



Apple® MIDI Interface Owner's Guide



Apple MIDI Interface

LIMITED WARRANTY ON MEDIA AND REPLACEMENT

If you discover physical defects in the manuals distributed with an Apple product or in the media on which a software product is distributed, Apple will replace the media or manuals at no charge to you, provided you return the item to be replaced with proof of purchase to Apple or an authorized Apple dealer during the 90-day period after you purchased the software. In addition, Apple will replace damaged software media and manuals for as long as the software product is included in Apple's Media Exchange Program. While not an upgrade or update method, this program offers additional protection for up to two years or more from the date of your original purchase. See your authorized Apple dealer for program coverage and details. In some countries the replacement period may be different; check with your authorized Apple dealer.

ALL IMPLIED WARRANTIES ON THE MEDIA AND MANUALS, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO NINETY (90) DAYS FROM THE DATE OF THE ORIGINAL RETAIL PURCHASE OF THIS PRODUCT.

Even though Apple has tested the software and reviewed the documentation, **APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO SOFTWARE, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS SOFTWARE IS SOLD "AS IS," AND YOU, THE PURCHASER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND PERFORMANCE.**

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE SOFTWARE OR ITS DOCUMENTATION, even if advised of the possibility of such damages. In particular, Apple shall have no liability for any programs or data stored in or used with Apple products, including the costs of recovering such programs or data.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING

This equipment has been certified to comply with the limits for a Class B computing device, in accordance with the specifications in Subpart J of Part 15 of FCC rules. See instructions if interference to radio or television reception is suspected.

DOC Class B Compliance This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Observation des normes—Classe B Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Classe B prescrites dans les règlements sur le brouillage radioélectrique édictés par le Ministère des Communications du Canada.



Apple® Apple MIDI Interface Owner's Guide



Radio and television interference

The equipment described in this manual generates and uses radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple's instructions—it may cause interference with radio and television reception.

This equipment has been tested and complies with the limits for a Class B computing device in accordance with the specifications in Subpart J, Part 15, of FCC rules. These rules are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation, especially if a "rabbit-ear" television antenna is used. (A rabbit-ear antenna is the telescoping-rod type usually found on television receivers.)

You can determine whether your computer is causing interference by turning it off. If the interference stops, it was probably caused by the computer or its peripheral devices.

If your computer system does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- ☐ Turn the television or radio antenna until the interference stops.
- ☐ Move the computer to one side or the other of the television or radio.
- ☐ Move the computer farther away from the television or radio.
- ☐ Plug the computer into an outlet that is on a different circuit than the television or radio. (That is, make certain the computer and the radio or television are on circuits controlled by different circuit breakers or fuses.)
- ☐ Consider installing a rooftop television antenna with a coaxial cable lead-in between the antenna and the television.

If necessary, consult your authorized Apple dealer or an experienced radio/television technician for additional suggestions.

You may find helpful the following booklet, prepared by the Federal Communications Commission: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

Important

This product was FCC-certified under test conditions that included use of shielded cables and connectors between system components. It is important that you use shielded cables and connectors to reduce the possibility of causing interference to radios, television sets, and other electronic devices. For Apple peripheral devices, you can obtain the proper shielded cable from your authorized Apple dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.



Apple MIDI Interface Owner's Guide

This short guide explains how to connect the Apple® MIDI Interface to a Macintosh™ or an Apple IIGS™ computer.

MIDI, an acronym for **Musical Instrument Digital Interface**, is a communications protocol—a standard way of exchanging information between electronic musical instruments, and between computers and those instruments.

By connecting the Apple MIDI Interface to your Macintosh or Apple IIGS and using MIDI software and instruments designed for the purpose, you can use your computer to compose, edit, orchestrate, and control playback of music on MIDI instruments such as **keyboard synthesizers, drum synthesizers, and tone generators** (also called **expanders**). And you can compose on a MIDI instrument such as a synthesizer or a **keyboard controller**. You can then use your computer and MIDI software to transcribe the music into musical notation that can be edited, saved on a disk, and printed. You can find out about specific MIDI software from your authorized Apple dealer, and you can get information about MIDI instruments at a musical instrument store.

The following section explains how to connect the Apple MIDI Interface to a Macintosh or to an Apple IIGS.

Connecting the Apple MIDI Interface to a Macintosh or an Apple IIGS

The Apple MIDI Interface kit contains the Apple MIDI Interface, a short cable with 8-pin connectors for connecting the Apple MIDI Interface to the computer, and two MIDI cables with 5-pin connectors for connecting the Apple MIDI Interface to MIDI devices.

- ❖ *Macintosh 512K owners:* If you are connecting the Apple MIDI Interface to a Macintosh 512K, you will need to purchase a special cable, because the modem port on the Macintosh 512K requires a different type of connector from that of other Macintosh models. Ask your authorized Apple dealer for the Macintosh Peripheral-8 Cable (#M0196).

Here's how to connect the Apple MIDI Interface to your computer:

1. Turn off the Macintosh or Apple IIGS power switch, but leave the power cord plugged in. This keeps your computer grounded and prevents damage to your system from static electricity.
 2. Connect the Apple MIDI Interface to the modem port as shown in Figure 1 for a Macintosh or in Figure 2 for an Apple IIGS.
- ❖ *Sometimes you have a choice:* If your MIDI application asks whether your MIDI device is attached to the modem port or the printer port, you can connect the Apple MIDI Interface to either port. If your application doesn't give you a choice, use the modem port.

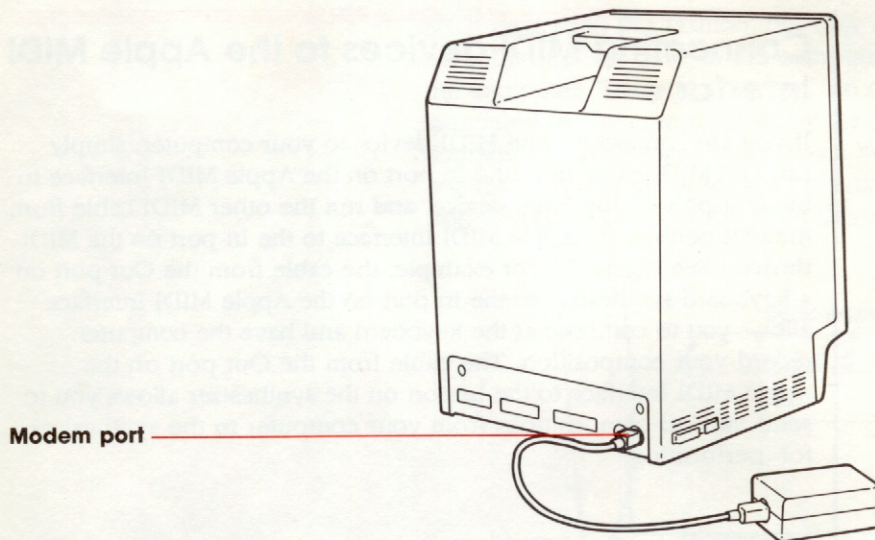


Figure 1
Macintosh Installation

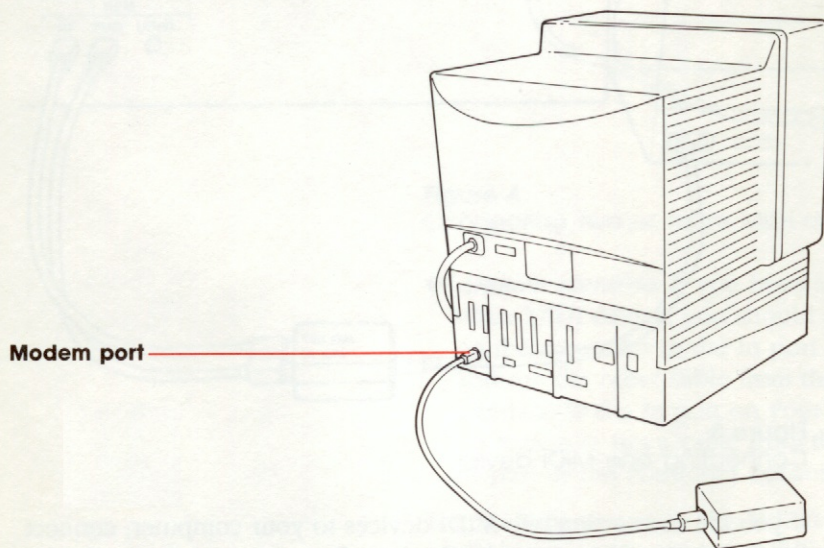


Figure 2
Apple IIgs Installation

Connecting MIDI devices to the Apple MIDI Interface

If you are connecting one MIDI device to your computer, simply run one MIDI cable from the In port on the Apple MIDI Interface to the Out port on the MIDI device, and run the other MIDI cable from the Out port on the Apple MIDI Interface to the In port on the MIDI device. (See Figure 3.) For example, the cable from the Out port on a keyboard synthesizer to the In port on the Apple MIDI Interface allows you to compose at the keyboard and have the computer record your composition. The cable from the Out port on the Apple MIDI Interface to the In port on the synthesizer allows you to send musical compositions from your computer to the synthesizer for performing.

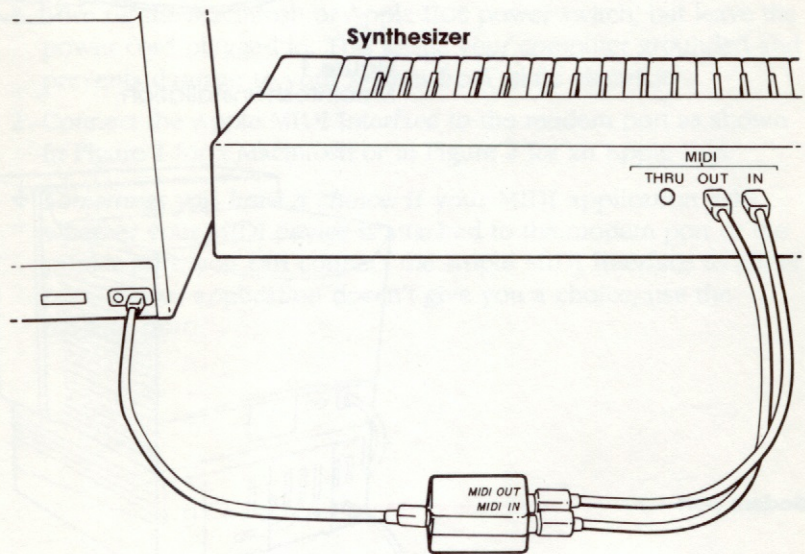


Figure 3
Connecting one MIDI device

If you are connecting two MIDI devices to your computer, connect the first device (the one with a keyboard) as shown in Figure 3. Then run a third cable from the Thru port on the first MIDI device to the In port on the second device. (See Figure 4.) If you have a third MIDI device, run a fourth cable from the Thru port on the second device to the In port on the third device. You can continue stringing

MIDI devices in this fashion, but only the first device—the one with an outbound line back to the computer—can send information to the computer. The other devices can only respond to signals generated by the computer, or by the first device as relayed by the computer. Most MIDI software has a keyboard select feature or a command called *patch through* that lets you send signals generated from the first device to the other devices.

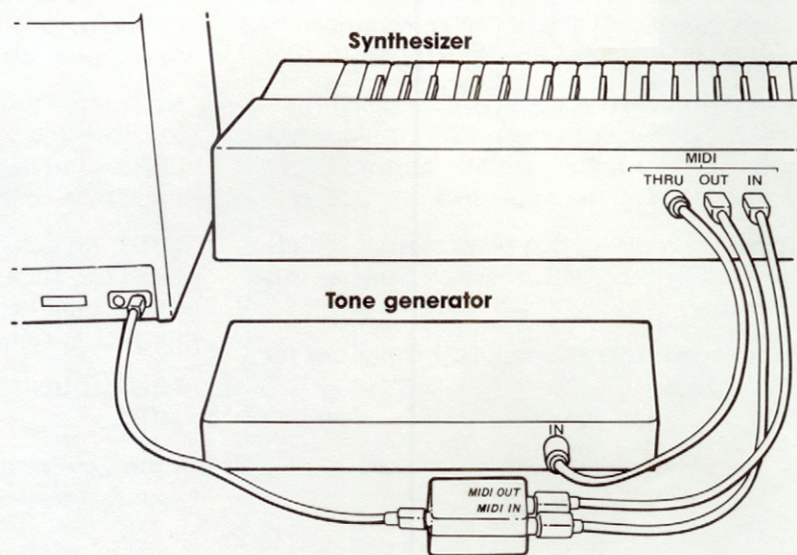


Figure 4
Connecting two or more MIDI devices

- ❖ *Another scenario:* If you have a keyboard controller and one other MIDI device, you should run one cable from the Out port on the controller to the In port on the Apple MIDI Interface, and run the other cable from the Out port on the Apple MIDI Interface to the In port on your second MIDI device. (There is no reason to run a cable from the Apple MIDI Interface to the In port of the controller because controllers don't play music.)

That's all there is to it! You'll find information for using MIDI applications and instruments in the manuals furnished with those products.

- ❖ *MIDI clock rate:* Some software packages will ask you for the clock rate or speed of your MIDI interface. The Apple MIDI Interface runs at 1 megahertz.



Glossary



drum synthesizer: A device that can be used to play percussion sounds. It can be controlled by an external MIDI device or by drum pads.

8-pin connector: A connector designed for connecting devices to the printer or modem port on the Macintosh Plus, the Macintosh SE, the Macintosh II, and the Apple IIGS.

expander: A device that plays musical sounds generated by other MIDI devices. Same as **tone generator**.

5-pin connector: The standard connector for MIDI devices.

keyboard controller: A piano-like keyboard that can be used to create and send MIDI information to other devices. It makes no sound itself.

keyboard synthesizer: A device that can be used to create and send MIDI information to other devices and to play musical sounds generated by itself, by a computer, or by another MIDI device.

MIDI: An acronym for **Musical Instrument Digital Interface**. MIDI is a standard way of exchanging information between computers and electronic musical instruments.

Musical Instrument Digital Interface: See **MIDI**.

tone generator: A device that plays musical sounds generated by other MIDI devices.

THE APPLE PUBLISHING SYSTEM

This Apple manual was written, edited, and composed on a desktop publishing system using the Apple Macintosh™ Plus and Microsoft® Word. Proof and final pages were created on the Apple LaserWriter® Plus.

POSTSCRIPT™, the LaserWriter page-description language, was developed by Adobe Systems Incorporated.

Text type is ITC Garamond® (a downloadable font distributed by Adobe Systems). Display type is ITC Avant Garde Gothic®. Bullets are ITC Zapf Dingbats®. Some elements, such as program listings, are set in Apple Courier, a fixed-width font.



Apple Computer, Inc.

20525 Mariani Avenue
Cupertino, CA 95014
(408) 996-1010
TLX 171-576

Scanned by cvxmelody

<http://www.cvxmelody.net/AppleUsersGroupSydneyAppleIIIDiskCollection.htm>

030-0016-B
Printed in Singapore



Packing List for Apple® MIDI Interface

This package contains the following items:

-
- | | |
|---|----------------------|
| 1 | Apple MIDI Interface |
|---|----------------------|
-
- | | |
|---|--|
| 1 | Manual: <i>Apple MIDI Interface User's Guide</i> |
|---|--|
-
- | | |
|---|---|
| 2 | Cables, DIN-5-to-DIN-5 (MIDI interface to MIDI device cables) |
|---|---|
-
- | | |
|---|--|
| 1 | System cable (CPU to MIDI Interface cable) |
|---|--|
-
- | | |
|---|-------------|
| 1 | Logo decals |
|---|-------------|
-
- | | |
|---|---------------|
| 1 | Warranty card |
|---|---------------|
-

If you have any questions, please contact your authorized Apple dealer.



Apple® MIDI Interface



Apple® MIDI Interface

With the Apple MIDI Interface, you can easily connect your Apple IIgs™ or Macintosh™ computer to the world of electronic music.*

Used in conjunction with MIDI compatible software packages, this interface allows you to control a variety of MIDI-equipped musical instruments from your computer—including keyboards, synthesizers, drum machines, and more. You can record music on the computer and play it back on your electronic keyboard, for example. You can sequence musical tracks. You can even create unique sounds on the computer and send them to your instrument to be played.

The MIDI Interface is compact and does not require a power supply. It's also easy to set up. Just connect the two MIDI cables between the interface and the instrument you want to use. Attach the system connector cable to the interface and to either the printer or modem port on the back of the computer (the correct port is determined by the software package you select). The owner's guide describes the procedure in detail.

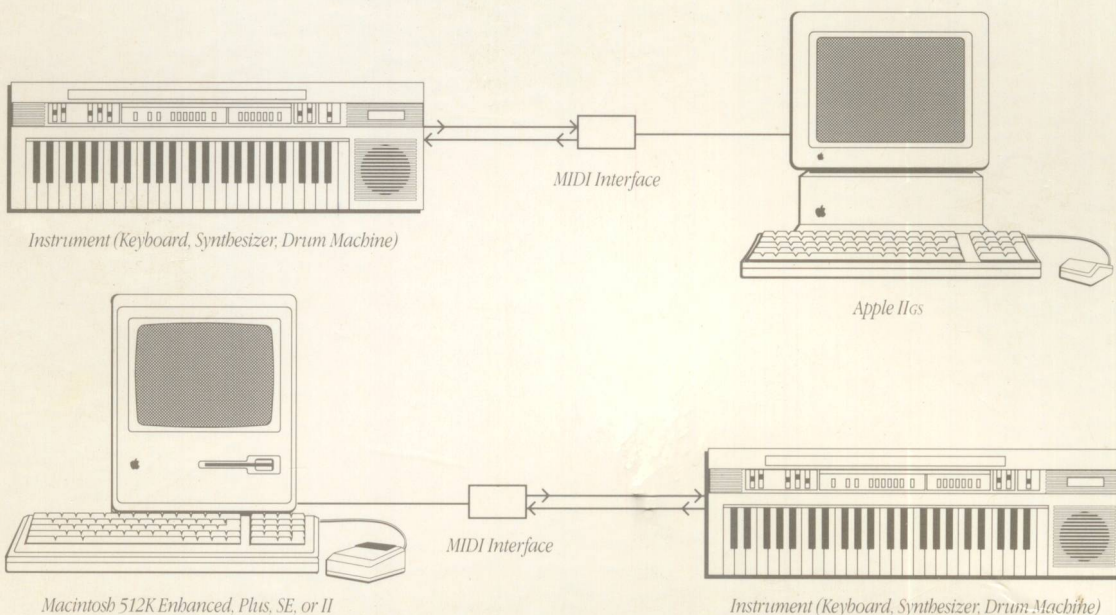
Required equipment:

- An Apple IIgs, Macintosh 512K Enhanced Macintosh Plus, Macintosh SE, or Macintosh II computer (the Macintosh 512K and earlier systems that use a nine-pin connector require an additional cable, order number M0196, sold through your dealer)
- Any MIDI-equipped musical instrument
- MIDI-compatible software for your computer

This package contains:

- The Apple MIDI Interface
- Apple System Peripheral-8 Cable, Short
- Two 6-foot MIDI cables
- Owner's guide

*MIDI stands for Musical Instrument Digital Interface.



Packaged in Australia with certain components from foreign countries of origin as specified thereon.

©1991 Apple Computer, Inc. Apple and the Apple logo are registered trademarks of Apple Computer, Inc.

Apple IIgs and Macintosh are trademarks of Apple Computer, Inc.



Apple®

Apple
MIDI
Interface

A9M0103





Apple® MIDI Interface

Apple Computer, Inc.
Cupertino, California

Model No.: A9M0103

FCC ID: BCG6DSA9M0103
Assembled in Australia.

© 1987 Apple Computer, Inc.

9076X



How to Use Apple's Global Warranty

The Apple Hardware Warranty now includes global coverage for a period of one year. This means that if you discover a defect with your in-warranty Apple® product while outside the United States, that product will be covered. Apple wants to ensure that you know how to take advantage of this warranty. Here's how it works.

If your equipment fails while under warranty, you can wait until you return to the United States to have it repaired. However, you cannot wait beyond the term of the warranty; the equipment must be repaired while the warranty is still in effect. When you return to the United States, simply take your Apple product to the dealer from whom you purchased it, or to any other authorized Apple service provider.

If you need to have your in-warranty Apple product repaired while you are outside the United States, you should do the following:

1. Locate an authorized Apple dealer or other authorized Apple service provider (the service provider must be Apple authorized in order for you to qualify for the warranty repair reimbursement). Apple dealers and service providers are usually listed in the telephone directory. If you don't speak the local language, looking for the Apple logo is a good start. Because of Apple's extensive worldwide service coverage—more than 80 countries are included—there are many authorized Apple service providers available to repair your equipment. Please be aware that service providers outside the United States may not carry repair parts for U.S. products. If the repair parts need to be specially ordered, the repair may take somewhat longer.

2. Pay for the repair in full at the time the defective product is repaired. It is recommended that you pay for the repair with a credit card. When you receive your credit card bill, it will reflect the exchange rate in effect at the time of payment. If you send us this bill, Apple will reimburse you at the documented exchange rate. Otherwise, Apple will reimburse you at the exchange rate in effect on the date your claim is processed.

3. Claim reimbursement from Apple USA. To obtain reimbursement (in U.S. dollars) for the complete cost of repairs performed outside the United States, send Apple the following information for each in-warranty product for which you have obtained service:

- Your name, address, and daytime telephone number
- A letter briefly describing the problem and the repair
- The original (foreign) repair bill
- A copy of the U.S. bill of sale bearing the appropriate Apple serial numbers, as proof of date of original retail purchase
- Proof of payment for the repair (credit card receipt or cash receipt)
- Credit card bill (optional)

Mail this information to:

Apple Computer, Inc.
20525 Mariani Avenue
Cupertino, CA 95014
Attn: Global Warranty Reimbursement

You must submit your claim within three months of the repair date. Please allow six to eight weeks for processing. The refund will be made in U.S. dollars only. If you have sent us your credit card bill (which documents the exchange rate in effect when you paid for the repair), this rate will be used when determining your reimbursement. Otherwise, Apple will use the exchange rate in force on the day the claim is processed.

If you plan to travel overseas, please remember to take this card with you. In case your Apple product does fail, you'll know exactly what to do. If you have questions about this global warranty reimbursement program, please contact your local authorized Apple reseller or Apple representative.