

## Cambridge Audio DACMAGIC 200M

# Cambridge Audio DacMagic 200M User Manual

High-Performance Digital-to-Analog Converter and Headphone Amplifier

## 1. INTRODUCTION

The Cambridge Audio DacMagic 200M is a high-performance Digital-to-Analog Converter (DAC) and headphone amplifier designed to enhance your digital audio experience. It processes digital audio signals from various sources, converting them into high-fidelity analog sound for your amplifier, active speakers, or headphones. The DacMagic 200M supports high-resolution audio formats, including MQA, DSD, and PCM up to 32-bit/768kHz.

## 2. KEY FEATURES

- **Exceptional Sound Conversion:** The DacMagic 200M utilizes dual ESS Sabre DAC converters to deliver precise digital-to-analogue conversion, improving the sound quality of digital audio systems.
- **MQA Support:** This device is Cambridge Audio's first product to support MQA (Master Quality Authenticated), providing studio-quality sound from compatible streaming services.
- **High-Resolution Audio:** Capable of handling digital audio files up to 32-bit/768kHz PCM and DSD512, ensuring compatibility with a wide range of high-resolution music.
- **Versatile Connectivity:** Features digital optical, digital coaxial, and USB inputs for connecting CD players, game consoles, computers, and other digital equipment.
- **Bluetooth aptX:** Integrated Bluetooth with aptX allows for high-quality wireless audio streaming from smartphones and tablets.
- **Selectable Digital Filters:** Offers 'Fast', 'Slow', and 'Short Delay' digital filter options to customize the audio output to your preference.
- **Integrated Headphone Amplifier:** A dedicated high-quality headphone amplifier provides an excellent listening experience through headphones.

## 3. SETUP

### 3.1 Unpacking and Placement

Carefully remove the DacMagic 200M from its packaging. Place the unit on a stable, flat surface away from direct heat sources or excessive moisture. Ensure adequate ventilation around the unit.

## 3.2 Power Connection

Connect the supplied power cable to the 'DC 12V 2A' input on the rear panel of the DacMagic 200M and then to a suitable mains power outlet. Use only the power supply provided with the unit.

## 3.3 Connecting Source Devices

The DacMagic 200M offers multiple digital inputs:

- **USB Audio:** For connecting to a computer (PC/Mac). Use a USB Type-B cable.
- **Optical (Toslink):** Two inputs (D1, D2) for devices like CD players, TVs, or game consoles.
- **Coaxial (S/P DIF):** Two inputs (D1, D2) for devices like CD players or network streamers.
- **Bluetooth:** For wireless connection from smartphones, tablets, or other Bluetooth-enabled devices.

## 3.4 Connecting Output Devices

Connect the DacMagic 200M to your amplifier, active speakers, or headphones:

- **Unbalanced Output (RCA):** Use standard RCA cables to connect to the analog inputs of your amplifier or active speakers.
- **Balanced Output (XLR):** For optimal performance with compatible amplifiers, use XLR cables to connect to the balanced inputs.
- **Headphone Output:** Plug your headphones into the 6.3mm (1/4 inch) jack on the front panel.

16BIT (BLUETOOTH),  
16-24BIT (OPTICAL, COAXIAL),  
16-24BIT (USB)



## DacMagic 200M

The complete rear panel of the DacMagic 200M, detailing all input and output connections including Unbalanced RCA, Balanced XLR, Optical, Coaxial, USB, and power input, along with bit depth information for each input type.

## 4. OPERATING INSTRUCTIONS

### 4.1 Powering On/Off

Press the power button on the front panel to turn the unit on or off. The unit will enter standby mode when turned off.

### 4.2 Source Selection

Press the 'Source' button on the front panel to cycle through the available digital inputs: USB, D1 (Optical/Coaxial), D2 (Optical/Coaxial), and Bluetooth. The active input will be indicated by an illuminated LED.



Front panel of the Cambridge Audio DacMagic 200M, showing input selection, volume knob, filter selection, sample rate indicators, and headphone jack.

## 4.3 Volume Control

The large rotary knob on the front panel controls the volume for the headphone output. It also controls the output level for the pre-amplifier outputs (RCA and XLR) if the unit is configured for variable output. For fixed output, the knob only affects the headphone volume.

## 4.4 Indicator Lights

The front panel features LEDs that indicate the incoming sample rate (MQA, 44.1kHz to 768kHz) and DSD status (64x to 512x). These lights confirm the resolution of the audio signal being processed.



The front panel displaying incoming sample rate indicators (MQA, 44.1kHz to 768kHz, DSD) and icons representing Digital Coaxial, Dual ESS DACs, USB Inputs, and Bluetooth aptX connectivity.

## 5. DIGITAL FILTER SETTINGS

The DacMagic 200M offers three selectable digital filters to fine-tune the audio characteristics:

- **Fast:** A linear phase filter with a steep roll-off, offering a precise and detailed sound.
- **Slow:** A minimum phase filter with a gentler roll-off, often perceived as a more natural or analog-like sound.
- **Short Delay:** A linear phase filter with a short delay, providing a balance between detail and naturalness.

Press the 'Filter' button on the front panel to cycle through these options. Experiment with each filter to find the one that best suits your listening preferences and audio content.



The digital filter selection buttons on the DacMagic 200M, offering 'Fast', 'Slow', and 'Short Delay' options to tailor the audio output.

## 6. MQA PLAYBACK

The DacMagic 200M supports MQA (Master Quality Authenticated) decoding. When playing MQA content, the MQA indicator light on the front panel will illuminate. This confirms that the unit is performing the full MQA unfolding process, delivering the original master recording quality.

To utilize MQA, ensure your streaming service (e.g., Tidal) is configured to output MQA to the DacMagic 200M. On a computer, you may need to adjust settings in your audio player software to allow the DAC to handle MQA rendering.

## 7. BLUETOOTH CONNECTIVITY

The DacMagic 200M features Bluetooth aptX for high-quality wireless audio streaming.

### 7.1 Pairing Process

1. Select the Bluetooth input on the DacMagic 200M using the 'Source' button. The Bluetooth LED will flash, indicating it's in pairing mode.
2. On your source device (smartphone, tablet), enable Bluetooth and search for available devices.
3. Select 'DacMagic 200M' from the list of devices.
4. Once paired, the Bluetooth LED on the DacMagic 200M will glow steadily.

The DacMagic 200M supports aptX, aptX HD, and standard SBC codecs for Bluetooth audio transmission.

## 8. MAINTENANCE

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To maintain the performance and appearance of your DacMagic 200M:

- **Cleaning:** Use a soft, dry, lint-free cloth to clean the unit. Avoid abrasive cleaners, waxes, or solvents.
- **Ventilation:** Ensure the ventilation openings are not blocked. Do not place the unit on soft surfaces like carpets or rugs.
- **Power:** Disconnect the unit from the mains power supply if it will be unused for extended periods.

## 9. TROUBLESHOOTING

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If you encounter issues with your DacMagic 200M, refer to the following common problems and solutions:

- **No Sound:**

- Ensure the DacMagic 200M is powered on and the correct input source is selected.
- Check all cable connections (source to DAC, DAC to amplifier/headphones).
- Verify that your amplifier or active speakers are powered on and set to the correct input.
- For USB connections, ensure the correct audio output device is selected in your computer's sound settings.

- **Distorted Sound:**

- Check for loose cable connections.
- Ensure the source device's volume is not excessively high, causing clipping.
- Try a different digital filter setting.

- **Bluetooth Connection Issues:**

- Ensure the DacMagic 200M is in Bluetooth pairing mode (flashing LED).
- Delete 'DacMagic 200M' from your source device's Bluetooth list and attempt to re-pair.
- Ensure your source device is within range.

- **MQA Indicator Not Lighting Up:**

- Verify that the audio content being played is indeed MQA.
- Check your streaming application or computer settings to ensure MQA passthrough or decoding is enabled and directed to the DacMagic 200M.

## 10. SPECIFICATIONS

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<b>Brand</b>	Cambridge Audio
<b>Model Number</b>	DACMAGIC 200M
<b>DACs</b>	Dual ESS ES9028Q2M
<b>Frequency Response</b>	10Hz to 50kHz ( $\pm 1$ dB)
<b>Max Power Consumption</b>	12W
<b>Signal to Noise Ratio</b>	>115dB (A-Weighted)
<b>Digital Filter</b>	Selectable (Fast - Slow - Short Delay)
<b>Digital Inputs</b>	2x Optical (Toslink), 2x Coaxial (S/P DIF), 1x USB Audio (Type-B), Bluetooth aptX
<b>Analog Outputs</b>	1x Unbalanced RCA, 1x Balanced XLR, 1x 6.3mm Headphone Jack
<b>Supported Digital Formats</b>	PCM up to 32-bit/768kHz, DSD up to DSD512, MQA
<b>Dimensions (H x W x D)</b>	2.0" x 8.6" x 7.6" (approximate)
<b>Item Weight</b>	2.2 pounds

## 11. WARRANTY AND SUPPORT

The Cambridge Audio DacMagic 200M comes with a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Cambridge Audio website. For technical support, product registration, or service inquiries, please contact Cambridge Audio customer support directly.

Official Cambridge Audio Website: [www.cambridgeaudio.com](http://www.cambridgeaudio.com)

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