

AOSHIDA PS100

AOSHIDA SMSL PS100 Digital to Analog Audio Converter User Manual

Model: PS100

1. INTRODUCTION

The AOSHIDA SMSL PS100 is a versatile Digital to Analog Audio Converter (DAC) designed to enhance your audio experience across various devices. It features multiple input options including USB, Optical, Coaxial, and HDMI ARC, converting digital audio signals to stereo L/R RCA output. This manual provides detailed instructions for setting up, operating, and maintaining your PS100 converter.

2. SAFETY INFORMATION

- Do not expose the device to water or excessive moisture.
- Avoid placing the device near heat sources or in direct sunlight.
- Use only the provided power cable or a certified equivalent.
- Do not attempt to disassemble or repair the unit yourself. Refer all servicing to qualified personnel.
- Ensure proper ventilation around the device to prevent overheating.

3. PACKAGE CONTENTS

Please check the package for the following items:

- 1 x SMSL PS100 Digital to Analog Audio Converter
- 1 x HDMI Cable
- 1 x USB Cable (for power and USB audio input)
- 1 x User Manual
- 1 x SMSL Card

4. PRODUCT OVERVIEW

4.1 Device Layout



Figure 4.1: The SMSL PS100 converter shown with its included USB and HDMI cables. The device features a compact black casing.



Technical Parameter

Model	SMSL PS100	
Input	BT/Optical/Coaxial/HDMI/USB	
Output level	1.9Vrms	
THD+N	0.005% (-85dB)	
Dynamic Range	96dB	
SNR	98dB	
USB Compatibility	Windows 7 / 8 / 8.1 / 10 / 11 Mac OS X10.6 or Later , Linux	
Sampling Rate	USB	PCM 44.1kHz-48kHz
	Opt/Coax	44.1kHz-192kHz
Power Consumption	<2W	
Standby Power	<0.1W	
Size	105 x 22 x 80mm (WxHxD)	
Weight	90g/0.20lbs	

Figure 4.2: Diagram illustrating the various input and output ports on the SMSL PS100, including USB, HDMI, Optical, Coaxial, and RCA outputs, along with typical connection scenarios.

4.2 Key Features

- **High-Resolution Audio:** Supports coaxial and optical inputs up to 192kHz resolution.
- **Dedicated DAC Chip:** Equipped with an independent ES9023 DAC chip for enhanced audio signal conversion and improved sound quality.



Figure 4.3: Close-up image of the ES9023 DAC chip, highlighting its role in high-quality audio processing.

- **HDMI ARC Functionality:** Connects to TV HDMI ARC interfaces for TV audio output, compatible with devices like PS5 game consoles.

HDMI ARC Input

Supports HDMI (ARC) audio return function, allowing the output of TV audio through the TV's HDMI ARC interface.

*When using this input, the TV digital audio output format is set to: PCM



- Only supports HDMI ARC function, does not support eARC function + volume control + synchronous power on/off function.
- When using HDMI ARC input, when the TV is turned off and then turned on, this product also needs to be restarted.

Figure 4.4: Image showing the SMSL PS100 connected via HDMI ARC to a television, illustrating its use in a home entertainment setup.

- **USB Audio Input:** Features a USB interface and a high-performance power supply system for connecting to computers or mobile phones, improving digital audio source quality.
- **Built-in Bluetooth:** Integrated Bluetooth reception for wireless audio streaming without the need for an external antenna.

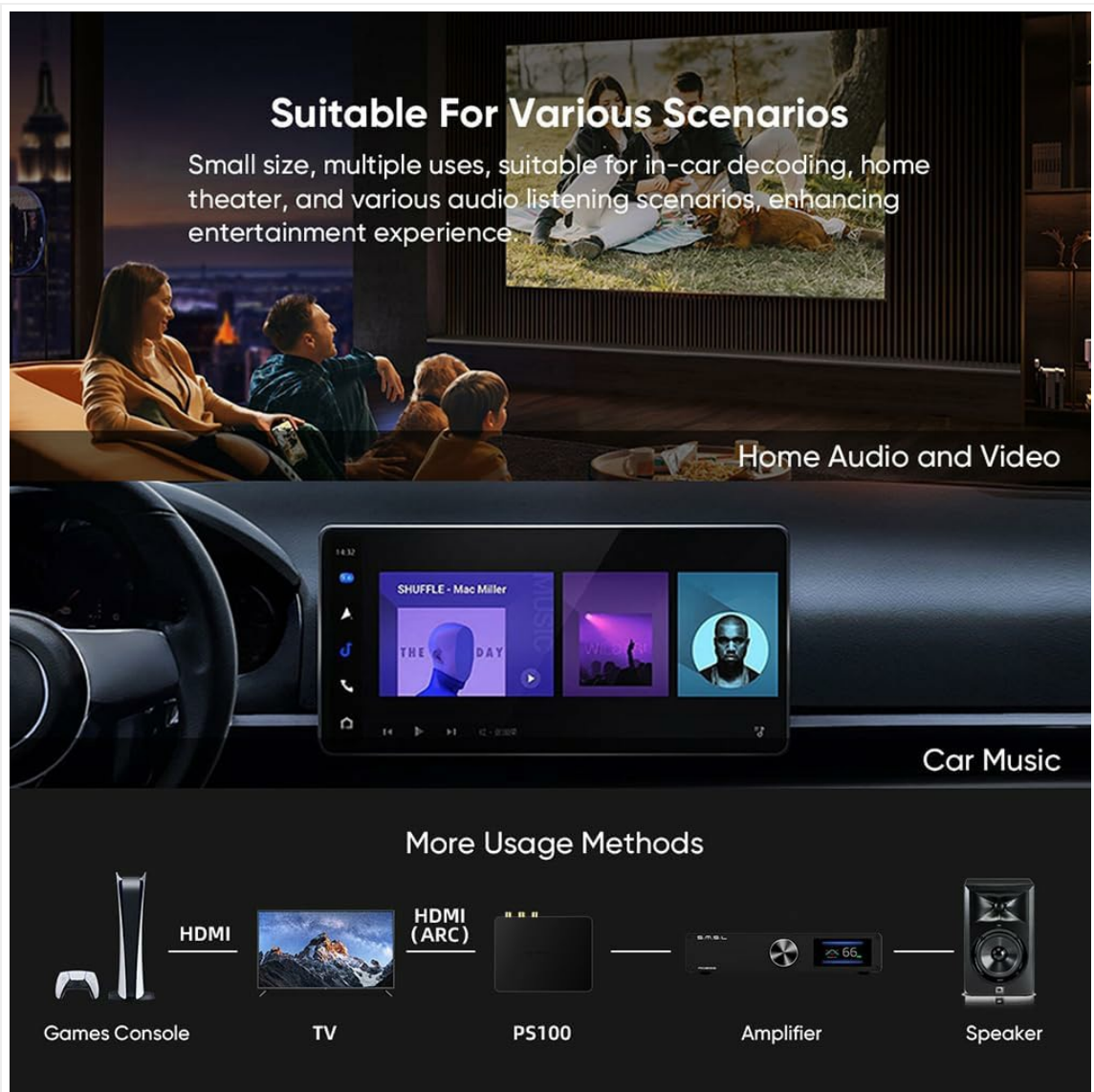


Figure 4.5: Image depicting the SMSL PS100 receiving audio via Bluetooth from a smartphone, demonstrating its wireless capability.

- **Compact and Portable:** Mini size for easy integration into various audio setups, including home cinema systems and car audio.

INPUT/OUTPUT

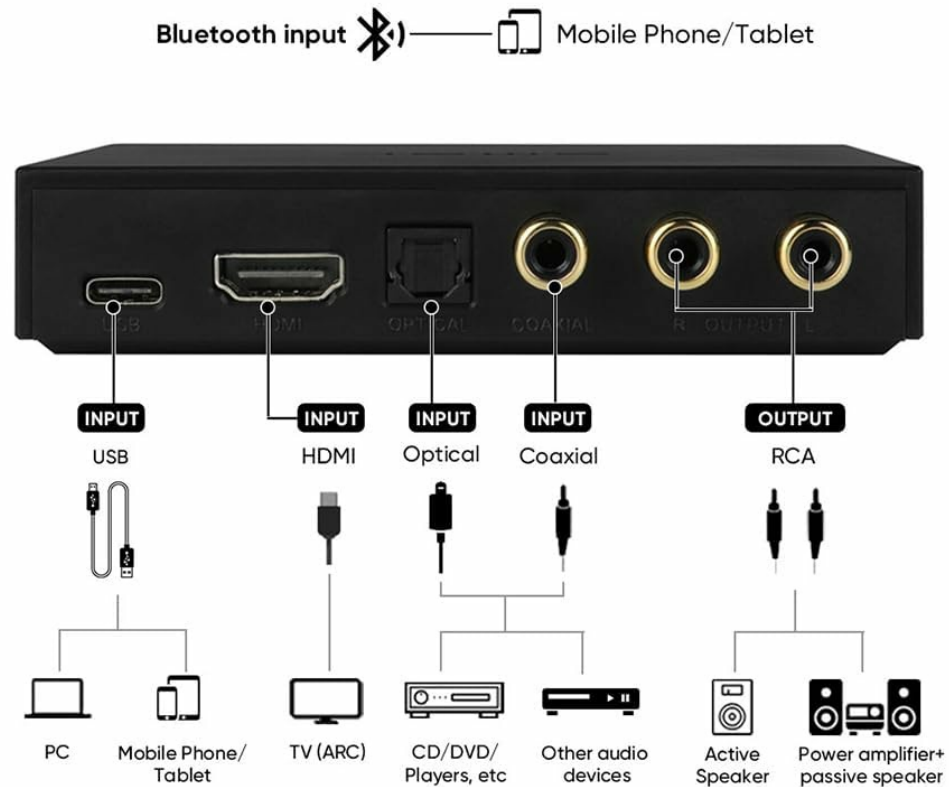


Figure 4.6: Collage showing the SMSL PS100 used in different environments, such as a home theater setup and a car, highlighting its versatility.

5. SETUP AND CONNECTIONS

Follow these steps to connect your SMSL PS100 to your audio system.

5.1 Power Connection

1. Connect the provided USB cable to the USB-C port on the PS100.
2. Connect the other end of the USB cable to a 5V USB power adapter (not included) or a powered USB port on a computer.
3. The device will power on automatically or can be turned on using the power button.

5.2 Audio Output Connection (RCA)

1. Connect RCA cables (red for right channel, white for left channel) to the "R OUTPUT" and "L OUTPUT" ports on the PS100.
2. Connect the other end of the RCA cables to the analog input (e.g., "AUX IN", "LINE IN") of your amplifier, active speakers, or home cinema system.

5.3 Digital Audio Input Connections

The PS100 supports multiple digital audio inputs:

- **USB Input:** Connect a USB cable from your computer, mobile phone, or tablet to the "USB" port on the PS100. This port also provides power.
- **Optical Input:** Connect an optical fiber cable from your TV, CD/DVD player, or game console to the "OPTICAL" port.
- **Coaxial Input:** Connect a coaxial cable from your audio source to the "COAXIAL" port.
- **HDMI ARC Input:** Connect an HDMI cable from your TV's HDMI ARC port to the "HDMI" port on the PS100.
 - **Important:** When using HDMI ARC, ensure your TV's digital audio output format is set to **PCM**. The PS100 supports HDMI ARC functionality but does not support eARC, volume control via TV remote, or synchronous power on/off functions.
 - If the TV is turned off and then turned on, the PS100 may also need to be restarted for the HDMI ARC connection to re-establish.
- **Bluetooth Input:** For wireless connection, enable Bluetooth on your mobile device and pair with "SMSL PS100".

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

Press the power button on the front panel to turn the device on or off.

6.2 Input Selection

Press the input selection button on the front panel to cycle through the available inputs: Bluetooth (BT), Coaxial (COAX), Optical (OPT), HDMI, and USB. The active input will be indicated by an LED light.

6.3 Audio Playback

Once an input is selected and connected, play audio from your source device. The PS100 will convert the digital signal to analog and output it through the RCA ports to your connected amplifier or speakers.

7. SPECIFICATIONS

Parameter	Value
Model	SMSL PS100
Input	BT/Optical/Coaxial/HDMI/USB
Output Level	1.9Vrms
THD+N	0.005% (-85dB)
Dynamic Range	96dB
SNR	98dB
USB Compatibility	Windows 7 / 8 / 8.1 / 10 / 11, Mac OS X10.6 or Later, Linux
Sampling Rate (USB)	PCM 44.1kHz-48kHz

Parameter	Value
Sampling Rate (Opt/Coax)	44.1kHz-192kHz
Power Consumption	<2W
Standby Power	<0.1W
Size (WxHxD)	105 x 22 x 80mm
Weight	90g / 0.20lbs

8. TROUBLESHOOTING

- **No Sound Output:**
 - Ensure the PS100 is powered on and the correct input source is selected.
 - Verify that RCA cables are securely connected to both the PS100 and your amplifier/speakers.
 - Check the volume level on your amplifier/speakers.
 - For digital inputs (Optical, Coaxial, HDMI ARC), confirm the source device is outputting audio in a compatible format (e.g., PCM for HDMI ARC).
- **HDMI ARC Issues:**
 - Ensure your TV's HDMI ARC port is used and enabled in TV settings.
 - Set the TV's digital audio output to PCM.
 - If audio is lost after turning the TV off and on, try restarting the PS100.
 - Disconnecting and reconnecting the HDMI cable can sometimes resolve connection issues.
- **Bluetooth Connection Problems:**
 - Ensure the PS100 is in Bluetooth input mode.
 - Check that Bluetooth is enabled on your mobile device and it is within range.
 - Try unpairing and re-pairing the PS100 from your device's Bluetooth settings.
- **Distorted or Intermittent Audio:**
 - Check all cable connections for looseness or damage.
 - Ensure the sampling rate of your source matches the PS100's capabilities (up to 192kHz for Opt/Coax, 48kHz for USB).
 - Avoid placing the PS100 near strong electromagnetic interference.

9. MAINTENANCE

- Clean the device with a soft, dry cloth. Do not use liquid cleaners or aerosols.
- Keep the device free from dust and debris.
- Store the device in a cool, dry place when not in use for extended periods.

10. WARRANTY AND SUPPORT

The SMSL PS100 comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the SMSL card included in your package or visit the official AOSHIDA website. If you encounter any issues or have questions regarding your PS100, please contact AOSHIDA customer

support for assistance. They are available to guide you through troubleshooting and provide solutions.

AOSHIDA Support: [Visit the AOSHIDA Store on Amazon](#)