

# Canyon3D-II PCI SOUND CARD

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## Configuration and Hardware USER MANUAL

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### INFORMATION TO USER:

*This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the 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 / 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 not expressly approved by the manufacturer responsible for compliance could void the user’s authority to operate the equipment

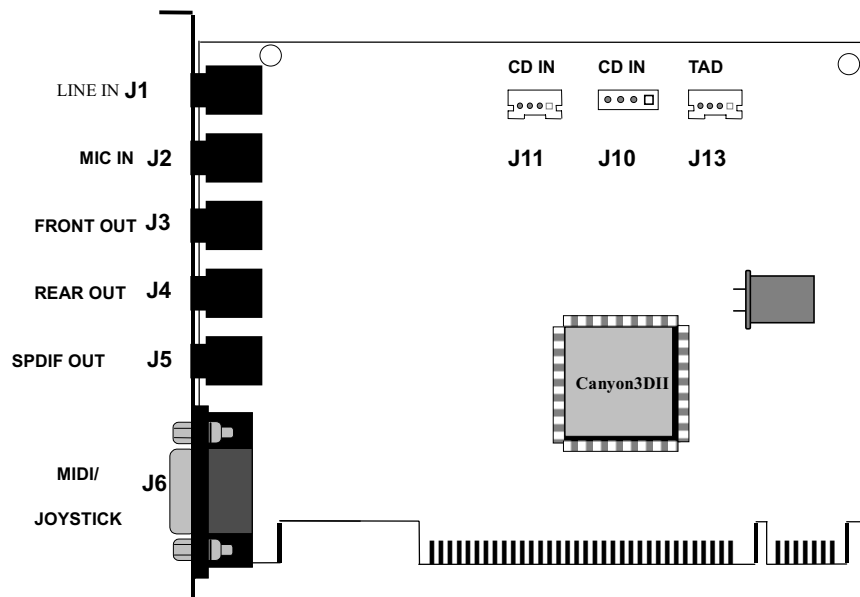
## 1. DESCRIPTION

“Canyon3D-II U70” are new audio adapters that provide the next generation of PCI audio performance to the PC market. The adapters not only meet the new demands of advanced PC audio applications but also enable the integration of a complete multimedia subsystem on a single adapter. The adapter functionality and interfaces are compliant with all major industry standards, including the SoundBlaster Compatible, PC'99, Windows® 98 Direct Sound, Windows® Sound System and PCI 2.2 bus specification.

### 1.1. Features

- PCI 2.2 compliant
- Compliance APM1.2, ACPI 1.0, and PPMI 1.1
- PCI Bus master for PCI Audio
  - ⇒ True Full Duplex Playback and Capture with different Sampling Rate
  - ⇒ Maximum 64-voice XG capital Wavetable Synthesizer including
  - ⇒ GM compatibility
  - ⇒ Direct Sound Hardware Acceleration
  - ⇒ Direct Music Hardware Acceleration
  - ⇒ Downloadable Sound (DLS) level-1
- Legacy Audio compatibility
  - ⇒ Genuine OPL3
  - ⇒ Hardware SoundBlaster Pro compatibility
  - ⇒ MPU-401 UART mode MIDI interface
  - ⇒ Joystick
- Supports distributed DMA for Legacy DMAC (8237) emulation
- Supports AC-1 interface (AC-Link)
- Single Crystal operation (49.152 MHz)
- 5V Power supply for I/O. 3.3V Power supply for internal core logic
- Compliant with AC'97 Requirements
  - ⇒ 3 Stereo Inputs: LINE, CD, AUX
  - ⇒ TAD connector for mono In and Output for modem Audio
  - ⇒ 1 MIC Input
  - ⇒ 4 Channel Output Front Out / Rear Output
- 20 dB MIC Amplifier
- Low Power Consumption
- S/PDIF digital output

## 2. Card Figure for “Canyon3D-II U70”



### 2.1. Connectors for “Canyon3D-II U70”

“Canyon3DII U70” includes up to three internal connectors, six external Jack Ports, one external MIDI/ Joystick connector.

#### 2.1.1. External Connectors:

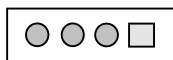
- J1: ..... Ø 3.5mm Phone Jack for **LINE IN**.
- J2: ..... Ø 3.5mm Phone Jack for **MIC IN**.
- J3: ..... Ø 3.5mm Phone Jack for **FRONT OUT**.
- J4: ..... Ø 3.5mm Phone Jack for **REAR OUT**.
- J5: ..... RCA JACK for **SPDIF OUT**
- J6: ..... Connector for **MIDI/JOYSTICK**.

#### 2.1.2. Internal Connectors:

- J10: ..... Connector for **CD AUDIO IN**. (ATAPI)
- J11: ..... Connector for **CD AUDIO IN**. (JST)
- J12: ..... Connector for **AUX IN**.
- J13: ..... Connector for **TAD/VOICE MODEM**.

## 2.2. Audio Connectors:

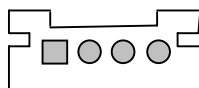
**J10: CD-**



**R G G L**

L: LEFT CHANNEL SIGNAL  
G: GROUND  
R: RIGHT CHANNEL SIGNAL

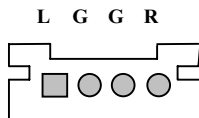
**J11 CD-**



**G L G R**

L: LEFT CHANNEL SIGNAL  
G: GROUND  
R: RIGHT CHANNEL SIGNAL

**J13 TAD/Voice**



**1 2 3 4**

**L G G R**  
1 PHONE IN  
2 GROUND  
3 GROUND  
4 MONO OUT

### 3. HARDWARE INSTALLATION

#### 3.1. Handling the PCI Sound Card

**WARNING:** *Static electricity can damage your equipment. Do not take the card out of its static protective bag until you are ready to work with it.*

Follow these precautions when handling the card:

- Before you open the static protective bag, touch it to a metal expansion slot cover on the back of your computer. This drains static electricity from the package and from your body.
- Do not touch any exposed printed circuitry after opening the package.
- Keep other people from touching the card. They might have a static-electricity build-up.
- Limit your movement. Movement causes a build-up of static electricity.

#### 3.2. Installing the PCI Sound Card

- Step 1.** Turn off the system and all peripheral devices.
- Step 2.** Disconnect the power cord and all peripheral devices from the system.
- Step 3.** Remove the system cover and identify an unused PCI slot.
- Step 4.** Unscrew the slot cover plate, plug in the PCI Sound Card, and tighten it with the screw.
- Step 5.** If you have speakers or amplifiers, plug the cable into the **J3** and **J4** Jack on the back of the Sound Card.
- Step 6.** Depending on what type of CD Audio cable you have connect **J10** or **J11** on the Sound Card and the Audio output at the back of the CD-ROM drive. Make sure pin 1 of **J10** or **J11** is connected to the leftmost pin of the CD-ROM Audio output.
- Step 7.** Put back the system cover, reconnect the system power cord and all peripheral devices. Check and make sure all connections are correct before you turn on the system.