



User Guide



High Definition Audio VDeck

***(Audio Control Panel of Black
Skin Color)***

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VIA TECHNOLOGIES, INC.

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1.01	7/30/09	Added Microsoft Windows 7 support and respective descriptions Updated the descriptions and figures in Section 5 Miscellaneous Control	TL

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1.0 INTRODUCTION

The VDeck (Audio Control Panel of Black Skin Color) is a Vista based program that co-works with the VIA High Definition Audio driver and the VIA High Definition Audio Codec chip. With this convenient audio control interface, users can make the best use of the VIA HD Audio Codec chip and create powerful customized sound environments.

The main features of VDeck are listed as following:

- Support volume and mute control for playback and recording devices.
- Support various sound enhancement settings with detailed customization
- Support active jack detection
- Support jack function configuration
- Support headphone configuration
- Support multi-language
- Support settings of sampling rate and bit length of audio devices
- Support speakers testing
- Support multi-device selection for playback and recording

2.0 SYSTEM REQUIREMENT

The VDeck only supports VIA HD Audio Codec series chip with VIA HD audio driver installed.

Minimum System Requirements

- CPU: PIII 1.0 GHz
- RAM: 256 MB
- Hard Disk Space: 10 MB
- OS: Microsoft Windows Vista or Windows 7

Recommended System Configuration

- CPU: P4 2.0 GHz
- RAM: 512 MB
- OS: Microsoft Windows Vista or Windows 7

3.0 CONTROL PANEL INTERFACE

The VIA VDeck provides an easy-to-use interface for users to manage their audio systems. There are four main areas on control panel as Figure 1 shows:

- Jack Detection and Configuration
- Simple Device Control
- Advanced Options Control
- Information

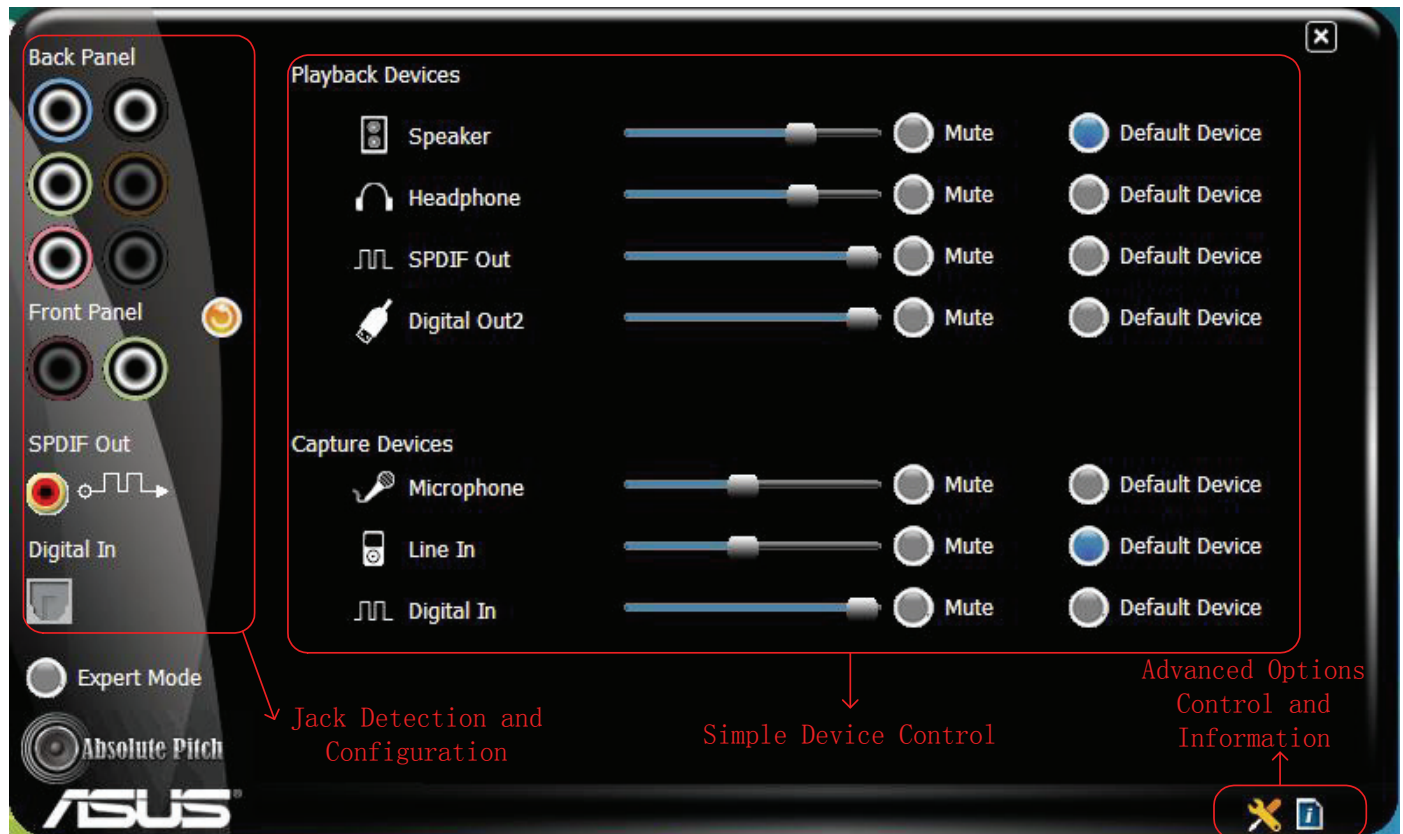


Figure 1. Control Panel Interface

3.1 Jack Detection and Configuration

Jack Detection and Configuration function is in the left part of the panel that shows the jacks connections of the audio system.

Jack Detection and Configuration area enables user to configure all the audio jacks in the computer system. The “Back Panel” items include all the jacks at the rear side of the computer system. The “Front Panel” items include all the jacks in the front side of the computer system. In general, the multi-channel playback and recording jacks will be included in the “Back Panel”. The “Headphone” and “Front Mic” will be included in the “Front Panel”. The “SPDIF-Out” item includes the SPDIF-Out port, and the “Digital In” item includes the SPDIF-In port.

In “Back Panel” and “Front Panel” control lists, the jacks can be distinguished by different colors in order to identify each jack. Users can find the colors that match the jacks at the rear or the front part of the computer system.

When a device is connected, the related jack icon will be highlighted; otherwise the jack will be grey, and the function is disabled. Users can also re-task the jacks by clicking the corresponding jack icon if the jack is re-assigned. For example, Figure 2 below shows a device being plugged into the “Front Mic” jack.

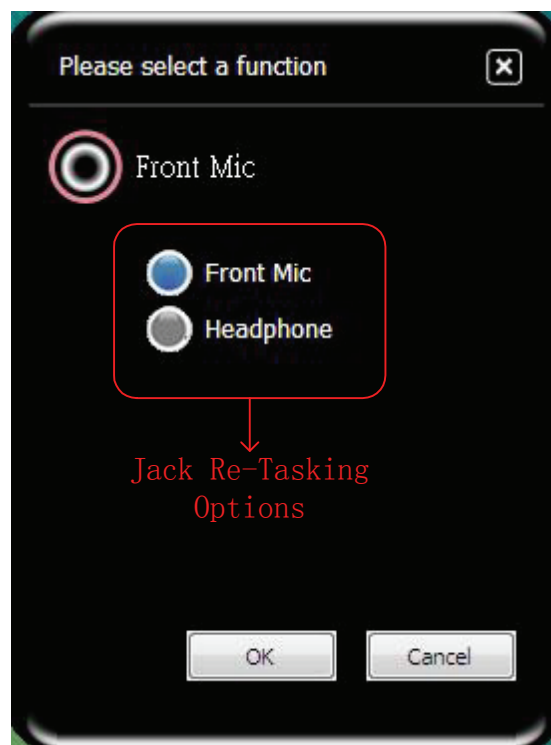


Figure 2. Jack Configuration Panel

3.2 Simple Device Control

Simple Device Control is located at the right part of the Control Panel that allows users to configure all the devices that connect to the computer system. When the “Expert Mode” enable/disable switch control is disabled, the Simple Device Control area will be shown. And the device control is in the “Simple Mode”.

3.2.1 Simple Mode

In the Simple Mode, only limited functions are available. And there are two parts in the Simple Device Control: playback devices and the capture devices as Figure 1 shows. All the detected devices will appear in this area. Basic control functions include: Volume, Mute, and Default Device select.

Volume control is used to adjust the master volume of the device. Mute control is to mute the device. Default device select is to set a certain device as the default device to playback or record.

3.2.2 Expert Mode

Check the “Expert Mode” in the device control area to switch from simple mode to expert mode. This mode provides detailed control options to the devices. There are one Basic Device Control area and seven functional pages for users to configure devices. The Basic Device Control area provides the similar functions with those in the Simple Mode. The function pages provide professional control options. Following is the list of function pages:

- Volume Control function page
- Speaker Test function page
- Default Format Select function page
- Bass Management function page
- Equalizer function page
- Environment Modeling function page
- Room Correction function page

These function pages are not available for all devices. For example, only Volume Control and Default Format Select function pages are available for the capture devices, such as a microphone. Depending upon the devices selected, different function pages will appear in the device control area. For detailed information please refer to Chapter 4. The following Figure 3 shows an example of VDeck in Expert Mode.



Figure 3. VDeck in Expert Mode

3.3 Advanced Options

This area provides some advanced options as Figure 4 shows.

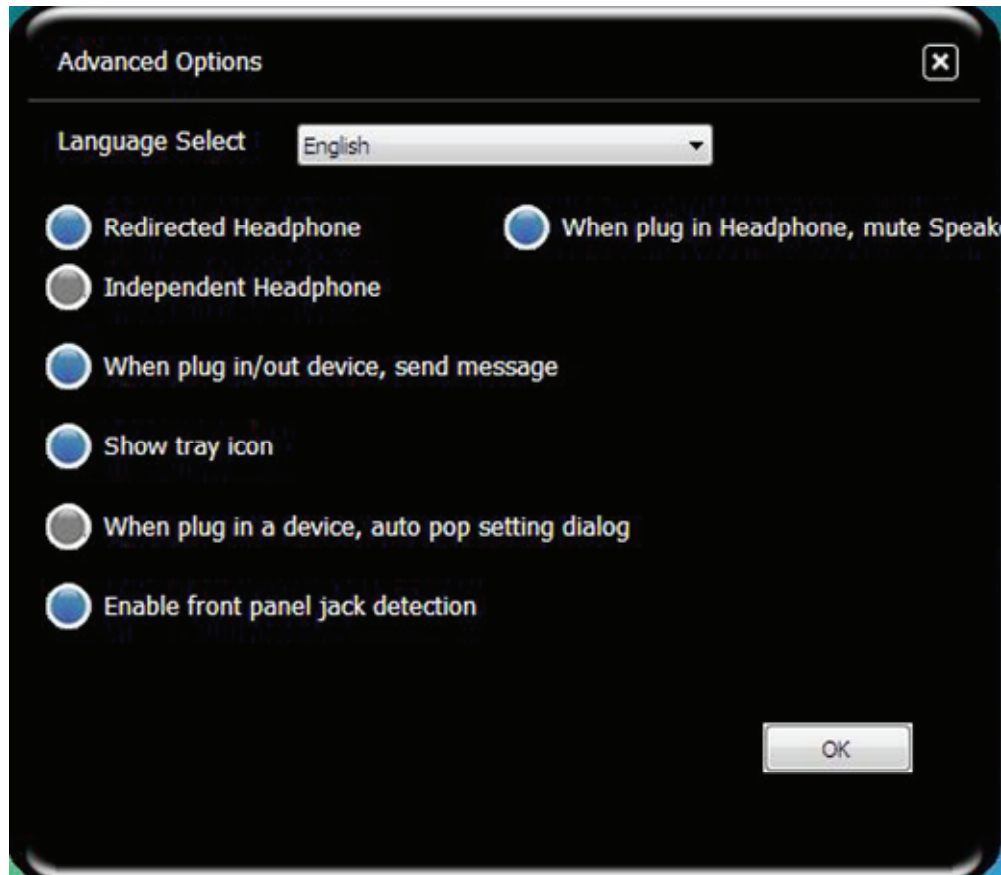


Figure 4. Advanced Control Options

Following are the main options:

Language Select

This option allows multi-language select. Users can set Vdeck default display language.

Headphone Configuration

There are three options in headphone configuration.

Check “Redirected Headphone” check box to copy the speaker’s front channel stream to headphone.

Check “When plug in Headphone, mute Speaker.” check box to mute the speaker if it connects to a headphone device. This function is only available when “Redirected Headphone” is checked.

Check “Independent headphone” to change the headphone to an independent device from the speaker. It means that different audio streams will output from speaker and headphone devices individually.

Note:

To set the speaker and headphone as separate and individual audio streams under Windows 7, use different players and set the speaker or headphone as the output device in the respective players.

Window and Message Settings for Jack Detection

Check “When plug in a device, auto pop setting dialog.” to enable jack configuration dialog box to pop up automatically when plugging in a device.

Check “When plugging in/out device, send message.” to enable a message box to pop up when plugging in or out a device.

Check “Enable front panel jack detection” to enable auto detection of jacks on the front panel.

VDeck Icon Settings

Check “Show tray icon” to enable an icon appearing in the task bar after VDeck is launched. Then if the VDeck is closed, it will be hidden in the system tray. If users un-check this option and close VDeck, they have to double click the VDeck icon to restore the VDeck window.

3.4 Product Information

Click the “Information” button and the information dialog box will appear. As Figure 5 shows, users can find the related information about the driver, codec, OS, VDeck package, and so on.

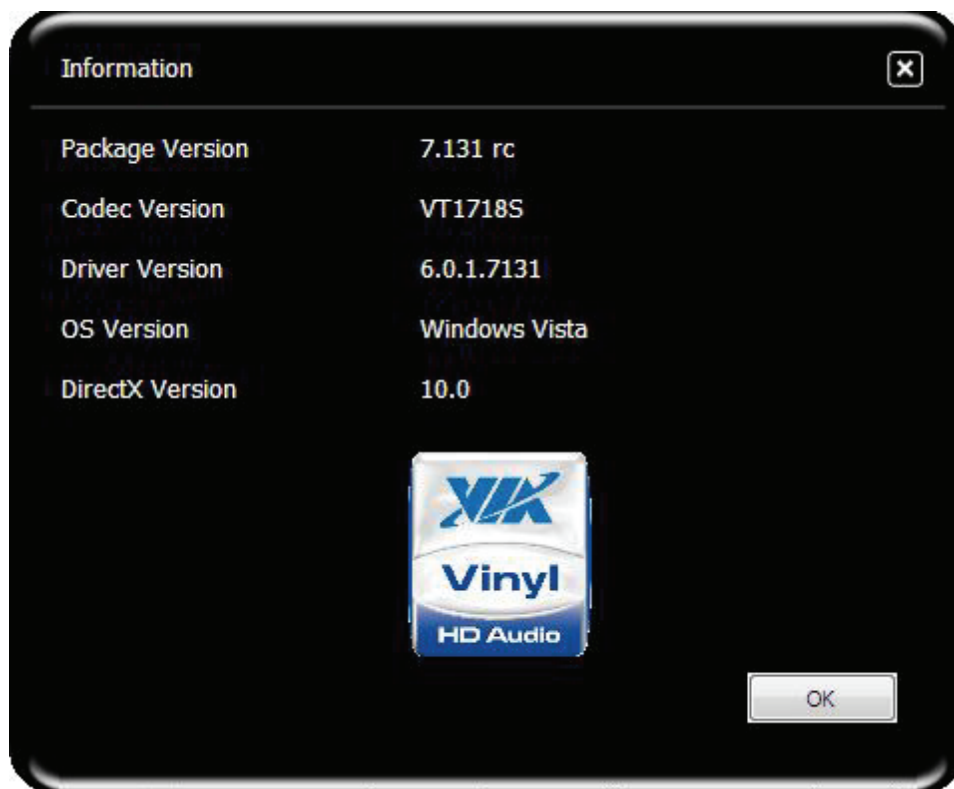


Figure 5. Information Dialog Box

4.0 EXPERT MODE DEVICE CONTROL

The Expert Mode of the Device Control consists of seven function pages. In this mode, the top of the area includes pages corresponding to the devices. The left part of the area lists function selection buttons. Users can select a certain device to control and switch to different function page to configure the device.

4.1 Basic Device Control

Basic device control mainly includes Volume Control, Mute Control and Default Device Settings. It is located on the top of each function page. For different devices, the functions of each Basic Device Control are different. If the control is not supported by the device, it will not appear. Figure 6 shows the Basic Device Control of a microphone.

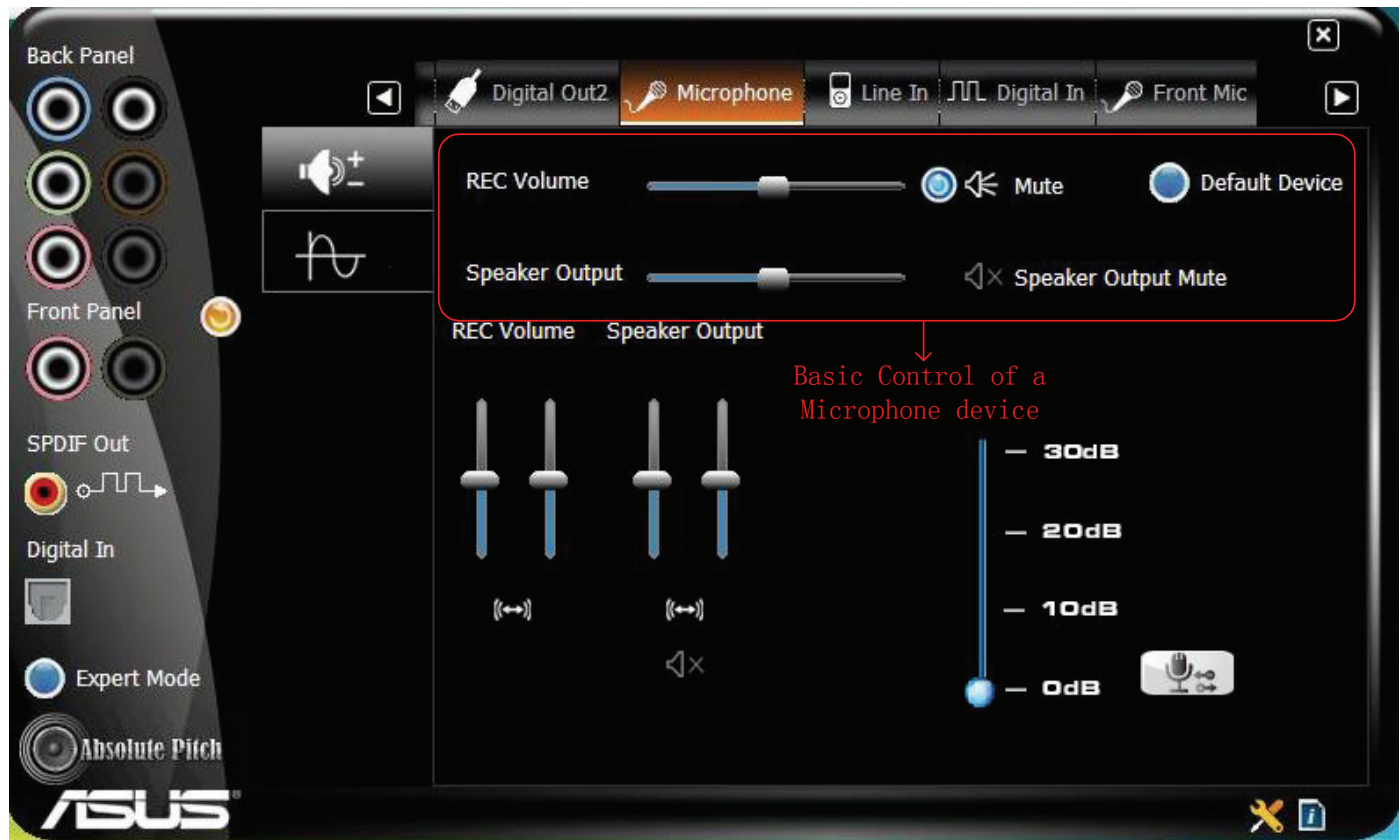


Figure 6. Basic Device Control

Volume Control

This controls the volume of the device. It is controlled by a slider. Moving the slider to the right amplifies the volume, and moving to the left reduces the volume.

Mute Control

This item can set the device to mute.

Speaker Output Mute Control

This is an A-A path mute control. It is only available for the capture devices which supports A-A path. When the mute button is activated, the A-A path of this device will be silent.

Speaker Output Volume Control

This is an A-A path volume control. It is only available for the capture devices which supports A-A path. It controls the volume of the A-A path of the device.

Default Device Control

This item sets the default device. Only one device can be the playback device. And only one device can be the capture device. If a capture device is re-tasked to a playback device, the basic device control is invalid for this device. Users should switch to the re-tasked type of device to adjust device control.

4.2 Volume Page

This function page controls device volumes. Users can control the volume of each supported channel. Besides stereo volume control, there are multi-channel volume control and A-A path volume control. Figure 7 shows volume control of a multi-channel speaker. There are 10 channels for this device, and each channel has a volume control slider.



Figure 7. Speaker Volume Control Page

For each pair of stereo volume, there is a sync button. This controls the behavior of the volume control sliders. If it is enabled, the left and right channel volume will be changed synchronously. If it is disabled, the left and right channel volume can be adjusted separately.

The A-A path Volume Control is for streams from the capture devices to playback devices. Figure 8 shows a capture device with A-A path volume control.

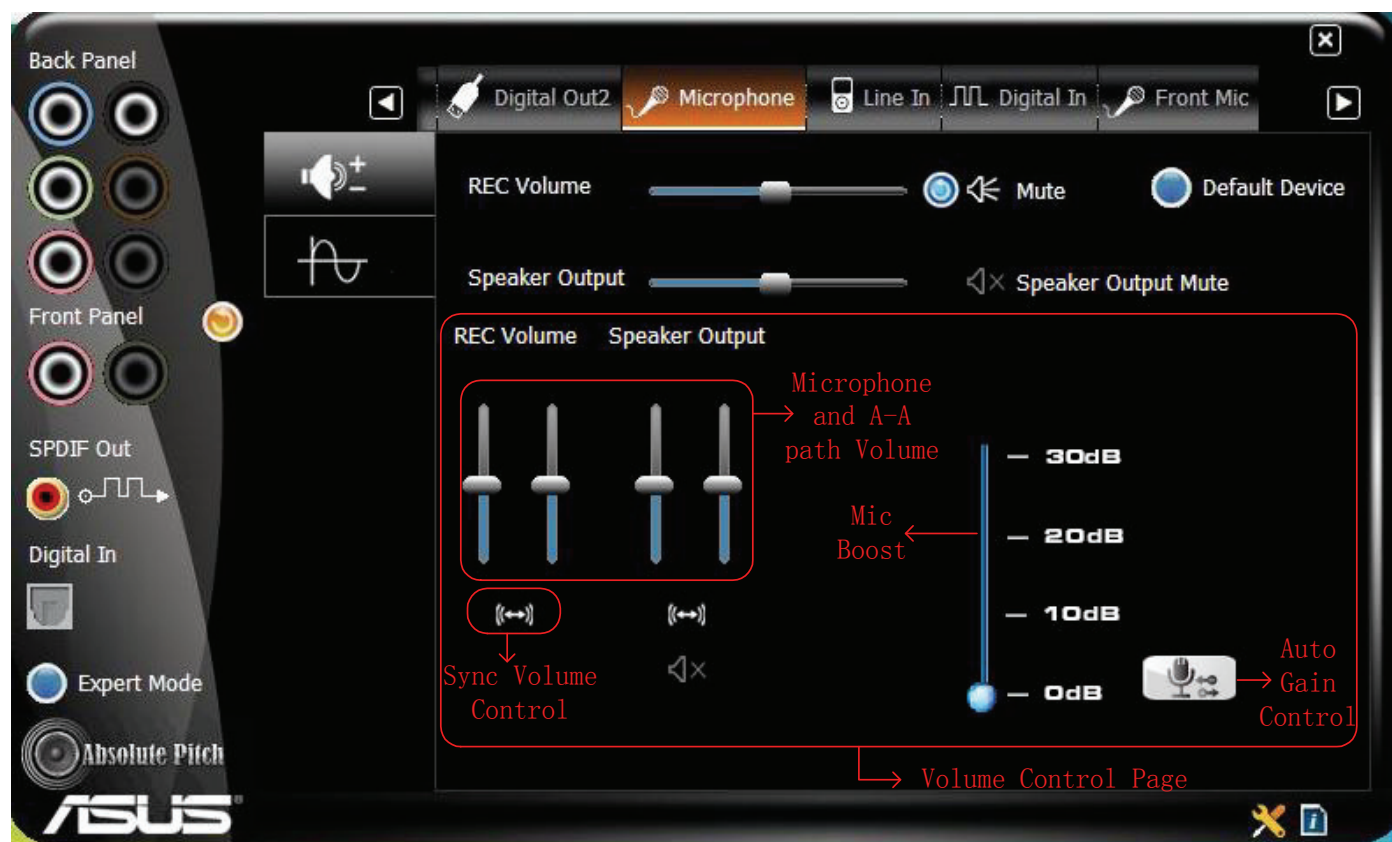


Figure 8. Microphone Volume Control Page

4.3 Speaker Test Page

The Speaker Test Page is only available for speakers and headphone devices.

For speakers, the Speaker Test Page is divided into three parts: Speaker Test Panel, Channel Number Configuration, and other Speaker Control Options. For headphones, no channel number configuration function is supported because there are fixed 2 channels for it. And some speaker options are not valid for headphones. Figure 9. shows speaker test control for speakers. Figure 10 shows speaker test control for headphones.



Figure 9. Speaker Test Page

Speaker Test Panel

It is in the left part of the page. Users can test whether the speakers are connected by clicking the speaker icon or the test button. If the device is connected, users can hear the test audio clip.

Channel Number Configuration

It is in the bottom part. Users can change the number of audio channels. There are up to 8 channels available. Once a channel configuration is selected, the speaker test panel and speaker options at the right side of the page will change accordingly. One thing to notice: if users enable the independent headphone, the headphone device will occupy two channels, and the speaker's maximum number of channels will subtract 2 channels.

Speaker Fill

This option is used to copy front channels streams to the other optional speakers. If users want to playback multi-channels audio streams, for example to play a DVD audio, then users should not check this item.

Center/LFE Swapping

This option is used to swap the center speaker and LFE speaker audio streams.

Loudness Equalization

This option is used to equalize the loud tone for speaker playback.



Figure 10. Headphone Test Page

Speaker Option Button

As Figure 11 shows, click this button and a dialog box appears with the advanced options for speakers. Users can select the customized full-range speakers.

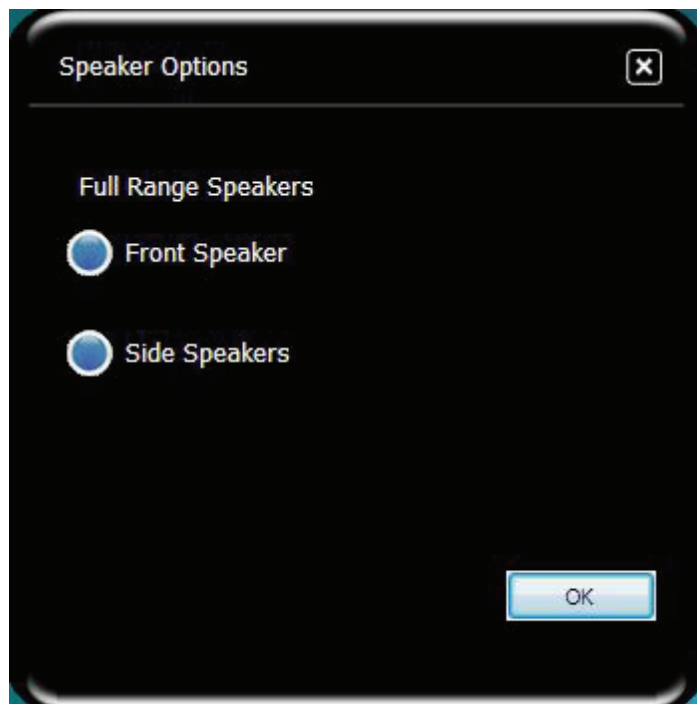


Figure 11. Speaker Option Dialog Box

4.4 Default Format Page

This function page controls the playback or the capture devices' sample rate and bit depth. Figure 12 shows the supported sample rates and bit depth for speaker devices. Users can click the button to select a sample rate and bit depth. The selected buttons will be high-lighted.



Figure 12. Default Format Page

4.5 Bass Management Page

Bass Management Page is only available for speaker devices. There are two control panels in this page: Cutoff frequency configuration and Boost configuration as Figure 13 shows below.

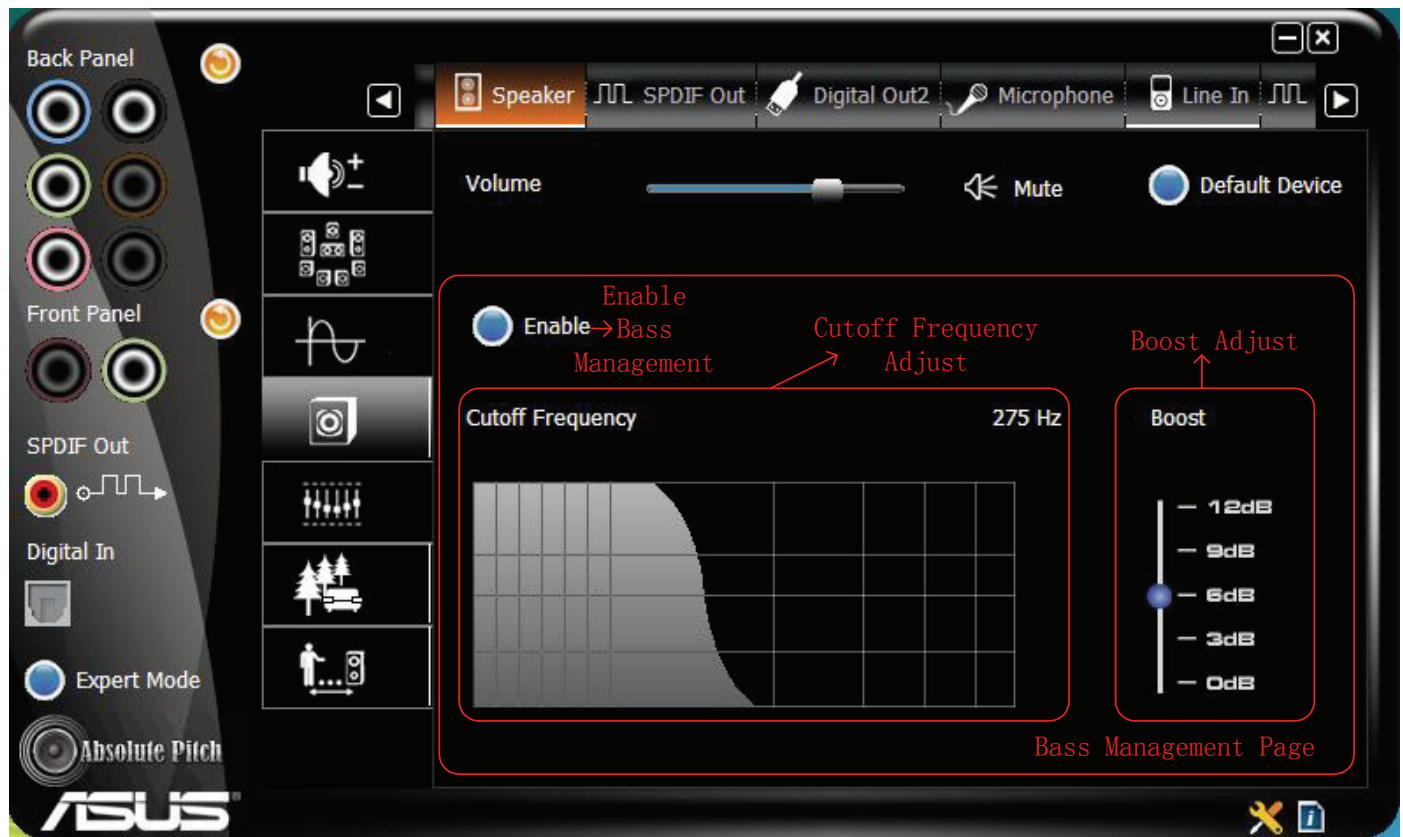


Figure 13. Bass Management Page

4.6 Equalizer Management Page

Equalizer page is only available for the speakers and headphones.

When the Equalizer page is selected, users can see 10 bands from 60 Hz to 16 kHz. The equalizer settings will only take effect after users enable it with the “Enable” button.

There are seven preset equalizer settings: Classical, Vocal, Jazz, Pop, Rock, Dance, and Party. Users can choose these settings or adjust the band value. If users want to create their own settings, drag the band width sliders to the customized value. And then save these values with the “Save Button” and type a name for the setting. If users do not need the customized setting, they can delete it by clicking “Delete Button”. The “Reset Button” can restore the bands settings and preset type to the default value. The “Smooth” button makes the change of the sliders smoothly.

Figure 14 shows the Equalizer function page.



Figure 14. Equalizer Management Page

4.7 Environment Modeling Page

Environment Modeling Page is only available for speakers and headphones.

There are also some preset settings of the environment modeling, such as club, theater, and etc. Users can select the environment settings they need to get the best audio experience. Click “left” and “right” button to navigate sequentially among all environment modeling settings. Clicking the environment modeling icon can change the current selected environment modeling value. At the center of this page, you can see the selected environment modeling preset icon.

Figure 15 shows the Environment Modeling page.



Figure 15. Environment Modeling Page

4.8 Room Correction Page

Room Correction Page is only available for speakers and headphones.

This page is used to configure speakers' distance to users. If some speakers are too far or too near to users, users can adjust room correction to get the suitable volume. Increasing room correction value will amplify the speakers' volume. On the other hand, decreasing room correction value will reduce the speakers' volume.

Figure 16 shows Room Correction page.

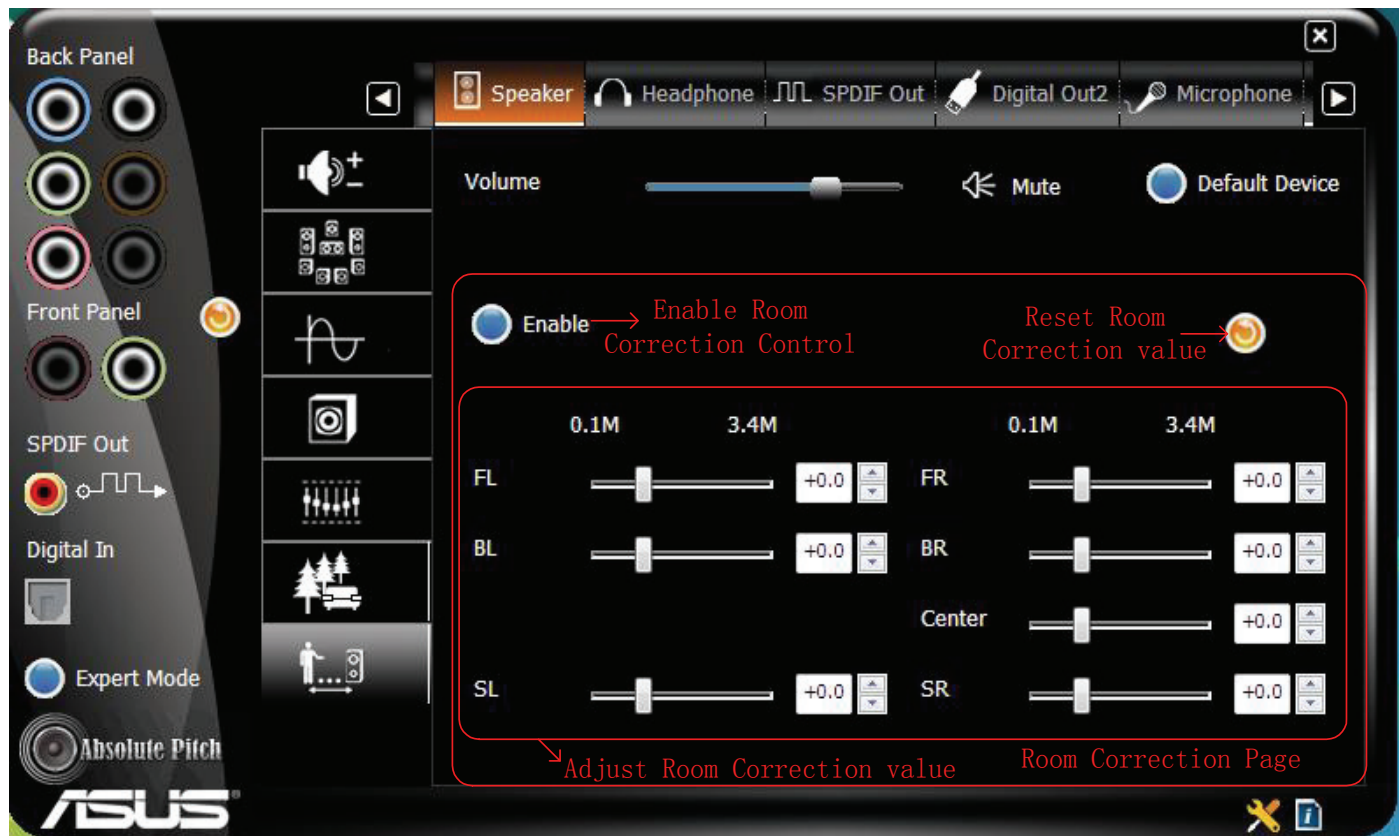


Figure 16. Room Correction Page

5.0 MISCELLANEOUS CONTROL

Figure 17 shows the VDeck icon when it is enabled. Users can click the icon in the system tray to view the VDeck window.



Figure 17. VDeck Icon in the System Tray

Right-click the VDeck icon in the system tray, and a small menu will appear as shown in Figure 18. Users can either open VDeck by selecting "VIA HD Audio Deck" or close VDeck by selecting "Exit".

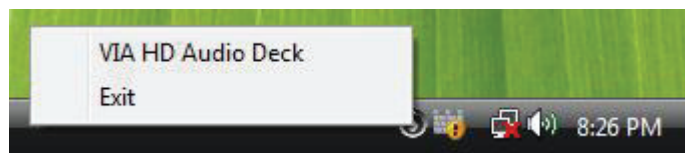


Figure 18. Right Click Options