Telex ®

Audiocom®

EMS-4001 Four-channel Expansion Master Station and Power Supply

General Description

The EMS4001 adds four powered intercom channels to an MS2002 or US2002 Master Station. It connects to the master station with a supplied patch cord. Then, you simply plug it into any AC power outlet from 100 to 240 volts, connect intercom stations to the back panel, and you're ready to communicate on four more channels using the master station microphone and speaker (or headset). The EMS4001 fits in a standard 19-inch equipment rack and is 1 rack unit high.

Features

- SIMPLIFIED EXPANSION: The EMS4001 integrates four powered channels with talk, listen, and call controls in a single rack mount unit. Saves on rack mount hardware and eliminates power supply to expansion station interconnect cables.
- COMPATIBILITY AND FLEXIBILITY: Connects directly to an MS2002 or US2002 Master Station to add 4 complete powered channels. Or connects to a previous EMS4001 or ES4000A Expansion Station to add another 4 powered channels (up to 18 channels total).
- OVERLOAD/SHORT-CIRCUIT PROTECTION: Provides automatic current limiting during short circuits or overloads. Front panel fault indicator provided for each channel. The SPS-2001 has Instantaneous Auto Reset (IAR), the newest technology in performance and safety, which uses a revolutionary new circuitry that dynamically monitors line fault conditions.
- MIC KILL: Turn off all microphones on a selected expansion channel, or all channels, using the master station's Mic Kill key.
- DEDICATED PROGRAM INPUTS: Each expansion channel has its own program input. Connect any line-level audio source for monitoring in the master station's speaker or headset and for routing to the expansion channel if desired. When program audio is routed to the channel it can be set to interrupt while the master station operator is talking on the channel.
- BINAURAL (STEREO) LISTENING: If the master station is equipped with external powered speakers you can assign the EMS4001 channels to either right or left speaker.
- CLEAR-COM® COMPATIBLE.

Specifications

General

Power Requirements:

AC Input: 100-240 VAC, 50/60 Hz

Channel Power: 24 VDC nominal (17 to 30 VDC), 65 to 150 mA

Dimensions: 1.75" (44.5 mm) high x 19" (483 mm) wide x 10.31" (261.9 mm) deep

Weight: approximately 4.5lb (2 kg)

Environmental Requirements:

Storage: -20°C to 80°C; 0% to 95% humidity, non-condensing

Operating: -15°C to 60°C; 0% to 95% humidity, non-condensing

Program Inputs

Input Level: 100mV maximum

Voltage Gain: 25 ±3 dB

Output Level (to intercom channel) :1.0 Vrms nominal, 2.3 Vrms max.

Input Impedance: 75 kohm

Common Mode Rejection: Greater than 50 dB

Connector Type: DB9F Female, 9-pin D-subminature

Pin 1: Common

Pin 2: Channel 3 program in low

Pin 3: Channel 4 program in low
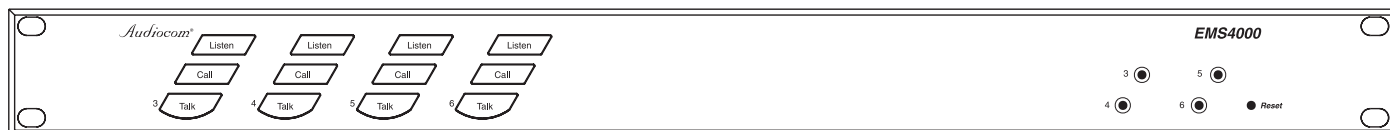
Pin 4: Channel 5 program in low

Pin 5: Channel 6 program in low

Pin 6: Channel 3 program in high

Pin 7: Channel 4 program in high

Pin 8: Channel 5 program in high

Pin 9: Channel 6 program in high

Intercom Channels, Balanced Mode (Back panel switch set to BAL)

Output Level: 1 Vrms nominal
Input Impedance: 300 ohms
Bridging Impedance: greater than 10,000 ohms
Sidetone: -40 dB, 35 dB adjustable range
Call Signaling:
  Send: 20 kHz ±100 Hz, 0.5 Vrms ±10%
  Receive: 20 kHz ±800 Hz, 100 mVrms
Mic-Kill Frequency:
  Send: 24 kHz ±300 Hz, 0.5 Vrms ±10%
  Detect: 24 kHz ±800 Hz, 100 mVrms
Noise Contribution: less than -70 dB
Common Mode Rejection Ratio: greater than 50 dB
Connector Type: One XLR-3M for each channel.
Balanced Configuration Pinout
  Pin 1: Common
  Pin 2: Intercom audio low and +24 VDC input
  Pin 3: Intercom audio high and +24 VDC input

Intercom Channel, Unbalanced Mode (UNBAL position)

Output Level: 0.750 Vrms ±10%
Input Impedance: 200 ohms
Bridging Impedance: greater than 10,000 ohms
Call Signaling:
  Send: 11 ±3 VDC
  Receive: 4 VDC minimum
Connector Type: Uses same connectors as for balanced mode, above, but with pinout modified by BAL/ UNBAL switch on back panel as follows:
  XLR-3 Unbalanced Configuration Pinout
    Pin 1: Common
    Pin 2: +30 VDC input
    Pin 3: Intercom audio high

PA Output

Output Level: 235 mVrms nominal
Connector Type: 1/8-inch Stereo Phone Jack
  Tip: PA output high
  Ring: Not used
  Sleeve: Common

Expansion Input /Output

Type: 2.0 mm stereo phone jack
  Tip: Talk output
  Ring: Listen input
  Sleeve: Common

Ordering Information

EMS-4001	4 channel expansion station with 2.0 amp power supply with instantaneous auto reset in a single unit.	Catalog No. 90007713000

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