ABIT AC11 Communication and Networking Riser

Installation Guide and User's Manual

Copyright and Warranty Notice

The information in this document is subject to change without notice and does not represent a commitment on part of the vendor, who assumes no liability or responsibility for any errors that may appear in this manual.

No warranty or representation, either expressed or implied, is made with respect to the quality, accuracy or fitness for any particular part of this document. In no event shall the manufacturer be liable for direct, indirect, special, incidental or consequential damages arising from any defect or error in this manual or product.

Product names appearing in this manual are for identification purpose only and trademarks and product names or brand names appearing in this document are the property of their respective owners.

This document contains materials protected under International Copyright Laws. All rights reserved. No part of this manual may be reproduced, transmitted or transcribed without the expressed written permission of the manufacturer and authors of this manual.

If you do not properly set the settings of this product, causing this product to malfunction or fail, we cannot guarantee any responsibility.

AC11 CNR Card User's Manual

		Index
CHAPT	TER 1. INTRODUCTION	1-1
1-1.	SPECIFICATIONS	1-1
1-2.	WHAT'S IN THE BOX? (PACKAGE LIST)	1-5
СНАРТ	TER 2. HARDWARE INSTALLATION	2-1
2-1.	CARD LAYOUT	2-1
2-2.	CONNECTORS AND HEADERS	2-2
2-3.	CARD INSTALLATION	2-3
2-4.	CONNECTING MODEM TO TELEPHONE LINE	2-4
СНАРТ	TER 3. DRIVER INSTALLATION	3-1
3-1.	INSTALL HOMEPNA DRIVER FOR WINDOWS 98 SE	3-1
3-2.	INSTALL HOMEPNA DRIVER FOR WINDOWS ME	3-3
3-3.	INSTALL HOMEPNA DRIVER FOR WINDOWS 2000	3-4
3-4.	INSTALL MODEM DRIVER FOR WINDOWS 98 SE	3-5
3-5.	INSTALL MODEM DRIVER FOR WINDOWS 2000	3-7
3-6.	SELECTING MODEM COUNTRY FOR WINDOWS 9X	3-8
3-7.	SELECTING MODEM COUNTRY FOR WINDOWS 2000	3-10
3-8.	DIAGNOSTICS FOR WINDOWS 9X	3-11
3-9.	DIAGNOSTICS FOR WINDOWS 2000	3-13
3-10.	INSTALL 5.1 CHANNEL AUDIO DRIVER	3-15
СНАРТ	TER 4. INTERVIDEO WINRIP™ SOFTWARE	
	APPLICATION	4-1
4-1.	WINRIP INSTALLATION	4-1
4-2.	WINRIP CONFIGURATION:	4-6

4200-0140-02 Rev. 1.00

CHAPTER 5. INTERVIDEO WINDVD [™] 2000 SOFTWARE		
	APPLICATION5-1	
5-1.	Installing WinDVD [™] 2000 Driver for the Windows [®] 2000	
5-2.	REMOTE CONTROL KIT (OPTIONAL)	
5-3.	REMOTE CONTROLLER (OPTIONAL)	
APPEND	DIX A. HOW TO GET TECHNICAL SUPPORT	

Introduction 1-1

Chapter 1. Introduction

The AC11 CNR (Communication and Networking Riser) card supports 5.1 Channel Home Theatre speaker output, V.90 analog modem, and HomePNA with RJ-11 lines. It offers a cost-effective and a more flexible selection in communication and networking, allowing motherboard OEM manufacturers a new opportunity in the PC market.

The CNR card shares a PCI slot to distinguish its application from AMR. With the added functionality and the superior hardware-integration design, a system manufacturer has several motherboard acceleration options available, as well as expandability for future technologies.

1-1. Specifications

Home PNA

1. Chipset

Intel 82562EH

2. Home Phone line Networking Alliance

- Integrates a HomePNA PHY for 1Mb/s Ethernet like home networking on telephone lines
- Provides automatic support for dual HomePNA data transfer rates and dual transmission power levels
- Supports auto detection between HomePNA and MII/LAN ports
- · Generates an interrupt upon HomePNA PHY interrupt
- · Provides a software interface to the HomePNA PHY internal registers

3. Power Management and Power Saving Features

- Fully compliant with the Network Device Class Power Management Specification Revision 1.0, and the Communication, Device Class Power management Specification, under the OnNow Architecture for Microsoft's PC97 Hardware Design Guide and PC98 Hardware Design Guide.
- Supports all wake-up events defined in the Network Device Class
- Power Management Specification Revision 1.0
- Fully compliant with the ACPI Specification Revision 1.0
- Fully compliant with the PCI Bus Power Management Interface Specification, Revision 1.0.

4. Network Side Features

• Supports network ports: HomePNA 1.0 (1Mbps)

1-2 Chapter 1

5. Operating System Support

- Windows 95/98/ME
- Windows NT 4.0
- · Windows 2000

Modem

1. Chipset

· Conexant 11246, 20463-11

2. Line Connection

· PSTN, 2 wires

3. Data Modem

- V.90 & K56flex
- V.34 (33,600 bps 2,400 bps)
- V.32bis (14,400 bps 4,800 bps)
- V.32 (9,600 bps 4,800 bps)
- V.22bis (2,400 bps 1,200 bps)
- V.22 (1,200 bps)
- V.23 (75/1,200-600 bps)
- V.21 (300 bps)
- Bell 212A (1,200 bps)
- Bell 103 (300 bps)

4. Fax Modem

- · Group III, Class 1
- · Class 1 fax error correction mode
- V.17 (14,400/12,000 bps)
- V.29 (9,600/7,200 bps)
- V.27ter (4,800/2,400 bps)
- V.21 (300 bps)

5. Error Correction

- V.42, LAP-M & MNP 2-4
- · Data Compression
- V.42bis & MNP 5

6. Answering Machine Option

- · 8KHz PCM and IMA ADPCM
- · Concurrent DTMF detection
- · Voice/Silence detection

Introduction 1-3

7. Modem Communication Model

· Asynchronous

8. Speaker Phone Option

- Full-duplex w/acoustic and line echo cancellation
- · Microphone AGC and muting
- · Software volume control
- · Music-on-hold
- · Flash-hook

9. Video Phone Ready Modem

- V.80 sync access mode interface
- · Transparent & framed sub-modes
- · Voices call first Supports Intel Video Phone with ProShare technology

10. Adaptive Connection Support

- V.8 auto mode negotiation
- V.8 PRIME & V.8bis
- · Adaptive Rate Renegotiation
- · Automatically adjusts speeds up and down to accommodate changing line conditions

11. Tone Detections

- · Dial tone, second dial tone
- · Ring back, Busy
- · Data/fax answering tones
- DTMF

12. PTT and Safety

• FCC, CE, CTR21

13. DOS Box Comm. Applications Support (Available with TAM option)

· Distinguish among data, fax, voice

14. Modem Auto Dial & Auto Answer

YES

15. Modem Line Quality Monitoring

Receive Level Monitoring

16. Modem Programmable Volume Control

YES

17. Operating System Support

- · Windows 95/98/ME
- · Windows NT 4.0
- · Windows 2000

1-4 Chapter 1

18. Modem Data Interface

• AC'97 compliant primary / secondary selection

19. Telephone Interface

• PSTN Line through RJ-11

20. Minimum System Requirements

- 233MHz Pentium II Processor
- · 266MHz Celeron Processor
- 233MHz AMD K6 3D now!
- 256K L2 Cache
- AC-Link V.2.1 Compatible Core Logic chipset
- Windows 95/98 with 16 MB RAM
- Windows NT 4.0/2000 with 32 MB RAM
- 7 MB free hard disk space
- · One CNR slot

5.1-Channel Audio

- Analog Device AD1885 Codec
- Support 5.1 channel Home Theatre Speaker Output
- AC'97 2.1-Compliant
- Soft DVD provide Dolby Digital Decoding
- · Bus Interface: CNR Bus
- · Stereo Headphone amplifier
- · S/N Ratio Greater than 90 dB
- Audio Converters: 16-bit Stereo Full-Duplex Codec
- Games Compatibility: Compatible with all standard Windows games and most DOS games (in Real Mode DOS)
- Full Duplex Variable Sample Rates from 7040 Hz to 48 KHz with 1 Hz Resolution
- Audio Inputs/Outputs: Microphone input, Line input, Aux input on internal header, CD input on internal header, one G9 speaker output.
- Mono MIC input w/Built-in 20 dB Preamp
- · Power Management Support
- · Digital Audio Mixer Mode
- · PHAT Stereo 3D Stereo Enhancement
- Windows 95/98/ME, Windows NT 4.0, Windows 2000 operating system supported
- Specifications and information contained in this manual are subject to change without notice.

Introduction 1-5

1-2. What's In The Box? (Package List)

Check the following list. If there is any item damaged or missing, please contact your local dealer.

- ☑ (1) AC11 CNR Card
- ☑ (1) AC11 Installation and Utility Disc (CD-Title)
- ☑ (1) G9 6-Channel Cable
 Red jack: To connect Front speakers
 White jack: To connect Rear speakers
 Black jack: To connect Center speaker/Subwoofer
- ☑ (1) Telephone Cord
- ☑ (1) This User's Manual
- ☐ WinDVD Remote Controller Kit (Optional)

1-6 Chapter 1



Hardware Installation 2-1

Chapter 2. Hardware Installation

2-1. Card Layout

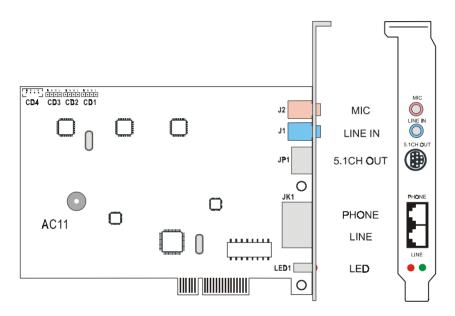


Figure 2-1. AC11 CNR card layout diagram.

2-2 Chapter 2

2-2. Connectors and Headers

- MIC (J2): Connect to an external microphone.
- LINE IN (J1): Connect to an external audio source.
- 5.1CH OUT (JP1): Connect a 6-speaker audio system (with G9 6-channel cable).
- PHONE (JK1): Connect to a telephone set.
- LINE (JK1): Connect to telephone wall socket.
- LED1: Display the connecting status.
- CD1 ~ CD4: Connect to audio sources of internal CD-ROM or other audio sources.

CD1: AUX_IN CD2: VIDEO_IN CD3: CD_IN2 CD4: CD_IN1

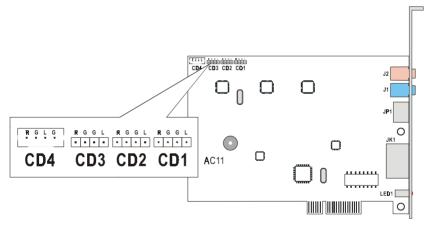


Figure 2-2. Pin definition of CD1 ~ CD4 headers.

Hardware Installation 2-3

2-3. Card Installation

- **Step 1.** Turn off the PC and all external peripherals connected to it (e.g. printer...etc.), and then remove the PC system cover.
- Step 2. Locate the CNR expansion slot on the motherboard. The AC11 can only be plugged into the CNR slot. Remove the metal bracket corresponding to the CNR slot you have chosen. Save the screws.
- Step 3. Align the AC11 connectors' side down to the CNR slot. Hold the card by its edges and insert the card into the slot without using excessive force or pressing any components on AC11. Make sure it is firmly and completely fixed into the slot without using excessive force or pressing any components on AC11.

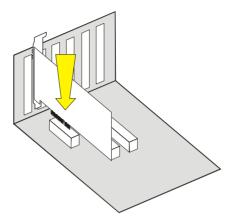


Figure 2-3. Install AC11 to CNR expansion slot.

- is firmly and completely fixed into the CNR slot.
- **Step 4.** Secure AC11 to CNR slot. Align the notch in the mounting bracket of the CNR card with the screw hole in the rear panel of the computer case. Use the screw that had been removed from the metal bracket to secure the CNR card in place.
- **Step 5.** Replace the system cover. It is ready to boot up your PC system.

Note

It is recommended to disconnect the power from the switching power supply before replacing this CNR card. Failing to do so may cause the system unable to detect this hardware after rebooting; you will have to flash the BIOS under this circumstance.

2-4 Chapter 2

2-4. Connecting Modem to Telephone Line

Step 1. Plug one end of telephone cord supplied into the socket on the back of the modem marked "LINE".

- **Step 2.** Insert the other end of the cord into the telephone wall socket.
- **Step 3.** If you want to use your telephone set on the same line with modem, please you're your telephone cord into the socket on the back of the modem marked "PHONE".

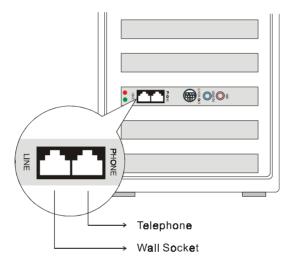


Figure 2-4. Connect the LINE input from telephone wall socket, and then connect the PHONE output to your telephone set.

Chapter 3. Driver Installation

3-1. Install HomePNA Driver for Windows 98 SE

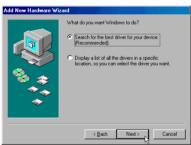
After the Windows system had been installed successfully and rebooted, the system will automatically detect the AC11 CNR card.

Note

If your operation system is unable to detect this new hardware, please reboot the system and enter the BIOS setup menu to enable the Audio and Modem option in AC'97 Codec.



When the message of "PCI Ethernet Controller" appearing, inserts the AC11 CD-Title, and click "Next>" to search the driver.



Select "Search for the best driver for your device. [Recommended]", and click "Next>" to continue.



Select "Specify a location:" and type in "F:\HomePNA" (F is the letter of the CD-ROM drive) or use "Browse..." to search the driver. Click "Next>" to continue.

3-2 Chapter 3



Windows has found the driver for the "82562EH based Phoneline Desktop Adapter", click "Next>" to start the installation.



Insert the AC11 CD-Title to CD-ROM drive and click "**OK**".



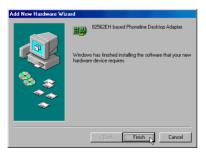
Please type in "F:\HomePNA" (F is the letter of the CD-ROM drive) to search, and click "OK" to copy files.



Insert the Windows 98 SE CD to the CD-ROM drive and click "OK" to continue.



Please type in "F:\" to search the Windows origin files, and then click "OK" to copy files.



Windows has finished installing the software for this CNR card. Click "Finish".



Click "Yes" to finish setting up the hardware and restart computer.

3-2. Install HomePNA Driver for Windows ME



When the message of "PCI Ethernet Controller" appearing, inserts the AC11 CD-Title, and click "Next>" to search the driver.



Windows has finished installing this CNR card. Click "Finish" to end the installation.



Click "Yes" to finish setting up the device and restart computer.

3-4 Chapter 3

3-3. Install HomePNA Driver for Windows 2000



Windows detects this CNR card automatically. Insert the AC11 CD-Title to CD-ROM and click "Next>" to continue.



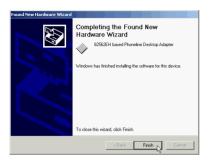
Select "Search for a suitable driver for my device [recommended]", and click "Next>" to continue.



Select "CD-ROM drives" and click "Next>" to go on.



Windows has found the driver for this CNR card. Click "Next>" to install the driver.



Windows has finished installing driver for this CNR card. Click "Finish" to end the installation.

3-4. Install Modem Driver for Windows 98 SE



When the message of "PCI Card" (or PCI Communication Device that depends on different motherboards) appearing, inserts the AC11 CD-Title, and click "Next>" to search the driver.



Select "Search for the best driver for your device. [Recommended]" and click "Next>" to continue.



Select "Specify a location:" and type in "F:\Modem\Conexant\Win9X" (F is the letter of the CD-ROM drive) or use "Browse..." to search the driver. Click "Next>" to continue.

3-6 Chapter 3



Windows has found the driver for the "Conexant PCI Modem Enumerator", click "Next>" to start the installation.



Windows has finished installing the software for this CNR card. Click "Finish" to reboot the system.



After the system rebooted, please type in "F:\Modem\Conexant\Win9X" (F is the letter of the CD-ROM drive) or use "Browse..." to search the file, and then click "OK" to copy file.

3-5. Install Modem Driver for Windows 2000



Windows detects this CNR card automatically. Please insert the AC11 CD-Title to CD-ROM and clicks "Next>" to continue.



Select "Search for a suitable driver for my device [recommended]". Click "Next>" to continue.



Select "Specify a location". Click "Next>" to continue.



The wizard found a driver for this device. Click "Next>" to continue.

3-8 Chapter 3



Click "Yes" to continue.



Click "Finish" to end this procedure.

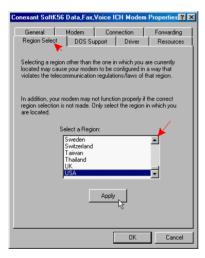
3-6. Selecting Modem Country for Windows 9x



Move the cursor to "Start → Settings → Control Panel", click "Control Panel". Then double-click on the "System" icon.



Click Device Manager tab and select "Conexant SoftK56 Data, Fax, Voice ICH Modem", then click "Properties" button.

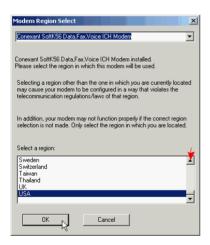


Click "Region Select" tab and select country from the region select list. Click "Apply" button to confirm this setting. 3-10 Chapter 3

3-7. Selecting Modem Country for Windows 2000



Move the cursor to "Start → Settings → Control Panel", click "Control Panel". Then double-click on the "HSF Modem Region Select" icon.

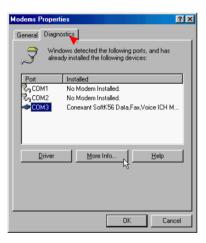


Select a country name from the region list, click "**OK**" button to confirm this setting.

3-8. Diagnostics for Windows 9x

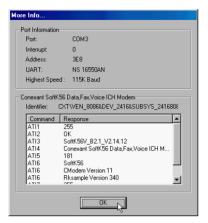


Move the cursor to "Start → Settings → Control Panel", click "Control Panel". Then double-click on the "Modems" icon.



Click on the "Diagnostics" tab. Select the "COM Port" that the modem is setting. Click on the "More Info..." button to start the test.

3-12 Chapter 3



If the modem is responding to AT commands and functioning correctly, it means the modem is working properly. Click "**OK**" to end the modem diagnostics.

3-9. Diagnostics for Windows 2000

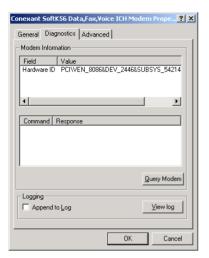


Move the cursor to "Start → Settings → Control Panel" and click "Control Panel". Then double-click on the "Phone and Modem Options" icon.

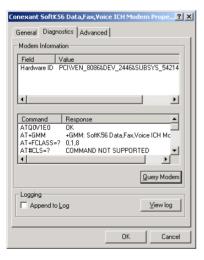


Click "Modems" tab and select "Conexant SoftK56 Data, Fax, Voice ICH Modem", then click "Properties" button.

3-14 Chapter 3



Click "Diagnostics" tab, then click "Query Modem" button.



If the modem is responding to AT commands and functioning correctly, it means the modem is working properly. Click "**OK**" to end the modem diagnostics.

3-10. Install 5.1 Channel Audio Driver

Insert the AC11 CD-Title into the CD-ROM drive, it should execute the program automatically. If not, execute the execution file at the main directory of this CD-Title. After it has been executed, enter the page of driver installation, the installation wizard appears:

Note

In order to obtain the effect of 5.1 Channel audio output, please install the latest version of DirectX first. You may find a DirectX 8.0 bundled together in the AC11 CD-Title.



The welcome screen appears. Click "Next>" to go on.



Windows is installing the drivers for SoundMAX.

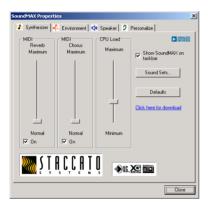


Windows has finished installing the audio driver. Choose "Yes, I want to restart my computer now", and click "Finish".

3-16 Chapter 3



After the system rebooted, there is a SoundMAX icon in the lower-right task bar.



Double-click on the SoundMAX icon in the task bar to call out SoundMAX properties to set up the sound effect.

Chapter 4. InterVideo WinRip[™] Software Application

WinRip is application software developed by InterVideo to provide you with a complete audio playback and recording environment for all currently available audio formats, including the MP3, MP2, WAVE, MIDI, and Audio CD formats for Abit's 5.1 channel playing device. WinRip enables you to swap and convert between these formats freely.

Insert the AC11 CD-Title into the CD-ROM drive, it should execute the program automatically. If not, execute the execution file at the main directory of this CD-Title. After it has been executed, enter the page of driver installation, the installation wizard appears:

4-1. WinRip Installation



The welcome screen appears. Click "Next>" to go on.



Please read the License Agreement and click "Yes>" to go on.

4-2 Chapter 4



Type in your name, company name, and serial number of this software. Click "Next>" to go on.



Select your desired setup language. Click "Next>" to go on.



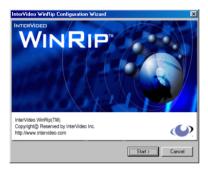
Choose the destination location you want by entering the "**Browse...**" button, or you may click "Next>" to go on.



Type the new folder name you want, or you may Click "Next>" to go on.



WinRip is now installing.



Click "Start>" to go on.



Type in your own registration information and click "Next" to go on. Or you may click "Cancel" button to skip this step, finish the registration later, and jump directly to steps 14 to complete the installation.

4-4 Chapter 4



Select the extensions names associated with WinRip, and click "Next>" to go on.



Type in the recording path of your recorded songs, or you may click "Next>" to go on with the default path.



Check the type of recording. There are 128 (default), 160, 192, 224, 256, and 320 kbps options to select. Click "Next>" to go on.



Click "Finish" to end the installation.



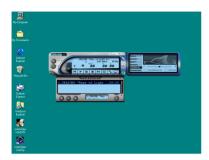
Windows has finished installing WinRip. Enable the check box if you want to view the Readme file, or click "Finish" to go on.



Enable the check box of "Yes, I want to restart my computer now", and click "Finish" to complete the setup.

4-6 Chapter 4

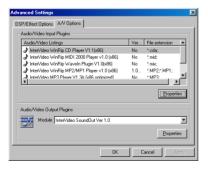
4-2. WinRip Configuration:



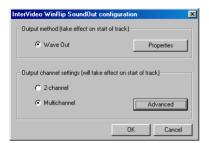
Double-click on the WipRip icon on the desktop.



Click the "Advanced..." button to go on.



Select the A/V Options tab, and click the "<u>Properties</u>" button of Audio/Video Output Plugins to go on.



Enable the checkbox of the "Multichannel" and click the "Advance" button.



Choose 5.1-channel and click "OK" button.

You will have to click the "**OK**" button for three more times in the next three screens, which are the same ones with step 4 back to step 2.

The output channel settings will take effect immediately on the start of next track.

4-8 Chapter 4



Chapter 5. InterVideo WinDVD[™] 2000 Software Application

5-1. Installing WinDVD[™] 2000 Driver for the Windows[®] 2000

Note

In order to obtain the effect of 5.1 Channel audio output, please install the latest version of DirectX first. You may find a DirectX 8.0 bundled together in the CD-Title.

If you have a DVD-ROM, you can install this software for DVD player into your computer. Insert the AC11 CD-Title into the DVD-ROM drive, it should execute the program automatically. If not, execute the execution file at the main directory of this CD-Title. After it has been executed, enter, you will see the screen below.



Move the cursor to "WinDVD 2000" and click on it. This will begin installing the InterVideo WinDVD software into your computer.

Note: Please follow the on-screen instruction for the rest of the installation procedure.



5-2 Chapter 5



You can also play DVD movies by using the DVD player control panel as shown left.

For more detailed information about how to operate it, you may refer to the Help File in the InterVideo WinDVD program group.

Note

The WinDVD2000 on Windows® 2000 currently only provide the Stereo mode output. Please contact InterVideo (www.intervideo.com) for the software update.

5-2. Remote Control Kit (Optional)



This optional IR remote control kit replaces the keyboard and mouse when you are watching DVD/VCD movies with the WinDVD2000 software.

This remote control kit not only controls the WinDVD playback function but also used as a pointing device for Microsoft® PowerPoint™ presentation software.

The installation procedure:

- **Step 1.** Remove the keyboard from the PS/2 port on your motherboard.
- Step 2. Connect one end of the receiver cable to the PS/2 Keyboard port on your motherboard.
- **Step 3.** Connect your PS/2 keyboard connector to the other end of the receiver cable.

Step 4. Place the IR receiver to the most convenient location facing towards you. Please avoid having any obstacle in between to block the IR transmission.

Note

This IR remote control kit only works with the version of WinDVD2000 software bundled together with ABIT's multimedia system.

5-3. Remote Controller (Optional)

• On/Off: Power On/Off

• Eject: Ejects the disk from the drive

• Screen: Select the size of viewing screen.

- Title: Opens a submenu showing you all of the titles available on the DVD disc currently being played and allows you to select a new title to play back.
- Subtitle: Displays the subtitle menu. If multiple language subtitles are available, use this menu to select your choice.
- Audio: Displays the audio track options. If multiple audio tracks or language are available, use this menu to select your choice.
- Mute: Mutes the sound on the disk currently playing
- Chap Menu: Shows the Chapter menu
- Angle: When available, select the angle to view from a list of optional angles.
- Volume: Increase or decrease audio output
- Brightness: Increase or decrease the brightness of the video output
- Menu: shows menu selections
- Up/Down/Right/Left: Use the directional buttons just as you would the mouse button or Tab key
- Enter/Play: Enter Plays the current title, restores play after a pause
- ESC: To escape from the Menu selection
- Fast Forward: Plays the disk in fast forward mode
- Stop: Stops the current playback
- Pause: Pauses the current playback
- Fast Backward: Plays the disk in fast reverse mode
- Previous Chapter: Jump to the previous chapter
- Next Chapter: Jump to the next chapter
- Chapter: Opens a submenu showing you the chapter currently being played. You can select
 another chapter from this menu.



5-4 Chapter 5

• Numeric Keypad: The numeric keypad provides you with a method of selecting numbers. This is more likely to be used while playing a Video CD than a DVD disc. Any time that you enter a numeric value, click the corresponding key on the numeric keypad and then click the enter button to accept that number

Appendix A. How to Get Technical Support

(From our website) http://www.abit.com.tw
(In North America) http://www.abit-usa.com
(In Europe) http://www.abit.nl

Thank you for choosing ABIT products. ABIT sells all our products through distributors, resellers and system integrators, we have no direct sales to end-users. Before sending email for tech support please check with your resellers or integrators if you need any services, they are the ones who sold you your system and they should know best as to what can be done, how they serve you is a good reference for future purchases.

We appreciate every customer and would like to provide the best service to you. Providing fast service to our customers is our top priority. However we receive many phone calls and a huge amount of email from all over the world. At the present time it is impossible for us to respond to every single inquiry. Therefore it is quite possible that if you send an email to us that you may not receive a response.

We have done many compatibility tests and reliability tests to make sure our products have the best quality and compatibility. In case you need service or technical support, please understand the constraint we have and always check with the reseller who sold the product to you first.

To expedite service, we recommend that you follow the procedures outlined below before contacting us. With your help, we can meet our commitment to provide the best service to the greatest number of ABIT customers:

- 1. Check the Manual. It sounds simple but we have taken a lot of care in making a well-written and thorough manual. It is full of information that doesn't only pertain to motherboards. The CD-ROM included with your board will have the manual as well as drivers. If you don't have either one go to our Program Download Area of the Website or FTP server at: http://www.abit.com.tw/download/index.htm
- 2. Download latest BIOS, software or drivers. Please go to our Program Download area on our Website to check to see if you have the latest BIOS. They are developed over periods of time to fixes bugs or incompatibilities. Also please make sure you have the latest drivers from your peripheral cards makers!
- 3. Check the ABIT Technical Terms Guide and FAQ on our Website. We are trying to expand and make the FAQs more helpful and information rich. Let us know if you have any suggestions. For hot topics check out our HOT FAQ!

A-2 Appendix A

4. Internet Newsgroups. They are a great source of information and many people there can offer help. ABIT's Internet News group, alt.comp.periphs.mainboard.abit, is an ideal forum for the public to exchange information and discuss experiences they have had with ABIT products. Many times you will see that your question has already been asked before. This is a public Internet news group and it is reserved for free discussions. Here is a list of some of the more popular ones:

alt.comp.periphs.mainboard.abit comp.sys.ibm.pc.hardware.chips alt.comp.hardware.overclocking alt.comp.hardware.homebuilt alt.comp.hardware.pc-homebuilt

- 5. Ask your reseller. Your ABIT authorized distributor should be able to provide the fastest solution to your technical problem. We sell our products through distributors who sell to resellers and stores. Your reseller should be very familiar with your system configuration and should be able to solve your problem much more efficiently than we could. After all, your reseller regards you as an important customer who may purchase more products and who can urge your friends to buy from him or her as well. They integrated and sold the system to you. They should know best what your system configuration is and your problem. They should have reasonable return or refund policies. How they serve you is also a good reference for your next purchase.
- 6. Contacting ABIT. If you feel that you need to contact ABIT directly you can send email to the ABIT technical support department. First, please contact the support team for the branch office closest to you. They will be more familiar with local conditions and problems and will have better insight as to which resellers offer what products and services. Due to the huge number of emails coming in every day and other reasons, such as the time required for problem reproduction, we will not be able to reply to every email. Please understand that we are selling through distribution channels and don't have the resources to serve every end-user. However, we will try to do our best to help every customer. Please also remember that for many of our technical support team English is a second language, you will have a better chance of getting a helpful answer if your question can be understood in the first place. Be sure to use very, simple, concise language that clearly states the problem, avoid rambling or flowery language and always list your system components. Here is the contact information for our branch offices:

In North America and South America please contact: ABIT Computer (USA) Corporation

46808 Lakeview Blvd.

Fremont, California 94538 U.S.A.

sales@abit-usa.com

technical@abit-usa.com

Tel: 1-510-623-0500 Fax: 1-510-623-1092

In the UK and Ireland:

ABIT Computer Corporation Ltd.

Unit 3, 24-26 Boulton Road

Stevenage, Herts SG1 4QX, UK

abituksales@compuserve.com

abituktech@compuserve.com

Tel: 44-1438-228888 Fax: 44-1438-226333

In Germany and Benelux (Belgium, Netherlands, Luxembourg) countries:

AMOR Computer B.V. (ABIT's European Office)

Van Coehoornstraat 7,

5916 PH Venlo, The Netherlands

sales@abit.nl

technical@abit.nl Tel: 31-77-3204428

Fax: 31-77-3204420

All other territories not covered above please contact: **Taiwan Head Office**

When contacting our headquarters please note we are located in Taiwan and we are 8+ GMT time. In addition, we have holidays that may be different from those in your country.

ABIT Computer Corporation

3F-7, No. 79, Sec. 1, Hsin Tai Wu Rd.

Hsi Chi, Taipei Hsien, Taiwan

sales@abit.com.tw

market@abit.com.tw

technical@abit.com.tw

Tel: 886-2-2698-1888 Fax: 886-2-2698-1811 A-4 Appendix A

7. RMA Service. If your system has been working but it just stopped, but you have not installed any new software or hardware recently, it is likely that you have a defective component. Please contact the reseller from whom you bought the product. You should be able to get RMA service there.

- 8. Reporting Compatibility Problems to ABIT. Because of tremendous number of email messages we receive every day, we are forced to give greater weight to certain types of messages than to others. For this reason, any compatibility problem that is reported to us, giving detailed system configuration information and error symptoms will receive the highest priority. For the other questions, we regret that we may not be able to reply directly. But your questions may be posted to the Internet news group in order that a larger number of users can have the benefit of the information. Please check the news group from time to time.
- 9. Fill out the Technical Support Form: If you encounter any problems and need help from our technical staff, please take the time to fill out the Technical Support Form and send it to your dealer or our technical support mailbox. The mailbox address is: technical@abit.com.tw. We will try to solve your problem as soon as possible. You must provide specific information on your equipment. Also please describe in detail the problems you encountered. It's helpful and enables our technicians to analyze your problems more quickly. Information on items marked with an asterisk "*" on the Technical Support Form are required.

☐ Technical Support Form				
📥 Company Name:	Phone Number:			
♦ Contact Person:		🗷 Fax Number:		
🗗 E-mail Address:				
Product Name	*	Product Software and Driver Version	*	
Motherboard Manufacturer, Model Name and Chipset type				
Operating System Type	*			
Hardware Name	Type	Specifications		
CPU Type and Speed	*			
HDD ☐IDE1 ☐IDE2				
CD-ROM-Drive ☐IDE1 ☐IDE2				
System Memory Size (SDRAM)				
Add-On CARD				
Problem Description:				
-				



A-6 Appendix A

Thank you, ABIT Computer Corporation

http://www.abit.com.tw