



# ***Turtle Beach Montego II Quadzilla***

***User's Guide***

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# TABLE OF CONTENTS

TABLE OF CONTENTS	3
WELCOME...	5
Remember to Register!	6
Our Website	6
THE MONTEGO II QUADZILLA	7
Resource Usage	8
The required resources are as follows:	8
System Requirements	8
3-D Listening Mode	9
The Montego II Quadzilla Sound Card	10
Signal Flow Diagram	11
INSTALLING THE MONTEGO II QUADZILLA	13
Overview of the Steps	14
Installing the Board	14
WINDOWS 95 & 98 INSTALLATION	19
Before You Install the Drivers, Note...	19
To install the drivers in Windows 98:	20
To install the drivers in Windows 95:	22
Final Software Installation Notes	23
About Online Documentation	24
Setting the Montego II Quadzilla as the default audio device	24
Testing and Troubleshooting	24
SoundCheck®	25
Uninstalling the Montego II Quadzilla	25
WINDOWS NT 4.0 INSTALL	27
Before You Install the Drivers, Note ...	27
Installing the Montego II Quadzilla Drivers in Windows NT 4.0	28
Setting the Montego II Quadzilla as the default audio device	29
Troubleshooting	29
Uninstalling the Montego II Quadzilla	30
Making Connections	31
The Back Panel	31
Audio Connections Overview	32
Joystick Controller	33

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Port Addresses	33
USING THE MONTEGO II QUADZILLA	35
Graphic EQ	35
S/PDIF Digital Output	35
Included Software:	36
MIDI Orchestrator Plus	36
AudioStation 32	36
AudioView 32	36
MIDI Orchestrator 32	37
PC Audio Mixer	37
System Tray Launcher	37
A3D Demos	37
THE TBS MONTEGO II QUADZILLA CONTROL PANEL	39
Windows 95/98 TBS Montego II Quadzilla Control Panel	40
MIDI TAB	40
A3D Settings Tab	41
A3D Demos Tab	42
Digital Output Tab	42
Windows NT TBS Montego II Quadzilla Control Panel	42
MIDI TAB	42
Digital Output Tab	43
TECHNICAL SUPPORT	45
WARRANTY AND LICENSING INFORMATION	47
Hardware Warranty	48
Voyetra End-User License Agreement	49
FCC Declaration of Conformity	51
Declaration of Conformity (EMC)	52
INDEX	53
Montego II Quadzilla Card Layout	56

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# WELCOME...

The ultimate audio gaming experience is here with the new Turtle Beach Montego II Quadzilla PCI accelerator card. Powered by the new A3D PCI audio accelerator and Wavetracing® technologies, Montego II Quadzilla puts you right in the middle of the gaming action. Sounds come from above, below, right and to the left of you by modeling the acoustic characteristics (stone, marble, glass, water, etc.) of the gaming environment. With up to 96 simultaneous DirectSound™ streams, Montego II Quadzilla frees your CPU increasing graphics card performance, input device response times and rendering of audio environments, maximizing your gaming experience. Montego II Quadzilla also features real-mode DOS compatibility to support your legacy DOS games while enhancing the latest 3D games by accelerating A3D, Microsoft DirectSound3D, and DirectSound.

The Montego II Quadzilla continues to push the gaming audio experience to new levels, and that's just what you'd expect from the leaders in award-winning PC sound technology-Turtle Beach!

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## REMEMBER TO REGISTER!

You can register by mail, fax, phone or on the Web — whichever is easiest for you. Refer to the front of this manual or the Registration Card for these addresses.

There are many benefits to registering your Montego II Quadzilla. In addition to the warranty, you also will receive:

- ◆ Update Notifications — to keep you informed of software updates and new Voyetra/Turtle Beach products.
- ◆ Upgrade Plan — to provide you with discounts on our full-featured PC sound products.
- ◆ Technical Support — You must be a registered user to receive full Technical Support. To help you install your soundcard and software, prior to Registration, you will need your product ID. This number is located on the CD cover of your software.

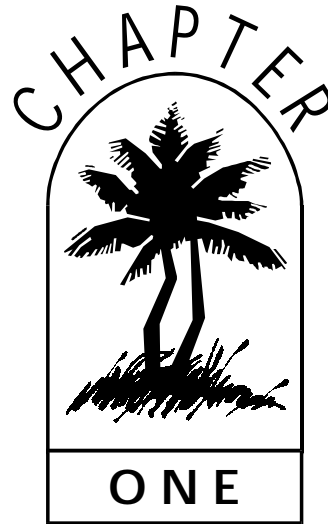
## OUR WEBSITE

Be sure to visit the Turtle Beach website for the latest information on new products, upgrades, technical support FAQ's and to obtain the most recent drivers. You will find us at [www.tbeach.com](http://www.tbeach.com).



Click the Turtle Beach website icon, in the TBS Montego II Quadzilla program group, for direct access to our website.

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# THE MONTEGO II QUADZILLA

The Montego II Quadzilla has many significant features, including:

- ♦ A3D 2.0 positional audio
  - ♦ >97 dB Signal to Noise Ratio
  - ♦ 18 bit audio converters
  - ♦ Headphone, 2-speaker and 4-speaker support
  - ♦ RCA Digital Out
  - ♦ Up to 96 Hardware accelerated DirectSound streams
  - ♦ MIDI and digital audio editing tools included
  - ♦ 10 Band Graphic EQ with Digital Display
  - ♦ 64 Hardware wavetable voices
  - ♦ 256 Software Synth voices
-



## RESOURCE USAGE

The Montego II Quadzilla, like all plug-in cards, requires certain computer resources in order to operate. These resources are associated with specific board functions.

- ♦ **In Windows 95 and 98**, the resources are set automatically by the Configuration Manager, but can be adjusted using the Windows Device Manager.
- ♦ **In Windows NT**, the resources are configured automatically.

THE REQUIRED RESOURCES ARE AS FOLLOWS:

- ♦ Two IRQs
- ♦ Several I/O address ranges
- ♦ Two DMAs

## SYSTEM REQUIREMENTS

<b>Computer</b>	IBM PC or compatible with one available PCI slot and one available space at the back of the computer chassis to install the breakout bracket.
<b>Processor</b>	Pentium 75 MHz or higher (Pentium 200MMX Recommended)
<b>RAM</b>	16 MB (32MB in Windows NT)
<b>Hard Drive</b>	approximately 12 MB free space for drivers and applications;
<b>Operating System</b>	Windows® 95, 98 Windows® NT 4.0
<b>CD-ROM Drive</b>	A CD-ROM drive is needed for the software and driver installations

High-quality stereo sound system, powered speakers or headphones to properly hear the Montego II Quadzilla's high-quality audio playback.

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## 3-D LISTENING MODE

The Montego II Quadzilla is capable of producing 3D sound through four speakers, two speakers or headphones. To achieve the best 3D listening experience you must have the appropriate listening mode selected in the Montego II Quadzilla Control Panel applet. The different modes are:

**Headphones:** Use this selection if you are listening through headphones.

**Monitor speakers:** Use this selection if you are listening through speakers placed close together.

**Satellite speakers:** Use this selection if you are listening through speakers placed far apart. (Default setting)

**Quad speakers:** Use this selection if you are listening through four speakers. For optimal experience, place two speakers in front of you and two speakers behind you.



The Montego II Quadzilla ships in Stereo Satellite Speaker mode. If you connect four speakers, be sure change to Quad Speaker mode in the control panel.

## TWO SPEAKERS VS. HEADPHONES

When using two speakers for 3-D audio, your left ear hears the sound coming from the left speaker but also some of the sound coming from the right speaker. The same holds true for your right ear, it also hears sounds coming from the left speaker. This diminishes the 3-D effect.

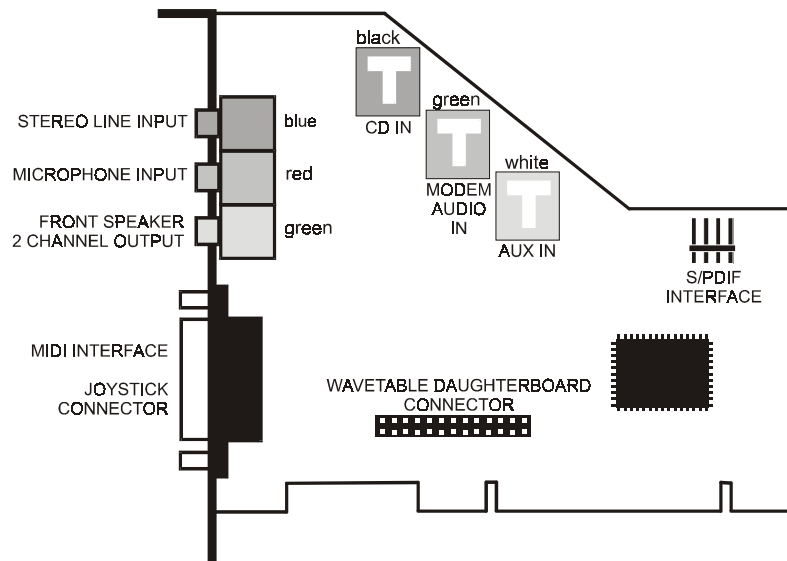
To achieve the maximum 3D effect the use of headphones is recommended. When using headphones the sound coming from the left are only heard by your left ear just as the sounds coming from the right are only the heard by your right ear. This results in a much more immersive experience.

Please see the Control Panel section later in this manual for more details.

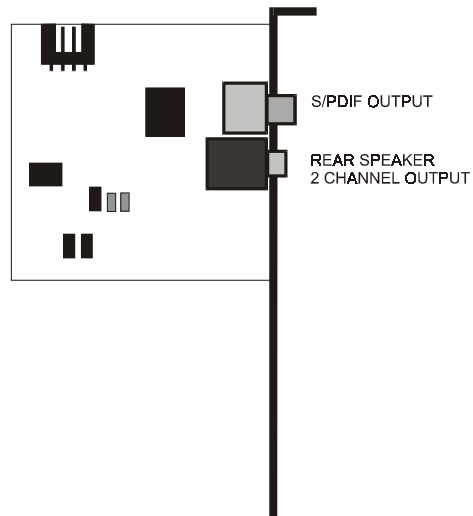


## THE MONTEGO II QUADZILLA SOUND CARD

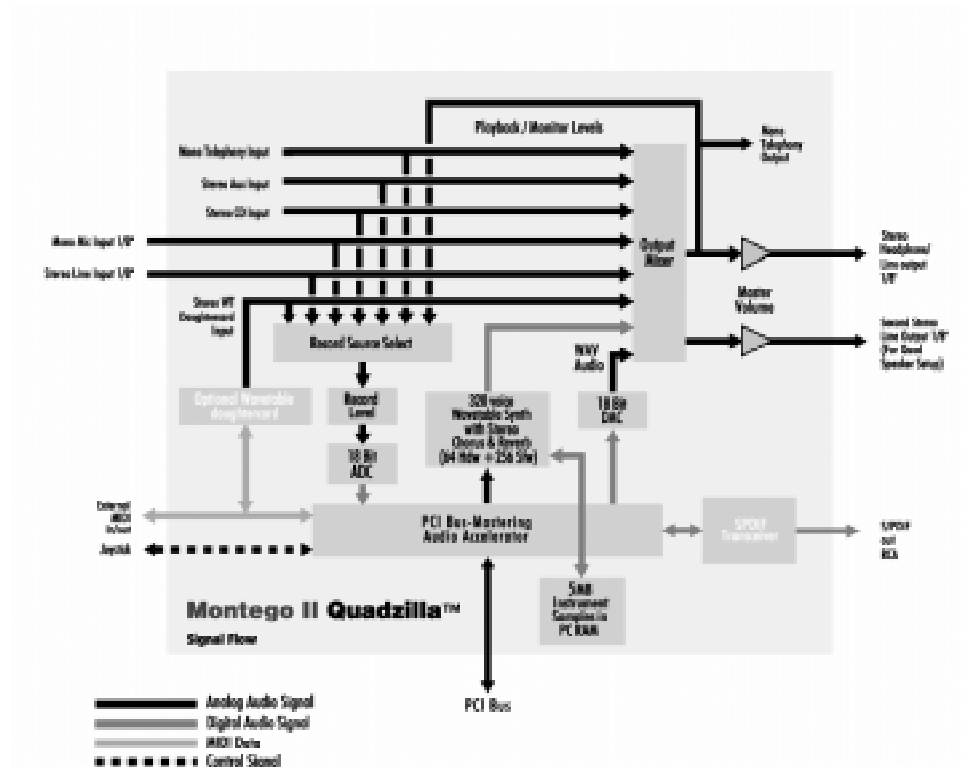
Here is a look at the Montego II Quadzilla sound card, to help you identify the various connectors and ports.



## BREAKOUT BRACKET



## SIGNAL FLOW DIAGRAM

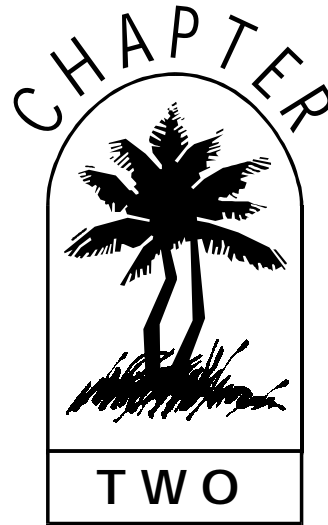




## TURTLE BEACH SYSTEMS

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# INSTALLING THE MONTEGO II QUADZILLA

It is time to install the Montego II Quadzilla sound card. This chapter takes you through the process step-by-step.

If you have another sound card in your system that you are replacing with the Montego II Quadzilla, remove that sound card's drivers from your system, remove that sound card, then reboot the system to make certain no errors occur and no old sound card drivers remain. For information on removing the sound card and its drivers, refer to the appropriate documentation.

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## OVERVIEW OF THE STEPS

There is a specific sequence of steps that you need to take when installing the Montego II Quadzilla sound card.

### HERE IS AN OVERVIEW OF THE STEPS:

1. Remove old sound card and drivers (if present.)
2. Install the Montego II Quadzilla sound card and breakout bracket in the computer.
3. Attach the audio cable to the CD-ROM drive (optional.)
4. Install the Montego II Quadzilla drivers and software.
5. Set the Montego II Quadzilla to be the default audio device if there is another audio device in your system.

### ***PRODUCT ID NUMBER***



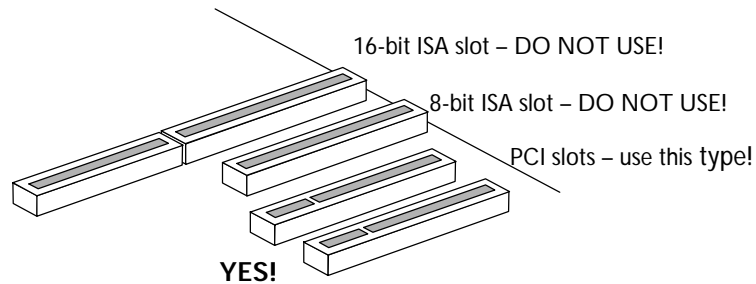
To install the software, you will need the Product ID number. This number is located on the CD case that came with the software.

## INSTALLING THE BOARD

It is time to install the Montego II Quadzilla sound card and breakout bracket in your system.

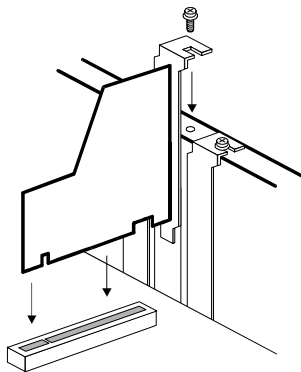
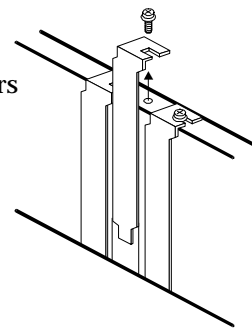
1. Turn off your PC and any connected peripherals and unplug the system.
  2. Remove the mounting screws from your computer's cover. Remove the cover.
-

3. Select an unused PCI expansion slot for the card. It should be near another empty expansion slot which you'll need to install the breakout bracket. The second slot can be any type however because the bracket doesn't require an actual slot. Also, you should position the Montego II Quadzilla card as far as possible away from the video card and power supply!



4. Remove the two selected expansion slot covers by unscrewing their securing screws.

Save the screws to secure the Montego II Quadzilla and expansion bracket to the chassis later.

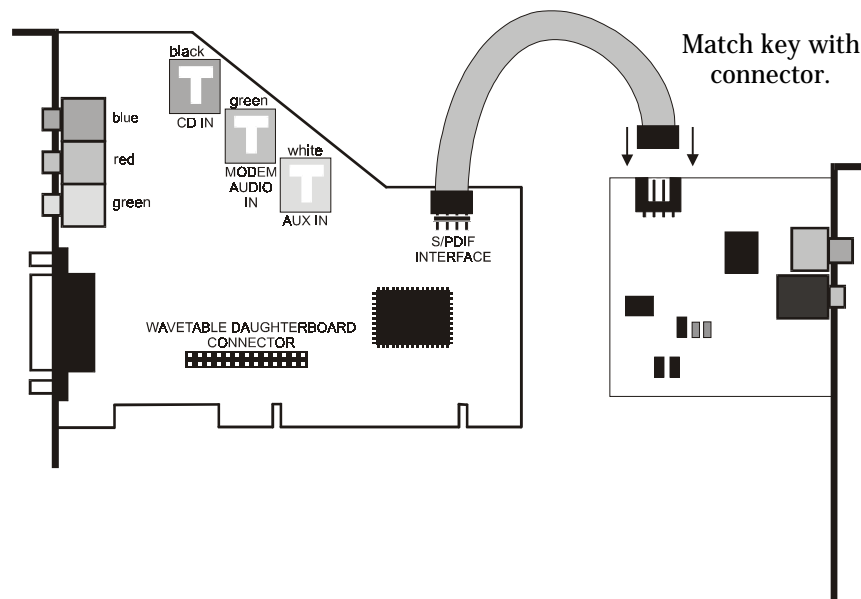
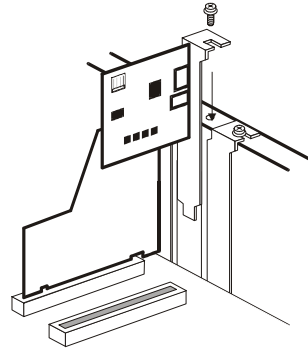


Gently press the Montego II card into the slot

5. Align the card's gold-striped edge connector with the selected PCI expansion slot socket. With a gentle back-and-forth rocking motion, press the Montego II Quadzilla firmly into the slot until it snaps in place.
6. Secure the Montego II Quadzilla sound card to the chassis with the expansion slot cover screw you removed earlier.



7. Slide the breakout bracket into the other selected slot and secure it with the remaining expansion slot cover screw.
8. Connect the Montego II Quadzilla sound card and the breakout bracket together using the included connector cable. When connecting the cable between the Montego II Quadzilla and the breakout bracket, be sure that the pins are aligned correctly. Misaligning these pins **WILL** damage the Montego II Quadzilla, the breakout bracket, and potentially your computer. Note that the cable is shipped pre-attached to the Montego II Quadzilla card.

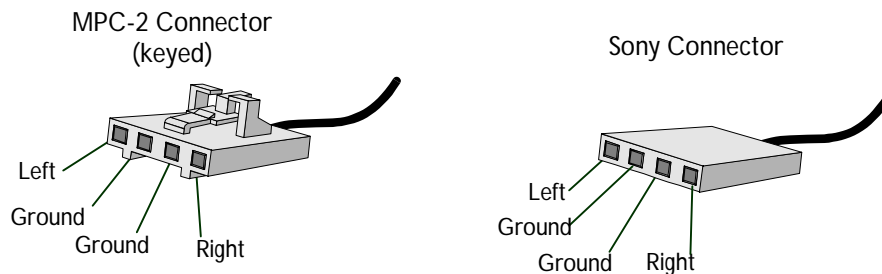




## INSTALLING THE CD-ROM AUDIO CABLE

The Montego II Quadzilla comes with an audio connector cable — one end is keyed (MPC-2), the other is not (Sony). All CD-ROM drives that adhere to the MPC-2 (Multimedia PC) standard have an MPC-2 jack.

Connect the MPC-2 connector to your CD-ROM drive. Then attach the



Sony connector to the Montego II Quadzilla.

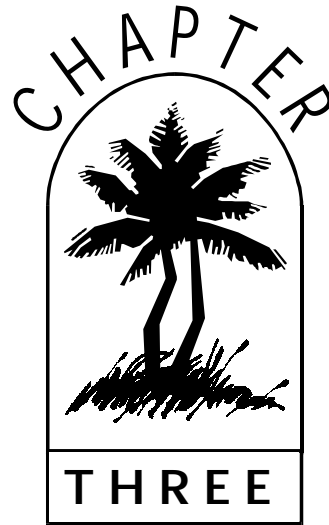
When connecting the CD-ROM audio cable, note that:

- ♦ The audio cable should be plugged into the CD-ROM drive first; then the other end of the interface should be plugged into the appropriate connector on the Montego II Quadzilla sound card. Make sure that you are plugging the audio connector into the 4-pin header labeled “CD IN.”
- ♦ On the cable, “white” is “left” and “red” is “right.”
- ♦ When connecting the cable to the Montego II Quadzilla, the red wire should be on the right (white should be closest to the slot cover.)
- ♦ Now You Are Ready to Install the Drivers!

## PROCEED TO THE CHAPTER THAT APPLIES TO YOUR SYSTEM:

- ♦ Windows 95 & 98 Installation
- ♦ Windows NT 4.0 Installation





# WINDOWS 95 & 98 INSTALLATION

Now that the hardware is installed, it is time to configure the drivers. The Plug and Play installation process uses your system's BIOS and the Plug and Play features of Windows 95 to allocate resources for the Montego II Quadzilla.

## BEFORE YOU INSTALL THE DRIVERS, NOTE...

- ♦ The Montego II Quadzilla sound card and breakout bracket must be installed in your system. If you have not already installed the sound card in your PC, refer to the previous chapter for instructions.
  - ♦ **IMPORTANT** On the first boot up after physically installing the Montego II Quadzilla, place the Montego II Quadzilla Applications CD in your CD-ROM drive **before** Windows completes boot up.
-



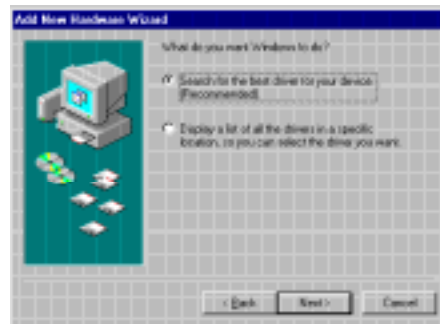
## TO INSTALL THE DRIVERS IN WINDOWS 98:

The following outlines the driver and applications installation process for Windows 98 drivers. (If your system is running the Windows 95 operating system, please skip to the next section.)

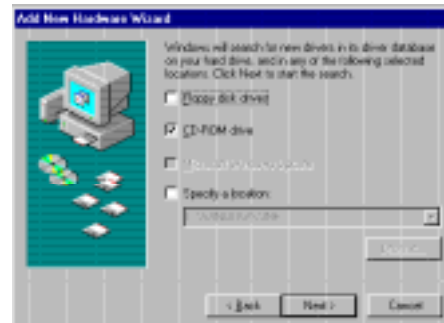
1. Turn on the computer and place the Montego II Quadzilla Applications CD in your CD-ROM drive if you did not already.

When the New Hardware Found dialog box reports that it sees the Turtle Beach Montego II Quadzilla sound card, select **Driver from disk provided by hardware manufacturer**. Then click **OK**.

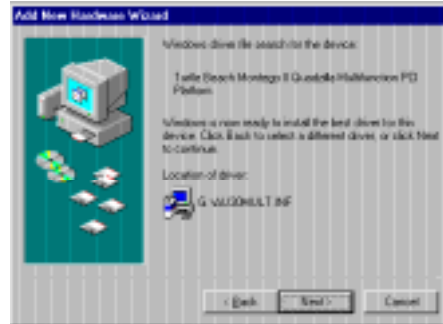
2. The following dialog box asks if you'd like to search for the best driver for your device or display a list of drivers. Select "Search for best drivers..." and click the Next button.



3. The next dialog box asks you to indicate the location of the drivers. Click on the CD-ROM drive option and click the Next button to continue.



4. Windows will search the system for the correct driver which will be located on the CD-ROM drive. Click next to continue the installation.



5. The installation will install the appropriate drivers for the various subsystems of the board. When this is complete you will be prompted to reboot the system.
6. Once the system reboots the Applications Installation will automatically run. Follow the onscreen instructions to complete the install. **Note that the product ID can be found inside the jewel case of your applications CD.**

You should now skip the next section and proceed to the Final Software Installation Notes section.



## TO INSTALL THE DRIVERS IN WINDOWS 95:

### WHICH VERSION OF WINDOWS 95 DO YOU HAVE?

Microsoft issued a maintenance release of Windows 95 referred to as OSR2. This version shipped as the stock operating system on many PCs. If you have this version of Windows 95 then the installation will be slightly different than described below. However, the installation will go smoothly if you simply follow the on screen instructions and, in all cases where the system is looking for a file, just browse to the root of the Montego II Quadzilla CD.

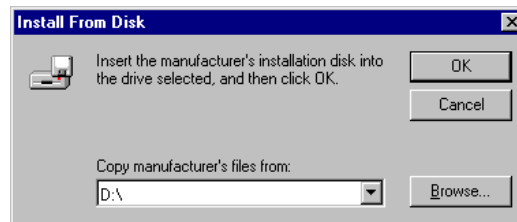
1. Turn on the computer and place the Montego II Quadzilla Applications CD in your CD-ROM drive if you did not already.

When the New Hardware Found dialog box reports that it sees the

Turtle Beach Montego II Quadzilla sound card, select **Driver from disk provided by hardware manufacturer**. Then click **OK**.



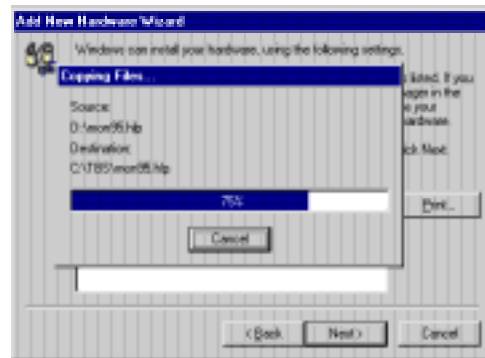
2. When the Install from Disk dialog box displays enter the letter of your CD-ROM drive, or click on Browse and locate your CD-ROM drive. Click **OK**.





At this point, the install program will check for Direct X 6 or later. If Direct X is already on your system the installation will proceed. If Direct X 6 or later is not installed the setup will prompt you to install it. Simply browse to the DIRECTX folder on the CD and follow the on-screen instructions. At the end of the Direct X install you will be prompted to reboot. Press OK and continue the installation. At the end of the applications install you must reboot the system.

3. Windows then copies the files from the CD. You may be prompted to insert your Microsoft Windows 95 CD or floppies, as the core sound components of the operating system may need to be copied as well. These include the audio codecs, joystick drivers, the Mixer and the Sound Recorder program.



The files are located in the **WIN95** directory on your Windows 95 CD-ROM.

If you do not have your Microsoft Windows 95 installation CD or floppies available, you can choose **Skip File** for each of the Windows 95 Sound Options and install them later from the Windows 95 Control Panel, **although this is not recommended**.

4. The Installation will continue, follow the on-screen instructions to complete the install. **Note that the product ID can be found inside the jewel case of your applications CD.**
5. **At the end of the install you should reboot your system.**

## FINAL SOFTWARE INSTALLATION NOTES

At this point, the drivers should be installed and the Montego II Quadzilla sound card should be functional. We recommend that you run the SoundCheck diagnostic located in the TBS Montego II Quadzilla program folder to test your system or troubleshoot any conflicts you might have.



To test the system, you need to hook up headphones or speakers to the Montego's output. For more information on hooking up speakers to the Montego II Quadzilla, refer to the "Making Connections" chapter later in this Guide.

## ABOUT ONLINE DOCUMENTATION

The MIDI Orchestrator program included provides documentation in the Adobe Acrobat format (PDF). If you do not have Acrobat installed you can run the installation from the Montego II Quadzilla CD Setup Menu. (Run setup.exe on the CD then select Acrobat Installation.)

## SETTING THE MONTEGO II QUADZILLA AS THE DEFAULT AUDIO AND MIDI DEVICE

If you have more than one sound card in your system you will need to set the Montego II Quadzilla as the default audio and MIDI device.

### SETTING THE MONTEGO II QUADZILLA TO BE THE DEFAULT AUDIO AND MIDI DEVICE:

1. In the Windows 95 and 98 Control Panel double-click the Multimedia icon.
2. Click on the Audio tab. **Montego II Quadzilla Playback** should be chosen for Playback and **Montego II Quadzilla Record** should be chosen for Recording.
3. Now click on the MIDI tab.
4. The **Montego II Quadzilla MIDI** should be selected.
5. Click on OK to save any changes.

## TESTING AND TROUBLESHOOTING

If the Montego II Quadzilla or your system is not working properly, there is probably a resource conflict in your system. This means that two or more devices in the system are using the same resources. Resource conflicts are fairly typical and are a normal part of the PC hardware installation process — and they are easily resolved.

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There are several possible types of conflicts that users experience when installing the Montego II Quadzilla:

- ◆ Input/Output Port Address Conflict
- ◆ Interrupt (IRQ) Conflict

Troubleshooting your system involves checking the current settings for each of these common conflicts and trying new settings for the resources that conflict. Note that you may need to try a number of different resource configurations before all of the peripherals work together in your PC.

In the rare occasion that your system locks up after installing the board, you should re-boot the system in safe mode and remove the drivers. (The process is explained below) Then call Turtle Beach technical support at 914-966-2150 for help in diagnosing the problem.

#### TO BOOT IN SAFE MODE:

1. **Restart** the system again.
2. When you see the message "Starting Windows 95..." press the **F8** key. If you have Windows 98 press F8 after the first beep.
3. Select **Safe Mode** from the menu.

#### SOUNDCHECK®

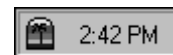
SoundCheck provides an easy way to find and fix audio problems in your system. If you experience any problems installing the drivers, we recommend you run this diagnostic utility.

## UNINSTALLING THE MONTEGO II QUADZILLA

Uninstalling the Montego II Quadzilla is a two step process. First the applications must be removed, and then the drivers. Before Uninstalling be sure to close the Turtle Beach System Tray Launcher.

#### TO CLOSE THE TURTLE BEACH SYSTEM TRAY LAUNCHER:

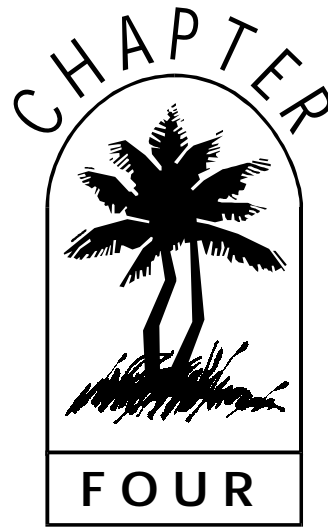
1. Right-click on the Turtle Beach System Tray Launcher icon and choose Close.





## TO UNINSTALL THE APPLICATIONS AND DRIVERS:

1. From the Windows Control Panel double-click the System icon.
  2. Click the Device Manager tab.
  3. Double-click on Multi-function adapters.
  4. Select TBS Montego Multifunction PCI Platform and click Remove. A dialog will display asking confirmation, Click Ok.
  5. From the Windows Control Panel double-click the Add/Remove Programs icon.
  6. Select Montego II Quadzilla Applications from the list and click the Add/Remove button..
  7. Select Montego II Quadzilla Drivers from the list and click the Add/Remove button.
-



# WINDOWS NT 4.0 INSTALL

## BEFORE YOU INSTALL THE DRIVERS, NOTE ...

- ♦ That your BIOS is in non Plug-and-Play mode. For instructions on changing your BIOS, refer to your motherboard's manual.
  - ♦ The sound card must be physically installed in your system. If you have not already installed the sound card in your PC, refer to the "Installing the Montego II Quadzilla" chapter for instructions.
  - ♦ All other applications have been closed down. This is very important.
-



## INSTALLING THE MONTEGO II QUADZILLA APPLICATIONS AND DRIVERS IN WINDOWS NT 4.0

To install the Montego II Quadzilla applications in Window NT 4.0, run D:\SETUP.EXE (assuming D: is the letter of you CD-ROM drive.) This will display a menu with different installation options.

Click on the TBS Montego II Quadzilla Applications Setup. Follow the on-screen instructions to install the applications.

After installing the applications you'll need to install the drivers.

### TO INSTALL THE MONTEGO II QUADZILLA DRIVERS:

1. From the Windows NT Control Panel double-click the Multimedia icon.
  2. Click the Devices tab.
  3. Click the Add button.
  4. Select unlisted or updated driver. Click OK.
  5. A dialog box appears and requests the path of the Montego II Quadzilla drivers to be installed. The drivers are located in the NT directory of the Montego II Quadzilla CD-ROM. Use the Browse button to navigate to the D:\NT directory (where D: is the CD-ROM drive letter) Click OK.
  6. Select the Turtle Beach Montego II Quadzilla driver in the dialog box. Click OK.
  7. A Turtle Beach splash screen should now appear. Click the OK button.
  8. Next, you'll be prompted to restart the system. Click OK to restart.
  9. It is recommended that you use the default address settings. If you find that you are experiencing problems, follow the instructions in this chapter troubleshooting section.
  10. Windows NT may display a dialog box asking you to restart your system. Click OK. After the system reboots, the Montego II Quadzilla drivers should be installed and working correctly.
-

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## SETTING THE MONTEGO II QUADZILLA AS THE DEFAULT MIDI AND AUDIO DEVICE

If you have more than one sound card in your system you will need to set the Montego II Quadzilla as the default MIDI and audio device.

### SETTING THE MONTEGO II QUADZILLA TO BE THE DEFAULT AUDIO AND MIDI DEVICE:

1. From the Windows NT Control Panel double-click the Multimedia icon.
2. Click on the Audio tab. TBS Montego II Quadzilla Playback should be chosen for Playback and TBS Montego II Quadzilla Record should be chosen for Recording.
3. Now click on the MIDI tab.
4. The TBS Montego II Quadzilla MIDI should be selected.
5. Click on OK to save any changes.



Note that you may need to be logged in as the Administrator to make any system changes.

## TROUBLESHOOTING

The Montego II Quadzilla PCI is assigned an IRQ by the BIOS. If you are having an IRQ conflict, you will need to go into your BIOS setup to select which IRQ is assigned to the slot in which you installed your Montego II Quadzilla PCI. Please see your motherboard manufacturer's documentation.

### TO CHECK THE RESOURCE SETTINGS FOR YOUR MONTEGO II QUADZILLA AND OTHER DEVICES:

1. Click on Start, then go to Programs -> Administrative Tools -> Windows NT Diagnostics.
  2. Click on the resources tab. This will display a list of some of the devices and resources that they use.
-



### TO DISABLE OR ENABLE A DEVICE:

1. In the Windows NT Control Panel double-click on the Devices icon.
2. From here you can disable or enable individual devices. This can be helpful when troubleshooting conflicting devices.

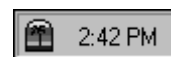
For more information regarding devices and resource settings please see your Windows NT manual.

## UNINSTALLING THE MONTEGO II QUADZILLA

Uninstalling the Montego II Quadzilla is a two step process. First the applications must be removed, and then the drivers. Before Uninstalling be sure to remove the Turtle Beach System Tray Launcher.

### TO CLOSE THE TURTLE BEACH SYSTEM TRAY LAUNCHER:

1. Right-click on the Turtle Beach System Tray Launcher icon and choose Close



### TO UNINSTALL THE APPLICATIONS

1. From the Windows NT Control Panel double-click the Add/Remove Programs icon.
2. Select TBS Montego II Quadzilla Applications from the list and click the Add/Remove button..

### TO UNINSTALL THE DRIVERS

1. From the Windows NT Control Panel double-click the Multimedia icon.
  2. Click the Devices tab.
  3. Select the TBS Montego II Quadzilla Audio driver and click the Remove button.
-



## MAKING CONNECTIONS

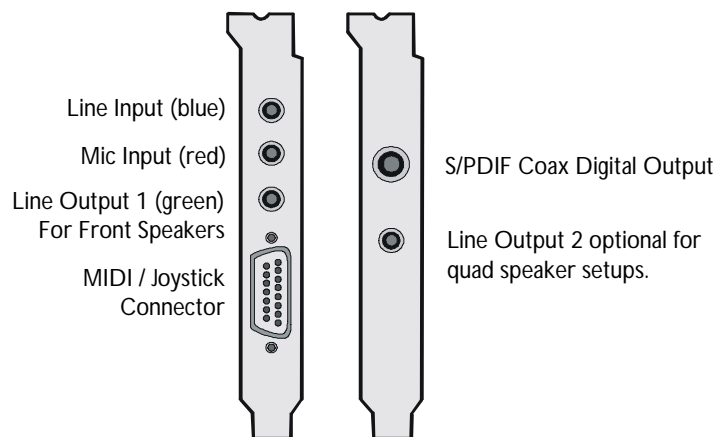
This section covers hooking up the Montego to the rest of your audio system.

### THE BACK PANEL

The back panel of the Montego II Quadzilla has Microphone input, Line input, Line output and MIDI/ Joystick connectors.

The breakout bracket includes an RCA digital Output, and a second Line output.

#### CONNECTIONS ON THE BREAKOUT BRACKET





There are several different ways to connect equipment to the Montego II Quadzilla:

**Mic In**— connects a microphone directly for recording your voice, acoustic instrument or acoustic sound source.

**Line Input** — connects line level audio sources such as a mixer, tape deck, CD player, etc. for playback or recording.

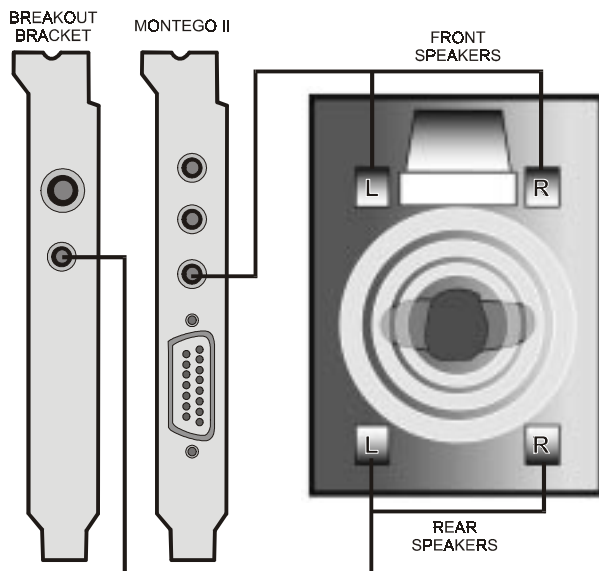
**Line Output 1** — connect to powered speakers, a separate power amp/speaker system or to headphones directly. In a four speaker configuration these would be the front speakers.

**Line Output 2** — Also for connecting speakers. In a four speaker configuration these would be the back speakers.

**S/PDIF Digital Output** — (Sony Philips Digital Interface) This RCA style coax output connector can be connected to the input of a DAT recorder to record the direct digital output of the Montego II Quadzilla.

## AUDIO CONNECTIONS OVERVIEW

The following illustration is a typical configuration for connecting the Montego II Quadzilla to your external audio equipment.





## JOYSTICK CONTROLLER

The joystick connection on the back of the Montego II Quadzilla also serves as a MIDI port. The optional cable available from Voyetra Turtle Beach, allows you to have both a joystick and a MIDI keyboard connected to your system.

If you want to connect a joystick to the Montego II Quadzilla, the sound card and its drivers must be properly installed in your system.

## PORT ADDRESSES

The Montego's joystick controller uses ports 201-201.

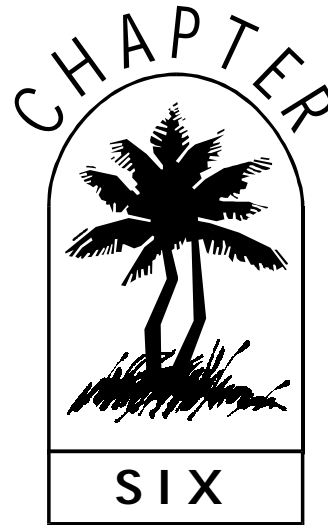
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## TURTLE BEACH SYSTEMS

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# USING THE MONTEGO II QUADZILLA

## GRAPHIC EQ

A 10 band graphic EQ, located in the AudioStation 32 application provides tone control over the wave output and synth output of the Montego Quadzilla.

## S/PDIF DIGITAL OUTPUT

The S/PDIF digital output enables digital transfer of audio data from the PC without signal degradation. The output sample rate can be set to 32kHz or 48kHz. This is done in the Montego II Quadzilla Audio Control Panel applet in the Digital Out tab.

---



## INCLUDED SOFTWARE:

### MIDI ORCHESTRATOR PLUS

MIDI Orchestrator Plus turns your multimedia PC into a complete desktop MIDI recording studio. Create multi-track MIDI recordings of your own music or modify pre-recorded MIDI songs.

Whether you're a beginner or an accomplished musician, even if you can't read a note—you'll be able to compose and play professional-sounding music right from the start. The on-screen video tutorials show you how. Compose songs step-by-step by entering notes with a mouse or MIDI keyboard. Then edit every detail on the PC screen. You can even print out sheet music.

### AUDIOSTATION 32

AudioStation® 32 integrates control of your multimedia files in one convenient and useful location. AudioStation® 32 supports playback of Redbook CD Audio, MIDI, WAV, DVD and Video Discs, and more. In addition, AudioStation 32 is bundled with AudioView 32 and MIDI Orchestrator 32, two feature-packed media editors.

### AUDIOVIEW 32

AudioView 32 is a full featured digital audio recorder/editor which lets you:

- ◆ Edit WAV files using cut, paste, copy and continuously variable zoom.
  - ◆ Record files of virtually unlimited length directly to the hard drive.
  - ◆ Save and load internet ready compressed audio files. (audio codecs required)
  - ◆ Modify WAV files with sound effects: echo, reverse, fade, and more.
  - ◆ WAV file conversions include halve sample rate, stereo to mono and more.
  - ◆ Embed WAV files by dragging icon into documents or load WAV files by dragging file name into AudioView.
  - ◆ Open multiple instances to edit between several WAV files.
  - ◆ And much more...
-

---

## MIDI ORCHESTRATOR 32

MIDI Orchestrator lets you re-orchestrate MIDI music with an intuitive 16-channel "audio mixer" style control panel. It provides a quick way to adjust MIDI mix setting without the need for a full featured sequencer.

- ◆ View MIDI data activity and change instruments, volumes, transposition, tempo and other song settings in 16 MIDI channels.
- ◆ Single out individual instruments while playing songs.
- ◆ Lengthen and shorten MIDI songs by varying the tempo while viewing the corresponding change in song time.

## PC AUDIO MIXER

The PC Audio Mixer provides a convenient way to view all the available mixer functions at one time

## SYSTEM TRAY LAUNCHER

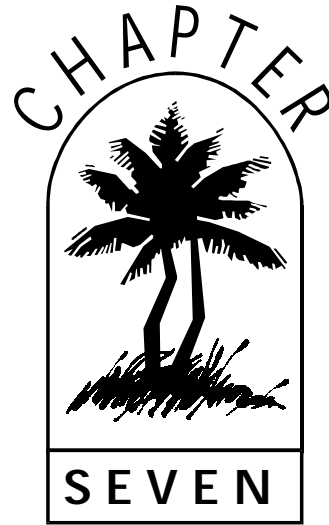
If you selected the option during the install the yellow speaker icon in the system tray (bottom right) should have been replaced with a Turtle Beach Icon (Palm Tree). Left clicking on this icon will display a master volume slider for making quick global volume adjustments. Right clicking on the icon will display a menu for launching the applications in the Montego II Quadzilla software suite.

## A3D DEMOS

The Montego II Quadzilla board provides A3D positional audio support which enables an amazing three dimensional audio experience using only two speakers. This technology is demonstrated with the programs included in the A3D demos folder.

---





# THE TBS MONTEGO II QUADZILLA CONTROL PANEL

The TBS Montego II Quadzilla Control Panel allows you to configure the features of your Montego II Quadzilla. It lets you easily adjust wavetable settings, A3D settings and offers access to the A3D demos. The Montego II Quadzilla Control Panel is slightly different in Windows 95/98 and Windows NT 4.0 so be sure to reference the proper section. Note that A3D sound is currently only supported in Windows 95 and 98.

---



## WINDOWS 95/98 TBS MONTEGO II QUADZILLA CONTROL PANEL

### MIDI TAB

#### DESTINATION FOR DOS BOX MIDI OUT

This list box lets you select how MIDI is handled by programs running in DOS boxes. There are two options.

- ♦ **Montego II Quadzilla MPU-401** - This setting sends MIDI data to an external synthesizer attached to the MIDI port.
- ♦ **Montego II Quadzilla MIDI** - This setting sends MIDI data to the internal Montego II Quadzilla music synthesizer.

If you do not have an external synthesizer connected, select "Montego II Quadzilla Wavetable."

#### WAVETABLE MODE

Wavetable mode sets the number of voices as well as the quality level of those voices. These settings directly affect the amount of CPU utilization.

- ♦ **320 Voice, Pro Quality** – The wavetable engine is optimized for 320 voices and premium quality. This mode has the highest CPU utilization.
- ♦ **128 Voice, Game Quality** – The wavetable engine is optimized for 128 voices with lower CPU utilization.
- ♦ **64 Voice, Pro Quality** – The wavetable engine is optimized for 64 voices. CPU utilization in 64-voice mode is significantly less than that in 320-voice mode.

#### DOWNLOAD BUTTON

The download button lets you select a different instrument sound bank to be used by the Montego II Quadzilla's internal synthesizer. DLS Level 1 sound banks are supported as well as the Aureal ARL format.

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## WAVETABLE EFFECTS

The Montego II Quadzilla offers advanced global effects. These controls allow fine tuning of the effects.

- ◆ **Effects Checkbox** – You can disable the effects with this checkbox. When disabled, no effects are heard even if a program or MIDI file requests them.
- ◆ **Effects Selection** – The effect selection dropdown box allows you to select from a number of effect algorithms including, Reverb, Delay, Hall Reverb, Flange Distortion and more. Reverb and Chorus are the default settings and are most useful for general MIDI playback.
- ◆ **Effects Sliders** – These sliders increase the amount of the selected effect over the levels set by a program or MIDI file. A zero setting selects the same amount of chorus and reverb as set in the program or MIDI file. Moving the sliders up increases the effects level until the effect reaches its maximum possible level. If a program or MIDI file sets the maximum possible reverb and chorus, the sliders have no effect. These settings can be changed while a song is playing.

## A3D SETTINGS TAB

### OUTPUT MODE

The Montego II Quadzilla is capable of optimizing it's A3D Interactive positional audio technology for 2-speaker, 4-speaker or headphone output. This setting lets you select the target output. For optimum performance change target output settings whenever you switch between speakers and headphones.

### A3D SPLASH

By default, when an A3D enabled application starts up, the A3D logo displays and a audio signature plays. You can deactivate the audio signature and A3D logo at startup using these checkboxes. These settings have no effect on the actual A3D sound.

---



## DISABLE DIRECTSOUND HARDWARE ACCELERATOR

Some games using DirectSound do not check the hardware resources correctly. If no sound is audible, you can disable hardware acceleration of DirectSound with this checkbox. Applications will then use the generic, slower and lower-quality software DirectSound drivers supplied within DirectX 5.0.



Disabling DirectSound hardware acceleration disables all A3D functionality.

## A3D DEMOS TAB

This tab offers quick access to the A3D demos. Double-click the icons in this window to launch an A3D demo program.

## DIGITAL OUTPUT TAB

The Digital Output tab provides output sample rate options. You can choose to output a sample rate of 32kHz or 48kHz.

# WINDOWS NT TBS MONTEGO II QUADZILLA CONTROL PANEL

## MIDI TAB

### WAVETABLE MODE

Wavetable mode sets the number of voices as well as the quality level of those voices. These settings directly affect the amount of CPU utilization.

- ♦ **320 Voice, Pro Quality** – The wavetable engine is optimized for 320 voices and premium quality. This mode has the highest CPU utilization.
  - ♦ **128 Voice, Game Quality** – The wavetable engine is optimized for 128 voices with lower CPU utilization.
  - ♦ **64 Voice, Pro Quality** – The wavetable engine is optimized for 64 voices. CPU utilization in 64-voice mode is significantly less than that in 320-voice mode.
-

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## WAVETABLE EFFECTS

The Montego II Quadzilla offers advanced global reverb and chorus effects. These controls allow fine tuning of the chorus and reverb effects.

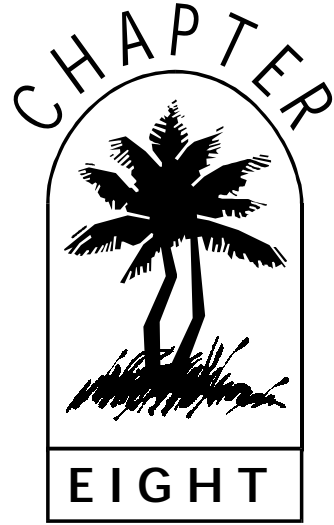
- ◆ **Effects Checkbox** – You can disable the chorus and reverb effects with this checkbox. When disabled, no effects are heard even if a program or MIDI file requests them.
- ◆ **Effects Selection** – The effect selection dropdown box allows you to select from a number of effect algorithms including, Reverb, Delay, Hall Reverb, Flange Distortion and more. Reverb and Chorus are the default settings and are most useful for general MIDI playback.
- ◆ **Effects Sliders** – These sliders increase the amount of effects, such as chorus and reverb, over the levels set by a program or MIDI file. A zero setting selects the same amount of chorus and reverb as set in the program or MIDI file. Moving the sliders up increases the effects level until the effect reaches its maximum possible level. If a program or MIDI file sets the maximum possible reverb and chorus, the sliders have no effect. These settings can be changed while a song is playing.

## DIGITAL OUTPUT TAB

The Digital Output tab provides output sample rate options. You can choose to output a sample rate of 32kHz or 48kHz.

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# TECHNICAL SUPPORT

This **Getting Started Guide**, the SoundCheck utilities and the various help and PDF files should be all you need to get the Montego II Quadzilla sound card and the software applications working. However, if you need support, here is how to contact us — Monday through Friday, 9am-5pm, EST.

## TO CONTACT TURTLE BEACH TECHNICAL SUPPORT:

Email: [tech@tbeach.com](mailto:tech@tbeach.com)

Internet: [www.tbeach.com](http://www.tbeach.com) (Visit our FAQ section!)

Phone: 914.966.2150

Fax: 914.966.1093

You can receive a list of frequently asked questions both through the web or by emailing [support@tbeach.com](mailto:support@tbeach.com).

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### IF YOU CALL:

- ◆ You must be registered or have your product ID at hand.
  - ◆ If possible, use a telephone near your computer.
  - ◆ The technician might need to ask about the type of system you are using and the additional hardware installed on the system — for example, a synthesizer, CD-ROM drive or MIDI interface. Try to have the manufacturers' manuals for these peripherals at hand.
  - ◆ Be prepared to explain the problems you are having, what you were doing when these problems occurred and any error messages you have received.
-



# WARRANTY AND LICENSING INFORMATION

This Appendix includes the warranty for the Montego II Quadzilla sound card, the Voyetra End-User License Agreement for the software suite in this package and the FCC and EMC Declarations of Conformity.





## HARDWARE WARRANTY

Voyetra Turtle Beach, Inc. ("Voyetra") warrants to the original end-user purchaser ("Purchaser") that the Turtle Beach Systems Montego II Quadzilla ("Product") will be free of defects in materials and workmanship for a period of one (1) year from the date of purchase by Purchaser ("Warranty Period").

Should a defect occur during the Warranty Period, the Purchaser must fax a copy of the dated proof of purchase in order to obtain a Return Merchandise Authorization ("RMA") from Voyetra. The Purchaser is responsible for all costs incurred in returning the defective Product to and from the authorized Voyetra service center, or to the repair facility located at Voyetra's corporate headquarters. The Product must be returned in a static-proof bag, similar to the one included with the original packaging. A copy of the dated proof of purchase must be included with the defective Product and the RMA number must be clearly indicated on the outside of the package. All packages sent without an RMA number will be Returned to Sender.

In the event of a defect, Purchaser's sole and exclusive remedy and Voyetra's sole liability is expressly limited to the correction of the defect by adjustment, repair, or replacement of the Product at Voyetra's sole option and expense.

This warranty does not cover, and Voyetra is not responsible for, damage caused by misuse, neglect, fire, acts of God, or unauthorized modification of the Product or damage resulting from the use of the Product with hardware or software programs not provided or specifically recommended by Voyetra.

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## FCC DECLARATION OF CONFORMITY

**PRODUCT NAME:** Internal PCI Sound Card

**Model Number:** TBS-33750-01

**FCC RULES:** TESTED TO COMPLY WITH FCC PART 15, CLASS B

**OPERATING ENVIRONMENT:** FOR HOME OR OFFICE USE

**FCC COMPLIANCE STATEMENT:**

*This device complies with part 15 of the FCC rules. Operation is subject to the following conditions. (1) This device may not cause harmful interference and (2) This device must accept any interference received including interference that may cause undesired operation.*

**INFORMATION TO USER:**

*This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:*

- 1. Reorient or relocate the receiving antenna.*
- 2. Increase the separation between the equipment and receiver.*
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- 4. Consult the dealer or an experienced radio TV technician for help.*

**CAUTION:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE**

**Turtle Beach Systems  
5 Odell Plaza  
Yonkers, NY 10701  
Tel: (914) 966 0600  
Fax: (914) 966 1102**



## DECLARATION OF CONFORMITY (EMC)

**Manufacturers Name:** Turtle Beach Systems  
**Manufacturers Address:** 5 Odell Plaza  
Yonkers, NY 10701

**Declares that this product:**

**Product Name:** Montego II Quadzilla  
**Model Number(s):** TBS33750-01  
**Year of Manufacture:** 1999

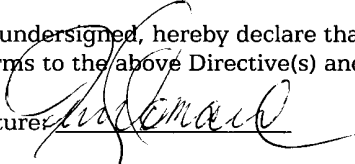
**Conforms to the following Product Specifications:**

**EMC:** EN55022 (CISPR:1993) CLASS B  
ENN50082-1 (1992):IEC801-2 (1981)  
ENN50082-1 (1992):IEC801-3 (1984)  
ENN50082-1 (1992):IEC801-4 (1988)

**Supplemental Information:**

The product herewith complies with the requirement to the EMC Directive 89/336/EEC.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standards(s).

Signature: 

Date: 5/13/99

Printed Name: Frederick Romano

Place: Yonkers, NY USA

Title: Executive Vice President

# INDEX

---

## *C*

cable connections, 33  
CD-Audio Connector, 10  
CD-ROM audio cable  
connecting, 17

---

## *H*

headphones, 8

---

## *I*

I/O addresses, 8  
installing the sound card, 13  
overview of the steps, 14  
IRQs, 8  
ISA slot, 15

---

## *J*

joystick controller, 33  
joystick/external MIDI connector, 10

---

## *L*

license agreement, 49  
Line In, 10, 31, 32  
Line Out, 10, 31, 32

---

## *M*

Mic, 10, 31, 32  
MIDI/joystick, 31  
Montego sound card  
back panel, 31

features of, 7  
installing, 13  
warranty, 48  
MPC-2 connector, 17

---

## *P*

port addresses, joystick, 33  
Product ID Number, 14

---

## *R*

RAM, 8  
red wire, 17  
registering your software, 6  
resource usage, 8

---

## *S*

S/PDIF, 10  
Safe mode, 25  
software license agreement, 49  
Sony connector, 17  
speakers, 8

---

## *T*

technical support, 6  
contacting, 45  
troubleshooting  
Windows 95, 25  
Turtle Beach, contacting, 2

---

## *U*

Update notifications, 6



---

## W

warranty, 48

website, 2, 6

white wire, 17

Windows 3.x

installing the drivers, 27

resources, 8

Windows 95

common conflicts, 24

installing the drivers, 19, 22

resources, 8

Testing and Troubleshooting, 24

Windows NT 4.0

installing the drivers, 27

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TURTLE BEACH SYSTEMS

## MONTEGO II QUADZILLA CARD LAYOUT

