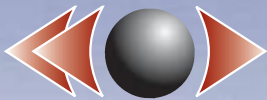# FlashBack-2
covert video recording

tough, compact performance

flash memory MPEG-2 video recorders
for covert surveillance applications

FlashBack-2

introduction

FlashBack-2 utilises broadcast standard MPEG-2 video compression to record high quality real-time video and audio to a Compact Flash (CF) memory card. Once a recording has been made, the flash card may be removed and immediately viewed on a hardware CF media player or a PC.

The recorder is DC powered and has stereo audio inputs at microphone or line level. FlashBack-2 Dual offers two Compact Flash card slots, doubling the record time and allowing for the "hot swapping" of cards.

Housed in small rugged metal enclosures, FlashBack-2 is ideal for covert installations. Furthermore, as it contains no moving parts, recording in harsh environments, with continual shock and vibration over extended temperatures (-10 to +60°C) is now possible.
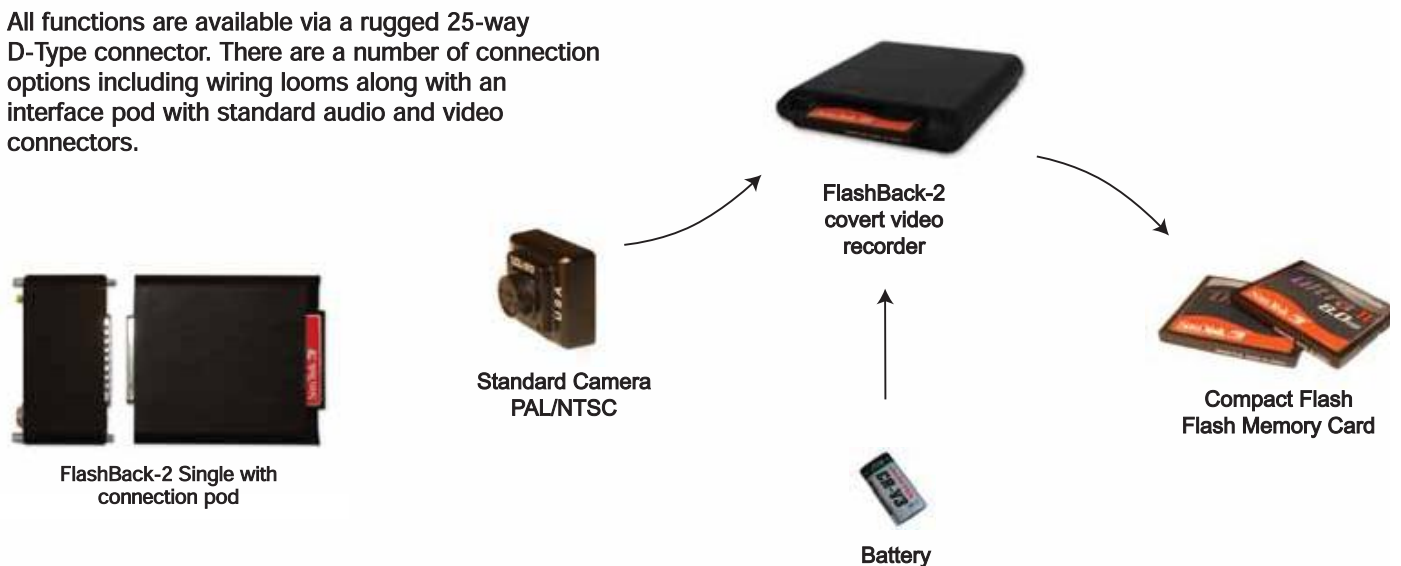
Excellent video performance, ease of playback, compact size and rugged construction makes FlashBack-2 the ideal solution for rugged and covert video recording applications.

installation

FlashBack-2 is simple to install and only requires DC power (6 to 15 Volts), a camera feed and a record switch to function. Further interfaces include stereo audio inputs (microphone to line level with mic bias) and video and audio monitor outputs.

All functions are available via a rugged 25-way D-Type connector. There are a number of connection options including wiring looms along with an interface pod with standard audio and video connectors.

- Rugged and compact real-time MPEG-2 video and audio recorder

- Records to single or dual Compact Flash memory cards, playable on a PC / laptop

- Up to 8 hours of high quality recording, 16 hours with the dual

- Stereo line and mic level audio recording

- DC powered with low current consumption (6 to 15V DC)

- Light weight and rugged with no moving parts

- "Burnt in" on-screen date and time

- Files may be burnt to DVD disk, without file conversion

FlashBack-2 Single with connection pod

Standard Camera PAL/NTSC

FlashBack-2 covert video recorder

Battery

Compact Flash Flash Memory Card

configuration

The FlashBack-2 unit is easily set up by a PC configuration utility, supplied on CD, connected to the FlashBack-2 via a serial lead.

The Record Setup Tab (See Figure 1) configures the amount of video compression (quality). For example, the "High" quality setting at full resolution gives a record time of 24 minutes per gigabyte (GB) of memory. By contrast, "Low" video quality with the lowest resolution provides 111 minutes per GB. It is also possible to record audio only, extending the record time to 416 minutes per GB.

The "On-Screen Display" Tab configures the date and time, which is superimposed on the recorded video to your preferred format and position. Other Tabs control features such as optional triggered recording and setting the internal clock (See Figure 2).
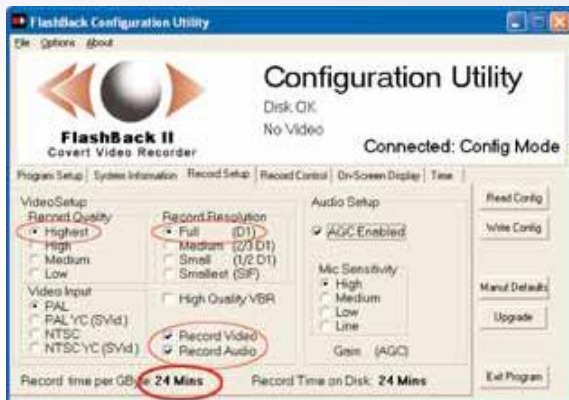

figure 2

figure 1

operation

FlashBack-2 starts and stops recording under control of an external record switch. After the required recordings have been made, the flash card is removed for viewing.

FlashBack-2 files may be replayed on a standard MPEG-2 compatible PC media player application or hardware Compact Flash Viewer. Furthermore, files may be easily archived to DVD (which also use MPEG-2 compression) without the need for file conversion.

Play on a low-cost DVD player

Play on a PC/ Burn onto DVD

DVD

Archive

Play on an MPEG-2 CF card media player

specifications

general

Operating temperature range	0 to +45°C
	(-10 to + 60°C optional)
Mechanical size (housed)	Single: 75 x 83 x 16 mm
	Dual: 75 x 83 x 23 mm
Finish	Hard anodised aluminum
Weight (housed, no cards)	Single 115g, Dual 145g
Operating voltage range	6 to 15 V DC
Power consumption	< 3 Watts
Current consumption at 12 V	225 mA (approx.)
Standby current consumption	< 220 uA
Disk interface	CF Card
Input / output connector	25 way D-Type socket
Record control	Record on contact to Gnd or triggered record for preset time
Configuration	via RS232 port & PC application (cable provided)

video

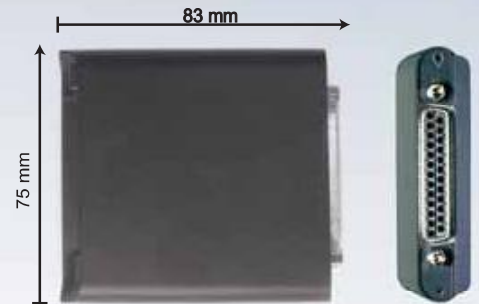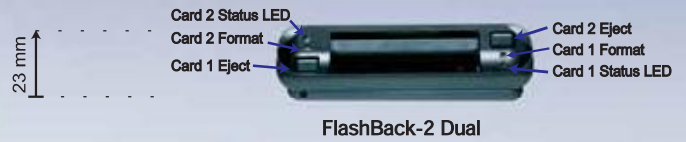|	
Video standards supported	PAL & NTSC configurable
Video compression	MPEG-2
Video Input level	1 Vpp into 75ohms
Digital sampling	PAL: 576 lines by 720 pixels
	NTSC: 488 lines by 720 pixels
Power-up to record time	< 2 seconds
Record Time (at full resolution)	Highest: 15 min/GB (9 Mbps)
	High: 24 min/GB (5.6 Mbps)
	Medium: 39 min/GB (3.5 Mbps)
	Low: 55 min/GB (2.4 Mbps)
Onscreen display	Date & time with configurable format

audio

Number of channels	2 (stereo)
Compression	MPEG-1 level 2
Input level	Mic / line (adjustable)
Mic bias	3.3 v
Audio only recording	Supported

connection pod specifications
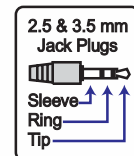
general

Mechanical size	75 x 40 x 16 mm
Finish	Hard anodised aluminum
Weight	60 g
Video Input	SMB (SMB to BNC adapter cable provided)
Audio Inputs	2 x 3 pole 2.5 mm jack socket:
	Tip: audio Input
	Ring: mic bias (3 Volts)
	Sleeve: ground
Record control	3 pole 3.5 mm jack socket
	Tip: record switch input
	Ring: triggered record input
	Sleeve: ground
Camera DC & Rec OK	3 pole 3.5 mm Jack
	Tip: record OK output
	Ring: switch camera DC output
	Sleeve: ground
DC input	2.1 mm DC Jack socket with locking ring

16 mm

Card Eject
Status LED
On / Format Switch

FlashBack-2 Single

23 mm

Card 2 Status LED
Card 2 Format
Card 1 Eject
Card 2 Eject
Card 1 Format
Card 1 Status LED

FlashBack-2 Dual

83 mm

75 mm

25-Way D-Type Pin Assignment

1	DC in (6 to 15V)	14	Power Gnd
2	RS232 RXD	15	RS232 Gnd
3	RS232 TXD	16	Switched DC (out)
4	Trigger / stop (in)	17	Rec Switch (in)
5	Switch Gnd	18	Rec OK (out)
6	Audio Gnd	19	Mic bias R
7	Mic input R	20	Audio Gnd
8	Mic bias L	21	Mic input L
9	Audio Gnd	22	Aud monitor L
10	Aud monitor R	23	Video monitor
11	Video Gnd	24	S-Video C (in)
12	Video Gnd	25	Video (in)
13	Gnd		

40 mm

75 mm

Video In
Rec Switch & Rec Trig /Stop
Camera DC & Rec OK
DC Input 6 to 15 V

Left Audio In & Mic Bias
Right Audio In & Mic Bias

FlashBack-2 Connection Pod

2.5 & 3.5 mm Jack Plugs

Sleeve
Ring
Tip

Please note:
Ovation Systems Ltd. reserves the right to change specifications without notice. E&OE

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