



ICM-8R

Design and construction –

The ICM-8R series of Intercom Control Masters are ruggedized intercom panels for use in harsh environments such as correctional facilities while providing high quality audio communication with complete control. The ICM-8R series was designed to withstand physical attacks and deliberate abuse designed to disable the unit. These units feature a 12 gauge stainless steel faceplate, vandal resistant steel selector switches and vandal resistant LEDs. The integral speaker and microphone are mounted in such a way to prevent physical damage to the components from objects and liquids that could cause these components to stop working. The chassis of the unit is constructed so users cannot introduce liquids inside to damage components and is constructed of rugged, powder coated steel. Field wiring for speakers and call buttons is connected to the unit using a industry standard 50 pin connector. A metal “keeper” prevents users from unplugging the field wiring and thus disabling the unit.

The ICM employs our unique intercom amplifier with discrete dual channel operation. Separate Operator and Remote amplifiers, AGC, level, and reach controls are used to provide complete control and quality audio. Both amplifiers are capable of 20 Watts of output into a 25Volt-industry standard speaker loads.

Operation –

An internal jumper selects whether station selection is done by a single press of the associated steel button or by holding the station button for the duration of the conversation. Holding the button during the conversation keeps operators from selecting an unused station so as to never hear the call in tone over the speaker. An All Call button selects all stations for one-way paging announcements.

ICM-8R Rack Mount

Intercom Control Master 8 Stations with All Page

BENEFITS

- Vandal Resistant, Hardened Chassis
- Designed Specifically for Corrections
- High Quality Audio
- Automatic Level Control
- Solid State Switching
- Steel Push Buttons
- Ultra Bright, Hardened LEDs
- Options Designed for Corrections Industry

Design Information

Dual Channel Audio Intercom Amplifier

Audio Power: 20 Watts @ 31 Ohms

Designed to drive 25V speakers

Inputs, R.F. and static electricity protected

Outputs, short circuit protected

Frequency Response 250 Hz to 14KHz

Distortion at full rated output < 1% T.H.D

Built-in Condenser Microphone

Color: Stainless steel faceplate, black powder coated metal chassis

Power: 24VDC, 3A

Power Supply not included

Weight: 15lbs.

Dimensions: 19" W X 3.5" H X 8.6"D

Tech Works™

“Making Specialized Communication Easy”

A Division of: **United Communication Technology, Inc.**

22349 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

Options – (Future, Call for availability)

Scan – The Scan (“S” option) allows the operator to listen to each station sequentially when the intercom is not in use. As a station is scanned, the associated LED flashes and the operator automatically hears audio from the scanned station. If the operator hears something of interest, they press the button corresponding to that station and scanning is paused. When monitoring is complete, pressing the button a second time resumes scanning where it left off.

Dual Call – The Dual Call (“D” option) equips the panel with two call in LEDs for each speaker selector button. This is used where two cells share a speaker.

40 Watt Power Amp – A 40 Watt Power Amp (“40” option) can be installed *inside the chassis* for applications requiring more than 15 watts of all call power. This option saves a tremendous amount of space over having a separate power amp for all call and eliminates the need for field wiring to an all call amplifier.

Alarm –

The Alarm (“A” option) feature allows integration of external video switchers or alarm contacts with the ICM-8R. This permits connection of alarm contacts (inputs) for each station or connection to a video switcher (outputs). This “audio follow video” or “audio follow alarm” can be used in a variety of corrections applications.

The Level sensing (“L” option) feature allows the second call (like the “D” option) to be placed by a loud noise such as a Scream from the remote station. This feature uses discrete high sensitivity Level Sensing to trigger a second call in point just like pressing of a second button. The level threshold can be selected from two adjustable pre-sets. In this way a “Day” level can be set and a separate “Night” or quiet level (time clock inputs). Each channel can be selectively set to activate on Level “A” or “B” or both. In this way some areas can be monitored 24 X 7 while others are only monitored at night.

Video – An 8-camera video switching option is available for “Video Follow Audio” applications. In this way the intercom audio and simple video surveillance monitoring are synchronised so that the operator can here and see the area being Scanned or Selected.

Models –

ICM-8R	Single call in master, no scan
ICM-8R-D	Dual call in per station master, no scan
ICM-8R-S	Single call in master with Scan option
ICM-8R-A	Single call in master with Alarm interface option
ICM-8R-L	Single call in master with Level Sensing alarm option
ICM-8R-V	Single call in master with Video switching option

For internal 40 watt all call amplifier, add “- 40” suffix to any model number

Architects' and Engineers' Specifications

The Voice Communication System Intercom Control Master Station shall be ruggedized steel design for use in harsh environments such as correctional facilities. The intercom shall feature a 12 gauge stainless steel faceplate, vandal resistant steel selector switches and vandal resistant LEDs. The integral speaker and microphone shall be mounted in such a way to prevent physical damage to the components from objects and liquids. The chassis of the unit must be constructed of rugged, powder coated steel and fabricated so users cannot introduce liquids inside. Field wiring for speakers and call buttons is connected to the unit using a industry standard 50 pin connector. A metal “keeper” prevents users from unplugging the field wiring and thus disabling the unit.

An LED light and an associated call tone shall annunciate each remote station call in. An internal jumper selects whether station selection is done by a single press of the associated steel button to select and press again to release or by holding the station button for the duration of the conversation. An All Call button selects all stations for one-way paging announcements.

The intercom amplifiers must be discrete dual channel type with separate Operator and Remote amplifiers, AGC, level, and reach controls. Both amplifiers shall be capable of 20 Watts of output into a 25Volt-industry standard speaker load. Any intercom unit not providing dual channels with separate and discrete control will not be accepted under this specification.

The following feature options must be included:

- Single call in master, no scan (ICM-8R)
- Dual call in per station master, no scan (ICM-8R-D)
- Single call in master with Scan option (ICM-8R-S)
- Single call in master with Alarm interface option (ICM-8R-A)
- Single call in master with Level Sensing alarm option (ICM-8R-L)
- Single call in master with Video switching option ICM-8R-V

The Voice Communication System Intercom Control Master Station shall be
Tech Works Model ICM-8R ().