TELIKOU® Intercom System

BK-2400 Wireless Belt Pack Instruction Manual

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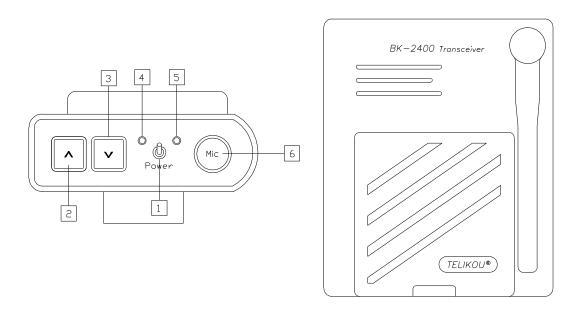
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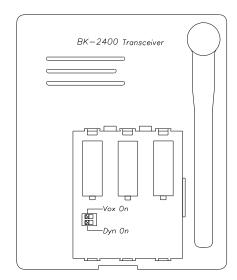
I. Introduction

Thank you for choosing TELIKOU Wireless intercom product.

BK-2400 belt pack works with TELIKOU Wireless Intercom main station MDS-400. It adopts 2.4GHz frequency. BK-2400 is full two-way audio transmitter and receiver. It is suitable for stage communication, outside broadcast van, show, and other applications where wireless communication is required.

II. Basic operation





1. Power Switch

Turn on or off BK-2400. When the belt pack is not using, please turn it off.

2. Volume Up ▲

Press this button to turn up the volume. Every time belt pack is turned on, the volume level is default set to middle level. When volume level reach the bottom or top level, you can hear indicate beep through headset.

3. Volume Down ▼

Press this button to turn down the volume.

4. LB/CODE LED

Low power and Code indication light is a dual color LED light. Low power status is red. Code and working status are green.

When the corresponding channel on main station is contacting with belt pack, the LED light will flash. After the connection is made, the LED light will always on.

5. MIC LED

Microphone LED indicates microphone is turned on or off. When belt pack detected the corresponding channel on main station is turned on. MIC LED will flash.

6. MIC Button

Press MIC button will turn on or off the microphone and microphone light. Hold the 'MIC' button will turn on the microphone and microphone LED. Release 'MIC' button will turn off the microphone and microphone light.

Or double click 'MIC' button quickly will keep the microphone and microphone light on instantly. Click 'MIC' button again will turn off the microphone and microphone light.

7. Headset Connector

BK-2400 uses XLR-4M balanced headset. Headset technique detail as follow:

Earphone: dynamic, 50-2000ohm Microphone: dynamic, 100-600 ohm

Headset plug

Pin1, Pin2 Microphone (balanced) Pin3, Pin4 Earphone (balanced)

8. Vox On

Vox On is a dipper. When it is been set as ON, MIC button can be controlled by voice.

If VOX function detected any voice signal from microphone, it turns on the microphone automatically. If no, the microphone is turned off.

When 'Vox On' is set OFF, the MIC button need to be operated manually.

9. Dyn On

Dyn On gives more microphone gain to belt pack. The default is ON.

10. Battery

BK-2400 uses 3 AA size batteries. The working hour no less than 5 hours.

III. The operation between main station and belt pack

Every belt pack has its own machine code. Main station need to memorize each belt pack's code on corresponding channel to recognize each belt pack. We call this process is code matching.

Before we do the code matching, the storage on main station needs to be cleared. It is code clear.

When doing the code clear or code matching, Channel 1 and Channel 2 or Channel 3 and Channel 4 are always to be done together.

Code clear or code matching must to be done under main station's code operation mode.

Enter Code Operation Mode

To enter code operation mode, turn on the main station MDS-400 with 'Aux In' button being pressed, until 'CH1' and CH2' LED flashes fast or slow. Release 'Aux In' button. The code operation channels are current on 'CH1' and 'CH2'.

Press 'Aux In' button change code operation channels to 'CH3' and 'CH4'. The LED light of 'CH3' and 'CH4' flashes slow or fast.

Press 'Aux In' button change code operation channels between 'CH1/'CH2' and 'CH3/'CH4'.

Turn off the main station exit code operation mode.

Code Clear

Enter code operation mode. Press '2-wire/4-wire' button clear belt pack code on current channels. The LED of current channels flashes slowly.

Code Matching

Enter code operation mode. Please make sure the current code operation channels' LED flash slowly.

Get ready a belt pack BK-2400 for CH1 or CH3.

Turn on the belt pack with volume down button '▼' being pressed until the 'LB/CODE LED' start to flash with green color.

The belt pack and main station start to do the code matching automatically. Until 'LB/CODE LED' is constantly light with green color. It means the code matching is successful. Otherwise the code

matching needs to be done again.

Do the same on CH2 or CH4.

When the LED of 'CH1/'CH2' or 'CH3/'CH4' flash fast. It means the codes matching on current code operation channels are done.

IV. Technical Specification

Radio Specifications

1. General

- 1) RF Input/output Impedance is 50Ohms
- 2) RF 75CHs Frequency Hopping Spread Spectrum(FHSS) in RF Operation Frequency Band
- 3) Transmitting Modulation Data Rate is 576Kbps
- 4) Modulation is GFSK, BT=0.6
- 5) RF Operation Frequency Range is from 2401.808203~2479.398926MHz, Frequency Space is 891.871 KHz. 350m in opened area.

2. Transmitting

Normal Transmitting Power (NTP): 20+/-4 dBm

Frequency Deviation: +/-190 KHz

Frequency Offset: +/-10KHz (CW Mode)
RF Output 20dBc Bandwidth: <=- 30dBm

RF 1st & 2nd Order Harmonic Output Level: <=- 30dBm

Test Conditions:

- NTP measurement is continued transmitting mode, equipment setup are RBW=1MHz, VBW=3MHz, Zero span, Maxhold, Sweep=auto
- 2) Spurious measurement is burst transmit mode. Equipment setup are RBW=100kHz, VBW=100kHz, Span=100MHz, Maxhold, Sweep=auto
- 3) 20dB BW measurement is continued transmit mode. Equipment setup are RBW=20kHz, VBW=20Hz,Span=2MHz, Maxhold, Sweep=auto

3. Receiving

Receive Sensitivity@CW BER=0.1% -96dBm

Please Not:

2.4GHz Frequency is running on high frequency. It is weak on penetration.