

**IPB Intercom
Beltpack**

Instruction Manual

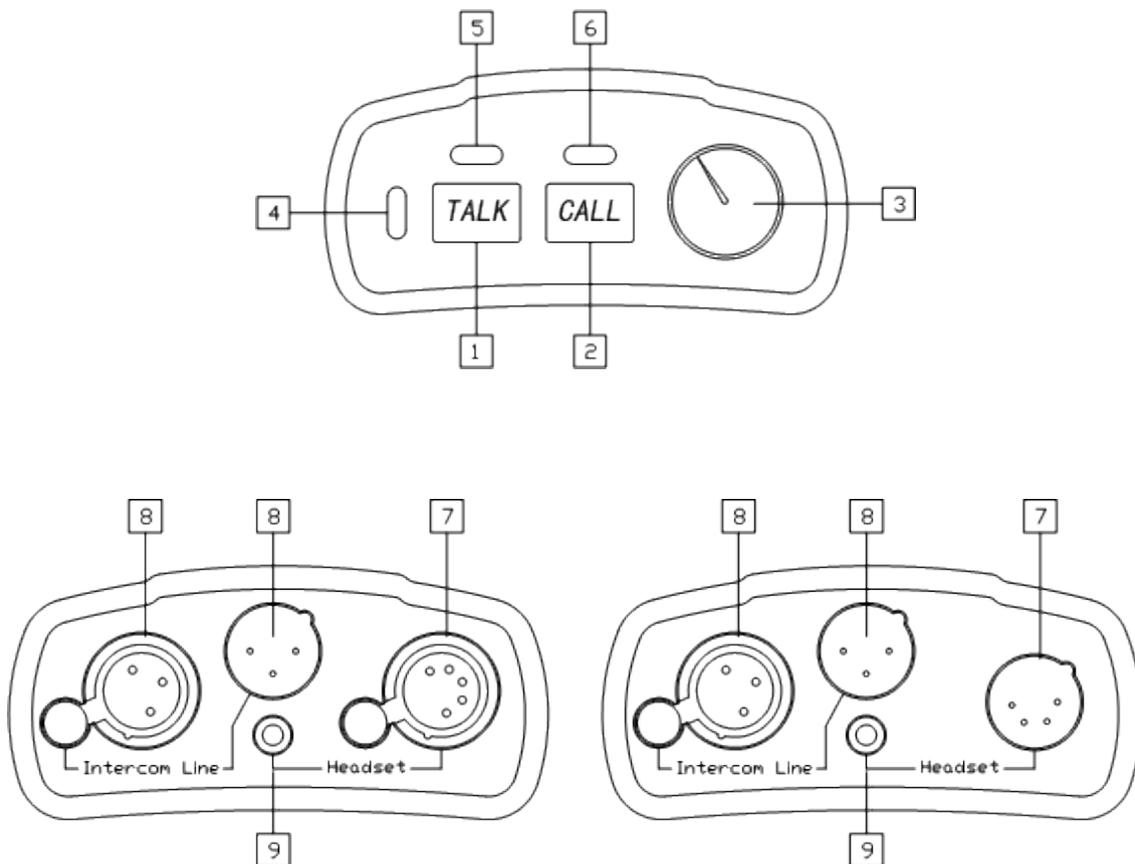
● Introduction

Thank you for choosing this intercom product. BK-101 is a new design belt pack with plastic case. It can work with IMS Intercom Master station.

This belt pack adopts wired connection. It has stable and reliable performance, flexible configuration, full-duplex communication, clear and loud communication sound, easy operation, and strong noise resistance.

● Quick start

1. Connect BK-101 belt pack to a 2-wire intercom main station or belt pack by XLR-3 cable. If belt pack receives DC power, the red Power LED will light.
2. Turn volume control knob to the end by anticlockwise rotation, then plug in the headset.
3. Double click 'TALK' button quickly will latch the microphone. The green indicator is ON.
4. Adjust sidetone (Sidetone adjustment is next to the belt-clip) and volume level; make sure the voice level which you heard from earphone is minimum.
5. Press 'CALL' button send a call signal to main station or other belt pack.
6. When the communication is finished, click 'TALK' button to turn off the microphone.



● Basic operation

1. TALK Button

Pressing the talk button connects the headset microphone with Intercom Channel.

The Talk LED will light when the talk function is active.

The TALK button may be activated in either of two ways:

Momentary Mode: Press and hold the TALK button, then speak into the microphone. The green talk LED will remain lit while the TALK button is held. Release the TALK button when finished talking. The talk LED will turn off.

Latching Mode for Hands-free Conversation: Quickly tap the TALK button (do not press and hold). The green talk LED will turn on and remain on. When finished talking, tap the TALK button again. The talk LED will turn off.

2. CALL Button

Pressing call button will send a call signal to intercom system. The red CALL LED will also light to indicator call signals.

3. Volume Control

This control is used to adjust the volume level which heard from connected headset.

4. Power LED

A Red LED lights if BK-101 is powered.

5. TALK LED

A green LED indicator is controlled by TALK button.

6. Call LED

A red LED indicates a call signal is sent or received.

7. Headset connector

XLR-4M/5F / 3.5mm connector

Pin out configuration as follow:

Pin 1--Head Microphone common

Pin 2--Head Microphone hot

Pin 3--Earphone common

Pin 4--Earphone hot

Pin 5--Null

8. Intercom cable connectors

A pair of internal parallel connected XLR-3 connectors is set for loop through connection of the intercom station.

Pin out configuration as follow:

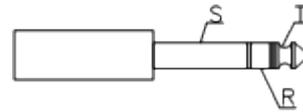
Pin 1--Common

Pin 2--DC supply (15-30V)

Pin 3--Audio signal

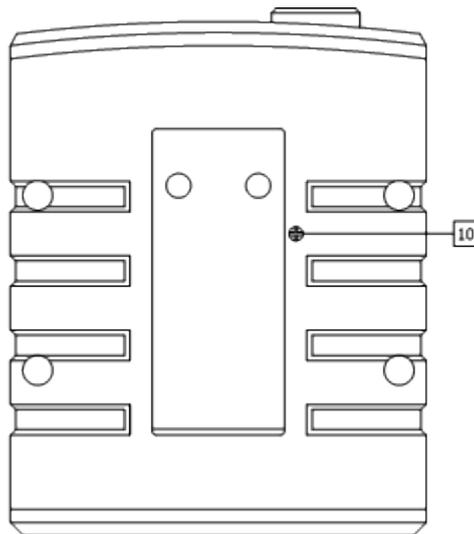
9. 3.5mm Headset Connector

3.5mm jack headset connector.



Pin out configuration as follow:

T (Tip)	--	Microphone Hot
R (Ring)	--	Headset Hot
S (Sleeve)	--	Common



9. Sidetone adjustment

The sidetone adjustment knob is in the hole which next to belt-clip at the backside of belt pack.

Sidetone controls the level of one's own voice in their headset.

Sidetone adjustment helps to reduce the sound feedback and avoid squeal.

The step for sidetone adjustment:

1. Turn on the Talk Button.
2. Adjust volume to proper level.
3. Make a voice against microphone. Meanwhile, use a small screwdriver insert into the

hole, and rotate the sidetone adjustment knob by clockwise or anticlockwise slowly, until the voice heard from headset is minimal.

4. Turn off the talk button.

● Troubleshooting

Problem: Listen level is too high or too low

Cause 1: More than one Terminal in the system or non Terminal

Solution 1: Check every channel, each channel must only has one Terminal.

Problem: System feedback (Acoustical)

Cause 1: Listen level control on main station is too high

Solution 1: Adjust the listen level on main station

Cause 2: Sidetone null control on belt pack or main station is not adjusted properly

Solution 2: Adjust the belt pack or main station sidetone.

Refer to the section 9 in the manual.

Cause 3: Main station is not terminated.

Solution 3: Set the termination switch on main station.

Cause 3: A headset cord is too long or jointing quality.

Solution 3: Check headset cord

● Specifications

1. Microphone Amplifier (From Microphone to Line)

Dynamic Headset Microphone impedance: 200 ohm

Voltage Gain: 44±3dB

Harmonic Distortion :< 1% (1000Hz)

2. Headphone Amplifier (From Line to Load)

Load impedance: 50-600 ohm

Voltage Gain: 31±3dB

Harmonic Distortion :< 2% (1000Hz)

3. Power Requirements

24V DC, 60mA±10mA

Power Range: 15-30V DC

4. Environment

-10~55°C

5. Dimension

High: 105mm, Wide: 87mm, Deep: 48mm