ABIT Home Theater AU10 5.1 Channel Audio Card

Installation Guide and User's Manual



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

ABIT Home Theater AU10 5.1 Channel Audio Card User's Manual

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Getting Started 1-1

Chapter 1. Getting Started

Congratulations! You have chosen one of the most powerful high performance 3D audio cards available. In this chapter we will show you the key features, features and benefits, and the package list of ABIT Home Theater AU10 audio card.

1-1. Key Features

- ForteMedia FM801-AU audio controller
- · 5.1 channel output
- PCI 2.1 Compliant
- Soft MPEG-II Support
- Microsoft® DirectSound and MMSystem Compliance
- 128-voice Software WaveTable Synthesizer support
- Superior 3D positional Audio Support
- Creative Environmental Audio (EAX), A3D 1.0 game titles Compatible
- Native DOS Game Support without Software Emulation
- Analog/Digital Joystick Interface
- · Legacy Audio compatibility
- · Hardware Sound Blaster Pro compatibility
- AdLib compatible Music Synthesizer
- MPU401 UART mode MIDI interface

1-2 Chapter 1

1-2. Features and Benefits

Features	Benefits		
	High-quality sound rivaling CD audio		
Yamaha XG	Supports the XG format with a rich array of sounds and diverse effects		
r amana AG	Dynamic filtering allows subtle musical nuances to be reproduced		
	Simultaneous playback of MIDI and audio is now possible		
WinDVD2000	WinDVD is software DVD decoder/player that capitalizes on the growing demand for DVD playback on the PC. This software DVD decoder/player includes integrated MPEG1 and MPEG2 file playback, a powerful VCD 2.0 player, MP3 audio file and SVCD playback.		
Remote Control Kit	The world's only complete remote control allows you to sit back, relax and enjoy watching your DVDs, listening to the 5.1 channel digital output. Just like your regular TV remote, there is no need to get up in order to control how and what you see and hear.		
	The remote control can also be used in the office in controlling your PowerPoint presentations.		
Great Sound Clarity	Provide highest quality of playback and recording performance by separating digital controller (FM801) and CODEC (AC'97).		
Sound Accuracy to the Music Notes	Supports software wavetable synthesizer (music synthesizer engine).		
	EzAudio [™] provides the overall application-driven capacity in music listening.		
EzAudio™ Audio Rack software application	EzAudio [™] consists of Power ON/OFF controller, CD player, MIDI player, and Wave (digital sound) player and recorder. It also links with Microsoft [®] Mixer for easy access of volume control.		
3D Positional Sound	Q3D is the positional 3D sound algorithm provided by QSound. It provides the ability to simulate a two-speaker system as a full surround sound source. It supports Microsoft® direct sound and positional 3D games. That means with this driver, your AU10 PCI audio card can be used to play those amazing games with positional 3D audio.		

Getting Started 1-3

1-3. What's in the box? (Package List)

Read through this section to familiarize yourself with everything that is included with the ABIT Home Theater AU10 audio card.

- One ABIT Home Theater AU10 audio card
- One G9 6-Channel Cable

Red jack: To connect Front speakers White jack: To connect Rear speakers

Black jack: To connect Center speaker/Subwoofer

- One Remote Controller
- One Remote Receiver Cable
- · One User's manual
- ABIT Home Theater AU10 audio card installation CD-Title (which includes Windows[®] 95/98 SE, Windows[®] NT 4.0, Windows[®] 2000 drivers, Yamaha XG 5.0, EzAudio[™], and WinDVD player).

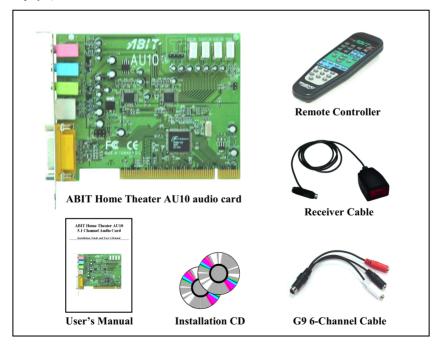


Figure 1-1. Package list of ABIT Home Theater AU10 audio card

1-4 Chapter 1

Note: Carefully examine your ABIT Home Theater AU10 audio card to make sure there is no loosen or broken component on the card. If the audio card appeared to be damaged, return it to the store for exchange as soon as possible.

Hardware Installation 2-1

Chapter 2. Hardware Installation

It is fast and easy to install the hardware of ABIT Home Theater AU10 audio card. Simply insert the ABIT Home Theater AU10 audio card into any empty PCI slot on your motherboard, and then fix it to the back panel.

2-1. Card Layout

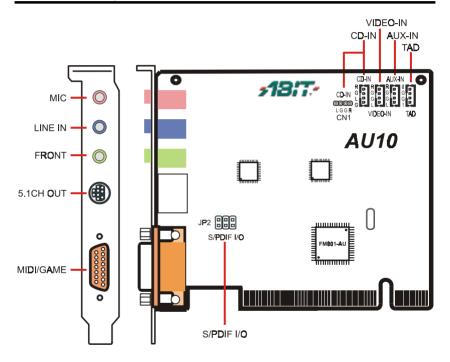


Figure 1-2. Connection diagram of ABIT Home Theater AU10 audio card

2-2. Connectors and Headers

- MIC: To connect a microphone.
- LINE IN: To connect an external audio source.
- FRONT: To connect the 2-speaker audio system.
- 5.1CH OUT: To connect the 6-speaker audio system.

2-2 Chapter 2

- MIDI/GAME: To connect a MIDI player or Joystick.
- CD-IN: To connect the Audio-Out connector of an internal CD/DVD-ROM drive.
- VIDEO-IN: To connect a video add-on card.
- AUX-IN: To connect an auxiliary audio input.
- TAD: To connect the modem card.
- S/PDIF I/O: To connect the digital audio input. Note that the connection of S/PDIF requires an optional daughter card.

2-3. Card Installation

- **Step 1.** Turn off the PC and all external peripherals connected to it (e.g. printer...etc.), then remove the PC system cover.
- Step 2. Locate an empty PCI expansion slot. Your ABIT Home Theater AU10 audio card can be installed in any available PCI expansion slot. Remove the metal bracket corresponding to the slot you have chosen. Save the screw.
- Step 3. Align the ABIT Home Theater AU10 audio card to the expansion slot. Hold the audio card by its edges and insert the card into the slot without using excessive force or pressing any components on the audio card. Make sure it is firmly and completely fixed into the slot.
- Step 4. Secure the ABIT Home Theater AU10 audio card to the expansion slot. Align the notch in the mounting bracket of the audio card with the screw hole in the rear panel of the computer case. Use the screw that you had removed from the metal bracket to secure the audio card in place.
- **Step 5.** Use the audio cable that comes with your CD/DVD-ROM to connect the CD/DVD-ROM audio output to the audio connector on the ABIT Home Theater AU10 audio card (refer to Fig. 1-2).
- Step 6. Connect the required cables to the audio card there are 3 external audio jacks at the back end of the audio card: "MIC", "LINE IN", and "FRONT". Connect your speaker cable to the "FRONT" jack.
- **Step 7.** Replace the system cover. You are now ready to boot up your PC system.

Driver Installation 3-1

Chapter 3. Driver Installation

In this chapter we will show you how to install the drivers for the ABIT Home Theater AU10 audio card. The ABIT Home Theater AU10 audio card product package contains a CD-Title for installation.

The ABIT Home Theater AU10 audio card supports the following drivers:

- Microsoft® Windows® 95/98
- Microsoft® Windows® 2000
- Microsoft® NT
- Native DOS

The Windows® 95/98 and DOS drivers are not just designed for the latest Microsoft® compliance and direct sound games but also designed to support the legacy DOS SoundBlaster Pro compatible games. The following sections describe the steps in driver installation under different operating systems.

Note: You may update the latest ABIT Home Theater AU10 audio card driver files download from your dealer or from our WEB site http://www.abit.com.tw.

3-2 Chapter 3

3-1. Installing AU10 Driver for the Windows® 95/98

Insert the AU10 CD-Title into your CD/DVD-ROM drive, it should execute the program automatically. If not, you can go to the CD/DVD-ROM location and execute the execution file at the main directory of this CD-Title. After it has been executed you will see the screen below.

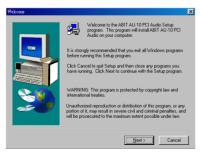
Note: In order to obtain the effect of 5.1 channel, please install the DirectX with version later than 6.0 first. You can find both 6.0 and 7.0 version of DirectX in the AU10 CD-Title.



Move the cursor to "**Drivers**" and click on it to go to the next screen.



Move the cursor to the correct operating system you are currently running. Your selection of operating system will be turned into red from green color once the cursor is on top of it.



Once you have made your selection, the welcome screen and its dialogue box appears. Click "Next" to go on.

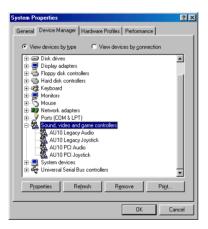
Driver Installation 3-3



The install shield is now loading.



When the installation is complete, the installer will ask you to restart your computer. We suggest you choose "Yes, I want to restart my computer now" and then click the "Finish" button to restart your computer to finish the drivers update.

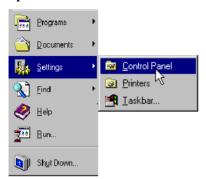


Once the Windows[®] has restarted, check **System Properties** → **Device Manager** → **Sound, video and game controllers**, you will see that the ABIT

Home Theater AU10 audio card drivers has been successfully installed.

3-4 Chapter 3

Speaker Test and Driver Un-Installation



Go to the "Control Panel" by clicking on the "Start" Menu, selecting "Settings" and choosing "Control Panel".



Double-click on "ABIT Q3D" Icon in "Control Panel"



To test if all the speakers were properly installed, click on "Test All" button. Please watch carefully the movement of the music note shown on the screen to verify the correct placement of your speakers.

To uninstall the ABIT Home Theater AU10 Audio Card drivers, click on "Uninstall" button to disable the driver.

Driver Installation 3-5

3-2. Installing AU10 Driver for the Windows® NT 4.0 Server/Workstation

Insert the AU10 CD-Title into your CD/DVD-ROM drive, it should execute the program automatically. If not, you can go to the CD/DVD-ROM location and execute the execution file at the main directory of this CD-Title. After it has been executed you will see the screen below.



Move the cursor to "**Drivers**" and click on it to go to the next screen.



Move the cursor to the correct operating system you are currently running. Your selection of operating system will be highlighted once the cursor is on top of it.

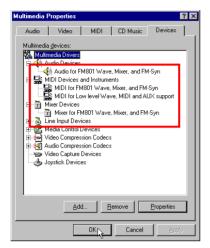


Select "Yes" if you want to continue the installation, or click "No" to quit the installation.



Click "**OK**" to reboot the system to finish the installation.

3-6 Chapter 3



Once the Windows® has restarted, check Control Panel → Multimedia Properties → Devices → Sound, video and game controllers, you will see that the "AU10 Wave, Mixer and FM-Syn" drivers has been successfully installed.

*If there is a yellow mark on one of the component or a missing component, try uninstalling and then reinstall the drivers. If it still does not work we recommend you contact your board manufacturer.

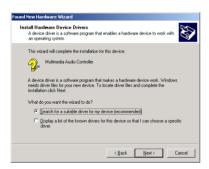
Driver Installation 3-7

3-3. Installing AU10 Driver for the Windows® 2000



After the ABIT Home Theater AU10 audio card had been installed and the system had been rebooted, the Windows® will detect the new hardware automatically. Click "Next>" to go on.

If the Windows® is not able to detect the new hardware, you can go to the CD-ROM location and execute the ABIT.exe file at the main directory of the AU10 CD-Title to install the driver automatically.



Choose the check box "Search for a suitable driver for my device [recommended]" and click "Next" to go on.



Choose the check box "Specify a location" and click "Next>" to go on.

3-8 Chapter 3



Inserct the driver CD-Title comes with the AU10 and type the path in the text box "D:\Win2000\Eng" (D:\ is the letter of CD/DVD-ROM drive).



Windows[®] is now ready to install the driver. Click "Next>" to go on.



Click "Yes" to go on.

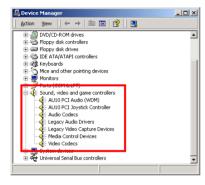


Windows® has finished installing the audio driver. Click "Finish".

Driver Installation 3-9



Now the Windows® will detect AU10 PCI Joystick Controller automatically. Click "Yes" to end the installation.



Go to the "Control Panel" \rightarrow "System Properties" \rightarrow "Device Manger". Now you can see the driver is installed under the item of "Sound, video and game controllers".

3-10 Chapter 3

3-4. Installing AU10 Driver for the DOS under Windows®

This package is intended for systems running DOS with Windows[®] as its operating System. There is a DOS sub-directory in AU10 CD-Title containing tools for DOS support.

- Step 1. Turn off your PC & Insert your ABIT Home Theater AU10 audio card.
- Step 2. Turn on PC and reboot system.
- Step 3. At DOS Prompt, type A:\INSTALL if the driver is from floppy, or type D:\DOS\INSTALL if it is from CD. (D:\ is the letter of CD/DVD-ROM drive)
- **Step 4.** Follow the procedure of the INSTALL program to finish the installation.
- Step 5. Since DOS is not a Plug-n-Play OS, make sure you select the IO/IRQ/DMA that are available and safe for the DOS games.

Driver Installation 3-11

3-5. Installing AU10 Driver for the Native DOS

This package is intended for systems running pure DOS as its operating System. There is a DOS sub-directory in AU10 CD-Title containing tools for DOS support.

```
Step 1. Please Select SB I/O Port:
        I/O 220
        I/O 240
        ESC. To quit
        Please Enter (1~2 or ESC):
        I/O 220 is the recommended setting for this selection
Step 2. (You may not see this step if your CMOS BIOS have IRQ 5,7,9 assigned to your Audio
        card)
        Please Select SB IRQ Channel:
        IRQ5
        IRO 7
        IRO9
        ESC. To quit
        Please Enter (1\sim3 or ESC):
        IRQ 5 is the recommended setting for this selection
Step 3. Please Select SB DMA Channel:
        DMA<sub>1</sub>
        DMA<sub>0</sub>
        DMA 3
        ESC. To quit
        Please Enter (1\sim3 or ESC):
        DMA 1 is the recommended setting for this selection
```

3-12 Chapter 3

Step 4. You have selected:

I/O Port: 220 IRQ Channel: 5 DMA Channel: 1

Is this ok for your DOS games (y/n)?

Answer YES if you are sure it's OK.

Step 5. System needs to reboot for the settings to take effect.

Do you want to reboot [y/n]

YES is the recommended setting for this selection

Troubleshooting

[1] Check list if Audio card not found or IRQ not assigned to AU10 audio card:

Change Slot: Insert the Audio Card into another PCI Slot. Reboot. If problem persists, please Adjust BIOS Settings:

- a. Getting into BOIS (usually, hit <F1>, or <F10> after Reboot).
- b. Get into the Section with title "PCI/PnP".
- c. Make sure it reserves enough IRQ for PCI devices.
- d. If there is "Reset Configuration" option, change it to "Yes/Enable".
- e. If there is "PnP OS" option, change it to "NO".
- f. Reboot.

[2] Check list if a SB Game is not working:

For the best result of DOS game play and to reduce potential problem(s) of the additional layer of routing, please change BIOS setting to reserve PCI IRQ 5/7/9 for PCI Devices.

[3] Adjust SB IRQ/IO/DMA for some DOS Games:

Some DOS games may need certain fixed resource (IO, IRQ and DMA). This adjustment can be achieved through the INSTALL program. Make sure that IRQ/IO/DMA resource is available, then choose the IRQ/IO/DMA which is good for the games by running the INSTALL again.

Chapter 4. InterVideo WinDVD[™] 2000 Software Application

4-1. Installing WinDVD[™] 2000 Driver for the Windows[®] 2000

Note: In order to obtain the effect of 5.1 channel, please install the DirectX with version later than 6.0 first. You can find both 6.0 and 7.0 version of DirectX in the AU10 CD-Title.

If you have a DVD-ROM, you can install this software for DVD player into your computer. Please insert the AU10 CD-Title into the CD/DVD-ROM drive. It should execute the program automatically. If not, you can go to the CD location and execute the execution file at the root directory of this CD-Title. After it has been executed 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.





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

4-2 Chapter 4

For more detailed information about how to operate it, please check 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.

4-2. Remote Control Kit



We provide a specially designed IR remote control kit with the ABIT Home Theater AU10 audio card for the convenience of our users. This remote control kit can replace the keyboard function when a user is watching DVD/VCD movies with the WinDVD2000 software.

This remote control kit not only can control the WinDVD playback but also can be used as a pointing device to control 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.
- Step 5. If you have already installed the WinDVD multi-channel version that is included with the ABIT Home Theater AU10 audio card, you can verify the installation by trying out the IR remote function.

Note: This IR remote control kit will only be functional with the WinDVD2000 which is specially designed for audio products from ABIT. It will not work with other versions of WinDVD nor other software DVD playback utilities.

4-3. Remote Controller

We provide a specially designed IR remote control kit with the ABIT Home Theater AU10 audio card for the convenience of our users. This remote control kit can replace the keyboard function when one is watching VCD or DVD movies with the WinDVD2000 software.

- 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



4-4 Chapter 4

- 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.
- 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

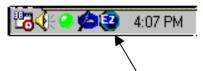
Chapter 5. EzAudio[™] Software Application

 $EzAudio^{TM}$ is a software application developed for the PC music lover through CD, MIDI, and WaveTable features. $EzAudio^{TM}$ provides the overall application-driven capacity in music listening.

EzAudio[™] consists of Power ON/OFF controller, CD player, MIDI player, and Wave (digital sound) player and recorder. It also linked with Microsoft[®] Mixer for easy access of volume control.

5-1. To Activate EzAudio[™]

The proper way to activate EzAudio™ is:



Double click the EZ Audio icon in the task bar.



The whole appearance of EzAudio[™] control panel is now available.

5-2 Chapter 5

5-2. EzAudio[™] Component Description



POWER ON/OFF Control:

This component manages and launches the other components. The "Power" button acts as a power switch. When clicked, the EzAudio[™] application will close itself. EzAudio[™] also supports the application minimization, so you may shrink it to the bottom of your screen.

CD PLAYER:

This component plays audio CDs. The window display shows the information of track and time.

MIDI PLAYER:

This component play General MIDI files (a computer music format). The display window shows the file name and the times it plays.

SOUND PLAYER:

This component plays and records WAVE (digital PCM format) files. The recording source can be CD (AUX), MIC, MIDI or LINE.

MIXER:

This component controls all sources volume input & output for playback & recording. The playback source can be AUX, WAVE, FM, CD, MIC, LINE IN, VIDEO, and I2S. The recording source can be AUX, MIC, CD, LINE IN, MIX or VIDEO.

5-3. To Play EzAudio[™]

The following are the common operations of CD, MIDI, and SOUND. Each component has the basic functions of Play, Stop, Pause, Fast Forward and Fast Rewind. The CD player also has the Next and Previous functions.

The component buttons are marked with symbols commonly found on consumer audio players. So, if you have operated audio players before, you will find $EzAudio^{TM}$ operation straightforward.

- Stop
- Pause Pause
- Play
- ◀■ Fast Rewind
- Fast Forward
- Go to the beginning of previous song
- Go to the beginning of next song

5-4. EzAudio[™] Recording

Clicking on the record button on the WAVE component, the $EzAudio^{TM}$ will start to record your favorite sound or song. To stop recording, simply press the Stop button.

5-4 Chapter 5

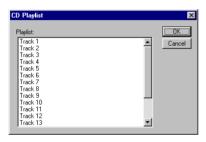
5-5. To Select CD, MIDI, or Wave Titles

The Playlist function allows you to arrange CD tracks, MIDI songs, and WAVE sound files into a program of your choice. Playback starts with the first item in the playlist and continues until all items have been played.

The CD Playlist:



Move the cursor at the CD Disc tray and click on the icon to access the CD Playlist.



This allows you to access the Name CD dialog box shown below to enter the CD title and track number

The MIDI Playlist:



Place the cursor at the floppy-drive icon. Click on the icon to access MIDI Playlist.

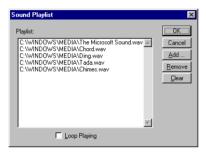


This allows you to accesses the Name MIDI dialogs box shown below. The dialog box allows you to enter the MIDI title and track number.

The WAVE Playlist:



Move the cursor to the audio-tape door and click on it to access the Sound Playlist.

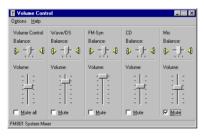


To play a ".WAV" digital audio file you must first insert the files you wish to hear in the playlist. Once you have created a playlist, press "**OK**" to close the playlist. Press Play to hear the files in the playlist.

PLAY MIXER:



For volume control, click the "MIXER" button to bring out the Volume Control window.



To adjust the Volume Control, or the applicable Wave/DS, FM-Syn, CD and Mic:

- Move the corresponding "Balance" dial left and right.
- Move the corresponding "Volume" dial up and down.
- If mute is preferred on particular channel, click

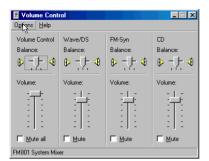
inside the corresponding "Mute" Box. To re-activate sound, click inside "Mute" Box again.

RECORD MIXER:

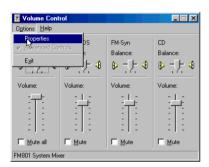


The recording mixer is inside the MIXER component. To activate, click on "MIXER" button

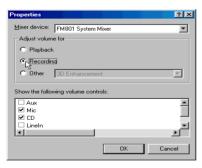
5-6 Chapter 5



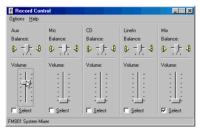
Select "Options" tab from the Volume Control Panel.



Choose "Properties" from drawdown menu.



Check the "Recording" box in the item of "Adjust volume for", and then check the input source. Click "OK" to go on.



Check the "Select" box for the recording channels. If you prefer to record the entire source at the same time, make sure to check the "Select" box for the "Mix Balance".

Chapter 6. YAMAHA SoftSynthesizer Software Application

The YAMAHA SoftSynthesizer is application software to control the audio quality of your ABIT Home Theater AU10 audio card.

Please insert the AU10 CD-Title into the CD/DVD-ROM drive. It should execute the program automatically. If not, you can go to the CD location and execute the execution file at the root directory of this CD-Title. After it has been executed you will see the screen below.

6-1. Installing YAMAHA S-YXG50 Driver



Move the cursor to "Application" and click on it to go to the next screen.



Move the cursor to "For Windows® NT/2000" and click on it. This will begin installing the YAMAHA S-YXG50 software into your computer.

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

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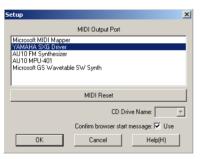
6-2. To Activate YAMAHA SoftSynthesizer



Double click on this icon in the task bar to bring up the control panel of YAMAHA SoftSynthesizer.



Click on the adjustment tool to enter the "MIDI Output Port" selection screen.



Choose the "YAMAHA SXG Driver" and click "OK" to exit.

In order to obtain a normal operation of the 6-channle output, it is highly recommended to set the hardware acceleration to the fullest for a maximum usage of the CPU.



Go to "Start" → "Control Panel" → "Sounds and Multimedia" → "Audio" → "Advanced" → "Performance". Move the slider of "Hardware acceleration" to "Full" position.

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Appendix A. Product FAQ

The following tips for troubleshooting is to examine the evidence you have, gain as much information as you can, and eliminate possibilities one by one. In most cases, the source of the problem will soon become clear. For example, if ABIT Home Theater AU10 audio card works fine when you remove all the other add-on cards from your computer, but it stops working when you replace your fax-modem, there maybe a conflict between the audio card and the fax-modem (such as port address or IRQ). Often, problems are extremely simple: cable not plugged in or turned on, etc. Check the obvious first, not last.

Q1: What are the configuration problems?

Adding new hardware and software to your computer requires ensuring that there are no conflicts with your existing system. If you have difficulty with the installation procedure or are unable to make the card work, a conflict may be present. There are three major configuration settings to consider: I/O Port Address, Interrupt Request lines (IRQ), and Direct Memory Access channels (DMA).

Even though the ABIT Home Theater AU10 audio card is a plug and play card, the presence of other legacy cards can still cause resource conflicts. To resolve such conflicts, it is important to know the settings of other cards (it is best to remove other audio cards) and peripherals currently in your system, including the mouse, fax-modem, video accelerators, etc. Many peripherals come with setup software similar to ABIT Home Theater AU10 audio card that lets you see and change the current configuration. There are also utility programs that investigate and report on the configuration of your system and its peripherals. In either event, make a record of the settings used by all the peripherals in your system for reference when installing new hardware and software or trouble shooting problems.

Generally, you will only have a DMA conflict if your system contains another audio card or an external CD/DVD-ROM drive.

Q2: What are DMA Channels and PCI?

Under Windows 9x, the ABIT Home Theater AU10 audio card is capable of full duplex. This means that the card can playback one .WAV file while recording another. With the PCI bus full duplex is possible without any DMA channels.

There is no microphone support in the MS-DOS Mode and therefore only a single DMA is required for legacy emulation.

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Q3: What should I do if I have problems with playing games?

Make sure that you have the game set up in a music option that the ABIT Home Theater AU10 audio card supports. If the game takes advantage of DirectX or DirectSound be sure that you have the latest DirectX drivers from Microsoft[®]. If you are having a problem with external joystick or gamepad, make sure that the Joystick is enabled and the Windows[®] 9x Gameport Joystick drivers are loaded and working properly in the Device Manager.

In order to use two joysticks, you will need to use a SoundBlaster-compatible Y-connector (such as Radio Shack part # 26-380), or use an industry-standard MIDI Joystick kit. This will make allowances for the proper direct connections for dual joysticks.

O4: Can I install two audio cards?

Having another audio card in your system in addition to the ABIT Home Theater AU10 audio card will greatly increase the chances of having system conflicts. We highly recommend that any other sound devices and their associated Windows® drivers be removed before installing the ABIT Home Theater AU10 audio card.

Q5: Why are some of the Windows® Multimedia Components (i.e. Media Player) missing?

If you install the ABIT Home Theater AU10 audio card after Windows® 9x is installed, Windows® will not install the sound utilities that you would expect to find. Features such as the Audio CODEC, the Media Player, and the Microsoft® Mixer may not be present. This may cause your audio card to not function properly, even when our drivers are installed. If this is the case, these applications must be installed onto the system from the Windows® 9x installation media.

Q6: What happened if my AU10 soundcard and driver are both properly installed, yet, there is still no sound?

If the ABIT Home Theater AU10 audio card and drivers are properly installed with no conflicts, yet there is no sound, the problem may be with your audio connections. Here are some suggestions:

Try playing both a ".WAV" file and a .MID file to ascertain that there is no sound at all coming from the speakers. If you hear one and not the other, the problem is internal and has nothing to do with your audio system.

Be sure that your monitoring system is properly set up. Try connecting a sound source other than ABIT Home Theater AU10 audio card, such as an audio CD player, and establishing whether or not you can hear it.

Be sure that the audio card is properly connected to the monitoring system (a 1/8-inch

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mini-phone cable should be running from ABIT Home Theater AU10 audio card "FRONT" connector to a line input on the monitoring system). To eliminate the possibility of a bad cable, try plugging a pair of high-impedance headphones to the ABIT Home Theater AU10 audio card "FRONT" jack and see if you hear any sound.

Q7: How do I change volume and balance levels in Windows® 9x?

To make adjustments to ABIT Home Theater AU10 audio card volume settings and balance levels, use the ForteMedia $EzAudio^{TM}$ Mixer. The Install Wizard adds the $EzAudio^{TM}$ icon to your taskbar. The $EzAudio^{TM}$ Mixer can be invoked by double clicking on its icon located on the right side of the taskbar.

Q8: My microphone records at very low levels, with distortion, or not at all?

For ease of installation, we recommend that you use a dynamic microphone. These require the least amount of setup. Do the following steps to be sure that your software is set up correctly for MIC input:

In your toolbar, next to the clock, double-click on the EzAudio™ icon.

Under the Recording panel of Mixer make sure MIC is checked.

Make sure the MIC slider is all the way up, the mute box is not checked and the Boost box is checked.

If you experience distortion with a dynamic microphone adjust the volume levels of the Microphone and Master audio devices.

Q9: Why doesn't my CD audio work?

First, be sure that your CD volume is turned up to the maximum in the Mixer. If you still aren't getting music, you will need to verify that the internal patch cable is connected between your CD ROM drive and the audio card's CD Input. This is typically a small connector with four wires coming out of it.

Another tip is to obtain a 1/8" stereo patch cord and connect one end to the "headphone out" on the front of the CD/DVD-ROM drive, and the other end to the Line Input on the back of the audio card. Make sure the headphone volume dial on the CD/DVD-ROM drive is at maximum, and try playing a CD. You should hear the music playing. If your internal patch cable is missing or defective, contact your CD/DVD-ROM manufacturer for information on how to obtain another cable.

Q10: What to do if audio card is not found or IRQ is not assigned to AU10 PCI audio card?

Change slot: insert the ABIT Home Theater AU10 audio card into another PCI slot. (Do so by first shutting down the computer. Remove the audio card and insert it into another PCI slot.) If the problem persists: if you are a new user, uninstall the driver and re-install

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it from the beginning. (For uninstalling instructions, see "UN-installing the AU10 driver" section below.)

Adjust BIOS settings: get into BIOS (usually, hit <F1>, or <F10> after Reboot), get into the Section with title "PCI/PnP", make sure it reserves enough IRQ for PCI devices. If there is a "Reset Configuration" option, change it to "Yes/Enable", if there is a "PnP OS" option, change it to "NO".

Q11: The SB Games are not working properly...

DOS games run best with PCI IRQ 5/7/9 assigned to audio card. This can be verified through "Control Panel" → "Device Manager" → "Sound, Video, and Games" → "AU10 PCI Audio".

For the best results of DOS game play and to reduce potential problem(s) of the additional layer of routing, change BIOS setting to reserve PCI IRQ 5/7/9/10 for PCI Devices.

Some old DOS games may not work in a Windows[®] DOS Box. If this is the case, shut down the system to MS-DOS mode and play the game in Real DOS mode.

Q12: How to adjust SB IRO/IO/DMA for some DOS Games?

Some DOS games may need certain fixed resource (IRQ and DMA). This adjustment can be achieved by selecting the following path: "Control Panel" (from the Windows[®] Main Menu, click the Start button located at the lower left hand corner and select Control Panel from Settings) \rightarrow "System" \rightarrow "Device Manager" \rightarrow "Sound, Video, and Games" \rightarrow "Legacy Audio Device".

Click "Resource" Tab to change the Legacy Audio Device I/O, IRO, and DMA.

Q13: I have bought the audio card with Yamaha software Wavetable synthesizer in the package. But I can not install Yamaha Wavetable synthesizer in my computer.

Please install AU10 Win95 or Win98 driver first, before you install Yamaha Software Wavetable Synthesizer. AU10 sound driver has to be installed first in order to install Yamaha Wavetable driver.

Q14: Does AU10 audio card support Linux OS?

ABIT Home Theater AU10 audio card supports Windows® 95, Windows® 98, Windows® NT 4.0 and DOS. Linux is not supported by AU10 in the current driver set.

Q15: What are the 2-speaker, 4-speaker and 6-speaker Audio Output Options used that can be found in Control Panel?

These buttons are designed for the end users to configure how many speakers have been connected to your audio card. For example, If your audio card is a 4-channel audio card,

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then you can choose to connect 2 speakers or 4 speakers to your system. The default will be set to 4 speakers. However if you choose to connect to 2 speakers, ABIT Home Theater AU10 audio card driver will not allow you to select Quad mode in your QSound Control Panel (for the driver bundled with Q3D only) or in some of the software DVD player setup menu.

Q16: Why are two interrupts allocated for my AU10 audio card?

The PCI audio uses one PCI interrupt for operation. Additional IRQ is used for ISA legacy support, an additional to the PCI IRQ.

One PCI IRQ is needed for the audio to function under a PnP operating systems such as Windows® 9x. One additional ISA IRQ is dedicated for legacy audio support. Legacy audio support is used for DOS based applications and games that are SoundBlaster compatible. Most DOS based applications and games only use SoundBlaster compatible legacy audio requiring the use of a ISA IRQ. By disabling the ISA legacy audio support in the operating system the dedicated ISA IRQ is freed, thus using only one PCI IRQ. DOS Applications and games that require SoundBlaster Audio support will have no audio output if ISA legacy audio is disabled.

Another way to save one IRQ is to make the BIOS assign IRQ5 or IRQ7 or IRQ9 to ABIT Home Theater AU10 audio card. In this way, ISA legacy audio can also be supported via ABIT Home Theater AU10 audio card. Please refer to BIOS user manual to see the details of how to allocate the IRQ to PCI slots.

Q17: How to Get Technical Support

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.

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Technical Support Form							
📥 Company Name:		Phone Num	ber:				
♦ Contact Person:		Fax Number:					
🗗 E-mail Address:							
Audio Card Product Name	*	Audio Card Software and Driver Version	*				
Motherboard Manufacturer, Model Name and Chipset type	*		*				
Operating System Type	*		*				
Hardware name CPU Type and Speed HDD	Type *	Spec	ifications				
CD-ROM DIDE1 Drive DIDE2	*						
System Memory Size (SDRAM)	*						
Add-On Card	*						
Problem Description:							

Appendix B. 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:

- 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/DVD-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 driver. They are developed over periods of time to fix 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!

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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. Caxton Place, Caxton Way, Stevenage, Herts SG1 2UG, UK abituksales@compuserve.com abituktech@compuserve.com

Tel: 44-1438-741 999 Fax: 44-1438-742 899

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

AMOR Computer B.V. (ABIT's European Office) Van Coehoornstraat 5a, 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.

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ABIT Computer Corporation

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

Hsi Chi, Taipei Hsien

Taiwan, R.O.C.

sales@abit.com.tw

market@abit.com.tw

technical@abit.com.tw

Fax: 886-2-2698-1811

- 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.

Thank you, ABIT Computer Corporation http://www.abit.com.tw