

EMS 4001

E X P A N S I O N M A S T E R S T A T I O N



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.



EMS4001 Specifications

General

Power Requirement:	AC Input: 100-240 VAC, 50/60 Hz cables. 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 Input

Input Level:	100mV maximum
Voltage Gain:	25 ±3 dB
Output Level (to intercom channel):	1.0 Vrms nominal, 2.3 Vrms maximum
Input Impedance:	75 kohm
Common Mode Rejection:	Greater than 50 dB
Connector Type:	DB9F Female, 9-pin D-subminiature • 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

Ordering Information

Model No.	Description	Order by Cat.
EMS-4001	4 channel, expansion station with 2.0 amp power supply with instantaneous auto reset in a single unit.	90007713000

Distributed by:

EMS4001 Specifications *continued*

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:	<ul style="list-style-type: none"> • Pin 1 Common • Pin 2 Intercom audio low and +24 VDC • Pin 3 Intercom audio low and +24 VDC

Intercom Channel, Unbalanced Mode (UNBAL position)

Output Level:	.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
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Warranty

Products are warranted by Telex Communications, Inc. to be free from defects in materials and workmanship for a period of one year from the date of sale.

All specifications are subject to change without notice.

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