

***TELIKOU* Intercom System**

FM-804 4-Wire Matrix Control Station

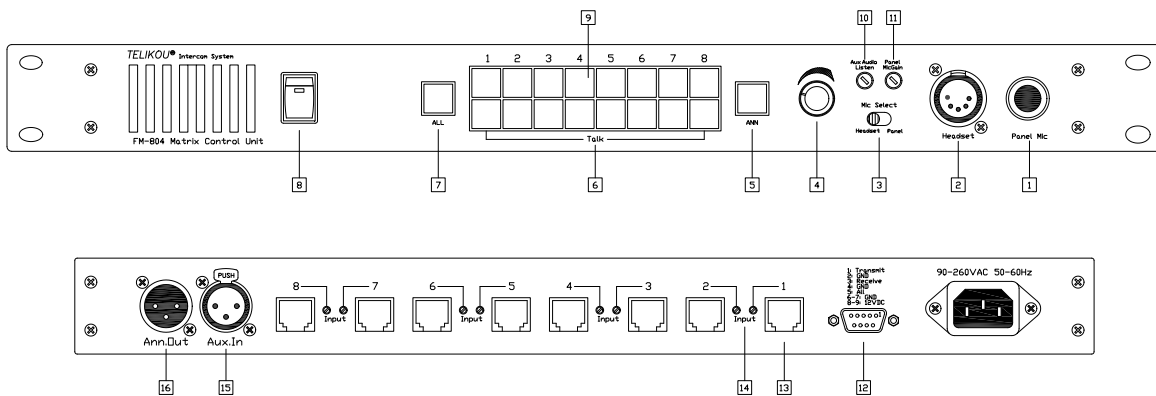
Instruction Manual

I. Introduction

Thank you for choosing TELIKOU intercom product. FM-804 is a eight channel four wire matrix control station, the maximum can constitute 9 points full-duplex distributed intercom system, if coupled with TELIKOU four wire extension unit, it can reach 17 points. FM-804 main station is suitable for television station, communication center, UB truck, live performance and any other environment which requires communication. We recommend you read through this manual to better understand the functions of FM-804.

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

II. Basic operations



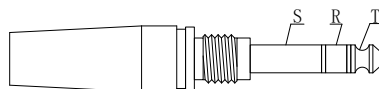
Front Panel

1. Panel Mic Connector

6.35mm unbalanced microphone jack. The microphone type can be dynamic or electric.

The definition of 6.35mm plug is as follow:

- T-- Mic Hot
- R-- Mic Common
- S-- Shield



2. Headset connector

4-pin XLR Male or 5-pin XLR Female

EARPHONE: Dynamic 50-2000 ohm

MICROPHONE: Dynamic 100-600 ohm

The wiring of headset is as follow:

- Pin 1 -- Mic. common
- Pin 2 -- Mic. hot
- Pin 3 -- headphone+
- Pin 4 -- headphone-
- Pin 5 -- Null

3. Microphone Select Switch

Microphone select switch is used to select panel microphone or headset microphone.

4.Listen Level Control

Use this control to adjust the audio level which heard from FM-804 headset or panel speaker by clockwise or counterclockwise direction.

5. ANN. Button

Send the activated microphone signal to ANN. Out connector which is at rear panel.

6. Talk & Talk LED

Button 1~8 corresponds to 1~8 channel. Press "TALK" button sent microphone signal to the corresponding channel. It also lights its embedded LED and "LISTEN" button. Meanwhile a call signal is sent into the channel.

Button operation mode:

- PTT -- Hold the button
- Latch -- Quick click the button. Press the button again will release the function.

7. ALL

Press this button. All "TALK", "LISTEN" and "ANN" button are connected at same time.

8. Power (Power/Power LED)

This red LED will light when power supply switch is on.

9. Listen & Listen LED

Button 1~8 corresponds to 1~8 channel. Press the button to monitor the corresponding channel. The embedded LED lights.

There is call signal from channel, LISTEN function is activated and listen LED lights.

Button operation mode:

- PTT -- Hold the button

Latch -- Quick click the button. Press the button again will release the function.

10. Aux Level Control

Adjust external audio level which goes into FM-804 by clockwise or counterclockwise direction

11. Panel Mic Gain

It is used to adjust the panel microphone gain. It has preset with electret microphone.

12. Extension Connector (DB9)

If station number is more than 9 in a system. An extension FM-804 can be connected through this DB9 connector to make a 16 ports station. The max numbers of FM-804 in the system will be 17.

The definition of connector is as follow

Pin 1 --- Audio Output

Pin 2 --- Ground

Pin 3 --- Audio In

Pin 4 --- Ground

Pin 5 --- Control Signal

Pin 6 --- Ground

Pin 7 --- Ground

Pin 8 --- 12V/1A DC

Pin 9 --- 12V/1A DC

The extension FM-804 station can be powered by this DB9 connector.

13. Intercom Line connector

RJ-45 connector. The pin out of connectors is as follows:

Pin 1 --- Analog Ground

Pin 2 --- 12+VDC

Pin 3 --- Audio Input +

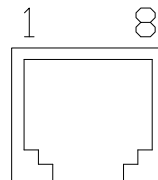
Pin 4 --- Audio Output +

Pin 5 --- Audio Output -

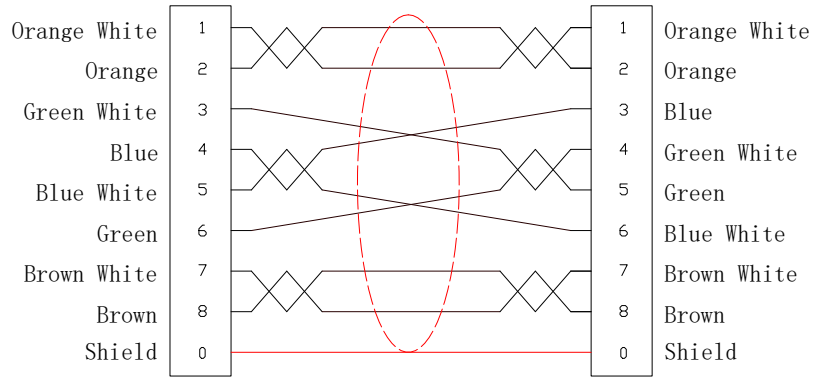
Pin 6 --- Audio Input -

Pin 7 --- Control Signal

Pin 8 --- Digital Ground



Note: When connect to any other TELIKOU 4-wire device. The RJ-45 connection cable should be made as follow.



14. Input Audio Gain Adjustment

The standard audio level is 1Vp-p. If input audio level is not proper, this knob is used to adjust the audio gain.

Note: Must open the top cover to reach this top potentiometer. This W4 potentiometer is located at the middle of circuit board. Turns potentiometer W4 by clock-wise direction with screw driver. The audio level of channel 1-8 changes at same time. The audio level is 1Vp-p by factory set.

15. AUX Input

The external audio signal is sent into intercom line through this connector.

XLR-3F Pin out is as follow:

- Pin 1 --- Ground
- Pin 2 --- Audio Input +
- Pin 3 --- Audio Input -

16. Announce Out

It sent microphone signal out through this connector.

XLR-3M Pin out is as follows:

- Pin 1 --- Common (Shield)
- Pin 2 --- Audio Output +
- Pin 3 --- Audio Output -

III: Troubleshooting

Problem	Cause	Solution
Power LED wink	Short circuit inside	Send them to dealer for repairing
Excessive crosstalk	1. High DC resistance at cable end. 2. Headset cables are not well connected	1. Press and connect the RJ-45 plug again 2. Check and connect again
Hum or	1. Without connecting to ground or bad	1. Do earthing well.

Buzz	earthing 2. Inductive pickup caused by close proximity of this main station or connected remote stations to power lines or transformers. 3. Headset cable is not wired properly. The shield of microphone cable is not connected well to Pin 1.	2. Relocate the offending unit. 3. rewire or change the cable.
channel volume is too low or distortion	Outside signal level too small or too large	Adjust input level at the rear panel.

IV Technical Specification

Bandwidth: 300Hz-4000Hz ±3dB

Earphone impedance: Dynamic 50-2000ohm

Microphone impedance: Dynamic 100-600ohm

Input Audio Level: 1Vp-p

Output Audio Level: 1Vp-p

Connector Input Impedance: >10Kohm

POWER SUPPLY:

90~240VAC, 50~60Hz;

ENVIRONMENTAL:

0° - 70°C (32°-158°F)

DIMENSION:

19" (W) x1.75" (H) x9.48" (D), 482mm x 44.5mm x 241mm

WEIGHT:

2.8kg