

### RM-325 User Station

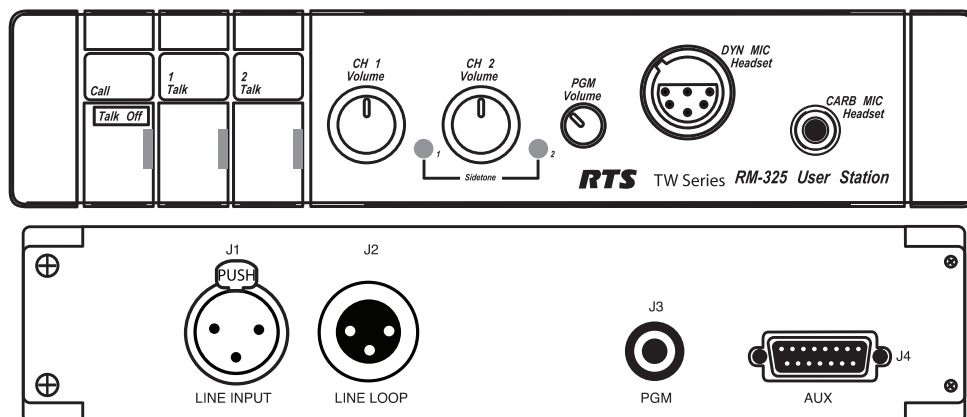


The RM-325 is a 2-channel intercom user station for the RTS-TW Intercom System. It is designed for use with a headset, and it can be placed on a desktop, or rackmounted with optional rackmount hardware.

### Features

- Talk button with talk-on indicator for each channel.
- Talk buttons feature dual-action, momentary/latching talk operation.
- External talk switch input (for footswitch etc.) for each channel via the Aux connector.
- Separate listen volume control for each channel, and a listen volume control for the program input.
- The RM-325 accepts a stereo (default), dynamic-mic headset or a monaural, carbon-mic headset.
- Dynamic-mic headset connector features a balanced, dynamic mic input, and a mic on/off switch input.
- Talk-off (mic kill) signaling the RM-325 can send and receive talk-off signals.
- Talk-off send and receive can be independently enabled/disabled via internal DIP switches.
- Call signaling there is a call button and indicator, and the RM-325 can send and receive call signals.
- Program Input balanced program audio may be input via the 1/4-inch stereo phone jack (PGM) or via the AUX connector.
- Line/Local power options by default, the RM-325 receives operating power from intercom channel 1. Alternatively it may be configured to receive power from channel 2 or from a local, 24VDC power source connected to the AUX connector.
- Separate sidetone control for each intercom channel.

### Line Drawings



# Specifications

## TW System Specifications

DC Operating Limits (station to power supply):

About 5,000 ft. (1.5 km) with #22 AWG wire

Audio Operating Limits (locally powered stations):

About 10,000 ft. (3 km) with low-capacitance cabling

System Capacitance:

0.3mF, maximum (10,000 ft. [3 km] cable at 30 pF/ft.)

Intercom Channels:

Station Output Level: 0.77Vrms (0 dBu) nominal

Channel Terminating Impedance: 200Ω ±5%

Station Bridging Impedance: greater than 10kΩ

Call Signalling:

Send: 20kHz ±100Hz, 0.3Vrms nominal

Receive: 20kHz ±200Hz, 0.1Vrms

Talk- Off Signalling:

Send: 24kHz ±100Hz, 0.3Vrms nominal

Receive: 24kHz ±200Hz, 0.1Vrms

## RM-325 General Specifications

Power Requirements, Channel Powered RM-325:

30VDC nominal (standard TW line), 45 to 75mA

Power Requirements, Locally Powered RM-325:

24VDC nominal, 45 to 75mA

Environmental Requirements:

Storage: -40°C to 125°C (-40°F to 257°F); 0% to 95% humidity, non-condensing

Operating: 0°C to 50°C (32°F to 122°F); 0% to 95% humidity, non-condensing

Dimensions:

1.72 in (44 mm) H, 8.2 in (208 mm) W, 8 in (203 mm) D

Weight:

2 lb 12 oz (1.23 kg)

Noise Contribution:

Less than -75dB on the line

Common Mode Rejection Ratio:

Greater than 40dB from the line

Program Input:

Maximum Input Level: 20dBu

Nominal Input Level: -10 to +8dBu

Frequency Response: 100Hz to 12kHz ±3dB

Headphone Amplifier

Voltage Gain: 30 ±3dB from the line

Maximum Output: 150mW into 50Ω

Frequency Response: 100Hz to 8kHz ±3dB nominal

Output Voltage Level: 8 volts peak-to-peak

Headphone Impedance: 50 to 600Ω

Sidetone:

20dB minimum range, adjustable

Microphone Preamplifier:

Maximum Voltage Gain: 54dB

Frequency Response: 100Hz to 8kHz, nominal

Input Impedance: 1.0kΩ, balanced

Limiter Range: 30dB

Total Harmonic Distortion:

Less than 0.2% nominal at Channel output

## RM-325 Connectors

Auxiliary Connector

Type: DB-15F

Pin 1: Program input low

Pin 2: Program input high

Pin 3: Unswitched mic output high

Pin 4: Foot switch in, channel 1

Pin 5: Foot switch in, channel 2

Pin 6: Local power (+24VDC)

Pin 7: Remote mic switch in

Pin 8: Not Used

Pin 9: Common

Pin 10: Common

Pin 11: Common

Pin 12: Foot switch channel 1 common

Pin 13: Foot switch channel 2 common

Pin 14: Local power common

Pin 15: Remote mic switch common

CARB MIC Headset Connector

Type: ¼-inch, 3-Conductor Phone Jack

Tip: Microphone input high (or mic switch contact)

Ring: Headphone high

Sleeve: Common

DYN-MIC Headset Connector

Type: XLR-6F 6-Pin Female Audio Connector

Pin 1: Headset dynamic microphone low

Pin 2: Headset dynamic microphone high

Pin 3: Headphone and mic switch common

Pin 4: Headphone left high

Pin 5: Headphone right high

Pin 6: Remote microphone switch contact

Intercom Line Input Connector

Type: XLR-3F 3-Pin Female Audio Connector

Pin 1: Common

Pin 2: Intercom channel 1 audio and power

Pin 3: Intercom channel 2 audio

Intercom Line Loop Connector

Type: XLR-3M 3-Pin Male Audio Connector

Pin 1: Common

Pin 2: Intercom channel 1 audio and power

Pin 3: Intercom channel 2 audio

Program Input Connector

Type: ¼-inch, 3-Conductor Phone Jack

Tip: Program input high

Ring: Program input low

Sleeve: Common

# Order Information

RM-325 A5F • RM-325 A5F • 2-channel binaural (stereo) programmable modular user station

RM325 A4F • RM-325 A4F • 2-channel binaural (stereo) programmable modular user station with A4M headset connector

The specification information is preliminary and is subject to change without notification.  
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