



MDA-100

Mixing Distribution Amp

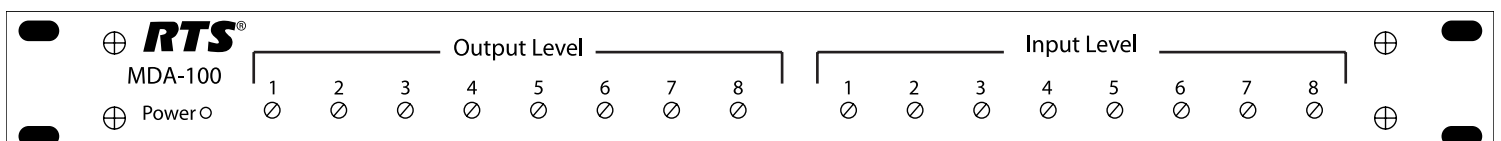
Features

The MDA-100 mixing and distribution amplifier contains an 8x1-summing amplifier (mixer) and a 1 x 8 distribution amplifier in a case that is one rack unit high. The MDA-100 is useful, for example, in camera control (CCU), where multiple camera operators have to talk and listen to one master control location. In this application, audio from each camera (up to eight) is fed to one of the summing amplifier inputs of the MDA-100. All eight audio inputs are summed and fed to the master controller input. The return audio path from the master controller back to the individual cameras is accomplished using the distribution amplifier, which takes the single audio output from the master controller and distributes it to each of the eight camera outputs.

A trimmer on the front panel of the MDA-100 may individually adjust the gain of each summing amplifier input. There is also an output adjustment trimmer located inside the MDA-100 to adjust the final output level of the summing amplifier. The summing amplifier output is a 60Ω voltage source. The input impedance may be set for bridging (20 kΩ, 150 Ω, or 600 Ω, selected by rear panel jumpers).

The MDA-100 fits into a standard 19" (483 mm) equipment rack. The power entry module is an IEC approved type, which contains a line voltage switch, a line filter, a fuse holder, and a line cord socket connector. The line voltage switch may be set for either 105/125 Vac, 50/60 Hz, or 210/250 Vac, 50/60 Hz supply voltages. The MDA-100 features a toroidal-transformer power supply for low-noise operation.

Line Drawing



MDA-100 Specifications

General

Power Consumption: 18 Watts Maximum; 117 Vac or 220 Vac nominal, 10%, 50/60 Hz.

Operating Temperature Range: 0° to 50° C (32° to 122° F)

Dimensions: 19" (483 mm) W x 1.75" (44 mm) H x 8.5 (213 mm) D

Weight: 9 lbs (4.1 kg)

Summing Amplifier

Input Level: -20 dBm to +24 dBm

Input Impedance: >20 k Ω , active, balanced

Output Level: +28 dBu, maximum

Output Source Impedance: 600 ohm, active, balanced

Gain Adjustment: ± 12 dB (Front Panel) per input, ± 12 dB (internal) output trim

Frequency Response: 0 to -0.2 dB, 20 Hz to 20 kHz, referenced to 1 kHz

Distribution Amplifier (1x8)

Input Level: -22 to +14 dBu nominal for +8 dBm output, Maximum +28 dBu

Input Type & Impedance: Active balanced, 20 k Ω , 600 Ω or 150 Ω , selectable

Output Level: +28 dBu, maximum, 60 Ω

Output Source Impedance: 60 Ω , active, balanced.

Output Isolation: >80 dB, 20 Hz to 20 kHz

Output DC Offset: < ± 50 mVdc

Gain Adjustment: Each output independently adjustable from -6 dB to +28 dB (34 dB)

Frequency Response: 0 to -0.2 dB, 20 Hz to 20 kHz, referenced to 1 kHz

Noise: 124 dB below maximum output at unity gain (20 Hz to 20 kHz), nominally 114 dB below at +18 dBu, unity gain (20 Hz to 20 kHz). Typically 104 dB below +8 dBm

Total Harmonic Distortion: <0.01% (20 Hz to 20 kHz) at unity gain. Up to +28 dBu output level.

Intermodulation Distortion: 0.008% at unity gain. Up to +28 dBu output level (4:1 ratio). Typically <0.001% at +8 dBu.

Common-Mode Rejection: >80 dB, 20 Hz to 20 kHz, Typically 96 dB at 1 kHz (adjustable).

Common Mode Voltage: 100 V peak-to-peak, maximum

Contact Information

Telex Communications, Inc.
12000 Portland Avenue South
Burnsville, Minnesota 55337
Telephone: 877-863-4169
Fax: 800-955-6831

Form Number:
Date: April, 2006

Ordering Information

MDA-100
Mixing Distribution Amp
Catalog Number: 8800281643

This specifications information is preliminary and is subject to change without notification.
Brand names mentioned are the property of their respective companies.