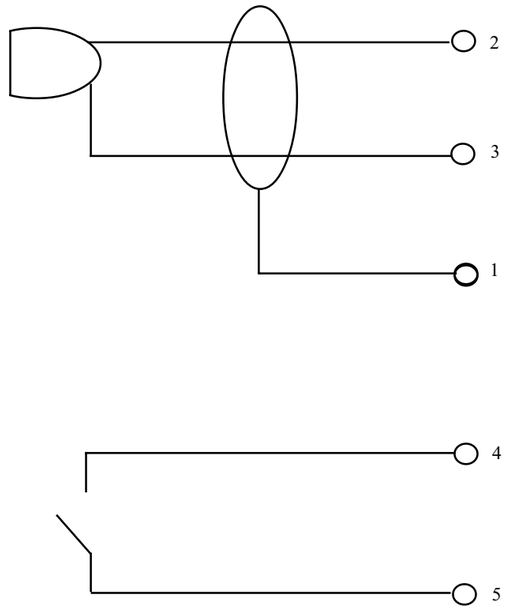
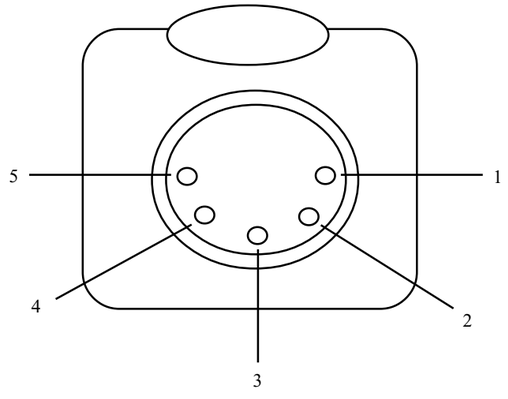
XL CONNECTOR WIRING





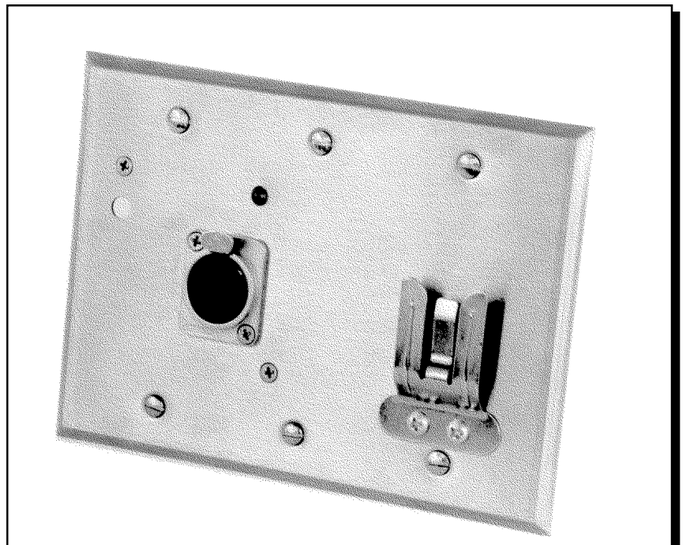
PROTECH®

1/06

REMOTE MICROPHONE STATION
INSTALLATION & OPERATION MANUAL

MODELS COVERED
5053B

www.protechaudio.com



The Model 5053B Remote Microphone Station is designed for use in engineered sound systems. The 5053B allows the audio to be amplified at the source, and prevents the serious degradation of signal-to-noise ratios normally found when microphone level signals are caried over long distances. Typical installations include airport terminals, convention centers, and sports arenas.

The Model 5053B incorporates a number of features that allow it to perform in a variety of venues. The unit has a transformer balanced input, a transformer balanced output, adjustable gain, phantom power capability, and a busy buss indicator.

The input section starts with the panel mounted 5 pin female XLR Connector. The connector allows wiring of any low impedance microphone with a push-to-talk switch. Pressing the push-to-talk switch activates an internal relay, which connects the output transformer to the output wiring. By disconnecting the output from the load, many units can be wired to a single receiving device, without the problem of loading the line. The XLR connector can be configured to accept prewired microphones. The unit is shipped from the factory wired with pin #1=shield, pin #2= Audio Hi, pin #3= Audio Lo, and pins 4 & 5= audio output switch closure.

The XLR audio input connects to the low impedance microphone input transformer. The Model 5053B has provision to allow strapping of the center-tap on the transformer primary, to the 24VDC, to provide phantom power to microphones requiring that feature.The gain of the opamp section is adjustable with a small screwdriver, thru the small hole located in the upper left hand of the front panel. The unit has been shipped from the factory with the gain adjusted to 45dB, into a 600 ohm load. The minimum recommended gain setting is 35dB.

The output section consists of a high quality audio output transformer, followed by a double-pole, double-throw relay. Pressing the push-to-talk switch activates the relay, and connects the output transformer to the audio output wiring. The only other wiring required is for the 24VDC power.

One additional conductor may be used to connect the optional busy buss. When the push-to-talk switch is activated, the front panel busy indicator will illuminate. By wiring the buss pins together, all busy indicators wired together will illuminate when any push to talk switch is activated.

For additional information, contact:

APPLICATIONS ASSISTANCE

Protech Audio Corporation 192 Cedar River Road, Indian Lake New York, 12842 Voice 518-648-6410 Fax 518-648-6395

INSTALLATION

The Model 5053B Remote Microphone Station is designed to be mounted in a standard triple gang electrical box at least two (2) inches deep. Wiring to the box must include;

1 - A two-conductor, shielded cable, 24AWG or heavier

2 - A 24 volt DC power connection, with the low side of the power supply connection providing a good EARTH ground. The minimum recommended gauge is 22AWG.

3 - (Optional) A single conductor, 24AWG minimum, for the busy buss

Step 1- Mount the microphone mounting clip on the front panel

Step 1A- (Optional) Strap unit for phantom power (See Wiring Diagram On Facing Page).

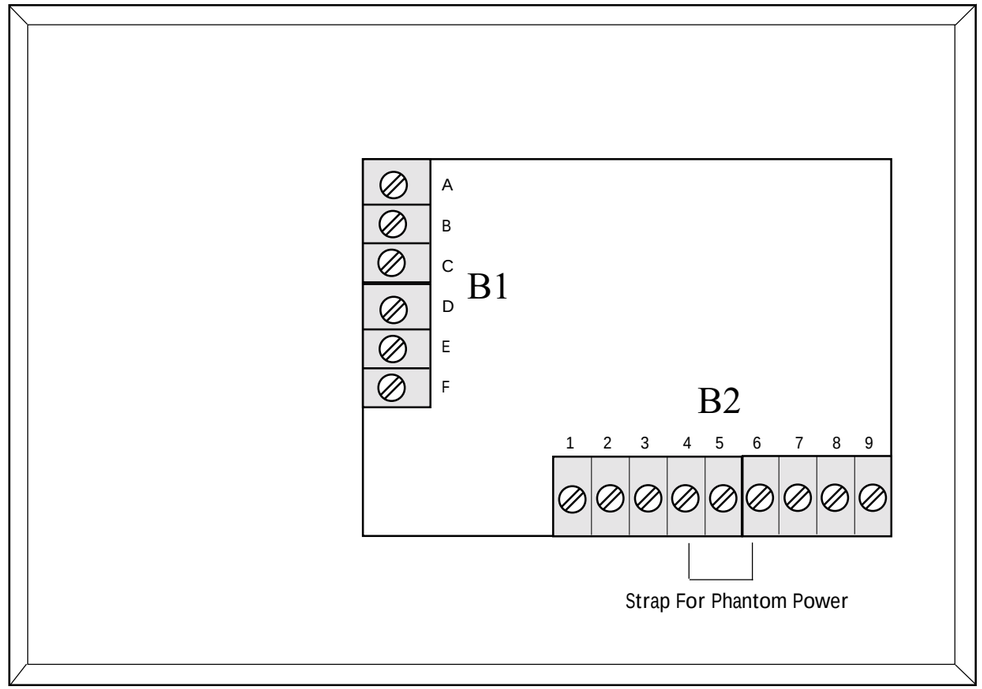
Step 2- Wire one of the microphones to be used, and test several Model 5053B units for correct operation with the test microphone. It is recommended that this step be done in the shop, before mounting the units in the field.

Step 3- Wire the audio output and 24VDC to one unit (See Wiring Diagram On Facing Page), mount the unit in the electrical box, plug-in microphone, and test for audio outpt at the receiving device.

ALIGNMENT

The alignment of the Model 5053B is a one step procedure. The gain of the unit is factory adjusted for 45dB. This will usually achieve proper level at the receiving device. It is not recommended that the gain of the 5053B be lowered, since this will result in a lower signal-to-noise ratio. If additional gain is needed, simply turn the gain trimpot, accessible thru the front panel, until the desired output level is achieved.

REAR VIEW



WIRING TABLE

B1	B2
PIN A = +24VDC	PIN 1 Switch Closure
PIN B = GROUND	PIN 2 Switch Closure GND
PIN C = BUSY BUSS	PIN 3 N/A
PIN D = SHIELD	PIN 4 +24VDC
PIN E = OUTPUT HI	PIN 5 N/A
PIN F = OUTPUT LO	PIN 6 Phantom Power Connection
	PIN 7 GND
	PIN 8 Audio Input LO
	PIN 9 Audio Input HI