PORTTA N3C21BT

PORTTA N3C21BT Digital SPDIF (Coaxial/Toslink) Audio Converter User Manual

Model: N3C21BT

1. Introduction

The PORTTA N3C21BT is a versatile 2-way Digital SPDIF (Coaxial/Toslink) Audio Converter designed to facilitate audio signal conversion and extension. This device allows users to connect a SPDIF audio signal input via either a Coaxial cable or a Toslink cable. It then passes the signal to both its coaxial and Toslink output ports simultaneously. With its built-in amplification feature, the N3C21BT can also function as an audio signal repeater, effectively doubling the transferring distance for both coaxial and Toslink cables.

2. Key Features

- Supports two-way conversion: Coaxial to Toslink or Toslink to Coaxial.
- Audio format support: LPCM2.0, DTS, Dolby-AC3.
- Amplifies SPDIF audio signals to extend transferring distance via coaxial or Toslink cables.
- Compact design for easy installation and integration into existing audio systems.

Image: The PORTTA N3C21BT converter, illustrating its support for various audio formats including LPCM2.0, 5.1, Dolby AC3, and DTS, along with its capability to extend Toslink output distance up to 30 meters (98 feet).

3. Product Diagram

Familiarize yourself with the input and output ports, as well as the mode selection switch on your PORTTA N3C21BT converter.

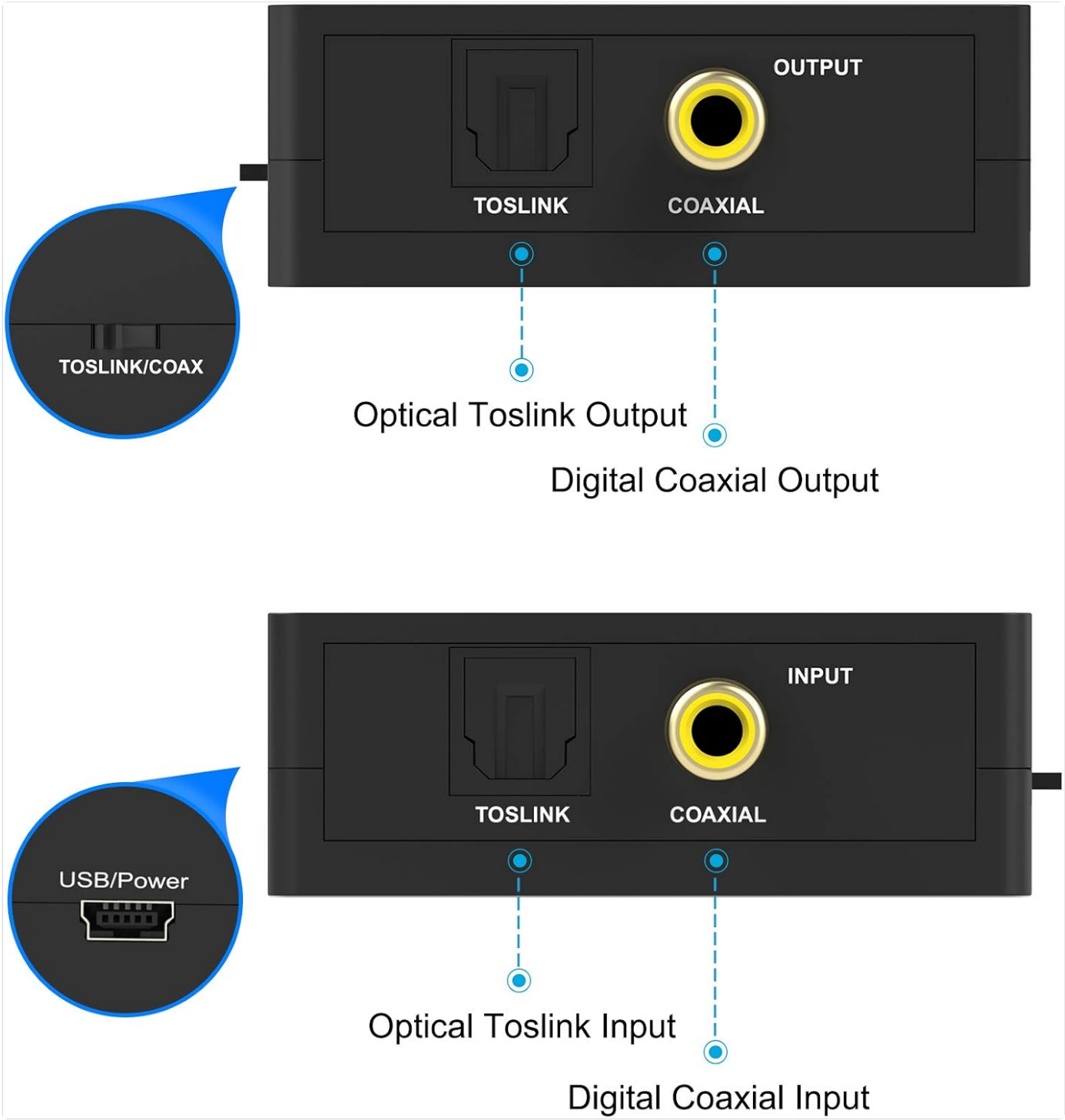

Image: A detailed diagram of the PORTTA N3C21BT converter, clearly labeling the Optical Toslink Output, Digital Coaxial Output, Optical Toslink Input, Digital Coaxial Input, USB/Power port, and the TOSLINK/COAX bidirectional switch.

Port Descriptions:

- **TOSLINK/COAX Switch:** This switch determines the direction of conversion. Slide it to 'TOSLINK' for Toslink input and Coaxial output, or to 'COAX' for Coaxial input and Toslink output.
- **USB/Power:** Connect the provided USB power cable to this port and a suitable USB power source (e.g., a USB wall adapter, TV USB port) to power the device.
- **Optical Toslink Input/Output:** For connecting optical fiber cables.
- **Digital Coaxial Input/Output:** For connecting coaxial digital audio cables.

4. Setup Instructions

Follow these steps to connect your PORTTA N3C21BT audio converter to your audio system.

Image: An illustration demonstrating typical connection scenarios for the PORTTA N3C21BT. It shows how to connect source devices like an Xbox or AV receiver to the converter's input, and then connect the converter's output to audio systems such as soundbars or speaker setups using both Toslink and Coaxial cables.

1. **Power Connection:** Connect the USB power cable to the 'USB/Power' port on the converter and plug the other end into a 5V DC USB power source. Ensure the power source is stable.
2. **Select Conversion Direction:** Use the 'TOSLINK/COAX' switch to select the desired conversion direction.
    - If your source device uses Toslink and your receiving device uses Coaxial, set the switch to 'TOSLINK'.
    - If your source device uses Coaxial and your receiving device uses Toslink, set the switch to 'COAX'.
3. **Connect Source Device:** Connect your audio source device (e.g., TV, DVD player, game console) to the corresponding input port (Toslink or Coaxial) on the converter, based on your switch selection.
4. **Connect Receiving Device:** Connect your audio receiving device (e.g., amplifier, soundbar, home theater system) to the corresponding output port (Coaxial or Toslink) on the converter. The converter will output the signal to both

output types simultaneously.

5. **Power On Devices:** Power on all connected audio devices and the converter.
6. **Audio Settings:** Ensure your source device's audio output settings are configured to output the correct digital audio format (LPCM2.0, DTS, or Dolby-AC3) that the converter supports.

5. Operating Instructions

The PORTTA N3C21BT is designed for straightforward operation. Once properly set up, it functions automatically.

Bidirectional Conversion:

The primary function of this converter is its bidirectional capability. The 'TOSLINK/COAX' switch on the side of the unit determines the input type. The converter will then output the audio signal to *both* the Toslink and Coaxial output ports, regardless of the input type selected.

- **Input Selection:** Slide the switch to 'TOSLINK' if your audio source is connected to the Toslink input. Slide it to 'COAX' if your audio source is connected to the Coaxial input.
- **Output:** The converter will automatically send the converted audio signal to both the Toslink and Coaxial output ports. You can connect one or both outputs to your receiving audio devices.

Image: The PORTTA N3C21BT converter integrated into a home living room audio setup, demonstrating its role in connecting various audio components. Icons indicate support for Toslink/Coaxial bidirectional conversion, LPCM audio, and 96KHz sampling rates.

6. Troubleshooting

If you encounter issues while using the PORTTA N3C21BT, please refer to the following common problems and solutions:

- **No Audio Output:**
  - Ensure the converter is properly powered via the USB port.
  - Verify that all audio cables (Toslink/Coaxial) are securely connected to both the source, converter, and receiving devices.
  - Check the 'TOSLINK/COAX' switch position. It must match the type of input cable you are using.
  - Confirm that your source device's audio output settings are correctly configured for digital audio (e.g., PCM, Bitstream) and that the output format is supported by the converter (LPCM2.0, DTS, Dolby-AC3).
  - Test with different cables if possible, as faulty cables can prevent audio transmission.

- Ensure the receiving audio device (amplifier, soundbar) is set to the correct input source.

- **Intermittent Audio / Signal Drops:**
  - Check the power supply. An unstable or insufficient power source can cause intermittent operation. Use a reliable 5V USB power adapter.
  - Ensure cables are not damaged or excessively bent, especially optical cables.
  - Try resetting the converter by unplugging and re-plugging the USB power cable.
  - Verify that the audio format from the source is consistently supported.

- **Humming or Static Noise:**
  - This can sometimes be caused by ground loops. Ensure all devices are connected to properly grounded outlets.
  - Check for interference from other electronic devices.
  - Ensure cables are of good quality and properly shielded.

7. Specifications

Detailed technical specifications for the PORTTA N3C21BT converter.

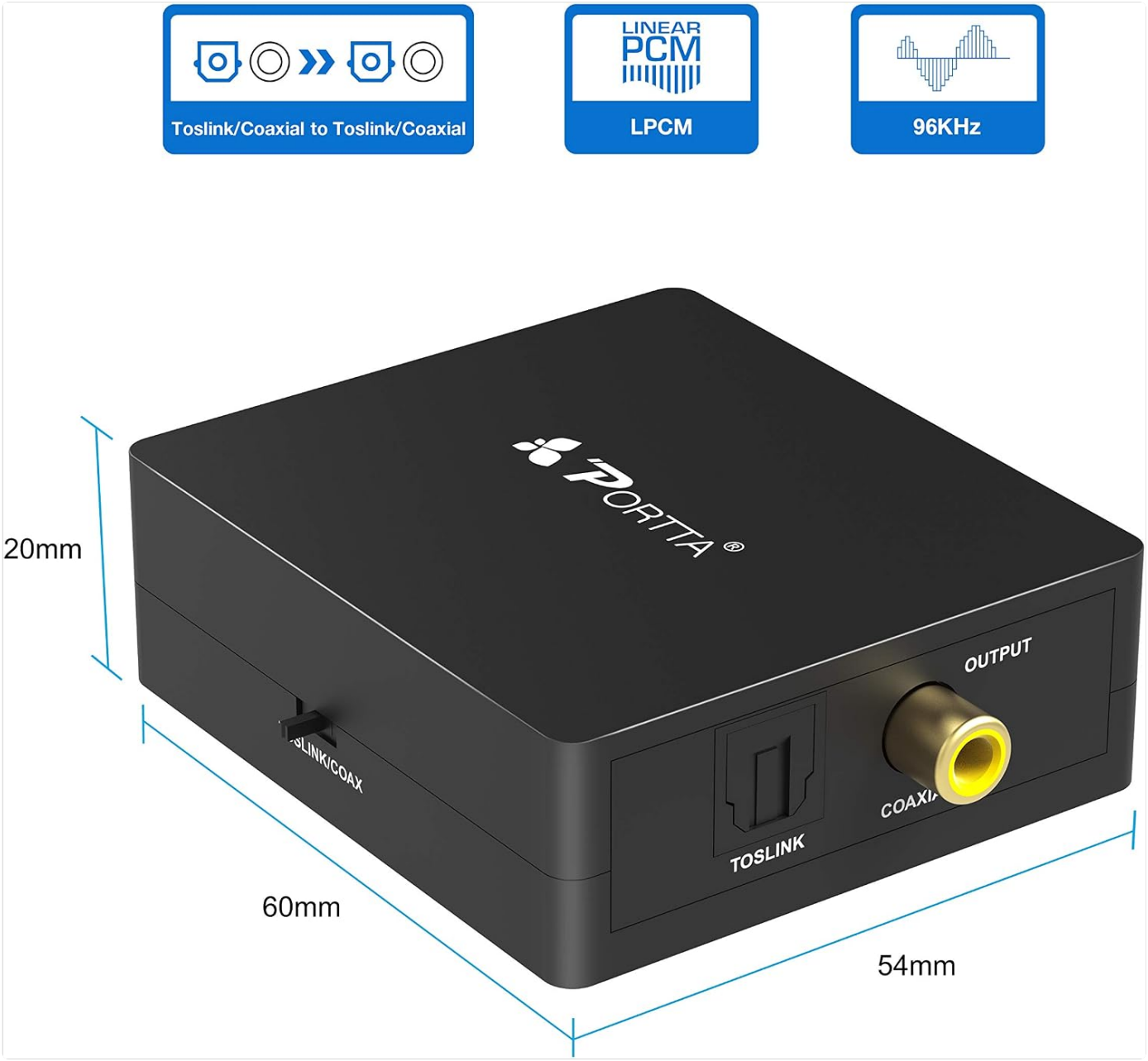

Image: A visual representation of the PORTTA N3C21BT converter with its dimensions clearly marked: 60mm in length, 54mm in width, and 20mm in height.

Feature	Description
Model Number	N3C21BT
Connector Type	Coaxial, Optical (Toslink)
Number of Ports	2 (Input/Output for each type)
Audio Format Support	LPCM2.0, DTS, Dolby-AC3
Built-In Media	Optical Splitter
Item Weight	1.4 Ounces (approximately 40 grams)
Dimensions (L x W x H)	60mm x 54mm x 20mm (approximate, refer to diagram)
Power Supply	USB 5V DC (via Micro-USB port)

Feature	Description
Compatible Devices	DVD Player, Television, Game Consoles, Amplifiers, Soundbars, Speakers (2.0, 5.1)

8. Maintenance

To ensure the longevity and optimal performance of your PORTTA N3C21BT converter, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use liquid cleaners or aerosols, as they may damage the device.
- **Environment:** Keep the converter in a cool, dry place, away from direct sunlight, heat sources, and excessive moisture.
- **Handling:** Avoid dropping or subjecting the unit to strong impacts. Handle cables carefully, especially optical cables, to prevent damage to the connectors or fiber.
- **Power Off When Not in Use:** If the device will not be used for an extended period, it is advisable to disconnect the power supply.

9. Warranty and Support

PORTTA products are designed for reliability and performance. For specific warranty information, please refer to the documentation provided with your purchase or visit the official PORTTA website. If you encounter any issues that cannot be resolved using the troubleshooting guide, please contact PORTTA customer support for assistance.
Please retain your proof of purchase for warranty claims.