

## IC-52 TWO CHANNEL AUDIO INTERCOM AMPLIFIER

The IC-52 is the most versatile Audio Intercom ever built; yet it is also the easiest to integrate into your design. Configuration Templates support every common application.

The audio quality of the IC-52 is superb. Noise and distortion are very low. Selectable equalization optimizes voice communications. The Automatic Level Control assures optimum performance. There are separate controls for Audio Level, and Reach. Once set, the Audio Level remains constant over wide dynamic input range. The independent Reach Control allows for optimized accommodation of the input signal level. The user may wander throughout the room, and still be heard at a nearly constant level without any operator adjustments!

Hands-Free operation is easily achieved with the IC-52. The selectable Voice Operation (VOX) operates flawlessly. Electronic switching takes less than 3mS. Setup indicators make adjustments easy. If activated, the Auto-Take feature automatically activates the intercom and cycles the incoming call sequence (Call Tone, Privacy Alert Tone).

The IC-52 incorporates two selectable Notch-Filters to reduce acoustic feedback. One filter has an optimized frequency range to compensate for poor room acoustics. The other has a higher frequency range to reduce microphone to wall/glass resonance.

The logic interface has a plethora of Inputs and Output Options. The Indicators are comprehensive, yet simple. The interface is fully configurable with jumpers, however common functions are preset. All necessary user controls can be remotely operated manually or by a PLC.

Modular Construction makes the IC-52 ideal for integrated designs. The unit is small; mounting is flexible, and easy. Power is from a Universal Plug-in D.C power adapter. All I/O is through Euro-Style connectorized barrier strips.

### BENEFITS

- Very Versatile
- Easy to use
- High Quality Audio
- Automatic Level Control
- Hands Free Operation (VOX)
- Simplex or Full Duplex Operation
- Solid State Switch <3mS
- Auto Take Answering
- Built in Notch Filters

### Design Information

Dual Channel Universal Audio Intercom Amplifier  
Inputs, R.F. and static electricity protected  
Outputs, short circuit protected  
Frequency Response 250 Hz to 14KHz  
5-Watts RMS Sine Wave output into 45 Ohms (Balanced), Both channels full power.  
Side-tone selection for Headset Operation  
Distortion at full rated output < 1% T.H.D  
Microphone Inputs:  
1000 Ohms Balanced or 500 Ohms Unbalanced  
-76dBm minimum input for full rated output  
Selectable Equalization - 3 settings optimized for voice communication  
Selectable Phantom Power (10 Volts)  
Color: Light Gray metal enclosure  
Power: 24VDC, 1A Power Supply included  
Weight: 3 lbs.  
Dimensions: 8.5" W X 6" D X 1.75" H

## Tech Works™

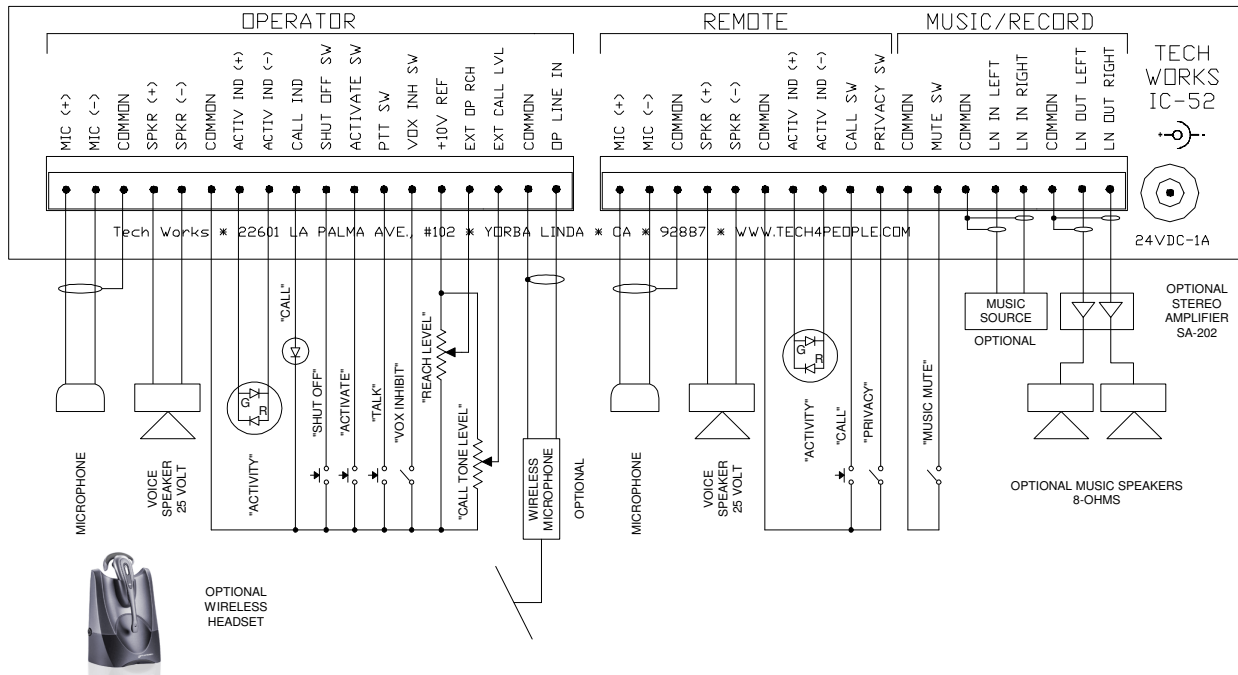


“Making Specialized Communication Easy”

A Division of: **United Communication Technology, Inc.**  
22347 La Palma Ave., Suite #107, Yorba Linda, CA 92887

Direct Line: **714-694-1040** Fax: **714-694-1041** Toll Free: **1-800-813-1080**

Web site [www.tech4people.com](http://www.tech4people.com)



## REAR CONNECTIONS

### Logic Control Inputs:

Fully Configurable with internal jumper options  
 Ground sensing for Buttons, or PLC  
 Shutoff (Lowest Priority)  
 Activate  
 Push-to-Talk  
 Privacy, or Push to Listen

Call  
 VOX Inhibit  
 Logic/Indicator Outputs:  
 For use with External LED indicators or PLC inputs  
 Call Indicator  
 Operator and Remote Activity Indicators

### Options:

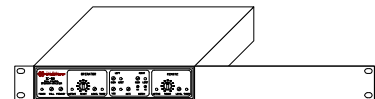
The IC-52 is available in two (2) basic configurations. The IC-52-STD is the "Standard" version and includes the basic functions of the logic control and notch filters. The IC-52-ENH is the "Enhanced" version that includes the Option-1 board, which provides the Music Control and Recording output options. Three mounting options are available as standard configurations.



Desk Mount (DM)  
 IC-52-STD-DM  
 IC-52-ENH-DM



Wall Mount (WM) (Under Counter)  
 IC-52-STD-WM  
 IC-52-ENH-WM



Rack Mount (RM)  
 IC-52-STD-RM  
 IC-52-ENH-RM

### Architects' and Engineers' Specifications

The Dual Channel Audio Intercom Amplifier shall have two completely separate and discrete audio processing channels. The unit shall include all switching and logic control for full hands free operation without the use of push to talk (PTT) or push to listen (PTL) controls. All logic controls including PTT and PTL shall be available on the rear panel screw terminals. All logic and control connections shall be fully PLC compatible ground sensing. The reach control and signal direction indicators shall be available on the rear screw terminals for external remote user interfaces as specified or shown on the plans. Microphone inputs shall be 1000 ohms balanced, -76dBm, with selectable phantom power. Each power amplifier shall deliver 5 watts continuous power into 45 ohms at less than 1% total harmonic distortion. The Amplifier shall include all optional circuitry to allow full control of Music Ducking and line level audio input and output control without custom assemblies.

The Dual Channel Audio Intercom Amplifier shall be Tech Works Model IC-52-ENH.