



CM-300L

Console-Mount User Station

The Model CM-300L is a console mount, two-channel intercom user station. The user station is designed to be used in a full duplex, conference line intercom system.

Features

Volume Control

The volume control on the CM-300L has a wide range to compensate for: user hearing differences, ambient noise variation, variations in headset / handset sensitivity, and variations in voice. The volume control in the CM-300L reduces distortion by driving the headphone amplifier only as much as needed.

Microphone Switch

In normal system operation, one or more users talk and the others listen. A microphone switch on each station allows the talker's microphone to be enabled and allows the listeners to keep their microphones disabled. In this condition, speech intelligibility is enhanced since background noise from other microphones is not present. On the Model CM-300L, a toggle switch turns the microphone on.

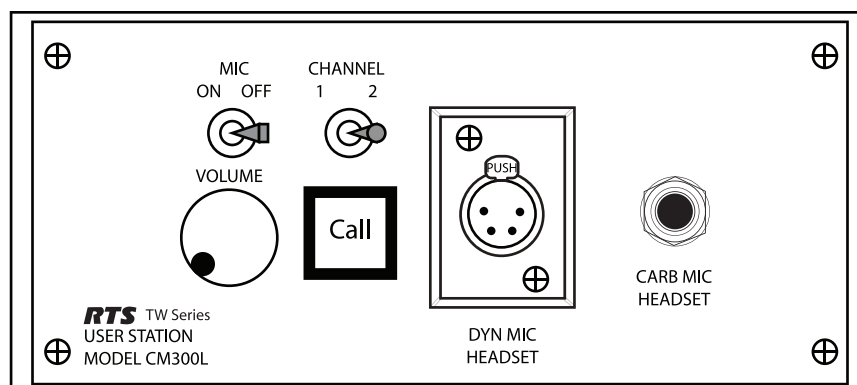
The Channel Select Switch

A channel selector switch allows a choice of two (optionally three) channels. When the switch is on the "1" position the station talks and listens on channel 1, on the "2" position, to channel 2.

Call Light Push Button

Pushing this button transmits a call signal to all other units on the channel selected by the channel selector switch. A call signal on this channel will cause the call light push button to flash. The flash rate is 2 to 5 times a second. The call signal itself is a 20 kilohertz signal.

Line Drawing



CM-300L Specifications

Input DC Voltage

TW Mode: 18 to 35 volts DC

LP Option: 15 to 35 volts DC

Battery: 12 to 35 volts DC (reduced performance)

DC Current Drawing from TW Line (Note: LP Option draws no current from TW line)

Quiescent

CM-300/RM-300: 23 milliamperes $\pm 10\%$

CM-300/RM-300L: 33 milliamperes $\pm 10\%$

Operating 25 Ω headphones

CM-300/RM-300: 37 milliamperes $\pm 10\%$

CM-300/RM-300L: 45 milliamperes $\pm 10\%$

Operating 25 Ω headphones + Call Light

CM-300/RM-300: 60 milliamperes $\pm 10\%$

Impedance Across Line: 10,000 Ω , minimum

Environmental

Temperature

Operating: 0°C to 60°C

Storage: -40°C to 85°C

Humidity

Operating and Storage: 5% to 95% non-condensing

Noise Contribution

One Unit: -75 dBu

Ten Units: -67 dBu

Microphone Preamplifier

Input Impedance: 470 Ω /dynamic mic

Source Impedance: 200 Ω , nominal

Maximum Input Level: 150 millivolts

Frequency Response: 100 hertz to 10 kilohertz ± 3 dB (-54 dBu input)

Limiter Range: 30 dB

Carbon Mic Excitation Current: 10 milliamperes, nominal

Current Source

Transfer Ratio: 3.3 milliamperes/volt=3.3 millisiemens

Output: ± 5 milliamperes into 200 Ω = ± 1 volt peak, nominal

Headphone Amplifier

Voltage Gain: 34 dB

Output Voltage: 8 volts peak-to-peak into 25 $\frac{1}{2}$

Output Power: $\frac{1}{2}$ watt peak into 25 Ω

Frequency Response: 150 hertz to 8 kilohertz ± 3 dB

Headphone Impedance Range: 25 to 600 Ω (600 to 2000 with reduced levels)

Note: Do not use headphones with impedance less than 25 Ω .

Sidetone Adjustment Range: -20dB to full on

Call-Light

Signaling Frequency: 20,000 hertz ± 100 hertz

Flashing Rate: 5 hertz ± 2 hertz

Auxiliary Connections

Headset Connector

Dynamic Microphone: XLR type 4-pin female

Carbon Microphone: $\frac{1}{4}$ " standard phone jack, 3-circuit

Live Connection

Input: XLR type 3-pin female

Loop/External: XLR type 3-pin female

Mechanical (CM-300/CM-300L)

Dimensions: 2.75" (69.9mm) high, 6.25" (158.75 mm) wide, 6.4 (162.6mm) deep

Weight: 1.2 lbs (0.55kg)

Finish: Front Panel: Light Gray Enamel Paint,

Federal Standard 595A Color#26492

Chassis: Gold Iridite over aluminum

Ordering Information

CM-300L A4F • 2 channel console mount user station with an A4F headset connector • Catalog Number: 9000264400

CM-300L A5F • 2 channel console mount user station with an A5F headset connector • Catalog Number: 9000264403

This specifications information is preliminary and is subject to change without notification.

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