

DR-100

Portable Stereo Recorder



The DR-100, designed for professional recording applications in the field, offers high-quality recording directly in WAV or MP3 format from a rugged metal chassis. You can choose between two pairs of built-in uni-directional and omni-directional microphones, XLR inputs with switchable 48V phantom power and a mini jack line input. This ensures that virtually all fields of application are covered – from music, speech and atmosphere recordings to meeting minutes and live concert recordings. The recording level can be easily controlled by a twin hardware control rather than a menu option. Recordings can be started manually, automatically by level, advanced (by up to 2 seconds), delayed (to prevent key presses from being recorded) or with the help of a remote control. A defeatable loudspeaker for playback is also included. You can make overdubs, manually create a new file during recording, divide a recording and use locate markers. The unit is further equipped with switchable automatic analogue gain control with limiter, a three-frequencies switchable low-cut filter, headphones output, wired remote connector and USB connector.

The DR-100 comes with a 2GB SD card, wireless remote control, windshield and soft case and can be powered either by the included lithium-ion rechargeable, two easily-available AA batteries or an optional AC adapter. The built-in mic stand screw socket allows the unit to be mounted on a tripod or microphone stand.

Main Features

- Handheld digital stereo recorder for professional use
- Rugged metal chassis
- MP3 and WAV file recording and playback
- Records to SD/SDHC card
- Selectable recording formats:
 - 16-bit, 24-bit WAV
 - 32/64/96/128/192/256/320 KBit/s MP3
- 96/48/44.1 kHz sampling rates supported
- Four built-in high-quality condenser microphones
 - Two uni-directional microphones for stereo recording
 - Two omni-directional microphones for minutes recording
- Two XLR mic inputs with switchable +48V phantom power
- High-performance mic preamp provides wide range of gain (-58 dBu to +2 dBu)
- Use of Audio4pro™ family AD/DA converters by AKM with more than 100 dB SN ratio
- Stereo line input with adjustable level to connect an external source (mini jack)
- Dual hardware controls for intuitive recording level setting
- Switchable low-cut filter (40 Hz, 80 Hz, 120 Hz)
- Analogue auto gain control

- Delayed recording feature to prevent the DR-100 from recording a touch noise of keystroke
- Auto recording feature (recording is automatically started when the input signal exceeds a threshold level)
- Overdub feature to add narration, singing or instruments to an existing recording
- **■** Locate markers
- File renaming (Date/User Word)
- File devide function (to cut unwanted noise for instance)
- Create a new file during recording (manually or by file size)
- Quick menu allows deleting or tagging a file directly from the home screen
- Playback features include:
 - In/Out loop
 - Folder or playlist playback
 - MP3 ID3 tag display (up to version 2.4)
 - Pitch control (-50 % to +16 %)
 - Tempo control without affecting the key
- Stand adapter (¼ inch) on bottom side to attach the unit to a tripod or microphone stand
- 2-Gigabyte SD card included
- USB 2.0 connection for file transfer to/from computer

- Analogue limiter to prevent clipping (hardware switchable on/off)
- Built-in monitor speaker (hardware switchable on/off)
- Headphones output with level control (mini iack)
- Separate stereo line output (mini jack)
- Pre-recording buffer (2 seconds) allows a recording to start before the record key is pressed
- Two options of battery operation: BP-L2 lithium-ion rechargeable (included for long time operation) or two easy-to-find AA batteries
- Wired remote control, windshield, and softcase included as standard
- Optionally available:
 - **BP-L2** replacement battery
 - PS-P520 AC adapter

Specifications

Audio inputs and outputs	
Microphone inputs	XLR-3-32 equivalent (balanced) switchable 48V phantom power
Input impedance	1.2 kOhm
Nominal input level	-58 dBu (GAIN HIGH) -36 dBu (GAIN MID) -14 dBu (GAIN LOW)
Maximum input level	–42 dBu (GAIN HIGH) –20 dBu (GAIN MID) +2 dBu (GAIN LOW)
Line input	3.5 mm stereo minijack
Input impedance	23 kOhm
Input level (nominal/maximum)	-10 dBV/ +6 dBV
Line output	3.5 mm stereo minijack
Output level (nominal/maximum)	-10 dBV/ +6 dBV
Headphones output	3.5 mm stereo minijack
Maximum output power	25 mW + 25 mW (at 32 Ohm)
Built-in loudspeaker	0.4 W output

Audio performance (LINE IN > LINE OUT)	
Frequency response	20 Hz-20 kHz, +1/-3 dB (44.1 kHz) 20 Hz-22 kHz, +1/-3 dB (48 kHz)
	20 Hz - 42 kHz, +1/-3 dB (96 kHz, Line input, XLR mic input)
Distortion	Less than 0.01%
S/N ratio	90 dB or more

Audio file compatibility	
MP3 files	Bit rate: 32–320 KBit/s, variable bit rate (playback only), Sampling frequency: 44.1/48 kHz, ID3 tag support up to Version 2.4
WAV files	Sampling frequency: 44.1/48/96 kHz Bit length: 16/24-bit
Recording medium	SD card (64 MB-2 GB) or SDHC card (4-32 GB)
File system	FAT partition: FAT16/32

Computer requirements	
Supported OS	Windows 2000 Professional SP4 or newer, Windows XP, Windows Vista, Windows 7, Mac OS X 10.2 or newer
Windows	Pentium 300 MHz or better 128 MB or more memory
Macintosh	266 MHz Power PC, iMac, G3, G4 or better 64MB or more memory
USB port	USB 2.0 recommended
USB host controller	Intel chipset recommended

Power supply and other specifications	
Power supply	Lithium-ion battery (BP-L2, included) or
	NiMH rechargeable batteries (HR15/51) or Alkaline batteries (LR6) or
	PS-P520 AC adapter (available for purchase)
Battery life (continuous operation, backlight off, MP3 at 128 KBit/s, varies with operating conditions)	Lithium-ion: About 5 hours (recording or playback) NiMH: About 4 hours (recording or playback) Alkaline: About 2 hours (recording or playback)
Operation temperature range	0-40 °C
Power consumption	1.7 W (MP3 playback) 5.5 W (maximum)
External dimensions (W x H x D)	80 mm x 153 mm x 35 mm (excluding protrusions)

Weight	0.29 kg (not including batteries)
Accessories available for purchase	BP-L2 replacement battery
	PS-P520 AC adapter

Design and specifications subject to change without notice. Last modified: 2010-10-07 14:39:19 $\ensuremath{\mathsf{UTC}}$