

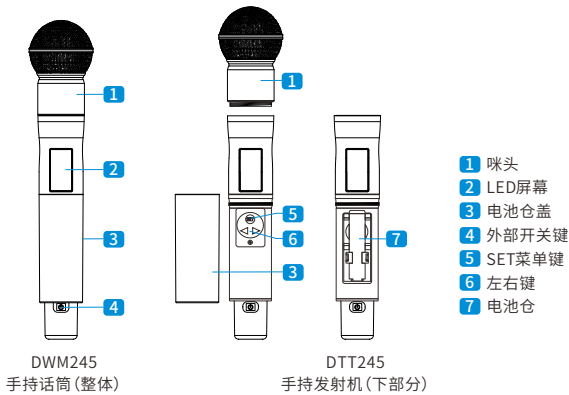
数字UHF无线系统

Digital UHF Wireless System

手持麦克风 说明书 (DWM245)

本设备咪头和手持式发射机两部分组成，独立购买和使用

产品外观



技术特点

- 舞美级数字通信技术，实现音频的高保真、低延时的无线传输。
- 支持红外配对的传统模式，可兼容同品牌其他型号的无线发射机。

概念说明

1. 无线信道管理逻辑

- 遵循"Group(组) - Channel(无线通道) - Frequency(频率)"逻辑。
Group(组):系统内置若干个无线通道组(不同国家,不同Firmware版本有所区别),每个组包括12个CH(无线通道)。
CH(无线通道):每个无线通道映射一个频率,同一Group下的12个无线通道为系统推荐频率,可以规避"互调干扰"。
Frequency(频率):通过选择不同CH进行更改(最后一组除外)。
Customized Group(自定义组):最后一组为自定义频点组,本组各通道映射的频率可手工更改,需人工规避"互调干扰"。
- 发射机、接收机需要设置在相同Group(组)、相同CH(无线通道)下,才可工作。
- Tx 代表发射机,Rx代表接收机。

操作说明

- 外部低端开关键的功能可以设置。
- 按内部 SET 设置键进入设置菜单。
- 在配置界面,可使用"左"、"右"键进行菜单选择或更改参数。

1. 首界面说明



2. 红外配对

- 配对:发射机长按内部SET设置键即可进入配对模式;将接收机的红外发射器对准发射机的红外接收器,即可完成配对。

设置说明

1. 频率组设置

- 选择频率组。
- AFH自动跳频模式下,无需设置。

2. 通道设置 - 频率设置

- 选择通道编号,对应不同的工作频率。
- AFH自动跳频模式下,无需设置。

3. 自定义组的频率设置

- 仅在选择了自定义组情况下才出现该菜单。
- 对自定义组每个通道对应频率进行设置。

4. 增益设置

- 增益设置,对应话筒的音量。
- 每3dB代表音量增加1倍。

5. 发射功率设置

- 天线发射机功率,Low / Middle / High。
- 对应10mW / 20mW / 50mW。

6. 外部键设置

- Mute+Power: 长按开机或关机,短按发言或静音。
- Power: 长按开机关机,无静音功能。
- Mute: 短按发言或静音,只能去掉电池关机。
- None: 外部键无任何功能,去掉电池关机。

7. 信息

- "Region区域" 软件版本适用的地理区域,不同选项,频率有所不同。选用正确选项,以符合当地法规。
- 发射机和接收机应使用相同的Region区域选项。
- "Region区域" 更改需要联系当地经销商。

OTA模式

- 长按SET键同时开机,进入OTA模式。
- OTA模式下,可进行OTA升级,并能恢复出厂设置。
- OTA模式下,需有技术支持下操作设置的更改。

性能参数

1. 通信和电气指标

通信模式	UHF无线电数字通信
无线调制方式	Pi/4 DQPSK
位数	24Bit
采样率	48Khz
传输频段	510~694MHz (根据地区不同有所差别)
射频输出	<18dBm
传输距离	>50米 (与DS240系列AP工作) >80米 (与传统真分集接收机工作)
通信频响衰减	<3dB (20Hz~20KHz)
信噪比 S/N	>112dB
动态范围	105dB
底噪电压	<12uV
失真度 T.H.D	<0.03% (@1KHz)
时延	4.17ms
匹配阻抗	600Ω
屏幕	LED屏
供电	14500锂电池 x2 / AA电池 x2 (混用动力技术)
续航	6h(AA电池) / >10h(14500锂电池)
重量 / 尺寸	383g(含咪头、电池) / L=252mm, R _{max} =52mm

2. 声学指标

默认安装标准咪头	
类型	动圈
指向性	单一指向
输出阻抗	600Ω
咪芯频响	100Hz~10Khz
灵敏度	0°-71dB±3dB(0dB=1V/ubar at 1KHz)

注意事项

- 推荐更换 GAODIMIC M48 咪头,可大幅提升音质。
- 如果更换其他品牌的咪头,可能因为电磁波屏蔽性能原因出现电流声,需要调低 RF POWER。

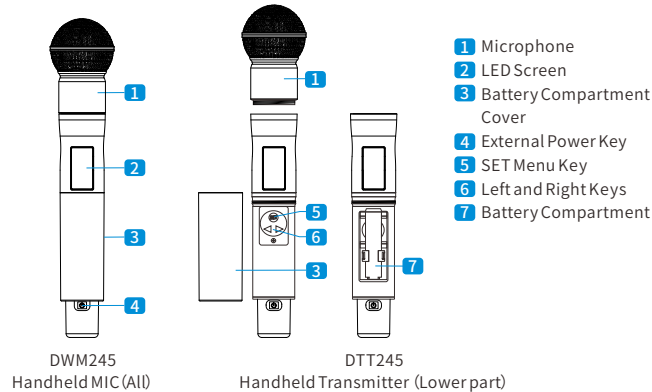
警告

- ❗ 避免设备长时间暴晒,或高温环境工作,避免性能下降,甚至致损坏!

Handheld Microphone Manual (DWM245)

This device consists of two parts: Mic. capsule & handheld transmitter.

Appearance



Feature

- Supports traditional mode of infrared pairing and is compatible with other models of receivers of the same brand.
- Stage-level digital communication technology achieves high-fidelity and low-latency wireless transmission of audio.

Concept

1. Wireless Channel Management Logic

- Follow the "Group - Channel - Frequency" logic.

Group: The system has several built-in wireless channel groups (different in different countries and different firmware versions), each group includes 12 wireless channels.

CH: Each wireless channel maps a frequency. The 12 wireless channels under the same Group are the recommended frequencies, which can avoid "intermodulation interference".

Frequency: Change by selecting different CHs (except the last group).

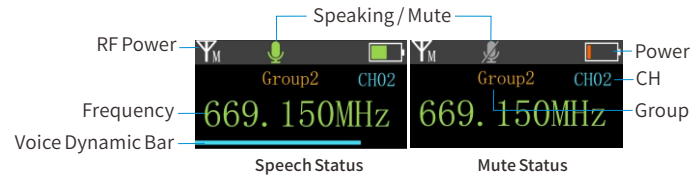
Customized Group: The last group is a customized frequency group. The frequencies mapped to each channel can be changed manually, and "intermodulation interference" needs to be avoided manually.

- Tx stands for transmitter and Rx stands for receiver.

Instructions

- The function of the external low-end switch key can be set.
- Press the internal SET setting key to enter the setting menu.
- In the configuration interface, you can use the "left" and "right" keys to select menus or change parameters.

1. Main



2. Infrared Pairing

Long press the SET button on the transmitter to enter pairing mode; align the receiver's infrared Tx with the transmitter's infrared Rx to complete pairing.

Setting

1. Group Setting

Group 1

- Select the frequency group.
- In AFH mode, no setting is required.

2. CH Setting - Frequency Setting

CH 1
633.350MHz

- CH number corresponds to different frequencies.
- In AFH mode, no setting is required.

3. Frequency Setting for Customized Group

Set Freq.
CH 02
688.350MHz

- This menu appears only if a custom group is selected.
- In AFH mode, no setting is required.

4. Gain Setting

Gain
18 dB

- Gain setting, corresponding to the volume of the MIC.
- Every 3dB represents a doubling of the volume.

5. RF Power Setting

RF Power
Middle

- Low / Middle / High.
- Corresponding to 10mW / 20mW / 50mW.

6. External Key Settings

Key Function
Mute+Power

- Mute+Power: long press to power on or off, short press to speak or mute.
- Power: long press to power on or off, no mute function.
- Mute: short press to speak or mute, remove the battery to turn off.
- None: have no function, remove the battery to turn off.

7. Info

EUROPE
Ver 1.0.0
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- "Region" The geographical area to which the software version is applicable. Different options have different frequencies. Select the correct option to comply with local regulations.
- The transmitter and receiver should use the same Region option.
- To change the "Region", contact your local dealer.

OTA Mode

- Press and hold the Menu button while turning on the device to enter OTA mode.
- In OTA mode, you can perform OTA upgrades and restore factory settings.
- In OTA mode, you need technical support to change the settings.

Parameters

1. Communication and Electrical Indicators

Communication Mode	UHF Wireless Digital Communications
Modulation	Pi/4 DQPSK
Num. of Digital	24Bit
Sampling Rate	48Khz
Frequency Band	510~694MHz (Varies by region)
RF Output	<18dBm
Transmission Distance	>50m (work with DS240Series) >80m (work with Standard Rx)
Frequency Attenuation	<3dB (20Hz~20KHz)
S/N	>112dB
Dynamic Range	105dB
BG Noise Voltage	<12uV
T.H.D	<0.03% (@1KHz)
Latency	4.17ms
Screen	LED
Power	14500 Li-battery x2 / AA Battery x2 (Hybrid Battery Tech)
Battery Life	>6h (AA Battery) / >10h (14500Li battery)
Weight / Dimension	383g (with MIC Capsule & Battery) L=252mm, R _{MAX} =52mm

2. Acoustic Indicators

Standard microphone installed by default

Type	Dynamic
Directivity	Single Direction
Output Impedance	600Ω
Frequency Response	100Hz~10KHz
Sensitivity	0°-71dB ± 3dB (0dB=1V/ubar at 1KHz)

Precautions

- It is recommended to replace the GAODIMIC M45 microphone head, which can greatly improve the sound quality.
- When replacing a capsule with another brand, an electric current sound may occur due to electromagnetic wave shielding performance issues, and you may need to lower the RF POWER.

Warn

- ⚠ Avoid exposing the device to sunlight for a long time or working in a high temperature environment !