

MCX 1900

High-Performance, Professional Rack-Mount Stereo Mixer



- 16/20 input channels in only seven rack spaces
- High-end console performance: -129 dB EIN and -109 dB S/N ratio
- High-quality parts for high reliability—including Alps controls and faders and a Dynacord-manufactured toroidal power transformer
- Extensive signal-routing capability
- Three-year parts-and-labor warranty

GENERAL SPECIFICATIONS

Conditions:

1. 0 dBV = 1 volt rms.
2. 120-volt ac line voltage.
3. Input levels measured with all nonfrequency-dependent level controls fully open.
4. All output levels measured via line input.

Frequency Response, Mic Input to Master Output (EQ flat),

20-40,000 Hz:

+0/-3 dB

20-20,000 Hz:

±1 dB

Total Harmonic Distortion, 20-20,000 Hz

at +4-dBu Output:

<0.04%

Equivalent Input Noise

(200 ohm termination):

-129 dB microphone input

Output Noise at Balanced Outputs

(A-weighted):

-109 dB residual at master outputs (all faders down)

Maximum Voltage Gain,

Mic Input to Balanced Output:

58 dB

Line Input to Balanced Output:

40 dB

Mic Input to Insert Send:

46 dB

Line Input to Insert Send:

28 dB

Mic Input to Direct Output:

57 dB

Line Input to Direct Output:

39 dB

Mic Input to Headphones:

64 dB

Line Input to Headphones:

46 dB

Mic Input to Auxiliary Send:

63 dB

Line Input to Auxiliary Send:

45 dB

Auxiliary or Line Input to Main Output:

11 dB

Mic Input to Line Output:

59 dB

Line Input to Line Output:

41 dB

Crosstalk,

Adjacent Inputs:¹

-70 dB at 1,000 Hz

Input to Output:

-73 dB at 1,000 Hz

Level Display,

Type:

10-segment LED in 3-dB steps for left and right masters

Range:

-21 dB to +6 dB

Reference:

0 dB = +3.8 dBV

INPUT SPECIFICATIONS

Input Channel Equalization,

Mono Input Channels:

±15 dB low cut/boost centered at 80 Hz;

±12 dB mid cut/boost sweepable

from 200 Hz to 6,000 Hz;

±15 dB high cut/boost centered

at 12,000 Hz ¹

Stereo Input Channels:

±15 dB low cut/boost centered at 50 Hz;

±15 dB low-mid cut/boost centered

at 250 Hz;

±15 dB high-mid cut/boost centered

at 2,500 Hz;

±15 dB high cut/boost centered

at 15,000 Hz

¹ Input of measured channel terminated with 200 ohms.

Microphone Inputs,

Type:

Low-impedance, balanced, pin 2 referenced positive

Maximum Input Level:

+15 dBV (5.5 volts)

Input Impedance:

2.6 kilohms at 1,000 Hz

Peak Indicator Threshold:

+4 dBV 1.23 volts at maximum gain

Line Inputs,

Type:

High-impedance, unbalanced, tip positive, 1/4-inch phone

Maximum Input Level (mono inputs):

+16 dBV (6.5 volts)

Maximum Input Level (stereo inputs):

+23 dBV (13.5 volts)

Input Impedance:

33 kilohms at 1,000 Hz

Aux 1-4 and Auxiliary Line Input,

Type:

High-impedance, unbalanced, tip-positive, 1/4-inch phone

Maximum Input Level:

+13 dBV (4.4 volts)

Input Impedance:

23 kilohms

OUTPUT SPECIFICATIONS

Output Impedance,

Balanced Main Outputs:

100 ohms

Headphones:

200 ohms

Direct Outputs:

10 kilohms

Insert Sends:

10 kilohms

Aux 1-4 Sends:

10 kilohms

FIGURE 1 — MCX 1900 Dimensions

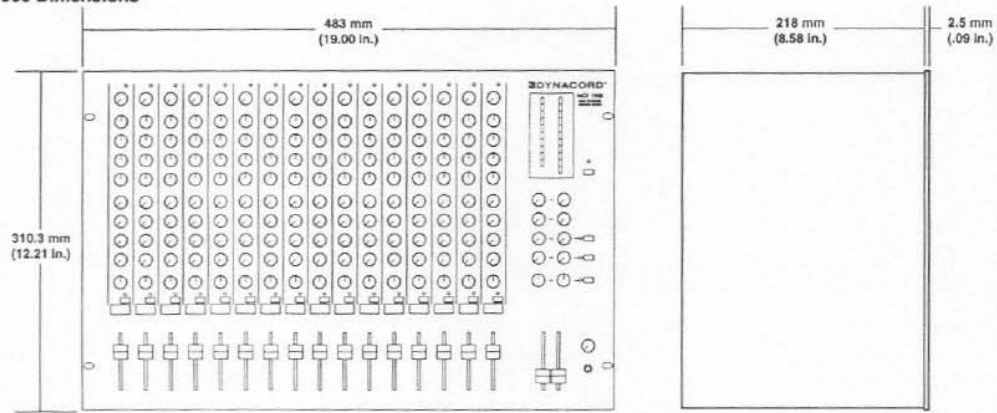


FIGURE 2 — MCX 1900 Front and Rear Panel Views

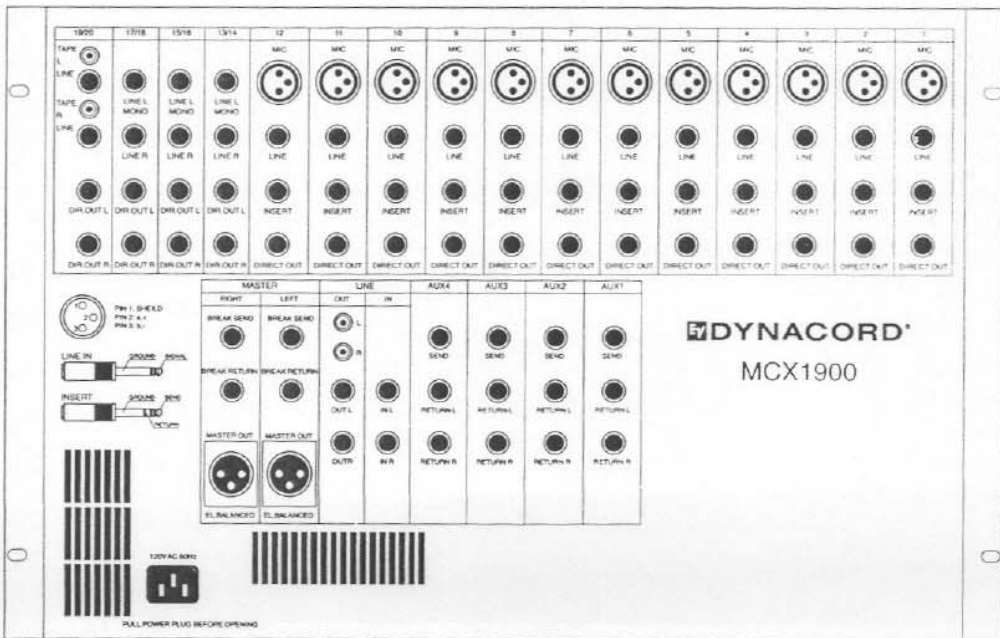
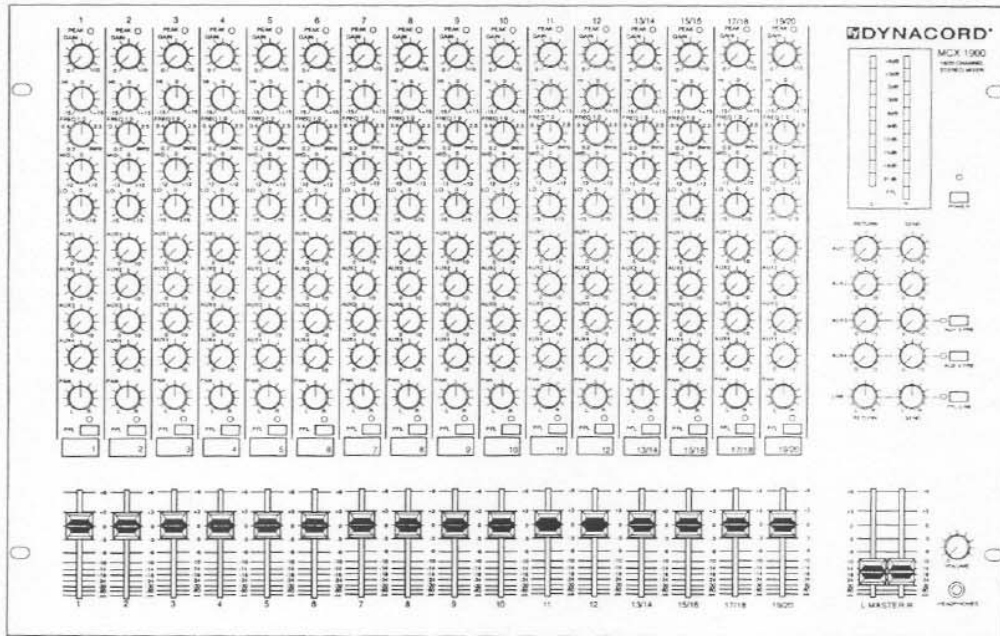
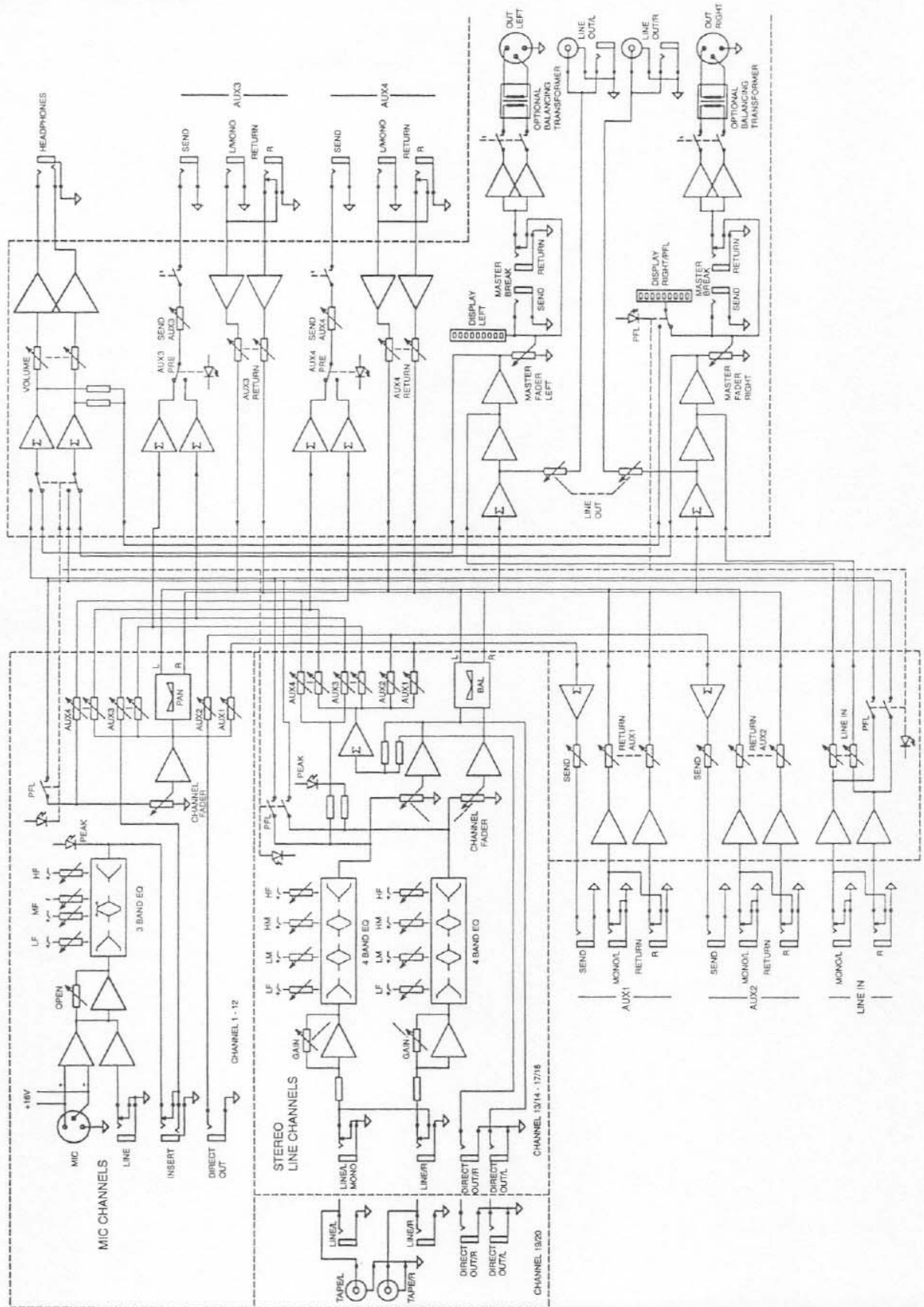


FIGURE 3 — MCX 1900 Block Diagram



Line Output:
10 kilohms

Maximum Output Level, Master Outputs:
+19.5 dBV (9.4 volts)

Headphones:
+13.5 dBV (4.8 volts)

Direct Outputs:
+19 dBV (8.6 volts)

Insert Sends:
+18 dBV (8.2 volts)

Aux 1-4 Sends:
+19.3 dBV (9.2 volts)

Line Outputs:
+18.8 dBV (8.7 volts)

Master Sends:
+19.5 dBV (9.4 volts)

Power Requirements:
115/230 volts, 50/60 Hz, 40 watts

Dimensions (see Figure 1),
Height: 31.0 cm (12.22 in.)
Depth: 23.5 cm (9.25 in.)
Width: 48.3 cm (19.00 in.)

Weight:
11.0 kg (24.2 lb)

Shipping Weight:
12 kg (27 lb)

DESCRIPTION

The EV/Dynacord MCX 1900 is a high-performance, professional rack-mount stereo mixer occupying just seven rack spaces (12.25 in.). Its wide range of features, excellent performance and signal routing capabilities make it ideal for many audio applications from sound reinforcement to drum and keyboard submixing or recording. The controls and functions are clearly labeled and logically grouped to ensure easy operation.

Front and rear panel views are shown in Figure 2. The block diagram is shown in Figure 3.

INPUT SECTION FEATURES

- 12 mono and four stereo input channels.
- The 12 mono input channels have 3-pin XLR-type microphone inputs and 1/4-inch line inputs with three-band EQ with semiparametric mids. The mono input channels are also equipped with insert jacks and direct outputs for connection to signal processing or recording equipment.
- The four stereo input channels have line-level, 1/4-inch inputs and direct outputs with four-band EQ. Channels 19/20 also have RCA phono inputs to allow easy connection of tape decks or CD players.
- All input channels have a gain control with a peak LED to accommodate a wide range of sources.
- All channels have four aux sends; aux 1 and aux 2 are fixed post fader for use as effects sends; aux 3 and aux 4 are switchable pre/post fader so that they may be configured as monitor (pre) or effects (post). The four aux sends have stereo returns.
- All input channels are equipped with a PFL switch. When the PFL switch is engaged, the signal from that channel is routed to the headphone jack and the right channel meter for monitoring.

- All input channels are equipped with high-quality 60-mm Alps faders.
- Comes with a front-panel-controlled stereo line input with two 1/4-inch phone plugs and PFL switch.
- A total of 12 microphone and 28 line inputs (20 line inputs and eight aux returns).

OUTPUT SECTION FEATURES

- Stereo master XLR-type 3-pin active balanced low-impedance outputs. There are also separate sends and returns ("break jacks") on these outputs to allow equalizers or other signal processors to be connected. These outputs can be optionally transformer-balanced using a Dynacord NRS 90113 output transformer.
- A powerful headphone amplifier with a front-panel-mounted control and jack. This jack is a three-conductor, 1/4-inch phone jack.
- Separate send and return controls for aux 1 through aux 4 and pre/post switches for aux 3 and aux 4.
- A front-panel-controlled stereo line output with unbalanced 1/4-inch phone jacks and RCA phono connectors.

GENERAL FEATURES

- High-quality components used throughout including Alps faders and controls.
- An integrated power supply with a Dynacord-manufactured toroidal transformer is utilized. The power supply has excellent current capacity and very low noise. The mixer uses an IEC connector for easy matching with local requirements.
- The MCX 1900 has phantom power which will supply +48 volts to operate condenser microphones and direct boxes.
- A ground lift switch is employed to disconnect the circuit ground from the enclosure to prevent ground-loop hum.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The mixer shall have 16-20 input channels with rear-mounted input and output connectors designed for rack-mounted installation but usable as a table-top console. It shall occupy seven rack spaces (31.1 cm (12.25 in.)).

There shall be 12 mono input channels. Each of these channels will have a 3-pin XLR-type jack with universal, 48-volt phantom power for microphones and a 1/4-inch unbalanced high-impedance line input. These mono channels will have insert and direct output jacks on unbalanced 1/4-inch connectors. These channels will have three-band EQ with semiparametric mids sweepable from 200 Hz to 6,000 Hz, a pre-fader listen (PFL) switch and a 60-mm Alps fader.

There shall be four stereo line input channels. Each will have unbalanced 1/4-inch input connectors for the left and right signals and post-fader direct outputs. Channels 19/20 will have RCA phono connectors in addition to the 1/4-inch jacks. These stereo channels will have fixed four-band EQ with center frequencies of 50 Hz, 250 Hz, 2,500 Hz and 15,000 Hz; they also will have pre-fader listen (PFL) and a 60-mm fader.

All input channels will have four aux sends. Aux 3 and aux 4 will be switchable pre or post fader from the front panel. The master section shall have separate sends and returns for each aux path. All four aux sends will have stereo returns. The mixer shall have a separate front-panel-controlled stereo line input and output. This channel shall have a PFL circuit and unbalanced 1/4-inch input and output connectors along with RCA phono output connectors. All rotary controls shall be made by Alps.

The mixer shall have XLR-type, 3-pin active balanced output connectors. The mixer can be optionally transformer balanced with the addition of a kit. The master outputs will have 1/4-inch send and return jacks in their circuit. The mixer shall have an integral power supply with a toroidal transformer capable of operation at 115 or 230 volts, 50 or 60 Hz. The mixer shall have an IEC connector and a switchable chassis ground switch. Dimensions: 31.0 cm x 23.5 cm x 48.3 cm (12.22 in. x 9.25 in. x 19.00 in.) HWD. Net weight: 11.0 kg (24.2 lb).

The mixer shall be the EV/Dynacord MCX 1900.

WARRANTY (Limited)

Electro-Voice products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Electro-Voice at 600 Cecil Street, Buchanan, MI 49107 (616/695-6831 or 800/234-6831) and/or Electro-Voice West, at 8234 Doe Avenue, Visalia, CA 93291 (209/651-7777 or 800/825-1242). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Electro-Voice and EV/Dynacord Electronics are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (616/695-6831 or 800/234-6831).

Specifications subject to change without notice.



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