

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

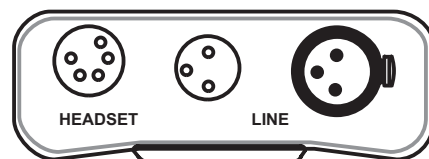
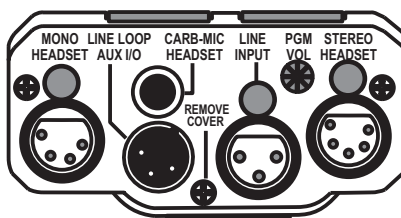
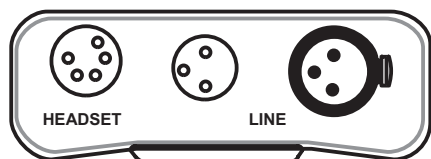
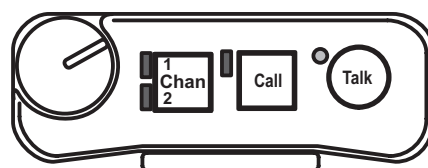
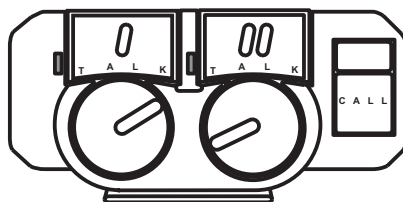
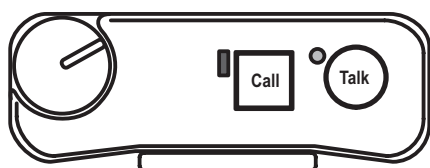


The BP-319, BP-325, and BP-351 are portable user stations for use with RTS **TW** (Two-Wire) intercom systems. The BP-319 is a microprocessor controlled 1-channel intercom where the BP-351 is a microprocessor controlled 2-channel select intercom beltpack. The BP-325 is a binaural (stereo) programmable 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



BP-319

BP-325

BP-351

# 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 10kΩ  
Call Signalling:

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

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

Noise Contribution to 200Ω 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

10kΩ 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 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)

¼-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

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 backpack with an A4M headset connector; gray

BP-319 A5F • BP-319 A5F • 1-channel portable metal backpack with an A5M headset connector; gray

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

BP319-PIN • BP-319-BLK A5F • 1-channel portable metal backpack with an A5M headset connector; black

BP-325 GREY • BP-325 • 2-channel binaural (stereo), programmable backpack; gray

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

BP-351 A4F GREY • BP-351 A4F • 2-channel portable metal backpack with an A4M headset connector; gray

BP-351 A5F GREY • BP-351 A5F • 2-channel portable metal backpack with an A5M headset connector; gray

BP351-4PIN BLACK • BP-351-BLK A4F • 2-channel portable metal backpack with an A4M headset connector; black

BP351-5PIN BLACK • BP-351 A5F • 2-channel portable metal backpack with an A5M headset connector; black

The specification information is preliminary and is subject to change without notification.  
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