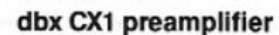


This is an ultra high-end preamplifier that is amazing even by today's standards. It is in excellent cosmetic, mechanical and sonic condition. There are absolutely no marks, scratches, dings or any other cosmetic flaws on this preamplifier. It will come with a professionally copied and bound Instruction Manual and two vintage reviews, one by *Stereophile's* J. Gordon Holt and the other by *Stereo Review's* Julian Hirsch. Its Serial Number is CX1-01032.



From the *Stereophile* Review, Sept. 1988 by J. Gordon Holt

The CX1 "preamplifier" is not just a full featured audio preamp. It is also a video switcher and a Dolby Pro Logic surround-sound decoder.

Overall, the dbx CX1 is one very suave sounding preamp. While it doesn't have quite the limpid ease and openness of a superb tube preamp, it shares much of the smoothness and musicality we have come to associate with the best tube equipment. And, considering how much circuitry there is in this, its sound is surprisingly neutral. Another manufacturer, whose preamp I tested recently, made a big point of how neutral it sounded under bypass test conditions. It wasn't. dbx's literature makes no mention of bypass testing, yet the CX1 proved to be one of the most nearly perfect preamps, in terms of accuracy, I have auditioned. It is not "warm" or "cool" or "clinical" or "analytical."

The Preamp

The CX1 has 10 pairs of stereo audio inputs, marked Phono MM, Phono MC, Tuner, CD, Aux, External Processor, and Tape 1, 2 and 3, as well as three video inputs (Main, Tape 2 and Tape 3). The front-panel control lineup consists of five Source buttons (Video, Aux, CD, Tuner, Phono), four Monitor buttons (Tape 1, Tape ZIVDP, Tape 3/VCR, and Source), a Record Out switch (1 to 2 and 3, 2 to 1 and 3, 3 to 1 and 2, Source, Tuner), a separation control (from L+R to L- R), a pair of channel Reverse buttons, Bass and Treble controls, LF and HF turnover buttons, a tone control 11-11 Out button, a low-pass "scratch filter button, External Processor buttons which insert the device in-circuit or connect it ahead of a tape recorder, Volume and Balance controls, surround Input Level and Balance / Calibrate controls, and an Ambience Recovery Mode switch.

On the back panel are controls which select and set the level of a center-channel (dialog) output, and a switch that selects a moving magnet or a moving-coil phono source and provides a choice of capacitive loads for the MM input. Internal switches adjust MC load, MC gain, and delay time for each channel.

Outputs include main video (to monitor), one tape video, three pairs of tape audio, one center channel audio, and one pair each of Front and Rear audio signals.

Both the CX1 and BX1 appear to be very well built, with well-fitting chassis parts and neatly laid-out and cleanly soldered PC boards. The capacitors are polypropes and polycarbs, the resistors are 1% metal-film types, all receptacles are gold-plated, and the circuit boards are glass-epoxy. The power supply looks a little skimpy, though, for all the circuitry it has to support. All controls and receptacles are logically laid out, making the unit reasonably easy to install and operate. My only gripe, ergonomically speaking, applies to all dbx products: gold lettering on a black background is not the most legible combination for small print control identifications. (White on black is best.)

The phono preamp stages were a pleasant surprise, too. The MM input, which I used in conjunction with Ortofon's T-3000 step-up transformer, measured as having better RIM accuracy than my inverse equalizer; the 0.2dB errors observed at 20Hz and 20kHz were those of the network itself, and if it was adding anything to the sound, I was unable to hear it.

Overall, the sound was almost more tapelike than master tape, in that direct-to-disc recordings also had that very subtly rounded-off quality characteristic of analog tape, even at, 30 ips. There was no trace of edginess or harshness from disc, which made it possible to enjoy listening even to some of CBS's and Deutsche Gramophon's worst mid-'60s efforts. Low frequency extension was superb, but the bass had the same very slight heaviness I had observed from the high-level section, indicating that the preamp stage was having no additional adverse effect on the low end.

MINIMUM PERFORMANCE SPECIFICATIONS (IHF Standards)

Frequency response (tone controls in & centered, or out)

20 Hz-20 kHz ± 0.09 dB (line),
 ± 0.15 dB (phono)

30 Hz-20 kHz ± 0.1 dB (phono)

Bandwidth

Line: -3 dB @ 2 Hz and 200 kHz

Phono: -3 dB @ 12 Hz, -29 dB @ 5 Hz

Phono noise

Mm: -78 dBA-weighted relative to 5 mV input, cartridge connected (i.e., limited by cartridge self-noise)

-87 dBA shorted

Mc: -79 dBA (26 dB gain),

-77 dBA (20 dB gain), relative to 0.5 mV input, shorted

Equivalent input noise (line, unity gain)

-94 dBA relative to 0.5 V input (-100 dBVA)

Dynamic range

120 dB

Distortion (all kinds, to rated output)

Less than 0.01%

Rated output

2 V rms

Separation

80 dB @ 1 kHz, 60 dB @ 20 kHz

Source/source crosstalk, including tape monitor

-80 dB, 20 Hz-20 kHz

Video frequency response

-2 dB @ 10 MHz

Video crosstalk

-45 dB to 7 MHz

Maximum gain

Line 18 dB

Mm: 35 dB more @ 1 kHz

Mc: 20/26 dB beyond that

Maximum input and output

9 V rms

Phono overload (@ 1 kHz; follows inverse

RIAA curve elsewhere)

Mm: 150 mV

Mc: 15 mV (20 dB gain)

7.5 mV (26 dB gain)

Slew rate

9 V/ μ s

Input impedances

Line: 48.5 k-ohms in parallel w/200 pF

Phono, mm: 47 k-ohms with switchable

50/100/200 pF capacitance

mc: Selectable 50/100/200 ohms

with 1000 pF capacitance

Output impedance (including tape and EP loop)

Buffered: 332 ohms

Sensitivity

Line: 63 mV

Phono, mm: 1.25 mV

mc: 0.125 mV/0.063 mV depending on gain

Tone controls

Bass, 300 Hz: ± 3 dB @ 300 Hz, ± 11 dB @ 20 Hz

120 Hz: ± 3 dB @ 120 Hz, ± 10 dB @ 20 Hz

Treble, 4 kHz: ± 3 dB @ 4 kHz, ± 7 dB @ 20 kHz

Tilt: ± 1 dB/octave above 200 Hz, ± 7 dB @ 20 kHz

Highcut (lowpass) filter: 8.5 kHz, -12 dB/oct

Polarity ("absolute phase")

Non-inverting

Digital delay

Input level adjust with LED indicators

Sample rate: 12 MHz

Encoding: second-order noise-shaped

sigma-delta modulator

Response contour: 20 Hz-8 kHz (1 dB/oct rolloff

above 3 kHz; -1.3 dB @ 8 kHz)

Dynamic range: 93 dB

Time: set @ 19.1 ms (left) and 21.8 ms (right), internally

adjustable 13.7-32.8 ms in 2.7-ms increments

Ambience recovery: L/R, separate L-R/R-L, and L $\pm$ jR (j = 90° phase shift to delocalize ambience)

Dolby® Pro Logic® Surround

Five channels

Exceeds Dolby professional surround standards

Pro Logic circuitry uses selected dbx VCAs and rms detectors

for unmatched steering tracking at all levels and steering

accuracy to all locations

Calibration modes for input and channel-output balances

Mute

Automatically by 50 dB on power on/off; also switchable full mute for headphone listening

Volume control interchannel tracking

± 0.5 dB

Construction & circuitry

1% metal-film resistors

Highest-quality film capacitors, polypropylene and polycarbonate dielectric

MM phono: selected low-noise differentially paired FETs

Mc design: low-noise bipolar class-A

Glass-epoxy printed circuit boards with ground planes

Toroidal transformer

Gold-plated connectors

Separately regulated power supplies for delay, headphone amp,

line amp, phono preamps, video section

Anti-resonance aluminum chassis and feet

Dimensions

17.1" w x 3.5" h x 15.5" d (434 x 89 x 394 mm)

Weight

17 lbs (7.7 kg)