

MP-DAC

Digital Audio Converter / 1×3 Splitter



Digital Audio Conversion & Distribution

MP-DAC converts coaxial or Toslink digital audio to analog L/R and 3.5mm audio outputs, while also providing a COAX SPDIF output for digital audio extension.

CORE FUNCTION

One digital audio source can be distributed to three audio outputs: RCA L/R,

Source: MP-DAC User Manual, Version MP-DAC_2025V1.0

Key Features

- Splits one audio source into three audio outputs.
- Converts coaxial or Toslink digital audio input to analog L/R and 3.5mm audio output.
- Provides COAX SPDIF output for digital audio extension.
- Supports up to 24-bit / 192 kHz input; PCM, Dolby Digital and DTS are supported for digital audio extension only.
- Micro-USB power connection; easy installation and simple operation.
- Compatible with CD/DVD, PS3, X-Box 360, Blu-ray players, computers and A/V receivers.
- Ideal for interfacing modern digital A/V devices with analog amplifiers or self-powered speakers.

System Diagram

Clear vector-style redraw of the typical connection shown in the supplied manual (page 3).

DIGITAL SOURCES	MP-DAC	OUTPUTS
Blu-ray Player Game Console	Digital Audio Converter / 1×3 Splitter TOSLINK IN + COAX IN Digital → Analog conversion COAX SPDIF digital extension	RCA L/R → Speaker / Amplifier 3.5mm Stereo → Headset / Powered Audio COAX OUT → Digital Audio Extension

Signal & Routing Notes

- **Input:** 1 × TOSLINK IN and 1 × COAX IN.
- **Analog outputs:** 1 × 3.5mm stereo and 1 × L-OUT-R (RCA).
- **Digital output:** 1 × COAX OUT for digital audio extension.
- **Input priority:** if both TOSLINK and COAX are connected, the coaxial audio source is selected.

ENGINEERING NOTE

The manual's original system connection is pictorial. This redraw preserves the documented signal flow in a cleaner format for print and zoomed viewing.

Technical Specifications

Values below are taken directly from the supplied MP-DAC User Manual.

Audio Input

Audio Input	(1) TOSLINK IN, (1) COAX IN
Audio Format	LPCM 2CH, Dolby Digital 2/5.1 CH, DTS 2/5.1CH (only PCM supports format conversion)
Sample Rate	32, 44.1, 48, 96, 192 kHz, up to 24 bit

Analog Audio Output

Audio Output	(1) 3.5mm stereo audio, (1) L-OUT-R (RCA)
Audio Format	PCM
Frequency Response	20 Hz – 20 kHz, ± 3 dB
Max Output Level	2.0 Vrms ± 0.5 dB; 2 V = 16 dB headroom above -10 dBV (316 mV) nominal consumer line level signal
THD+N	< 0.05% (-80 dB), 20 Hz – 20 kHz bandwidth
SNR	> 80 dB, 20 Hz – 20 kHz bandwidth
Crosstalk Isolation	< -80 dB, 10 kHz sine at 0 dBFS level (or max level before clipping)
L-R Level Deviation	< 0.3 dB, 1 kHz sine at 0 dBFS level (or max level before clipping)
Output Load Capability	1 k Ω and higher (supports 10 $\times$ paralleled 10 k Ω loads)
Background Noise	< -80 dB

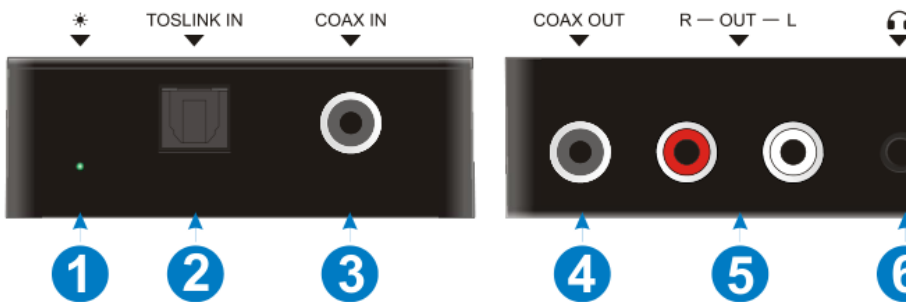
Digital Audio Output

Audio Output	(1) COAX OUT
Audio Format	LPCM 2CH, Dolby Digital 2/5.1 CH, DTS 2/5.1CH (only PCM supports format conversion)
Output Level	± 0.05 dBFS
Frequency Response	20 Hz – 20 kHz, ± 3 dB
THD+N	< 0.05% (-80 dB), 20 Hz – 20 kHz bandwidth, 1 kHz sine at 0 dBFS level (or max level)
SNR	> 90 dB, 20 Hz – 20 kHz bandwidth
Crosstalk Isolation	< -80 dB, 10 kHz sine at 0 dBFS level (or max level before clipping)
L-R Level Deviation	< 0.3 dB, 1 kHz sine at 0 dBFS level (or max level before clipping)
Noise Level	< -90 dB

General Specifications & Interface Reference

Operating Temperature	-5 ~ +55°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	10% – 90%
Power Supply	Input: 100V~240V AC; Output: 5V DC 1A
Power Consumption	1.3 W (Max)
Dimensions (W×H×D)	66.0 mm × 22.5 mm × 66.0 mm
Net Weight	50 g

Panel & Connector Reference



- ① **Power LED:** The LED illuminates b
applied.
- ② **TOSLINK IN:** Toslink audio input.

No.	Interface	Function
1	Power LED	Blue when power is applied.
2	TOSLINK IN	Toslink audio input.
3	COAX IN	Coaxial audio input.
4	COAX OUT	Coaxial audio output.
5	L-OUT-R	RCA audio output.
6	3.5mm	3.5mm stereo audio output.
7	DC 5V	Micro-USB power connection.

PACKAGE CONTENTS

1 × MP-DAC Digital Audio Converter • 1 × Power Cord (USB-A to Micro-USB) • 1 × User Manual

TYPICAL APPLICATIONS

Digital audio breakout for Blu-ray players, game consoles, computers and A/V receivers; connection to analog amplifiers, self-powered speakers and headsets; digital audio extension via COAX SPDIF.