

The UREI Model 1181 CX Encoder/Decoder offers the mastering, production or mixdown facility the ability to precisely record and playback according to the CBS Technology CX disc noise reduction standard.

The CX noise reduction system is designed for phonograph and video disc recording and reproduction. In the encoding process which is done during disc mastering, all signals below a preset threshold level are not compressed — in the CX 20 position, the threshold is -40 dB ref. 0 VU*, and in the CX 15 position, the threshold is -30 dB. Above this threshold, all program is compressed with 2:1 ratio, using a signal-dependent variable time constant. In decoding, complementary expansion takes place, using the same signal-dependent variable time constant.

The 1181 includes encoders for Preview and Program channels and a decoder which may be switched to audition preview, program or any "line level" external source. The encoders are highly accurate 2:1 compressors switchable for CX 15 or CX 20 conformance. High technology gain control blocks, audio operational amplifiers and precision control circuits assure excellent performance and long term stability. The decoder or expander section is a mirror of the encoder, using the identical gain control circuitry to assure accurate playback tracking. Operating modes can also be remotely controlled through a rear panel connector so that the 1181 may be installed wherever convenient.

*For phonograph records, 0 VU corresponds to 3.54 cm/sec groove modulation at 1 kHz.

FEATURES:

- Preview, Program and Audition in two rack spaces (3½").
- Tamper resistant, screwdriver adjust setup controls behind security cover.
- Fully automatic operation after initial setup. No special techniques need be learned by the mastering engineer.
- Relay bypass with power off.
- LEDs allow setup with 0.1 dB resolution.
- Extremely low noise and distortion.
- Remote mode selection.
- Full metering matrix.
- Built and backed by UREI.



UNITED RECORDING ELECTRONICS INDUSTRIES

TECHNICAL SPECIFICATIONS

ELECTRICAL: (Each Channel)

Inputs Balanced bridging differential amplifiers, six each.

Input Impedance 10 kohms, used as balanced input.

5 kohms, used as unbalanced (single ended) input.

Input Level +20 dB maximum (Ref. 0.775 V rms).

Outputs Floating, transformer isolated, six each.

Output Load 600 ohms or greater.

Power Output +24 dBm into 600 ohm load (12.28 V).

Frequency Response +0, -0.5 dB, 20 Hz - 20 kHz.

Distortion Less than 0.1% THD, 50 Hz - 15 kHz, at worst case gain.

Control Law According to CBS Technology CX Standard, CX 15 or CX 20.

Noise (Encoder) Program -95 dB.

Preview -85 dB.

(Referred to Input; Ref. 0.775 V rms).

(Decoder) Output -83 dB (15.7 kHz BW),

-95 dB (A-weighted).

CONTROLS:

Front Panel Input Gain, Output Attenuator Trims, Meter Switches, Mode Switches,

Power Switch.

Metering Two Meters, switch selectable to read any Input or Output.

"0" Reference +4 dB (Ref. 0.775 V).

Six LEDs to precisely indicate 1 kHz, 3.54 cm/sec "0" point during setup. **LEDs**

Power LED.

External Connections Rear chassis barrier strips for inputs and outputs, plus barrier strip for remote

control of operating mode. Power through 3-wire IEC style connector.

Power Requirements 110-120 VAC, or 220-240 VAC, 50/60 Hz, switch selectable, 25 watts.

Special option: 1181-100 V for 100 V operation.

Environment Operating 0°C to +50°C. Storage -20°C to +60°C.

PHYSICAL:

Dimensions 483x89mm rack panel, depth behind panel 305mm (19 in x 3½ in x 12 in).

Finish Panel is 3.18mm (1/8 in.) brushed clear anodized aluminum.

Chassis is cadmium plated steel.

Weight 7.5 kg (16.5 pounds).

Shipping Weight 9.3 kg (20.5 pounds).

Accessories Security Cover, SC 1181, included.

100 V power option available on request (1181-100 V).