

Tascam DR-70D

TASCAM DR-70D Portable Audio Recorder and TH-02-B Studio Headphones User Manual

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your TASCAM DR-70D Portable Audio Recorder and TASCAM TH-02-B Studio Headphones. Please read this manual thoroughly before using the products to ensure correct and safe operation.



Figure 1.1: TASCAM DR-70D Portable Audio Recorder and TH-02-B Studio Headphones.

2. PRODUCT OVERVIEW

2.1 TASCAM DR-70D Portable Audio Recorder

The TASCAM DR-70D is a compact 4-channel audio recorder designed for filmmakers, television producers, advertisers, and documentarians. It features four balanced XLR mic inputs with phantom power, built-in omnidirectional microphones, and various recording modes to capture high-quality audio.



Figure 2.1: Angled front view of the TASCAM DR-70D Portable Audio Recorder.

2.2 TASCAM TH-02-B Studio Headphones

The TASCAM TH-02-B headphones are designed for audio monitoring, featuring a closed-back, circumaural design for maximum isolation. They provide a clean sound with rich bass response and crisp highs, suitable for monitoring recordings.





Figure 2.2: TASCAM TH-02-B Studio Headphones.

3. SETUP

3.1 Unboxing and Package Contents

Carefully remove all items from the packaging. Ensure the following components are present:

- TASCAM DR-70D Portable Audio Recorder
- TASCAM TH-02-B Studio Headphones
- Owner's Manual (this document)
- Other accessories (e.g., USB cable, 1/8" to 1/4" adapter for headphones)

3.2 Inserting SD Card

The DR-70D records to SD, SDHC, or SDXC media cards (up to 128GB). Locate the SD card slot on the device, insert the card with the contacts facing down until it clicks into place.

3.3 Powering the Device

The DR-70D can be powered by 4 AA batteries, a USB power adapter, or an optional AC adapter (PS-P515U). Insert batteries into the battery compartment, ensuring correct polarity. Connect a USB cable to a power source for external power.

3.4 Connecting Microphones and Headphones

Connect your microphones to the XLR/TRS inputs (1-4) on the DR-70D. For 3.5mm stereo microphones, use the EXT IN 1/2 jack. Connect the TH-02-B headphones to the PHONES output jack for monitoring.



Figure 3.1: Side view of the DR-70D showing input and output ports.

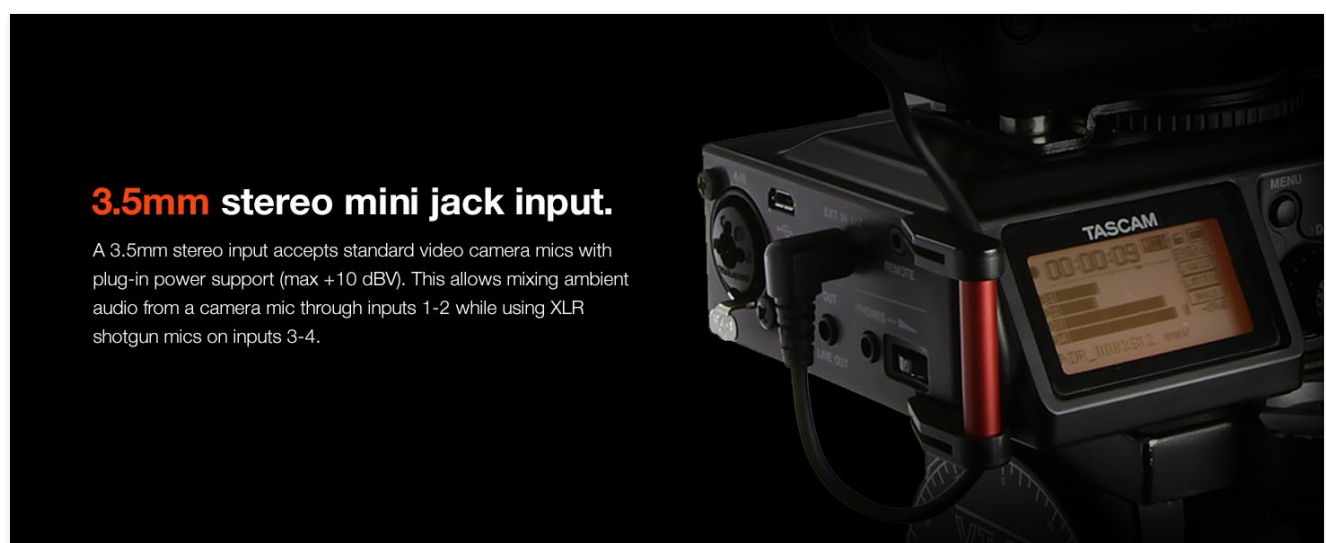


Figure 3.2: Detail of the 3.5mm stereo mini jack input on the DR-70D.

3.5 Mounting the DR-70D

The DR-70D can be mounted above or below a camera using its integrated mounting points. It also features tripod threads on the bottom for mounting on tripods or follow-focus cages.



Figure 3.3: Top view of the DR-70D showing the mounting bracket.



Figure 3.4: The DR-70D mounted on a camera, demonstrating its compact design.

4. OPERATING THE DR-70D

4.1 Basic Controls and Interface

The DR-70D features dedicated controls for quick adjustments. The front panel includes individual gain knobs for each input, peak indicators, a menu navigation system (MENU, DATA, ENTER), and transport controls (PLAY, REC, STOP).



Figure 4.1: Front panel of the DR-70D, showing the display and control knobs.

4.2 Built-in Microphones

The DR-70D includes two built-in omnidirectional microphones for capturing ambient sound or quick stereo recordings without external mics.



Figure 4.2: The DR-70D highlighting its two built-in omnidirectional microphones.

4.3 Recording Modes

The DR-70D offers multiple recording modes to suit various production needs:

- **Mono/Dual Mono:** Ideal for recording a single performer, with the option to record a safety track at a lower level.
- **Stereo/Dual Stereo:** Best for recording with the built-in microphones or an external stereo microphone, also with a safety track option.
- **2MIX/Dual 2MIX:** Creates stereo files from two or more mixed inputs. Dual Recording creates a backup track at up to 12dB lower levels to prevent distortion.

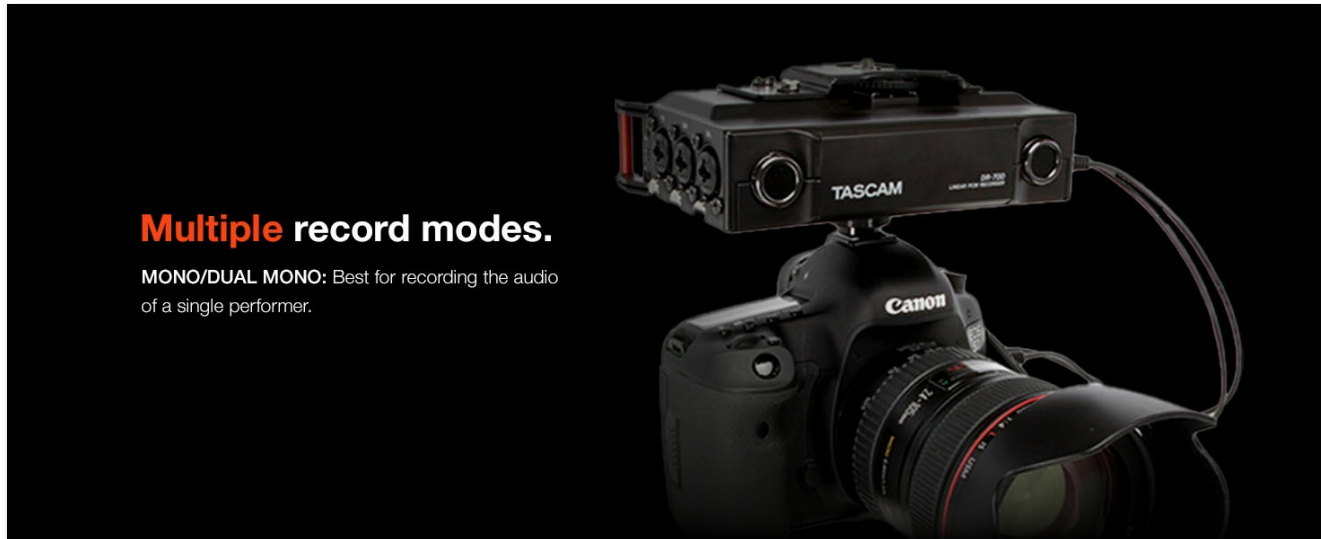


Figure 4.3: DR-70D configured for Mono/Dual Mono recording, mounted on a camera.

Multiple record modes.

2MIX/DUAL 2MIX: Creates stereo files of two or more mixed inputs. Dual Recording creates a backup track at up to 12dB lower levels, capturing a safety copy to prevent distortion if the main recording clips.



Figure 4.4: DR-70D configured for 2MIX/Dual 2MIX recording, utilizing external microphones.

4.4 Input Level Adjustment

Adjust input levels using the individual gain knobs for each channel. Monitor the peak indicators to prevent clipping. The DR-70D also includes a limiter and low-cut filter to optimize audio quality.

4.5 Built-in Mixer

The DR-70D features a built-in mixer with four inputs and two outputs. This allows for individual recording and stereo mixing, with per-input features like pan, limiter, low-cut filter, delay, and mid-side decoding.



Figure 4.5: The DR-70D's screen interface showing mixer settings and audio levels.

4.6 Slate Tone Generator

The built-in slate tone generator produces reference tones for audio/video alignment. These can be added automatically at the start and/or end of recording, or manually by holding the SLATE button.



Figure 4.6: The SLATE button on the DR-70D's control panel.

4.7 Monitoring and Playback

Connect your TH-02-B headphones to the PHONES jack for direct audio monitoring. The DR-70D also features a camera input jack for monitoring playback from your camera and a camera output jack for routing a stereo mix to the

camera for easy synchronization during editing.

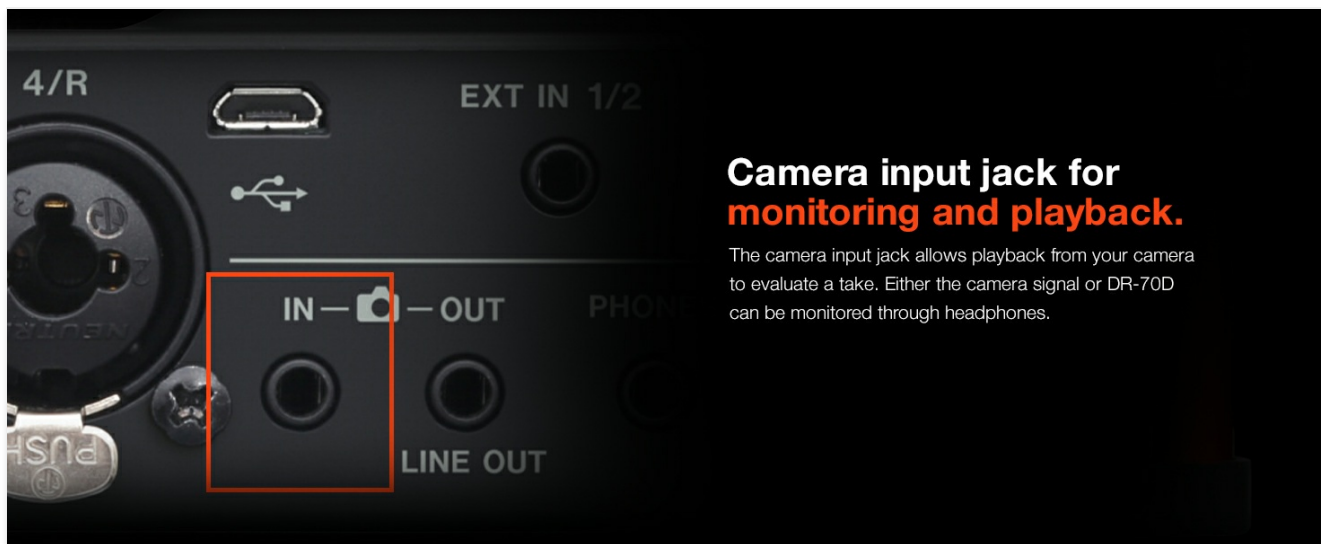


Figure 4.7: The camera input jack on the DR-70D.

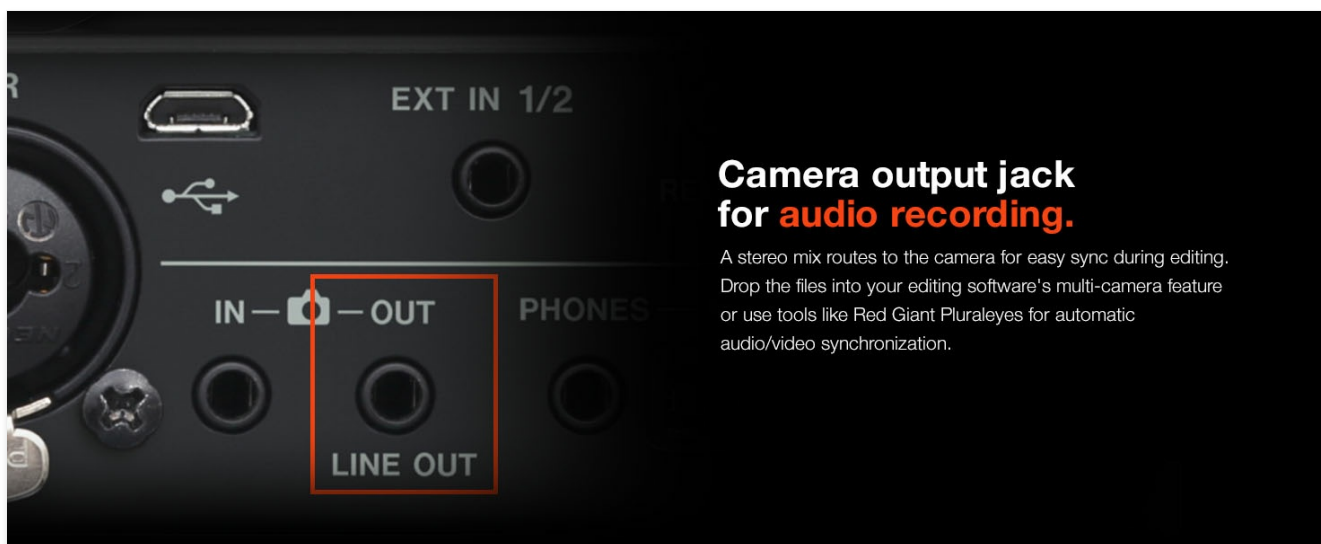


Figure 4.8: The camera output jack on the DR-70D.

5. OPERATING THE TH-02-B HEADPHONES

5.1 Wearing the Headphones

Adjust the headband for a comfortable and secure fit. The circumaural earcups should fully enclose your ears to maximize isolation and sound quality.

5.2 Connecting to Devices

Plug the 3.5mm stereo mini-jack into the PHONES output of the DR-70D or any compatible audio device. Use the included 1/8" to 1/4" adapter for devices with a 6.3mm headphone jack.

5.3 Adjusting Volume

Adjust the headphone volume using the dedicated PHONES level control on the DR-70D or the volume control of your connected audio device.

6. MAINTENANCE

6.1 Cleaning

Wipe the DR-70D and TH-02-B headphones with a soft, dry cloth. For stubborn dirt, use a slightly damp cloth and then dry thoroughly. Do not use abrasive cleaners, solvents, or alcohol, as these can damage the surfaces.

6.2 Battery Care

Remove batteries from the DR-70D if the unit will not be used for an extended period to prevent leakage. Use high-quality alkaline or NiMH rechargeable batteries for optimal performance.

6.3 SD Card Handling

Always format new SD cards in the DR-70D before first use. Avoid removing the SD card during recording or playback to prevent data corruption. Store SD cards in a protective case when not in use.

7. TROUBLESHOOTING

7.1 No Power

- Check if batteries are inserted correctly and have sufficient charge.
- Ensure the USB power source is connected and functional.
- Verify the power switch is in the ON position.

7.2 No Audio Input/Output

- **Input:** Check microphone connections, ensure phantom power is enabled if required, and verify input gain levels are not set to minimum.
- **Output:** Ensure headphones are properly connected and the PHONES level is adjusted. Check if the correct output source is selected in the menu.

7.3 Distorted Recordings

- Reduce input gain levels to prevent clipping (peak indicators should not consistently light red).
- Engage the limiter function in the DR-70D settings.
- Utilize the Dual Recording mode to capture a safety track at a lower level.

7.4 Recording Errors

- Ensure the SD card has sufficient free space.
- Try formatting the SD card (this will erase all data).
- Use a high-speed SD card (Class 10 or higher recommended).

8. SPECIFICATIONS

8.1 TASCAM DR-70D Portable Audio Recorder

Feature	Specification
Hardware Interface	Secure Digital Card
Microphone Form Factor	Built-In

Feature	Specification
Format	WAV
Digital Recording Time	120 hours (approximate, depending on card size and settings)
Microphone Operation Mode	Stereo
Headphones Jack	3.5 millimeters
Inputs	4 x XLR/TRS combo, 1 x 3.5mm stereo mini-jack
Phantom Power	24V/48V selectable
Preamp Gain	Up to 64dB (HDDA Mic Preamps)



Figure 8.1: Front and back views of the TASCAM DR-70D.

8.2 TASCAM TH-02-B Studio Headphones

Feature	Specification
Design	Closed-back, Dynamic
Earcups	Circumaural
Connectivity	Wired (3.5mm stereo mini-jack with 1/4" adapter)
Foldable Design	Yes

9. SUPPORT INFORMATION

For technical support, warranty information, or service inquiries, please refer to the official TASCAM website or contact TASCAM customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

 <p>TASCAM DR-70D Linear PCM Recorder for DSLR</p>	<p>TASCAM DR-70D Owner's Manual</p> <p>Comprehensive owner's manual for the TASCAM DR-70D Linear PCM Recorder, detailing setup, operation, safety precautions, and specifications for DSLR users.</p>
 <p>POCKET GUIDE 1/2017</p> <p>TASCAM</p>	<p>TASCAM Pocket Guide: Portable Audio Recorders</p> <p>Explore the full range of TASCAM portable audio recorders, including handheld devices, multi-track recorders, and mic-attachable units. Discover features, specifications, and models for professional and creative audio capture.</p>
 <p>POCKET GUIDE Full Product Range 2019</p> <p>TASCAM</p>	<p>Tascam Pocket Guide: Full Product Range 2019</p> <p>Explore the comprehensive Tascam product range for 2019, featuring high-quality audio recorders, interfaces, and accessories. Discover detailed specifications and features for models like the DR-44WL, DR-22WL, DR-40X, DR-07X, DR-05X, DR-100 MKIII, DR-680 MKII, DR-10X, and DR-10C.</p>
 <p>TASCAM DR-701D Linear PCM Recorder for DSLR</p> <p>REFERENCE MANUAL</p> <p>HDMI</p>	<p>TASCAM DR-701D Linear PCM Recorder for DSLR - Reference Manual</p> <p>This reference manual provides comprehensive guidance for the TASCAM DR-701D, a professional audio recorder designed to enhance the audio quality of DSLR and video camera productions. It covers features, setup, recording, playback, mixer functions, connectivity, settings, and specifications.</p>
 <p>TASCAM DR-60DMKII Linear PCM Recorder</p> <p>REFERENCE MANUAL</p>	<p>TASCAM DR-60DMKII Linear PCM Recorder Reference Manual</p> <p>Comprehensive reference manual for the TASCAM DR-60DMKII Linear PCM Recorder, detailing its features for high-quality audio recording with DSLR cameras, including setup, operation, recording modes, connectivity, and specifications.</p>
 <p>TASCAM DR-701D Linear PCM Recorder for DSLR</p> <p>HDMI</p>	<p>TASCAM DR-701D Linear PCM Recorder for DSLR: Owner's Manual</p> <p>This document is the owner's manual for the TASCAM DR-701D Linear PCM Recorder for DSLR. It provides comprehensive instructions on setup, operation, recording, playback, connectivity, troubleshooting, and technical specifications, ensuring users can effectively utilize the device for professional audio capture.</p>