[2]:15:54:48	[1]:20:44:21
8192	[8]:6:50:28	[6]:5:7:51	[4]:23:18:17	[4]:3:25:14	[3]:13:13:3	[2]:11:39:8

Media Capacity (MB)	WAV Recording Time in Seconds						
	16	16	16	16	24	24	
44100	44100	48000	88200	96000	44100	48000	88200
64	380	350	190	175	254	233	127
128	761	699	380	350	507	466	254
256	1522	1398	761	699	1014	932	507
512	3043	2796	1522	1398	2029	1864	1014
1024	6087	5592	3043	2796	4058	3728	2029
2048	12174	11185	6087	5592	8116	7457	4058
4096	24348	22370	12174	11185	16232	14913	8116
6144	36522	33554	18261	16777	24348	22370	12174
8192	48696	44739	24348	22370	32464	29826	16232

Media Capacity (MB)	WAV Recording Time in H:M:S						
	16	16	16	16	24	24	
64	0:06:20	0:05:50	0:03:10	0:02:55	0:04:14	0:03:53	0:02:07
128	0:12:41	0:11:39	0:06:20	0:05:50	0:08:27	0:07:46	0:04:14
256	0:25:22	0:23:18	0:12:41	0:11:39	0:16:54	0:15:32	0:08:27
512	0:50:43	0:46:36	0:25:22	0:23:18	0:33:49	0:31:04	0:16:54
1024	1:41:27	1:33:12	0:50:43	0:46:36	1:07:38	1:02:08	0:33:49
2048	3:22:54	3:06:25	1:41:27	1:33:12	2:15:16	2:04:17	1:07:38
4096	6:45:48	6:12:50	3:22:54	3:06:25	4:30:32	4:08:33	2:15:16
6144	10:08:42	9:19:14	5:04:21	4:39:37	6:45:48	6:12:50	3:22:54
8192	13:31:36	12:25:39	6:45:48	6:12:50	9:01:04	8:17:06	4:30:32

Certain software contained in this product is copyrighted work of PortalPlayer, Inc. © PortalPlayer, Inc. 1999-2005. All Rights Reserved.

PortalPlayer and the PortalPlayer logo are trademarks owned by PortalPlayer, Inc.

PORTALPLAYER



Supply of this product does not convey a license nor imply any right to distribute content created with this product in revenue-generating broadcast systems (terrestrial, satellite, cable and/or other distribution channels), streaming applications (via Internet, intranets and/or other networks), other content distribution systems (pay-audio or audio-on-demand applications and the like) or on physical media (compact discs, digital versatile discs, semiconductor chips, hard drives, memory cards and the like). An independent license for such use is required. For details, please visit <http://mp3licensing.com>.