



61PMX

81PMX



*Electro-Voice®
Powered
Mixing Consoles*

61PMX 81PMX

Electro-Voice 61PMX & 81PMX Powered Mixing Consoles

Designed to be your audio "workhorse," Electro-Voice 61PMX (6-channel) and 81PMX (8-channel) powered mixers offer the flexibility, convenience and special features necessary for a variety of portable and fixed applications.

SPECIFICATIONS

Amplifier Power Output:	4-ohm load/200 watts 8-ohm load/125 watts
Frequency Response, Power Amplifier:	20 Hz-20 kHz ± 0.5 dB
Mixer:	Microphone input to any output, EQ flat, gain controls nominal, 20 Hz-20 kHz ± 1 dB
Total Harmonic Distortion, Power Amplifier:	<0.5% @ maximum rated power with 4-ohm load, 20 Hz-20 kHz <0.1% @ maximum rated power with 8-ohm load, 1 kHz <0.1% @ +20 dBu, 20 Hz-20 kHz
Mixer:	
Noise (20-20,000 Hz with 150-ohm impedance):	-126 dBu EIN-equivalent input noise, microphone input
Input Channel Equalization:	± 12 dB low cut/boost centered at 90 Hz ± 12 dB high cut/boost centered at 10 kHz
Channel Inserts:	1/4-in. stereo phone plug, tip send, ring return
Microphone Inputs, Type:	Balanced, pin-2 reference positive
Maximum Input Level:	+14 dBu (3.9 volts)
Input Impedance at 1 kHz:	4,440 ohms
Clip Indicator Threshold:	+15 dBu (at minimum gain)
Line Inputs:	High impedance, balanced, tip positive
Maximum Input Level:	+24 dBu (12 volts)
Input Impedance:	30 kilohms
Tape Inputs:	High impedance, RCA jack, unbalanced, tip positive
Input Impedance:	47 kilohms
Graphic Equalizer:	9-band, Constant Range™, ± 12 dB cut/boost
Center Frequencies:	50, 100, 200, 400, 800, 1,600, 3,150, 6,300, 12,500 Hz
Echo:	Electronic, adjustable delay time
Maximum Power Indicator:	Lights when power amp input exceeds +11 dBu
Dimensions (HWD):	17.4 cm x 45 cm x 39.6 cm (6 7/8" x 17 1/4" x 15 1/2")
Net Weight:	11.3 kg (25 lb)/12.2 kg (27 lb) 81PMX
Power Requirements:	100/120/220/240 V ac, 50/60 Hz, 260 W
Phantom Power:	40 volts

*PMPC-8 carrying case available.

Special features include:

- **40-volt phantom power supply** for maximum performance from condenser microphones.
- **Digital reverb/delay** for more natural ambience and control flexibility than bucket-brigade devices, and no "clatter" from spring reverbs.
- **A beefed-up amplifier** for improved reliability and sound quality. The amp also features a new mechanical design which improves heat dissipation and withstands abusive conditions with ease.
- **Optimum tone control** through the 9-band graphic EQ (with Constant Range™ filters) on output and 2-band EQ on input.
- **Individual sends on each channel** for stage monitors and outboard signal processors. Insert jacks allow use of separate processors or effects on each channel.
- **Superior design** with easy-access channel inputs, insert jacks and a complete patch bay on top panel.

The 61PMX and 81PMX offer power to spare, with 200 watts into four ohms and plenty of headroom. Constructed of rotomolded polyethylene, they are typically 40 percent lighter than competitive mixers as well as being more rugged to withstand the punishment of constant travel. Insert jacks allow the use of separate effects on each channel, which feature both low- and high-impedance inputs. A gain control allows you to achieve optimum signal-to-noise ratio, and to level-match input sources.

Microphone inputs are designed to handle the high output of EV's N/DYM® microphones, as well as condensers, without overload distortion. And distortion can be carefully monitored via a clip LED for input, EQ and overall levels. Our exclusive PowerLock™ circuit further prevents speaker damage from distortion. Vocalists hear what

the audience hears, with a "wet" stage monitor mix provided by the reverb-to-monitor feature.

Backed by EV's three-year parts-and-labor warranty, as well as the best service support in the business, the 61PMX and 81PMX clearly outdistance the competition in terms of value and performance.



Electro-Voice® a MARK IV company

600 Cecil Street, Buchanan, Michigan 49107, Phone (616)695-5831, FAX: 616-695-1304

8234 Doe Avenue, Visalia, California 93291, Phone (209)651-7777, Fax (209)651-0164

Mark IV Audio Canada, Inc., 345 Herbert St., Gananoque, Ontario, Canada K7G 2V1, Phone (613)382-2141, Fax (613)382-7466

Mark IV Audio, A.G., Kellenstrasse 5, CH-2563 IPSACH, Switzerland, Phone (011)41/32-51-68-33, Fax (011)41/32-51-1221

Mark IV Audio Japan, Ltd., 2-5-60 Izumi, Suganami-ku, Tokyo, Japan 168, Phone (011)81/3-3325-7900, Fax (011)81/3-3325-7878

Mark IV Vertriebs GmbH, Lärchenstrasse 99, 6230 Frankfurt/Main 80, Germany, Phone (011)49/69-380-100, Fax (011)49-69-386-959

Electro-Voice Pty. Ltd., Unit 24, Block C, Slough Business Park, Slough Ave., Silverwater, N.S.W. 2141, Australia, Phone (011)61/2-648-3455, Fax (011)61/2-648-5585

Audio Consultants, Co., Ltd., Flat E/F, 21/F, 8 Luk Hop St., Luk Hop Industrial Bldg., San Po Kong, Kowloon, Hong Kong, Phone (011)852/712-5251, Fax (011)852/351-3329

August 3, 1994

61PMX PART LIST

<u>PART</u>	<u>DESCRIPTION</u>	<u>NUMBER</u>	<u>KNOB</u>	<u>NUMBER</u>
INSERT JACK	RN113BPC	A21-01-028714		
LINE IN JACK	RN112BPC	A21-01-028713		
MIC IN JACK	XLR	A21-01-124470		
GAIN POT	20K-RD	A47-06-037146I	GREY/GREY	A24-04-029107
HIGH EQ POT	20K-B CD	A47-06-029095U	GREY/DK BLUE	A24-04-029105
LOW EQ POT	20K-B CD	A47-06-029095U	GREY/DK BLUE	A24-04-029105
MONITOR POT	50K-B	A47-06-028055	GREY/GREEN	A24-04-036192U
EFX/REV POT	50K-B	A47-06-028055	GREY/GREEN	A24-04-036192U
CHANNEL FADER	5K-RD SLIDE	A47-06-037149I	LT GREY SLIDE	870025
EFX SEND POT	200K-D V PCMT	A47-06-037231I	GREY/GREEN	A24-04-036192U
EFX RETURN	200K-D V PCMT	A47-06-037231I	GREY/GREEN	A24-04-036192U
TAPE LEVEL	200K-D V PCMT	A47-06-037231I	GREY/GREY	A24-04-029107
REVERB TO MAIN	50K-B V PCMT	A47-06-037148I	GREY/GREEN	A24-04-036192U
REV TO MONITOR	50K-B V PCMT	A47-06-037148I	GREY/GREEN	A24-04-036192U
DELAY TIME	5K-B V PCMT	A47-06-037229I	GREY/GREEN	A24-04-036192U
MAIN FADER	200K-D PCMT	A47-06-037227I	DK GREY SLIDE	870024
MONITOR FADER	200K-D PCMT	A47-06-037227I	DK GREY SLIDE	870024
EQUALIZER POT	5K-B CD, 30mm	A47-06-037228I	BLACK SLIDE	24-04-028144
RELAY	HR-311	A45-01-037269I		
AC RECEPTACLE/FUSECAP-HOLDER		A21-02-037961		
SPEAKER OUTPUT JACK		A21-01-037556I		
CHANNEL INPUT PC BOARD		A27-01-050028		
MAIN PC BOARD		A27-01-050027		
IRF 640 FET		A48-03-037233I		
IRF 9640 FET		A48-03-037234I		
5532 OPAMP		A17-01-122832		
4558 OPAMP		A17-01-027463		
TLO 72 OPAMP		A17-01-124688		
100 OHM, 1/5W RESISTOR		A47-01-037120I		
.33 OHM, 2W RESISTOR		A47-02-037247I		
THERMISTOR		A53-02-037270I		
SCREW(FACEPLATE TO CHASSIS)		A28-01-029152		
TINNERMAN CLIP		20462		

61PMX PARTS LIST

DESCRIPTION	PART NUMBER
IC RECEPTICLE/FUSEHOLDER ASSEMBLY	21-02-037961
AMP MODIFICATION KIT	21-01-052550
CARTON, PLAIN 24X24X12	96722
FADER, CHANNEL 5D-RD SLIDE	47-06-037149I
FUSE FB 4A/250V UL	51-04-037288I
FUSEHOLDER & CAP (2 PCS 1 PORT PLUG IN /1 PORT LIKE PLASTIC DRAWER FOR FUSE)	21-02-037961
IC, 4558 OPAMP 8-PIN	17-01-027463
IC, 5532 OPAMP	17-01-122832
IC, DUAL TLO72CP	17-01-124688
JACK, INSERT RN113BPC 1/4"	21-01-028714
JACK, LINE IN RN112BPC 1/4"	21-01-028713
JACK, MAIN OUT PHONE JACK S-C111PC (REPLACES TPCO 300157)	71160
JACK, MIC IN XLR FEMALE	21-01-124470
JACK, PHONE/SPEAKER WITH WASHER & SCREWS	21-01-027476
JACK, SPEAKER OUTPUT 1/4"	21-01-037556
KNOB, DELAY TIME GREY/GREEN	24-04-036192U
KNOB, EFX SEND/RETURN GREY/GREEN	24-04-036192U
KNOB, EQUALIZER BLACK SLIDE	24-04-028144
KNOB, GAIN / TAPE LEVEL GREY/GREY	24-04-029107
KNOB, HIGH & LOW EQ GREY/DK BLUE	24-04-029105
KNOB, MAIN/MONITOR/CHANNEL FADER LT GREY SLIDE	24-04-029206
KNOB, MONITOR GREY/GREEN	24-04-036192U
KNOB, REV TO MAIN/MONITOR GREY/GREEN	24-04-036192U
PC BOARD CHANNEL INPUT	27-01-050028
PC BOARD MAIN	27-01-050027
POT, DELAY TIME 5K-B V PCMT	47-06-037229I
POT, EFX SEND & RETURN/TAPE LEVEL 200K-D V PCMT	47-06-037231I
POT, EFX/REV/MONITOR 50K-B 16mm	47-06-028055
POT, EQUALIZER 5K-B CD 30mm	47-06-037228I
POT, GAIN 20K-RD	47-06-037146I
POT, HIGH & LOW EQ 20K-B CD 16mm	47-06-029095U
POT, MAIN/MASTER/MONITOR FADER 200K-D PMCT	47-06-037227I
POT, REVERB TO MAIN 50K-B V PCMT	47-06-037148I
POWER AMP EXCHANGE	11-01-037576I
POWER TRANSFORMER	56-08-037286I
RELAY OUTPUT R4301 OR HR CR311	45-01-037269I
RESISTOR, .33 OHM 2 WATT 5%	47-02-037247I
RESISTOR, 100 OHM 1/5 WATT 5%	47-01-037120I
SCREW (FACEPLATE TO CHASSIS)	28-01-029152

61PMX (FIGURE 2 DIAGRAM)

LOC.	DESCRIPTION	PART NUMBER
1	INSERT JACK RN113BPC	21-01-028714
2	LINE IN JACK RN112BPC	21-01-028713
3	MIC IN JACK XLR	21-01-124470
4	GAIN POT 20K-RD	47-06-037146I
	KNOB, GAIN POT GREY/GREY	24-04-029107
5A	HIGH EQ POT 20K-B CD	47-06-029095U
	KNOB, HIGH EQ GREY/DK BLUE	24-04-029105
5B	LOW EQ POT 20K-B CD	47-06-029095U
	KNOB, LOW EQ GREY/DK BLUE	24-04-029105
6	MONITOR POT 50K-B	47-06-028055
	KNOB, MONITOR GREY/GREEN	24-04-036192U
7	EFX/REV POT 50K-B	47-06-037149I
	KNOB, EFX/REV GREY/GREEN	24-04-036192U
8	CLIP LITE	
9	CHANNEL FADER 5K-RD SLIDE	47-06-037149I
	KNOB, CHANNEL FADER LT GREY SLIDE	24-04-036192U
10	TAPE IN JACK	
11	MAIN OUT JACK	
12	MONITOR OUT JACK	
13	EFX SEND JACK	
14	EFX RETURN JACK	
15	EQ IN JACK	
16	EQ OUT JACK	
17	POWER AMP IN JACK	
18	EQUALIZER POT 5K-B CD 30mm	47-06-037228I
	KNOB, EQUALIZER POT BLACK SQUARE	24-04-028144
19	EFX SEND POT 200J-D V PCMT	47-06-037231I
	KNOB, EFX SEND GREY/GREEN	24-04-036192U
20	EFX RETURN POT 200K-D V PCMT	47-06-037231I
	KNOB, EFX RETURN GREY/GREEN	24-04-036192U
21	TAPE LEVEL POT 200K-D V PCMT	47-06-037231I
	KNOB, TAPE LEVEL GREY/GREY	24-04-029107
22A	REVERB TO MAIN 50K-B V PCMT	47-06-037148I
	KNOB, REVERB TO MAIN GREY/GREEN	24-04-036192U
22B	REV TO MONITOR 50K-B V PCMT	47-06-037148I
	KNOB, REV TO MONITOR GREY/GREEN	24-04-036192U
22C	DELAY TME POT 5K-B V PCMT	47-06-037229I
	KNOB, DELAY TIME GREY/GREEN	24-04-036192U
23	MAIN FADER POT 200K-D PCMT	47-06-037227I
	KNOB, MAIN FADER DK GREY SLIDE	24-04-029206
24	MASTER/MONITOR FADER 200K-D PCMT	47-06-037227I
	KNOB, MASTER/MONITOR DK GREY SLIDE	24-04-029206
25-27	NO PARTS AVAILABLE	

61PMX PARTS LIST

SWITCH, POWER (ROCKER SWITCH)	51-02-037289I
HERMISTOR	53-02-037270I
TINNERMAN CLIP J-TYPE	20462
TRANSISTOR, IRF 640 FET	48-03-037233I
TRANSISTOR, IRF 9640 FET	48-03-037234I
WHITE VINYL CAP	14-02-027423
SPEAKER JACK - EQUIVALENT DYNACORD PART (METAL)	D301017
WASHER: FLAT BROWN	D303597
WASHER: BLACK COLLAR	D306626

61PMX

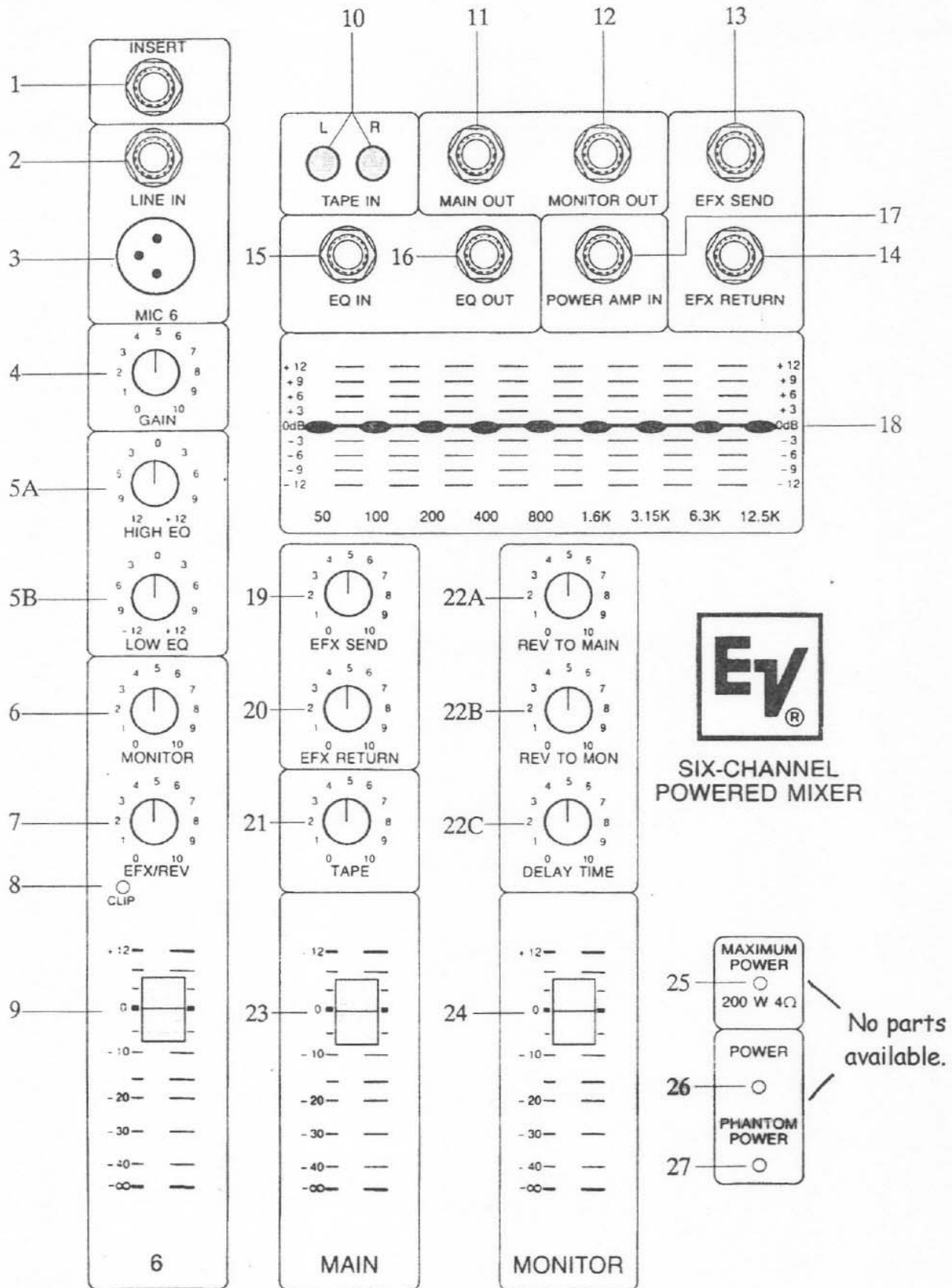


Figure 2