

# MODEL 51003

# AUDIO MIXER 6 x 1

## FEATURES

- Six Transformer Isolated Mic/Line Inputs
- Dual Transformer Isolated Outputs



[www.protechaudio.com](http://www.protechaudio.com)

- Adjustable Gain On Each Input
- Separate Auxilliary Input With Adjustable Gain
- Built-In Limiter, Tone Controls, Lo-Cut Filters, And Mute Circuit.
- External UL Listed Power Transformer For Lowest Possible Noise

The Model 51003 Audio Mixer has been designed to fit multiple applications in small venues, especially Houses of Worship. The unit incorporates an extensive array of features to allow for almost any situation which may arise in a small venue.

The input section has six transformer isolated inputs, each individually selectable for mic or line use. When in the mic mode, the built-in phantom power may be selected on an individual input basis. The unit also has a separate auxilliary input. The gain of each input is individually adjustable. The mic/line inputs also have Lo-Cut filters, selectable via dip switches. The auxilliary input is normaled thru a front panel phone jack. This feature allows instant access to the house PA system.

Input #1 has an automatic mute circuit, which can be activated via another dip switch. When activated, any signal applied to input #1 will automatically mute inputs 2 to 6, and the AUX input. There is also provision for an external manual mute switch to activate the mute circuit at the same point. Also, the mix buss is accessible for linking additional units to create custom mixing configurations.

The output section starts with an effects send/return, for inserting signal processors. The next stage is the tone control circuit, with controls for both high and low frequency adjustments mounted on the front panel. Following the tone control section is the built-in limiter, which may be activated via a slide switch.

The output section consists of two independently adjustable, transformer isolated output channels. Output B has a built-in VCA circuit, which allows the unit to function with remote control of the output B level.

The meter section has a 12 segment LED bargraph, to allow accurate setting of output levels. To aid in this setting, the Model 51003 has a built-in oscillator which is factory set to provide a zero dB signal to both output sections. By adjusting the output levels first, using the on-board oscillator, adjusting the inputs becomes much simpler, and prevents overload of the following circuits. The LED meter is factory adjusted to read 0dB, when the output level is +4dBm.

For additional information or applications assistance contact:

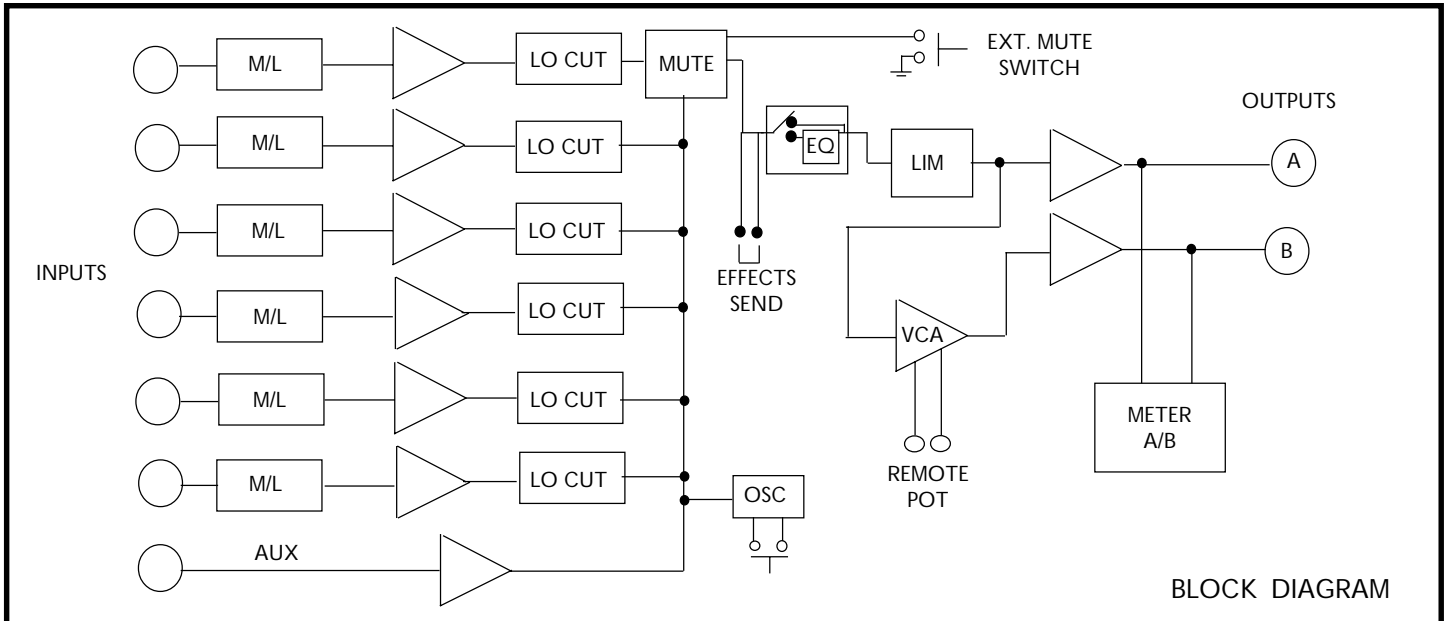
SALES ENGINEERING

MODEL 51003 AUDIO MIXER 6 x 1

**PROTECH**®

Engineering Data

1/06



**SPECIFICATIONS**

GAIN.....	0-60dB, Adjustable
MAXIMUM INPUT LEVEL.....	+20dB
INPUT IMPEDANCE.....	Mic = 150 Ohms Nominal Line = 10K Ohms, Nominal
MAXIMUM OUTPUT.....	+20dBm
OUTPUT IMPEDANCE.....	200 Ohms
FREQUENCY RESPONSE.....	+0, -1dB, 20Hz To 20KHz
DISTORTION.....	0.1% Maximum @ +20dBm Out, and 15dB of Gain
NOISE.....	-82dB Below +4dBm Out, and 15dB of Gain
POWER REQUIREMENTS.....	117VAC @ 0.5 Amp.
SIZE.....	1.75" x 19" x 10"
OPERATING TEMPERATURE.....	-20 To +75 Degrees C

**ARCHITECT'S & ENGINEER'S SPECIFICATIONS**

The audio mixer shall have 6 mic/line inputs selectable via on-board slide switches. The mixer shall also have an auxilliary input which is normalised thru a front panel phone jack. Each mic/line input shall have a locut filter, independently selectable for each M/L input. Each M/L input shall be balanced, transformer isolated. The gain of each M/L input, and the AUX input shall be adjustable via front panel mounted potentiometers. The mixing section shall incorporate an equalizer section with both bass and treble controls, mounted on the front panel. The mixing section shall also have a built-in oscillator, which is activated via a front panel mounted push-button switch.

The output section of the mixer shall have a built-in limiter, which may be activated via an on-board switch. The limiter shall be placed in the signal chain ahead of the output level controls.

The mixer shall have two individually adjustable outputs. the outputs shall be balanced transformer isolated, and capable of driving a 600 ohm load to +20dB. The mixer shall incorporate a 12 segment LED meter capable of metering either the A or B output, with selection of the meter function selectable via an on-board pushbutton switch.

The audio mixer shall be :

PROTECH AUDIO Corporation Model 51003

**ACCESSORIES**

AUTOMATIC LEVEL CONTROL.....MODEL 65306  
Senses ambient noise in paging area, & automatically adjusts paging level.

Toolbox Series Audio Distribution Amplifiers.....Model 5117 & 5126  
Designed to provide additional audio feeds from mixers.

**Protech Audio Corporation**  
PO Box 597, 192 Cedar River Road  
Indian Lake, New York 12842  
Voice 518-648-6410 Fax 518-648-6395  
Web - [www.protechaudio.com](http://www.protechaudio.com)

**AUTHORIZED DEALER**