



## 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® 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 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), 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

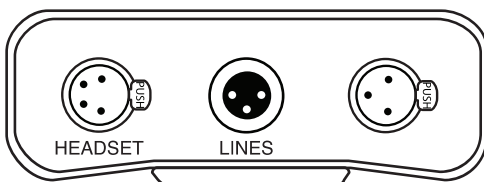
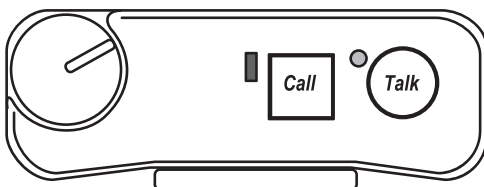
Headset 4 or 5-pin XLR connection is available. (The BP-325 has both standard.)

#### Auto-Sensing Headset Connector

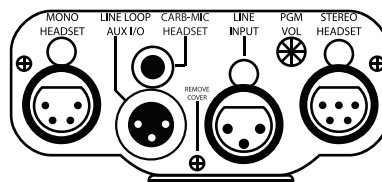
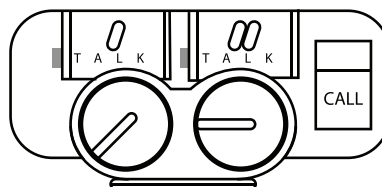
The BP-319 and BP-351 have a built-in auto-sensing headset connector that will determine automatically whether a dynamic or electret headset is connected to the system. (BP-319 and BP-351 only)

### Line Drawing

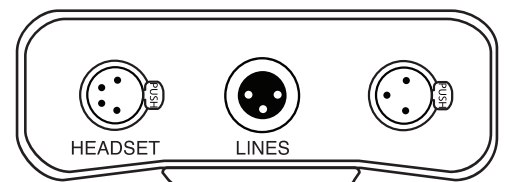
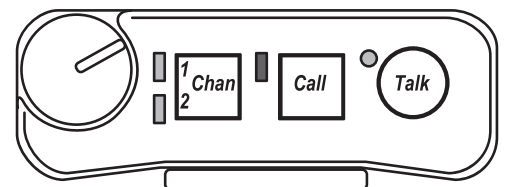
#### BP-319



#### 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, noncondensing

Operating: 0°C to 50°C; 0% to 95% humidity, noncondensing

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 $\Omega$  dynamic microphone

50 to 600 $\Omega$  headphones

RTS® Intercom Channel:

Output Level: 0.775 Vrms (0 dBu) nominal

Bridging Impedance: greater than 10,000 $\Omega$

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

Maximum Output:

60 mW into 150 $\Omega$

Frequency Response:

200 Hz to 8 kHz +1/-4dB nominal

Audible Alert:

1 kHz tone

Total Harmonic Distortion:

Less than 0.2% nominal at 50 mW from the line

Sidetone:

20 dB minimum range, adjustable

### 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 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

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, noncondensing

Operating: 0°C to 50°C; 0% to 95% humidity, noncondensing

Dimensions: 5.00" (127mm) High, 3.75" (96.3mm)

Wide, 2.05" (52.1mm) Deep

Weight: 0.75 pounds (340 grams)

### Exterior

Polystyrene and polycarbonate mix; gray textured main body

### Impedance Across Intercom Line

10,000  $\Omega$  typical

### Ambient Temperature Range

Operating: 0° C to 50° C

Storage: -40° C to 125° C

### Noise Contribution to 200- $\Omega$ Intercom Line

-75 dBu

### Program Input

Maximum input level: +20 dBu

Nominal input level: -10 to +8 dBu

Frequency response: 100 Hz to 12 kHz,  $\pm$ 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)

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 - 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 - +22 to +24 volts DC

Pin 3 - Remote switch normal-open contact

## Ordering Information

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

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

**BP-325** • 2 channel binaural (stereo), programmable beltpack • Catalog Number: 9000673800

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

**BP-351 A4F** • 2 channel portable metal beltpack 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.