

**Electro-Voice®**

a MARK IV company

# Models 2504/2505 Four-Input Automatic Mixer

## SPECIFICATIONS

### Frequency Response:

20-20,000 Hz,  $\pm 1$  dB

### Equivalent Input Noise:

-126 dBm per channel, A weighted

### Distortion (THD):

.1%

### Maximum Gain:

78 dB

### Microphone Input Equalization,

Channel 1 and 2,

#### Treble,

Level:  $\pm 12$  dB at 10,000 Hz

Hinge Frequency: 1,000 Hz

#### Bass,

Level:  $\pm 12$  dB at 30 Hz

Hinge Frequency: 1,000 Hz

### Input Configuration:

4 mic/line (2 with bass and treble control)

1 auxiliary

1 background

1 page

### Microphone Input Impedance,

Actual:

6,800 ohms electronically balanced

### Recommended Input:

150-600 ohms

### Line Input Impedance,

Actual:

20,000 ohms electronically balanced

### Phantom Power:

+24 V dc through 3,400-ohm resistors

### Output Load Impedance:

600 ohms or greater

### Maximum Output Level:

+18 dBm

### Pre-Vca Output Impedance:

604 ohms

### Pre-Vca Output Level:

+3 to +60 dB relative to input level

~18 dB below master output level

### Pre-Vca Mix Output Impedance:

604 ohms

### Pre-Vca Mix Output Level:

6 dB below master output at

zero attenuation

### Post-Vca Output Impedance:

604 ohms

### Channel Off Attenuation:

0 to -90 dB

### Channel Release Time:

1 to 10 seconds

### Channel Active Output:

Open collector type capable of sinking

200 mA at 30 V dc

### High Pass Filter:

-6 dB at 125 Hz

-30 dB at 32 Hz

### Power Consumption:

11 watts

### Dimensions,

Height:

4.45 cm (1.75 in.)

Depth:

26.67 cm (10.5 in.)

Width:

48.26 cm (19 in.)

### Net Weight:

4.28 kg (9.5 lb)

### Shipping Weight:

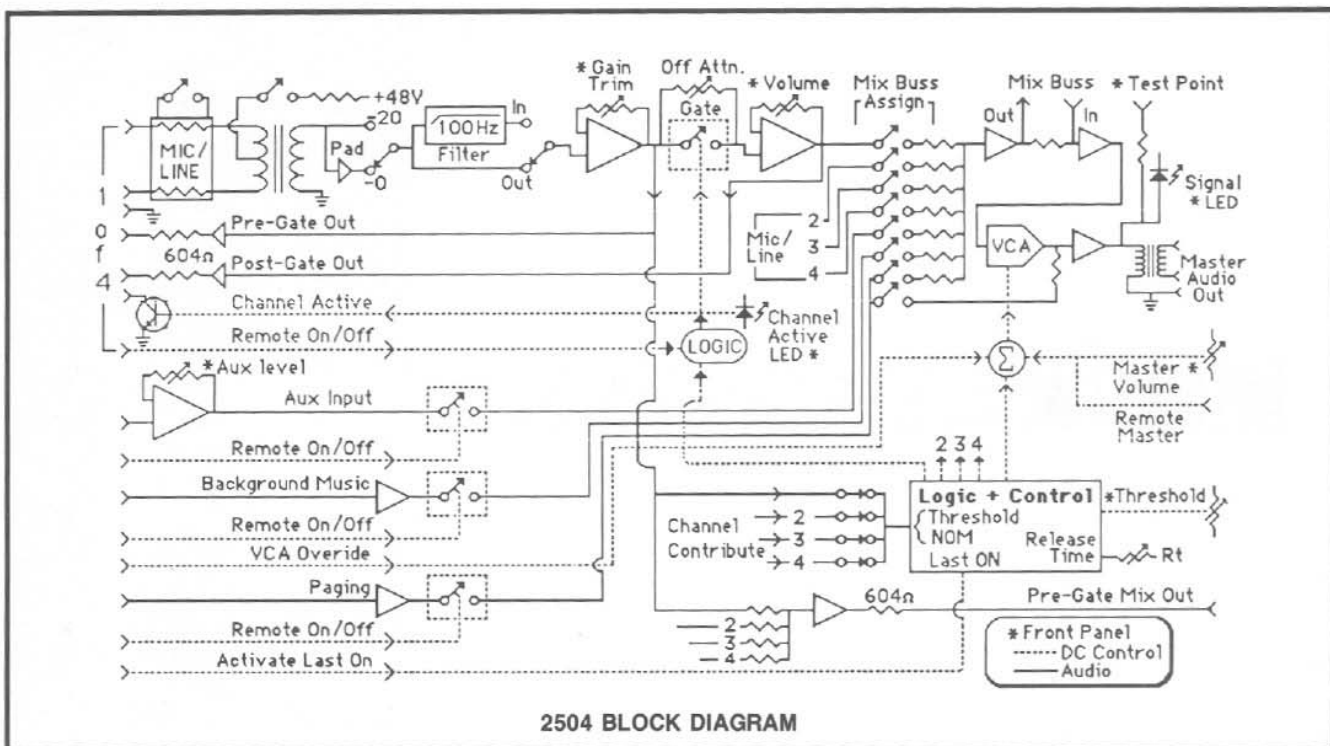
5.40 kg (12 lb)

## DESCRIPTION

The 2504 and 2505 are a new breed of automatic microphone mixers designed to meet the ever changing requirements of the professional sound reinforcement industry. The unique combination of features of the 2504 and 2505 provide many benefits for the consultant, contractor and end user. These features make the 2504 and 2505 mixers ideal for use in meeting rooms, churches, and teleconferencing. The standard features provide the consultant with powerful tools that allow increased flexibility of design necessary to meet the needs of the end user. These features also allow for ease of installation by the contractor without the need for custom work.

## GENERAL FEATURES

- Automatic gating with NOM attenuation
- Designed specifically for room combining applications
- Vca override or mute for emergency paging
- Four electronically balanced microphone/line inputs
- One unbalanced auxiliary line level input
- Separate input for background music
- Separate input for paging
- Bass and treble controls on 2 inputs
- Adjustable "OFF" attenuation on each channel
- Adjustable release time
- Direct channel outputs — pre- and post-gate
- Remote control of master level
- Remote control of auxiliary input
- Remote control of each channel (2505 only)



- Remote ON/OFF control of all inputs
- "Channel Active" indication on front panel
- Status output port for "Channel Active"
- Pre-gate tape output
- Configured for addition of auto level control on output

#### INPUT SECTION FEATURES

The 2504 and 2505 have seven inputs, five of them controllable from the front panel. These five inputs include four switchable (mic/line) electronically balanced, automatic gating inputs with bass and treble controls on two channels and one non-gating unbalanced auxiliary line input. The sixth and seventh inputs are special. One input is specifically intended for background music applications. It is a fixed gain, 50 k ohm, unbalanced, line level input, with remote on/off capability. It can be mixed with the other channels either before or after the master volume control. When mixed after the volume control, all other signals may be completely muted, or simply "ducked", during the page. This feature was designed with emergency paging applications in mind. The seventh input is designed for paging applications.

#### ROOM COMBINING FEATURES

One of the applications the 2504 and 2505 are specifically designed to fulfill is the combining of sound systems in multiple meeting rooms. For example: a hotel has a complex of eight meeting rooms of various sizes. At times all meeting rooms are used independently of one another, while at other times movable partitions between rooms are

opened, to create one large room. Of course, any combination of rooms can also occur. The 2504 and 2505 can be combined with other 2504 or 2505s to effect room combining. A complete line of room combining accessories greatly enhance the power of the 2504 or 2505 automatic mixer. When 2504s or 2505s are combined, all automatic functions such as NOM and THRESHOLD are also combined.

#### "LAST ON"

The 2504 and 2505 have a feature called "Last On". This feature may be activated by installing a wire jumper on the terminal board used with the mixer. So what exactly does the "Last On" function do? Very simply; the last microphone that was gated on automatically, remains on until another microphone is gated on to take its place. This means that at least one microphone is always on in the room. This has many benefits in recording meetings or in teleconferencing. "Last On" will allow several microphones to be on at the same time if dictated by microphone usage.

#### ADDITIONAL FEATURES

The 2504 and 2505 can be ganged with other 2504 or 2505s to provide a greater number of inputs, when required. Each channel has adjustable "Off Attenuation", channel active status indicator, and an open-collector status output port. Channel one and two both have bass and treble controls for easy matching of wireless mics, lavaliers and wired mics. For a more in-depth description of features and applications, consult the user's manual.

#### WARRANTY (Limited)

Electro-Voice Professional Sound Electronic Components are guaranteed for two years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not extend to finish, appearance items or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee. A list of authorized service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice, Inc., 1366 West Center Street, Orem, UT 84057 (AC/801-224-1800); or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty give you specific legal rights, and you may also have other rights which vary from state to state.

The service and repair address for this product is: Electro-Voice, Inc., 1366 West Center Street, Orem, UT 84057 (AC/801-224-1800).

Specifications subject to change without notice.



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