

ICA-202D

TWO CHANNEL AUDIO INTERCOM AMPLIFIER

The ICA-202D is the most versatile Audio Intercom available; yet it is also the easiest to integrate into your design. With 20 watts of clean audio power at 25-Volts it can do both the Intercom and the Paging functions in most facilities. The audio quality of the ICA-202D is superb. Noise and distortion are very low. Selectable equalization optimizes voice communications.

There are separate controls for Audio Level, and Reach. Once set, Automatic Level Control (ALC) assures the speaker level remains constant over a wide dynamic input range. The Remote user may wander throughout the room and still be heard at a nearly constant level without any operator adjustments.

All configuration settings are factory presets; only the speaker levels are set in the field. The microphone sensitivity (Reach) is preset with 16 position (3dB/Step) switches; the Speaker Levels are adjusted with Back Panel Controls.

External Control allows the Operator to listen to very low sounds or soft speech from the remote station. The Remote Microphone Sensitivity (Reach) is fully controllable; set by a Front Panel Control, and/or Console Push Buttons, or PLC Touch Screen. ALC keeps the Speaker and Recording levels from exceeding preset levels.

A Privacy Tone, to alert the remote party that someone is listening, is a control option. If selected the privacy tone will sound every 20 seconds unless the PTT is pressed.

The logic interface is PLC compatible including stepped external “Level Control”. Input control options include Privacy Tone, Page, PTT, Mute, Activate, Shut Off, and Call Tone, which is automatically routed to the operator speaker. A Line level output for recording is included. A separate Page line level output provides audio to paging amplifiers if required. A Page Pre-Announce Tone (jumper option) is available.

BENEFITS

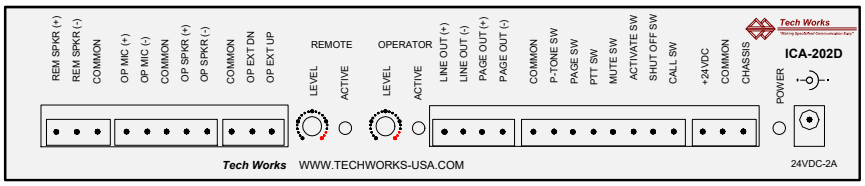
- Easily Repeatable Settings
- Digital Microphone Sensitivity
- High Quality Audio
- Automatic Level Control
- External Reach Digital Stepper
- Solid State Switch <3mS
- Integral Privacy Tone
- Selectable Call Tones
- Line Level Recording Output
- Page Output
- 20 Watts Audio Power

Associated Equipment

DODC-1	Detention Operator Desk Console w/Gooseneck Mic
DODC-2	Detention Operator Desk Console w/Hidden Mic
ICR-116	Intercom Relay Panel - 1 Voice path, 16 Stations
PS2437B	Power Supply (Sold Separately)

Design Information

Power	24V DC @ 2A Max. Mic Phantom – 23V
Color	Light Gray metal enclosure
Mounting	DM - Desk Mount RM - Rack Mount RM2 - Dual Rack Mount WM - Wall Mount
Dimensions	8.6” W x 6” D x 1.75” H
Weight	3 lbs.
Freq. Resp.	250 – 10k Hz
Output	Short Protected Operator Speaker 3W Remote Speaker 20W RMS
Distortion	< 1% THD
Mic Input	1 K/ohms Balanced
Equalization	Selectable



REAR CONNECTIONS

Audio Connections

Remote Speaker (+ & -)
Microphone Power
Operator Microphone (+ & -)
Shield (Common)
Operator Speaker (+ & -)
Line Output (Recording)
Page Output (to External Paging Amplifier)

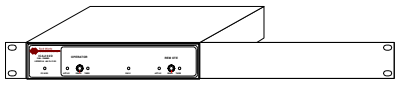
Logic Control Inputs

Ground sensing for Buttons, or PLC
Operator External Reach Down
Operator External Reach Up
P-Tone Enable
Page Switch
Push-to-Talk (PTT)
Mute
Activate
Shut Off (Lowest Priority)
Call Tone (to Operator Speaker)

A wide variety of mounting options are available as standard configurations.



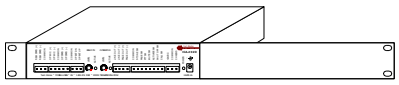
Wall Mount (WM) (Under Counter)
ICA-202D-WM



Rack Mount (RM)
ICA-202D-RM



ICA-202D-RM2 Dual Rack Mount



ICA-202D-RM-Rear Rack Mount

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 push to talk (PTT) operation. An integral privacy tone shall be available and jumper selectable to alert the remote party that they are being monitored. All logic controls including Privacy Tone, Page, PTT, Mute, Activate, Shut Off, and Call Tone shall be available on the rear panel screw terminals. All logic and control connections shall be fully PLC compatible ground sensing. Microphone inputs shall be 1000 ohms balanced, –80dBm, with phantom power. The Remote Speaker Power Amplifier shall deliver 20 watts continuous power into 25 Volt loads at less than 1% total harmonic distortion. The Amplifier shall include a line output for recording all communication without custom assemblies. A separate Page line level output shall provide audio to external paging amplifiers if required. A Page Pre-Announce Tone option shall be available.
The Dual Channel Audio Intercom Amplifier shall be Tech Works Model ICA-202D.

For further system set up and adjustment please see the System Planning Guide.