



BP-319, BP-325, BP-351 Belt Pack User Stations

The BP-319, BP-325, and BP-351 are portable user stations for use with RTS™ Two-Wire intercom systems. The BP-319 is a microprocessor controlled one-channel intercom where the BP-351 is a microprocessor controlled two-channel select intercom belt pack. The BP-325 is a binaural (stereo) programmable 2 channel belt pack with PGM-in capability. The BP-319 and BP-351 have connections for headset/earset microphones (Dynamic or Electret), whereas the BP-325 is for use with a dynamic microphone only. The factory setting is for Dynamic.

Features

Call Function

Call function that allows the user to send or receive call signals to other devices on the intercom channel, including audible call alert on the listen side.

Microphone Kill Detect

Microprocessor controlled microphone kill detect.

Powered Externally

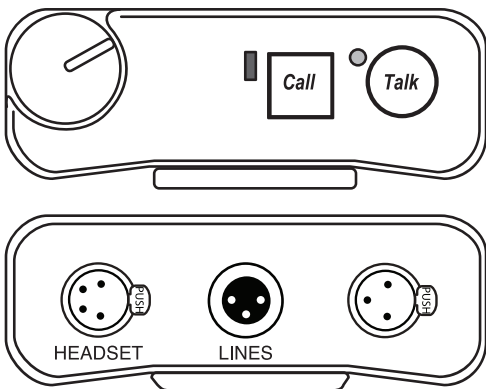
Powered externally, via the intercom system power supply on channel one.

Headset

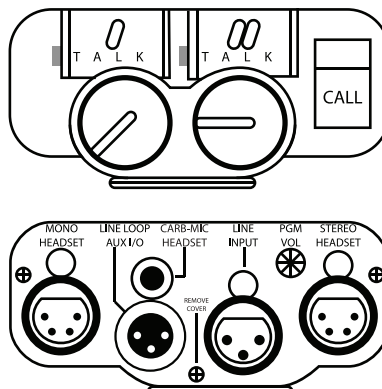
Headset 4 or 5-pin XLR connection is available. (The BP-325 has both standard.)

Line Drawings

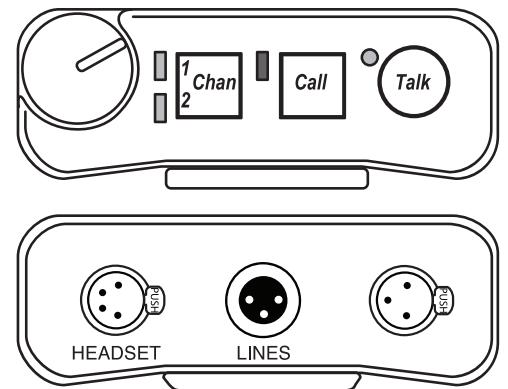
BP-319



BP-325



BP-351



BP-319, BP-325, BP-351 Specifications

BP-319 and BP-351

General

Channel Supplied Power Requirements:
30 VDC nominal (standard RTS® line), 45 to 70 mA
Environmental Requirements:
Storage: -20°C to 80°C; 0% to 95% humidity, non-condensing
Operating: 0°C to 50°C; 0% to 95% humidity, non-condensing
Dimensions: 5" (127 mm) high, 3.5" (88.9 mm) wide, 1.8" (45.7 mm) deep
Weight: Approximately 13 oz (364 g)

Interface Requirements

Headset/Earset:
50 to 200 Ω dynamic microphone
50 to 600 Ω headphones
RTS™ Intercom Channel:
Output Level: 0.775 Vrms (0 dBu) nominal
Input Level: 200 Ω \pm 5%
Bridging Impedance: greater than 10,000 Ω
Call Signalling:
Send: 20 kHz \pm 100 Hz, 240 mVrms \pm 10%
Receive: 20 kHz \pm 800 Hz, 100 mVrms
Mic-Off Frequency Detect: 24 kHz \pm 800 Hz, 100 mVrms
Noise Contribution: less than -60 db on the line

Headphone Amplifier

Voltage Gain:
18 \pm 3 dB from the line
Maximum Output:
60 mW into 150 Ω
Frequency Response:
200 Hz to 8 kHz +1/-4db nominal
Audible Alert:
1 kHz, at the headset/earset
Total Harmonic Distortion:
Less than 0.2% nominal at 50 mW from the line
Sidetone:
20 dB minimum range, adjustable

Dynamic Microphone Amplifier

Voltage Gain:
Mic to Channel; 45 \pm 3 dB, before limiting
Mic to Headphone; adjustable, 65 dB \pm 10% range into 150 Ω
Frequency Response:
200 Hz to 8 kHz +1/-4db nominal
Total Harmonic Distortion:
Less than 0.2% nominal at Channel output

Electret Microphone Amplifier

Voltage Gain:
Mic to Channel; 27 \pm 3 dB, before limiting
Mic to Headphone; adjustable, 45 dB \pm 10% into 150 Ω
Frequency Response:
200 Hz to 8 kHz +1/-4db nominal
Total Harmonic Distortion:
Less than 0.2% nominal at Channel output

Connector Pin Configurations

Intercom Channel Connector
XLR-3 M/F
Pin 1 Common
Pin 2 +30 VDC In
Pin 3 Syst Chan 2
Headset Connector
Type: XLR-4F
Pin 1 Headset Microphone low
Pin 2 Headset Microphone high
Pin 3 Headphone Common
Pin 4 Headphone Chan 1 or Chan1 and Chan 2 audio
Type: XLR-5F
Pin 1 Headset microphone low
Pin 2 Headset microphone high
Pin 3 Headphone low
Pin 4 Headphone high
Pin 5 No Connection

BP-325

General

Channel Supplied Power Requirements:
30 VDC nominal (standard RTS® line), 65 to 85 mA
Environmental Requirements:
Storage: -20°C to 80°C; 0% to 95% humidity, non-condensing
Operating: 0°C to 50°C; 0% to 95% humidity, non-condensing
Dimensions: 5.00" (127mm) High, 3.75" (96.3mm) Wide, 2.05" (52.1mm) Deep
Weight: 0.75 pounds (340 grams)

Contact Information

Telex® Communications, Inc.
12000 Portland Avenue South
Burnsville, MN 55337
Telephone: (800) 392-3497
Fax: (800) 323-0498

Form Number: 38110505
August, 2005

Exterior

Polystyrene and polycarbonate mix; gray textured main body

Impedance Across Intercom Line

10,000 ohms typical

Ambient Temperature Range

Operating: 0° C to 50° C
Storage: -40° C to 125° C

Noise Contribution to 200-ohm Intercom Line

-75 dBu

Headphone Amplifier

Maximum Voltage Gain: 30 dB
Frequency Response: 100 Hz to 8 kHz, +/-3 dB
Headphone impedance: 50 to 600 ohms
Output Power: 150 mW/50 ohms
Output voltage level: 8 volts peak-to-peak

Microphone Preamplifier

Maximum Voltage Gain: 54 dB
Frequency Response: 100 Hz to 8 kHz, +/-3 dB
Input Impedance: 1,000 ohms, balanced
Limiter Range: 30 dB

Program Input

Maximum input level: +20 dBu
Nominal input level: -10 to +8 dBu
Frequency response: 100 Hz to 12 kHz, +/-3 dB

Monaural Dynamic-mic Headset Connector

XLR-4-31 receptacle (J13)
Pin 1 - Microphone low
Pin 2 - Microphone high
Pin 3 - Common
Pin 4 - Headphone high

Stereo Dynamic-mic Headset Connector

XLR-5-31 receptacle (J14)
Pin 1 - Microphone low
Pin 2 - Microphone high
Pin 3 - Common
Pin 4 - Headphone left high
Pin 5 - Headphone right high

Carbon-mic Headset Connector (J1)

1/4-inch, 3-conductor Phone Jack
Used for Headset
Tip - Carbon microphone
Ring - Headphone
Sleeve - Common
Used for Mic Switch
Tip - Remote switch normal-open contact
Ring - No connection
Sleeve - Remote switch common

Intercom Line Input Connector (J11)

XLR-3-31 female receptacle
Pin 1 - Common
Pin 2 - Channel 1 intercom audio and +DC
Pin 3 - Channel 2 intercom audio

Line Loop/Aux Connector (J10)

XLR-3-32 male receptacle
Used for Loop-through:
Pin 1 - Common
Pin 2 - Channel 1 intercom audio and +DC
Pin 3 - Channel 2 intercom audio
Used for Program Input:
Pin 1 - Common
Pin 2 - Program input high
Pin 3 - Program input low
Used for Remote Mic Switch and/or External Power:
Pin 1 - Common
Pin 2 - +18 to +24 volts DC
Pin 3 - Remote switch normal-open contact

Ordering Information

BP-319 A4F • 1 channel portable metal belt pack with an A4M headset connector. • Catalog Number: 90007753010

BP-319 A5F • 1 channel portable metal belt pack with an A5M headset connector. • Catalog Number: 90007753000

BP-325 • 2 channel binural (stereo), programmable belt pack • Catalog Number: 9000673800

BP-351 A4F • 2 channel portable metal belt pack with an A4M headset connector. • Catalog Number: 90007754010

BP-351 A5F • 2 channel portable metal belt pack with an A5M headset connector. • Catalog Number: 90007754000

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