

SIIG CE-H24F11-S1

SIIG HDMI 2.0 Audio Extractor User Manual

Model: CE-H24F11-S1

Brand: SIIG

1. INTRODUCTION

This user manual provides detailed instructions for the installation, operation, and troubleshooting of the SIIG HDMI 2.0 Audio Extractor (Model: CE-H24F11-S1). This device is designed to split an incoming HDMI audio signal into stereo analog audio and Toslink optical outputs, enabling connection to various audio systems that may lack HDMI input.

The extractor supports high-resolution video up to 4K/60Hz with HDR and is compliant with HDCP 2.2. It also features ARC (Audio Return Channel) support via Toslink and CEC bypass, ensuring compatibility with modern home theater setups. Please read this manual thoroughly before use to ensure proper setup and optimal performance.

2. PRODUCT FEATURES

- HDMI 2.0a and HDCP 2.2 compliant.
- Supports HDCP 2.2, HDR, and CEC bypass.
- Video resolutions up to 4Kx2K@60Hz YUV 4:4:4 8-bit and 4K HDR YUV 4:2:0 10-bit.
- Supports 480p, 720p, 1080i, 1080p resolutions.
- Video bandwidth: 18Gbps (600MHz per channel).
- Audio extraction via 3.5mm stereo jack and Toslink optical output.
- ARC audio extraction via Toslink (S/PDIF).
- Supports audio embedded via stereo and S/PDIF (Toslink).
- Audio formats supported:
 - HDMI: PCM 2/5.1/7.1, Dolby 5.1/7.1, DTS 5.1/7.1
 - Toslink (S/PDIF): PCM 2, Dolby 5.1, DTS 5.1
 - 3.5mm Stereo: PCM 2
- Sturdy metal enclosure for durability and EMI/RFI noise interference minimization.
- ESD protection: $\pm 15\text{kV}$ Air & $\pm 8\text{kV}$ Contact.
- Country of origin: Taiwan.

- Regulatory approvals: FCC, CE, RoHS.



Image: The SIIG HDMI 2.0 Audio Extractor highlighting its key features such as HDMI 2.0, 4K 60Hz, HDR, HDCP 2.2, 18Gbps bandwidth, 3-year warranty, and ESD Guards.

3. PACKAGE CONTENTS

Please verify that all items are present and in good condition. If any items are missing or damaged, contact your vendor for assistance.

- 1x HDMI 2.0 Audio Extractor/Embedder (CE-H24F11-S1)
- 1x USB Type-A to Micro B Cable (for power)
- 1x Installation Guide (this document)

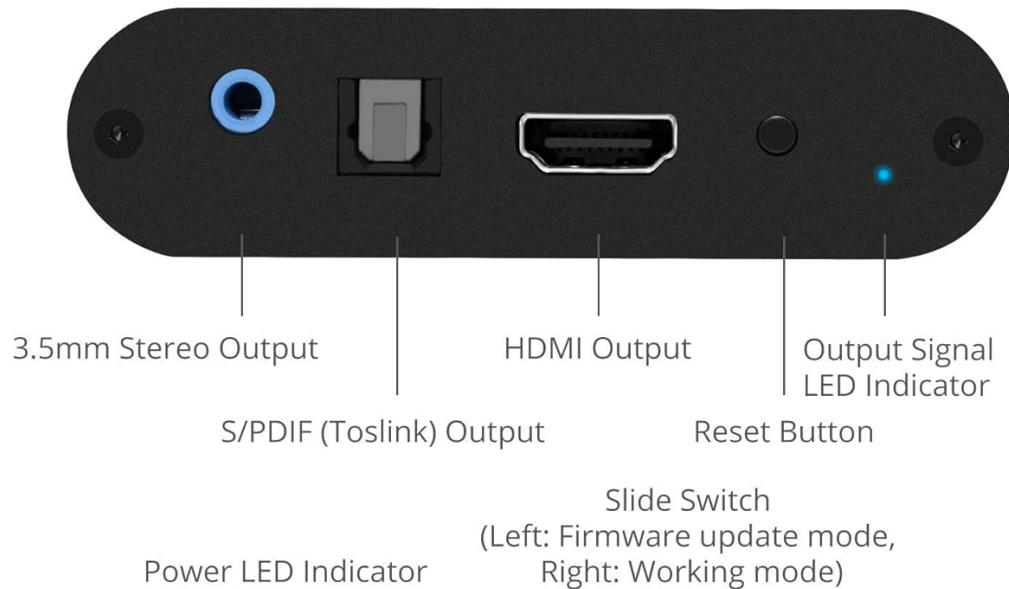
4. PRODUCT OVERVIEW AND PORT DESCRIPTIONS



Image: A top-down view of the SIIG HDMI 2.0 Audio Extractor, showcasing its compact design and port layout.

HDMI 2.0 4K HDR with Audio Extractor & ARC

Front



Back

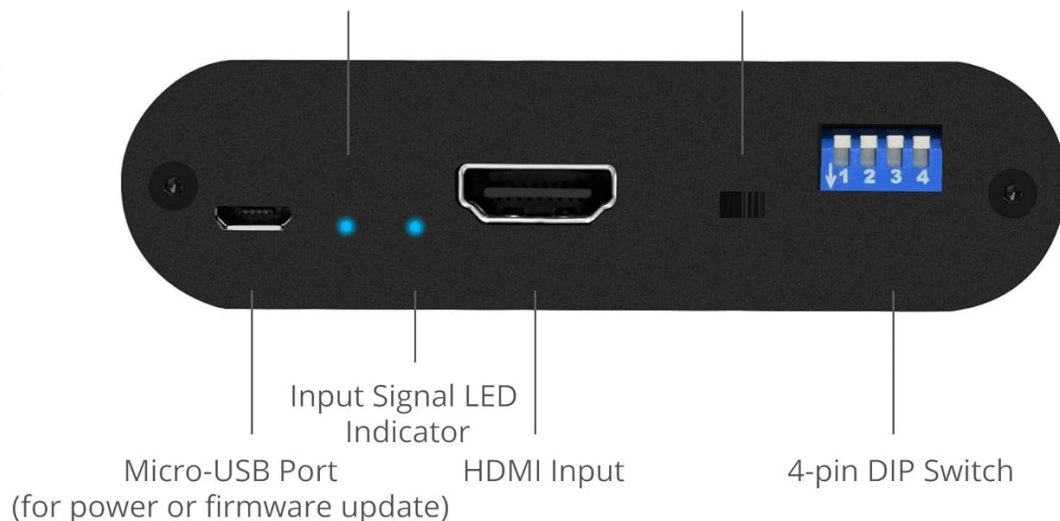


Image: Detailed diagram showing the front and back panels of the SIIG HDMI 2.0 Audio Extractor, labeling all ports, indicators, and switches.

Front Panel:

- **3.5mm Stereo Output:** Connect to analog audio devices (e.g., headphones, stereo speakers).
- **S/PDIF (Toslink) Output:** Connect to digital optical audio receivers or soundbars.
- **HDMI Output:** Connect to an HDMI display (e.g., TV, monitor, projector).
- **Output Signal LED Indicator:** Illuminates when an HDMI output signal is detected.
- **Reset Button:** Used to reset the device.
- **Slide Switch (FW/NORMAL Mode):**
 - **Left (FW):** Firmware update mode.
 - **Right (NORMAL):** Normal operating mode. Ensure this is set to NORMAL for regular use.

Back Panel:

- **Micro-USB Port (DC 5V):** Connect the provided USB power cable for device power. Also used for firmware updates.
- **Power LED Indicator:** Illuminates when the device is powered on.

- **Input Signal LED Indicator:** Illuminates when an HDMI input signal is detected.
- **HDMI Input:** Connect to an HDMI source device (e.g., Blu-ray player, game console, streaming device).
- **4-pin DIP Switch:** Used to configure EDID settings and enable/disable ARC and audio extraction functions.

5. SETUP INSTRUCTIONS

Follow these steps to set up your SIIG HDMI 2.0 Audio Extractor:

1. **Power Off Devices:** Ensure all source devices, displays, and audio systems are powered off before making any connections.
2. **Connect HDMI Input:** Connect an HDMI cable from your source device (e.g., Blu-ray player, game console) to the **HDMI IN** port on the audio extractor.
3. **Connect HDMI Output:** Connect an HDMI cable from the **HDMI OUT** port on the audio extractor to your display device (e.g., TV, monitor, projector).
4. **Connect Audio Output (Digital):** For digital audio, connect a Toslink (optical) cable from the **S/PDIF (Toslink) Output** port on the extractor to your audio receiver, soundbar, or amplifier.
5. **Connect Audio Output (Analog):** For analog stereo audio, connect a 3.5mm audio cable from the **3.5mm Stereo Output** port on the extractor to your headphones or stereo speakers.
6. **Connect Power:** Connect the provided USB Type-A to Micro B cable to the **Micro-USB Port (DC 5V)** on the extractor and the other end to a USB power source (e.g., USB wall adapter, TV USB port). The Power LED Indicator will illuminate.
7. **Verify Slide Switch:** Ensure the slide switch on the front panel is set to the **NORMAL** position (right).
8. **Power On Devices:** Power on your display, audio system, and source device in that order.

Audio Extraction

Extracts multi-channel digital S/PDIF(Toslink) and stereo analog audio from an HDMI signal



Image: Connection diagram illustrating how to set up the audio extractor with a Blu-ray player as input, and headphones, speakers, and a display as outputs.

6. OPERATING INSTRUCTIONS

6.1 EDID and Function Configuration (DIP Switch)

The 4-pin DIP switch on the back panel allows you to configure the EDID (Extended Display Identification Data) settings and control the ARC and audio extraction functions. Adjust these settings based on your connected devices and desired audio output.

Easy Configuration via DIP Switch



DIP Switch Position		Description		
PIN#1	PIN#2	OFF[↑]	OFF[↑]	EDID bypass
		OFF[↑]	ON[↓]	Ultra HD (4K2K @60Hz) – 8/10/12bit, 3D, HDR video & 5.1ch audio
		ON[↓]	OFF[↑]	Ultra HD (4K2K @60Hz) – 8/10/12bit, 3D, HDR video & 2ch audio
		ON[↓]	ON[↓]	Learning EDID from Output
PIN#3		OFF[↑]	Disable ARC Function	
		ON[↓]	Enable ARC Function	
PIN#4		OFF[↑]	Disable Audio Extractor Function	
		ON[↓]	Enable Audio Extractor Function (via Toslink & 3.5mm)	

Image: Table detailing the functions of each DIP switch position (PIN1-PIN4) for EDID, ARC, and audio extraction settings.

DIP Switch Configuration Table

DIP Switch Position	Description
PIN1: OFF, PIN2: OFF	EDID bypass
PIN1: OFF, PIN2: ON	Ultra HD (4K2K@60Hz) – 8/10/12bit, 3D, HDR video & 5.1ch audio
PIN1: ON, PIN2: OFF	Ultra HD (4K2K@60Hz) – 8/10/12bit, 3D, HDR video & 2ch audio
PIN1: ON, PIN2: ON	Learning EDID from Output
PIN3: OFF	Disable ARC Function
PIN3: ON	Enable ARC Function
PIN4: OFF	Disable Audio Extractor Function
PIN4: ON	Enable Audio Extractor Function (via Toslink & 3.5mm)

Note: After changing DIP switch settings, it is recommended to power cycle the audio extractor and all connected devices to ensure the new settings are applied correctly.

6.2 ARC (Audio Return Channel) Function

When ARC is enabled (PIN3 ON) and your display supports ARC, audio from your TV's internal tuner or smart apps can be sent back to the audio extractor via the HDMI cable and then output through the Toslink (S/PDIF) port to your audio system.

ARC Support & CEC Bypass

Supports ARC audio extraction via S/PDIF (Toslink)



Image: Visual representation of ARC (Audio Return Channel) functionality, indicating how audio can be returned from the display to the extractor's S/PDIF (Toslink) output.

6.3 CEC Bypass

The device supports CEC (Consumer Electronics Control) bypass, allowing CEC commands to pass through the extractor to control connected HDMI devices. This means you can use a single remote to control multiple CEC-enabled devices in your setup.

7. TROUBLESHOOTING

If you encounter issues with the SIIG HDMI 2.0 Audio Extractor, please refer to the following common troubleshooting steps:

- **No Video Output:**

- Ensure all HDMI cables are securely connected.
- Verify the input source is selected correctly on your display.
- Check the power connection to the extractor; the Power LED should be illuminated.
- Try a different HDMI cable.
- Adjust DIP switch settings for EDID (PIN1 & PIN2) to match your display's capabilities or try "EDID bypass".

- Power cycle all connected devices (source, extractor, display).
- **No Audio Output (Toslink/3.5mm):**
 - Ensure audio cables (Toslink or 3.5mm) are securely connected to the correct output ports on the extractor and input ports on your audio system.
 - Verify the audio input is selected correctly on your audio receiver/soundbar.
 - Check DIP switch PIN4 is set to **ON** to enable audio extraction.
 - If using ARC, ensure DIP switch PIN3 is set to **ON** and your TV's ARC function is enabled.
 - Confirm the audio format from your source is supported by your audio system and the extractor (refer to "Product Features" for supported formats). Some audio systems may not support certain multi-channel formats.
 - Try setting DIP switch PIN1: ON, PIN2: OFF for 2ch audio output if your audio system only supports stereo.
 - Power cycle all connected devices.
- **Intermittent Video/Audio:**
 - Check for loose cable connections.
 - Ensure the power supply is stable.
 - Reduce cable lengths if possible, especially for HDMI.
 - Verify that the slide switch is in the **NORMAL** position.
 - Test with different HDMI cables.
- **HDR/4K Issues:**
 - Ensure all connected HDMI cables are rated for HDMI 2.0 or higher and support 18Gbps bandwidth.
 - Verify your source and display devices both support 4K/60Hz and HDR.
 - Adjust EDID settings (PIN1 & PIN2) to ensure the correct video mode is selected.

8. SPECIFICATIONS

Feature	Detail
Model Number	CE-H24F11-S1
HDMI Compliance	HDMI 2.0a
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps (600MHz per channel)
Supported Resolutions	Up to 4Kx2K@60Hz (YUV 4:4:4 8-bit), 4K HDR (YUV 4:2:0 10-bit), 1080p, 1080i, 720p, 480p
HDR Support	Yes (4K@60Hz YUV 4:2:0 10-bit)
Audio Outputs	1x Toslink (S/PDIF), 1x 3.5mm Stereo
ARC Support	Yes (via Toslink)
CEC Support	Bypass
ESD Protection	±15kV Air & ±8kV Contact

Feature	Detail
Material	Metal enclosure
Product Dimensions (L x W)	4.56" x 0.78" (11.58 cm x 1.98 cm)
Item Weight	6.4 ounces (181.4 grams)
Power Supply	DC 5V (via Micro-USB)
Operating Temperature	Up to 104°F (40°C)
Certifications	FCC, CE, RoHS, TAA compliant
Country of Origin	Taiwan

Metal Housing & ESD Protection



Image: Physical dimensions of the SIIG HDMI 2.0 Audio Extractor, showing length, width, and height measurements.

9. MAINTENANCE

The SIIG HDMI 2.0 Audio Extractor is designed for reliable operation with minimal maintenance.

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using liquid or aerosol cleaners, as they may damage the unit.
- **Ventilation:** Ensure the device is placed in a well-ventilated area to prevent overheating. Do not block any

ventilation openings.

- **Storage:** When not in use for extended periods, store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Firmware Updates:** Periodically check the SIIG website for any available firmware updates for your model. Follow the instructions provided with the firmware update carefully.

10. SAFETY INFORMATION

Please observe the following safety guidelines to prevent damage to the device and ensure user safety:

- Do not expose the device to water or excessive moisture.
- Do not attempt to open or modify the device. There are no user-serviceable parts inside.
- Use only the provided power cable or a certified 5V USB power adapter.
- Keep the device away from heat sources, direct sunlight, and flammable materials.
- Ensure proper grounding for all connected electrical equipment.

11. WARRANTY AND TECHNICAL SUPPORT

11.1 Warranty Information

The SIIG HDMI 2.0 Audio Extractor (CE-H24F11-S1) comes with a **3-year warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, please refer to the warranty documentation provided with your purchase or visit the official SIIG website.


11.2 Technical Support






For technical assistance, product inquiries, or troubleshooting beyond the scope of this manual, please contact SIIG customer support.

- **Website:** Visit the official SIIG website for support resources, FAQs, and contact information.
- **Contact:** Refer to your product packaging or the SIIG website for the most current contact details for technical support.

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Related Documents - CE-H24F11-S1

 <p>1x2 HDMI Splitter Over Cat6 Extender User Manual</p> <p>04-1374A P/N: CE-H27911-S1</p>	<p>SIIG 1x2 HDMI Splitter Over Cat6 Extender User Manual</p> <p>User manual for the SIIG 1x2 HDMI Splitter Over Cat6 Extender (Model: CE-H27911-S1), detailing features, package contents, device layout, EDID settings, and RS-232 commands for extending HDMI signals over Cat6/7 cable.</p>
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	<p>SIIG 1x HDMI 2.0a Splitter Quick Start Guide: Features, Setup, and Specifications</p> <p>Quick start guide for the SIIG 1x HDMI 2.0a Splitter (Model CE-H26911-S1). Learn about its features, layout, EDID management, audio extraction, HDR to SDR conversion, and 4K downscaling capabilities.</p>
	<p>SIIG 4K120Hz HDMI Extender with IR User Manual</p> <p>User manual for the SIIG 4K120Hz HDMI Extender with IR, detailing features, package contents, installation layout for transmitter and receiver, EDID settings, supported resolutions, IR cable connections, application examples, and troubleshooting Q&A. This guide helps users set up and operate the HDMI extender for high-resolution video transmission.</p>
	<p>SIIG 1x8 HDMI Extender: 120m HDBiT over IP Splitter - Quick Start Guide</p> <p>Quick Start Guide for the SIIG 1x8 HDMI Splitter HDBiT over IP Extender, detailing features, package contents, layout, and application setups for extending HDMI signals up to 120 meters over CAT6 Ethernet.</p>
	<p>SIIG CE-H3WE11-S1 Kit / CE-H3WE21-S1 RX Full HD Wireless HDMI Extender with IR User Manual</p> <p>User manual for the SIIG CE-H3WE11-S1 Kit and CE-H3WE21-S1 RX Full HD Wireless HDMI Extender with IR. This guide provides detailed information on installation, features, product layout, pairing, troubleshooting, and technical specifications.</p>
	<p>SIIG 3x1 HDMI 2.0 Switch with IR & Voice APP Control User Manual</p> <p>User manual for the SIIG 3x1 HDMI 2.0 Switch (CE-H27211-S1), detailing features like 4K@60Hz, HDR, Dolby Vision, and HDCP 2.2. Includes setup instructions, app control via Magic Home, Alexa integration, voice commands, and troubleshooting guide.</p>