Telex®

Technical Data Sheet

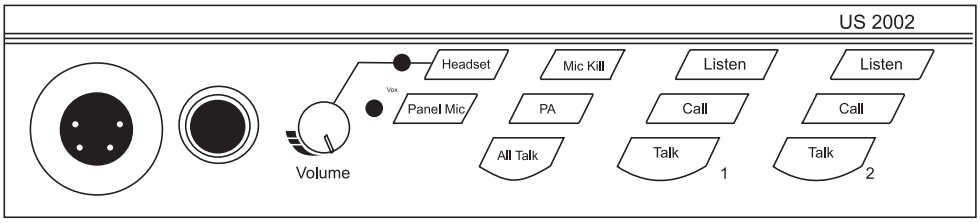
US2002 User Station

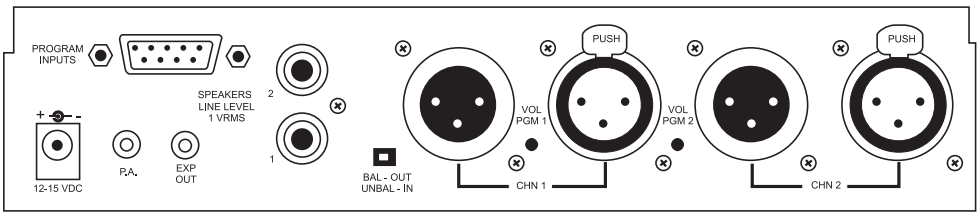
The US2002 is a simple, multichannel user station. It provides you with talk, listen, and call capabilities. You simply plug it into any AC power outlet from 100 to 240 volts, add a microphone or headset, connect intercom stations to the back panel, and you're ready to communicate. Combine the US2002 with different types of power supplies to create various Master Station configurations. The US2002 can operate in an unbalanced mode to make it completely Clear-Com® compatible.

Features

- Speaker Station or Headset Station. Use the built-in speaker for listening and add an optional Telex MCP-90 series Gooseneck Panel Microphone for talk-back. Or, turn off the speaker volume, and plug in any of a variety of Telex headsets for private communication.
- Voice Activated Microphone (VOX). Separate controls adjust the voice activation level for the headset microphone and panel microphone inputs.
- Public Address (PA) Output, with PA key. Use your intercom microphone to talk over a PA system.
- Back-lit Keys: Improves visibility in low-light.
- Incoming Call Indications: Red flashing call light, with beep tone if desired.
- Mic Kill Key: You can turn off all microphones on a channel to quickly clear the channel.
- Program Input for Each Channel: Connect any line-level audio source for monitoring in the speaker or headset, or for routing to the intercom channel. The program audio to the channel can be set to interrupt while the US2002 operator is talking on the channel.
- Expandable: Add more channels by connecting optional ES4000A Expansion Stations. Each ES4000A adds four additional channels (up to eighteen channels).
- Clear-Com* Compatible.

** Brand names mentioned are the property of their respective companies.*





Specifications

General

Power Requirements:
Phantom Power: 24 VDC nominal
Local Power: 12 to 15 VDC, 65 to 150 mA
Dimensions: 1.75" (44.5 mm) high x 8.25" (209.5 mm) wide x 10.31" (261.9 mm) deep
Weight: approximately 2lb (0.9 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

Dynamic-mic Headset

Microphone: 50 to 200 ohm, dynamic (balanced or unbalanced)
Headphones: 150 to 600 ohm, monaural
Connector Type: XLR-4M
Pin 1 Microphone low
Pin 2 Microphone high
Pin 3 Headphone high
Pin 4 Headphone low

Panel Microphone or Electret-mic Headset

Microphone: 5k ohm, electret (-57 dB)
Headphones: 150 to 600 ohm, monaural
Connector Type: MCP-90, stereo plug with threaded shaft connector

Program Input

Input Level: 100mV maximum
Voltage Gain: 25 ±3 dB
Output Level :1.0 Vrms nominal, 2.3 Vrms maximum
Input Impedance: 75k ohm
Common Mode Rejection: Greater than 50 dB
Connector Type: DB9F
Pin 1 Ground
Pin 2 Program 1 input low
Pin 3 Program 2 input low
Pin 4 NC
Pin 5 NC
Pin 6 Program 1 input high
Pin 7 Program 2 input high
Pin 8 NC
Pin 9 NC

Intercom Channels, Balanced Mode (SW2 set to BAL position)

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 and XLR-3F pair, wired in parallel, for each channel
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 (SW2 set to 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: One XLR-3M and XLR-3F pair, wired in parallel, for each channel
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

Speaker Output

Output Level: 0 dB nominal (1.0 Vrms max)
Output Impedance: 1000 ohms nominal
Frequency Response: 200 Hz to 8 kHz +1/-3dB
Connector Type: RCA Phono Jack
Tip: Speaker output high
Sleeve: Common

Expansion Input /Output

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

External Power

Type: 2.0 mm power jack
Internal pin: positive (+)
External shell: negative (-)

Headphone Amplifier

Voltage Gain: 30 ±3 dB
Maximum Output: 250 mW ±10% into 150 ohms, 65 mW±10% into 600 ohms
Frequency Response: 200 Hz to 8 kHz +1/-3db
Incoming Call Beep Tone: 2 kHz, at the headphones
Total Harmonic Distortion: Less than 0.2% at 200 mW
Sidetone: 18 ±2 dB, adjustable

Panel Microphone Amplifier

Voltage Gains:
Mic to CHN; 25±3 dB, before limiting
Mic to Headphone; adjustable, 45 dB ±10% maximum, into 150 ohms
Mic to PA; 15 ±3 dB, 235 mVrms ±10%
Frequency Response: 200 Hz to 8 kHz +1/-3dB
Total Harmonic Distortion: Less than 0.2% at CHN output
VOX Range: -75 to -30 dB, -60 dB factory set

For Sales / Technical Support and System Design:

Pro Audio Sales Department
Telex Communications, Inc.
12000 Portland Avenue South
Burnsville, Minnesota 55337 U.S.A
Telephone: (800) 392-3497
Fax: (800) 323-0498

Ordering Information

US-2002	2 channel, user / main station	Catalog No. 90007748000

TELEX®