



Unique Control Flexibility and a Sheer Sense of Power

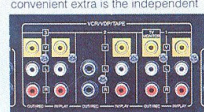
CX-3 Control Amplifier

The dbx CX-3 is unique: use it as a control center for your video system or as an audio control/preamplifier in a sophisticated hi-fi system. Either way, it spells unusual flexibility, convenience and versatility.

The CX-3 incorporates the latest, exciting development in video sound: the surround sound processor. Three positions are provided: DOLBY[®] SURROUND to properly decode Dolby-encoded soundtracks of releases, MATRIX for musical videos and live performances, and SIMULATED STEREO to derive stereo-like sound from flat mono soundtracks of old films or tapes recorded off the air. They improve video sound so much that even movies at home will have you feeling like you're sitting in a first-run theater.

You can also connect an outboard surround processor to process the signal going to the surround channels. And thanks to a separate volume control for the surround channels, you can easily balance the front sound with the rear.

Up to three audio and video components can be connected to and controlled with the CX-3. You can, for instance, connect one record/play VCR, one play-only VCR and one VDP (Video Disc Player); you can also connect a monitor for video output. Alternately, you can connect three audio tape decks to the CX-3. Or you can mix up to three audio and video components in any combination—two VCRs and an cassette deck, for instance. A convenient extra is the independent



Tape in/output terminals

record output selector that, for instance, lets you listen to a CD while recording video tapes and/or while watching a video on the monitor.

The CX-3 is equipped with an external processor loop for patching in an audio processor, like a dynamic-range controller, equalizer, or subharmonic synthesizer, all available from dbx. An EXT PROC switch lets you choose to output the signal before processing (for playback) or after (for recording). An LED indicator lets you know whenever a processor is active.

In addition to the three tape decks, five more audio inputs can be accommodated and controlled—two Compact Disc players, one tuner, one turntable and one AUX unit. Since the CX-3 has a high-gain phono equalizer, you can connect not only popular MM (Moving-Magnet) cartridges but also high-quality MC (Moving-Coil) cartridges.

A triple tone control is extra handy, letting you adjust the frequency responses of not only low and high frequencies but also of mid frequencies—excellent for making movie dialogue more distinct, for instance. The amplifier further includes loudness, mute and headphone output.

We know you insist on high quality in a control amplifier, so we have built it right in, ensuring that the video and audio signals going through the unit are not degraded. There are three power supplies, one each for the phono equalizer, tone control circuit, and surround sound processor circuit. This ensures that there is no adverse interference and that abundant power is always available for each circuit. Video circuits each have a buffer amp to prevent buzz and pop noise and signal degradation. We also took extreme care to ensure effective isolation of audio signals and video signals.

BX-3 Power Amplifier

The BX-3 amplifier shines when it comes to power. Indeed, there has never been an amplifier that's this compact yet this powerful. And it's flexible. With its four independent power amps, you can use the BX-3 as (1) a 2-channel stereo amplifier, (2) a 3-channel amplifier, or (3) a 4-channel amplifier.

When used to drive a pair of speakers, the four amps are connected in pairs for bridged BTL (Balanced Transformerless) operation. In this arrangement, the BX-3 delivers an awesome 300 watts of power per channel, continuous RMS, at 8 ohms, from 20Hz to 20,000Hz with no more than 0.01% total harmonic distortion.

Or keep the four amps separate to drive the front and rear channels independently, and you'll have a huge 125 watts of power for each channel, continuous RMS, from 20Hz to 20kHz with 0.003% total harmonic distortion.

Or use the BX-3 in a 3-channel setup to drive two front channels and a subwoofer system. This gives you 125 watts for each front channel and a massive 300 watts for the subwoofer output.

What's more amazing, the BX-3 delivers more power dynamically. When set for stereo operation, it has dynamic power of 550 watts per channel at 8 ohms, 650 watts per channel at 4 ohms, and a gigantic 1000 watts per channel at 2 ohms. The BX-3 has no superior when it comes to reproducing the highly dynamic sound of digital recordings.

Two breakthroughs made possible this amazing design. One is the elaborate power supply system made to provide a consistently higher current supply. The system uses no fewer than four separate power supplies in combination with a

high-regulation toroidal power transformer. The second is the use of high-power transistors. Each has a high P_c (power loss) rating of 150 watts, and 16 of them are used in a parallel push-pull configuration—four for each channel. Put them together and they have a potential of 2.4kW of power!



Toroidal power transformer

And to ensure a high signal-to-noise ratio, we've used a DC configuration for all four amps, each fronted by a dual-FET input. Another way to insure low noise is what we call "BTL-connection": two amps are bridged in a direct conversion connection in which the second amp doubles as a phase inverter. The absence of an extra phase converter results in lower noise.

The front panel contains two large peak power meters to show instantaneous peak power output, channel by channel. A switch (with an LED indicator) lets you monitor the front or rear channels. Their sensitivity can be increased to indicate lower output values more accurately.

Also on the front panel are volume controls for four channels, an LED power/protection indicator, and LED indicators to show driven speakers (Front A and B, Rear A and B) and active amplifiers (Front Left and Right, Rear Left and Right). Finally there's an impedance switch on the rear for 2-to-6 ohms and 6-to-16 ohms, to allow you to drive any speaker system safely and effortlessly.