BOYA

BY-DMR7

Shotgun Microphone with Integrated Flash Recorder
for DSLR Cameras and Video Cameras

Product Introduction

BOYA BY-DMR7 is a broadcast quality condenser microphone specially designed for DSLR cameras and camcorders. The integrated flash recording allows you to record 24-bit/48kHz wav audio files to MicroSDHC cards, supporting capacities up to 32GB. It features one-button recording and easy-to-read menu display, making your recording work much easier. The detachable 3.5mm cable connects the BY-DMR7 Recorder to your camera's audio input, while the stereo headphone output allows you to monitor incoming audio. The shock mount system provides isolation from vibration and mechanical noise.

Highlights

- Camera-On Condenser Microphone
- Supercardioid polar pick up pattern
- Records 24-bit/48kHz wav audio to a Micro SDHC card
- Easy-to-use menu system and LCD display
- Detachable 3.5mm Gold-Plated Audio Cable
- Switchable low-cut filter
- 3.5mm headphone monitor input
- Standard size shoe mount
- Includes Foam Windscreen

Packing List

- One BY-DMR7 unit
- One pop wind shield
- One 3.5mm audio transmission cable
- User manual

Product Structure

1. Foam windshield
2. Battery compartment
3. Memory card compartment
4. Audio output jack
5. Headphone jack
6. LCD Display
7. Control panel
8. Camera shoe mount

Quick Setup Guide

1. Install two AA batteries and a memory card.

   Installing the battery
   1) Slide the battery compartment
   2) Insert two pieces of AA batteries. Make sure that the + and – signs match the symbols in the compartment.
   3) Replace the battery compartment lid.

Installing the memory card
Insert a MicroSDHC memory card into the card slot with the contacts facing up.
To remove: Press the card to unlock it, then pull it out from the card slot.

> **Note:**
> BY-DMR7 can still work as a microphone even if there is no memory card installed. Please make sure the power is off when you insert or remove the memory card.

2. Attach the BY-DMR7 to the hot shoe of your camera or camcorder. Connect the supplied audio transmission cable from the audio output to the MIC input of your camera or camcorder.

3. Plug a headphone to the headphone output to monitor the audio.

> **Note:**
> The sound can be monitored only on recording screen and playback screen.

4. Set the control panel. Please refer to " Control Panel Introduction."

5. Press the recording button to enter recording screen, and press again to start recording.

Control Panel Introduction

1. Control Panel Structure
1). Power Button : Power or main menu
   Long press the power button to turn on or off the unit.
2). Recording Button: Start, pause or stop recording
3). Five-Position Joystick: Navigates through the menu
4). LCD Screen: Display the menu and settings

2. Control Panel Adjusting Indication

Control Panel		On Recording Screen	On Playback Screen	In Main Menu	In Submenu
Joystick Direction	Left ←	Long press		—	Exit the submenu
	Right →	Set low cut on/off	Play next audio	—	Go to the audio level indication of the audio
	Up ↑	Increase gain volume	Increase the volume	Scroll up	Change parameters only on SYSTEM SET menu
	Down ↓	Decrease gain volume	Decrease the volume	Scroll down	Change parameters only on SYSTEM SET menu
	Center ●	Start/pause recording	Pause/play	Enter	Enter/confirm
Recording Button		Start/pause/stop recording			Enter recording screen
Power Button		Enter Main Menu			

---

3. LCD Screen

1. ● Indicates recording screen.
2. ▶ Indicates playback screen.
3. Microphone volume.
   Press the joystick up and down to adjust volume.
4. Level meter.
5. Power indicator.
6. Elapsed time. This shows the elapsed time (hours: minutes: seconds) of the current file. You can set the maximum elapsed time of every audio file in the main menu.
7. Current file name/total number of files.
8. Recording status.
   ● Record ▶ Pause ■ Stop ▶ Play
9. Folder name
   BY-DMR7 allows you to create maximum 9 folders, every folder can accommodate 200 wav files.
   The screen shows now you are recording No.003 wav file, the wav file will be stored in FOLDER01.
10. Low-cut filter icons. On ✦ Off. —

4. Audio Path

Note: If you want to record the audio into your camera, please make sure the BY-DMR7 is on recording screen.

Operating Menu

```
MENU  SUBMENU
┌ 1 FILE - FOLDER01 - REC-001.wav - Delete File - Yes/No
├ 2 INPUT - low cut on
│          └ low cut off
├ 3 REC SET - file limit - 30 minutes - 60 minutes -
│                          90 minutes - 120 minutes
│            └ sample rate - 24kHz/16bit - 48kHz/16bit -
│                            24kHz/24bit - 48kHz/24bit
├ 4 SD CARD - total - remain - format SD
├ 5 PLAY MODE - single play - single cycle - order play -
│                             content cycle
└ 6 SYSTEM SET - date & time
                - lcd backlight - always on - always off -
                                  5 seconds - 10 seconds - 15 seconds -
                                  30 seconds
                - lcd contrast 1-2-3-4-5
                - version
                - factory rst - Yes/No
```

1. Menu Introduction

- **FILE:** Press joystick center button to browse all recorded files.
  FOLDER01: Folder name
  REC-001.wav: File name.
  Delete File: Select a file and press joystick to right to delete the file. The next file's name will not change if a file is deleted. When you begin to record a new file, it will be named after the deleted file name.
  Note: Once audio files have been deleted, they cannot be recovered.
- **INPUT:** Set low cut filter. Default setting is low cut off.

---

low cut on: BY-DMR7 will filter audio signal that lower than 200Hz to reduce noises.
low cut off: Record original audio.

- **REC SET:** Set recording parameter.
  file limit: Set maximum elapsed time limit. If you set file limit to 30 minutes, a 90 minutes' recording will be divided into 3 separate wav files. Default setting is 60 minutes.
  sample rate: Set sample rate. The higher rate you set, the higher audio quality you will get.
  Default setting is 48kHz/24bit.

Recording Time (hour)

Memory Card \ Sample Rate	24kHz/16bit	48kHz/16bit	24kHz/24bit	48kHz/24bit
16GB	90hrs	45hrs	60hrs	30hrs
32GB(maximum card size)	180hrs	90hrs	120hrs	60hrs

- **SD CARD:**
  total: Total memory storage.
  remain: Remain memory storage.
  format SD: Format SD card will erase all data.
  Please always format new memory cards in the device before recording.
- **PLAY MODE:** Set mode of playback.
  single play: Play one selected wav file for one time.
  single cycle: Play one selected wav file circularly.
  order play: Play wav files in order of file name.
  content cycle: Play all stored wav files in circulation.
- **SYSTEM SET :**
  date & time: Set the date and time so that files include a timestamp when exported.
  lcd backlight: Set background LCD lights. Select LCD backlight on, off or delay 5/10/15/30 seconds.

---

lcd contrast: Set LCD contrast. Default setting is 3.
Set LCD screen contrast from 1 to 5. In LCD contrast screen, press joystick up/down to adjust contrast level. Then press left to exit.
version: version of BY-DMR7 Recorder.
factory rst: Restore the factory settings.

Specifications
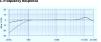
1. Technical Specifications

Type	Condenser Microphone
Polar Pattern	Supercardioid
Recording Format	WAV, 16bit/24bit, 24kHz/48kHz Sampling Rate
Frequency Response	50 Hz to 20 kHz
Maximum SPL	0 dB Gain Setting, 1 kHz at 1% THD; 1000 Ω load 110 dB SPL
Signal to Noise Ratio	78 dB
Operating Temperature Range	+7°C (0°62.6F) to 57°C (134.6°F)
Audio Output Impedance	47Ω
Headphone Output Impedance	5Ω
Plug	3.5mm jack plug
Power	Two AA batteries
Dimensions (L x H x W)	249 x 50 x 95 mm
Net Weight	140g

---

2. Battery Life

Use the following information for reference when considering which battery type to use with the device. Actual runtime may vary depending on the brand of memory card and batteries, output volume levels, and the type of headphones used.

Battery Type (AA)	Battery Runtime (Hours)	
	When Recording	Passing Audio Only
Alkaline	9	10
NiMH	11.5	14.5
Lithium	17	22

3. Frequency Response

4. Polar Pattern