Xonar D-KARA

PCI 5.1 Karaoke Audio Card

User Manual

Contents

Notices

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

• This device may not cause harmful interference, and
• This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for 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 manufacturer's 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:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.

Safety information

- Before installing the device on a motherboard, carefully read all the manuals that came with the package.

- To prevent electrical shock hazard or short circuits, switch off the power supply before installing the device on a motherboard or connecting any signal cables to the device.

- If the device is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

- Before using the product, make sure all cables are correctly connected. If you detect any damage, contact your dealer immediately.

- To avoid short circuits, keep paper clips, screws, and staples away from connectors, sockets, and circuitry.

- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may be exposed to moisture.

- Place the product on a stable surface.

- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

Trademarks

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License

Dolby Master Studio driver is manufactured under license from Dolby Laboratories.

1.   Introduction

1.1   Package contents

- ASUS Xonar D-Kara PCI audio card
- Driver/User Manual CD x1
- Quick Start Guide x1

1.2   System requirements

- One PCI 2.2 (or higher) compatible slot for the audio card
- Microsoft® Windows® 10 / 7 (32/64bit) / Vista (32/64bit) / XP (32/64bit) / MCE2005
- Intel® Pentium® 4 1.4 GHz or AMD® Athlon 1400 CPU or faster CPU
- 256 MB (or above) DRAM system memory
- 60 MB available HDD space for driver installation package
- CD-ROM drive (or DVD-ROM drive) for software installation
- High-quality headphones or powered analog speakers

1.3   Specifications summary

Items	Description
Audio Performance	
Output Signal-to-Noise Ratio (A-Weighted):	106 dB for Speaker Out
Input Signal-to-Noise Ratio (A-Weighted):	102 dB
Output Total Harmonic Distortion + Noise at 1kHz (A-Weighted):	Up to 0.0013% (-98dB)
Input Total Harmonic Distortion + Noise at 1 kHz (A-Weighted):	Up to 0.0013% (-98dB)
Frequency Response (-3dB, 24-bit/96kHz input):	<10Hz to 48kHz
Output/Input Full-Scale Voltage	1 Vrms (2.828Vp-p)
Bus Compatibility	
PCI	PCI v2.2 or above bus compatible
Main Chipset	
Audio Processor	C-Media CM8786 High-Performance Sound Processor (Max. 96KHz/24-bit)
D-A Converter of Digital Sources:	Cirrus Logic CS47028
A-D Converter for Analog Inputs:	- 8 Channels of DAC output: 108dB DR, -98dB THD+N
	- 4 Channels of ADC input: 105dB DR, -98dB THD+N
Sample Rate and Resolution	
Analog Playback Sample Rate and Resolution	44.1K / 48K / 96KHz @ 16 / 24-bit for all channels
Analog Recording Sample Rate and Resolution	44.1K / 48K / 96KHz @ 16 / 24-bit for all channels
S / PDIF Digital Output:	44.1K / 48K / 96KHz @ 16 / 24-bit for all channels
ASIO 2.0 Driver Support:	44.1K / 48K / 96KHz @ 16 / 24-bit for all channels
I/O Ports	
Analog Output Jack:	3.50mm mini jack *3 (Front / Side / Center-Subwoofer)
Analog Input Jack:	3.50mm mini jack *2 (Line-In / Mic-In)
Other line-level analog input (for CD-In / TV Tuner):	Aux-In (4-pin header on the card)
Digital S / PDIF Output	High-bandwidth Optical Connector supports 96KHz/24-bit
Front-Panel Audio Header	Supports headphone jack-detection, automatic switching of audio output from back panel to front panel
S / PDIF Header	Additional SPDIF-out header for connecting graphics card with HDMI audio output
Driver Features	
Operating System	Windows® 10 / 7 / Vista / XP (32/64-bit) / MCE2005
Software	10-band Equalizer, 27 Environmental Effects, Enhancer, Mixer
Size (Width x Height)	106.15mm x 178.06mm

*Specifications are subject to change without notice.

2.   Xonar D-Kara card layout
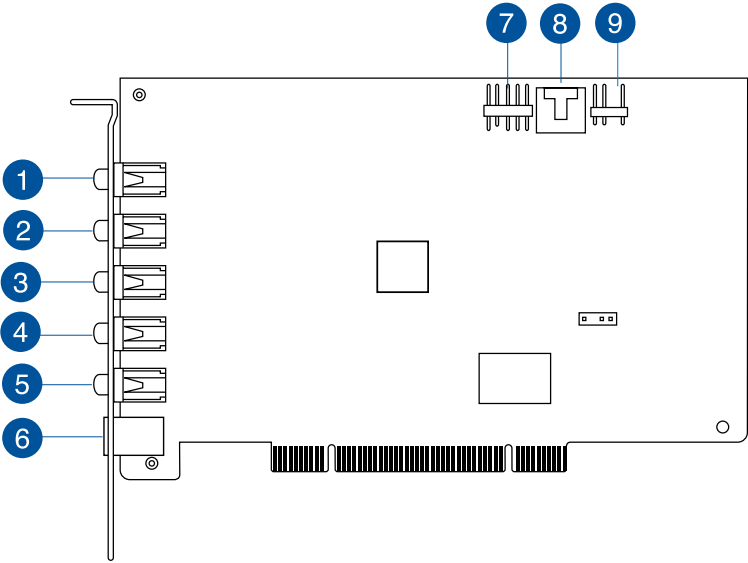
No	Item	Description
1	Microphone In port	Connect an external PC microphone to this 3.5mm port.
2	Line In port	Connect analog devices like MP3 players, CD players, music synthesizers and other line-level sound sources to this 3.5mm port for audio recording or processing.
3	Headphone/Front Out port	Connect your headphones or 2-channel speakers to this port. For multi-channel speaker systems, this port connects to the front left/right input on the speakers.
4	Side Surround Out port	Connects to the surround channel input on 4/5.1 powered analog speakers.
5	Center/Subwoofer Out port	Connects to the center/subwoofer input on 5.1 powered analog speakers.
6	S/PDIF Out port	This optical TOSLINK digital output port connects to external digital decoders or digital speaker systems, home theater systems, and AV receivers for outputting digital audio such as PCM, DTS Digital, DTS, WMA-Pro, etc.

No	Item	Description
7	Front Panel Header	This 9-pin Intel® AC'97/HDA front-panel port supports auto jack-detection and auto FP Headphone selection for Analog Out on the Audio Center.
8	Aux Input Header	This 4-pin header connects to the Analog Audio output of TV tuner cards or other sound devices inside your PC.* *To monitor your TV tuner card's audio from this Aux-In, you must enable the "monitor" function for Aux-In in the Xonar Audio Center software's recording mixer.
9	S/PDIF Out Header	Connects to a graphics card with HDMI support

3.   Installing the hardware

3.1   Installing the audio card

Before you proceed with the following installation steps, it's recommended that you disable your onboard audio device in your BIOS settings, or uninstall any other audio cards on your PC. (For BIOS settings or uninstallation of other sound cards, refer to the user manuals of your motherboard and audio card.)

Installing the Xonar D-Kara card

1.   Power OFF the computer, the monitor, and all other peripheral devices connected to your computer.

2.   Unplug the computer power cord from your computer and power outlet.

3.   Touch the metal back or side panel of the computer to avoid static electricity.

4.   Remove the chassis cover.

5.   Remove the metal bracket from an available PCI slot for the Xonar D-Kara audio card.

6.   Carefully insert the audio card into the PCI slot until the card is seated firmly in place.

7.   Secure the audio card with screws and the metal bracket.

8.   Replace the chassis cover.

9.   Reconnect all cables.

10.   Plug the power cord to the computer and to a power outlet.

11.   Power ON the computer.
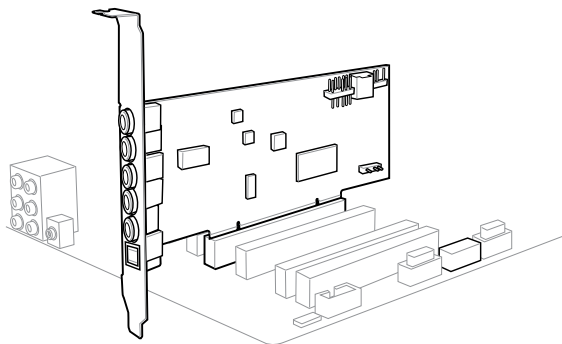
3.2 Connecting to a TV tuner card

1. If you have a traditional PCI TV tuner card on your PC, you may need to connect it to the Xonar D-Kara card to send the tuner card's sound to your PC speakers.

2. Secure the PCI TV tuner card and screw it into the back-panel.

3. Connect the audio output header from the TV tuner card to the Aux-In header of the Xonar D-Kara card.

For optimum TV audio quality, Xonar D-Kara uses ADC recording to digitize the signal and loop it back for DAC playback. Select Aux-In as the recording source in the Xonar D-Kara Center's recording mixer and enable the monitoring button to pass this signal to the audio output. Using this setup, you can even turn on sound effects such as Dolby headphone to expand the stereo TV audio to 5.1 channel surround sound in any set of headphones. TV audio on your PC will become even better than on your TV set.

4.   Installing software

Installing the card driver

Install the audio card driver before installing the Xonar D-Kara driver. Otherwise, driver installation error may occur.

1.   After you have installed the Xonar D-Kara card, turn on your computer. Windows® automatically detects the audio card and searches for device drivers. When prompted for the drivers, click Cancel.

2.   Insert the support CD into the optical drive. If Autorun is enabled on your system, the setup starts automatically. If not, run setup.exe from your support CD.

3.   Follow the onscreen instructions to finish the installation.

The version and content of the support CD are subject to change without notice.

5. Connecting speakers and peripherals

5.1 Connecting digital speaker systems (Home Theater)

The Xonar D-Kara makes surround sound playback through your home theater system possible. A single digital cable connection can carry high-quality digital audio from any of your PC audio sources to any digital speakers or AV Receivers.

Decoder Box

Amplifier

Front Left

Central

Front Right

Subwoofer

Ls Surround

Rs Surround

Lb Surround

Rb Surround

Mic In

Line In

Front L/R

Side L/R

Center/Sub
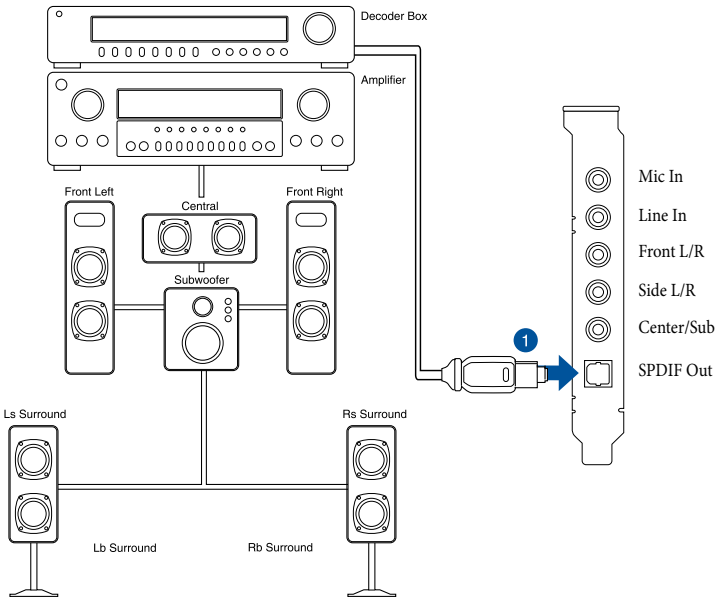
SPDIF Out

No	Item	Description
1	Optical cable	Plug your decoder's TOSLINK optical cable into the S/PDIF-Out connector.

5.2 Connecting stereo headphones

5.2.1 Connecting Stereo Headphones
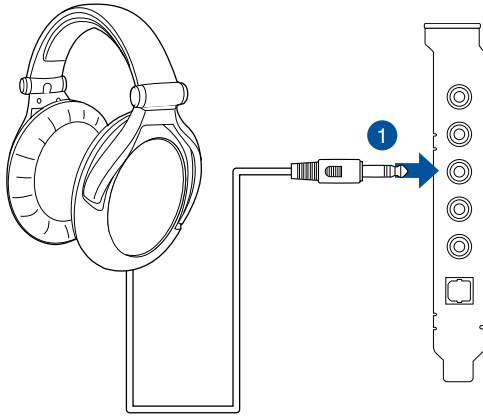
No	Item	Description
1	Front Out/Headphone Jack	Connect stereo headphones directly to this port.

5.3 Connecting analog speaker systems

5.3.1 Connecting an analog power amplifier
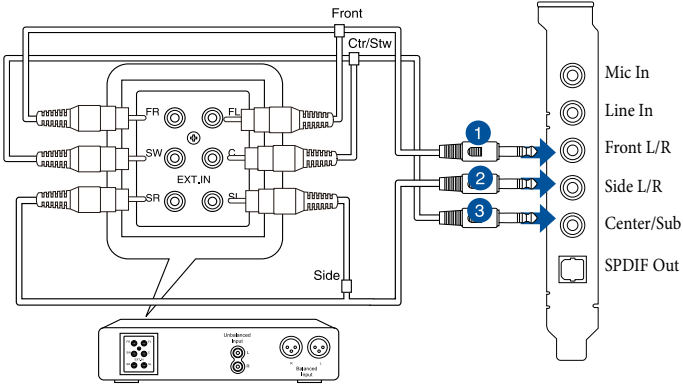
No	Item	Description
1	Front Out	Connect "left front" and "right front" input ports of the analog amplifier to the Front L/R port.
2	Side Surround Out	Connect "left surround" and "right surround" input ports of the analog amplifier to the Side L/R port.
3	Center/Subwoofer	Connect "center" and "subwoofer" input ports of the analog amplifier to the Center/Sub port.

5.3.2   Connecting 2 Channel Speakers
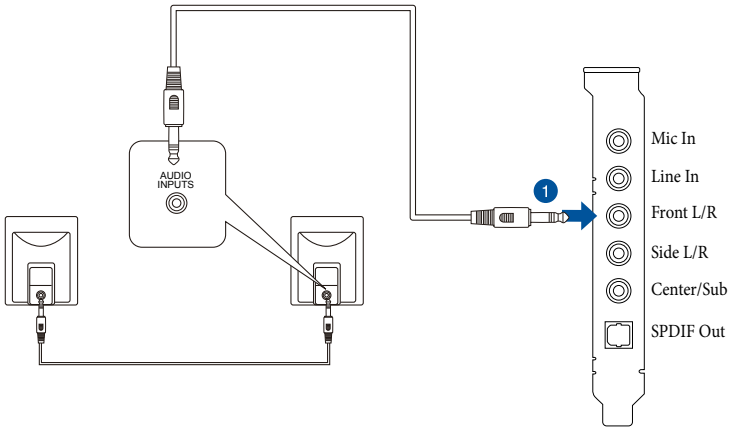
No	Item	Description
1	Front Out/Headphone Jack	Connect the speaker set's 3.5mm plug to Front L/R port.

5.3.3 Connecting 4 Channel Speakers
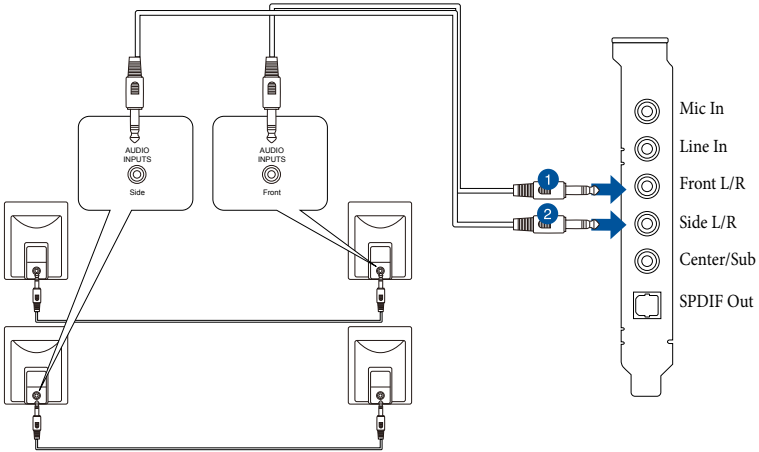
No	Item	Description
1	Front Out	Connect the front input port of the 4 channel speakers with the 3.5mm plug.
2	Side Surround Out	Connect the Surround input port of the 4 channel speakers with the 3.5mm plug.

5.3.4   Connecting 5.1 Channel Speakers

AUDIO
INPUTS

Front   Side   Center/
Subwoofer

Mic In

Line In

Front L/R

Side L/R

Center/Sub

SPDIF Out
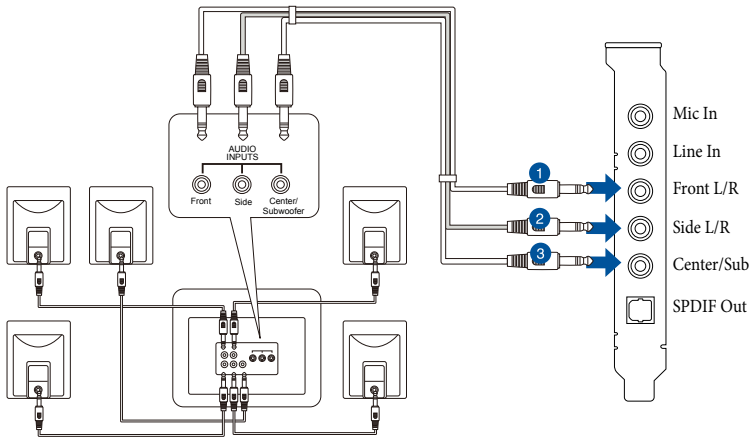
No	Item	Description
1	Front Out	Connect the front input port of the 5.1 speakers with the 3.5mm plug.
2	Side Surround Out	Connect the Surround input port of the 5.1 speakers with the 3.5mm plug.
3	Center/Subwoofer	Connect the Center/Subwoofer input port of the 5.1 speakers with the 3.5mm plug.

5.4 Connecting a microphone
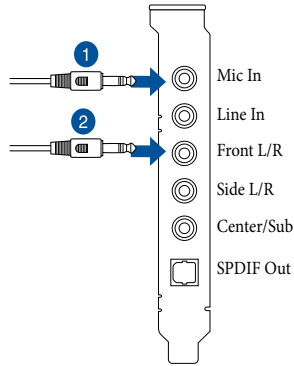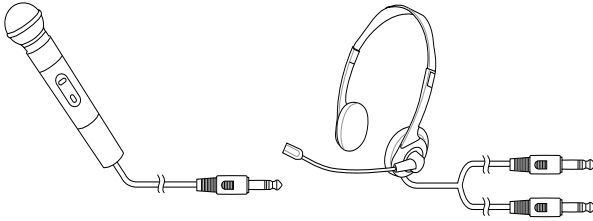
No	Item	Description
1	Microphone Input Jack	Connect the microphone's 3.5mm plug to the Mic In port.
2	Headphone Jack	Connect headphone plugs to the Front L/R port.

5.5 Connecting Line-In audio sources
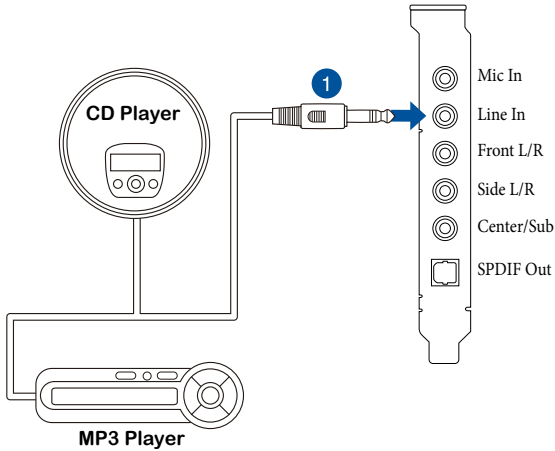
No	Item	Description
1	Line Input Jack	Connect the 3.5mm plug of the CD/MP3 Player or any other Line level analog audio sources into the Line-In port for sound recording (See the "Mixer" section of this User Manual).

6. Xonar Audio Center

6.1 Xonar Audio Center GUI

1. After driver installation is complete and your computer has been rebooted, you will find the Xonar Audio Center's icon in the system tray on the bottom right-hand corner of the screen. Double click this icon to open the Xonar Audio Center utility.

> If the icon does not appear on the system tray, launch the Xonar Audio Center from the Windows desktop by clicking Start > All Programs > ASUS Xonar D-Kara > Xonar D-Kara Audio Center.

2. The Xonar Audio Center is the Graphical User Interface (GUI) for the Xonar D-Kara driver. You can control the functions and features of the Xonar D-Kara driver on the Xonar Audio Center. The following picture shows a basic overview of the Xonar Audio Center. The following sections of this manual will describe its functions in more detail.

No	Item	Description
1	Display Area	This display area shows the 10-band signal meter, volume level, status of preset, equalizer, and signal output.* *This area displays information, but is not used to change settings.
2	Menu Open/Close	Clicking this button will reveal the configuration settings. Clicking it again will move the display area back to its original position and hide the configuration area.
3	Master Volume	This knob controls the master playback volume. Turn to change the volume level.
4	SVN Button	Click this button to enable the "Smart Volume Normalization" feature for consistent volume levels from all playback sources. It will display a blue light when enabled.
5	Mute Button	Click this button to mute audio playback. It will display a red light when playback is muted.
6	Settings Tab	Two tabs are available for quick access to Music Playback and Karaoke features.
7	Settings Menu Panel	This panel provides access to audio settings, including Main Settings, Mixer/Volume, Effects, FlexBass, and Enhancer.

To start using the Karaoke features of the Xonar D-Kara, plug in your microphone and click the Karaoke tab in the Xonar D-Kara Audio Center. Click the Mixer option and select "microphone".

6.2 Xonar D-Kara Audio Center Icon
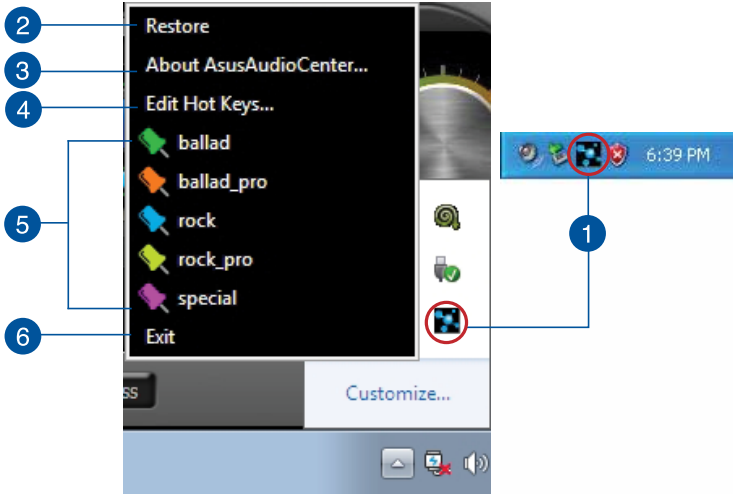
No	Item	Description
1	Information icon	Click this icon to display driver options. Double-click the icon to launch the Xonar D-Kara Audio Center.
2	Restore	Click to restore Xonar Audio Center application window.
3	About AsusAudio Center	Click to find out more about Audio Center version.
4	Edit Hot Keys	Click to edit shortcut keys for volume control, master presets, sampling rate, and analog out.
5	Master Preset	Click to apply a master preset.
6	Exit	Click to exit.

6.3 Music Main Settings

No	Item	Description
1	Audio Channel	The audio channel refers to the available speaker channels that can be used to mix sounds. Select an audio channel based on your speaker system (2CH, 4 CH, 5.1 CH, or 7.1 CH).
2	Sample Rate	The sample rate determines the number of audio samples per second that the Digital-to-Analog Converters (DAC) and S/PDIF digital interface will output.
		Please select the sample rate that corresponds to (or exceeds that of) your playback sources for optimal audio fidelity. The Xonar D-Kara audio card supports sample rates up to 96KHz (44.1K, 48K, 96KHz). Typical values for sample rates are:
		- Audio CD, MP3, WMA, Wave files are 44.1 KHz
		- DVD-video audio is 48KHz
		- DVD-Audio or other HD media may contain 96KHz high-definition audio content
3	Analog Out	The analog out setting defines your actual speaker setting, such as front headphones, rear headphones, Dolby headphones, Dolby rear headphones, 2 speakers, 4 speakers, or 5.1 speakers. Xonar D-Kara will play the channels and process the proper 3D surround sound accordingly.
4	S/PDIF Output	S/PDIF output enables a single digital connection to carry high quality audio from your PC to digital speakers and AV receivers via PCM.*
		*PCM - Pulse Code Modulation is a typical raw audio data format.

6.4   Mixer/Volume

The mixer page is designed to control the volume for playback and recording on the Xonar D-Kara. The Xonar D-Kara also provides a high-quality digital monitoring function for playing the recorded audio from the speakers.

6.4.1   Playback Volume
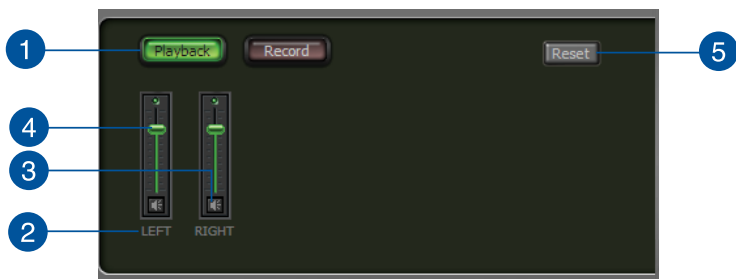
No	Item	Description
1	Playback Volume Tab	Click this button to show the playback volume page.
2	Source/Path Name	Left and Right volume controls for each speaker/channel.
3	Mute/Unmute button	Click this button to mute or unmute the audio channel.
4	Volume Slider	Drag this slider down to decrease the volume; drag it up to increase the volume. The tool-tip displays percentage increments.
5	Reset	Click to reset all volume controls to the default settings.

6.4.2 Recording/Monitoring Volume

No	Item	Description
1	Recording Volume Tab	Click this button to show the recording volume page.
2	Recording volume slider	Drag this slider down to decrease the recording volume; drag up to increase the recording volume. The tool-tip displays percentage increments.
3	Recording Selector button	Click this button to select the path/source you are going to record. The recording function on Windows is a one-path selector. Only one default recording source can be used at a time. You may have to restart the recorder application if you switch to a different source.* *On Windows Vista, some application programs allow you to select the recording device/path in the application itself.
4	Monitoring button	Click this button to monitor and loopback recording audio to output speakers. The recording volume will affect monitoring signals from speaker output. The audio will be mixed into the streams from your PC and all digital audio effects will be applied to both the source and the output.
5	Source/Path Name	Displays the source name for each volume control slider: FP MIC: Recording from MIC front panel jack RP MIC: Recording from MIC rear panel jack Aux: Recording from Aux-In sources such as TV-tuner audio cards or other audio sources Line-In: Recording from Line-In jack for external audio devices
6	Reset	Click to reset all volume controls to the default settings.

6.5 Effects

6.5.1 Environment Effects

Environment effects can be used to create realistic listening experiences that mimic different environments. There are 27 available environment options that be can be applied to music and other 2D sound sources.
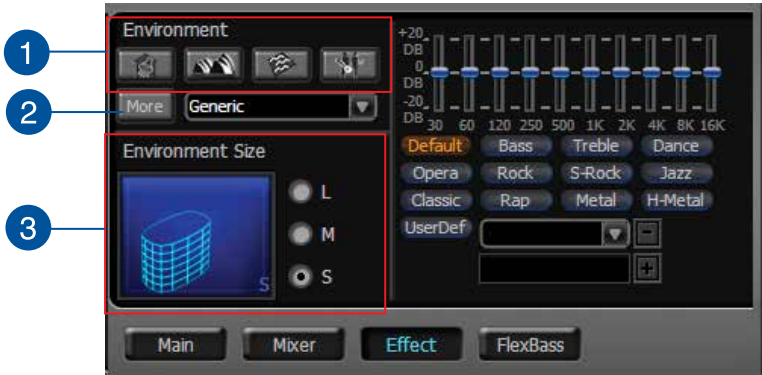
No	Item	Description
1	Default environments	There are four default environments available: Bathroom, Concert hall, Underwater, and Music Pub.
2	More options	Clicking this button will apply the environment effect selected from the pull-down menu. 23 additional options are available in this menu.
3	Environment size	Three size settings are available for each environment: Large, Medium, and Small.

6.5.2   10-Band Equalizer

The equalizer can modify the audio output for different frequencies and can be used to compensate for deficiencies in your speakers/sound system. You can create custom settings in addition to the 12 default patterns available.
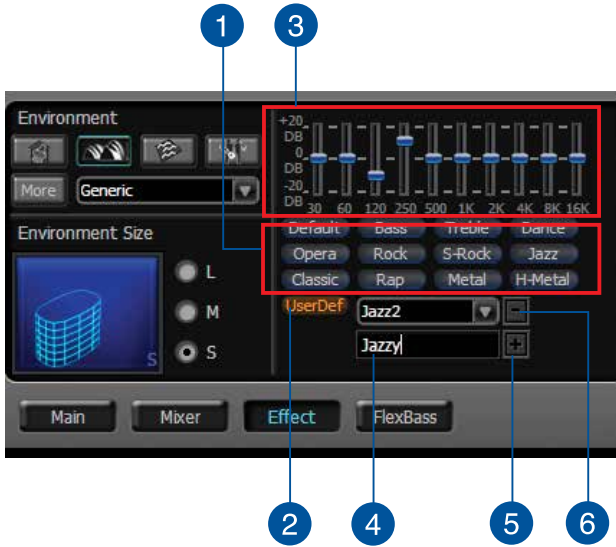
No	Item	Description
1	Default equalizer options	There are 12 available equalizer patterns. Click an item to apply a pattern to audio playback.
2	User Defined	You can click this button to apply a selected User Defined setting.
3	Equalizer slider	Adjusts the gain for each band (30~16KHz)
4	Save name	Type a name for your own "User Defined" equalizer setting in the text box.
5	Add / save	Click the "+" button to add the defined parameters to the User Defined list as a preset.
6	Delete	Click the "–" button to delete a saved preset from the User Defined list.

6.6   FlexBass

FlexBass is an advanced bass management and enhancement mechanism that allows you to select each satellite speaker's type for optimal sound performance. It comes with an adjustable crossover frequency for the boundary of the bass signals. FlexBass will filter out the bass signals from small speaker channels and redirect them to the subwoofer or large speakers.

> Standard speakers that cannot produce low frequencies are considered "Small" while wide-band speakers that can product low frequencies are categorized as "Large."

No	Item	Description
1	On/Off	Click this button to disable or enable all FlexBass functions.
2	Small/Large speaker option	Select the speaker type connected to the Xonar D-Kara. If your speaker type cannot handle low-frequency signals (bass), select "Small" speaker type. Xonar D-Kara will filter out the bass signals and send them to the subwoofer channel. If the speakers support full-range signals, you can select the "Large" speaker type.* *In most cases, low-cost desktop PC 2-channel speakers are small-type speakers. Refer to speaker's specifications or consult your speaker vendor to identify correct speaker type. However, common 2.1 speakers with a subwoofer should be categorized as large speakers because the subwoofer can redirect the bass signals inside the two channels to the subwoofer speaker automatically.
3.	Picture for Small/Large speaker	Small/large speakers are identified by their colors: Orange: large speakers Green: small speakers

No	Item	Description
4	LFE Crossover Frequency	Adjusts the cut-off frequency (50~250Hz) for LFE (Low-Frequency Effects) signals. Xonar D-Kara will filter out bass signals below the crossover frequency from small speaker channels and forward them to the subwoofer. Higher crossover frequency values would result in reduced bass signals.

6.7   Karaoke Main Settings

To start using the Karaoke features of the Xonar D-Kara, plug in your microphone and click the Karaoke tab in the Xonar D-Kara Audio Center. Click the Mixer option and select "microphone".
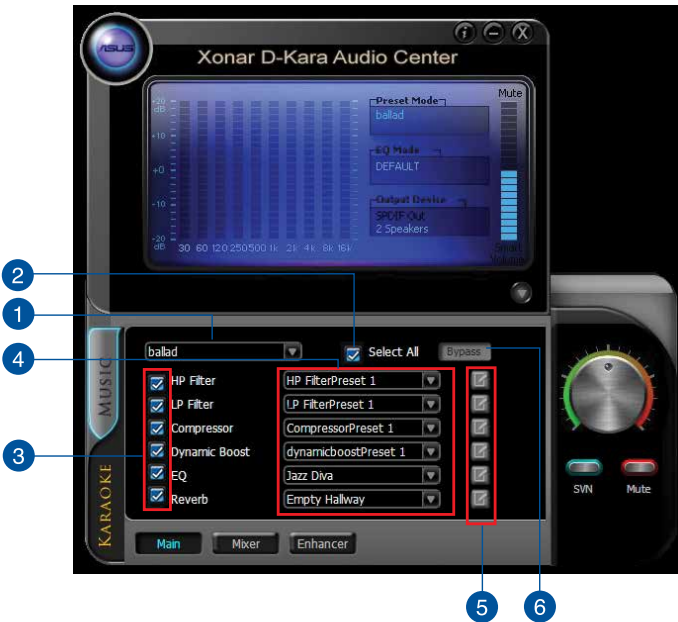
No	Item	Description
1	Master Preset	The master preset lists multiple combinations of presets such as EQ, Compressor, Reverb, and so on. Click this dropdown box to select, save, or edit a master preset.
2	Select all/Unselect all	Click this checkbox to select all or unselect all presets.
3	Preset Checkbox	Click desired checkbox to apply a sound effect to playback audio.
4	Preset	Click dropdown box to select presets or switch to Manual Mode.
5	Advanced Setting	Click this button to access advanced controls and customize presets.
6	Bypass	Click this button to temporarily disable all sound effects to compare audio before and after sound effects are applied.

6.7.1   Advanced Settings
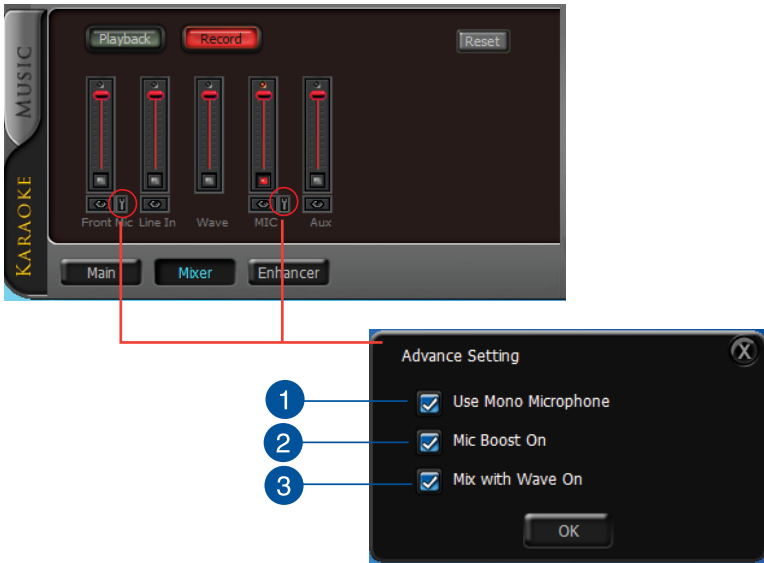
No	Item	Description
1	Use mono microphone	Select check box if you are using a mono microphone to balance the audio output.
2	Mic Boost On	Select check box to boost the microphone audio by 20dB.
3	Mix with Wave On	Select check box if you intend to record music audio with your voice.

6.7.2 Master Preset

The Master Preset is a quick way to save your preset combinations.
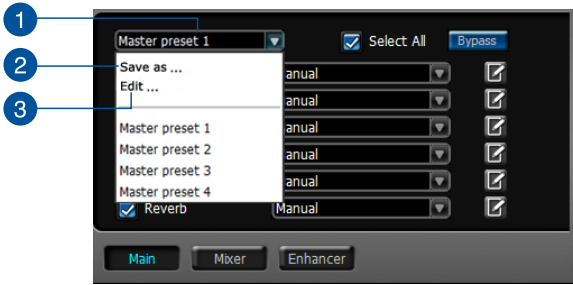
No	Item	Description
1	Master Preset	Click dropdown box to select, save, or edit a master preset.
2	Save as	Select a combination of presets and click Save as to create a new master preset. You may also choose to adjust settings for the current master preset.
3	Edit	Click edit to delete, rename, import, or export master preset.

6.7.3 HPF/LPF

High Pass Filter affects frequency ranges below the set cutoff frequency. Low Pass Filter applies to frequency ranges above the set cutoff frequency.
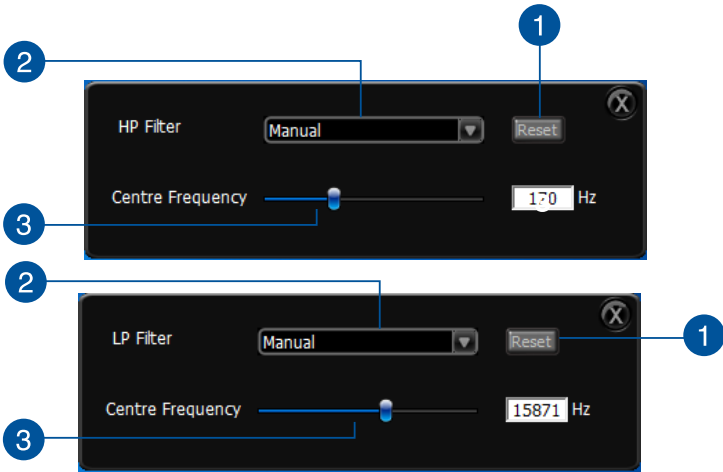
No	Item	Description
1	Reset	Click to reset to default. The reset option is only available under Manual Mode.
2	Preset	Click dropdown box to view current preset parameters or select Manual Mode to change parameters under the Advanced Settings Panel.
3	Center Frequency	This slider determines cutoff frequency. Drag the slider or input specific values in the text box.

6.7.4   Dynamic Boost/Compressor

The dynamic boost/compressor is used for tightening up a section of audio after hitting the threshold level. The expander reduces the dynamic range below the threshold. This effect is used to add versatility to your audio tracks.
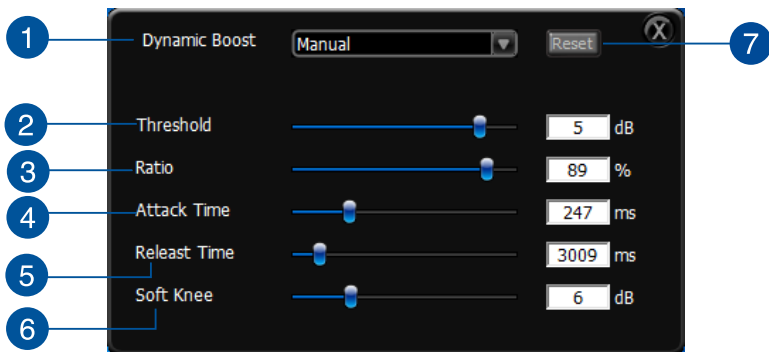

No	Item	Description
1	Preset	Click the dropdown box to view current preset parameters or select Manual Mode to change parameters under the Advanced Settings Panel.
2	Threshold	This setting determines the Threshold level when an effect is applied to audio playback. Signals above the indicated value are expanded while signals below the value are compressed. Drag slider or type specific values in the text box.
3	Ratio	Ratio of signal expansion or compression when threshold is met.
4	Attack Time	Amount of time before effect is applied to audio when the signal level exceeds the threshold.

No	Item	Description
5	Release Time	Amount of time before effect is applied after the signal level falls below the threshold.
6	Soft Knee	Indicates the strength of an audio effect as sound reaches threshold. Higher values result in gentler compression/expansion.
7	Reset	Click to reset settings to default. The reset option is only available under Manual Mode.

6.7.5   EQ
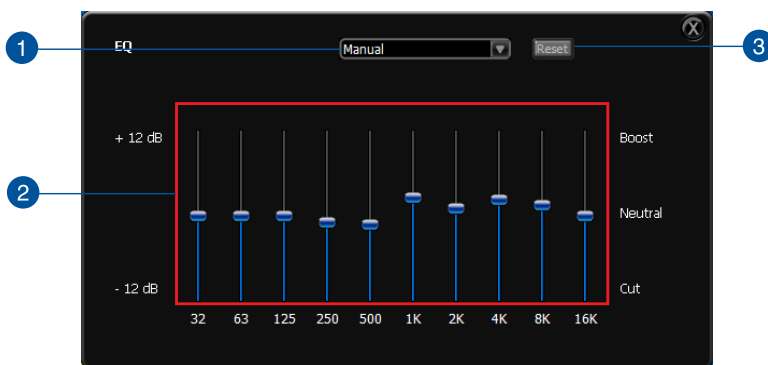
No	Item	Description
1	Preset	Click the dropdown box to view current preset parameters or select Manual Mode to change parameters under the Advanced Settings Panel.
2	Frequency Band	Drag the slider up or down to change the gain of each frequency band.
3	Reset	Click to reset settings to default. The reset option is only available under Manual Mode.

6.7.6   Reverb
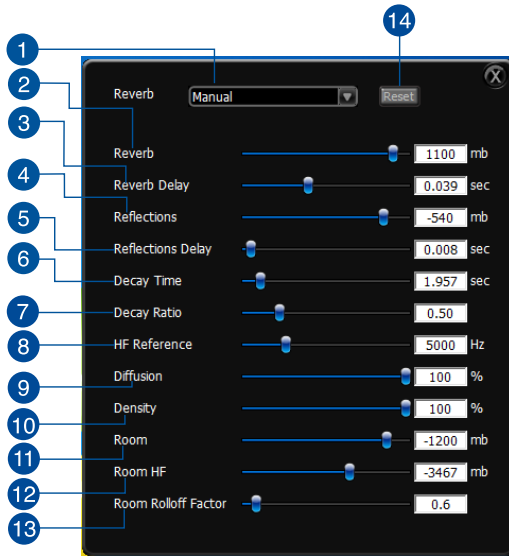
No	Item	Description
1	Preset	Click the dropdown box to view current preset parameters or select Manual Mode to change parameters under the Advanced Settings Panel.
2	Reverb	Intensity level of late reverbation
3	Reverb Delay	Time limit between early reflection and late reverbation
4	Reflections	Intensity level of early reflection
5	Reflections Delay	Delay time of first reflection
6	Decay Time	Reverbation decay time at low frequencies
7	Decay Ratio	Ratio of high frequency delay time relative to low frequency delay time
8	HF Reference	High frequency threshold reference point
9	Diffusion	Echo density in late reverberation decay. High diffusion represents regular density with an evenly spread out signal. Low diffusion represents irregular and grainy sound.
10	Density	Modal density in late reverberation decay. High density represents more natural sounding timber. Low density represents more hollow or "colored" space like the bathroom.
11	Room	Intensity level for room effect

(continued on the next page)

No	Item	Description
12	Room HF	Attenuation at high frequencies relative to intensity and low frequencies.
13	Room Rolloff Factor	Intensity of room effect adjusted by distance.
14	Reset	Click to reset settings to default. The reset option is only available under Manual Mode.

6.8 Mixer

6.8.1 Playback Volume

No	Item	Description
1	Playback Volume Tab	Click this button to show the playback volume page
2	Source/Path Name	Left and Right volume controls for each speaker/channel
3	Volume Slider	Drag this slider down to decrease the volume; drag it up to increase the volume. The tool-tip displays percentage increments.
4	Mute/Unmute button	Click this button to mute or unmute the audio channel.
5	Reset	Resets all volume controls to the default settings.

6.8.2 Recording/Monitoring Volume

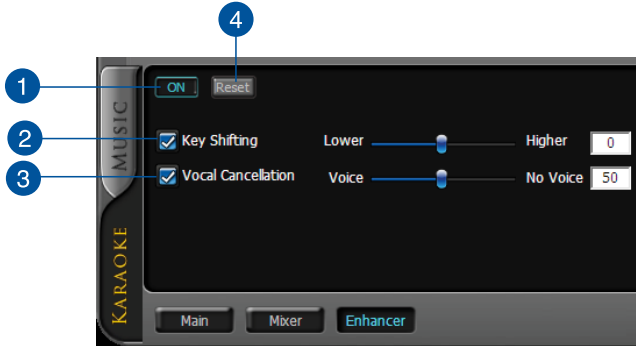| No	Item	Description
1	Recording Volume Tab	Click this button to show the recording volume page.
2	Recording volume slider	Drag this slider down to decrease the recording volume; drag up to increase the recording volume. The tool-tip displays the percentage increments.
3	Recording Selector button	Click this button to select the path/source you are going to record. The recording function on Windows is a one-path selector. Only one default recording source can be used at a time. You may have to restart the recorder program if you switch to a different source.* *On Windows Vista, some application programs allow you to select the recording device/path in the application itself.
4	Monitoring button	Click this button to monitor and loopback recording audio to output speakers. The recording volume will affect monitoring signals from speaker output. The audio will be mixed into the streams from your PC and all DGP effects will be applied to both the source and the output.

(continued on the next page)

No	Item	Description
5	Source/Path Name	This shows the source name for each volume control slider: FP MIC: Recording from MIC front panel jack RP MIC: Recording from MIC rear panel jack Aux: Recording from Aux-In sources such as TV-tuner audio cards or other audio sources Line-In: Recording from Line-In jack for external audio devices
6	Advanced Settings button	Click this button to access advanced settings.
7	Reset	Click to reset all volume controls to the default settings.
8	Use mono microphone	Select check box if you are using a mono microphone to balance the audio output.
9	Mic Boost On	Select check box to boost the microphone audio by 20dB.
10	Mix with Wave On	Select check box if you intend to record music audio with your voice.

6.9   Enhancer

The Xonar D-Kara provides powerful features for karaoke, including Key-Shifting and Vocal Cancellation. Key-Shifting can change the pitch of the karaoke background music. Vocal Cancellation can reduce the original vocals in songs while retaining the music and symphony for karaoke.

No	Item	Description
1	On/Off	Click this button to disable or enable all functions on this page.
2	Key-Shifting	This checkbox is used to enable or disable key shifting for music playback. This feature can adjust the pitch from 4 semitones below to 4 semitones above the audio level.
3	Vocal Cancellation	This checkbox is used to enable or disable the vocal cancellation function. Voice cancellation levels can be adjusted from 0 to +100. A value of +100 will eliminate most original vocals. Default values are set to 50.
4	Reset	Reset all settings to default.

7.   Troubleshooting and FAQs

7.1   Troubleshooting

Q1. The audio card driver could not be installed on my PC.

1.   Check that the audio card is properly inserted into the PCI slot on your motherboard.
2.   Run Windows hardware Device Manager and check if a multimedia audio device is listed. If no device is detected, scan manually for hardware changes.
3.   Reboot Windows.
4.   If Windows still fails to detect the audio card, insert the audio card in a different PCI slot.

Q2. I cannot find the Xonar D-Kara Audio Center.

1.   Make sure you have installed the driver.
2.   Locate the Xonar D-Kara Audio Center icon in the System Tray on the bottom right-hand corner of the screen. Double-click the icon to open the Xonar D-Kara Audio Center.

3.   If the icon is not displayed on the System Tray, go to Windows Control Panel and double click the "Xonar D-Kara Audio Center" icon to make it visible in the system tray again.
4.   After driver installation is complete, it's recommended that you reboot your computer to complete the setup. If the icon is still not available, reinstall the device driver.

Q3.   I cannot hear any sound from my analog speakers.

1.   Check that you have connected the speakers properly and have powered on your speakers.
2.   Check that the device master volume or the software player is not set to mute on the Xonar D-Kara Audio Center.
3.   Go to the sound and audio device settings found in Windows Control Panel to check if the playback default device is set to Xonar D-Kara Audio Device. If it's set to another onboard AC97 or HDA codec device, set it to Xonar D-Kara Audio Device and restart your application.
4.   Reboot Windows.

Q4. I cannot hear any sound from the S/PDIF output.

1. Check that you have enabled S/PDIF output in the Audio Center GUI.

2. Check that you connected the correct S/PDIF output port on the card to the decoder's (AV receiver) S/PDIF input port.

3. You may need to select the correct input and mode of your decoder or AV receiver.

4. If you are using 96KHz PCM output, make sure your decoder can support 96KHz decoding. Change the PCM output to 44.1K or 48KHz to check if your output device supports a lower value.

Q5. I cannot hear audio input (Mic, Line-in, AUX, etc.) from my speakers.

1. On the mixer recording page in the Audio Center, select the correct input as the recording source. If you are using Windows Vista, open the system audio control panel to check if the current recording/input device is correct.

2. Remember to turn on the digital monitoring button for that recording source.

Q6. I cannot hear the TV tuner audio from my speakers.

1. If you are using a TV tuner card with an analog audio output, connect the analog audio output to the Aux-In header on the audio card.

2. Select Aux-In as the recording source and on the digital monitoring button on the recording mixer page.

3. If you are using a TV tuner card with a digital audio output, check that the sound is not set to mute and whether other applications can playback sound. If you still have a problem hearing audio, refer to the TV tuner card's user guide.

7.2   Frequently Asked Questions (FAQ)

Q1. Does the Xonar D-Kara support Windows 7/Vista?

Yes, the Xonar D-Kara driver package does support Windows 7/Vista 32/64 bit with most key features available. Xonar D-Kara also supports DS3D GX on Windows 7/Vista, providing DirectSound 3D hardware and EAX gaming sound effects for many existing DirectX games.

Q2. Why can I hear and record sound from other recording devices when Wave/Digital is selected in Record on Windows Vista?

Unlike Windows XP, Windows Vista manages multiple audio devices and audio streams, identifying them as either Digital Input or Analog Input. This approach allows for multiple recording devices to run simultaneously in Windows Vista. Wave In or SPDIF-In, considered as a Digital Input, is an independent recording device from Analog Devices such as Mic In, Line In, or Aux In. Therefore, if you have analog inputs other than Wave In in use and set to be monitored, you are able to hear and even record sound from those analog devices even if Wave In / SPDIF-In is selected as the default recording device.

Turn off the monitoring function for analog input devices if you only prefer to hear and record Wave In / SPDIF-In sound.

Q3. Why are sound effects not available when playing 96K sound sources?

The sound effects feature in the Xonar D-Kara currently supports standard 44.1K and 48KHz sound sources. However, users are assured of high fidelity playback for 96K sound sources. This is the common setup professional audiophiles and musicians prefer.

Sound effects can still be applied by using commercial or free audio editing software to convert the sound files to 48KHz. Please note that the frequency meter on the Xonar D-Kara Audio Center will not take effect when the playback source is at a 96KHz sample rate to prevent any processing distortion.