

Technical Data Sheet

Innovating the Future of Global Communications

BP-319, BP-325, BP-351 Beltpack User Stations



The BP-319, BP-325, and BP-351 are portable user stations for use with RTS **TW** (Two-Wire) intercom systems. The BP-319 is a microprocessor controlled 1-channel intercom where the BP-351 is a microprocessor controlled 2-channel select intercom beltpack. The BP-325 is a binaural (stereo) programmable 2-channel beltpack with PGM-IN capability. The BP-319 and BP-351 have connections for headset/earset microphones (Dynamic or Electret). The BP-325 is only for use with a dynamic microphone. Available colors are gray (shown) or black.

Features

- Call function allows the user to send or receive call signals to or from other devices on the intercom channel, including audible call alert on the listen side.
- Microprocessor controlled microphone kill detect.
- Powered externally, via the intercom system power supply on channel 1. (The BP-351 can be powered on channel 1 or channel 2.)
- Headset 4- or 5-pin XLR connection is available. The BP-325 has both standard.
- The BP-319 and BP-351 have a built-in auto-sensing headset connector that will determine automatically whether a dynamic or electret headset is connected to the system. (BP-319 and BP-351 Only)

Line Drawings



Specifications

BP-319 and BP-351

General:

Power Requirements: 30VDC nominal (standard RTS line), 45 to 70mA

Environmental Requirements:

Storage: -20°C to 80°C (-4°F to 176°F); 0% to 95% humidity, non-condensing Operating: 0°C to 50°C (32°F to 122°F); 0% to 95% humidity, non-condensing Dimensions: 5 in (127 mm) H, 3.5 in (88.9 mm) W, 1.8 in (45.7 mm) D Weight: 13 oz (364 g) approximately

Interface Requirements

Headset/Earset:

50 to 200Ω dynamic microphone

50 to 600Ω headphones RTS Intercom Channel:

Output Level: 0.775Vrms (0 dBu) nominal Bridging Impedance: greater than $10k\Omega$ Call Signalling:

Send: 20kHz ±100Hz, 250mVrms ±10% Receive: 20kHz ±800Hz, 100mVrms

Mic-Off Frequency Detect: 24kHz ±800Hz, 100mVrms

Noise Contribution to 200 Ω Intercom Line: -75 dBu

Headphone Amplifier

Maximum Output: 60mW into 150Ω Frequency Response: 200Hz to 8kHz +1/-3dB nominal

Audible Alert: 1kHz tone

Total Harmonic Distortion: Less than 0.2% nominal at 50mW from the line Sidetone: 20dB minimum range, adjustable

Connector Pin Configurations

Intercom Channel Connector

XLR-3 M/F Pin 1 Common

Pin 2 +30VDC In & audio Pin 3 Syst Chan 2

NOTE: On the BP-351 the +30VDC can be connected to Chanel 2.

Headset Connector

- Type: XLR-4F
 - Pin 1 Headset microphone low
 - Pin 2 Headset microphone high
 - Pin 3 Headphone low
 - Pin 4 Headphone Chan 1 or Chan 1 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

Power Requirements: 30VDC nominal (standard RTS line), 45 to 85mA

Environmental Requirements:

Storage: -20°C to 80°C (-4°F to 176°F); 0% to 95% humidity, non-condensing Operating: 0°C to 50°C (32°F to 122°F); 0% to 95% humidity, non-condensing Dimensions: 5 in (127 mm) H, 3.75 in (96.3 mm) W, 2.05 in (52.1 mm) D Weight: 12 oz (340 g)

Exterior

Polystyrene and polycarbonate mix; gray textured main body

Impedance Across Intercom Line $10k\Omega$ typical

Noise Contribution to 200Ω Intercom Line

-75dBu

Program Input

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

Monaural Dynamic-mic Headset Connector

- XLR-4-31 receptacle (J13)
 - Pin 1 Microphone low Pin 2 - Microphone high
 - Pin 2 Microphon
 - 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 +30VDC In & audio Pin 3 - Channel 2 intercom audio
- load for Dragrom Input
- 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 +22 to +24VDC
- Pin 3 Remote switch normal-open contact

Order Information

BP-319 A4F • BP-319 A4F • 1-channel portable metal beltpack with an A4M headset connector; gray BP-319 A5F • BP-319 A5F • 1-channel portable metal beltpack with an A5M headset connector; gray BP319-4PIN • BP-319-BLK A4F • 1-channel portable metal beltpack with an A4M headset connector; black BP319-PIN • BP-319-BLK A5F • 1-channel portable metal beltpack with an A5M headset connector; black

BP-325 GREY • BP-325 • 2-channel binaural (stereo), programmable beltpack; gray BP325 BLACK • BP-325-BLK • 2-channel binaural (stereo), programmable beltpack; black

BP-351 A4F GREY • BP-351 A4F • 2-channel portable metal beltpack with an A4M headset connector; gray BP-351 A5F GREY • BP-351 A5F • 2-channel portable metal beltpack with an A5M headset connector; gray BP351-4PIN BLACK • BP-351-BLK A4F • 2-channel portable metal beltpack with an A4M headset connector; black BP351-5PIN BLACK • BP-351 A5F • 2-channel portable metal beltpack with an A5M headset connector; black

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



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