



GENEX GX8500 MULTI FORMAT RECORDER



# GENEX GX8500

## Multi Format Recorder

### GX8500

#### KEY FEATURES

- 8 channel hi-definition digital audio recorder
- Records DSD (Direct Stream Digital) and PCM
- 96kHz sampling: single or dual wire interface  
192kHz sampling: dual or quad wire interface
- Available with or without internal A-D and D-A 8-track converters (24-bit/96kHz)
- Simultaneous recording of 4-track 24-bit/192kHz via external converters
- New V2 software
- Choice of 5.2GB MO or fixed hard disk drive
- Advanced back-up algorithms for rapid disk to disk copying
- Seamless switching between any internal or external SCSI devices
- AES/EBU, SDIF2 & DSD digital I/Os
- Ultra-low jitter clock developed in conjunction with Pacific Microsonics
- Assemble and insert recording modes
- 16 input/output parallel interface
- Built-in 8 channel digital mixer
- Input and output routing
- Seamless punch in/out with adjustable digital crossfades
- Adjustable PPM meter level setting with fine calibration mode for accurate alignment
- Free Genex software updates
- RS422 interface
- 9 system presets
- 100 locate memories
- Unique ID facilities (Take, False Start, Note, End)



**The Genex GX8500 is an 8 channel, multi format digital audio recorder designed for multichannel mastering and location recording applications in which audio must be recorded and stored at the highest possible quality.**

of DSD (Direct Stream Digital), the 2.8224MHz 1-bit datastream developed by Sony for SACD (Super Audio CD). An optional DSD processing card, co-developed with Sony, provides metering, crossfades and headphone monitoring for DSD recording.

#### • PCM AND DSD RECORDING

In addition to high definition PCM recording up to 24-bit/192kHz, the GX8500 is also the only commercially available system capable of recording up to 8 channels

#### • TOTAL COMPATIBILITY

Available with or without on-board 24-bit/96kHz converters, the GX8500 uses advanced, ultra-low jitter clock output circuitry developed in conjunction with Pacific Microsonics to maintain exceptional



GXR48 Remote Control

### GX8500

#### KEY APPLICATIONS

- Hi-definition mastering
- Multichannel mastering for DVD
- DSD recording for Super Audio CD
- High-definition location recording
- Stereo or multichannel PCM archiving at the highest possible bit/sample rates



sound quality. Compatibility with digital mixers and other recorders is ensured by 192kHz dual or quad wire interfacing, and 96kHz single or dual wire interfacing, while AES/EBU and SDIF2 digital interfaces enable the GX8500 to integrate easily into any existing digital audio recording, production or mastering environment. A built-in 8 channel digital mixer automatically produces a 2 channel mix for monitoring, which is also delivered to an AES/EBU output making it easy to produce convenient CD-Rs for artist approval.

#### • CHOICE OF STORAGE MEDIA

Users may choose from a range of optional storage media including integral Magneto Optical or fixed hard disk

drives, with seamless switching between internal and external drives particularly useful on location for long recording sessions. A development unique to Genex is an optional internal insurance drive guaranteeing absolute data integrity when recording multichannel hi-definition PCM or DSD to the MO drive.

Magneto Optical is an excellent format for high definition digital audio recording and mastering. High levels of data security make it ideal for archiving and, as a removable medium, MO is also a convenient and durable file exchange format. HHB's own M05.2GB disk carries a lifetime warranty and is recommended for use with the GX8500.



HHB M05.2GB Disk

#### • OPTIONAL INTERNAL CONVERTERS

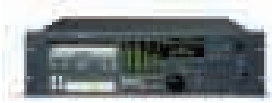
Affordable, high quality, 24-bit/96kHz A-D and D-A converter modules with gain adjustment are also available. They locate conveniently into the back panel, making the GX8500 a competitively priced, stand alone PCM 24-bit/96kHz and DSD 8 channel recorder.

#### • TOTAL SYNCHRONISATION

The GX8500 is equipped to generate and lock to timecode in all popular formats and can accommodate varispeed. There are two Chase/Lock modes - Lock & Release and Follow, and an adjustable flywheel system to allow operation over incoming timecode errors.

# TECHNICAL DATA

## Genex GX8500



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### MULTI FORMAT RECORDER

Internal recording media . . . 5.2GB MO disk drive and/or hard drive  
 External recording media . . . . . 5.2 GB MO disk drive,  
 removable hard drive, ORB  
 External backup media . . . . . 5.2GB MO disk drive, removable  
 hard drive, ORB drive, DVD RAM, AIT, DLT  
 Supported sector sizes . . . . .512/1024/2048 bytes/sector  
 Channels . . . . . 8  
 Input resolution . . . . . 16 to 24-bits selectable  
 Varispeed (0.02% steps) . . . . . -32%/+22.5% @ 44.1kHz,  
 -37.5%/+12.5% @ 48kHz

### SAMPLE RECORDING TIMES per side

Eight track / 20-bit/44.1kHz . . . . . 48 mins 22 secs  
 Two track / 24-bit/48kHz . . . . . 145 mins 52 secs  
 Eight track / 24-bit/48kHz . . . . . 30 mins 00 secs  
 Six track / 24-bit/96kHz . . . . . 16 mins 00 secs  
 Four track / 24-bit/96kHz single wire . . . . . 33 mins 08 secs  
 Four track / 24-bit/96kHz dual wire . . . . . 33 mins 08 secs  
 Two track / 24-bit/192kHz dual wire . . . . . 33 mins 08 secs  
 Two track DSD . . . . . 59 mins 32 secs  
 Four track DSD . . . . . 29 mins 46 secs  
 (Timings assume use of 5.2GB MO media)

### CLOCKS

AES/EBU . . . . . 32.0, 44.1, 48.0, 88.2, 96.0kHz (XLR)  
 Word clock . . . . . 32.0, 44.1, 48.0, 88.2, 96.0kHz (BNC)  
 Clock modifier . . . . . x1.000, x0.999, x1.001, x24/25, x25/24  
 Video . . . . . 24, 25, 29.97, 30 frm/sec (BNC)  
 Internal timing reference . . . . . Crystal (+/- 25ppm)

### SYNCHRONISATION

LTC . . . . . 24, 25, 29.97, 30 frm/sec (XLR)  
 Biphase reader . . . . . 2,10 Pulses per frame, 50 Way D-type  
 Biphase generator . . . . . 2,10 Pulses per frame, 50 Way D-type  
 Tach + direction generator . . . . . 50 Way D-type

### AUDIO INTERFACE

AES/EBU in/out . . . . . (Balanced) 25 Way D-Type Single/Dual  
 /Quad wire  
 Sample rates . . . . . 32.0, 44.1, 48.0, 88.2, 96.0kHz,  
 176.4kHz (dual/quad wire only),  
 192.0kHz (dual/quad wire only)  
 SDF2 in/out . . . . . 25 Way D-Type  
 DSD in/out . . . . . 25 Way D-type  
 AES/EBU monitor mix in/out . . . . . XLR

### CONTROL

Local  
 RS232 . . . . . 9 Way D-type  
 RS422 . . . . . P2 protocol, 9 Way D-type  
 Link . . . . . RS232 expansion port, 9 Way D-type  
 Parallel . . . . . 16 input, 16 output GPIB, 50 Way D-type

### GENERAL

Power supply . . . . . 98-265V, AC 45-65Hz autoranging  
 Power consumption . . . . . 60 Watts  
 External dimensions . . . . . (H/W/D) 132 x 480 x 410mm  
 (5.25 x 19 x 16 ins)  
 3U rack mounting  
 Weight . . . . . 10Kg (22 lbs)  
 Included accessories . . . . . HHB 5.2GB MO disk, instruction manual,  
 AC power cable

### OPTIONAL INTERNAL A-D CONVERTER SPECIFICATION

Dynamic range . . . . . >117dB 'A' weighted @ 48kHz  
 >117dB 'A' weighted @ 96kHz  
 Maximum resolution . . . . . 24-bits  
 Input format . . . . . Balanced 25 Way D-TYPE with adjustable line level  
 Input sensitivity . . . . . +1dBu to +29dBu for full scale digital input  
 Input impedance . . . . . >20KOhms  
 Frequency response . . . . . 1Hz - 20kHz, +/- 0.1dB  
 THD + noise . . . . . <105dB @ -1dBFS/48kHz  
 <105dB @ -1dBFS/96kHz  
 Channel separation . . . . . >120dB  
 Common mode rejection . . . . . >82dB

### OPTIONAL INTERNAL D-A CONVERTER SPECIFICATION

Dynamic range . . . . . >106dB 'A' weighted @ 44.1kHz  
 >103dB 'A' weighted @ 96kHz  
 Maximum resolution . . . . . 24-bits  
 Outputs . . . . . Balanced 25 Way D-TYPE with adjustable output level  
 Output level adjust with full scale digital input . . . . . +1dBu to +29dBu  
 Output impedance . . . . . 50 Ohms  
 Frequency response . . . . . 1Hz - 20kHz, +0.1, -0.5dB  
 THD + noise . . . . . <97dB @ 0dBFS 44.1kHz, <94dB @ 0dBFS 96kHz  
 Channel separation . . . . . >102dB @ 44.1kHz, >101dB @ 96kHz



Note: A-D and D-A converter modules are optional



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