

RTS® Two Wire Intercom Series

Innovating the future of communications



MCE-325

User Station

The MCE-325 is a four-channel, programmable intercom station. It may be used as a headset station or, with the addition of the MCS-325 Modular Speaker, as a speaker station. It may be mounted in a console or equipment rack via optional mounting kits. The MCE-325 can be used with either two-wire or four-wire intercom lines, or a combination of both. In the labeling on the MCE-325, references to channels 1, 2, 3, and 4 indicate two-wire lines; references to four-wire A and four-wire B indicate four-wire lines. The MCE-325 can be interfaced to a variety of external devices including external program sources, two-way radios, paging systems, and satellite circuits.

Features

Call Signaling

Call signaling is accomplished using an inaudible (20 kHz) signal to activate a call indicator LED.

Remote "talk-off"

Active, unattended remote station microphones may be deactivated by momentarily injecting an inaudible (24 kHz) signal into the corresponding intercom line. The MCE-325 can send and receive "talk-off" signals.

VOX circuit

The MCE-325 may be programmed for voice activation of the microphone.

Simple IFB

Program audio assigned to a channel is interrupted during talk.

External device keying

External devices, such as two-way radios, speaker mute relays, or paging systems may be activated through key outputs at the auxiliary connector on the rear panel. The key outputs may also be used to expand the simple IFB function, allowing any one of a number of MCE-325 stations to interrupt the program source and talk on the line.

Microphone Limiter

The microphone preamplifier circuit contains a limiter, which helps to equalize voice levels.

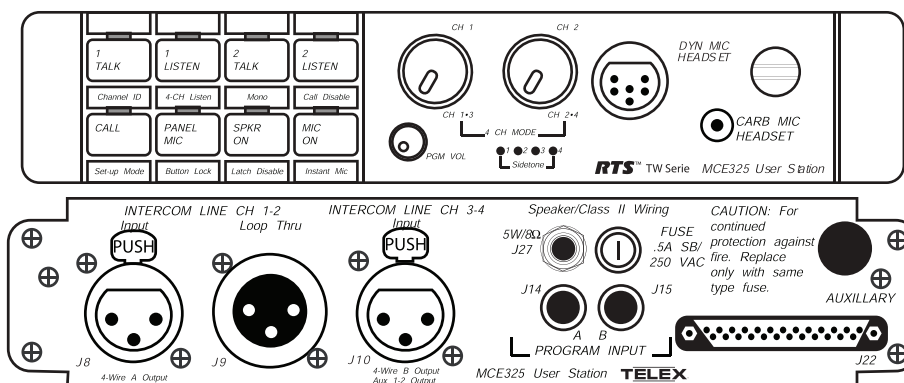
Fully programmable

Retains programming even when power is shut off.

Instantaneous Auto-Reset

Instantaneous Auto Reset (IAR), the newest technology in performance and safety, which uses a revolutionary new circuitry that dynamically monitors line fault conditions. Then, when the fault is removed, automatically brings individual power supply channels up.

Line Drawing



MCE-325 Specifications

General

Bridging Impedance (to line) 10,000 Ω typical
Noise Contribution to 200- Ω Line -90 dBu
Call Signal Frequency 20 kHz, crystal controlled
Talk-off Frequency 24 kHz, crystal controlled

Microphone Preamplifier

Maximum Voltage Gain 54 dB
Frequency Response 100 Hz to 8,000 Hz, ± 3 dB
Input Impedance 1,000 Ω
Limiter Range 30 dB

Headphone Amplifier

Maximum Voltage Gain 30 dB
Frequency Response 100 Hz to 8,000 Hz, ± 3 dB
Headphone Impedance 50 to 600 Ω
Output Power 150 mW into 50 Ω
Output Voltage Level 8 Vp-p

Speaker Amplifier

Maximum Voltage Gain 30 dB
Frequency Response 100 Hz to 8,000 Hz, ± 3 dB
Speaker Impedance 8 to 16 Ω
Output Power per Amplifier 5W into 8 Ω
Output Voltage Level 16 Vp-p

Power and Mechanical

Power Requirements 115 or 230 VAC, 20 VA max version available
12 to 25 VDC, 100 to 125 mA quiescent, 900 mA max
Dimensions 1.72" (44 mm) tall, 8.2" (208 mm) wide, 8" (203 mm) deep
Weight 4.5 lbs (1.93kg)
Material/Finish Thermo-plastic front panel, aluminum case, light gray finish

Connectors

Intercom Line Connector XLR type, 3-pin (male-female loop through on two-wire
Channel 1 and 2, or four-wire channel A; Female only on two-wire channel 3 and 4, or four-wire channel B
Dynamic Mic XLR type, 6-pin female
Carbon Mic ¼-inch phone jack, 3-circuit
Auxiliary Connector 25-pin, female, D-Sub
Program Inputs ¼-inch phone jack, 3-circuit
Speaker Output ¼-inch phone jack, 3-circuit
Panel Mic ¼-inch phone jack, metal busing, 3-circuit

Ordering Information

MCE-325 A5F • 2 or 4 channel user programmable modular user station • Catalog Number: 9000646400
MCE-325 A4F • 2 or 4 channel user programmable modular user station with A4M headset connector, UL approved • Catalog Number: 9000646401