

TAKSTAR® 得胜

G108 无线一拖八会议系统 8-Channel Wireless Conference System



使用说明
User's Manual

■ Welcome

Dear Customer,

Thank you for purchasing TAKSTAR G108 8-Channel Wireless Conference System. In order to better understand and use the product, please read this manual carefully. If you have any questions or suggestions, please contact our local dealer.

■ Features

- UHF 612.25MHz~690.00MHz with strong anti-interference property.
- PLL and high-precision quartz crystal, plus MCU control for high frequency stability.
- IR sync function for ease of use.
- Advanced digital pilot frequency effectively resolves interference and crosstalk.
- Three AND-logic squelch circuits to prevent noise and surge upon power on/off.
- Auto frequency finder to help find the interference-free channel quickly and easily.
- Adjustable transmission power and noise gate, effectively adapting to different use distance.
- Dual boost circuit to ensure transmission performance unaffected by decrease of battery voltage.
- Simple UI and controls to prevent accidental setting changes leading to malfunction.
- Silent switch on conference microphone to avoid mechanical switch noise.
- Highly sensitive vocal pickup, allowing effortless speech or singing.
- Use multiple sets together without interference or crosstalk between one another.

■ Application

- Conference room, classroom, multifunction hall.

■ Specifications

System Parameters

- Frequency Range: 612.25MHz-690.00MHz
- Frequency Band: 612.25-667.00MHz, 640.00-690.00MHz
- Modulation: FM
- Frequency Channel: 400 (200 channels per band, 2 bands in total)
- Channel Spacing: 250KHz
- Oscillation Mode: PLL synthesized
- Frequency Stability: ± 10 ppm
- Dynamic Range: 100dB
- Audio Frequency Response: 60-16000Hz
- S/N Ratio: ≥ 110 dB
- Distortion: $\leq 0.5\%$
- Operating Range: 100m (open area)
- Operating Temperature: $-10^{\circ}\text{C}\sim+50^{\circ}\text{C}$
- Receiving Mode: dual conversion superheterodyne
- Intermediate Frequency: 110MHz, 10.7MHz
- Antenna: BNC/TNC/50 Ω
- Receiving Sensitivity: $-95\sim-75$ dBm
- Spurious Suppression: ≥ -75 dB
- Audio Output: +10dB
- Power Supply: DC 12V
- Power Consumption: ≤ 14 W

G108Z/G108H Specifications

- Antenna: built-in
- Spurious Suppression: -60 dB
- Output Power: 10~30mW
- Power Supply: 2x1.5V AA battery
- Battery Life: 10~20h (subject to the battery)

■ Specifications

G108P Specifications

- Transmitting Antenna: 1/4 wavelength whip antenna
- LCD Display: shows current operating frequency, channel and battery level
- Spurious Suppression: -60db
- Output Power: 10–30mW
- Power Supply: 2x1.5V AA batteries
- Operation Time: 10–20 hours (depending on the battery)
- Weight: 100g
- Dimensions: 87×61×23mm

G108C Specifications

- Sensitivity: $-45 \pm 3\text{dB}$ (re $0\text{dB}=1\text{V}/\text{Pa}$ @ 1kHz, $R_L=680\Omega$, $V_s=1.5\text{V DC}$)
- Impedance: $680\Omega \pm 30\%$ (@ 1kHz, $R_L=250\Omega \pm 30\%$)
- Polar Pattern: uni-directional, cardioid
- Signal-to-Noise Ratio: $\geq 65\text{ dB SPL}$ (A weighted)
- Voltage Reference: DC 5V
- Operating Voltage: 1.1V~10V
- Frequency Response: 70Hz~20KHz
- Max. SPL: 120dB SPL (THD<1% @ 1kHz re 0dB SPL= 2×10^{-5} Pa @ 1KHz)
- Operating Current: $<500\mu\text{A}$ (re $R_L=250\Omega$, $V_{cc}=5\text{V DC}$)
- Weight: 82g
- Dimensions: 423* \varnothing 19.7mm

G108D Specifications

- Sensitivity: $-40 \pm 3\text{dB}$ (re $0\text{dB}=1\text{V}/\text{Pa}$ @ 1kHz, $R_L=680\Omega$, $V_s=1.5\text{V DC}$)
- Impedance: $680\Omega \pm 30\%$ (@ 1kHz, $R_L=250\Omega \pm 30\%$)
- Polar Pattern: uni-directional, cardioid
- Signal-to-Noise Ratio: $\geq 65\text{ dB SPL}$ (A weighted)
- Voltage Reference: DC 5V
- Operating Voltage: 1.1V~10V
- Frequency Response: 70Hz~20KHz
- Max. SPL: 120dB SPL (THD<1% @ 1kHz re 0dB SPL= 2×10^{-5} Pa @ 1KHz)
- Operating Current: $<500\mu\text{A}$ (re $R_L=250\Omega$, $V_{cc}=5\text{V DC}$)
- Weight: 150g
- Dimensions: 21*27.7*187mm

■ Specifications

Lavalier Microphone Specifications

- Sensitivity: $-45 \pm 3\text{dB}$ (re $0\text{dB}=1\text{V}/\text{Pa}$ @ 1kHz , $R_L=680\Omega$, $V_s=1.5\text{V DC}$)
- Impedance: $680\Omega \pm 30\%$ (@ 1kHz , $R_L=250\Omega \pm 30\%$)
- Polar Pattern: uni-directional, cardioid
- Signal-to-Noise Ratio: $\geq 65\text{ dB SPL}$ (A weighted)
- Voltage Reference: DC 5V
- Operating Voltage: 1.1V~10V
- Frequency Response: 70Hz~20KHz
- Max. SPL: 120dB SPL (THD<1% @ 1kHz re $0\text{dB SPL}=2 \times 10^{-5}\text{ Pa}$ @1KHz)
- Polarity: JIS standard ("-" grounding)
- Operating Current: $<500\mu\text{A}$ (re $R_L=680\Omega$, $V_{cc}=5\text{V DC}$)

Headset Microphone Specifications

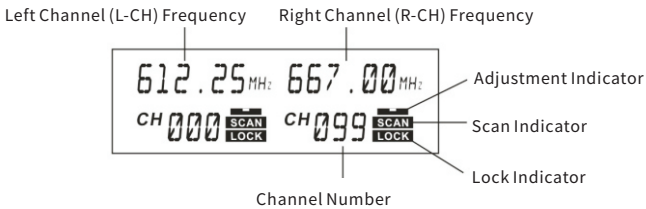
- Sensitivity: $-40 \pm 3\text{dB}$ (re $0\text{dB}=1\text{V}/\text{Pa}$ @ 1kHz , $R_L=2.2\text{K}\Omega$, $V_s=1.5\text{V DC}$)
- Impedance: $2.2\text{k}\Omega \pm 30\%$ (@ 1kHz , $R_L=680\Omega \pm 30\%$)
- Polar Pattern: omni-directional
- Signal-to-Noise Ratio: $\geq 65\text{ dB SPL}$ (A weighted)
- Voltage Reference: DC 5V
- Operating Voltage: 1.1V~10V
- Frequency Response: 70Hz~20KHz
- Max. SPL: 120dB SPL (THD<1% @ 1kHz re $0\text{dB SPL}=2 \times 10^{-5}\text{ Pa}$ @1KHz)
- Polarity: JIS standard ("-" grounding)
- Operating Current: $<500\mu\text{A}$ (re $R_L=2.2\text{K}\Omega$, $V_{cc}=5\text{V DC}$)

Receiver Operation Instructions



1. Signal Channel Adjustment

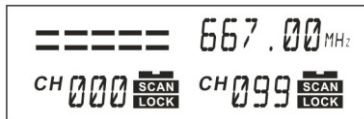
When turned on and unlocked, short press “SET” button to manually adjust signal channel, which by default starts from the R-CH MIC2. You can also short press again to switch to L-CH MIC1. During editing, the corresponding Adjustment Indicator will flash. Adjust to a desired signal channel/frequency by pressing “UP(▲)” or “DOWN(▼)”, then leave idle for 3s for the system to automatically save settings and exit.



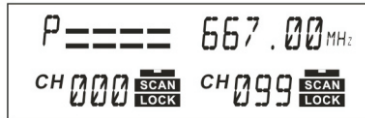
2. Manual Sync (digital communication infrared sync)

A. L-CH Sync

When turned on and unlocked, turn on one transmitter, point the IR windows of both transmitter and receiver towards each other (within 0.5~3m). Then press and hold “UP(▲)” to enter IR Sync mode, which by default starts from the L-CH MIC1, indicated by “=====” (5-bar meter) on the LCD screen. After 2s, the system automatically starts syncing and transmitting IR code as the meter changes from 1 bar to 5 bars cyclically, as shown below.



When the frequency digits remain unchanged, and the L-CH MIC1 displays “P=====” (shown below), it means that the frequency is matched successfully, setting is saved and sync mode exited. Once synced, the transmitter's frequency becomes same as that of the receiver. The system will automatically exit sync mode and return to its original status after failing to sync in 5s.



B. R-CH Sync

First, turn off the transmitter synced with L-CH, and turn on another un-synced transmitter. Position the IR window of the transmitter towards that of the receiver, then press and hold “UP(▲)” to enter sync mode, which by default starts from the L-CH MIC1. Within 2s, press “DOWN(▼)” once to select the R-CH MIC2, indicated by “=====” in the R-CH LCD. The subsequent syncing steps are same as those for the left channel. Spacing between frequencies used should be larger than 0.5MHz.

C. Follow the above steps for syncing in other channels. A transmitter can only be synced to one channel at a frequency different from other transmitters. Find an appropriate frequency depending on your environment. Frequency parameter changes on the receiver will require re-syncing.

3. Auto Sync (auto search for free channel and sync)

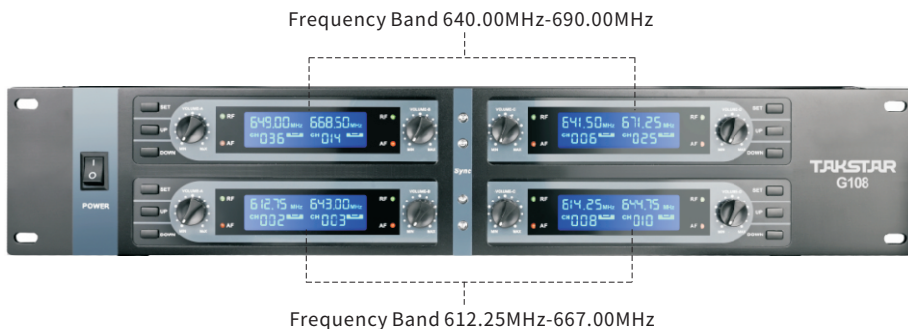
When turned on and unlocked, press and hold “DOWN(▼)” to initiate Auto Sync function, which by default starts from the L-CH MIC1 (or press “SET” again within 2s to select R-CH MIC2). In Auto Sync mode, frequency digits on the screen will change and flash during channel search, from low to high throughout the frequency band, then stop on a free channel and be auto saved. Subsequently, auto sync function will engage, then exit within around 5s regardless of successful sync or not. During Auto Sync, you can press “UP(▲)” once to manually exit. The searched frequency and ID No. are kept in case of auto exit after failing to sync in 5s. Keep synced transmitters turned on with their IR windows pointing away from the receiver during this process to avoid finding an already-used frequency.

G108 8-Channel Wireless Conference System

4. Lock/Unlock

When turned on and unlocked, press and hold “SET” to lock/unlock the receiver, indicated by the “LOCK” symbol on the LCD screen. When locked, other buttons will not work.

Note: Transmitters at frequency band 640MHz-690MHz can only sync with the 4 channels at the top of the receiver, while those at frequency band 612.25MHz-667.00MHz can only sync with the 4 channels at the bottom.

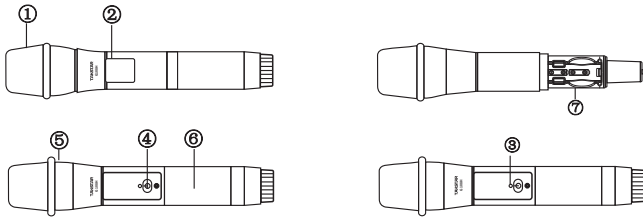


■ System Menu Settings

When turned off, press and hold “UP(▲)” and turn on the receiver to enter system menu settings. The screen will show “-SET-” before entering sub menu “-SQL-” ; short press “SET” to cycle through sub menus “-SQL-” L, “-SQL-” R, “RF OUT” L, “RF OUT” R, “LIGHT” L, “LIGHT” R, “IDF UN” L, “IDF UN” R. The Adjustment Indicator will flash next to the active sub menu; short press “UP(▲)” or “DOWN(▼)” to select preferred setting for the sub menu.

1. “-SQL-” : receive restriction/sensitivity, 11 levels in total from -95 to -75. The lower the number, stronger the receive capability but weaker the anti-interference. Adjust properly according to the actual environment. -95 by factory default (strongest reception but lowest anti-interference).
2. “RF OUT” : transmitter output power, either “H” (High) or “L” (Low), shown on transmitter LCD when synced. “H” by factory default.
3. “LIGHT” : power-saving mode; “ON” keeps the transmitter LCD screen awake, while “OFF” dims the screen (power-saving mode). “ON” by factory default.
4. “IDF UN” : “ON” or “OFF” ; “ON” shows the ID Code (if any) on the Adjustment Indicator on receiver LCD, while “OFF” does not. “ON” by factory default.

■ G108H Wireless Handheld Microphone Functions



- ① Capsule Module (with built-in high-density foam): specially crafted for anti-rolling and impact-resistant properties.
- ② LCD Screen: displays Channel, Frequency and Battery Status.
- ③ IR Sync Window: for manual/auto frequency sync with receiver.
- ④ Power Switch: for power on/off, or switching operation status.
- ⑤ Upper Handle: for joining capsule and lower handle.
- ⑥ Lower Handle: can be opened by turning counterclockwise, encases a plastic holder inside.
- ⑦ Plastic Holder: houses batteries and transmission circuit board, with built-in transmitting antenna at the bottom.

■ G108Z Wireless Conference Microphone Functions

1. High/Low Output Power

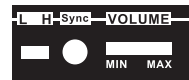
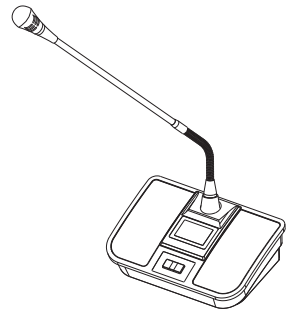
Slide the switch at the back of the transmitter to “L” or “H” to set to Low or High output power respectively.

2. Pickup Sensitivity

Turn the Volume Level knob to “MIN” for lowest sound pickup sensitivity, or “MAX” for highest sensitivity.

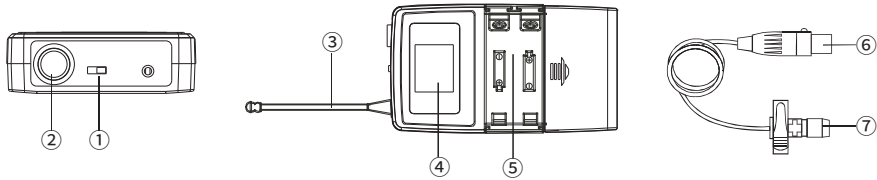
3. IR Sync

Point the back of the transmitter towards the IR window on receiver to sync data.



Rear Panel

■ G108P Bodypack Transmitter Functions



- ① Power Switch: flip to ON/OFF position to turn on/off the transmitter respectively.
- ② Mic Input Socket.
- ③ Transmitting Antenna: 1/4 wavelength whip antenna.
- ④ LCD Display: shows current operating channel and battery level. (same operation as that for the handheld transmitter)
- ⑤ Battery Compartment: houses two 1.5V AA alkaline batteries.
- ⑥ Lavalier Mic Plug: insert directly into the mic input socket to use.
- ⑦ Condenser Mic Cartridge.

■ Troubleshooting

If you cannot resolve the issue by the methods shown below, please contact the local dealer.

Issue	Cause	Solution
Battery indicator on microphone LCD has zero bar and is flashing.	Insufficient battery power.	Replace batteries
No display or backlight on microphone LCD	Batteries are installed in wrong polar direction.	Check and observe polarity markings for correct battery installation
	Severely insufficient battery power.	Replace batteries
	Smeared or rusted battery contact plates.	Clean or replace battery contacts
No response from receiver when powered on.	Mains outlet is not connected or live.	Check mains outlet
	Receiver power adapter is broken.	Replace with an adapter of the same spec
	Microphone is not turned on.	Turn on corresponding microphone
	Frequencies do not match between Mic/Receiver.	Correctly sync frequency following the instructions in this manual
No reception on receiver.	Microphone is out of range.	Get back within effective range
	Microphone is not synced.	Sync frequency before use
There is reception on receiver but no sound.	Volume knob is turned to minimum.	Check and properly adjust the volume knobs on receiver and amplifiers
	Audio cable is not properly connected.	Check and connect the audio cable firmly in correct port.

Screeching sound.	Feedback howling.	Lower the volume, and keep the mic pointing away from speakers; increase distance between mic and speakers.
Intermittent sound during use.	Out of effective range.	Get back within effective range.
Short effective operating range.	Environment is too complex.	Avoid overly complex surroundings, because large metals, brick walls or crowds in between mic and receiver will greatly reduce the effective range.

■ Safety Instructions

To avoid electric shock, overheat, fire, radiation, explosion, mechanical risk and injury or property loss due to improper use, please read and observe the following items before use:

1. Please check if the power of the connected equipment matches with that of this product before operation. Adjust the volume to proper level during operation. Do not operate at over-power or high-volume level for extended time to avoid product malfunction or hearing impairment.
2. If there is any abnormality during use (e.g., smoke, strange odor), please kill the power switch and unplug from power source, then send the product to the local dealer for repair.
3. Keep this product and its accessories in a dry and ventilated area. Do not store in a humid or dusty area for extended time. Keep away from fire, rain, liquid intrusion, bumping, throwing, vibrating, or from blocking any ventilation openings, to prevent malfunction.
4. The product must, when installed on walls or ceilings, be fixed firmly in place at adequate strength to prevent from falling.
5. Please abide by safety rules during operation. Do not use the product in places prohibited by laws or regulations to avoid accident.
6. Do not disassemble or repair the product by yourself to avoid injury. If you have any questions or require any services, please contact our local dealer.



Suitable only for altitudes below 2,000m



Suitable only for non-tropical climates

产品服务保证书

姓名：_____ 电话：_____ 地址：_____

商品：_____ 型号：_____ 购买日期：_____ 年 _____ 月 _____ 日

维修记录栏 (由维修员填写)	维修员签名	日期

注意事项：

1. 本单为保修凭证，请用户妥善保管，如有遗失，恕不保修或退换。
2. 保修期限制：购买之日起十二个月内。
3. 除了不可抗力事件损坏外，由本公司负责，免费维修。
4. 如属保管不善或使用不当造成的损坏，维修点将酌情收费。
5. 擅自拆卸维修者，不予保修。
6. 以上保修条款仅限于中国市场适用（不含港澳台地区）。

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