

***TELIKOU* Intercom System**

**WTI-100 Simplex wireless
Interface
Instruction Manual**

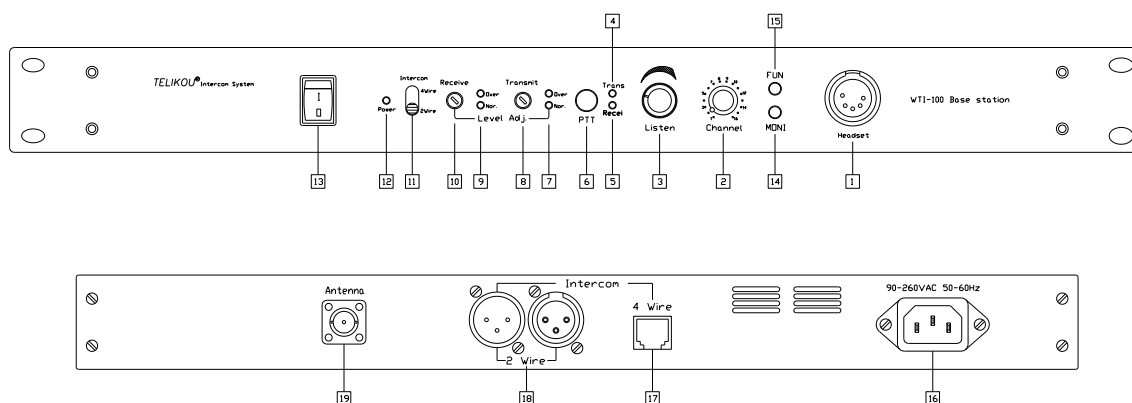
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I. Introduction

Thank you for choosing TELIKOU intercom product. The WTI-100 walkie talkie wireless interface connects to wired intercom main station. Receive and transmit signal by simplex model. WTI-100 is suitable for TV station, communication command center, outside broadcast vehicle, theater, project test field, and other applications which communication is required.

II. Equipments connection



1. Connect To 2-Wire System

By 2 core with shield audio cable. This 2-wire connector (18) is used to connect WTI-100 to any intercom channel of 2-wire main station. Set 2-wire/4-wire selection switcher (switcher 11) to “2-wire” position. Connector (18) is a pair of loop through XLR-3 connectors.

The pin definition is as follow:

- Pin1 -- Common, Cable shield
- Pin2 – Null
- Pin3 – Audio;

2. Connect to 4-wire System

Connector (17) is a 4-wire equipment connector. When use this connector, the switcher at front panel should be turned to “4-Wire” position.

Connector (17) is a RJ-45 connector. Face rear panel, the pin definition (from right to left) is as follow:

- Pin1 – Audio, - input
- Pin2 – Audio, + Output

Pin3 – Common

Pin4 – PTT

Pin5 – Null

Pin6 – Common

Pin7 – Audio, -Output

Pin8 – Audio, +Output

III. Operation

1. Check antenna for right frequency, put antenna to antenna connector (19).
2. Plug headset to headset connector (1).
3. Turn on the power of WTI-100 and walkie talkie.
4. Turn the channel knob, make sure WTI-100 and walkie talkie are on same channel.
5. Wireless test:
 - a) Talk on WTI-100, listen on walkie talkie.

Press PTT button on WTI-100 front panel, the signal transmit indication LED (4) lights. At this moment, walkie talkie can hear the voice from headset microphone.
 - b) Talk on walkie talkie, listen on WTI-100

Release PTT button on WTI-100. Press the PTT button on walkie talkie. The receive indication LED (5) lights green. The audio from walkie talkie can be heard from headset of WTI-100. Turn the volume knob (3) can adjust the volume level.

The connection between wired main station and WTI-100

6. Set “Call on Talk” dipper at wired main station rear panel to “ON” position. Turn on the channel which is connected to the WTI-100.
7. Press “Talk” button on main station (If main station has no TALK-Call function, “Talk” button and “Call” button at same time). The transmit indication LED4 lights red on WTI-100 front panel. At this time, all the walkie talkie at same channel can hear the audio from main station.
8. Release “Talk” button, wired intercom main station can hear from the walkie talkie

IV. Level Adjustment

1. Receive level

WTI-100 receives signal from walkie talkie and transfer to wired intercom main station connector (17) or (18). Adjust receive level adjustment (10), make receive level indication LED (9) lights constant green. At this time, 600ohm line level becomes 0dBu. If LED lights red, it means level is over. But a short red flash is allowed.

2. Transmit level

Audio signal from wired main station is sent to WTI-100 through connector (17) or (18). It is transmit by WTI-100. Adjust transmit level adjustment (8), make transmit level indication LED (7) lights constant green. If LED lights red, it means transmit level is over. But a short red flash is allowed.

V Technical Specification

EARPHONE:

Dynamic 8-200 ohm

MICROPHONE:

Dynamic 200-600 ohm

CONNECTOR:

Headset Connector: XLR-4M or XLR-5F

Pin 1--Mic common

Pin 2--Mic hot

Pin 3--headphone common

Pin 4--headphone hot

Pin 5—Null

Transmit:

Frequency: 430-470MHz

Channel Number: 16

Transmit power: 5W

Harmonic wavelength: $\leq -60\text{dB}$

Tune distortion: $\leq 5\%$

Antenna resistance: 50ohm

Tune: F3E

Max frequency bias: $\pm 5\text{KHz}$

Receive:

Sensitivity: $\leq 0.2\mu\text{V}$

Adjacent channel selectivity: $\geq 60\text{dB}$

Spurious suppression: $\geq 60\text{dB}$

Tune receive bandwidth: $\pm 5\text{KHz}$

Intermediation immunity: $\geq 60\text{dB}$

Audio output power: $\geq 100\text{mW}$

POWER SUPPLY:

AC 85-265V, 50-60Hz, $< 20\text{VA}$

ENVIRONMENTAL:

0° - 50 °C (32 °-122 °F)

DIMENSION:

19" (W) x 1.75" (H) x 9.48" (D), 482mm x 44.5mm x 241mm

WEIGHT: 2.6kg