



DP SoundWave 5.1 PCIe Installation Guide

Introduction

The *DP SoundWave 5.1 PCIe* transforms your computer into a high-definition 5.1 channel surround sound home theater system.

Key Features and Benefits

- S/PDIF optical output provides true 5.1-ch sound (Requires DVD playback software, S/PDIF decoder, Toslink fiber optic cable and 5.1-ch speakers)
- Perfect audio upgrade for DVD playback, MP3 or other music, gaming, and more
- Supports Dolby Digital EX and DTS ES 5.1 CH (S/PDIF optical only)
- Dual profile design to work in standard height and low profile chassis with the included brackets

System Requirements

- PCI Express enabled system with an available PCI Express slot
- Windows® 8.1 (32-/64-bit) / 8 (32-/64-bit) / 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit)

Package Contents

- *DP SoundWave 5.1 PCIe*
- Audio cable
- Spare low profile bracket
- Software CD and Installation guide

Layout

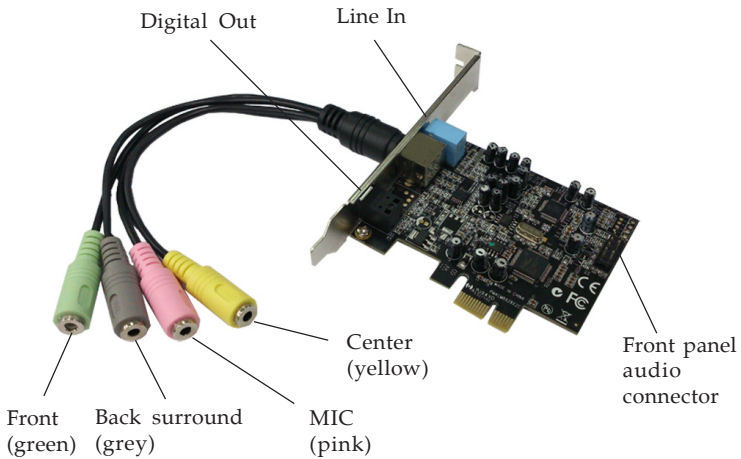


Figure 1: Layout

- **LINE In:** This connector provides analog stereo line-in function
- **Digital Out:** Connect to digital input of an external audio device via Digital S/PDIF optical cable (cable not included)
- **Front Out (green):** This connector provides front audio/ stereo output
- **Back Surround (grey):** This connector provides back surround sound output
- **MIC IN (pink):** This connector provides microphone input
- **Center Out (yellow):** This connector provides center audio output
- **Front panel audio connector:** Connects to your system's front panel audio connector (this connection is optional). Refer to **Figure 2** on the next page for pin assignment

Front Panel Audio Connector Pin Assignment

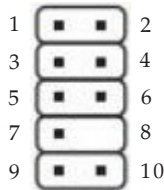


Figure 2

Pin	Signal
1	PORT 1L
2	GND
3	PORT 1R
4	PRESENCE#
5	PORT 2R
6	SENSE1_RETURN
7	SENSE_SEND
8	KEY
9	PORT 2L
10	SENSE2_RETURN

Hardware Installation

Note: For low profile systems, replace the currently mounted bracket with the included low profile bracket.

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer reference manual for further information if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer.
2. Unplug the power cord and remove the computer cover.
3. Remove the slot bracket from an available PCIe slot.
4. Carefully align the card to the selected PCIe slot, push the board down firmly, but gently, until it is well seated.
5. Replace the slot bracket holding screw to secure the card.

6. Connect one end of the audio cable from your CD/DVD-ROM to the CD-In on the soundcard.
7. Replace the computer cover and reconnect the power cord.
8. Make your speaker and device connections, then complete the driver installation on the next pages.

Driver Installation

Windows 8.1 (32-/64-bit) / 8 (32-/64-bit) / 7 (32-/64-bit)

1. Install the board and boot up Windows.
2. At the Windows desktop, insert the driver CD. Close the CD autoplay window if prompted.
3. Double click **This PC** (Windows 8.1) / **Computer** (Windows 8 & 7) on the desktop, then double click **E Drive**. (Change **E** to match your CD/DVD-ROM drive letter)
4. Double click **XP_7_8** folder, then double click **Setup.exe** to start the driver installation.
5. At the User Account Control window, click **Yes**.
6. At Welcome to the InstallShield Wizard for C-Media High Definition Audio Device window, click **Next**.
7. Select **I accept the terms of the license agreement**, then click **Next**.
8. Click **Install**.
9. At the Xear Audio Center, click **OK**.
10. Select **Yes, I want to restart my computer now**, and click **Finish** to restart the computer.

Windows Vista (32-/64-bit) / XP (32-/64-bit)

1. Install the board and boot up Windows.

2. Click **Cancel** at the Found New Hardware. Skip this step if not prompted.
3. At the Windows desktop, insert the driver CD. Close the CD autoplay window if prompted.
4. Double click **Computer** (for Vista) or **My Computer** (for XP) on the desktop, then double click **E Drive**. (Change **E:** to match your CD/DVD-ROM drive letter)
5. Double click **VISTA** folder (for Vista) or **XP_7_8** folder (for XP), then double click **Setup.exe** to start the driver installation.
6. At the User Account Control, click **Allow**. Skip this step for Windows XP.
7. At Welcome to the InstallShield Wizard for C-Media High Definition Audio Device, click **Next**.
8. Select **I accept the terms of the license agreement**, click **Next**, then click **Install**.
9. At the Xear Audio Center, click **OK**.
10. Select **Yes, I want to restart my computer now**, and click **Finish** to restart the computer.

To Verify Windows Installation

1. Check Device Manager to verify installation.
Windows 8.1 / 8 / 7 / XP: Right click **This PC, Computer** or **My Computer**, click **Manage**, then click **Device Manager**.
Windows Vista: Right click **Computer**, click **Manage**, click **Continue**, then click **Device Manager**.
2. Double click **Sound, video and game controllers**, **C-Media High Definition Audio Device** should be displayed.


Uninstalling the Soundcard Driver

If you want to uninstall the driver from the system, it's best to do so before removing the card from the system. Go to **Control Panel, Programs and Features**. Select the **C-Media High Definition Audio Device** option, click **Uninstall** and follow the on screen instructions to uninstall the driver.

Xear Audio Center

Xear Audio Center is an easy to use audio utility that allows you to adjust audio outputs, recording, sound effects and surround sound support to meet your needs.

Quick Start Icon

After successful driver installation, double click the **Xear Audio Center** icon  in the taskbar or on the desktop to initiate the program. If the icon doesn't appear as a shortcut, go to the program folder in which you installed the program and double click on the utility icon.

Control Panel



Figure 3

- **1 - Master Volume**

Adjusts the volume of all output device through this master volume bar.

Click the speaker icon on the right side to mute all the output devices. Click the icon again to unmute all the output devices.



Figure 4

- **2 - Function Panel / Profile Panel**

Click the switch button to change between Function Panel and Profile Panel.

Refer to **Figure 5** and **Table 1** for the descriptions of each abbreviation.

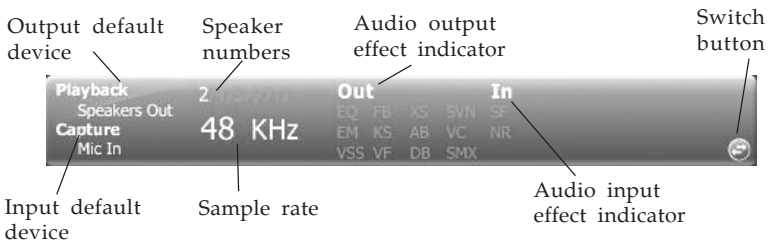


Figure 5

Output default device	Indicates the default output device.
Input default device	Indicates the default input device.
Speaker numbers	Indicates the speaker type - 2/4/5.1
Sample rate	Indicate the sample playback rate.
Audio output effect indicator	Indicates the sound effect playback status. When the function is enabled, the sound effect will turn to white; otherwise, it stays grey. <ul style="list-style-type: none"> - EQ: Equalizer - EM: Environment Effects - VSS: 7.1 Virtual Speaker Shifter - FB: Flex Bass II - KS: Xear SingFX - VF: Xear Vocal Fading - XS: Xear Surround Speaker - SVN: Xear Smart Volume - SMX: Xear Surround Max
Audio input effect indicator	Indicates the Capture sound effect status. When the function is enabled, the sound effect will turn to white; otherwise, it stays grey. <ul style="list-style-type: none"> - SF: Enable microphone echo adjustment - NR: Noise reduction

Table 1

Profile Panel: Select the preset profile modes by clicking on the button. Once the mode is selected, there will be a green check on the right-down corner. See **Figure 6**.

Click + to create a new profile by yourself. Click - to delete a profile.

NOTE: Not all the modes are available under different output types.

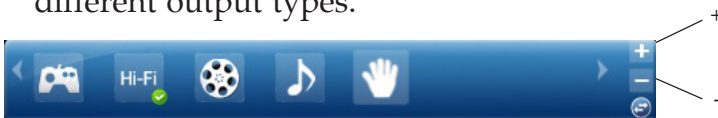


Figure 6

- **3 - Audio Output / Input Selections**

Audio Output Selection: Select **Speakers** or **S/PDIF Out** in the left side bar of the main menu. For analog audio output, click **Speakers**, for digital S/PDIF audio output, click **S/PDIF Out**.



Speaker



Headphone



S/PDIF Out

NOTE: Only when a device is connected to the front panel audio connector will the Headphone selection button be available.

Audio Input Selection: Based on your different type of audio inputs, select **Mic**, **Line-In**, **S/PDIF In** or **Stereo Mix** in the left side bar of the main menu.



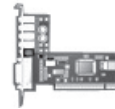
Mic



Line-In



S/PDIF-In



Stereo Mix

Speakers Output Audio Selection

1. Click **Speakers** icon in the left side bar of the main menu. Once **Speakers** is selected, a green check will appear below the **Speakers** icon.
2. Right click on the **Speakers** icon and select a function from the list. See **Figure 7** and **Table 2** for more information.



Figure 7

Function	Function Description
Volume Control	Volumn settings for all audio channels
Speaker Settings	Select one speaker setting: Stereo, Quadraphonic, or 5.1 Surround.
Sample Rate	Select one sample rate from 44.1 HKz, 48 KHz, 96KHz, and select Bit Depth from 16 bits & 24 bits
Equalizer	Click "Equalizer", and check the "Enable Equalizer" box to adjust the EQ. You can adjust the EQ manually, or you can click the buttons blow for the preset modes (Dance, Rap, Jazz mode, etc.)
Environment Effects	Click "Environment Effects", and check the " Enable Environment Effects" box for different types of sound reflection and reverberation. You can choose a preferred Environment type and room size.
7.1 Virtual Speaker Shifter	Click 7.1 Virtual Speaker Shifter, and check " Enable 7.1 Virtual Speaker Shifter". This is a simulation of speakers directions and distance. You can adjust the speakers manually or automatically.
Flex Bass II	Click "Flex Bass II", and check the " Enable Flex Bass II" box to select cut off frequency & Bass level.
Xear SingFX	Click "Xear SingFX", and check the "Enable Key shifting" box for pitch up or pitch down; check the "Enable Vocal Fading" box for voice or no voice.

Table 2

Headphone / S/PDIF Output Audio Selection

1. Click **Headphone** or **S/PDIF Out** icon in the left side bar of the main menu. Once **S/PDIF Out** is selected, a green check will appear below the **Headphone** or **S/PDIF Out** icon.
2. Right click on it for more audio settings.

Mic In / Line- In / S/PDIF-In / Stereo Mix Input Audio Selection

1. Click **Mic / Line- In / S/PDIF-In / Stereo Mix** icon in the left side bar of the main menu. Once it is selected, a green check will appear.
2. Right click on it to display the advanced audio settings. See **Table 3**.

Function	Function Description
Volume Control	Adjust Mic-In / Line-In volume level for recording and volume level for Mic-In/Line-In monitor.
Sample Rate	Select one sample rate from 44.1 HKz, 48 KHz, 96KHz, and select Bit Depth from 16 bits & 24 bits.
Xear SingFX* (For Mic-In only)	Click "Xear SingFX", and check the "Microphone Echo" box to enable microphone echo effect; check the "Magic voice" box to select from the preset magic voice modes.

Table 3

FAQ

Q: Why is there no audio output after the driver is successfully installed?

A: Please go to **Control Panel**, double click **Sound** or **Sound and Multimedia** to check if the *C-Media High Definition Audio Device* is selected as the default audio output device.

If *C-Media High Definition Audio Device* is the default audio output device, there will be a check beside it.

If the *C-Media High Definition Audio Device* is not the default audio output device then select it by clicking on it, then click **Set Default** to set it as the default device. See **Figure 8**.

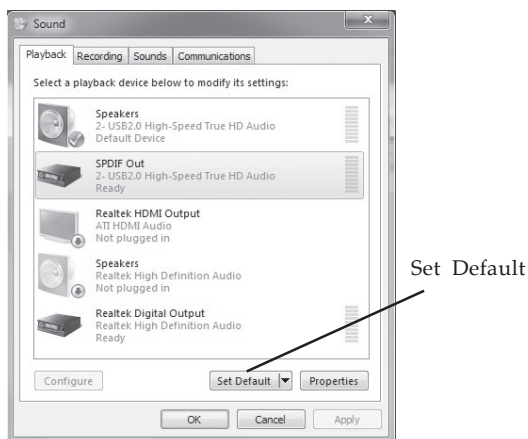


Figure 8

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Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our web site at www.siig.com and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analyst will promptly respond.

SIIG offers a 5-year manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for five (5) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased it.

B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request. Go to www.siig.com, click **Support**, then **Request A Product Replacement** to submit a request to **SIIG RMA** or fax a request to 510-657-5962. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping to SIIG. Ship the product to the following address:

SIIG, Inc.

6078 Stewart Avenue

Fremont, CA 94538-3152, USA

RMA #: _____

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/ Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. All centered around the distribution and switching of A/V signals over CAT5/6, these products include matrix switches, distribution amplifiers, extenders, converters, splitters, cabling, and more.

SIIG is the premier one-stop source of upgrades and is committed to providing high quality products while keeping economical and competitive prices. High-quality control standards are evident by one of the lowest defective return rates in the industry. Our products offer comprehensive user manuals, user-friendly features, and most products are backed by a lifetime warranty.

SIIG products can be found in many computer retail stores, mail order catalogs, and e-commerce sites in the Americas, as well as through major distributors, system integrators, and VARs.

PRODUCT NAME

DP SoundWave 5.1 PCIe

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

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