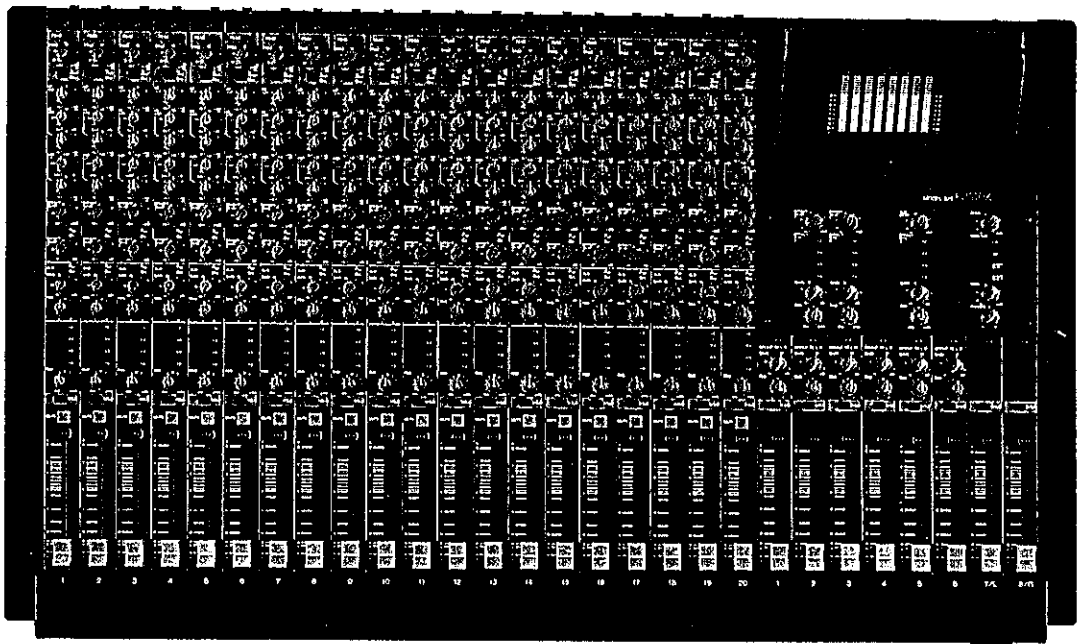


# Owner's Manual

## Model

# 820

## RECORDING MIXER



# Fostex®

# INTRODUCTION

Thank you very much for purchasing a Fostex Model 820 Recording Mixer.

The Model 820 is a 20-input recording mixer with all the necessary functions required for a multitrack recording. The Model 820 has all of the following features:

1. An 8-channel output, providing the perfect combination with an 16-track multitrack recorder.
2. Two Effect Sends (monaural) and an Auxilary Send (stereo), allowing a variety of sound effect processes possible.
3. The capability to send the AUX signal (while monitoring the recorder output signal) to the Effect Send 2 output, making it possible to, for example, cast a reverberation on this signal and thus simulate the recording environment without tampering with the output signals to the recorder.

4. Two parametric and one shelving equalizers, giving more flexibility to tone control, and, with the use of a solo monitor function and mute function, the mixing process is made even more easy.
5. Three stereo Effect Returns, allowing connections to various sound effect processors without sacrificing input channels to accept the output signals from the processors.
6. A DC24V phantom power source, enabling hookup to a high quality condenser microphone.
7. An FL level meter.
8. Space for connecting MIDI interfacing for future use with MIDI control.

We hope that you thoroughly read this Manual and will utilize the product to its fullest capabilities. With proper use and maintenance, you will enjoy many years of satisfied performance.

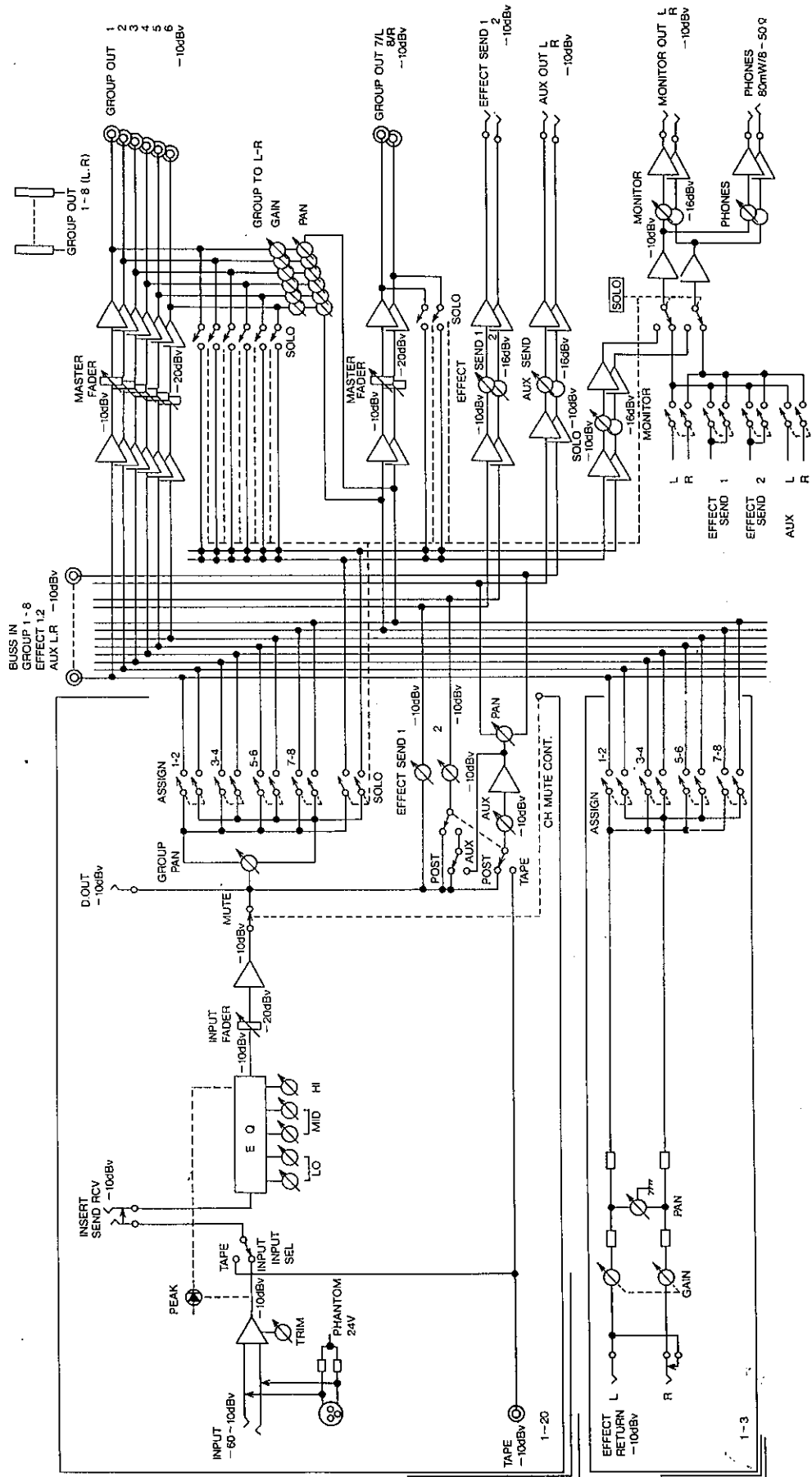
## CAUTION

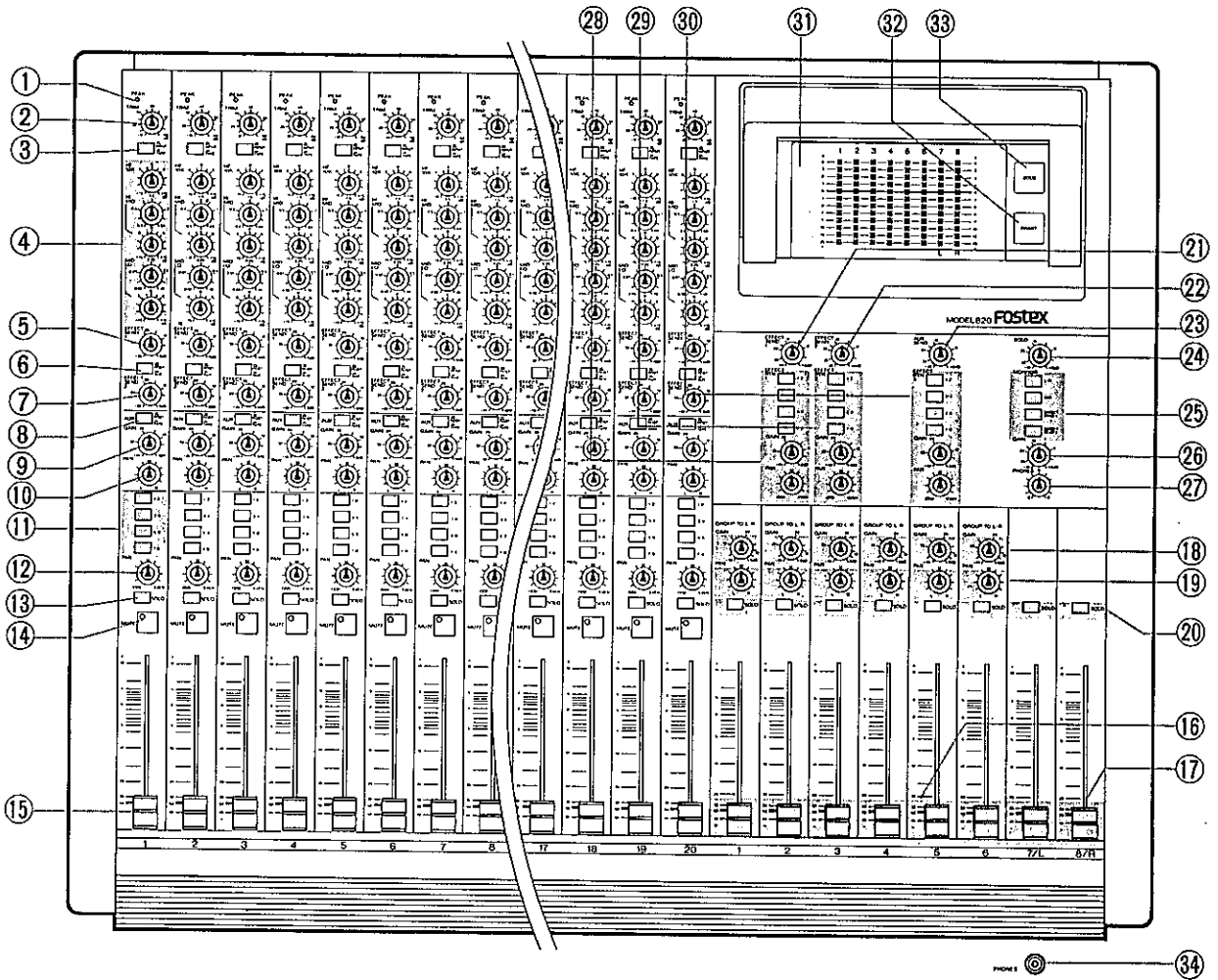
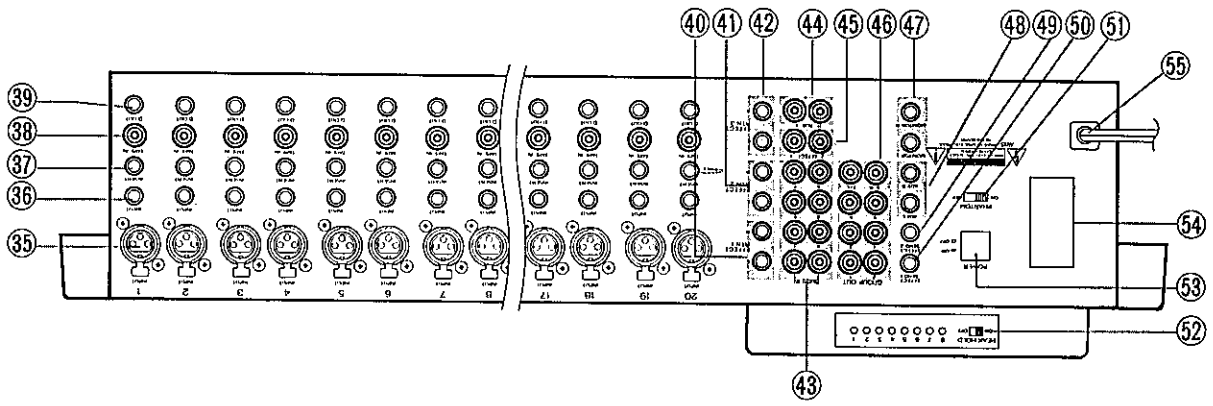
As regards an operating of the Model 820, follow the Model 812 Owner's Manual, after page 5-Guide of Components.

## SPECIFICATIONS

<b>INPUT (×20)</b>		
Microphone impedance	600Ω or less	
Input impedance	2kΩ balanced XLR connector and 20kΩ unbalanced phone jack	
Nominal input level	Microphone: -60dBV (1mV) Line: -10dBV (0.3V) -70dBV (0.3mV) +15dBV (5.6V)	
Minimum input level		
Maximum input level		
<b>TAPE INPUT (×20)</b>		
Input impedance	20kΩ	
Nominal input level	-10dBV (0.3V)	
Minimum input level	-20dBV (0.1V)	
Maximum input level	+15dBV (5.6V)	
<b>INSERT INPUT (×20)</b>		
Input impedance	20kΩ	
Nominal input level	-10dBV (0.3V)	
<b>INSERT OUTPUT (×20)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>BUSS INPUT (GROUP×8, EFFECT×2, AUX (L/R)×1)</b>		
Input impedance	20kΩ	
Nominal input level	-10dBV (0.3V)	
<b>EFFECT RETURN (L/R) (×3)</b>		
Input impedance	7kΩ	
Nominal input level	-10dBV (0.3V)	
Maximum input level	+25dBV (17.8V)	
<b>GROUP OUTPUT (×8)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>EFFECT SEND (×2)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>AUX OUTPUT (L/R) (×1)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>MONITOR OUTPUT (L/R) (×1)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>HEADPHONES OUTPUT (Stereo)</b>		
Output load impedance	8~50Ω	
Maximum output	80mW	
<b>DIRECT OUTPUT (×12)</b>		
Output load impedance	10kΩ or more	
Nominal output level	-10dBV (0.3V)	
Maximum output level	+15dBV (5.6V)	
<b>FREQUENCY RESPONSE</b>		
Microphone input	20~20kHz +1/-2dB	
Line input	20~20kHz +1/-1dB	
Monitor output	20~20kHz +1/-3dB	
Headphones output	20~20kHz +1/-2dB	
<b>EQUIVALENT INPUT NOISE</b>	-125dBV weighted	
<b>OVERALL SIGNAL TO NOISE</b>		
1 mic input	65dB weighted	
20 mic input	50dB weighted	
T.H.D.	0.05% (1kHz, nominal level) 0.1% (headphones, 1kHz, 10mW/50Ω)	
<b>FADER ATTENUATION</b>	70dB (1kHz)	
<b>CROSSTALK</b>	65dB (1kHz)	
<b>PARAMETRIC EQUALIZER</b>	60~1kHz ±15dB 400~6kHz ±15dB (SHELVING)	
<b>POWER REQUIREMENTS</b>	100V 55W 120V 55W 220V 55W 240V 55W	
<b>DIMENSIONS (H×W×D)</b>	175mm×910mm×530mm	
<b>WEIGHT</b>	18.5kg(41lbs)	
<b>PHANTOM POWER SUPPLY</b>	DC24V	

# BLOCK DIAGRAM





**FOSTEX**

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