

# HD-P2

## Portable High-Definition Stereo Recorder



Answering the call of remote recording engineers, the HD-P2 is the professional solution for the challenging requirements of live and on-location applications. It writes uncompressed Broadcast Wave audio files at up to 192-kHz/24-bit resolution for audiophile quality to CompactFlash media. Files are instantly available through the built-in high-speed FireWire computer connection and can be loaded into DAW projects with sample accuracy.

Unlike consumer MP3 sketchpads, the professional HD-P2 incorporates high-end features like SMPTE timecode and clock input for synchronization to video recorders or other external devices while in record or playback. Its XLR microphone inputs include phantom power and a limiter to curb unpredictable distortion during live events. The user interface has been designed for fast and intuitive use under stressful one-take-only situations, and with its large, angled LCD, the HD-P2 is perfect for any application from over-the-shoulder location recording to concert recording and commercial use.

### Recording time

The following chart provides approximate recording times for the HD-P2. To use the chart, first find the audio resolution you plan to record in. Move down the chart to find the length of recording time you need. Then move left to see what size CompactFlash card you'll need to use.

Recording time depending on memory size and recording resolution (Hours:Minutes)

CF Card	44.1k/16-bit	48k/16-bit	48k/24-bit	96k/24-bit	192k/24-bit
<b>512MB</b>	00:50	00:46	00:31	00:15	00:07
<b>1GB</b>	01:36	01:30	01:00	00:30	00:15
<b>2GB</b>	03:18	03:06	02:00	01:00	00:30
<b>4GB</b>	06:42	06:12	04:06	02:00	01:00
<b>8GB</b>	13:30	12:24	08:12	04:06	02:00

### Main Features

- Portable high-resolution stereo audio recorder for electronic news gathering and other recording tasks in the field
- Recording media: Compact Flash
- Sampling frequencies: 44.1, 48, 88.2, 96, 176.4, 192kHz
- 16-/24-bit Stereo or Mono recording
- Record from 16-bit/44.1kHz up to 24-bit/192kHz
- Audio file format: Time Stamped Broadcast Wave (BWF)
- Two XLR balanced microphone inputs with phantom power and 20dB PAD
- Two RCA unbalanced line inputs
- Limiter on each analogue input
- Low-cut filter on each analogue input
- RCA unbalanced line output
- Coaxial digital input and output (SPDIF)
- XLR timecode input
- BNC external clock input
- Timecode chase with video reference
- Built-in mono speaker and mono microphone
- PS/2 Keyboard input
- Large high resolution 240x160 LC Display
- Uses AA batteries for over 5 hours of continuous operation
- Easy and fast file transfer to PC or Mac via FireWire or CF card reader
- Durable and lightweight housing for field use
- Supplied accessory: Shoulder Belt

### Specifications

**General**

Recording media	CompactFlash cards
File system	FAT16, FAT32
Recording format	Broadcast Wave audio files (BWF)
Quantization	16/24 bit linear
Sampling frequencies	44.1/48/88.2/96/176.4/192 kHz
External clock	SPDIF, Video (NTSC or PAL), LTC, Word
Frame rates	23.976, 24, 25, 29, 29.97 DF/NDF, 30 DF/NDF

**Audio inputs and outputs**

MIC input	2 x XLR-3-31 (1: GND, 2: HOT, 3:COLD)
Input impedance	1.3 k $\Omega$
Input level	-60 dBu (Trim max) to -13.8 dBu (Trim min)
Maximum gain	46.2 dB
Headroom	16 dB (22 dB with limiter)
PAD	20 dB
LINE input	2 x RCA
Input impedance	10 k $\Omega$
Input level	-46.2 dBV (Trim max) to 0 dBV (Trim min)
Maximum gain	46.2 dB
Headroom	16 dB
LINE output	2 x RCA
Output impedance	100 $\Omega$
Nominal output level	-10 dBV
Maximum output level	+6 dBV
DIGITAL input	RCA (coaxial)
Input impedance	75 $\Omega$
Audio format	IEC60958 (SPDIF)
Quantization	24 bit
DIGITAL output	RCA (coaxial)
Output impedance	75 $\Omega$
Audio format	IEC60958 (SPDIF)
Quantization	24 bit
PHONES	6.3-mm stereo phone jack
Maximum output power	55 mW + 55 mW (at 32- $\Omega$ load)
Built-in loudspeaker	
Output power	500 mW
Impedance	16 $\Omega$

**Other inputs and outputs**

TIMECODE INPUT	XLR-3-31 (1: GND, 2: HOT, 3:COLD)
Input impedance	75 $\Omega$
VIDEO INPUT	BNC
Input impedance	75 $\Omega$
KEYBOARD	PS/2
FIREWIRE	IEEE 1394 (6-pin)
Format	IEEE1394 (Asynchronous)
Baud Rate	400 Mbps

**Audio performance**

Frequency response	20 Hz to 20 kHz, $\pm$ 1.0 dB (44.1/48 kHz) 20 kHz to 40 kHz, +0.5 dB/-3.0 dB (88.2/96 kHz) 40 Hz to 80 kHz, +0.5 dB/-20.0 dB (176.4/192 kHz)
Dynamic range	> 105 dB(A) (MIC to LINE OUT, 44.1 kHz, 22-kHz LPF)
Total harmonic distortion	< 0.01 % (1 kHz, MIC to LINE OUT, max level (22-22,000 Hz), Trim min, 22-kHz LPF)
Crosstalk	> 80 dB (1 kHz)
Delay	1.5 ms (44.1 kHz) 0.7 ms (192 kHz)
Limiter attack time	< 25 $\mu$ s
Limiter release time	< 50 ms
Low Cut filter	100 Hz (-18 dB/Oct.)
Phantom Power	+48 V, 10 mA

**Power supply and other specifications**

AC adapter input voltage	100 V AC, 50–60 Hz 120 V AC, 60 Hz 230 V AC, 50 Hz 240 V AC, 50 Hz
AC adapter output voltage	12 V DC (600 mA)
Batteries	8 x AA (SUM-3), Alkaline, NiMH (recommended), NiCd
Power consumption	6 W (with CompactFlash)
Operating temperature	0 °C to 35 °C
Display	240 x 160 px with backlight
Dimensions (W x H x D)	245 mm x 188 mm x 60 mm
Weight	1.2 kg (excluding batteries and AC adapter)
Supported operating systems	Windows XP, Mac OS X (10.3 or higher)

Design and specifications subject to change without notice.

Last modified: 2015-02-12 12:33:11 UTC