

Convergent Design Presents Flash XDR™ The First CompactFlash® Based HD Xstream Data Recorder

HD-SDI Source



HD-SDI
(Video+Audio+TC)



Native QT or m2t File

Laptop Editor



Satellite Uplink



ASI

Confidence Monitor



HD-SDI

1394

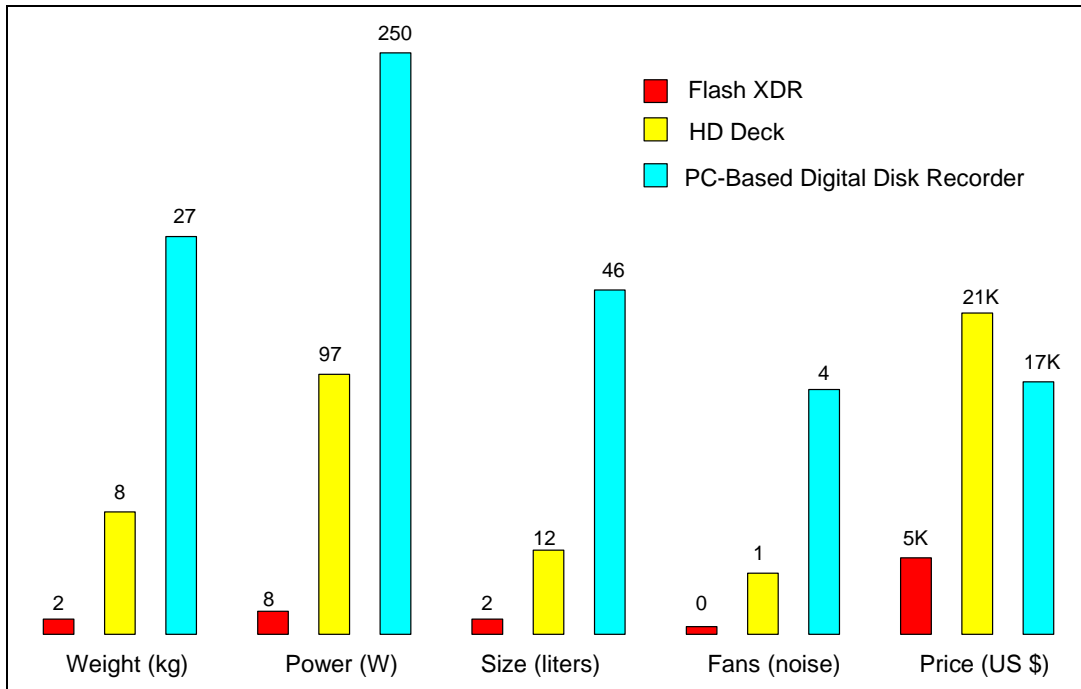
Optional HDV
Capture Devices



Features

- HD-SDI ↔ HDV or XDCAM® HD MPEG2 Streams
- Also supports MPEG2 4:2:2 @ 50 Mbps
- 1080i, 720p, **1080p23.98**
- Embedded or External Audio, Time-Code inputs
- Internal time-code generator, GPI Trigger input
- Two Hot-Swappable CompactFlash Card Slots
- Enables File-Based transfers, 5x-12x real-time
- Rugged, solid-state; silent operation
- Compact, Ultra-Portable, 2kg with battery
- US \$4995

Flash XDR Re-Defines Portability and Affordability In HD Field (Digital Disk) Recorders



Innovative CompactFlash Based Design

- Industry-standard, non-proprietary memory
- Widely available from multiple sources, 16GB costs ≈ US \$300
- 1/3 the price and 2X the performance of proprietary Flash Cards
- Price parity (per GB) with HDV Disk-Drives
- Hot-swappable, non-volatile, highly reliable (MTBF > 1M Hours)
- Solid-state, no heads to crash, tape to jam, or drop-outs
- Very low-power: 0.25 Watt (5% the power of hard-disk drive)
- Long-life: 10K Insertions / Removals, 100K Read / Write Cycles



High-Performance
Solid-State Media



FireWire-800 Reader
340 Mbps I/O

Transfer Time and Record Capacity (in Minutes)

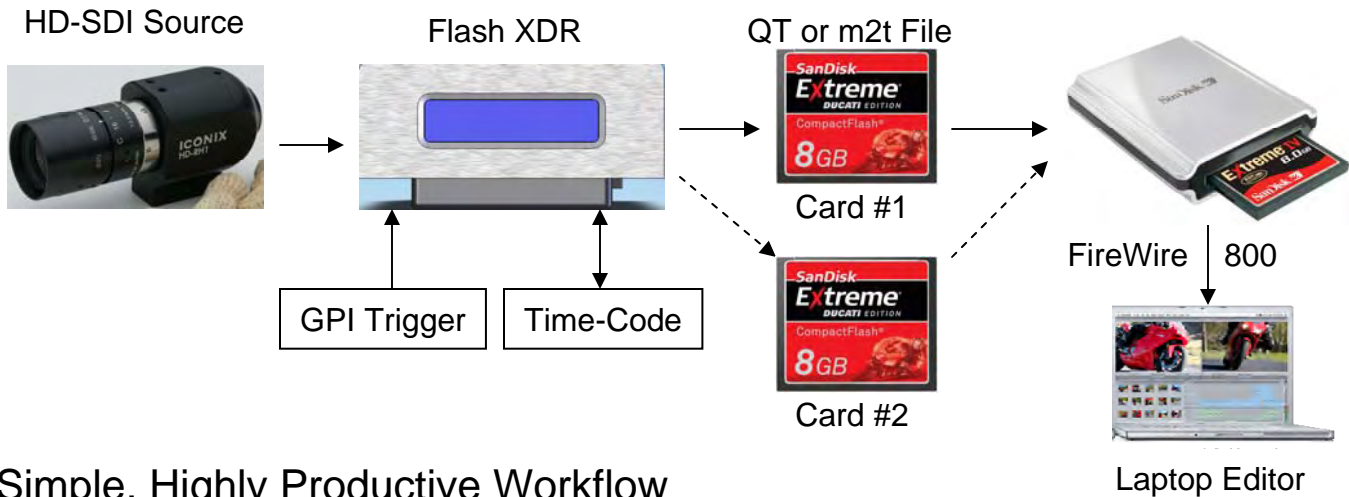
Video Format	720p	1080i	1080i/p	1080i/p 720p
Bit-Rate (Mbps)	19.3	25	35	50
Transfer Time (Mins)	4.5	5.8	7.8	11.25
16 GBytes	89	69	51	36
32 GBytes	178	138	102	72
64 GBytes (available 2008)	356	276	204	144

Transfer Time is the approximate time (in minutes) required to transfer 60 minutes of video to your NLE using the FireWire-800 Reader.

Approximate **Record Capacity** is shown (in minutes) for various memory configurations, assuming 2-Channel audio. **Flash XDR has two CompactFlash slots.** Currently, the largest Compact Flash card capacity is 16 GBytes, but 32 GByte cards are expected in 2008.

CompactFlash®

Powerful File-Based Workflow "Edit While You Shoot"



Simple, Highly Productive Workflow

Connect any HD-SDI source via coax (up to 150 meters) to Flash XDR. Use internal or external time-code source; the internal real-time clock will automatically add date and time information. Turn on Flash XDR and notice the instant start-up (no boot-up required) and the silent operation (no fans). Record some video to one of the two hot-swappable Compact Flash cards. Start your edit session by forcing a card eject (the box will automatically start recording to the second card). Quickly transfer (see chart) the QuickTime or .m2t file to your laptop editor using the Firewire-800 reader. Now "edit while you (continue to) shoot", productively using your laptop as an editing tool, avoiding lengthy ingests from the old FireWire direct-to-laptop capture method.

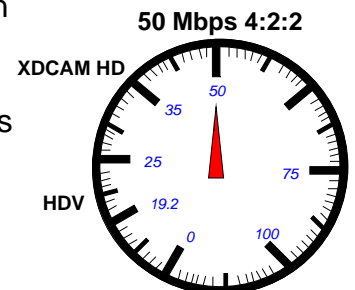
The ultra-portable, low-power design means you can carry Flash XDR on any shoot, and enjoy a full-day of battery-powered operation. This rugged, lightweight, self-contained unit can be easily carried in a backpack, placed in a helicopter or used as a pool-feed recorder. Create simultaneous offline clones in the field from the HD-SDI output of your online HD VTR. Compact Flash cards can be readily swapped-out for endless recording possibilities (surveillance). Finally, for maximum versatility, ASI and 1394 outputs support satellite uplink, Internet streaming (via ASI → IP), or recording to an HDV deck / camcorder / FireWire drive / Walkman device.

Upgrade to 50 Mbps 4:2:2 Quality

You're no longer limited to HDV rates, dial down the compression and select the 422P@HL profile to get full-raster 1920x1080i/p or 1280x720p 4:2:2, 50 Mbps video and up to 4-channels of uncompressed 16-bit, 48Khz audio. In addition to the standard 1080i/p and 720p video formats, you can also utilize the 1080p23.98 rate, perfect for digital cinematography.

The high-quality Sony MPEG2 CODEC employed in Flash XDR provides selectable bit-rates, so you can match your rate to the job requirements. Non-proprietary, industry-standard MPEG2 means you have a wide range of editing and transmission options.

MPEG2 HD



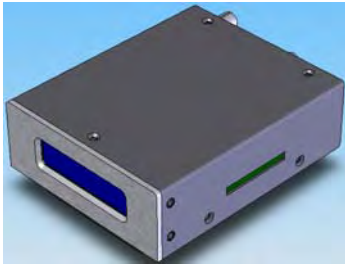
Selectable Bit-Rates



Convergent Design

Flash XDR™

CompactFlash® Based, HD Xstream Data Recorder



Top View



Rear View

Features

- Real-time, stand-alone **HD-SDI ↔ HDV, XDCAM HD™, or 50 Mbps 4:2:2 MPEG2 Bit-Rates**
- Store video internally to **CompactFlash**, or externally to Laptop, HDV deck / HDV Firewire drive
- Two hot-swappable solid-state CompactFlash slots; for endless record time
- Two 16GByte CompactFlash cards store up to 138 minutes (1080i HDV)
- Transfer CompactFlash video file at 5X ~ 12X real-time to NLE in QuickTime or .m2t format
- **HD-SDI** Input (with 4-channel embedded audio and time-code)
 - 1080i59.94, 1080i50, 1080p29.97, 1080p25, **1080p23.98**, 720p59.94, 720p50
- **MPEG2** Profiles
 - 422P@HL: 50 Mbps VBR (1920x1080i/p, 1280x720p, 4:2:2, Long-GOP)
 - MP@HL: 18, 35 Mbps VBR (1440x1080i/p, 4:2:0, Long-GOP) (XDCAM HD)
 - MP@H-14: 25 Mbps CBR (1440x1080i, 4:2:0, Long-GOP) (HDV-2)
 - MP@HL: 19.3 Mbps CBR (1280x720p, 4:2:0, Long-GOP) (HDV-1)
- Inputs: HD-SDI, ASI, AES Audio (BNC x2), Time-Code (LTC), GPI Trigger
- Outputs: 1394 (4-pin), HD-SDI, ASI, Time-Code (LTC)
- Audio Formats:
 - MPEG1 Layer 2, 48-KHz (384 Kbps: 2-Channel, 192 Kbps: 4-Channel)
 - Uncompressed PCM Audio (4 Channel, 48-KHz, 16-Bit)
- Audio Input Source: 4-Channel (AES digital or HD-SDI embedded)
- **Compact: 5.0”(W) x 3.5”(H) x 6.5”(D)**, (127 x 89 x 165 mm), 3 lbs (2 kg) with battery
- Low Power: 8W, +5V~+16V DC power input, universal AC adapter included
- Anton Bauer ElipZ 10K **Battery (included)**, provides approx. **8 Hours operating time**
- Rugged, all solid-state construction, no disk-drive heads to crash or tape mechanisms to jam
- Applications:
 - Live-Event recording (churches, concerts, etc)
 - Pool Feed Recorder from Live-News, Courtroom events
 - Mobile Trucks, Local TV Station Broadcast, Post Production, Pole Cams
 - ASI → IP (MPEG2 over Internet), ASI → Satellite Uplink
 - Sports, Nature shoots, Film documentaries, etc.
 - Helicopters, Race-Cars, Horse-Races, Airplanes, Helmet cameras
 - Off-line edits of high-end HD productions (HDCAM SR)
 - Sports, Medical, Corporate, ENG, EFP, Underwater cameras
 - Tape Dubs HDCAM® → HDV
- US \$4995, available Q4 07; 16Gbyte CompactFlash cards cost ≈ US \$300

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