TAKSTAR®得胜

DG-H300系列

有线无线双模会议系统

DG-H300 Series Dual-Mode Wired-Wireless Conference System

使用手册 | User Manual

DG-H300系列 有线无线双模会议系统

■ 前言

感谢您选购得胜DG-H300系列有线无线双模会议系统，为了您能够更好地了解使用本产品，建议您在使用前仔细阅读本说明书。

若存在有疑问或者您有宝贵的建议，可通过拨打得胜官方服务热线400 6828 333或微信扫描二维码关注得胜官方公众号与我们联系。

■ 产品特性

主机+单元机

• 支持有线、无线会议话筒单元混合接入，实现跨类型设备的统一发言调度与集中管理，满足多样化会议场景的设备协同需求；

• 可同时接入并管理128台有线会议单元+ 256台无线会议单元，最大支持384台会议单元参与会议发言控制，适配大型会议场景的终端扩展需求；

• 具备环形手拉手连接功能，提升系统拓扑灵活性；内置热插拔保护、短路保护机制，保障设备运行稳定性与终端操作安全性；

• 采用20Hz-20kHz频响和48kHz采样率的非压缩混音技术，结合时钟同步传输方案，实现会议单元拾音至主机输出的延时≤4ms，还原CD级无损音质，确保语音传输的实时性与清晰度；

• 无线频段覆盖600MHz工作频段+2.4GHz控制频段，基于数字U段传输技术与π/4-DQPSK调制方式，传输距离≥80米，抗干扰能力强；

• 支持实时扫频与自动切频功能，可智能筛选20个最优频点，规避信号干扰，保障无线发言稳定性；

• 有线单元支持6芯数字电缆或RJ45网线连接，可互为备份，传输距离可达150米，满足大型会场、长跨度空间的有线终端部署需求，确保会议信息长距离可靠传输；

• 支持接入无线AP（含RJ45/6芯数字双AP拓展接口），灵活拓展无线覆盖范围，摆脱主机位置局限，适配大型场馆、多分区会议场景；

• 话筒单元支持主席、VIP、列席3类角色定义，权限分层清晰

• 支持先进先出、发言人数限制（1-4台单元同时发言，有线/无线模式统一配置）、主席控制等多种会议模式；

• 具有4.3英寸全彩触摸屏，支持全触控操作，实时监测电池电量、无线信号频点、发言状态，发言状态、在线状态

• 支持终端编 ID 功能，可对有线/无线单元进行独立 ID 编码，便于设备识别与管理；

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• 支持视频跟踪，可实现发言者定位跟踪功能，支持Visca、Peleco-D、Peleco-P摄像机协议；

• 支持日期/时间/星期校准、音量/亮度调节、多语言（中英双语）切换，会议模式，成员管理等功能；

• 接口配置全面，具有1个RS-485、4路6芯数字话筒接口、4路RJ45话筒接口，1路RJ45 AP拓展接口、1路6芯数字AP拓展接口、1路XLR MIX有线无线总混音输出、1路XLR有线单元混音输出、4路XLR无线单元独立通道输出、1路XLR话筒输入、1路Type-C接口、3路外置天线接口，满足多设备协同需求；

• 主机采用金属结构屏蔽设计，结合电路抗干扰优化，有效抵御外部电磁干扰，保障音频传输与信号控制的稳定性，适配复杂电磁环境；

• 单个话筒具备有线/无线热备份功能：当有线线路突发故障时，可自动切换至无线连接，保障会议发言不中断；

• 会议单元配备2个RJ45手拉手级联接口+1个6芯数字电缆接口，可灵活选择连接方式，降低布线施工难度；

• 会议单元具有2.8英寸全彩屏，实时显示关键信息：发言状态、单元电量（无线模式）、无线信号强度、有线连接状态、单元角色、单元 ID，以及年/月/日/周/时/分高精度时间；同时支持发言时间显示与时间表功能，便于发言者参考时间调整语速，提升会议效率；

• 单元集成麦克风发言按键与发言指示灯，直观显示麦克风开启/关闭状态；

• 单元采用锂电池、5号电池双模式供电，支持自由切换使用，有效延长续航时间，适配长时间会议或户外临时会议需求，避免断电风险；

• 单元配备1个3.5mm耳机接口，可实现发言监听功能，也可外接录音设备进行会议音频记录，满足音频备份与后期复盘需求。

无线网关AP

• 支持无线会议单元的统一发言调度与集中化管理，最大带载能力可达256台无线会议终端，可高效适配大型会议、多分区会场等场景的无线终端扩展需求，保障多终端协同运行的稳定性与可控性；

• 具备无线接入范围扩展功能，可作为无线信号中继或覆盖节点，弥补单一主机无线覆盖的局限性，尤其适用于大型场馆、狭长空间等无线信号易衰减的场景，有效扩大无线会议单元的接入范围，保障全会场无线信号的稳定性与覆盖均匀性；

• 内置音频时钟同步传输技术，实现无线音频信号的精准同步处理，从终端拾音到信号输出的延时≤4ms，有效规避音频传输延迟导致的卡顿、不同步问题，保障会议语音的实时性与流畅度，匹配高清会议的音质需求；

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• 支持最大70米距离的布线需求，兼容网线、6 芯数字电缆两种连接方式，可根据会场空间布局灵活选择布线类型，降低复杂场景下的布线施工难度，满足多样化使用场景的连接需求；

• 提供本地供电与PoE（以太网供电）远程供电两种模式，用户可根据现场供电环境（如无就近电源插座、需简化布线）灵活切换，无需额外部署供电线路，提升安装便捷性，适配不同会场的供电条件限制；

• 支持吸顶安装、壁挂安装、吊装三种安装方式，可根据会场装修风格与功能需求选择最优安装位置，灵活适配不同场景的空间结构。

■ 适用范围

适用企事业单位、政府机关等会议室安装场合

■ 产品配置

DG-H300（会议主机）

会议主机 1台

电源线 1条

六芯线连接线（10米） 1条

UHF&2.4G天线 3根

螺丝刀（调试用） 1个

说明书 1份

DG-H300A1（单元座）

单元座 1台

六芯T型连接线（主缆2米，支缆1米） 1条

充电线 1条

DG-H300 AP

无线网关AP 1个

网线（10m） 1条

金属吊架（带螺丝） 1个

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■ 技术参数

DG-H300会议主机

- 屏幕：彩色电容触控屏
- 屏幕尺寸：4.3寸
- 分辨率：480×320
- 频率响应：20Hz-20kHz
- 供电：AC100-240V,50-60Hz
- 功耗：待机10W，最大带载：350W
- 电源接口：220V三孔AC接口
- 温度范围工作：0-45℃
- 综合S/N：>92dB
- 动态范围：>96dB
- 综合T.H.D：<0.1%（@1kHz）
- 频响衰减：<1dB（20Hz-20kHz）
- 调制方式：π/4-DQPSK
- 自动增益控制：2话筒开启时，增加2dB；
  3-5时增加1dB
- 主增益控制：15×1dB和关闭（静音）
- 谐波失真：<0.5%
- 通信端口：RJ45*1 / UPDATE*1 / RS485*1
- 输入通道：4路6P DIN+1路卡侬
- 输出通道：凤凰端子+1路卡侬
- 输出阻抗：470Ω
- 接收距离：空旷地带80m
- 频率范围：通话频率：500-698MHz（分段设计）
  调度频率：2.4G
- 天线分集：天线600MHz天线*2+2.4GHz天线*1
- 重量（克）：4000g
- 尺寸规格：483mm×556mm×89 mm

DG-H300AP无线网关

- 载波频段：668MHz-698MHz
- 载波频段宽度：30MHz
- 综合S/N：>96dB
- 综合T.H.D：<0.2% (@1kHz)
- 频响(Hz)：30Hz-18kHz
- 频响衰减：<2dB (20Hz - 20kHz)
- 传输时延(ms)：4ms
- 有效传输距离：空旷地带80m
- 天线：板载600MHz天线*5+板载2.4GHz天线

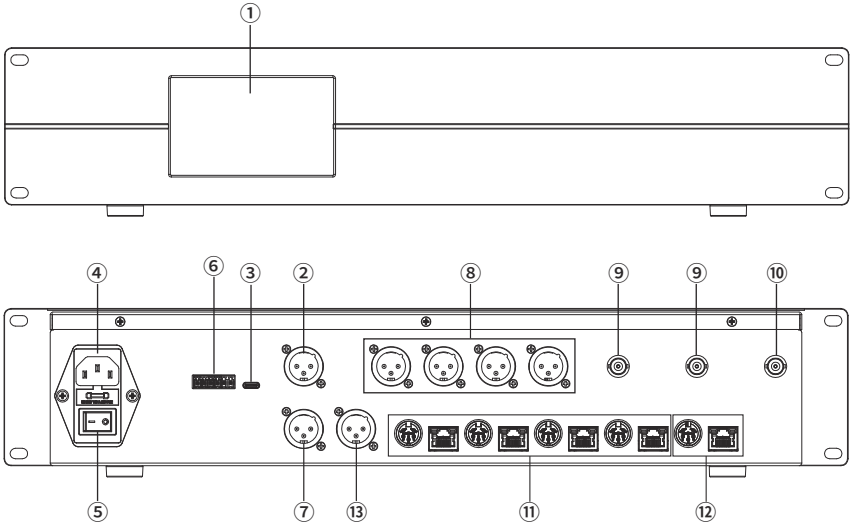
DG-H300 A1单元座

- 频率响应：20Hz-20kHz
- 综合SN：>96dB
- 传输时延：有线使用时延1ms，
  无线使用时延4ms
- 电池容量：18650锂电池 3.7V/3000mah
- 接口：RJ45*2 6P-DIN *1
- 屏幕大小：2.8寸
- 续航时间：≥8小时
- 发射功率：3-50MW

注：以上数据由得胜实验室测试得到，并拥有最终解释权！

■ 功能示意

会议主机



① 4.3寸触摸屏

② MIX音频输出：主输出通道

③ USB-C：调试接口（暂未开放）

④ 电源接口：连接电源线供电使用

⑤ 电源开关：拨动开启关闭电源

⑥ 视频跟踪接口：支持RS485传输协议

⑦ 有线音频输出口：只输出有线单元的音频信号

⑧ 无线音频输出口：只输出无线单元的音频信号，对应发言通道1-4

⑨ 600mhz天线连接座：通讯天线接口

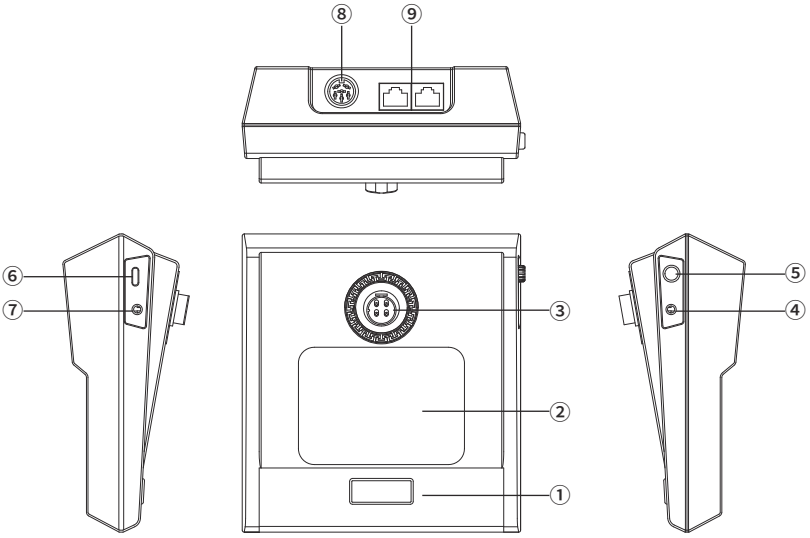
⑩ 2.4G天线连接座：控制天线接口

⑪ 有线单元输入接口：有线连接单元机使用

⑫ 有线扩展接口：扩展连接无线网关AP使用

⑬ 麦克风输入接口：XLR接口，支持音频输入

会议单元座



① 发言键：点按发言，长按可打断列席话筒发言（主席身份）

② 显示屏：2.8寸屏

③ 航空座：四芯航空插座，用于安装或更换麦克风咪杆

④ 电源键：长按可进行开关机操作，进入菜单后，点按此键可以返回和确认

⑤ 设置键：点按进入菜单，可旋转调节会议座、发射功率、音量等，按电源键确认

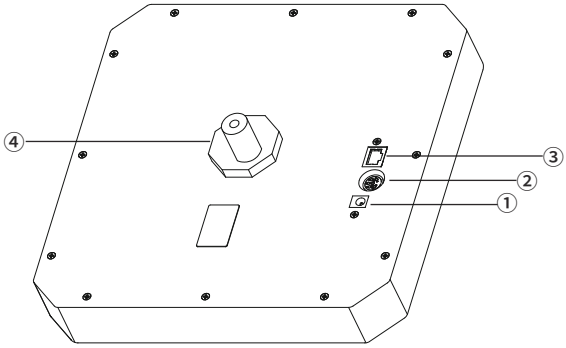
⑥ 充电口：TYPE-C接口，使用5V1A规格充电

⑦ 监听接口：3.5mm耳机接口

⑧ 6P DIN接口:通过6P DIN线缆与主机连接

⑨ RJ45接口:通过网线与主机连接

无线网关



① DC电源接口：长距离使用时，DC电源供电，稳定性更强

② 6P-DIN接口：连接六芯线供电和传输数据，建议六芯线长度70m内

③ RJ45网口：连接网线进行传输数据，可POE供电，建议网线长度60m内

④ 螺杆：安装固定金属吊架使用

■ 使用说明

操作说明

1. 会议终端角色身份说明：

○ 主席：拥有发言优先权，且拥有对普通列席发言控制权，可禁止普通列席发言。

○ VIP列席：拥有发言优先权，不能被禁言。

○ 普通列席：在条件允许情况下可以轮询发言。

2. 频点占用说明：

本系统使用“实时监控，自动切频”技术，系统将自动扫描附近的无线环境，并显示本会议系统候选的所有CH通信频点的信号强度。数值越低，说明该频点干扰越小。例如：-90dB的频点优于-80dB的频点。一般建议低于-70dB。

单元座申请发言时，自动选用以下20个频点中的最优频点，故该20个频点，切勿在现场其他设备使用，以免影响使用效果。

668.500 / 669.800 / 671.350 / 672.650 / 674. 450 / 675. 750 / 677. 300 / 678.600 / 680.650 / 682.200 / 683.500 / 685.050 / 687.350 / 688.900 / 690.200 / 692.000 / 693.300 / 694.850 / 696.150 / 697.950 (MHz)

3. 会议系统的连接

3. 1 单元座与会议主机的连接

会议系统主机有共4路RJ45的话筒单元接口及4路6P-DIN会议单元输入接口，系统自带一条公头标准电缆线（6P-DIN接口）和随底座配送相应的连接线。

主机与会议单元连接时，只要将第一台会议单元的6P-DIN公头连接到主机输出接口即可。

在主机与会议单元距离较远时，推荐使用6P-DIN延长电缆，该电缆两端分别为6P-DIN公头和6P-DIN母头。将延长电缆6P-DIN母头与会议单元自带的6P-DIN公头标准电缆线或T型连接线对接。再将延长电缆的6P-DIN

公头连接到主机输出接口即可。

单元座之间连接

6芯接口的发言单元与另一台会议单元连接时，只需将其配备的6芯T型线的横向公头对接上一条6芯T型母头相互对接即可。使用网线接口的发言单元与另一台会议单元连接时，只需接上两条网线，按手拉手的方式连接即可。

3.2 配置系统-单元注册

有线使用注册方法：连接好所有单元机后，进入主机的主页UI，点击主页UI右上角的菜单键，进入菜单页面，点击成员板块，点击重新添加，触摸图标后进入注册模式。此时所有话筒屏幕显示注册中，点击单元座上发言按键进行注册，全部单元座注册好后，即可进行使用。

无线使用注册方法：所有无线使用的单元机开机后，点按单元座侧面的设置键，进入设置菜单，旋转设置键，当光标落至注册图标时，点按开关键，单元座进入注册状态。此时将主机的注册模式打开，单元座自动进行注册，注册完后即可使用单元机。

3.3 发言模式与发言人数设置

单元座都注册好后，进入主机的主页UI，点击主页UI右上角的菜单键，在菜单页面选择会议板块，进入会议模式设置，设置发言人数与发言模式。

会议模式说明

先进先出模式：发言数量设置为n，一旦第n+1人员进入发言通道时，那么最先进入发言通道的第1人，将被系统自动下线。

数量限制：发言数量设置为n，发言通道内人数达到n时，不再允许其他人员发言；除非，发言通道内有人员退出。

同时发言人数设置支持1-4人同时发言。

4. 主机菜单说明

主机UI菜单分三大板块，系统板块、会议板块、成员板块。

4.1系统板块说明

时间设置：可调节主机系统时间，主机系统时间会自动同步至单元机。

音量设置：可设置有线模式，无线模式及无线AP通道的音量。

显示设置：可调节主机屏幕亮度。

摄像机设置：调节摄像跟踪使用的协议等。

语言设置：UI文字语言，有中英文可选。

版本：显示主机版本信息。

通道设置：无线音频路径，外接无线AP时，需将音频路径设置为天线盒。

管理信道：主机的信号信道，不同的信道，内置的频率范围不同，默认1通道，切换通道可尝试避开干扰。

调试模式：工厂调试模式，暂不开放。

4.2会议板块说明

模式：可调节发言人数及发言模式。

扫描：系统实时扫描20个频点的信号情况，在此板块显示。

4.3成员板块说明

a. 成员-重新添加

系统将注销所有成员，并重新扫描有线和无线的所有待注册终端设备，完成注册。成员ID号依次递增。无线会议终端设备需要处于注册状态，否则无法完成该无线终端设备的注册。

b. 成员-添加成员

系统将扫描有线和无线的所有待注册终端设备，完成注册，成员ID号依次递增。有线会议终端无需格外操作。无线会议终端设备需要处于注册状态，否则无法完成该无线终端设备的注册。

c. 成员-指定添加

系统将扫描有线和无线的所有待注册终端设备，完成一个终端设备的注册，ID号按指定设定。有线会议终端无需格外操作。无线会议终端设备需要处于注册状态，否则无法完成该无线终端设备的注册。

d. 成员-成员列表-所有成员

本项目支持对所有成员的属性进行一次性操作。

注销：注销所有成员。

禁言：禁言所有普通列席成员，VIP成员和主席成员不受影响。

e. 成员-成员列表-单独成员

本项目支持对某个成员的属性进行操作。

注销：注销该成员。

角色更改：更改该成员的角色（需要终端单元配合）。

禁言：禁言该成员（仅普通列席成员有该选项）。

5. 摄像跟踪说明

本设备支持摄像头跟踪功能，需要与对应的摄像头能够支持该功能的协议。

a. 本设备支持VISCA、PELCO-D、PELCO-P三种协议。

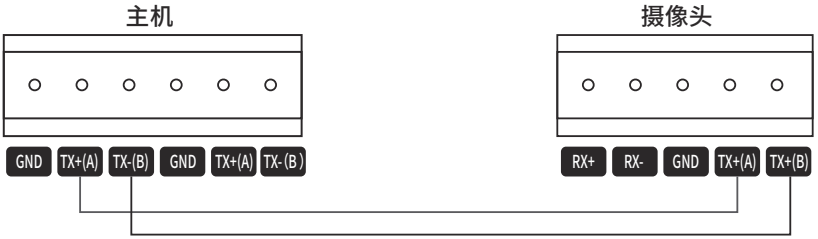
b. 摄像头控制信号线连接主机的485控制接口。

c. 在主机摄像头菜单中选择需要的协议。(如没有该选项，说明摄像头主机将自动适配）。

d. 在摄像头控制菜单中调试每个单元的角度，并进行保存即可实现摄像头跟踪功能。

e. 本摄像跟踪传输协议仅支持RS-485。

摄像头控制示意图



6. 无线AP连接方法

使用网线/六芯线连接至主机EXP有线扩展接口。

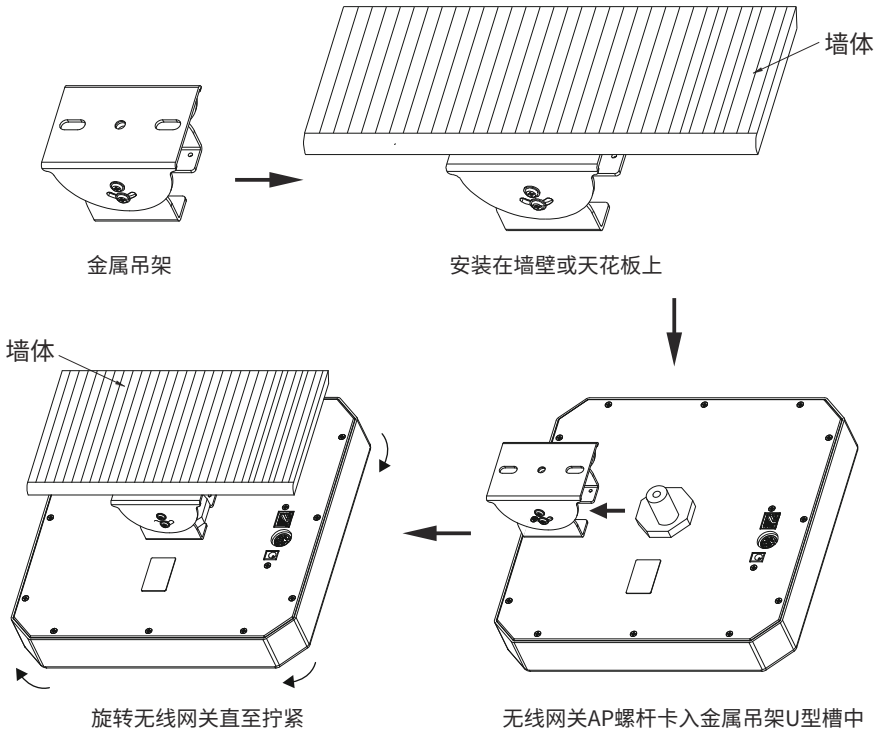
连接好AP后，在主机菜单将配置修改，路径为“配置”-“系统”-“通道管理”-“无线音频路径”，长按修改为无线网关AP选项，重启后生效。

安装方法：

方式一：壁挂安装

1. 将配置的金属吊架安装在墙壁或天花板上，定位好螺丝孔，进行预打孔，埋入膨胀螺丝柱，再锁紧螺丝固定；

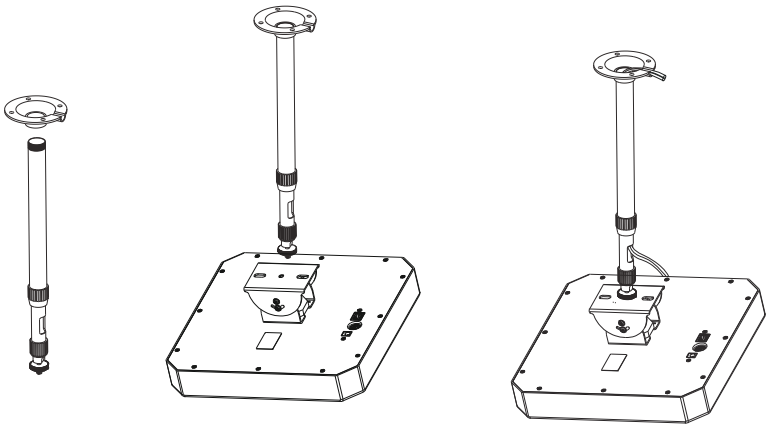
2. 将无线网关AP螺杆卡入金属吊架U型槽中，旋转无线网关直至拧紧，安装完成。



方式二：吊杆安装

1. 如果墙顶安装了吊顶，可选择使用吊杆安装方式，将吊杆的另一端固定到墙顶上。可将主机6P-DIN连接线或网线穿入吊杆管体中，然后从顶部穿出，与无线网关AP连接使用。请参考如下示意图。

2. 吊杆需单独购买 可使用得胜ST-60吊杆。



■ 安全警示

为避免电击、高温、着火、辐射、爆炸、机械危险以及使用不当等可能造成的人身伤害或财产损失，使用本产品前，请仔细阅读并遵守以下事项：

1. 使用产品时请确认所连设备与本产品是否匹配以及合理调整音量大小，不要在超过产品功率及大音量下长时间使用，以免造成产品异常；

2. 使用中若发现有异常（如冒烟、异味等），请立即关闭电源开关并拔掉电源插头，然后将产品送售后服务网点检修；

3. 消费者若使用电源适配器供电，则应购买配套使用获得CCC认证并满足标准要求的电源适配器；

4. 本产品及附件都应放置在室内干燥通风处，请勿长期存放在潮湿、灰尘多的环境，使用中避免靠近火源、雨淋、进水、过度碰撞、抛掷、振动本机及覆盖通风孔，以免损坏其功能；

5. 若产品需要固定于墙壁或天花板时，请确保固定到位，防止因固定强度不足导致产品发生跌落危险；

6. 使用该产品时需遵守相关安全规定，法律法规明确禁止使用场合请勿使用本产品，以免导致意外事故；

7. 请不要自行拆机改装或维修，以防止出现人身伤害，如有问题或服务需求请联系当地售后服务网点跟进处理。

■ 关于图标含义解释

此符号表示，根据WEEE指令(2012/19/EU)和国家法律，由于这种类型的废弃物会有潜在的有害物质，可能对环境和人类健康产生负面影响，所以本产品不应与您的家庭垃圾一起处置，应将本产品应交由授权的电气和电子设备（WEEE）回收站回收。同时，您在正确处理本产品的同时将有助于自然资源的有效利用。如需了解更多有关您可以在何处放置废物回收设备的信息，请联系您当地的城市办事处、废物管理局或家庭废物处理服务部门。

■ 关于本说明书

本说明书中内容符合截止印刷之日的技术规格。由于得胜公司会不断改进产品，本说明书可能不符合您的特定产品的技术规格。要获取最新版说明书，请访问得胜官网，然后下载说明书文件。技术规格、设备或另售的附件在各个地区可能有所不同，如有问题请与当地得胜销售网点确认。如需更多支持和深层产品信息，请浏览得胜官方网站：https://www.takstar.com

Preface

Dear Customer,

Thank you for purchasing Takstar DG-H300 Series Dual-Mode Wired-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

Control Unit + Unit

• Supports Dual-Mode access of wired/wireless conference microphone units, enabling unified speaking scheduling and centralized management of cross-type devices to meet device collaboration needs in diverse conference scenarios.

• Can connect and manage up to 128 wired + 256 wireless conference units (max. 384 units total) for speaking control, adapting to terminal expansion needs in large-scale conferences.

• Features daisy-chain ring connection for flexible system topology; built-in hot-swap and short-circuit protection ensures device stability and terminal operation safety.

• Adopts uncompressed mixing technology (20Hz-20kHz frequency response, 48kHz sampling rate) and clock-synchronized transmission, achieving ⩽4ms latency from unit sound pickup to control unit output, restoring CD-quality lossless audio for real-time, clear voice transmission.

• Covers 600MHz operating band + 2.4GHz control band; based on digital U-band transmission and π/4-DQPSK modulation, it offers ⩾80m transmission distance and strong anti-interference.

• Supports real-time frequency scanning and auto frequency switching, intelligently selecting 20 optimal frequencies to avoid signal interference and ensure stable wireless speaking.

• Wired units support 6-core digital cables or RJ45 cables (mutual backup) with up to 150m transmission distance, suitable for wired terminal deployment in large venues/long-span spaces.

• Compatible with wireless APs (with RJ45/6-core digital dual AP expansion ports) to flexibly extend wireless coverage, breaking control unit location limits for large venues/multi-zone conferences.

• Microphone units support 3 role definitions (Chairman, VIP, Attendee) with clear permission hierarchy.

• Offers multiple meeting modes: FIFO, speaking limit (1-4 units simultaneously, unified config for wired/wireless), and Chairman control.

• Equipped with a 4.3-inch full-color touchscreen for full-touch operation; real-time monitors battery level, wireless frequency, speaking status, and online status.

• Supports terminal ID coding for independent ID assignment to wired/wireless units, facilitating device identification and management.

• Enables video tracking (speaker positioning) and supports Visca, Peleco-D, Peleco-P camera protocols.

• Features date/time/week calibration, volume/brightness adjustment, bilingual (CN/EN) support, meeting mode settings, and member management.

• Comprehensive interfaces: 1×RS-485, 4×6-core digital mic ports, 4×RJ45 mic ports, 1×RJ45 AP expansion port, 1×6-core digital AP expansion port, 1×XLR MIX output, 1×XLR wired unit mix output, 4×XLR wireless unit independent outputs, 1×XLR mic input, 1×Type-C, 3×external antenna ports.

• Control unit uses metal shielding structure and anti-EMI circuit optimization to resist external electromagnetic interference, ensuring stable audio transmission and signal control in complex EMI environments.

• Single microphone has wired/wireless hot backup: auto-switches to wireless if wired connection fails, preventing speaking interruptions.

• Conference units have 2×RJ45 daisy-chain ports + 1×6-core digital cable port for flexible connection, reducing wiring difficulty.

• Equipped with a 2.8-inch full-color screen, displaying key info (speaking status, battery for wireless mode, signal strength, wired connection status, unit role, unit ID, high-precision time) plus speaking time display/timer to help speakers adjust speed.

• Integrates mic talk button and indicator light for intuitive display of mic on/off status.

• Dual power supply (lithium battery/AA batteries) for extended battery life, suitable for long conferences or outdoor temporary meetings to avoid power-off risks.

• Has a 3.5mm headphone jack for speaking monitoring and external recording (for audio backup and post-meeting review).

Wireless Gateway AP

• Enables unified speaking scheduling and centralized management of wireless conference units, supporting up to 256 wireless terminals for stable multi-terminal collaboration in large conferences and multi-zone venues.

• Provides wireless coverage expansion (as signal relay/coverage node) to make up for single control unit coverage limits, especially in large venues/narrow spaces (where signals easily weaken) for uniform, stable full-venue wireless coverage.

• Built-in audio clock synchronization technology ensures accurate wireless audio synchronization, with ⩽4ms latency from terminal pickup to output, avoiding stuttering/asynchrony for real-time, smooth conference voice (matching HD conference audio needs).

• Supports up to 70m wiring, compatible with network cables/6-core digital cables; flexible wiring selection based on venue layout reduces construction difficulty in complex scenarios.

• Dual power modes: local power supply & PoE remote power supply; adaptable to on-site power conditions (e.g., no nearby outlets, simplified wiring) without extra power lines.

• 3 installation methods: ceiling-mounted, wall-mounted, hanging; optimal installation based on venue decoration and functional needs, adapting to different space structures.

■ Applications

Conference rooms for enterprises, institutions, government agencies

■ Package Contents

DG-H300 (Conference Control Unit)

1 × Conference Control Unit

1 × Power Cable

1 × 6-Core Connection Cable (10m)

3 × UHF & 2.4G Antennas

1 × Screwdriver (for debugging)

1 × User Manual

DG-H300A1 (Unit Base)

1 × Unit Base

1 × 6-Core T-Type Connection Cable (Main Cable: 2m, Branch Cable: 1m)

1 ×Charging Cable

DG-H300 AP

1 × Wireless Gateway AP

1 × Network Cable (10m)

1 × Metal Hanger (with screws)

■ Specifications

DG-H300 Conference Control Unit

- Screen: Color capacitive touchscreen
- Screen Size: 4.3 inches
- Resolution: 480×320
- Frequency Response: 20Hz-20kHz
- Power Supply: AC100-240V, 50-60Hz
- Power Consumption: Standby: 10W, Maximum Load: 350W
- Power Interface: 220V 3-pin AC interface
- Operating Temperature Range: 0-45°C
- Comprehensive S/N Ratio: >92dB
- Dynamic Range: >96dB
- Comprehensive T.H.D: <0.1% (@1kHz)
- Frequency Response Attenuation: <1dB (20Hz-20kHz)
- Modulation: π/4-DQPSK
- AGC: +2dB (2 mics active), +1dB (3–5 mics active)
- Main Gain Control: 15×1dB + Mute (Off)
- Harmonic Distortion: <0.5%
- Communication Ports: RJ45×1/UPDATE×1/RS485×1
- Input Channels: 4×6-Pin DIN + 1×XLR

- Output Channels: Phoenix Terminal + 1×XLR
- Output Impedance: 470Ω
- Effective Range: 80m (open area)
- Frequency Range: Call Frequency: 500-698MHz (Segmented Design);
  Dispatching Frequency: 2.4GHz
- Antenna Diversity: 2×600MHz Antennas + 1×2.4GHz Antenna
- Weight: 4000g
- Dimensions: 483mm×556mm×89mm

DG-H300AP Wireless Gateway

- Carrier Frequency Band: 668MHz-698MHz
- Carrier Frequency Band Width: 30MHz
- Comprehensive S/N Ratio: >96dB
- Comprehensive T.H.D: <0.2% (@1kHz)
- Frequency Response (Hz): 30Hz-18kHz
- Frequency Response Attenuation: <2dB (20Hz-20kHz)
- Transmission Delay (ms): 4ms
- Effective Transmission Distance: 80m in open area
- Antennas: 5×PCB 600MHz Antennas + 1×PCB 2.4GHz Antenna

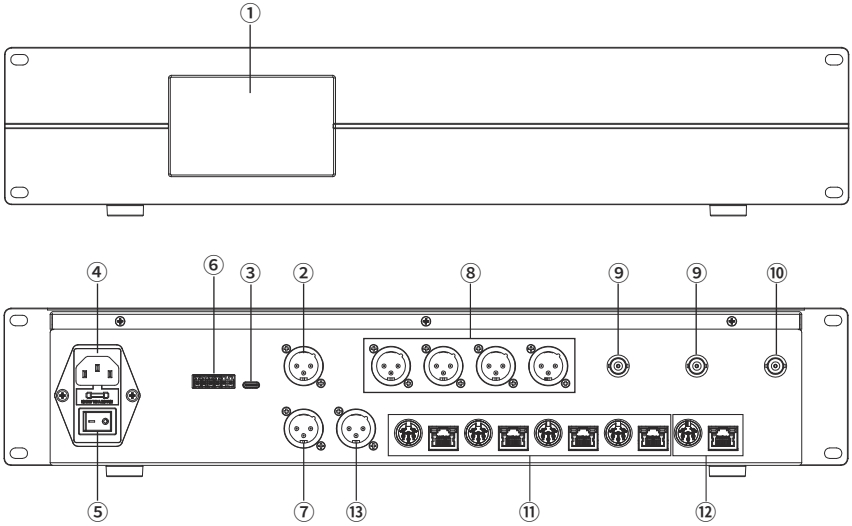
DG-H300 A1 Unit Base

- Frequency Response: 20Hz-20kHz
- Comprehensive S/N Ratio: >96dB
- Transmission latency: 1ms (wired)/4ms (wireless)
- Battery Capacity: 18650 lithium battery, 3.7V/3000mAh
- Interfaces: RJ45×2/6P-DIN×1
- Screen Size: 2.8 inches
- Battery Life: ⩾8hours
- Transmit Power: 3-50mW

Note: The above data are measured by Takstar laboratory which has the final interpretation right!

■ Function Descriptions

Conference Control Unit



① 4.3-inch Touchscreen

② MIX Audio Output: Main output channel

③ USB-C: Debugging interface (not yet open)

④ Power Interface: For connecting power cable to supply power

⑤ Power Switch: Toggle to turn power on/off

⑥ Video Tracking Interface: Supports RS485 transmission protocol

⑦ Wired Audio Output Port: Outputs only audio signals from wired units

⑧ Wireless Audio Output Port: Outputs only audio signals from wireless units, corresponding to speaking channels 1-4

⑨ 600MHz Antenna Connector: Communication antenna interface

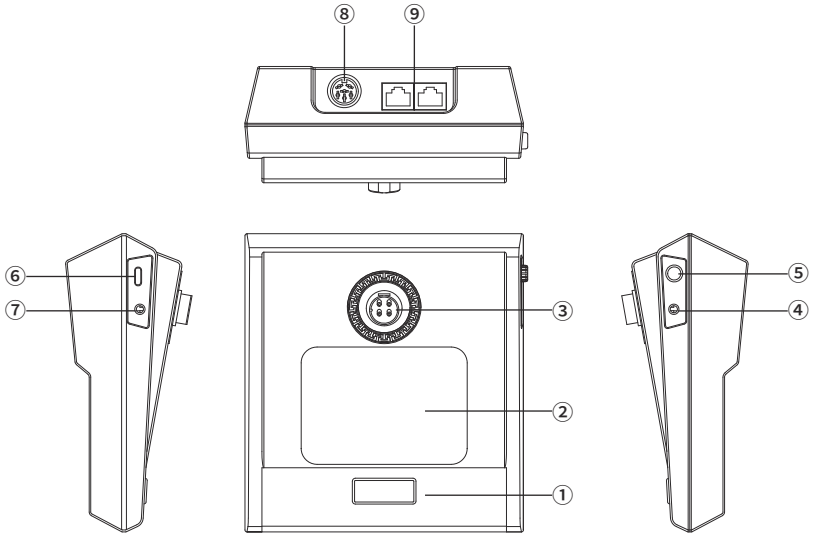
⑩ 2.4G Antenna Connector: Control antenna interface

⑪ Wired Unit Input Interface: For wired connection to unit devices

⑫ Wired Expansion Interface: For extended connection to wireless gateway AP

⑬ Microphone Input Interface: XLR interface, supports audio input

Conference Unit Base



① Talk Button: Short press to speak; long press to interrupt the attendee microphone (for chairman role).

② Display Screen: 2.8-inch screen

③ XLR Connector: A 4-pin connector for installing or replacing the microphone gooseneck.

④ Power Button: Long press to turn on/off; after entering the menu, short press this button to return and confirm.

⑤ Settings Button: Short press to enter the menu, rotate to adjust conference unit, transmit power, volume, etc.; press power button to confirm.

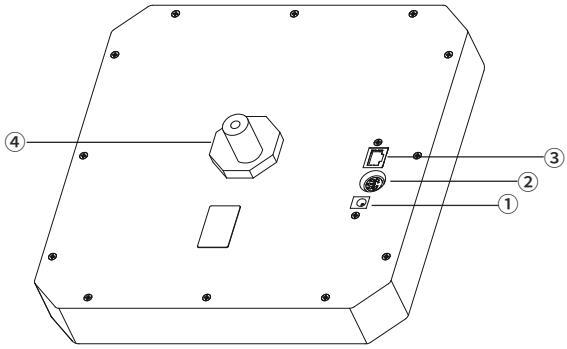
⑥ Charging Port: Type-C port, charging with 5V/1A specification

⑦ Monitoring Interface: 3.5mm headphone jack

⑧ 6P DIN Interface: Connect to the control unit via a 6P DIN cable.

⑨ RJ45 Interface: Connect to the control unit via an Ethernet cable.

Wireless Gateway



① DC Power Interface: For long-distance use, DC power supply provides stronger stability.

② 6P-DIN Interface: Connects 6-core cable for power supply and data transmission; 6-core cable length recommended within 70m.

③ RJ45 Network Port: Connects network cable for data transmission, supports POE power supply; recommended network cable length within 60m.

④ Bolt: Used for installing and fixing the metal hanger.

■ Operating Instructions

1. Role Description of Conference Terminals:

Chairman: Has speaking priority, controls the speaking rights of regular attendees, and can mute regular attendees.

VIP Attendees: Have speaking priority and cannot be muted.

Regular Attendees: Can take turns speaking when conditions permit.

2. Frequency Occupancy Instructions:

This system adopts "real-time monitoring and automatic frequency switching" technology. It will automatically scan the surrounding wireless environment and display the signal strength of all candidate communication frequencies (CH) of the conference system. The lower the value, the less interference on that frequency. For example: A frequency of -90dB is better

than -80dB. Generally, it is recommended to use frequencies below -70dB. When a unit base applies to speak, the system will automatically select the optimal frequency from the following 20 frequencies. Therefore, these 20 frequencies must not be used by other on-site devices to avoid affecting performance:

668.500 / 669.800 / 671.350 / 672.650 / 674.450 / 675.750 / 677.300 / 678.600 / 680.650 / 682.200 / 683.500 / 685.050 / 687.350 / 688.900 / 690.200 / 692.000 / 693.300 / 694.850 / 696.150 / 697.950 (MHz)

3. Connection of the Conference System

3.1 Connection between Unit Bases and the Conference Control Unit

The conference system control unit is equipped with a total of 4 RJ45 microphone unit interfaces and 4 6P-DIN conference unit input interfaces. The system comes with a standard cable with a male connector (6P-DIN interface), and the corresponding connecting cables are supplied with the base.

When connecting the control unit to a conference unit, simply connect the 6P-DIN male connector of the first conference unit to the control unit's output interface.

If the distance between the control unit and the conference unit is long, it is recommended to use a 6P-DIN extension cable—with a 6P-DIN male connector and a 6P-DIN female connector on each end.

Connect the 6P-DIN female connector of the extension cable to the standard 6P-DIN male connector cable or T-type connecting cable that comes with the conference unit. Then connect the 6P-DIN male connector of the extension cable to the control unit's output interface.

Connection between Unit Bases

When connecting a 6-core interface speaking unit to another conference unit, simply connect the horizontal male connector of its equipped 6-core T-type cable to a 6-core T-type female connector. When connecting an Ethernet port speaking unit to another conference unit, simply use two Ethernet cables and connect them in a daisy-chain manner.

3.2 System Configuration - Unit Registration

Wired registration method: After connecting all units, access the homepage UI of the control unit, click the menu button at the top right corner of the homepage UI to enter the menu

page. Select the "Members" section, click "Re-add", and touch the icon to enter registration mode. At this point, all microphone screens will display "Registering". Press the talk button on the unit base to complete registration. Once all unit bases are registered, they can be used.

Wireless registration method: Power on all wireless units, press the settings button on the side of the unit base to enter the settings menu. Rotate the settings button until the cursor lands on the registration icon, then press the power button – the unit base will enter registration status. Enable the registration mode on the control unit, and the unit bases will auto-register. They can be used once registration is complete.

3.3 Speech Mode and Setting of Number of Speakers

After all unit bases are successfully registered, access the homepage UI of the control unit, click the menu button at the top right corner of the homepage UI. On the menu page, select the "Conference" section to enter the conference mode settings, then configure the number of speakers and speech mode.

Explanation of Conference Modes

First-In-First-Out Mode: Set the number of speakers to n. When the (n+1)th person enters the speech channel, the first person who initially entered the speech channel will be automatically disconnected by the system.

Quantity Limit: Set the number of speakers to n. When the number of people in the speech channel reaches n, no other personnel will be allowed to join the speech channel—unless someone exits the speech channel.

The setting for the number of simultaneous speakers supports 1 to 4 people speaking at the same time.

4. Control Unit Menu Explanation

The control unit UI menu is divided into three main sections: System, Conference, and Members.

4.1 Explanation of System Section

Time Setting: Allows adjustment of the control unit system time, which will be automatically synchronized to the units.

Volume Setting: Enables setting the volume for wired mode, wireless mode, and wireless AP channel.

Display Setting: Allows adjustment of the control unit's screen brightness.

Camera Setting: Adjusts protocols used for camera tracking, etc.

Language Setting: UI text language, with Chinese and English available.

Version: Displays control unit version information.

Channel Setting: Wireless audio path. When an external wireless AP is connected, the audio path must be set to antenna box.

Management Channel: The control unit's signal channel. Different channels have different built-in frequency ranges. The default is channel 1. Switching channels can be attempted to avoid interference.

Debug Mode: Factory debug mode, not currently available.

4.2 Explanation of Conference Section

Mode: Allows adjustment of the number of speakers and speech mode.

Scan: The system scans the signal status of 20 frequency points in real-time, which is displayed in this section.

4.3 Explanation of Members Section

a. Members - Re-add

The system will deregister all members and rescan all wired and wireless terminal devices pending registration to complete registration. Member IDs will increment sequentially. Wireless conference terminal devices need to be in registration status; otherwise, registration of the wireless terminal device cannot be completed.

b. Members - Add Members

The system will scan all wired and wireless terminal devices pending registration to complete registration, with member IDs incrementing sequentially. No additional operation is required for wired conference terminals. Wireless conference terminal devices need to be in registration status; otherwise, registration of the wireless terminal device cannot be completed.

c. Members - Designated Add

The system will scan all wired and wireless terminal devices pending registration to complete the registration of one terminal device, with the ID set as designated. No additional operation is required for wired conference terminals. Wireless conference terminal devices need to be

in registration status; otherwise, registration of the wireless terminal device cannot be completed.

d. Members - Member List - All Members

This function supports one-time operations on the properties of all members.

Deregister: Deregisters all members.

Mute: Mutes all regular attending members; VIP members and members of the chairman are not affected.

e. Members - Member List - Individual Member

This function supports operations on the properties of a specific member.

Deregister: Deregisters this member.

Role Change: Changes the role of this member (requires cooperation from the terminal unit).

Mute: Mutes this member (this option is only available for regular attending members).

5. Camera Tracking Instructions

This device supports camera tracking function, which requires the corresponding camera to support the protocol for this function.

a. This device supports three protocols: VISCA, PELCO-D, and PELCO-P.

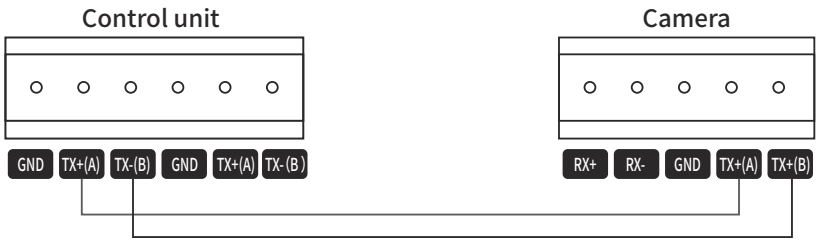
b. Connect the camera control signal cable to the 485 control interface of the control unit.

c. Select the required protocol in the control unit's camera menu. (If this option is not available, it indicates that the camera control unit will automatically adapt.)

d. Adjust the angle of each unit in the camera control menu and save the settings to enable the camera tracking function.

e. This camera tracking only supports the RS-485 transmission protocol.

Camera control diagram



6. Wireless AP Connection Method

Use an Ethernet cable/6-core cable to connect to the control unit's EXP wired expansion interface.

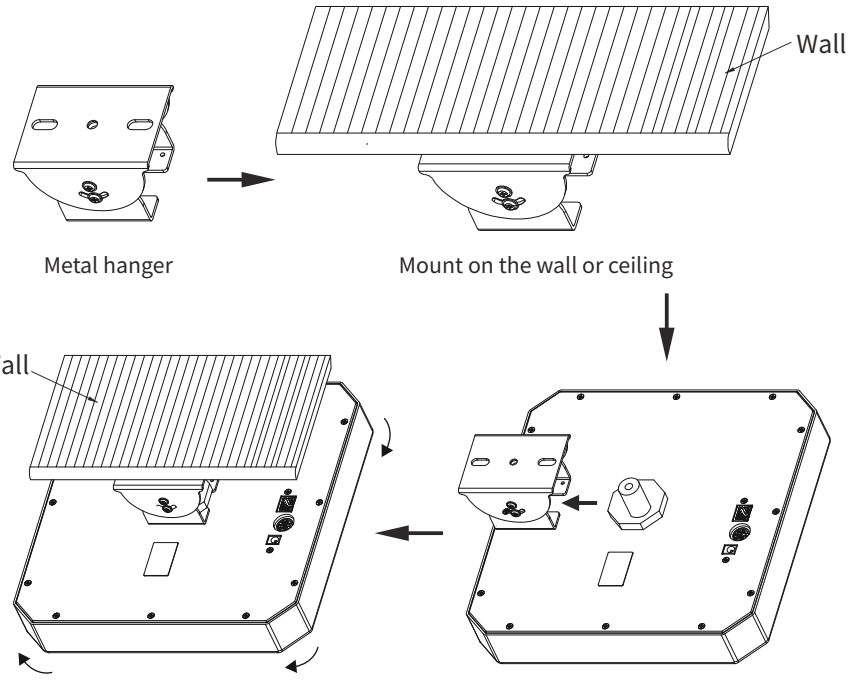
After connecting the AP, modify the settings in the control unit menu. The path is: "Configuration" - "System" - "Channel Management" - "Wireless Audio Path". Long-press to change to the "Wireless Gateway AP" option; the setting takes effect after restarting the device.

Installation Method

Method 1: Wall Mounting

1. Mount the supplied metal hanger on the wall or ceiling: mark the screw holes, pre-drill holes, insert expansion bolts, then tighten the screws to secure the hanger.

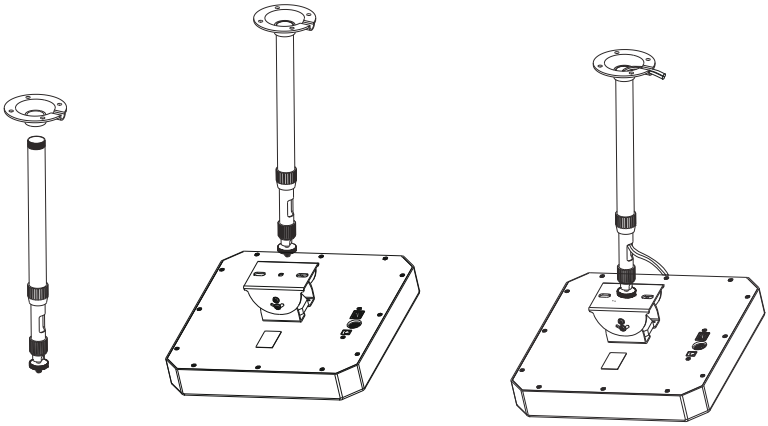
2. Clip the threaded rod of the Wireless Gateway AP into the U-shaped slot of the metal hanger, rotate the gateway until tight, and installation is complete.



Method 2: Ceiling Rod Mounting

1. If the ceiling has a suspended ceiling, you can choose the ceiling rod mounting method: fix the other end of the ceiling rod to the top of the wall. Thread the control unit's 6P-DIN connection cable or Ethernet cable through the ceiling rod tube, then feed through from the top to connect to the Wireless Gateway AP. Please refer to the diagram below:

2. The ceiling rod needs to be purchased separately; Takstar ST-60 ceiling rod is recommended.



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.
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 after-sales service for repair.
3. Power adapter used, if any, should be approved by CCC certification or similar standards and comply with the power supply requirements.
4. 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.
5. The product must, when installed on walls or ceilings, be fixed firmly in place at adequate strength to prevent from falling.
6. Please abide by safety rules during operation. Do not use the product in places prohibited by laws or regulations to avoid accident.
7. Do not disassemble or repair the product unauthorized to avoid injury. If you have any questions or require any services, please contact our local after-sales service.

Label Meanings

This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2012/19/EU) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (WEEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with WEEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

About This Manual

This manual contains up-to-date technical specifications as of printing. However, specifications contained herein may not conform to your particular product since Takstar is constantly improving its products. Also, specifications, devices or accessories available may vary from region to region. If you have any questions, please contact our local sales outlet. For the latest version/more information, please visit our website: https://www.takstar.com/

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（不包含港澳台地区）。

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

♦广东得胜电子有限公司 ♦电话：400-6828-333 ♦地址：广东省惠州市博罗县龙溪街道富康一路2号

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广东省电声工程技术研究开发中心
广东得胜电子有限公司制造
地址：广东省惠州市博罗县龙溪街道富康一路2号
服务热线：400 6828 333　传真：0752 6383950
邮箱：xs@takstar.com
网址：www.takstar.com

Guangdong Takstar Electronic Co., Ltd.
Address: No. 2 Fu Kang Yi Rd., Longxi Boluo
Huizhou, Guangdong 516121 China
Tel: 86 752 6383644　Fax: 86 752 6383952
Email: sales@takstar.com
Website: www.takstar.com