

## M2

### High-Performance Stereo Mixing Console

- High-performance, high-value stereo mixing consoles with 12 or 16 input channels
- Each input channel has 3-band EQ with sweepable mids from 250 Hz to 5 kHz, PFL, mute switches and 60-mm faders
- Each input channel has 4 aux sends (2 pre, 2 post) with after-fade listen (AFL)
- Fader-controlled, low-impedance balanced outputs for left, right and mono
- "Soft-touch" controls and faders
- Very quiet internal power supply

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#### Description

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The Electro-Voice M2 Series mixing consoles are cost-effective, high-performance professional audio mixers that contain all the necessary features for many sound reinforcement applications. The logical and well-spaced control arrangement makes their operation simple.

There are two electrically identical M2 models: one with 12 input channels and one with 16 input channels. Figure 1 shows the input channel control layout; Figure 2 shows the output section controls of the mixers.

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#### Input Section Features

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- The input channels have 3-pin XLR-type balanced microphone inputs and balanced ¼-inch TRS phone jacks with 3-band EQ with semi-parametric mids from 250 to 5 kHz. Each input channel also has insert jacks which are useful for looping processors and a true mic/line switch. All input channels have a gain control with a peak LED to help insure optimum control adjustment.
- All channels have four aux sends. Auxs 1 and 2 are configured pre-fader for use as monitor sends. Auxs 3 and 4 are configured post-fader for use as effects sends.

- All input channels are equipped with mute switches and PFL (pre-fade listen) for signal monitoring. When the PFL switch is engaged, the signal from that channel is routed to the headphone jack and the right VU LED meter for monitoring. Each channel is equipped with a mute switch.

- All input channels are equipped with 60-mm faders that have ergonomically-shaped control knobs for easy level adjustment.

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#### Output Section Features

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- XLR-type 3-pin active-balanced low impedance outputs for left, right and mono. These outputs are each controlled by their own faders. The master and mono outputs are also equipped with mute switches for additional operational ease.

- A powerful headphone amplifier with level control and three-conductor, ¼-inch phone jack mounted on the front panel.

- Four aux master sends, each equipped with an overload indicator and an after-fade listen (AFL) switch for signal monitoring.

- Two stereo (mono compatible) aux returns, each with level and balance controls.

- Tape record outputs and playback inputs via RCA-type connectors, each with a separate level control. The playback input is com-

patible with a variety of tape decks, CD players and keyboards. The output is fixed at -10dBu nominal level to avoid overloading the inputs of consumer-grade recorders.

- Two 10-segment LED ladders that monitor either the left and right outputs or the mono/PFL signals. The range of the meters is from -20 dBu to +6 dBu. The meters are designed to monitor signal averages like an analog VU meter.

- A phantom power switch that activates +48 volts to the microphone inputs. An LED indicator shows when the phantom power is activated.

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#### General Features

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- High-quality electrical components are used throughout. Each input channel is a separate printed circuit board for low crosstalk and easier servicing, if ever required.

- Integral power supply with excellent current capacity and very low noise.

- Rugged chassis with a steel control panel and bottom provides road-worthiness and excellent electrical isolation.

## M2 High-Performance Stereo Mixing Console

### Architects' And Engineers' Specifications

The mixer shall have (12 or 16) input channels with top-mounted input and output connectors.

The input channels shall have a 3-pin XLR-type connector with universal phantom power and a balanced ¼-inch high-impedance line input. These channels will have a three-band EQ with  $\pm 15$  dB of boost/cut with a semi-parametric mid sweepable from 250 – 5,000 Hz. These channels shall have pre-fade listen (PFL), a mute switch and a 60-mm fader. All input channels will have four aux sends. Auxs 1 and 2 are fixed pre-fader and auxs 3 and 4 are fixed post-fader.

The master section shall have four aux master sends, each with an LED overload indicator and after-fade listen (AFL). There shall be two stereo, mono-compatible aux returns with level and balance controls. There shall be two 10-segment LED meters that can monitor either the master outputs or the mono/PFL signals. There shall be separate record output and tape playback controls and a headphone amplifier with a gain control. The master outputs and the mono output shall be controlled with 60-mm faders and have mute switches.

The mixer shall be the Electro-Voice M2/12 and M2/16.

### Uniform Limited Warranty

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 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). **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.

Service and repair address for this product: Electro-Voice, 600 Cecil Street, Buchanan, MI 49107 (616/695-6831 or 800/234-6831) or Telex Communications, West 1<sup>st</sup> Street, Blue Earth, MN 56013 (507-326-3205).

Specifications subject to change without notice.

**Electro-Voice 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.

# M2 High-Performance Stereo Mixing Console

Figure 1—Input Controls

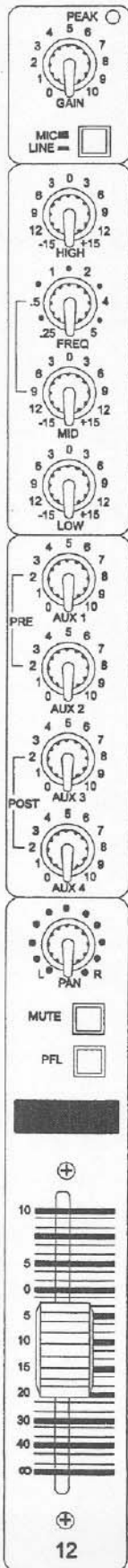
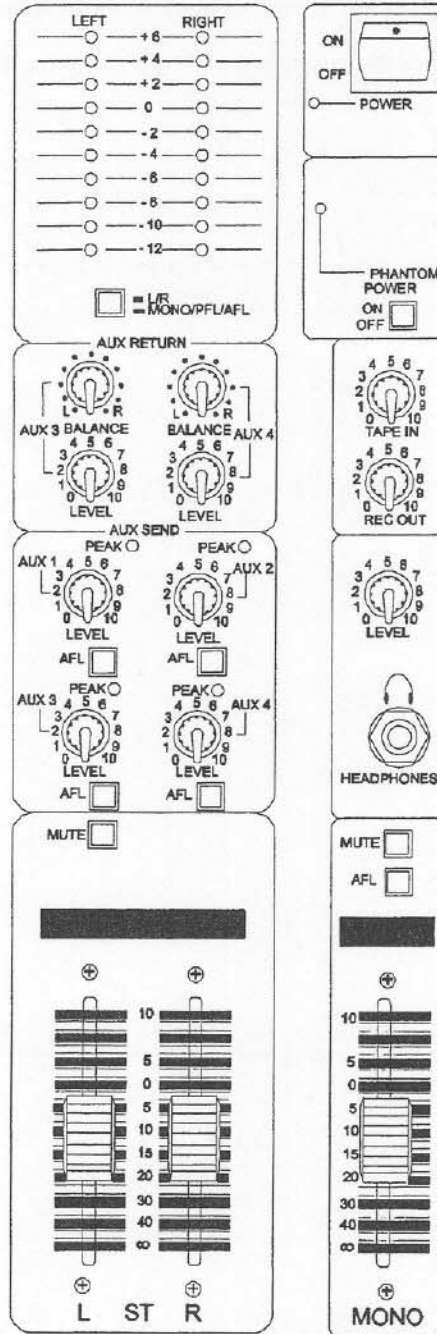


Figure 2—Output Section



# M2 High-Performance Stereo Mixing Console

## Specifications

### Conditions:

1. 0 dBu = 0.775 V rms.
2. 0 dBv = 1.0 V rms.
3. Measurements are referred to a 1-kHz, 0-dB sine wave input unless noted.
4. 120-V, 60-Hz ac line voltage.

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

20 – 20,000 Hz (+1/-2 dB)

### Total Harmonic Distortion, 20 – 20,000 Hz at +14 dBu Output into 600 ohms:

<0.1%

### Equivalent Input Noise

#### (150 ohm termination):

-127 dBv, microphone input

### Output Noise at Balanced Outputs:

-95 dB residual output noise

### Maximum Voltage Gain,

#### Microphone Input to Master and Mono Output:

84 dB

#### Microphone Input to Aux Send

1-2:

76 dB

#### Microphone Input to Aux Send

3-4:

86 dB

#### Aux Return 1-2 to Master Output:

16 dB

### Crosstalk, Adjacent Inputs:

>-70 dB at 1 kHz

### Crosstalk, Adjacent Outputs:

>-70 dB at 1 kHz

### Level Displays,

#### Type:

10-segment LED Ladders

#### Range:

-20 to +6 dB

#### Reference:

0 VU = +4 dBu (1.23 volts)

## Input Specifications

### Input Channel Equalization:

±15 dB low cut/boost centered at 80 Hz

±15 dB mid cut/boost variable from

250 Hz – 5 kHz

±15 dB high cut/boost centered at 12 kHz

### Input Channel Gain Control Range:

44 dB variable (-60 - -16 dB)

### Peak Indicator Threshold (on each input channel):

3 dB before clipping (post-EQ signal)

### Microphone Inputs,

#### Number:

12 or 16

#### Type Connector:

Low-impedance, balanced,

3-pin XLR-type

#### Polarity:

Pin 2 positive

### Maximum Input Level:

+16 dB with gain control at minimum

### Input Impedance:

4,000 ohms

### Phantom Power:

+ 48 volts

### Line Inputs,

#### Number:

12 or 16

#### Type/Connector:

High-impedance, balanced,

¼-inch TRS jack

#### Polarity:

Tip positive

### Maximum Input Level:

+24 dBu with gain control at minimum

### Input Impedance:

10,000 ohms

### Aux Inputs,

#### Number:

4 (two stereo)

#### Type/Connector:

High impedance, unbalanced

¼-inch phone jack

#### Polarity:

Tip positive

### Nominal Input Level:

+ 4 dBu (1.23 volts)

### Input Impedance:

10,000 ohms

## Output Specifications

### Output Impedance,

#### Balanced Low-Impedance Outputs:

150 ohms

#### Headphones:

100 ohms

#### Aux Sends:

75 ohms

#### Insert Sends:

600 ohms

#### Tape Record Outputs:

2,000 ohms

### Maximum Output Level,

#### Master Outputs:

+24 dBu (12.3 volts)

#### Headphones:

#### Channel Insert Sends:

+20 dBu (7.75 volts)

#### Tape Record Outputs:

### Power Requirements:

115 or 230 volts, 50 or 60 Hz. 36 watts

### Dimensions, (see Figure 1)

#### Height:

109 mm (4.29 in.)

#### Width:

12-channel: 520 mm (20.47 in.)

16-channel: 632 mm (24.88 in.)

#### Depth:

509 mm (20.03 in.)

### Weight,

M2/12: 12 kg (26.45 lb)

M2/16: 14 kg (30.80 lb)

# Electro-Voice®

600 Cecil Street, Buchanan, MI 49107

616/695-6831, 616/695-1304 Fax