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For Portable Recorders use Quick Dial #: 94
For Mixers and Communications use Quick Dial #: 91

Portable Recorders .........................701-715
Portable Mixers ............................716-721
Communication Equipment ...722-733
High Resolution WAVE/MP3 Recorder

Broadcasters and journalists can throw away their antiquated cassette recorders. A high-definition recorder that travels light and performs like a heavyweight, the R-09HR delivers crystal-clear 24-bit/96kHz linear PCM high-resolution, low-noise recording—while small enough to fit in a shirt pocket. Ideal for in-the-field interviews, the R-09HR records to SD (Secure Digital) cards and is compatible with SDHC (High Capacity) cards as well. It has a built-in, high-grade stereo condenser microphone for high quality recording, and accepts mic and line level signals via its two 1/8" stereo inputs. A USB 2.0 port lets you transfer files to and from your computer. Record for up to 4 hours on two AA batteries.

FEATURES

◆ Experience precise audio reproduction, and clarity with a wider dynamic range when using the higher bit and sample rates that the R-09HR offers. The R-09HR supports up to 24bit/96kHz linear PCM recording, which has over twice the digital audio resolution of a standard audio CD.

◆ Seamless manual file splitting allow you to easily demarcate unique interview subjects and/or audio subjects without interrupting the recording.

◆ Small enough to fit in a shirt pocket, it has a new tactile feel that is easy to grip. It also has a user-friendly graphic display for ultra easy operation. The large 1.5" OLED (Organic Light-Emitting Diode) display provides wide view-ability, at-a-glance level meters, peak indicators, and additional recording information on the screen.

◆ Runs 5.5 hour playback and 4 hour recording life when using two AA batteries, or just use the included AC adapter.

◆ A preview monitor (small speaker) is built in allowing you to check out the recorded sounds right after the recording— no need for headphones.

◆ Via USB 2.0 a 600 MB recording at 44.1 kHz/16-bit takes only 5 minutes to transfer to a computer.

◆ Includes a wireless remote control for recording and playback convenience.

◆ Bundled with Cakewalk’s “pyro Audio Creator LE” software. Perfect for WAV/MP3 audio file editing; to trim cut, or fade audio sections, to burn audio collections to CD, publish a web page with sounds, to publish sections, to burn audio collections to CD, and/or audio subjects without interrupting the recording.

◆ No extra gear to buy, no cables to connect, just point and record. A professional quality stereo mic is built into the unit, complete with a dedicated analog input control, mono/stereo selector, low-cut filter, limiter/AGC (Auto Gain Control), and a gain boost. The onboard electret condenser microphone elements are very compact, ultra-sensitive, and placed to capture three-dimensional sound naturally and accurately. To avoid possible noise interference from internal components, the microphone housing is separated from the main circuit board.

◆ To further improve quality, the R-09HR incorporates I.A.R.C. (Isolated Adaptive Recording Circuit) to optimize recording with the onboard A/D converter. Electrolytic capacitors provide stable, reliable power with an independent power source for the analog circuitry, and another power source for the digital circuit board, eliminating DC interference between components. This also contributes to high-quality, low noise MP3 recording with the R-09HR.

OPTIONAL ACCESSORIES

Stereo Microphone Kit (Mfr # CS-15 • B&H # EDCS15): A compact stereo microphone with a cardioid pickup pattern, foam windscreens, desktop stand, and a hand-held pistol grip that can be mounted to a mic stand. Connects with a standard stereo mini plug. Ideal for recording in the field .................99.50

Cover and Stand Set (Mfr # OP-R09HR-C • B&H # EDOPR09HRC): Comprised of a protective cover and a small tripod. The cover has cut-outs for accessing the controls, plus a belt clip, and a screw hole for attachment to the tripod base.................54.95

Carrying Pouch (Mfr # OP-R09HR-P • B&H # EDOPR09HRP): A stylish cushioned carrying pouch with a belt clip and a pocket for accessories such as batteries and SD cards..................39.00

Carrying Case (Mfr # CB-R09S • B&H # EDCBR09S): A padded nylon carrying case with dual carry straps for easy transport .................................................................32.95

Silicone Case Rubber Case (Mfr # OP-R09HR-S • B&H # EDOPR09HRS) .........................................................29.00

Microphone Stand Adapter (Mfr # OP-R09M • B&H # EDOPR09M): Allows you to mount the R-09HR on the microphone stand even when it is fitted with the OP-R09HR-C protective cover. The adapter has a swivel ball joint for angle adjustments .....................................17.95

R-09HR (Mfr # R-09HR • B&H # EDR09HR): Includes AC Adapter, Remote Control, Stand, 512MB SD Memory Card, USB cable and Pyro Audio Creator LE software ....................................................399.00

(212) 444-6601 • 1-800-947-9901 • Quick Dial 94

EDIROL
R-44

Compact 4-Channel Field Recorder

The R-44 is a compact solid-state field recorder that can record up to four channels of uncompressed 16-bit or 24-bit audio at up to 96kHz, and two channels of audio at 192kHz. It features four balanced XLR / 1/4” combo mic / line inputs, with switchable phantom power for each input. There are also two built-in condenser microphones for stereo recording, as well as coaxial S/PDIF digital I/O, line-level RCA inputs and outputs. Additionally, a control Sync terminal allows you to connect two R-44s together for a total of eight channels of audio. The R-44 records to SD or SDHC cards. Records for up to four hours using only four AA alkaline or NiMH batteries.

- Records onto SD cards or large capacity SDHC cards. No moving parts enables the most silent and reliable operation possible.
- Built-in high quality microphones for stereo recording, and on-board speakers allow you to record and monitor without the need for external equipment.
- Four combo input jacks with both XLR and 1/4” connectors accept mic and line level signals. Individually switchable phantom power is available for the mic inputs.
- Unbalanced RCA line level in/out
- Coaxial S/PDIF digital I/O
- The high contrast, high response organic LED screen, viewable from wide angles ensures fluid operation in field recording situations. The high response of level meters makes precise level adjustments possible.
- USB 2.0 connection allows you to copy data back and forth with your computer using simple drag and drop operation.
- Three types of power operation: AC adapter, external battery or AA batteries. Up to four hours of recording with four AA batteries.
- All the necessary switches and knobs are located on the top and front panels. Self-lit buttons on all the key controls enable clear-cut recording operations.
- Measures 6.2 x 7.25 x 2.4” (WxDxH)
- Weighs 2 lbs. 14 oz.

Built-in Processing and Effects

- An on-board limiter helps suppress sudden peaks in sound from an input source. A low-cut filter helps prevent things like wind noise or mic handling noise.
- On board studio-quality effects are available during recording and playback. They include 3-band EQ, 6-band graphic EQ, Noise Gate, Enhancer, Comp and DeEsser. The Enhancer clearly defines and enhances sound; good for dialogue. Can also generate a stereo mix with specified spread from inputs of Mid-Side microphones.
- Pre-Record function buffers input signals for a user-definable amount of time. When the REC button is pressed, the material from the previous few seconds (selectable) is included. This helps reduce sound bites at the beginning of a recording by not having to start the recorder too early.

R-4 • R-4 PRO

4-Channel Portable Digital Recorder

Geared for pro videographers, the R-4 is equipped with four XLR / 1/4” combo mic line inputs, and built-in stereo microphones and speakers. It supports four channel recording with resolutions up to 24-bit / 96kHz. It has a large LCD display with wave editing, pre-buffer recording, effects, and an on-board limiter. Internal 40GB hard drive provides storage for over 17 hours of 24-bit/96kHz audio. LANC capability provides the means to sync to non-time code equipment. USB 2.0 port lets you do fast back-ups of your projects. Runs on AA batteries or via included AC adapter.

The R-4 Pro shares the R-4’s rugged construction, robust feature set, great sound quality, on-board effects and WAV editing features. However, it steps up with AES/EBU support, SMPTE time code and superb electronics. Record up to four channels at 24-bit 96KHz and monitor each channel discretely. Durable DC input jack allows for industry-standard battery packs to extend record time. Its 80GB hard drive stores up to 34 hours of 24-bit/96kHz audio.
High Quality Recording

- Built-in electret condenser omni-directional stereo microphones provide superb transient characteristics and vibration resistance.
- Five high-quality effects are available during recording or playback: 3-Band EQ, Graphic EQ, Noise Gate, Enhancer, Compressor and DeEsser.

Storage

- An internal 40GB hard disk drive offers up to 17 hours of record time at maximum sound quality or up to 58 hours at CD quality.
- On-board Compact Flash slot offers an alternate read / write drive.

Inputs and Outputs

- Four XLR / 1/4" combo mic / line inputs accommodate mono, stereo, stereo x2, or 4-channel recording.
- Phantom power is switchable in pairs for the mic inputs.
- S/PDIF digital input and output.
- The analog limiter helps capture recordings free from digital clipping.
- The pre-recording function uses a buffer to capture audio even before the record button is pressed, thus preventing missed recording opportunities.
- LANC terminal lets you sync with a compatible video camera and control the R-4's record and playback functions. Gives you another two audio channels.
- USB 2.0 port and headphone jack

General

- Large 128 x 68 LCD display allows direct waveform editing with a shuttle wheel that accommodates scrubbing for locating precise edit points.
- The jog dial allows you to fast-forward or rewind at any of seven speed levels.
- Waveform editing functions include: Trim (Delete), Divide (Split), Combine (Append) and Merge (Bounce).
- The A-B repeat function allows you to set two points and repeatedly play back the material between them.
- Built-in speakers make it easy to monitor recorded sound without headphones.

R-4 Pro Step-up Features

- 24 bit / 192 kHz resolution files can be saved as WAV files as well as BWF files.
- Accepts SMPTE time code which enables it to slave to video cameras or VCRs. Four channels of high quality audio can be fully synchronized with video. In addition, the R-4 Pro can also act as the master, sending out time code to slave devices.
- 80GB internal hard drive can store up to 17 hours of 24-bit/192kHz audio.
- XLR connectors provide AES/EBU digital input and output for use with pro audio and video equipment.
- 4-pin XLR battery power input is compatible with pro video battery manufacturers such as Anton-Bauer, IDX and PAG.

Advantages of 4-Channel Recording

- Capture more ambient sound at any shoot for an overall more convincing soundscape.
- Place mics on each participant conferences, panels, reporters, etc.
- Redundancy or backup in case of camera mic noise or drop out.
- Simplify wedding shoots with a mic on the bride, groom, officiator and a mic for ambient sound.
- Video editing environments now support multi-channel audio as standard.

Recorders Pricing

R-4 (Mfr # R4 • B&H # EDR4)
Includes AC adapter, USB cable, carrying case with shoulder strap .................................... 895.00

R-4 Pro (Mfr # R4PRO • B&H # EDR4PRO)
Includes AC adapter, USB cable, carrying case with shoulder strap .................................... 1995.00

OPTIONAL ACCESSORIES

R-4 Hard Shell Travel Case (Mfr # SHCR4 • B&H # EDHSCR4)
Compact, lightweight, and solidly constructed travel case. It safely holds the R-4 or R-4 Pro and all accessories including CS-50 microphone and AC adapter. With locking latches and keys for complete protection........................................ 195.00

Porta Brace AR-R4 Case (Mfr # AR-R4 • B&H # POARR4)
Custom designed for the R-4 and R-4 Pro, this case is foam padded to protect the recorder from the hazards of every day work. The flaps, clear vinyl windows and protective coverings provide access to cassettes, batteries, cables, dials and switches. It has extra room for spare cassettes, batteries, wireless microphones, and other small items. Includes a comfortable suede shoulder strap........................................ 154.95

CS-50 Stereo Shotgun Microphone (Mfr # CS50 • B&H # EDCS50)
The Edirol CS-50 is a compact, light-weight stereo shotgun condenser microphone designed for the videographer, broadcaster, sound designer and recording artist. It features bass roll-off capability as well as selectable wide stereo or narrow (focused) polar patterns. The package includes windscreen, desktop prop, mic stand adapter, 6' XLR cable and soft case ........................................ Call
FR-2LE
CompactFlash Stereo Field Recorder

Designed for professionals in the field, the FR-2LE uses CompactFlash Type II cards to capture audio in Broadcast WAV Format (BWF) at 24-bit 96kHz quality. It's equipped with built-in stereo microphones as well as two XLR / 1/4" combo mic/line inputs with phantom power and precise control over the recording level. Monitoring is done via a built-in speaker and a 1/8" headphone jack. Can run for up to eight hours using NiMH batteries. Unique 1 take equals 1 file recording system eliminates overwrites and the 2-second ‘pre-record’ buffer means there should never be a missed take or lost soundbite. MP3 mode offers long form recording options for interviews.

- Light weight, yet tough with a highly rigid chassis
- Two-hour capacity on 4GB CF card with stereo 24-Bit/96 kHz resolution
- FAT32 file system supporting BWF and 192kbps MP3 recording and playback
- Built in Automatic Level Control and Limiter
- Switchable HPF (12dB/Oct @ 100Hz)
- Two XLR / 1/4" combo mic/line inputs with phantom power and recording level control
- Unbalanced RCA monitor outputs
- Built-in monitor speaker and 1/8" stereo headphone output
- USB 2.0 allows direct connection to PC and MAC for easy, high speed file transfer.
- Locate Memory with 99 Cue points per file
- Highly visible, low power backlit dot matrix (132 x 64) LCD display.
- Runs 8 hours on NiMH batteries. Also includes AC adapter.

Fail Safe Recording
- 1 take = 1 file system eliminates overwrites
- Auto File Closing closes files at one minute intervals, thus preserving the data in the event of a power failure.
- 2 second Pre Rec buffer

FR-2 LE (Mfr # FR2 LE • B&H # FOFR2LE)
Includes 128MB CF Card, AC Adapter, shoulder strap, wired remote control with mic attachment belt and carry pouch .............. $599.00

PD204 • PD606
Portable Professional DVD / HD Location Recorders

Designed from the ground up to excel in ‘real-world’ applications, the PD204 and PD606 offer spectacular audio quality, flexible multi-drive recording options, rock solid timecode implementation, extended battery life, loads of ‘instant access’ knobs, buttons and switches plus a whole battery of interface options. But impressive features are only part of the script. Fostex’s unrivaled pedigree in designing and manufacturing world class location recorders for over 16 years and their unique understanding of the broadcast, film, TV and audio acquisition environments means that these recorders aren’t just the best PD recorders ever, they’re simply the best professional location recorders available today.

- They record audio to the internal (user replaceable) 1.8" 80GB hard disc drive (HDD) and standard-size 12cm DVD-RAM discs. In addition simultaneous recording to both media is available either by mirroring or auto-copy. Further confidence is offered with an intelligent ‘background mode’ which automatically copies recorded audio from the HDD to DVD when the machines are idling. The DVD drive can also write to DVD-R/RW and CD-R/RW discs for easy data copy / backup.
- Real knobs and buttons make recording, mixing and routing an intuitive experience. No multiple button pushes and complex menus to change a level. Yet don’t confuse ease of use with a lack of features — they offer a multitude of mixing options and recording sophistication. The PD204 offers 2 track simultaneous recording, 4 analog inputs, 1 output and 2 AES/EBU digital I/Os. The PD606 offers flexible 8 track simultaneous recording via AES/EBU, (6 channels when using analog XLR inputs), full 8 channel analog outputs and the ability to digitally store monitor mix settings.
PD204 • PD606

- Battery life is perhaps one of the most important features of a location recorder and it’s here these machines really show their class. Not one, but two standard V-mounts are offered for with the user being in control of power management. Choose BATT.1, BATT.2 or External DC power. A smart function switches which battery is used when the primary source voltage falls below user-definable level.

- When connected to a computer via the USB 2.0 interface, the recorders can be directly mounted on the desktop for easy drag and drop data copying. Future enhancements will include the ability to use USB 2.0 flash memory pens. A standard QWERTY keyboard can also be connected for easy file name editing.

- These being Fostex recorders, the implementation of timecode is beyond reproach with an incredible ±1ppm accuracy. That’s 0.0001% accuracy for both recording and playback of IEC format timecode with Jam Sync also available. Four modes of timecode are offered:
  - 24H RUN (sync to the internal clock)
  - REC RUN
  - FREE RUN;
  - EXT RUN with 7 frame rates (23.97, 24, 25, 29.97ND, 29.97DF, 30ND, 30DF).

- Use them in the field and you immediately know they are designed for professional location recording. At almost every point in the acquisition process there are clues: Automatic file closing in the background every 60 seconds means fast data recovery in the event of a power outage, 10 seconds (max) of pre-record minimizes the risk of missing the start of a take. Auto data is backed up 60 seconds.

- They are built tough, being manufactured from ultra-durable materials specifically designed for a busy life in the field.

- No MP3. No compression. No short cuts. No compromise. The PD204 and PD606 simply feature sonically superior recording at up to 24-bit / 192kHz resolution.

- 24-bit / 192kHz resolution. feature sonically superior recording at up to no compromise. The PD204 and PD606 simply

### Recording Times

<table>
<thead>
<tr>
<th></th>
<th>16-Bit</th>
<th>24-Bit</th>
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<tr>
<td>Mono</td>
<td>838 770 558 513</td>
<td>279 256 139 128</td>
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<tr>
<td>2-TRK</td>
<td>419 385 279 256</td>
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<tr>
<td>4-TRK*</td>
<td>209 192 139 128</td>
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<td>6-TRK*</td>
<td>140 128 93 85 46**</td>
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<tr>
<td>8-TRK*</td>
<td>105 96 70 64 — — — —</td>
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*PD606 only  **HDD recording only

### PD204 Only

- 2-track simultaneous recording.
- 4-ch analog inputs (XLR), 2-ch analog outputs (XLR), 2-ch AES/EBU Digital I/O’s (XLR).
- Approx. 256 min recording at 24-bit/48kHz per 4.7GB DVD-RAM or HDD partition.
- 24-bit audio at 44.1/48/88.2/96/176.4/192kHz, 16-bit audio at 44.1/48kHz.
- AUX input for headphone monitoring of audio from a camcorder.

### PD606 Only

- 8 track poly file recording. 6 individual tracks
  - 2 stereo mix tracks or straight 8 track recording via 6 ch Analog I/O (XLR) or 8 channel AES/EBU Digital I/O’s (D-sub 25-pin).
- Using the Stereo Bus output together with the 6 channel discrete analog outputs creates 8 simultaneous analog outputs.
- Approx. 85 min. recording at 24-bit/48kHz per 4.7GB DVD-RAM or HDD partition.
- 8 track recording using 24-bit/16-bit, 44.1/48kHz, 6 track recording using 24-bit, 88.2/96kHz (HDD only), 2 track recording using 24bit, 176.4/192kHz.
- The PD606 has the ability to select and store channel combinations to output from monitor.
- Individual metering for each channel for more precise mixing.

PD-204 (Mfr # PD 204 • B&H # FOPD204): Portable 4-Channel Mixer DVD/HD Recorder..................3499.00
PD-606 (Mfr # PD 606 • B&H # FOPD606): Portable 4-Channel Mixer DVD/HD Recorder..................7999.00
Porta Brace AR-PD606 Recorder Case (Mfr # AR-PD606 • B&H # PAARP606): A blue foam padded case for the PD204 and PD-606. The flaps, clear vinyl windows and protective coverings provide access to cassettes, batteries, cables, dials and switches. A large pocket holds an optional QSA-4 audio rain cover, and a small hood for viewing the LCD in bright light fits neatly into a slip pocket. The included RM-Deluxe wireless mic case holds multiple wireless receivers, transmitters, microphones and other small items. A suede leather shoulder strap is also provided..........................259.95

(212) 444-6601 • 1-800-947-9901 • Quick Dial 94
**FLASHMic**

Professional Digital Recording Microphones

The FlashMic is a news and interview gathering powerhouse the size of a typical wireless hand-held mic. Weighing just 13 oz., the Flash Mic changes the way reporters capture the news and it fits nicely in the palm of your hand. An all-in-one handheld microphone and digital recording device with 1GB of internal flash memory, the FlashMic is a convenient, durable and portable recording device that’s extremely easy to operate. Available in four configurations with a high quality Sennheiser omnidirectional or cardioid capsule, and with or without a line level input, the FlashMic allows you to record instantly with just a single button-push in either .WAV linear or MPEG-2 format. It is ideal for any voice recording application, from podcast to broadcast, to and interviews and music recording. The built-in USB 2.0 interface makes it easy to drag and drop audio data directly from the FlashMic to your computer.

**FEATURES**

- Convenient, portable and extremely easy to use with a rugged build quality, designed to withstand the rigors of portable recording.
- High-quality Sennheiser omnidirectional or cardioid condenser microphone capsule, with very high quality microphone preamp for broadcast quality recording.
- Records linear 32, 44.1 or 48kHz, or MPEG 1 Layer 2 encoded audio (128 - 192 kbps) broadcast wave (.wav) files, including time stamp.
- 1GB Flash memory offers a maximum record time of over 18 hours.
- Full manual or automatic gain control (AGC)
- Switchable high pass filter, 12dB/octave @ 100Hz.
- An ‘Expert Mode’ allows all variable parameters to be accessed directly from the FlashMic body.
- Adjustable pre-record buffer from 0-10 sec.
- LCD display with backlight for time, level and status information.
- Record time remaining indicator with low time remaining visible warning
- A Date/Time stamp is stored along with the file, with the internal realtime clock-set/synchronized automatically by the host computer.
- Time date can be updated from the mic or when linked to host PC/Mac.
- USB 2.0 interface for drag and drop file transfer of audio data. USB is also used for configuration presets and FlashMic firmware updates.

**MP3 Compatibility**

FlashMic PCM or mp2 recordings can be converted by the supplied FlashMic Manager Mac/PC software application to provide mp3 files—the preferred workflow format for some broadcasters.

**Flash Mic with Line Input**

Developed in direct response to requests from broadcasters, the line-input models enable journalists to record the feeds often provided at press conferences.

Both models (omni and cardioid) feature a bantam TT jack input on the base of the microphone body. An XLR to bantam jack cable is supplied which, when connected, switches out the microphone signal. Journalists can enjoy the flexibility of being able to record a press conference feed, then switch quickly to recording interviews or adding their own commentary to the piece.

- Record time remaining indicator with low time remaining visible warning.
- More than eight hours of battery life via two AA (alkaline or NiMH) batteries.
- Battery remaining indicator on the backlit LCD.
- A visual low battery warning alerts you to the imminent need to change batteries.
- 1/8” headphone output with volume control
- Operate the FlashMic right out of the box using default settings, or create and store 9 custom configurations using the bundled straightforward Mac/PC GUI software.
- Simple mode of operation where presets from external PC/Mac templates can be recalled.

**FlashMic DRM85 (Omni)** (Mfr # DRM85 • B&H # HHFM) ..........999.00
**FlashMic DRM85-C (Cardioid)** (Mfr # DRM85-C • B&H # HHFCM) ...999.00
**FlashMic DRM85LI (Omni with Line-In Input)** (Mfr # DRM85 LI • B&H # HHFMLI) ..................1299.00
**FlashMic DRM85-CLI (Cardioid with Line-Input)** (Mfr # DRM85 LI-C • B&H # HHFMLIC) ..........1299.00

All FlashMic models come complete with a pouch, stand clamp, USB cable, FlashMic Manager software and two AA batteries.

www.bhphotovideo.com
1-Bit Professional Mobile Recorders

The MR-1 and MR-1000 are mobile recorders that utilize future-proof 1-bit recording capabilities. They are an ideal solution for source recording, podcasting, broadcast journalism including ENG/EFP, as well as archiving final mixes and master recordings.

The handheld MR-1 is capable of high quality 1-bit / 2.8 MHz recording and playback, while the larger MR-1000 delivers up to 1-bit / 5.6 MHz, double industry DSD recording quality standards.

Both support multiple recording formats including DSDIFF, DSF and WSD 1-bit formats, as well as multi-bit PCM format (BWF) with resolutions up to 24-bit / 192 kHz. The MR-1 offers stereo electret condenser mic, dual mini balanced inputs, and a stereo headphone jack. The MR-1000 features studio quality, ultra low-impedance mic preamps with balanced XLR / 1/4" inputs with phantom power and built-in limiting, plus XLR and RCA outputs.

Both have high speed USB 2.0 port and include Korg’s AudioGate software (Mac and PC) allowing you to convert 1-bit recordings into WAV and AIFF formats at various bit-rates (and vice versa) and offers real-time conversion/playback of 1-bit files.

FEATURES

MR-1

◆ 2-track recording/playback simultaneously
◆ 1-bit audio formats - DSDIFF, DSF, WSD (2.8224 MHz @ 1-bit).
◆ PCM audio formats - WAV, BWF: 44.1 kHz @ 16/24-bit, 48 kHz @ 16/24-bit, 88.2 kHz @ 24-bit, 96 kHz @ 24-bit, 176.4 kHz @ 24-bit, 192 kHz @ 24-bit
◆ MP3 format - 44.1kHz/192kbps - playback 44.1kHz/32kbps-320kbps (MP3 format support will be added in an upcoming free update.
◆ 20 GB internal hard drive holds up to 6 hours in the highest resolution, 30 hours at CD quality.
◆ Large 160 x 104 LCD display with backlight
◆ Dual balanced 1/8" (TRS) mic / line input with +3V microphone powering
◆ Stereo 1/8" line level output
◆ 1/8" stereo headphone output
◆ High-speed USB 2.0 port lets you transfer files to your computer and allows the MR-1 to be used as an external FAT32 USB drive

MR-1000

(Mfr # MR1000 • B&H # KOMR1000): Includes AC Adapter, specially designed carrying case that allows recording while still in the case, and AudioGate audio file conversion software ............................1199.00

MR-1 (Mfr # MR1 • B&H # KOMR1): Powered by internal lithium ion battery, includes 5V AC adapter/charger, protective case, CM-2M stereo mic, mic clip stand, “AudioGate” audio file conversion software ............................699.00

1-bit Recording

1-bit recording is the latest advancement in audio and has been adopted for use in the SACD recording format. It offers uncompromising fidelity, low noise floor, extended dynamic range, lifelike imaging and analog quality depth. Another benefit of the 1-bit format is that it can be converted to any other bit depth and sample rate without error or degradation.

Integrated Software Solution

The MR-1 and MR-1000 come with Korg’s innovative and powerful AudioGate software for Mac and PC. AudioGate can convert 1-bit recordings into WAV and AIFF formats at various bit-rates (and vice versa) and offers real-time conversion and playback of 1-bit files using your computer’s audio hardware. It also does essential functions like DC offset removal, gain control, and fade in/out.

The combination of the MR-1/MR-1000 and the software makes them the perfect system for both capturing and preserving critical projects and source recordings. This archiving capability previously the domain of the major record companies and top studios is now available to anyone.

MR-1000 Step-up Features

◆ Three pristine, high definition 1-bit recording formats at your fingertips - DSDIFF, DSF and WSD (2.8224 MHz @ 1-bit, 5.6448 MHz @ 1-bit).
◆ Balanced XLR / 1/4" TRS mic / line inputs with switchable 48V phantom per channel.
◆ Unbalanced RCA and balanced XLR line level outputs.
◆ 1/4" stereo headphone output
◆ Almite-coated aluminum body provides strong impact resistance and stable operation in any situation.
◆ 40GB internal hard drive provides approx. 60 hours of recording time at 16-bit/44.1 kHz or 6 hours at the highest quality.
◆ Runs on eight AA batteries.
PMD660 • PMD670 • PMD671

Solid State Field Recorders

The versatile PMD660, PMD670 and PMD671 provide digital solutions for today’s most challenging field recording environments. They record to dependable, cost-effective CompactFlash cards, extending the benefit of no moving parts. The PMD660 features handheld convenience with a choice of recording uncompressed WAV files at 44.1 or 48 kHz, as well as 64 kbps mono or 128 kbps stereo in MP3 format. It features built-in stereo microphones, balanced XLR mic inputs with +48V phantom power, and can run for four hours on 4 AA batteries. The PMD670 offers additional support for BWF and MP2 file formats. It provides up to 5 hours of operation on 8 AA batteries, and longer using the optional RB1652 rechargeable battery pack. The PMD671 adds high resolution 24-bit, 96kHz recording capabilities as well as Virtual Third Head (VTH) confidence monitoring.

FEATURES

- Audio data is stored on Compact Flash (CF) memory cards or Microdrives, eliminating the mechanical issues associated with tape and optical recorders. A 1GB card can hold over 1 hour of uncompressed stereo or 17 hours (stereo) or 36 hours (mono) .mp3.
- Support is provided for 16-bit linear PCM audio at 44.1 or 48kHz, and MP3 file format at 64 kbps (mono), or 128 kbps (stereo).
- Built-in stereo condenser mics and monitor speaker
- Two balanced XLR mic inputs with 48v phantom power.
- 1/8” line level stereo inputs and outputs
- 1/8” headphone output
- Built-in USB Port allows you to transfer files directly to your PC.
- Runs for up to four hours on 4 AA batteries
- External powering is provided via included AC power adapter.

Optional RC600 Wired Remote

The PMD recorders are compatible with the optional RC600 wired remote control. The RC600 attaches to any microphone allowing you to start and stop recording, and to mark new track-starts on the fly. It even has a peak meter right on the remote, so you can keep an eye on your recording, without taking your eye off the ball.

PMD670 / PMD 671 Step-up Features

- MP3 file support with selectable data rates from 32 kbps to 320 kbps, and MP2 file support with selectable data rates from 32 kbps to 384 kbps.
- WAV, BWF format compatible, over 40 assignable quality settings, +48v phantom power.
- Unbalanced RCA line level inputs and outputs; coaxial stereo digital input and output.
- 1/4” stereo headphone output.
- Has four powering options including: 8 AA alkaline batteries (6 hours), optional RB1100 nicad battery pack (5 hours), optional RB1651 NiMH battery (7 hours), supplied AC adapter.
- Stepping up, the PMD671 is 24-bit/96 kHz PCM capable for unrivaled fidelity, has a “Virtual Third Head” for confidence monitoring, Time-Shift Playback, Read-after-write capability.

Editing and File Transfer

- The Copy Segment mode provides straightforward, non-destructive cut-and-paste audio editing that never erases the original recording. The audio files based on the edited tracks are then easily transferred to your PC for broadcast or CD burning.
- Virtual Track mode lets you create an internal playlist with up to 99 audio segments or virtual tracks. This is an ideal way of creating short sound bytes from a longer interview.

PMD660: With 64MB CF card, AC adapter, cables (Mfr # PMD660 • B&H # MAPMD660) .........................................................499.00
PMD-670: With AC adapter, strap, cables (Mfr # PMD670 • B&H # MAPMD670) .................................................................699.00
PMD-671: With AC adapter, strap, cables (Mfr # PMD671 • B&H # MAPMD671) .................................................................999.00
RC600: Wristwatch Style Wired Remote Control (Mfr # RC600 • B&H # MARC600) .................................................................74.95
PRC-660: Nylon Carrying Case for PMD660 (Mfr # PRC660 • B&H # MAPRC660) .................................................................64.95
CA200: Hard Case for PMD670 (Mfr # CA200 • B&H # MACA200) ..........................................................................................94.95
CLC670: Vinyl Case for PMD670 (Mfr # CLC670 • B&H # MACLC670) ...................................................................................63.95
Porta Brace AR-PMD660 Case for PMD-660 (Mfr # AR-PMD660 • B&H # POARPM660) .........................................................144.95
Porta Brace AR-PMD650: Case for PMD-670/671 (Mfr # AR-PMD650 • B&H # POARPM650) ......................................................134.95
RB1100: Nicad battery pack (Mfr # RB1100 • B&H # MARB1100) ......................................................................................84.50
RB1650: Ni-MH battery pack (Mfr # RB1651 • B&H # MARB1651) ......................................................................................99.95
BC600: Battery charger (Mfr # BC600 • B&H # MABC600) .................................................................................................184.95

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Marantz’s smallest portable recorder, the PMD620 provides advanced functionality, and ease of use in a configuration that fits in your hand or in your pocket. It offers the choice of uncompressed 16 or 24-bit recording with sample rates up of 44.1 or 48 kHz, as well as MP3 recording in three quality levels from 32 kbps mono, to 192 kbps stereo. It records to SD flash memory, including high capacity cards up to 2GB. The PMD620 has two high quality electret condenser microphones, as well as a monitor speaker, allowing you to take it anywhere without the need for additional equipment. The PMD620’s intuitive interface includes an illuminated organic LED display, one touch recording, and a transport control section reminiscent of consumer-based portable playback units. Additional features include non-destructive copy and paste editing, along with a USB 2.0 port for transferring audio files directly to a computer.

**Connections**
- 1/8” stereo mic input with 5v phantom power, 1/8” line level input, 1/8” stereo line output, 1/8” headphone jack for monitoring.
- The USB 2.0 port allows effortless drag-and-drop transfer of files to a PC.

**Editing**
- Copy Segment function uses non-destructive cut-and-paste editing to extract pieces of an audio file to create a new sound file.
- The Skip Back allows transcribers the ability to rewind and replay recorded audio from 1 to 60 previous seconds.

### PMD620 Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>PMD620</th>
<th>PMD660</th>
<th>PMD670</th>
<th>PMD671</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usable Media</strong></td>
<td>SD/SDHC Cards</td>
<td>CF Memory Card / Microdrive</td>
<td>CF Memory Card / Microdrive</td>
<td>CF Memory Card / Microdrive</td>
</tr>
<tr>
<td><strong>Recording Format</strong></td>
<td>MP3, WAV 16/24 Bit</td>
<td>MP3, WAV 16-Bit</td>
<td>MP2, MP3, WAV 16-Bit</td>
<td>MP2, MP3, WAV 16/24 Bit</td>
</tr>
<tr>
<td><strong>Sample Rate</strong></td>
<td>44.1 / 48 kHz</td>
<td>44.1 / 48 kHz</td>
<td>16 / 22.050 / 24 / 32 / 44.1 / 48 kHz</td>
<td>8 - 48 kHz (16 bit) 44.1, 48, 88.2, 96 kHz (24 bit)</td>
</tr>
<tr>
<td><strong>Inputs (Mic)</strong></td>
<td>1/8” stereo mic</td>
<td>(2x) balanced XLR</td>
<td>(2x) balanced XLR</td>
<td>(2x) balanced XLR</td>
</tr>
<tr>
<td><strong>Inputs (Line)</strong></td>
<td>1/8” stereo</td>
<td>1/8” stereo</td>
<td>(2x) balanced XLR</td>
<td>(2x) balanced XLR</td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>1/8” stereo line</td>
<td>1/8” stereo line</td>
<td>(2x) unbalanced RCA</td>
<td>(2x) unbalanced RCA</td>
</tr>
<tr>
<td><strong>Digital I/O</strong></td>
<td>—</td>
<td>—</td>
<td>Coaxial S/PDIF</td>
<td>Coaxial S/PDIF</td>
</tr>
<tr>
<td><strong>Headphone Output</strong></td>
<td>1/8” stereo</td>
<td>1/8” stereo</td>
<td>1/4” stereo</td>
<td>1/4” stereo</td>
</tr>
<tr>
<td><strong>Speaker</strong></td>
<td>Standard Level 150 mW/8 ohms</td>
<td>150 mW / 16 ohms</td>
<td>100 mW</td>
<td>70 mW/4 ohms</td>
</tr>
<tr>
<td><strong>Battery Life (Alkaline)</strong></td>
<td>5 hours (typical)</td>
<td>4 hours (typical)</td>
<td>6 hours (typical)</td>
<td>6 hours (typical)</td>
</tr>
<tr>
<td><strong>Phantom Power</strong></td>
<td>5v, 1mA (Max.)</td>
<td>+48V, 5mA</td>
<td>+48V, 10mA</td>
<td>+48V, 7mA</td>
</tr>
<tr>
<td><strong>Dimensions (W x H x D)</strong></td>
<td>2.5 x 4 x 1”</td>
<td>4.5 x 1.9 x 7.2”</td>
<td>10.4 x 2 x 7.3”</td>
<td>10.4 x 2 x 7.3”</td>
</tr>
<tr>
<td><strong>Weight (Excluding Batteries)</strong></td>
<td>4 oz.</td>
<td>1.1 lbs.</td>
<td>2 lbs. 14 oz.</td>
<td>2 lbs. 14 oz.</td>
</tr>
</tbody>
</table>

**Key Features**
- Uncompressed, CD-quality 44.1/48 kHz.wav format in 16 or 24-bit resolution, as well as direct to MP3 recording in 3 quality levels from 32 kbps mono to 192 kbps stereo.
- Two integrated omnidirectional condenser microphones, with -12 dB and -24 dB pad, offer high quality stereo recording.
- One-touch record using a button with tactile feel and red highlight illumination.
- Transport controls include a thumb-operated scroll wheel which controls most transport functions.
- Integrated speaker for monitoring without the need for headphones.
- Runs up to five hours on two AA batteries. An external power supply is also provided.
- Vivid organic LED (OLED) display screen uses very little power to illuminate, thus extending battery life. The screen is configurable with two font sizes, allowing more information with the smaller font and highly readable key information with the larger one.
- Displays black background means that all alpha-numerics and function icons are always crisp and easy to read.
- Toggle between four displays screens that provide elapsed time, time remaining and other key data.
- Level and Peak LEDs let you know the status of your input signal.

**PMX620 (Mfr # PMX620 • B&H # MAPM620):** Includes AC Adapter, Handy Strap, Tripod/Belt Clip Adapter, SD Card, audio and USB cables.  

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**Price:** $399.00
**PORTABLE RECORDERS**

**SONY**

**PCM-D50**

Portable Linear PCM Recorder

A portable 24-bit/96 kHz recorder with built-in stereo microphones, 4 GB of internal flash memory and a Memory Stick Pro-HG Duo slot for additional storage. The mics offer a choice of both X-Y or Wide stereo configurations for capturing natural stereo sound in any environment. The PCM-D50 will run for up to 14 hours on 4 AA batteries and is constructed of lightweight aluminum that will withstand the demands of professional field applications. The unit’s high speed USB port provides a simple method for transferring its .WAV format files to and from Windows or Mac computers. Additional features include digital pitch control, dual digital limiter, low-cut filter, Super Bit Mapping, A-B repeat and MP3 playback capability. A prerecord buffer records five seconds of audio before hitting the record button. A range of optional accessories add even greater flexibility to the all-in-one PCM-D50. These include a remote commander, tripod stand, windscreen and wide-bandwidth balanced XLR microphone adapter.

**FEATURES**

◆ 16-bit and 24-bit recording to linear PCM .WAV with support for sample rates of 22.05 kHz, 44.1 kHz, 48 kHz and 96 kHz.
◆ MP3 playback at 32, 44.1, 48kHz with data rates of 32 to 320 kbps (VBR). MP2 playback: 16, 22.05, 24 kHz with data rates of 32 to 320 kbps (VBR).
◆ Designed with four separate circuit boards to separate analog audio, digital audio, digital recording and power supply circuits. Separate circuit boards for each function helps minimize noise.
◆ Built-in 4GB flash memory, expandable via the Memory Stick PRO-HG Duo Slot for additional 4GB of memory. Record up to 6 hours in 16-bit/44.1kHz mode.
◆ A 5 second pre record buffer captures audio before you hit the record button.
◆ SBM (Super Bit Mapping) noise shaping delivers 20-bit quality dynamic range from 16-bit recordings.
◆ A-B repeat playback allows you to loop and audition a specified range of audio.
◆ Runs up to 14 hours on four AA (alkaline or NiMH rechargeable) batteries.
◆ To minimize noise, four separate circuit boards are used for analog and digital audio, digital recording and power supply circuits.
◆ Lightweight but rugged enough to withstand the demands of pro applications.
◆ Digital Pitch Control feature allows you to slow down playback without changing pitch.

**Stereo Microphones**

◆ Comes equipped with a high sensitivity, built-in, two-position electret condenser stereo microphone with flexible rotation for either X-Y or Wide stereo positions.
◆ Dual digital limiter prevents clipping and distortion. A high pass filter with selectable frequencies (75/150 Hz) attenuates low frequency rumble and wind noise.

**Inputs/Outputs**

◆ 1/8" stereo mic input with plug in power.
◆ 1/8" stereo line / optical digital input.
◆ 1/8" stereo line / optical digital output.
◆ 1/8" stereo headphone output.
◆ Utilizes a simple drop and drag file transfer via the high speed USB 2.0 connection.

**OPTIONAL ACCESSORIES FOR PCM-D50 & PCM-D1**

**XLR-1 Mic Adapter:** The XLR-1 features two balanced XLR inputs and switchable 48v phantom power with high quality microphone balancing transformers. It can be mounted onto the bottom of the PCM-D50 or PCM-D1, or on-the-side (using supplied mounting hardware). Runs 40 hours with four AA batteries. (Mfr # XLR1 • B&H # SOXLR1) ............................................. **CALL**

**RM-PCM1 Remote Control:** The RM-PCM1 offers record start/stop and divide control with a 6’ wired connection. This remote includes a record status LED indicator with an easy-to-use button layout. (Mfr # RMPCM1 • B&H # SORMPCM1) ................. **49.95**

**VCT-PCM1 Tripod Stand:** High-quality aluminum tripod stand. An adjustable head lets you choose the perfect recording angle. (Mfr # VCTPCM1 • B&H # SOVCTPCM1) ............................................. **69.95**

**AD-PCM1 Windscreen:** If you’re recording outdoors, the AD-PCM1 is a must for reducing wind noise. (Mfr # AD-PCM1 • B&H # SOADPCM1) ............................................. **44.95**

**www.bhphotovideo.com**
Portable Linear PCM Recorder

The PCM-D1 takes mobile recording beyond the boundaries of typical field recording, making it the ideal choice for capturing live performances. With built-in, highly sensitive, electret condenser microphones; a circuit design that processes stereo sound with virtually no extraneous noise; and 96kHz 24-bit recording quality, this recorder can capture even the most subtle performance nuances. It also offers a comprehensive range of signal processing features for location recording including a unique limiter function, a 200 Hz high pass filter and SBM (Super Bit Mapping) noise shaping. For convenience, it features 4 GB internal Flash Memory, a slot for Memory Stick PRO (High Speed) storage media, a USB port, four AA NiMH batteries and a battery charger. Free of drive mechanisms, this portable recorder is built into a 1mm thick titanium body that offers incredible ruggedness while remaining lightweight.

**FEATURES**

**Built-in Condenser Mics**
- The built-in electret condenser mics have extraordinarily high sensitivity and low noise characteristics. All microphone casing parts fit together nearly seamlessly and are adjusted with 100-micron level precision. With a frequency response of nearly 30 kHz, the microphones are positioned using an X-Y pattern and then angled toward each other with the left and right diaphragms close together, covering a wide sound range with reduced phase shifts. The result is rich audio with a natural sounding stereo image, good depth, and perspective.
- Peaks and dips within the microphones range are minimized so that acoustic energy is transmitted effectively to the diaphragm in each microphone capsule. An arch-shaped polished stainless steel frame is provided to protect the microphones from impact damage.

**Audio Signal Path**
- The mic amplifier provided for each channel is the Analog Devices AD797, which boasts ultra-low noise and distortion. A variable gain circuit is used for amplitude control, which enhances the actual S/N ratio.
- The line amplifier provided for each channel is Analog Devices AD8672. Analog and digital circuits are mounted on separate circuit boards and separately powered to prevent interference between circuit blocks. The analog circuit achieves superb linearity so that the recorded sound is output faithfully.

**Inputs and Outputs**
- 1/8" stereo line input
- 1/8" stereo line / optical digital output
- 1/8" stereo headphone output
- The USB 2.0 port allows you to upload data to your computer for further distribution, editing and archiving.

**Power**
- Runs up to five hours on four supplied AA NiMH or two hours via alkaline batteries.

**Titanium Body**
- The PCM-D1 circuitry is protected by a 1mm thick pure titanium body that is covered with nitrate titanium, scratch resistant coating – resulting in a finished titanium surface ten times harder than alumite treated aluminum. In addition, a distinctive arch-shaped polished stainless steel frame is provided to protect the mics from impact damage. This rugged exterior protects the PCM-D1's circuits and microphones and enhances the high sonic quality of the recorder.

**High Quality Signal Processing**

The PCM-D1 offers comprehensive signal processing features for location recording including a unique limiter function, a 200Hz high pass filter and SBM (Super Bit Mapping) noise shaping.
- The digital limiter uses an independent audio buffer that contains audio 20dB lower than the audio processed in the normal recording signal path. So when a loud sound suddenly occurs during recording, the over level part of the sound is automatically set within the range of the maximum input level to prevent distortion. While the limiter won’t compensate for clipping of audio that is suddenly in excess of 20dB, the sonic purity of the recording is fully maintained.
- With the High Pass Filter enabled, audio below 200Hz is filtered out and not recorded. This function can be used to reduce noise caused by external sources such as wind, the flow of air-conditioning equipment, etc.
- Super Bit Mapping significantly increases the dynamic range acoustically by reducing noise that is particularly easy to hear within the human audible band. To improve the audio quality when converting 20-bit data into 16-bit, the top bits of information within the lower data (usually discarded when recording in 16-bit mode) are integrated into the 16-bit data track by shifting audible noise up into an inaudible higher frequency range.

**PCM-D50 (Mfr # PCMD50 • B&H # SOPCMD5):**
Includes AC Adapter, 4 AA Batteries, USB cable and Sound Forge Audio software .................... 499.00

**PCM-D1 (Mfr # PCMD1 • B&H # SOPCMD1):** Includes microphone windshield, 6v AC adapter, 4 AA NiMH rechargeable batteries, wall plug-in battery charger, wrist strap and USB cable ...................... 1849.95

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PORTABLE RECORDERS
SOUND DEVICES

702 • 702T • 722 • 744T

Portable, High-Resolution Audio Recorders

Sound Devices’ portable audio recorders combine superior mic preamplifiers taken from their benchmark field mixers, with high resolution audio recording. The microphone preamps are designed specifically for high bandwidth, high bit rate digital recording. They set a new standard for frequency response linearity, low distortion performance, and low noise. Each of the field recorders is capable of reading and writing uncompressed PCM audio at 16 or 24 bits with sampling rates between 32 kHz and 192 kHz. Compressed (MP3) audio playback is also supported.

The 702 is a two-channel recorder that records to cost-effective, removable Compact Flash cards and/or external FireWire drives, making field recording simple and fast. The 702T steps up with full-featured time code reader/generator. The 722 (no time code) records to a 40GB internal hardrive, along with the Compact Flash and FireWire drive capabilities.

The 744T offers four track recording with two mic preamps and two line level inputs. And offers full-featured time code capabilities.

FEATURES

General

- They record to removable Compact Flash I/II or Microdrive cards for convenient file audio file storage. They can also record directly to external FireWire drives.
- Record buffer (10 seconds @ 24-bit / 48kHz) captures audio even before you hit record.
- Aluminum and stainless-steel chassis for exceptional durability light weight and class-defining compact size.
- Supported file formats include:
  - 24-bit or 16-bit (with or without dither) and sampling at 32 kHz-192 kHz
  - Broadcast WAV format, mono or poly files, uncompressed PCM audio; iXML metadata written to file header
  - MP3, MP2 decoder, 64 to 320 kb/s stereo file
  - FLAC file recording and playback

Inputs and Outputs

- Two-channels of Sound Devices next generation XLR balanced mic preamps with phantom, limiters, and high-pass filters.
- Balanced Mic / Line outputs on TA3 (mini XLR) connectors.
- Unbalanced 3.5mm tape output.
- AES3id (S/PDIF) digital outputs.

GUI

- Programmable, sunlight-viewable LED level metering.
- Backlight LCD viewable in all lighting.
- Extended temperature range LCD display.
- PPM, VU or PPM/VU level metering.
- LED peak indication per channel.

Power

- Removable Li-on rechargeable battery compatible with Sony M- and L-mount batteries.
- 10-18v DC external 4-pin input powers and charges on-board battery.
- Internal and external voltage metering on LCD panel.

702 (Mfr # 702 • B&H # SD702)
Includes 100-240v AC adapter, 2200mAh Li-ion rechargeable battery, 3.5mm to 1/4” adapter for headphone output extension, C. Link Unit-to-Unit Linking Cable, padded carrying case............................................. 1875.00

702T (Mfr # 702T • B&H # SD702T)
Includes all of the above plus Ambient time code card and XL-1394 Firewire Power Conditioner.......................................................... 2495.00

722 (Mfr # 722 • B&H # SD722): Includes 100-240v AC adapter, 4600mAh Li-ion rechargeable battery, 3.5mm to 1/4” headphone extension cable, padded carrying case.......................................................... 2495.00

744T (Mfr # 744T • B&H # SD744T): Includes 100-240v AC adapter, 4600mAh Li-ion rechargeable battery, 3.5mm to 1/4” adapter for headphone output extension, C. Link Unit-to-Unit Linking Cable, XL-1394 Firewire Power Conditioner and padded carrying case.............. 4095.00

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702 • 702T • 722 • 744T

Optional Accessories

**Time Code and Data Cables**

- **XL-LX**: LEMO-5 to XLR-M and XLR-F cable for time code jamming of audio and video equipment 25" to XLR-M, 14" to XLR-F. (Mfr # XL-LX • B&H # SOXLX) **$225.00**
- **XL-LL**: LEMO-5 to LEMO-5 coiled-cable for time code interconnection of multiple 744Ts or to Ambient timecode products; 24" coiled; 55" full extension. (Mfr # XL-LL • B&H # SOXL-LL) **$75.00**
- **XL-RJ**: 6" Modular cable for unit-to-unit linking via C. Link. (Mfr # XL-RJ • B&H # SOXL-RJ) **$16.00**
- **XL-BNC**: 25" BNC-to-BNC cable for digital connection of AES3id and word clock signals. (Mfr # XL-BNC • B&H # SOXL-BNC) **$24.00**
- **XL-LB2**: 31" LEMO-5 to BNC output cable for time code jamming of audio and video equipment with BNC connectors. (Mfr # XL-LB2 • B&H # SOXL-LB2) **$96.00**

**YAMAHA POCKETRAK 2G**

Advanced Recording Capability In Your Pocket

The Pocketrak 2G is a light and compact pocket recorder featuring 2GB of built-in memory, long battery life, high speed USB file transfer, and Steinberg Cubase AI DAW software. The Pocketrak 2G provides two tracks of recording via the built-in stereo microphones or the stereo 1/8" mic / line input with the choice of CD-quality PCM recording, as well as extended recording in MP3 and Windows Media (WMA) formats. It is ideal for podcasting, field and location recording, audio for video and more. Included rechargeable AAA nickel-hydrogen battery provides 19 hours of MP3 recording. Plugging the retractable USB 2.0 connector into a powered USB bus simultaneously recharges the battery and transfers files to a PC or Mac. For monitoring, the Pocketrak 2G has an on-board speaker as well as an 1/8" headphone jack.

- The mic can be tilted upward when the unit is placed on a desk or table, thus minimizing sound degradations due to surface reflections and mechanically transmitted noise.
- Manual mode record levels can be adjusted in 31 steps.
- Record levels can also be set automatically using the ALC (Automatic Level Control).
- Level meters and a peak indicator make setting optimum levels quick and easy.
- To recharge the battery simply plug the unit directly into a USB port on your computer. You can also use an alkaline battery.
- Variable playback speed lets you speed up play back by 25% for faster review, or slow it down by 25% for improved intelligibility.
- Selectable equalizer settings and a bass enhancement functions are also provided.
- The built-in speaker provides a quick and convenient way to check your recordings.

Pocket 2G

Includes USB extension cable, stereo earphones, leather carrying case and Cubase AI, an “Advanced Integration” version of Steinberg’s renowned digital audio workstation software to further edit your recordings. (Mfr # POCKETRAK 2G • B&H # YAP2G) **$349.99**
HD-P2
Portable High-Resolution Stereo Recorder

Designed to answer the call of remote recording engineers to meet the challenging demands of live and on-location recording. It records at up to 192kHz/24-bit resolution for audiophile quality to Compact Flash media, and the unit can be locked to the built-in SMPTE timecode input. The HD-P2 writes time-stamped Broadcast WAVE audio files that can be loaded into your DAW projects with sample accuracy via the unit’s built-in high-speed FireWire interface. There are two balanced XLR mic inputs with switchable switchable phantom power. A switchable analog limiting helps prevent clipping. The user interface has been designed for fast and intuitive use under stressful one-take-only situations, and its large, angled LCD is perfect for any application from over-the-shoulder location recording to concert recording and commercial use.

FEATURES

General
- Stereo recording to Compact Flash media, including MicroDrives up to 8GB.
- 44.1kHz to 192kHz recording resolution at 16- or 24-bit.
- Time-stamped Broadcast WAVE file format is easily imported into DAW software and spotted into projects with sample accuracy.
- Audio files continually re-saved to safeguard against data loss.
- A built-in, dynamic Edit Decision List orders file playback based on file record times.
- Familiar tape machine-style layout and functionality.
- Comprehensive system & transport control from the front panel or a PS/2 keyboard.
- The large, uncluttered 240 x 160-dot backlit LCD display is angled for table-top or shoulder strap use.
- Jog/Shuttle data wheel moves forwards/backwards and navigates up/down through menu items and settings.
- Shortcut keys and LED indicators for frequently-accessed functions.
- Retake button allows you to delete the last recording and set up to re-record with a single button press.
- Files can be named from the front panel interface or using a PS/2 keyboard.
- Runs for up to 5.5 hours on 8 AA batteries.

HD-P2: Includes Firewire cable, AC adapter, shoulder strap (Mfr # HD-P2 • B&H # TAHDP2)...

Inputs and Outputs
- Balanced XLR mic inputs with switchable phantom power and analog peak limiter.
- Unbalanced stereo RCA I/O.
- S/PDIF digital I/O.
- 1/4” stereo headphone output with level control.
- Built-in mono microphone and speaker for desktop interview applications.
- Analog level controls allow easy operation without the need to look at the unit.
- FireWire interface for fast data transfer to a computer.

Synchronization
- SMPTE/LTC timecode input on locking XLR balanced jack.
- Time stamps Broadcast WAVE recordings from SMPTE input.
- Chase locks to incoming SMPTE timecode.
- Video clock input resolves to house clock.
- Tri-level sync support for HDTV applications.
- Includes Frame Lock, Lock and Release and flexible Freewheel settings for unpredictable timecode sources.
- Pull-up and Pull-down sample rates included for video format compatibility.

DR-1 Portable Stereo Audio Recorder

The DR-1 is a high-quality portable stereo audio recorder. Ideal for musicians, journalists, podcasters, and more, the DR-1 can record MP3 or WAVE files to an SD or SDHC memory card for easy data storage and transfer. It has a pair of stereo microphones with a variable angle mechanism, so you can record from multiple angles. In addition to the built-in mics, the DR-1 also offers two inputs for connecting external microphones, as well as line-level input and output jacks. Auto gain control and analog limiting functions make sure you get the best quality for your recordings with the least amount of effort, and a low-frequency cutoff helps to minimize handling or wind noise. (Mfr # DR-1 • B&H # TADR1)...

...299.00
Fault Tolerant Recording System

The ZFR100 is a portable time code referenced audio recorder that supports the Broadcast Wav file format as well as MP3 files. Files are recorded to industry-standard 24-bit/48kHz sample rate. The full-featured time code reader/generator supports all major frame rates and can auto detect the time code frame rate when jammed. The Fault Tolerant Recording system protects recorded audio in the event that the mini SD card is accidentally ejected, or power is lost to the unit. The ZFR100 can be worn on a belt or it can be used in a sound bag for any application that requires a time code referenced audio recording.

- Broadcast quality recording at 48 kHz / 24 bits for video applications. Choose between two time code stamped file types: BWF (Broadcast Wave file) or MP3 file format.
- Support record / stop and 8-hour continuous loop recording.
- Operates using a single unbalanced 3-pin Lemo connector designed for use with a lavalier mic. Provides power to the mic and a variable input gain range of -60 to –24 dB.
- Records to removable mini SD media with up to 8 hours of audio on a 2 GB card.
- Dual color LED on the top of the unit confirms the transport status of the recorder.
- Fault tolerant recording — If a memory card is ejected or accidentally turned off while recording there will be no audio loss prior to the point of interruption.

- Bundled Zaxcom conversion utility is a file transfer application that offers high quality sample rate conversion to obtain the sample rate and bit depth of choice when files are imported to your computer.
- Light weight and compact with a rugged design for extended field use.
- SMPTE timecode reader / generator delivers an accuracy of 1 frame every 12 hours.
- The ZFR100 can auto-detect the time code frame rate when jammed.
- Supported time code rates: 23.96, 24, 25, 29.97, 29.97 DF, 30, 30 DF.

ZFR100 (Mfr # ZFR100H • B&H # ZAZFR100H) .................................................................995.00
Stereo Adapter: Turns the ZFR100 into a 2-track recorder. Provides a 2-channel line level input, time code input, time code/audio output and a power input. (Mfr # STA100 • B&H # ZASTA100) ...........295.00
Earpiece Adapter: Use to monitor audio being recorded or played back. It has a volume knob and a standard 3.5mm headphone input jack. (Mfr # EA100 • B&H # ZAEA100) ..................................................100.00
Time Code Adapter: Provides a secondary time code input. In its standard configuration the ZFR100’s time code is jammed via the microphone connector, the TCA100 enables auto-load or a continuous time code connection. It has a 3.5mm TRS connector and accepts any source of SMPTE time code. (Mfr # TCA100 • B&H # ZATCA100) ............................................................100.00

ZOOM H2 • H4
Portable Field Recorders

The H2 and H4 offer high quality sound with 24-bit / 96kHz recording to SD memory cards up to 8GB. They can record for up to four hours on two AA batteries. The H2 features two pairs of microphones that offer a variety of recording options ranging from stereo, combined stereo, and even four channel recordings covering a 360° perspective. The H4 features a single pair of stereo microphones as well as two XLR balanced mic inputs with switchable phantom power for use with condenser mics. Both offer the ability to double as USB microphone / interfaces that allow you to use them directly with your computer and recording software.

- Better than CD quality 24bit/96kHz linear PCM WAV or MP3 files.
- BWF (Broadcast Wave Format) support allows you to time-stamp information and markers on audio files during recording.
- The built-in 3D panning function gives you full control over the front/rear/left/right balance. You can also use authoring software to create 5.1 surround recordings.
- Dual X/Y configured stereo mics, facing front and rear, capture a wide and contiguous stereo image, and allow you to record at 90° from the front or 120° from the rear. You can use both pairs of microphones to produce a four-channel recording with 360° coverage (24-bit/48kHz).
- The pre-record feature records the most recent two seconds of audio in memory.

(212) 444-6601 • 1-800-947-9901 • Quick Dial 94
Zoom H2/H4

Continued from previous page

- 1/8” stereo mic input with plug-in power and an 1/8” stereo line input.
- 1/8” stereo headphone output.
- USB port allows you to quickly transfer recordings to a Mac or PC.
- Runs for up to 4 hours on two AA alkaline batteries. An AC adapter is supplied, and you can also use USB bus power.
- The backlit 128 x 64 pixel LCD lets you check level meters and time elapsed, battery status and remaining recording time at a glance.
- Manual level control as well as Auto Gain Control (AGC) capabilities
- The Low-Cut Filter eliminates unwanted low frequency noise.
- The normalizing feature lets you optimize audio levels to their digital maximum.
- Audio files can be split without the need for an external editor. Wav files can be converted to MP3 files post recording.
- Auto record starts recording when audio is detected and stops when audio ceases.

H4 Step-up Features

- Four-track mode allows simultaneous recording on two tracks and simultaneous playback on four tracks. Level and panning can be adjusted for each track individually. Punch-in recording and track bouncing make editing a breeze.
- Two cardioid mics (H2 offers 2 pairs of mics) are employed in an X/Y configuration offering a wide stereo perspective while maintaining a strong and focused center, with minimum phase problems.
- Two phantom powered XLR / 1/4” inputs for external mics as well as line input devices.
- A compressor / limiter helps prevent input signal overload.
- Zoom Noise Reduction (ZNR) and other studio quality effects such as chorus, flanger, phaser, delay, and reverb are also provided.

H2: Includes AC Adapter, Stereo Earbuds, 512MB SD Card, 3.5mm to RCA Stereo Cable, USB Cable, Mic Clip Adapter, Tripod Stand, Foam Windscreen. (Mfr # H2 • B&H # ZOH2) ...$199.00

H4: Includes AC Adapter, 128MB SD Card, USB Cable, Windsheid Cover, Tripod Adapter. (Mfr # H4 • B&H # ZOH4) ...$299.00

FMX-20 • FMX-32 • FMX-42

Two, Three and Four Channel Field Mixers

The FMX-20, FMX-32 and FMX-42 are portable microphone mixers, for ENG and EFP applications, with two, three and four input channels respectively. Each mixer is housed in a rugged metal chassis, with comprehensive metering, and each can run on battery power or use 12v DC from an external power source. Balanced XLR connectors are used for the microphone inputs and both balanced XLR and unbalanced connectors are provided for the outputs. A switchable limiter helps prevent distortion due to overloaded inputs signals.

The FMX-32 and FMX-42 add independently switchable phantom power for each input, while the FMX-42 also adds low cut filters, and limiting separately for each of its inputs.

FMX-20

- Two balanced XLR mic inputs.
- A switchable input limiter helps reduce the possibility of overload distortion.
- Channel-addressable (Left, Left/Right, Right) 1/4” headphone output with level control.
- Two channel addressable balanced XLR line-level outputs with level controls.
- Stereo mini-jack (3.5mm) output.
- POWER On/Off/Low Battery LED indicator.
- Measures 4 x 1.65 x 5”, weighs 20 oz.

FMX-32 Adds–

- Three balanced XLR mic inputs with independently switchable 48V phantom power.
- Operates up to 15 hours on 6 AA batteries.
- 5-step LED array for easy signal monitoring.
- Measures 1.9 x 6.7 x 4.3”, weighs 28 oz.

FMX-42 Adds–

- Four balanced XLR mic inputs with independently switchable 48V phantom power.
- 1 kHz tone generator.
- Includes a ballistic nylon carrying case.
- Measures 1.9 x 8.6 x 5.9”, weighs 3 lbs.

FMX-20 (Mfr # FMX-20 • B&H # AZFMX20) ..........$249.95
FMX-32 (Mfr # FMX-32 • B&H # AZFMX32) ..........$329.95
FMX-42 (Mfr # FMX42 • B&H # AZFMX42) ..........$649.95

www.bhphotovideo.com
4-Channel Portable Audio Mixer

The AlphaMix delivers all of the professional capabilities required by today’s demanding ENG recordist. A four-channel audio mixer, each of the four low noise preamps is switchable to line or mic level inputs, with 12T or 48v phantom power, continuously variable gain trims, active 12dB/octave low cut filters, pre-fader-listens and simple three LED meters per input channel.

Unique to the AlphaMix is the ability to accept any NP-1 style battery and its selectable low battery monitoring, providing confidence when out in the field. Four industry-standard Hirose 4-pin power output connectors allow the AlphaMix to power up to four wireless receivers.

AlphaMix can feed and monitor audio returns from two cameras via two identical 10-pin Hirose connections. The unit’s outputs include special, custom-made, dual-isolated output transformers that are the largest in the industry and are designed to provide wide bandwidth, low distortion and real-world ease of use. The AlphaMix is also equipped with a boompole-mounted remote control that can be used to control the gain of the first input channel, thus allowing you to boom with both hands. The optional AlphaMix Expansion Module expands the AlphaMix’s capabilities from 4 to 8 inputs allowing it to be used as a stand alone mixer for larger, more complicated productions. The expander piggybacks to the AlphaMix providing a sleek and light weight method of effectively doubling the number of inputs of your rig.

### FEATURES

#### Inputs

- Four mic / line switchable inputs, each with retractable gain trims and pan pots, PFL and 12T and 48v phantom power.
- Each input channel also features active 12dB/octave low cut filters switchable between 20, 80 and 140 Hz.
- Three LED meters per input channel.

#### Outputs

- Individual 3-pin balanced outputs per input channel.
- Custom made (properly sized) dual isolated output transformers.
- Two mic / line switchable Hirose 10-pin connectors for easy dual camera support.
- Two XLR balanced outputs, 5-pin balanced stereo output, plus a 3-pin balanced mono feed.
- Output limiters, switchable separate or ganged.
- Two mic / line switchable 3.5mm (1/8") stereo auxiliary outputs.

#### Power

- 4 pin Hirose external power input.
- Internal NP-1 battery support, with built in battery monitoring, switchable calibration for all NP-1 battery types.
- Custom made peak reading LCD meters that emulate the camera’s meters.
- Switchable headphone monitoring left, stereo, right, mono, MS as well as tape returns from 2 cameras.

#### Conveniences

- Built in 4-way power distribution for wireless receivers.
- Built in slate microphone and reference tone oscillator.
- Boom pole mounted remote control slide fader allows booming with two hands.
- Aircraft aluminum housing with epoxy powder coat finish. Lexan overlays with wear-proof subsurface silk-screening.
- Production case and strap included.

### AlphaMix with Boompole Remote

(Mfr # FPSC0039 • B&H # PSAAM) ................................................................. 1866.75

### AlphaMix with Expansion Module

(Mfr # FPSC0039COMBO • B&H # PSAEM) ...................................................... 2411.10

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PORTABLE MIXERS

PSC

DV PROMIX 3

Portable 3-Channel Mic/Line Mixer

The DV Promix 3 is a robust and portable 3-channel mic/line mixer built for today’s DV/HDV camcorders. Equipped with a reference tone oscillator, it provides all the features necessary for demanding video shoots, including very low noise mic preamps with 48v phantom power available for each input channel and balanced XLR mic/line switchable outputs. Output limiters prevent overloading the camera’s audio inputs. The mixer is housed in an aircraft aluminum case with high quality fader pots and switches used throughout the mixer. A super bright, sunlight readable LED meter allows easy audio level settings even while outdoors. This meter is color coded for ease of use. The DV Promix 3 is also equipped with a tape return function, giving you confidence on the job that the audio has indeed, been fed to the camera.

Inputs
- Three balanced XLR microphone inputs, with three gain settings for Line level signals, Dynamic or Condenser microphone use.
- Switchable 48v phantom power, plus three position low frequency filters (80Hz, 20Hz, 150Hz) on each input.
- Left, Center, Right channel assignment switches (on each input)
- Tape/direct monitoring

Outputs
- Mic/Line switchable balanced XLR outputs
- Output limiters for overload protection
- Dedicated microphone level output jack for use with cameras not equipped with XLRs
- Tape return jack for monitoring audio back from the camera
- Channel Faders (Volume Controls)
- Headphone monitor with level control

Conveniences
- Smooth, ergonomic fader pots with non-slip rubber knobs.
- Bright sunlight readable, LED meters that are color-coded for easy use (-20 to +3dBv, Green, Amber, Red).
- Runs on two 9v batteries for easy field use, accepts external power from 7 to 16v DC
- Runs on two 9v batteries for easy field use, accepts external power from 7 to 16v DC

DV Promix 3 Basic Field Mixer Kit:
Includes DV Promix 3, Sony V6 Studio Headphones, Headphone Softies, 25’ XLR cable and black carabiner cable carrier (B&H # PSDVPM3BK)..........................470.25

DV Promix 3 with carrying case and strap
(Mfr # FPSCDVMIX3 • B&H # PSDVPM3)..........................579.95

PROMIX 6 Portable 6-Channel Mic/Line Mixer

The ProMix 6 is a six channel portable audio mixer that offers high performance to price ratio for ENG and EFP production. Each of the six inputs includes state of the art, super low-noise preamps, two-position low-cut filters, three-way channel assignment switches (pan switches) and handy pre-fade listen switches. In addition, the ProMix 6 offers true dual camera support, bright, sun-light readable peak program meters, dedicated individual line outputs and ergonomic fader knobs. The ProMix 6 also features a reference tone oscillator, slate microphone, switchable output levels, and custom-made, properly-sized, dual output transformers. Ganging input allows two mixers to be connected together for more complex productions.

Inputs
- Six balanced XLR inputs switchable between mic and line level, and each with switchable 48v phantom power, PFL, low cut switch (80, 20 and 140 Hz) and L/C/R pan switch, as well as 1/4” unbalanced outputs.
- Dual 3.5mm tape return inputs allows signal monitoring from one or two cameras.
- Balanced XLR outputs as well as two sets of 1/4” stereo outputs (Aux 1 and Aux 2).
- Switchable output limiters prevent distortion
- 3.5mm and 1/4” stereo headphone outputs
- 1/4” stereo ganged input for daisy chaining to another mixer

Outputs
- Peak reading, multi-colored LED meters
- On board electret condenser slate microphone and 440Hz reference oscillator
- Runs on eight AA alkaline batteries, accepts external power from 6 to 18v DC
- Measures 10 x 8 x 2.3”, weighs 4 lbs.

Conveniences
- Runs on two 9v batteries for easy field use, accepts external power from 7 to 16v DC

ProMix 6 with carrying case and strap (Mfr # FPSCDVMIX6 • B&H # PSDVPM6).................................................................1377.50

ProMix 6 Deluxe Field Mixer Kit: Includes ProMix 6, Porta Brace Mixer and Wireless Mic cases, Versa-Flex Shoulder Harness, carabiner cable carrier, Remote-Audio Betacam audio break-out cable with stereo XLR output and headphone monitoring connections (B&H # PSDVPM6DX) .......................1779.95

www.bhphotovideo.com
ProMix IV Field Mixer

The MX124 is a simple and straightforward 4-channel microphone mixer. It runs on two 9v batteries or 12v DC power for use in ENG and EFP applications. Each mic input offers individually switchable phantom power and low-cut switches. The transformer-balanced XLR outputs can bring the four channels of audio directly into your camera, or other recording device at mic or line level. The low cost and compact design of the MX124 makes it an ideal submixer, within a larger system, where additional microphone inputs are required.

- Four balanced XLR microphones inputs with level and pan controls and a low cut switch (-3 dB @ 100 Hz) available for each input.
- Individually switchable 8 VDC Phantom Power available for use with condenser microphones.
- Stereo transformer-balanced XLR main outputs on the rear panel, as well as 1/4" and 1/8" stereo outputs on the front panel that can be used for headphones, or an auxiliary monitor / record bus.
- Screwdriver adjustable right and left trim pots control the level of each output without affecting the aux / headphone output.
- A clip LED begins to light 3dB below actual circuit clipping letting you know that clipping is about to occur or is occurring.
- Runs on two 9-Volt batteries or +12 VDC power jack for connection to the included Rolls PS27 power supply.

MX124 (Mfr # MX124 • B&H # ROMX124) ................................................................. 179.95

MX422 4-Channel Professional Field Audio Mixer

The MX422 is a four channel, microphone/line mixer with balanced XLR inputs and outputs. The unit is ideal for the broadcast and video markets. It has the same features of other ENG / portable mixers without the extremely high price. Applications include: DV Field Production, Electronic News Gathering, Location Recording (Dialogue and Music), Digital Recording, Broadcast Remotes, Desktop Mixing for Video Post Production.

- Four servo-balanced XLR inputs, each with independent level and pan controls.
- Two transformer-balanced XLR outputs.
- Switchable output level (Line level, or -30 dB pad).
- 1/4" TRS stereo monitor and auxiliary inputs.
- Switchable 48 Volt Phantom Power and 100Hz Low Cut filters for each input.
- Main and Back-up battery compartments, never lose power.
- Built in limiter with variable threshold control (-5dB to off).
- 20 Hz Slate tone with Slate Microphone included.
- Switchable 1 kHz setup Tone.
- Calibrated VU meters.
- 1/4" and 1/8" headphone outputs with level control and selectable source input switchable between main mix or monitor input), and Level control.
- Canvas case included.
- Rolls PS27 external power supply included.

MX422 (Mfr # MX422 • B&H # ROMX422) .................................................. 499.95

Versa-Flex

The Versa-Flex Professional Audio Harness is a heavy-duty padded wide strap that prevents shoulder fatigue while carrying audio equipment. It is designed to be used with professional audio mixer and recording cases. There is a 21" over strap and an 8.0" under strap. The harness features attachment rings for securing cases, two carabiners, removable waist strap and a carry sack.

- Soft, cloth padding under straps
- Chrome-plated adjustment and attachment rings
- 1.5" wide strap with 4" padding underneath

HS1N (Mfr # HS1N • B&H # VEPAHV2) .................................................... 149.95
HS2N (Narrow) (Mfr # HS2N • B&H # VEPAHSV2) .............................. 139.95
HS3N (Narrow/Short) (Mfr # HS3N • B&H # VEPAHSV2) ... 139.95

(212) 444-6601 • 1-800-947-9901 • Quick Dial 91
FP33 Portable Stereo Mixer

The standard by which all portable mixers are measured, the FP-33 is used all over the world for remote audio recording, ENG/EFP applications and location film production. Built upon the benchmark FP32A field mixer, the FP33 is light enough, small enough and rugged enough to take anywhere. It features three XLR-balanced mic/line inputs and two outputs, center detented pan pot for each input channel, oscillator, two headphone jacks, 48v/12v phantom and 12v T (A-B) power, tape out jack, and a monitor input for the headphone circuit. Exceptional low noise design and wide dynamic range make the FP-33 ideal for use with digital transmission links.

FEATURES

Inputs and Outputs

- Three XLR-balanced inputs; switchable to low-impedance mic or line level.
- Phantom or A-B (T) power for condenser mics is available at each mic input.
- Built-in tone oscillator.
- Slate microphone with automatic gain control (AGC) for take identification or for emergency use. Slate tone for identifying take locations during editing.
- Stereo monitor input allows headphone monitoring of external sources without interruption of mixer functions.
- Link switch couples mixer inputs 2 and 3 into stereo pair
- Left and right XLR-balanced outputs are mic/line switchable.
- Left and right tape outputs are available to feed tape recorder inputs or other unbalanced aux-level inputs.
- 1/4" and 3.5mm headphone jacks are driven by a stereo headphone power amp with separate level control.

Controls and Indicators

- Center detented pop-up pan pots on each input. Color-coded, soft touch rubberized knobs with tactile position indicators.
- Active, feedback-type input gain controls permit direct input of high-level sources without input attenuators.
- Dual clutched Master gain control for individually adjusting left and right levels at line/mic and tape outputs, as well as tone oscillator and slate mic levels.
- 150Hz (6dB/octave) Lo-cut filters at each input. Color-coded, soft touch rubberized knobs with tactile position indicators.
- Active, feedback-type input gain controls permit direct input of high-level sources without input attenuators.
- Dual clutched Master gain control for individually adjusting left and right levels at line/mic and tape outputs, as well as tone oscillator and slate mic levels.

Performance

- Wide, flat response with extremely low distortion and up to +1dBm output level for studio-quality performance.
- Mix bus jack for connecting additional FP33 or FP32A mixers.
- Sealed input potentiometers and a steel chassis make the FP-33 extremely rugged and durable.
- Internal DIP switches provide over 4,000 different set-ups.

Porta Brace MXC-33 Audio Mixer Case

The MXC-33 is a padded, custom-fit case for the FP-33 mixer. Flaps, clear vinyl windows and protective coverings provide access to cable openings, batteries, dials and switches. It includes the main mixer compartment, the RM-Multi wireless microphone case and a medium duty suede leather shoulder strap. The RM-Multi attaches to the mixer case to carry various small accessories: batteries, wireless microphones and head phones. An optional AH-2 audio harness/belt combination helps provide additional stability and weight distribution.

FP33 (Mfr # FP33 • B&H # SHFP33): With carry case, shoulder strap, Mix Bus cable, spare fuse ........ 1274.95

Porta Brace MXC-33 (Mfr # MXC-33 • B&H # POMXC33): With suede leather shoulder strap.... 144.95

www.bhphotovideo.com
**Portable Six-Input Mic/Line Mixer**

An industry standard, the M367 is a six-input mono mic/line mixer/remote preamp designed for professional applications. A complete and compact console, the M367’s excellent performance, versatility and features make it ideal for studio, remote, video deposition and sound reinforcement applications. Built to meet the requirements of the most demanding field production applications.

- 6 balanced XLR mic/line level with switchable phantom power and low cut filters
- Two balanced XLR outputs; one selectable mic/line and one dedicated line output.
- Metal XLR connectors on both inputs and outputs; detachable AC cable
- Feedback-type input gain controls for maximum clipping levels and dynamic range.
- Wide, flat 20Hz to 20 kHz frequency response and extremely low distortion up to +16dBm line level output.
- Switchable, adjustable peak limiter adapts to power supply voltage.
- LED indicator shows limiter operation or overload with limiter defeated.
- VU meter is calibrated for +4 and +8dB with range switch. Meter is also illuminated during AC operation.
- Highly stable, low-distortion tone oscillator provides for line test and level checks.
- Automatic muting prevents speaker damage during power on/off.
- Front-panel headphone level control and monitor jack; can drive almost any stereo or mono headphones. Headphone output level is high enough to be used as an auxiliary unbalanced line feed
- Rear panel Mix Bus jack facilitates stacking multiple M367’s for additional inputs.
- Selectable 120 or 240v AC operation
- DC operation with three 9v batteries

**ENG-44 4-Channel Portable Field Mixer**

The ENG-44 is a compact, rugged, and lightweight four channel mixer with an impressive array of features. It offers superb sound quality with a range of inputs and outputs including four mic/line switchable XLR inputs and balanced XLR outputs. The ENG-44 is reliable and easy to use — just strap it over your shoulder or use it table top for complete hands on sound control— on location or anywhere else. You can gang multiple ENG-44s together for access to 8, 12, or more channels.

- Four mic/line XLR audio inputs each with its own gain control pot (volume control), switchable 48 volt phantom power, switchable low frequency roll off filter (low cut filter), pan switch (left-center-right), and mic/line level switch.
- Master Gain control.
- Compressor/limiter with indicator light.
- Mix buss input via 1/8” jack.
- Front panel slate mic with momentary push button for fail safe press-and-release voice slating and a 1kHz reference tone.
- Balanced left and right channel XLR outputs.
- Left and right channel LED audio VU meters.
- Auxiliary 1/8” unbalanced mic level stereo output jack.
- 1/8” stereo headphone output with volume control.
- Switchable tape return input, with level control, for monitoring to confirm that audio is actually being recorded to tape.
- Boom mic operator headphone out on XLR jack eliminates the need to carry a spare cable with 1/4” plugs.
- External power jack for use with AC adapter (included).
- Brightness switch for audio VU meters— switch to High for viewing in direct sunlight.
- Rugged anodized aluminum chassis, with rugged aluminum shoulder strap ears and attachable/adjustable shoulder strap.
- Automatic battery/external power switching, with power LED indicator lights. Slide out battery compartment allows quick and easy battery changes.
- Mixer is fully protected against battery or external input reverse voltage.
- Extended 14 hour battery life under normal operating conditions. A battery indicator flashes when battery life falls below 20%.

**M367**

(Mfr # M367 • B&H # SHM367) .................$599.95

**ENG-44**

(Mfr # ENG44 • B&H # SIENG44) .................$529.00

(212) 444-6601 • 1-800-947-9901 • Quick Dial 91
DMX-P01
Digital Audio Mixing for ENG and EFP

The DMX-P01 is a lightweight and portable field mixer with four balanced XLR mic/line inputs, designed for use in ENG and EFP applications. It offers full 24-bit A/D to D/A converters, 32-bit internal processing and a sampling rate of either 48kHz or 96kHz, to provide sound quality comparable to high-end production mixers. The front panel allows fast, easy, and accurate setting adjustments - essential when working in the field. The DMX-P01 offers a unique Scene store - recall feature that enables user to instantly recall up to ten different mixer user-snapshots. Other features include panel-lock and parameter-lock functions, selectable meter scales, and camera-audio return-level check. For applications requiring additional inputs, DMX-P01 mixers can be cascaded using a digital connection between mixers. When cascading mixers digitally, sound quality isn't degraded, as when cascading analog mixers. The DMX-P01 is also equipped with AES/EBU and coaxial S/PDIF digital outputs for connection to digital peripheral equipment.

**Inputs / Outputs**
- Four microphone/line inputs with balanced XLR connectors.
- Gain, level and pan controls as well as switchable 48v phantom power and Low Pass Filters, with adjustable frequencies and 2 user settings for each input.
- Coaxial S/PDIF digital input and output can be used to connect multiple units.
- Level control knobs with stereo-link facility.
- Selectable 48kHz or 96kHz sample rates for A/D converters and for D/A converters.
- Two balanced outputs with XLR-type connectors.
- Digital AES/EBU output with XLR connector.
- Unbalanced 1/8" TRS stereo tape output.
- Stereo and mono output modes.

**Link/M-S Operation**
- Links input levels, LCFs, and PAN controls for channels 1/2 and 3/4.
- Links output levels for master L/R outputs.
- Decodes M-S microphone inputs, and links the input levels of channels 1/2 and 3/4.
- Phase reverse on channels 2 and 4 (M-S decode).

**Limiters/Compressors**
- Digital limiters on both inputs and outputs.
- Digital compressors on outputs.
- Precise parameter control on threshold and ratio value, attack and release time.
- Link function (ON/OFF switchable).
- LED indicators for output limiter/compressor operation.

**Monitoring**
- 1/4" and 3.5mm headphone outputs.
- Six monitoring modes: left output, right output, stereo output, left/right-mixed monaural, M/S decode and camera return.
- Level-control knob Camera-Audio Send/Return-Level Control.
- Stereo return from a camcorder via 12-pin balanced connector.
- Precise level control on LCD with auto-evaluation function for return level.

**LCD Panel**
- The multi-function LCD display features a back light and is heated for low-temperature conditions.
- Various level-meter displays: VU, PPM1 (BBC-type), PPM2 (DIN-type), PPM3 (NORDIC-type), PPM4 (IEC-type1), dBFS.
- Displays setup menus and allows various parameter settings.
- Ten user-scene memory settings (each including level meter, LCF, limiter/compressor, and link status).
- Six scale sheets supplied for different level-meter calibrations.

**Memory and Recall Functions**
The DMX-P01 can effortlessly store and recall parameters from the setup menu. There are two memory functions: “Power-On Memory Recall,” and “Scene Memory Recall.” When powered on, the system is capable of recalling parameters in three different ways: with the default factory settings, with the same settings as the last time the unit was used, or with the parameters of one specific scene memory.

The Scene Memory Recall feature allows you to recall up to ten different user-defined parameter settings or the factory default settings. In situations where a single unit is required to serve multiple users or multiple shooting scenarios, these features can prove invaluable.
Compact Two Channel Compact Field Mixer

A studio-quality two-channel, portable microphone mixer. Its impressive audio performance and comprehensive features include Left / Center / Right pan switches, built-in slate microphone, 1 kHz tone oscillator, and headphone monitoring. Ideal for the front end of any studio or field production system, television and film production engineers value its compact size and ability to withstand extremes in the field. The MixPre combines rugged mechanical and electrical construction with high-quality components delivering no-compromise performance for any application.

- Dynamic range exceeding 110dB.
- 10Hz to 50kHz audio bandwidth.
- Maximum of 66dB of gain per input.
- Discrete 6-transistor balanced output drivers.
- Sealed, conductive plastic potentiometers.
- Seven-segment, sunlight-readable GaN LED meters.
- 48v or 15v phantom power.
- 6dB / octave high pass filters @ 80 or 160Hz.
- Inputs hard panned to left, center, or right outputs.
- “Unclippable” input peak limiters via two-stage opto-isolator circuit with adjustable limiter threshold (per input).
- Dual mono or linked stereo limiter operation.
- Powered via 2 AA alkaline batteries or external 5-17v DC power source.
- Power LED indicates low battery power.
- High-power headphone monitoring.
- RF filtering on all inputs and outputs. Free from “Pin 1” grounding problems.
- High-strength, extruded aluminum chassis with protective metal end panels. All-metal connectors solidly connected to chassis.

MixPre (Mfr # MIXPRE • B&H # SOMIXPR) ............. 665.00

302 Three Channel Compact Production Field Mixer

Developed specifically for audio-for-video applications, the 302 mixer is the perfect tool for production companies and camera operators wanting to take control of their audio. The 302 is stunning for its size, flexibility, control and performance; it is the most compact and cost-effective battery-powered professional audio mixer in its class. Designed to accommodate nearly any over-the-shoulder production, the 302 interfaces with wireless transmitters and receivers, camera audio inputs of all kinds, and external audio recorders. Like the larger 442 (next page), the 302 has a complete feature-set in a compact, functional design. All controls are accessible on its three main surfaces; no hidden controls. The high-efficiency power circuitry runs the mixer from either three internal AA batteries or external 5-18v DC power.

- Lundahl transformer-balanced mic or line level inputs on XLR connectors.
- Continuously adjustable input trim.
- Two-position high-pass filter.
- Pan switches.
- Limiters on inputs and outputs.
- Stereo and MS linking of channel 1 and 2.
- Phantom (48v or 12v) or “T” microphone powering selected per channel.
- Peak limiters per channel.
- Solo (PFL) channel monitoring in headphones.
- Tape level output on TA3 locking connectors.
- Active-balanced line/tape/mic level outputs on XLR connectors.
- Stereo tape level output on TA3 connector.
- Return input for monitoring.
- Sunlight-viewable LED meters with proprietary software selected ballistics.
- Channel 4/5 input option.
- On-board MS stereo matrix.
- Push pots for setup features to keep the front panel clutter-free.
- Durable extruded aluminum chassis.
- Weight less than 1 kg with batteries.
- Powered by three AA batteries or external 5-18v DC power.

302 (Mfr # 302 • B&H # SO302) ....................... 1295.00

(212) 444-6601 • 1-800-947-9901 • Quick Dial 91
Four Channel Field Mixer

Developed with input from top audio engineers, the 442 encompasses the audio performance, feature set and mechanical construction demanded by those who rely on audio gear for their livelihood. The 442 contains four mic preamps that re-define portable audio performance. With its comprehensive inputs and extensive outputs, including direct outputs per channel, the 442 is at home in small run-and-gun applications as well as large, multiple-input productions.

The 442 incorporates a complete feature-set into a compact, functional design. All controls are accessible on its three main surfaces; no hidden controls. The high-efficiency power circuitry runs the mixer from either four internal AA batteries or external 5-18v DC. The 442 and 442N, like all Sound Devices professional audio products, are designed to withstand the physical and environmental extremes of field production. Its compact mechanic construction strikes the perfect balance between access to all functions, uncluttered design, and durability.

**FEATURES**

- Lundahl transformer-balanced mic or line-level inputs on XLR connectors.
- Transformer-balanced line/tape/mic level output on XLR connectors.
- Continuously adjustable input trim.
- Variable high-pass filter.
- Continuously variable pan control.
- Phantom (48-volt or 15-volt) or “T” microphone powering selected per channel.
- Peak limiters per channel.
- Solo (PFL) channel monitoring in headphones.
- Transformer-balanced line/tape/mic level output on Hirose connector.
- Balanced line or tape level output on TA3 locking connectors.
- Unbalanced TRS-stereo tape level output on 1/8” connector.
- Unbalanced TS-mono mic level output on 1/8” connector.
- Direct outputs on TA3 locking connectors.
- Sunlight-viewable LED meters with proprietary software-selected ballistics.
- On-board MS stereo matrix, channels 1 and 2.
- Two independent monitor return inputs for monitoring two-camera productions.
- Push pots for setup features keep front panel clutter-free.
- Powered by four AA batteries or external 5 - 18v DC.

**442: 4-Channel Field Mixer with Mic or Line Level Input and Output (Mfr # 442 • B&H # SO442)…………………………………………………………………………………………………………………………………………………**2495.00

**442 ENG/EFP Deluxe Field Mixer Kit:**
Includes 442, Mixer and wireless microphone case, Shoulder Harness, Cable Carrier and Betacam Breakaway Audio Cable (B&H # SO442DK) ..........2995.00

<table>
<thead>
<tr>
<th>MixPre</th>
<th>302</th>
<th>422</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response</td>
<td>20 Hz - 30 kHz, +0.1, -0.5dB</td>
<td>20 Hz - 30 kHz, +0.2, -0.5dB, -1dB @ 5 Hz and 50 kHz typical</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>&gt; 110dB</td>
<td>115dB minimum (trim fully down)</td>
</tr>
<tr>
<td>THD + Noise:</td>
<td>0.05% maximum (from 60 Hz to 22 kHz @ +4 dBu output level, 22 Hz - 22 kHz filter bandwidth, gain control at 50%, phantom off)</td>
<td>0.007% typical (1 kHz, +4 dBu at Line out), 0.009 max (50 Hz to 20 kHz, +18 dBu at line out, fader fully up)</td>
</tr>
<tr>
<td>Gain Mic In to Line Out</td>
<td>66dB</td>
<td>75dB</td>
</tr>
<tr>
<td>Phantom Power</td>
<td>+15v, +48v</td>
<td>12v, 48v, 12v T-power</td>
</tr>
<tr>
<td>Battery Power</td>
<td>Up to 6 hours via 2 AA alkaline batteries</td>
<td>3 AA alkaline batteries</td>
</tr>
<tr>
<td>External DC input</td>
<td>5-18v on locking 4-pin Hirose connector</td>
<td>5-18v on locking 4-pin Hirose connector</td>
</tr>
<tr>
<td>Dimensions (HWD)</td>
<td>1.7 x 3.7 x 5.5”</td>
<td>1.8 x 8.4 x 4.5”</td>
</tr>
<tr>
<td>Weight</td>
<td>2.0 lbs.</td>
<td>1.8 lbs</td>
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</tbody>
</table>
The X3, X4 and X5 are high quality, portable audio mixers with three, four and five input channels respectively. These premium low-noise mixers have all the features necessary for any film or television application. Each mixer offers top of the line sound quality, maximum flexibility and exceptional reliability in the field.

Each of the three balanced XLR inputs are switchable for mic and line level operation, and offer individually switchable 48v phantom power, three position Low Cut Filters (140HZ, 20HZ, and 100HZ at 12dB /octave), and Left / Center / Right pan switching.

Each input also offers 3 position preamp gain attenuation (10dB, 20dB and 0dB).

XLR-balanced mic/line switchable outputs.

Switchable in/out Limiter.

Link / Aux output using a 5-pin TA connector lets you link the X3 to an X5 for eight inputs.

1/4" stereo headphone output with volume control.

An unbalanced 3.5mm return lets users confidently monitor the signal going through the camera or recording device.

Multi-colored stereo LED VU meters with switchable brightness — Blue LEDs -12dB, -9dB, -6dB, -3dB, 0dB and Red LED +3dB.

Power monitor LED for normal and low power. Battery voltage is indicated on the right LED display.

Runs on six AA batteries or external 9 - 18v power. Battery voltage is indicated on the right LED display.

Runs on six AA batteries or external 9 - 18v power. Battery voltage is indicated on the right LED display.

Options:

- Cordura Bag for X3 (Mfr # X3BAG • B&H # WEX3BAG) ......................................................... 89.95
- X3 Basic Kit: Includes X3 Mixer, Sony MDR V6 Studio Headphones, Headphone Softies, 25’ XLR cable and cable carrier. (B&H # WEX3BK) .............................................................. 1285.00
- X4 (Mfr # X4VU • B&H # WEX4VU) .................................................................................. 1799.00
- X4 Deluxe Kit: Includes X4 Mixer, Porta Brace mixer and wireless mic case, Versa-Flex Shoulder Harness, cable carrier and 20’ Betacam breakaway audio cable. (B&H # WEX4VUDK) .......... 2149.95
- X5 With Porta Brace custom case (Mfr # X5VU • B&H # WEX5VU) .................................... 2599.95
- X5 With Nordic Style Metering and Porta Brace custom case. (Mfr # X5PPM • B&H # WEX5PPM) ........................................ 2799.95

Running for almost 15 hours on six AA batteries, the X3 offers three mic / line switchable inputs with, pan switches, phantom power and two low cut filter settings for each channel. Additional features include a slate mic and a 1/4” headphone output, as well as unbalanced AUX and balanced XLR mic-line switchable outputs.

The four channel X4 mixer offers phantom power and 12v ‘T’ power for each of its inputs. Inputs 1 and 2 can be ganged for stereo operation. The X4 runs for up to 15 hours using eight AA batteries.

The five channel X5 adds a momentary PFL (PreFader Listen) button for each input, allowing you to solo each input channel, and check for correct level settings. The X5 also provides two set of balanced outputs, each selectable for mic or line level operation. Plus, two X5 mixers can be ganged for mixing a total of 10 inputs and eight outputs.

X4 Step-up Features

- Four XLR balanced mic / line inputs with switchable 48v phantom and 12v T power.
- Mixer Mode allows channels 1 and 2 to be ganged for full stereo operation using the channel 1 fader. Channel 2 fader becomes a balance control.
- 1/4” stereo headphone output with mono, stereo and mid-side stereo monitoring.
- 3.5mm microphone output provides unbalanced stereo mic level outputs.
- Analog VU meters with momentary 12 second back light illumination.
- A multi-pin accessory connector provides balanced line outputs, monitor returns and external power.
- Runs 15 hours on 8 AA batteries.

X5 Step-up Features

- Five XLR balanced mic / line inputs, each with PFL (PreFader Listen) via a momentary push button.
- Two sets of mic / line switchable outputs: stereo balanced XLR, and TA3 connectors switchable for R+L or stereo output.
- Returns - Multiple returns (front panel switchable) A & B, 3.5mm mini jack.
- The Link function allows two X5 mixers to be cross-linked for a total of 10 inputs and 8 outputs via a TA5 connector.
- External 9-18v, 4-pin Hirose conn.
- MS tape return, multi-pin ENG cable port (X4 snake cable compatible); stereo mic out - unbalanced, 3.5mm; metering - VU and optional PPM.