ASUS Essence STX II

ASUS Essence STX II Sound Card User Manual

Model: Essence STX II

INTRODUCTION

The ASUS Essence STX II sound card is designed to deliver exceptional audio fidelity for demanding audiophiles. Building on the legacy of its predecessor, the Essence STX II incorporates meticulous design and advanced components to provide a profound musicality and superior sound experience. This manual provides essential information for the installation, operation, and maintenance of your sound card.

Front view of the ASUS Essence STX II sound card, showcasing its black metal shield with an intricate design and various audio ports.

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance. Follow these steps carefully:

1. **Prepare Your System:** Power off your computer and unplug all cables. Open the computer case.

2. **Locate a PCI-E Slot:** Identify an available PCI Express (PCI-E) x1, x4, x8, or x16 slot on your motherboard. The Essence STX II is compatible with these slots.

3. **Insert the Sound Card:** Gently align the sound card with the chosen PCI-E slot and press down firmly until it is securely seated.

4. **Connect Power:** Connect a 4-pin Molex power connector from your power supply to the corresponding port on the sound card. This provides the necessary stable power.

5. **Secure the Card:** Secure the sound card to the computer case with a screw.

6. **Close Case and Power On:** Close your computer case, reconnect all cables, and power on your system.

7. **Driver Installation:** Once Windows starts, insert the driver CD or download the latest drivers from the official ASUS support website. Follow the on-screen instructions to complete the driver installation.

The ASUS Essence STX II sound card installed in a motherboard, demonstrating its physical integration within a PC system.

OPERATING THE SOUND CARD

After successful installation, you can configure and utilize the sound card's features through the ASUS Audio Center software.

Audio Output Configuration

- **Stereo Output:** The Essence STX II is primarily designed for high-fidelity stereo audio. Connect your speakers or amplifier to the RCA output jacks.
- **Headphone Output:** Use the dedicated 6.3mm headphone jack for connecting headphones. An adapter for 3.5mm jacks is typically included.
- **Digital Output:** The card also features S/PDIF optical output for digital audio connections to compatible receivers or DACs.

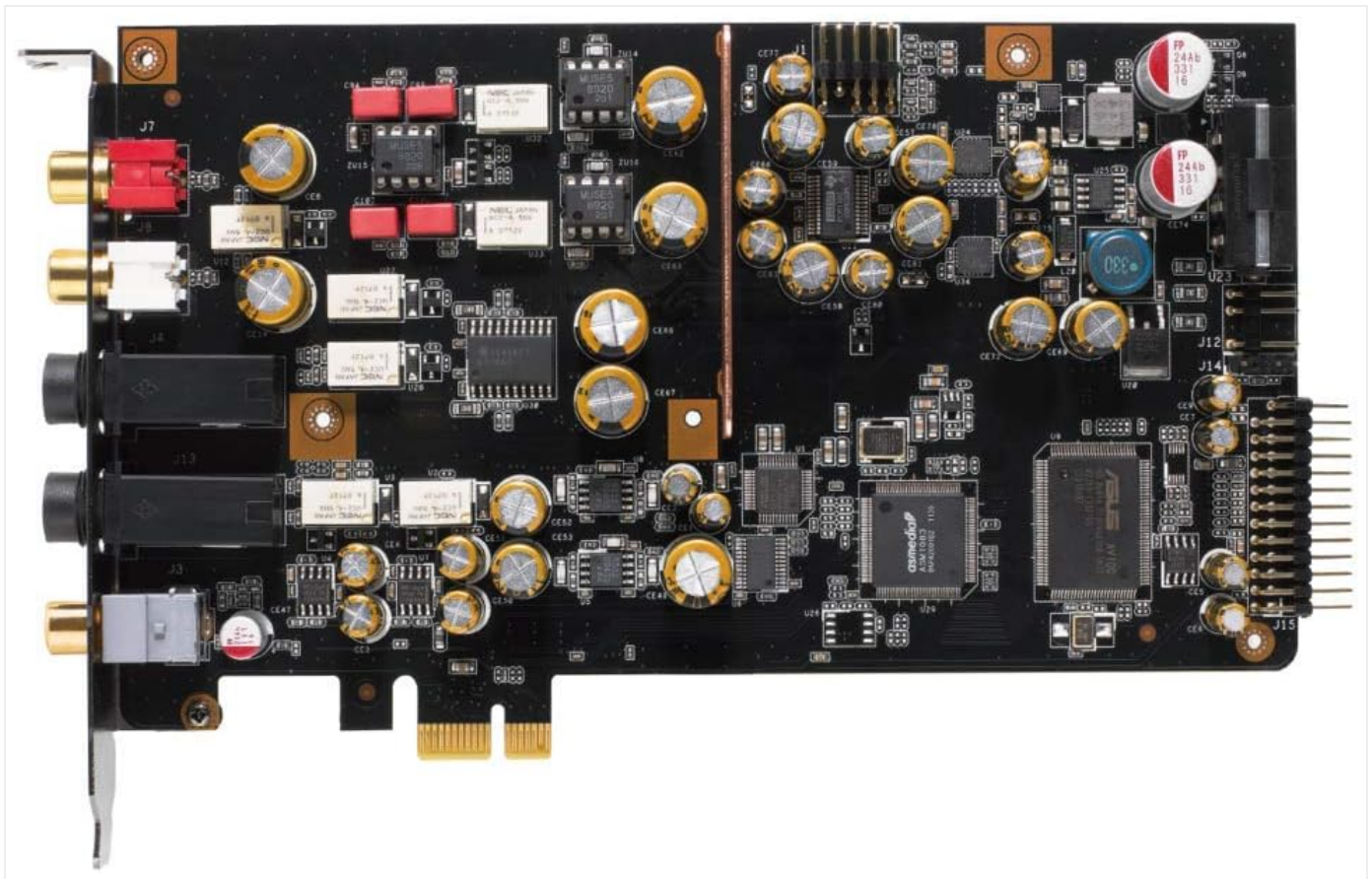### Headphone Amplifier Settings

The ASUS Audio Center provides "HP (headphone) Advance Settings" to optimize output for various headphone impedances:

- **IEM (In-Ear Monitor) or 16~32 ohms:** For low-impedance headphones and in-ear monitors.
- **Normal Gain or 16~32 ohms:** Standard setting for most consumer headphones.
- **High Gain or 64~300 ohms:** Recommended for headphones with higher impedance, such as many studio monitoring headphones.
- **Extra High Gain or 300~600 ohms:** For very high-impedance audiophile headphones, ensuring sufficient power and volume.

Caution: Always start with a low volume setting when changing headphone gain levels to prevent hearing damage or speaker/headphone damage.

Op-Amp Swapping

The Essence STX II features swappable operational amplifiers (op-amps), allowing users to customize the sound signature. The card comes with default MUSES op-amps and typically includes additional Texas Instrument LME49720 and another MUSES 8820 for experimentation. Use the provided op-amp removal tool for safe replacement.

Overhead view of the ASUS Essence STX II sound card's circuit board, highlighting the placement of op-amps, capacitors, and other audio components.

MAINTENANCE

To ensure the longevity and optimal performance of your ASUS Essence STX II sound card, consider the following maintenance tips:

- **Keep it Clean:** Periodically clean the interior of your computer case to prevent dust buildup on the sound card, which can affect cooling and performance. Use compressed air for this purpose.
- **Driver Updates:** Regularly check the official ASUS support website for the latest driver updates. Updated drivers can improve stability, performance, and compatibility.
- **Proper Handling:** When handling the sound card, always hold it by its edges and avoid touching the components or gold connectors to prevent electrostatic discharge (ESD) damage.

TROUBLESHOOTING

If you encounter issues with your sound card, refer to the following common troubleshooting steps:

- **No Sound Output:**

  - Verify that the sound card is securely seated in its PCI-E slot and the Molex power connector is firmly attached.
  - Check your speaker/headphone connections to the correct output jacks on the sound card.
  - Ensure the correct playback device is selected in your operating system's sound settings.
  - Confirm that the volume levels are not muted or set too low in both the operating system and the ASUS Audio Center software.
  - Reinstall the sound card drivers.

- **Driver Recognition Issues:**

  - Ensure you have downloaded and installed the correct drivers for your operating system version from the official ASUS website.
  - Try uninstalling existing sound drivers completely before performing a clean installation of the ASUS drivers.
  - Check Device Manager for any yellow exclamation marks next to the sound card entry, indicating a driver issue.

- **Headphone Jack Not Working:**

  - Confirm that the headphone output is enabled and configured correctly in the ASUS Audio Center.
  - Ensure the correct gain setting is selected for your headphones.
  - Test with a different pair of headphones to rule out a headphone issue.

- **Interference or Noise:**

  - Ensure the Molex power connector is providing stable power.
  - Check for proper grounding of your PC and audio equipment.
  - Move audio cables away from power cables or other sources of electromagnetic interference.

If problems persist, consult the official ASUS support resources or contact customer service.

SPECIFICATIONS

Feature	Detail
Brand	ASUS
Series	Essence STX II
Model Number	Essence STX II
Hardware Platform	Personal Computer
Item Weight	1.56 pounds
Item Dimensions (LxWxH)	6.61 x 4.21 inches
Hardware Interface	PCIE x 1
Audio Output Mode	7.1 (with optional daughterboard), Stereo (native)
SNR (Signal-to-Noise Ratio)	124dB (Industry-leading)
Headphone Impedance Support	Up to 600 ohms
DAC	TI Burr-Brown PCM 1792A
Power Connector	4-pin Molex

WARRANTY AND SUPPORT

For detailed warranty information, technical support, and additional resources, please visit the official ASUS support website. You can also find the comprehensive user guide in PDF format for further reference.

Official ASUS Support: www.asus.com/support/

User Guide (PDF): Download User Guide

Related Documents - Essence STX II

	[ASUS Essence STX II 7.1 High Fidelity Audio Card Quick Start Guide](#) Comprehensive quick start guide for the ASUS Essence STX II 7.1 high-fidelity audio card and headphone amplifier, detailing installation, driver setup, I/O ports, connectivity, and op-amp customization.
	[ASUS Xonar AE PCIe 7.1 Gaming Sound Card Quick Start Guide](#) This guide provides system requirements, driver installation instructions, and connectivity options for the ASUS Xonar AE PCIe 7.1 Gaming Sound Card. It details how to connect various audio devices including microphones, headphones, and different speaker configurations.
	[ASUS Xonar SE PCIe Audio Card Quick Start Guide](#) A concise guide to installing and connecting the ASUS Xonar SE PCIe 5.1 channel and headphone amplifier audio card, covering hardware features, connectivity options, driver installation, and system requirements.
	[ASUS PCE-AXE5400 WiFi 6E PCIe Adapter Quick Start Guide](#) Quick start guide for setting up the ASUS PCE-AXE5400 WiFi 6E PCIe Adapter. Learn how to install and connect your device for high-speed wireless networking.
	[ASUS Graphics Card Installation and Setup Guide](#) A comprehensive guide for installing and setting up your ASUS graphics card, covering physical installation, display connections, and driver installation. Includes instructions in multiple languages.
	[ASUS Xonar D2X Audio Card User's Manual](#) Comprehensive user manual for the ASUS Xonar D2X Audio Card, detailing installation, software setup, hardware features, driver configuration, and troubleshooting for enhanced PC audio performance.