

## INTRODUCTION

The Initio Miles™ Bluenote (INI-9090U Mac) is a high performance bus master SCSI-2 host adapter designed for Mac OS PCI-based computers. Miles Bluenote supports 32-bit data transfers across the PCI bus at speed up to 133 Mbytes per second.

- Miles Bluenote complies w/Plug & Play applications on systems using the PCI bus standard.
- Miles Bluenote supports synchronous I/O transfers to a maximum rate of 20 Mbytes per second.
- Miles Bluenote fully supports the SCSI-2 specifications.

This installation guide is designed to assist users with previous experience in integrating PCI local bus add-in boards. Users who require more in-depth installation information can contact our Technical Support department listed on the end of this guide. The following sections are included in this Installation Guide:

- *Unpacking the product*
- *Installing the host adapter*
- *Cabling, SCSI ID's and Termination Settings*
- *Default configuration settings*
- *Bundled software*
- *Troubleshooting*

## UNPACKING THE PRODUCT

Before opening the host adapter antistatic poly bag, discharge static electricity by touching the computer chassis. Remove the board from its bag and visually inspect it for possible damage during shipping.

The jumper JP1 (as shown in FIGURE 1) located on the board is used in multiple initiator configurations on the SCSI bus. JP1 defaults to OPEN or single initiator mode. Multiple initiator setups usually have two computers sharing one SCSI bus subsystem.

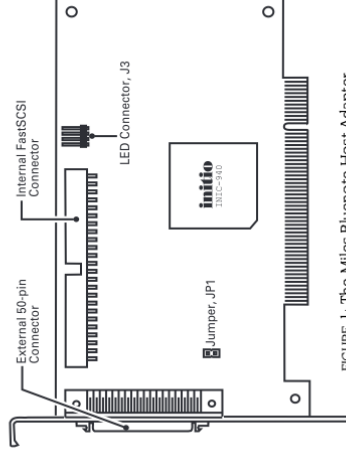
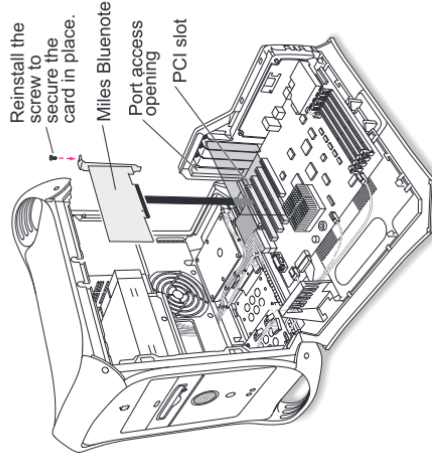


FIGURE 1: The Miles Bluenote Host Adapter

## INSTALLING THE HOST ADAPTER

Power down the computer system and its peripherals before opening the computer cover. Refer to your computer system documentation for cover removal instructions.



Install the board by inserting it into one of the available PCI connectors on the motherboard. Miles Bluenote is compatible by insertion into a 64-bit PCI slot as well (FIGURE 2).

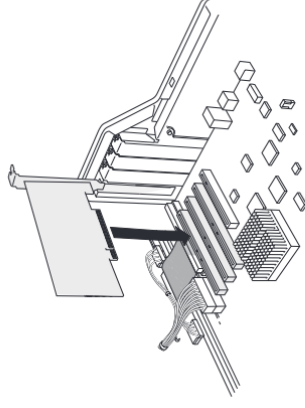


FIGURE 2: Inserting Miles Bluenote into a PCI Slot

Attach an internal SCSI cable between the host adapter and your internal SCSI device(s). A 50-pin internal SCSI cable can be inserted by matching the connector marking or cable stripe with the board connector J1, pin 1 (shown in FIGURE 3). Internal and external 50-pin cable connectors are keyed for proper insertion and can only be connected in one direction. External cables may be attached after the computer covers have been closed.

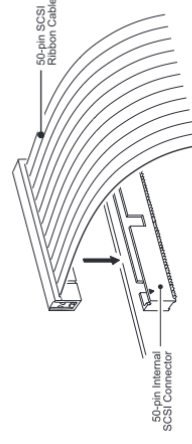
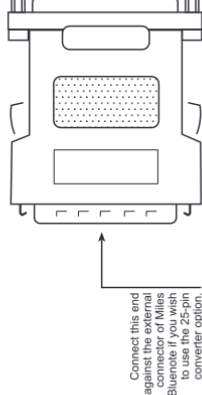


FIGURE 3: Inserting the 50-pin internal SCSI Connector

## USING THE 50 to 25-pin CONVERTER

External SCSI-2 devices such as Iomega® Zip™ drives can be connected to Miles Bluenote via a 50-pin to 25-pin connector converter (if included). It is highly

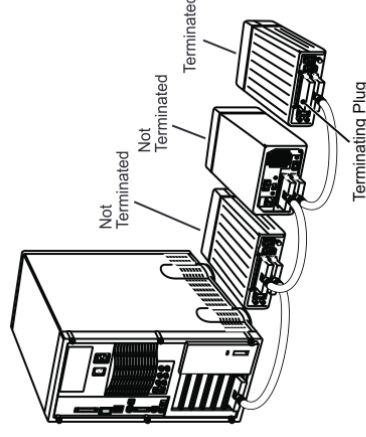
recommended that you operate devices at SCSI-2 speeds or lower (10 MB/sec) when using the 50-pin to 25-pin connector converter. In addition, Auto-termination logic may not work properly when the converter is in use; therefore, the correct termination must be set manually through SmartSCSI Utility.



50-pin to 25-pin connector converter

## CABLING, SCSI ID's and TERMINATION

Host adapter termination is automatically controlled by the Initio firmware and is enabled by default (unless you are using the 50 to 25 pin connector converter). Miles Bluenote detects the presence of cables on any of its two connectors and adjusts its internal termination accordingly. When connecting multiple SCSI devices, only the last SCSI device on the chain needs to be terminated. Refer to the peripheral manufacturer's user manual for proper device termination.



Each of the internal and external devices connected to a SCSI bus need to have a unique SCSI ID. Miles Bluenote supports up to 7 SCSI peripherals. SCSI peripherals can use SCSI IDs from 0 to 6 (excluding ID 7). Miles Bluenote defaults to using ID #7 and should not be changed to use a different ID.

The actual number of SCSI peripherals that can be connected to Miles is dependent on two factors: the total length of the SCSI cables used, and the SCSI type of connected peripherals. Refer to the table below for details.

| Type of Device          | Cable Length<br>(Internal & External) |
|-------------------------|---------------------------------------|
| Up to 7 SCSI-2 devices  | 6 Meters                              |
| Up to 4 Ultra devices   | 3 Meters                              |
| 5 or more Ultra devices | 1.5 Meters                            |

If you decide to use both internal and external connectors, we recommend using FastSCSI speeds of 10MB/sec or less. Attempting to operate the host adapter in UltraSCSI speeds (20MB/sec) when both external and internal connectors are utilized may result in unreliable operation.

The hardware installation is now complete. Replace the computer cover.

## DEFAULT CONFIGURATION SETTINGS

The Miles Bluenote host adapter configuration is completely automatic and should not be modified by the user. These factory settings are designed to meet most operational needs.

### Miles Bluenote Default Configurations:

|                                      |     |
|--------------------------------------|-----|
| SCSI Device Setup For All Device IDs | YES |
| Synchronous Transfer                 | YES |
| Synchronous Transfer Rate            | 10  |
| Spin Up Disk Drive                   | NO  |
| Enable Disconnect                    | YES |

### Miles Bluenote Host Adapter Setup:

|                          |      |
|--------------------------|------|
| Host Adapter SCSI Bus ID | 7    |
| SCSI Terminators         | AUTO |
| SCSI Parity Check On     | YES  |

## BUNDLED SOFTWARE

*NOTE: Type of software bundled with Miles Bluenote varies depending on kit type.*

**FWB® Hard Disk Toolkit•PE** can be used to partition and format a newly added hard disk connected to Miles Bluenote. Follow the FWB Hard Disk Toolkit User's Manual for instructions on how to prepare a new hard disk drive. **IMPORTANT:** if you plan to use FWB Hard Disk Toolkit with a new Power Mac G3, the ReadMe file contains important information that may affect functionality. Please read it carefully.

## QUESTIONS & ANSWERS

**Q:** Is Miles Bluenote compatible with the entire Power Macintosh series, past and/or present?

**A:** Yes. As long as you have an empty PCI slot within your Power Mac, you will be able to utilize the advantages of Miles Bluenote. And in many cases, Miles Bluenote will outperform the built-in SCSI that came with older Power Macintoshes.

**Q:** Is Miles Bluenote compatible with Windows-based PCs?

**A:** Yes. Provided the appropriate drivers are obtained, Miles Bluenote is cross-platformable should you decide to use it on a Windows-based PCs. The drivers are contained on the Miles Bluenote hybrid CD-ROM. Otherwise you may download the appropriate drivers from the Initio website.

### Product Specifications:

- PCI 2.1 compliant
- Plug & Play
- Mac OS version 8.1 or later
- 133 Mbytes per second PCI burst mode.
- Compatible with hard disks, CD-Rs, Optical, Tape, Zip/laz drives and other SCSI peripherals
- Up to 20 MB/s transfers over SCSI-2 bus
- SCSI Auto-termination
- On-board firmware supports bootable Mac OS
- SCSI Manager 4.3 compliant

### Power Requirements:

- DC Voltage: 5.0, 0.25 Vdc
- Power Dissipation: 350mW Typical

### Environmental Specifications:

- Operating Temperature: 0 to 55°C (32° to 131°F)
- 10% to 90% relative humidity (non-condensing)

### Storage Temperature:

- -40° to 75° C (-40° to 167°F)
- 5% to 95% relative humidity (non-condensing)

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## TECHNICAL SUPPORT

Additional answers about Miles Bluenote can be obtained at:

**1-800-99-INITIO or 408-577-1919**

(Available Monday thru Friday, 8 AM to 5 PM, PST)

**E-mail: support@initio.com**

**World Wide Web: www.initio.com**

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**FCC-MILES BLUENOTE HAS BEEN DESIGNED TO BE FULLY COMPLIANT FOR CLASS B DEVICE, PURSUANT TO PART OF THE FCC RULES.**

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**Miles<sup>™</sup>**  
**bluenote**

**PCI to SCSI-2  
Bus Master Host Adapter  
for Power Macintosh with PCI  
INSTALLATION GUIDE**

