

# TAKSTAR® 得胜



## SP-16A/SP-16F

### 平板音箱

Planar Speaker

使用手册 | User Manual

# SP-16A/SP-16F 平板音箱

## ■ 前言

感谢您选购得胜电教系统SP-16A/F平板音箱,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

- 系统采用红外人体感应对频连接的对频器主机,有效绑定音箱与麦克风,不串频、不干扰;
- 超宽指向性(H175°×V175°),覆盖面广,偏离中轴线也可以欣赏到完整、真实的声音;
- 音箱采用平板喇叭,外形纤薄,简约大气不占空间,方便安装和摆放;
- 声音衰减小,声压级分布均匀,不会因距离而产生剧烈变化;
- 传统喇叭声音从锥形振膜喉部经过压缩后传播出来,因频率波长差异导致声音失真严重,而平板喇叭声音直接辐射且振动在一个平面,失真较小,保真度高。

## ■ 适用范围

适用于教学、会议室等场合

## ■ 产品配置

音箱 .....	1只
天线 .....	1根
适配器.....	1个
音频转接线.....	1条
壁挂安装螺丝.....	3颗
胶塞 .....	3个
壁架 .....	1套
说明书.....	1份

# SP-16A/SP-16F 平板音箱

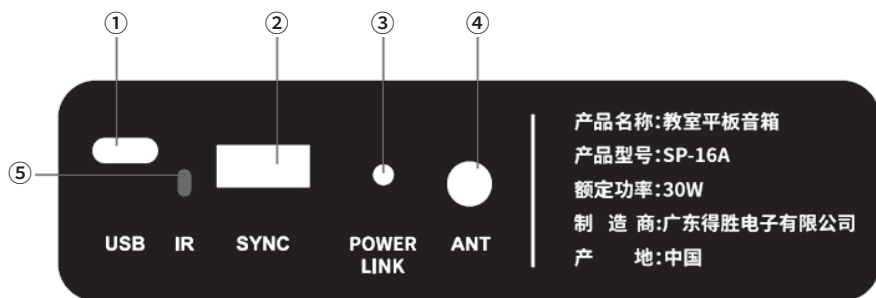
## ■ 技术参数

- 额定功率 (AES) :30W
- 频率响应:120Hz-10kHz
- 灵敏度:92dB
- 额定阻抗:4Ω
- 指向性:175°×175°
- 箱体板材:5mm夹板
- 安装方式:壁架、吊挂
- 表面处理:黑色/灰白色小点漆
- 产品尺寸:420\*320\*50mm
- 产品净重:约3.1Kg

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

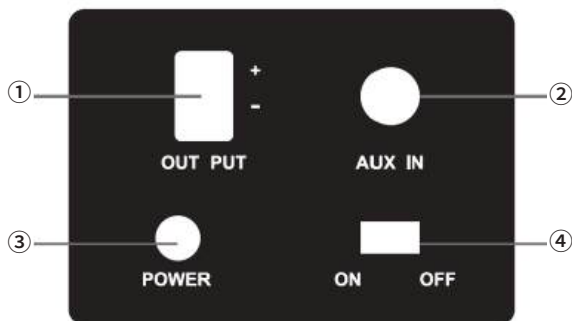
### 主音箱侧面板



- ① USB接口:用于音频处理调整,连接电脑调试音箱EQ。
- ② IR红外接收窗口:通过此窗口与红外对频主机同步系统设置(同步频率和地址码,有效距离1.5米以内)。
- ③ SYNC接口:用来与对频主机连接设置系统参数以及音箱输出音量。
- ④ 工作指示灯(POWER LINK):显示当前工作状态,开机未连接使用时,红灯常亮;关机状态时,指示灯灭;开机话筒连接使用中,常亮绿灯。
- ⑤ 天线接口(ANT):安装天线使用,接收来自麦克风发出的信号。

# SP-16A/SP-16F 平板音箱

## 主音箱后面板



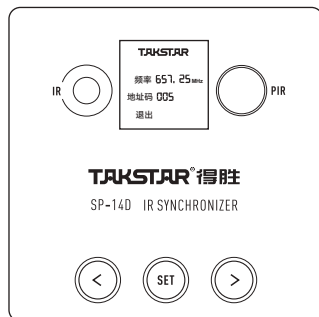
- ① 音频输出接口:采用凤凰插座接口,用于输出音频信号到副音箱(副箱根据实际环境大小选配)。
- ② 音频输入接口:Ø3.5mm立体声音频输入口,用来输入连接教学音频以及背景音乐。
- ③ 电源接口:连接产品附带的电源适配器给音箱通电。
- ④ 电源开关:开关拨动到“ON”位置开启电源,开关拨动到“OFF”位置关闭电源。

## ■ 使用说明

### 系统操作指引

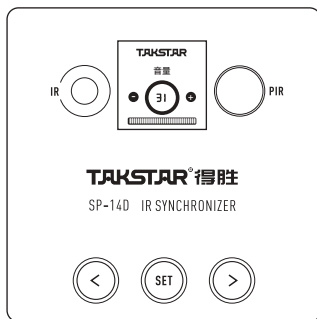
#### 一、系统设置

1. 通过附带的电源适配器给音箱通电并开机。
2. 使用USB转Type-C连接线连接音箱与红外对频主机(此时红外对频主机自动开机,且主界面中喇叭标识符常亮蓝色)。
3. 点按对频主机面板上的“SET”按键,进入系统设置界面,再次按动“SET”键可切换到下一项,选择“频率”或者“地址码”选项后,按动面板上的“<”或“>”按键可对系统频率以及地址码进行调节(可调频点数为99个,地址码范围为001-099),选择“退出”选项按动“<”或“>”按键确认当前设置并退出设置界面回到主界面,此时系统信息设置成功,音箱与对频主机信息绑定成功。



# SP-16A/SP-16F 平板音箱

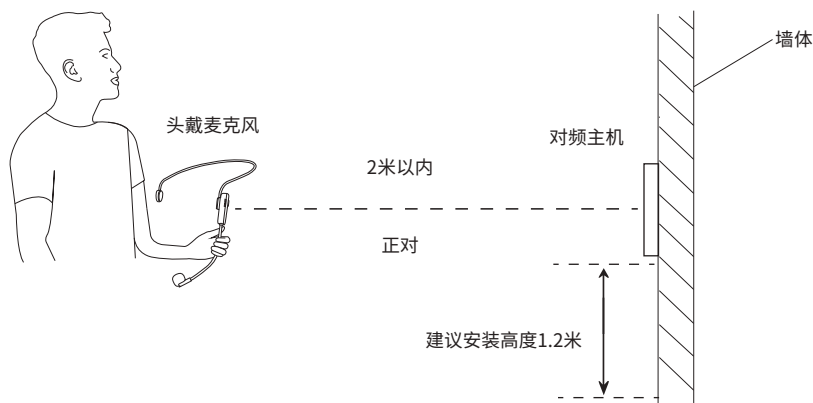
4. 音箱音量调节(出厂默认最大音量):用户可根据使用环境需求,对音箱输出音量进行设置,共31级音量大小可调节。先点按红外对频主机“<”按键,进入音箱音量设置界面,再次按动“<”或“>”按键,即可对音箱音量进行调节,点按逐级加减1级,长按连续变化到最大或者最小值。



注:音箱音量大小调节需在红外对频器安装施工前设置完成(即在线连接时)。

## 二、麦克风对频连接

1. 红外对频主机对频方式有两种:一种是红外人体感应自动对频,另一种是手动对频操作。
2. 对频主机在通电开机状态下,无线头戴或手持麦克风开机,麦克风将自动进入对频状态,同时显示屏中绿灯闪烁;人体正对靠近红外对频器,距离需保持在2米范围以内,此时对频主机主界面左上角出现红色指示灯闪烁,将麦克风显示屏正对红外对频主机,即可自动完成对频。



# SP-16A/SP-16F 平板音箱

3. 对频完成后,麦克风显示屏上指示灯由闪烁变为绿灯常亮;对频主机显示屏中红灯熄灭,话筒标识符号、话筒信号强度条、喇叭标识符号均绿色常亮,其中话筒音量进度条呈绿色闪动(根据话筒音量动态闪动)。

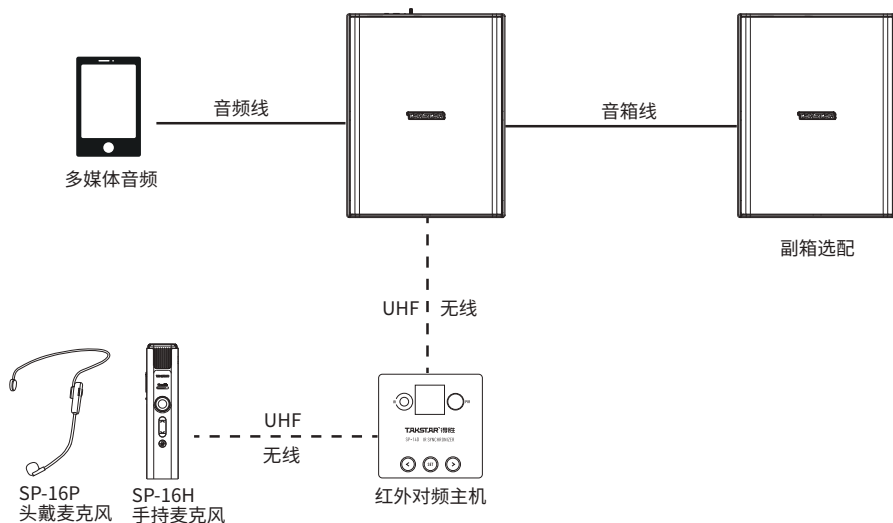
4. 如遇红外对频主机自动对频失败或特殊情况无法启动对频(主界面左上角无小红点指示灯闪烁),可以尝试手动对频。在对频主机通电开机状态下,直接点按面板上的“>”按键,主界面左上角将出现红色指示灯闪烁,将麦克风开机且显示屏正对红外对频主机完成对频。

5. 如需进行锁定/解锁操作,长按红外对频主机面板上的“SET”按键5秒,界面显示红色锁符,表示已锁定成功。如需解锁则再次长按“SET”按键5秒可进行解锁,红色锁符消失,变为绿色。

注:上述操作完成后,若在使用中存在干扰现象,可更换对频主机频率或者地址码退出回到主界面,然后将对频主机正面“IR”口对准音箱红外接收窗口(1.5米以内),进行更换系统频率和地址码(无需有线连接),当音箱红外接收“POWER LINK”指示灯闪烁红灯,表示系统信息更换成功,这样来系统避开干扰。

## 安装操作说明

### 一、平板音箱系统连接示意



# SP-16A/SP-16F 平板音箱

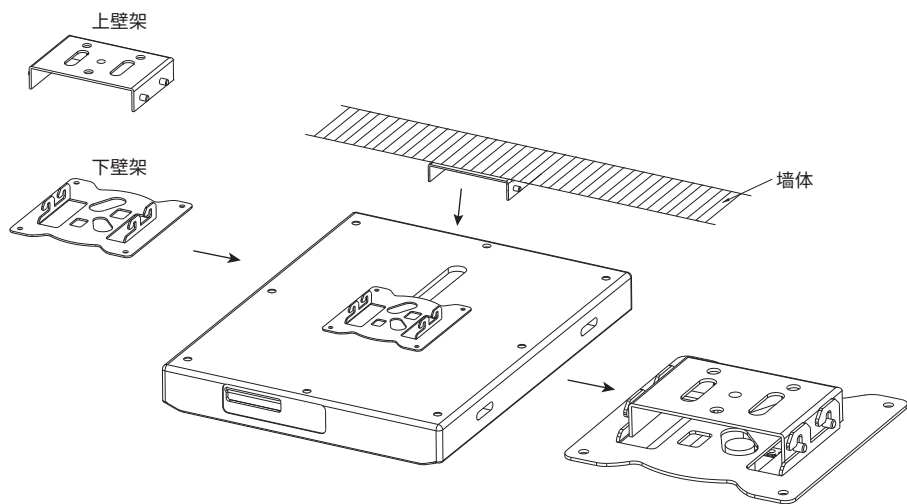
注:系统搭配方式:SP-14D红外对频主机1只、SP-16A平板音箱1只(SP-16F副箱选配)、无线麦克风若干(SP-16P无线头戴麦克风/SP-16H无线手持麦克风两种选择),鉴于使用场景及需求的不同,产品配置会相应调整。

## 二、平板音箱安装示意图

根据使用场景不同,平板音箱设计两种安装方式,一种是利用壁架直接锁墙上安装,一种是利用吊杆锁墙上(吊杆为选配件需另购)。

### 方式一:壁挂安装

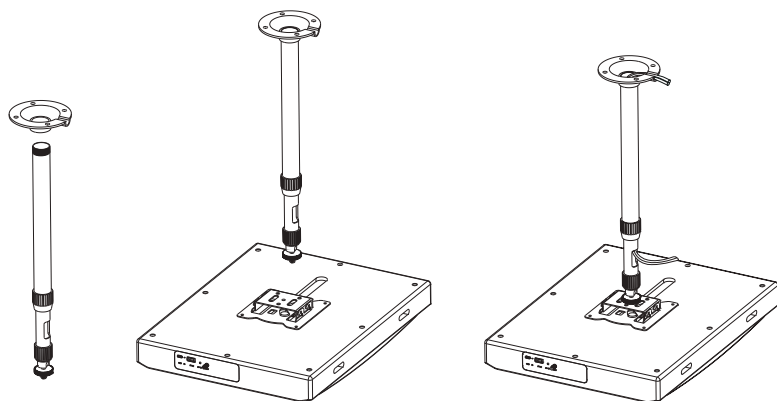
1. 音箱附带上下安装壁架一套,上安装壁架锁墙顶,下安装壁架锁在音箱上。
2. 将适配器电源插头接入音箱电源输入口,Ø3.5mm音频线转接头插入音箱音频输入口;如有需要搭配副箱使用,建议使用规格为0.68平方以下的音箱线接入音箱背部的凤凰接口。(注意正负极避免接反)
3. 拨动电源开关至“ON”处使音箱处于开启状态,并将上述线材整理好从音箱背部凹槽通过,再装回下安装壁架至音箱。
4. 选择6mm的合金冲击钻头,将钻头安装在冲击电钻上对准音箱上壁架安装点位进行钻孔,钻孔深度25mm(与壁挂胶塞长度一致),用胶锤把咬合胶塞敲打进孔位里直至与墙平整,接着把5mm的不锈钢自攻螺丝对准壁架3个孔位,用螺丝刀装入胶塞里面直至上壁架锁紧。
5. 将上壁架4个支点对准音箱下壁架滑槽处推至最内侧放开双手,音箱通过重力让支点落入音箱壁架4个凹槽处。安装完成后,手动检查音箱背部壁架与锁墙壁架的安装是否紧密牢固。如下图所示:



# SP-16A/SP-16F 平板音箱

## 方式二：吊杆安装

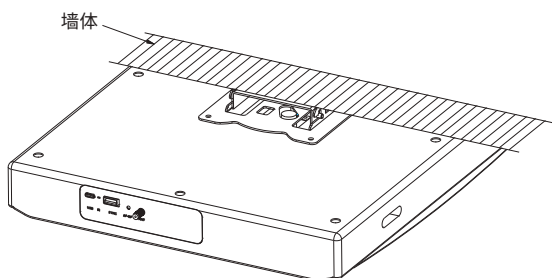
1. 如果墙顶安装了吊顶,可能需要选择使用吊杆安装方式,吊杆安装方式与壁挂基本相同,区别在于安装壁架直接拧在吊杆的螺杆上,吊杆的另一端则固定到墙顶上。连接线、电源线、音频输入线可穿入吊杆管体中,然后从顶部穿出。请参考如下示意图:



2. 选配件吊杆伸缩范围为30cm-60cm,如需其他规格吊杆请另行购买。

注:壁挂或吊杆安装时,主副箱安装方式相同,此处不再赘述。

## 三、平板音箱安装完成检查

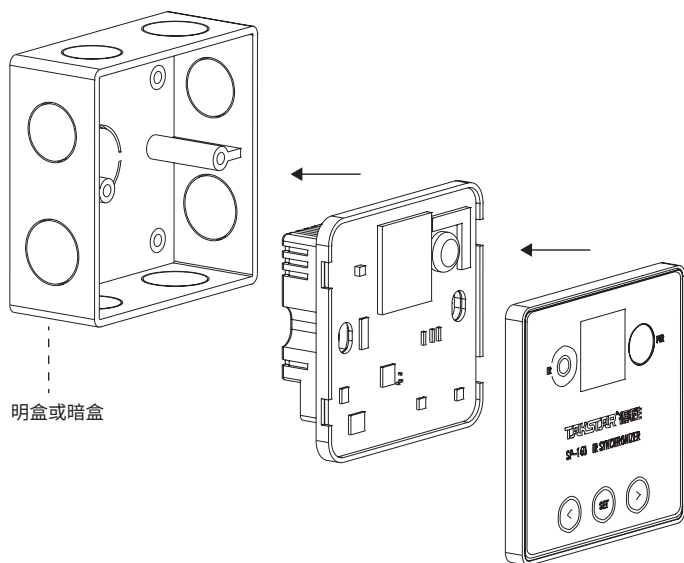


注:音箱安装完成后在重力作用下检查是否牢固,前后左右晃动音箱确保上壁架4个支点卡进下壁架最内侧卡点,再整理连接线、电源线、音频输入线(出厂配置350mm长3.5mm接口的音频转接线,如需延长线需客户根据实际情况另行购买)至合理位置,避免外漏。



# SP-16A/SP-16F 平板音箱

## 四、对频主机安装示意



1. 红外对频主机为标准86\*86mm隐藏式插座尺寸。
2. 选定好需要安装的位置(建议安装高度在1.2米左右),如需明装,需先固定好明盒(需自行购买)。
3. 安装方式与墙面隐藏式电源插座安装方式相同,安装时先取下对频主机面板,将220V交流电接入凤凰接口(注意L/N不要接反),安装板通过附带螺丝锁到暗盒或者明盒对应的螺丝柱,最后扣上面板完成安装。

# SP-16A/SP-16F 平板音箱

---

## ■ 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. 本产品及配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。

# SP-16A/SP-16F 平板音箱

---

## ■ 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 and 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>

版权所有 ©2024 得胜。得胜、TAKSTAR及其各自标志是广东得胜电子有限公司在中国和/或其他国家/地区的注册商标或商标。所有其它商标均是各自所有者的财产。

# SP-16A/SP-16F Planar Speaker

---

## ■ Preface

Dear Customer,

Thank you for purchasing Takstar SP-16A/F Planar Speaker. To better understand and use the product, please read this manual thoroughly. If you have any questions or suggestions, please contact our local sales outlet.

## ■ Features

- Pairs with infrared human body sensing synchronizer for hassle-free auto sync.
- Ultra-wide directivity H175°×V175° for complete, off-axis coverage.
- Slim, minimalist planar design for easy installation and placement.
- Minimal sound attenuation for even distribution of sound pressure.
- Planar speaker technology for lower distortion and higher fidelity. Planar speakers radiate sound directly from a flat, vibrating surface, unlike traditional speakers where sound waves are compressed through a constricted throat which can lead to significant distortion, especially at different frequencies, due to the difference in wavelengths.

## ■ Applications

For educational settings, conference rooms, etc.

## ■ Package Contents

1 × Speaker	1 × Antenna	1 × Power Adapter
1 × Audio Adapter Cable	3 × Wall Screw	3 × Wall Anchor
1 × Wall Bracket Set	1 × User Manual	

# SP-16A/SP-16F Planar Speaker

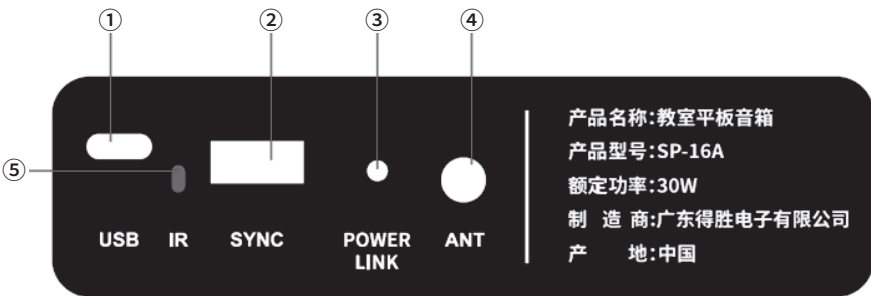
## ■ Specifications

- Rated Power (AES): 30W
- Frequency Response: 120Hz-10kHz
- Sensitivity: 92dB
- Rated Impedance: 4Ω
- Directivity: 175°×175°
- Enclosure Material: 5mm Plywood
- Mounting Options: Wall Bracket, Suspension
- Surface Finish: Black/Gray-White Small Dot Paint
- Product Dimensions: 420\*320\*50mm
- Product Net Weight: About 3.1Kg

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

## ■ Function Descriptions

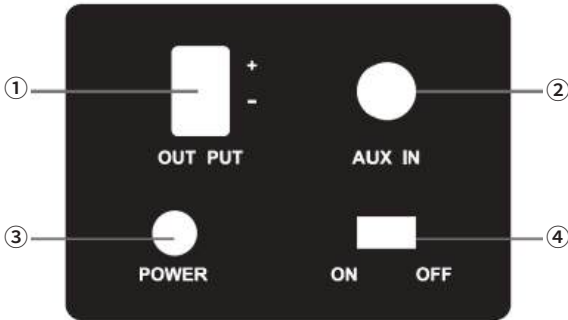
### Main Speaker Side Panel



- ① USB Interface: Used for connecting to a computer for speaker EQ calibration.
- ② IR Infrared Receiver Window: Synchronizes system settings (frequency and address code) with the IR synchronizer (within an effective range of 1.5 meters).
- ③ SYNC Interface: Connects to the synchronizer to set system parameters and adjust speaker output volume.
- ④ POWER LINK Indicator: Displays the current operating status. Light off when powered off; red when powered on and no mic is connected, and turns green when mic is connected.
- ⑤ ANT Antenna Interface: Used for antenna installation to receive signals from the mic.

# SP-16A/SP-16F Planar Speaker

## Main Speaker Rear Panel



- ① Audio Output Interface: Utilizes a Phoenix connector to output audio signals to the secondary speaker (secondary speaker is optional based on actual environment size).
- ② Audio Input Interface: Ø3.5mm stereo audio input port for connecting teaching audio and background music.
- ③ Power Interface: Connects to the provided power adapter to supply power to the speaker.
- ④ Power Switch: Toggle the switch to ON or OFF position to power on or off respectively.

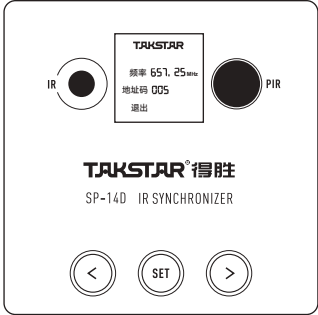
## ■ Operating Instructions

### System Operation Guide

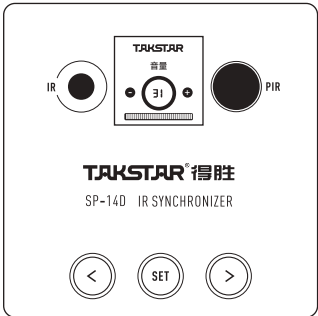
#### I. System Setup

1. Connect the speaker to power using the provided power adapter and turn it on.
2. Connect the speaker to the IR synchronizer using the USB Type-C cable (the IR Synchronizer will automatically turn on, and the speaker icon on synchronizer screen illuminates blue).
3. Press the SET button on the synchronizer panel to enter the system setup interface. Press the SET button again to switch to the next option. Use the < or > buttons on the panel to adjust the system frequency and address code (frequency can be adjusted in 99 steps, address code ranges from 001-099). Choose the Exit option and press the < or > buttons to confirm the current settings and exit the setup interface. At this point, the system parameters are successfully configured, and the speaker is successfully linked to the synchronizer.

# SP-16A/SP-16F Planar Speaker



4. Speaker Volume Adjustment (factory default maximum volume): Users can adjust the output volume of the speaker according to their use cases. There are 31 levels of volume adjustable. Press the < button on the IR synchronizer to enter the speaker volume setting interface. Press the < or > buttons again to adjust the speaker volume. Press once for incremental adjustment by 1 level, or press and hold for continuous adjustment to the maximum or minimum value.

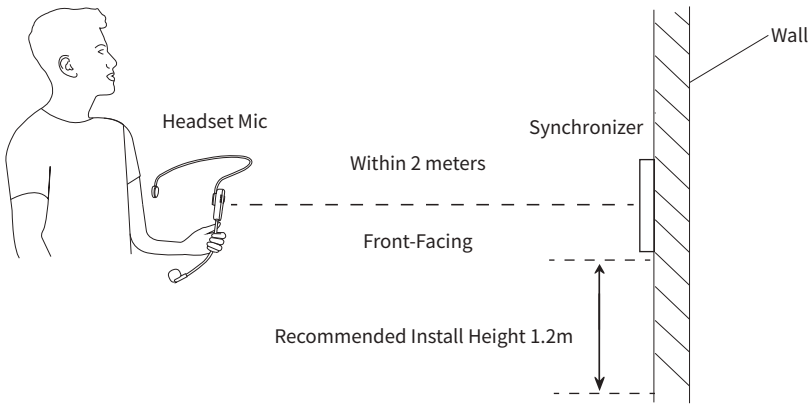


Note: Speaker volume adjustment should be completed before installing the IR synchronizer (i.e., when connected via Type-C cable).

# SP-16A/SP-16F Planar Speaker

## II. Mic Synchronization

1. There are two ways to synchronize with the IR synchronizer: automatic sync using infrared body sensing or manual sync.
2. With the synchronizer powered on, turn on the wireless headset or handheld mic. The mic will enter sync mode automatically, indicated by a flashing green light on its display screen. Stand within 2 meters in front of the IR synchronizer. A flashing red light will appear on the synchronizer's main interface. Align the mic display screen with the IR synchronizer to complete automatic sync.



3. Once sync is complete, the green light on the mic display screen will turn steady. The red light on the synchronizer's display screen will go off, and the mic symbol, signal strength indicator, and speaker symbol will all be displayed in steady green. The mic volume meter will fluctuate in green (in sync with the mic volume level).
4. If automatic sync fails or in special circumstances where automatic sync is not possible (no flashing red light indicator in the top left corner of the main interface), manual sync can be attempted. With the synchronizer powered on, press the > button on the panel. A flashing red light will appear in the top left corner of the main interface. Turn on the mic and align its display screen with the IR synchronizer for manual sync.
5. To lock/unlock operation, press and hold the SET button on the IR synchronizer panel for 5 seconds. The interface will display a red lock symbol when locked and a green symbol when unlocked.

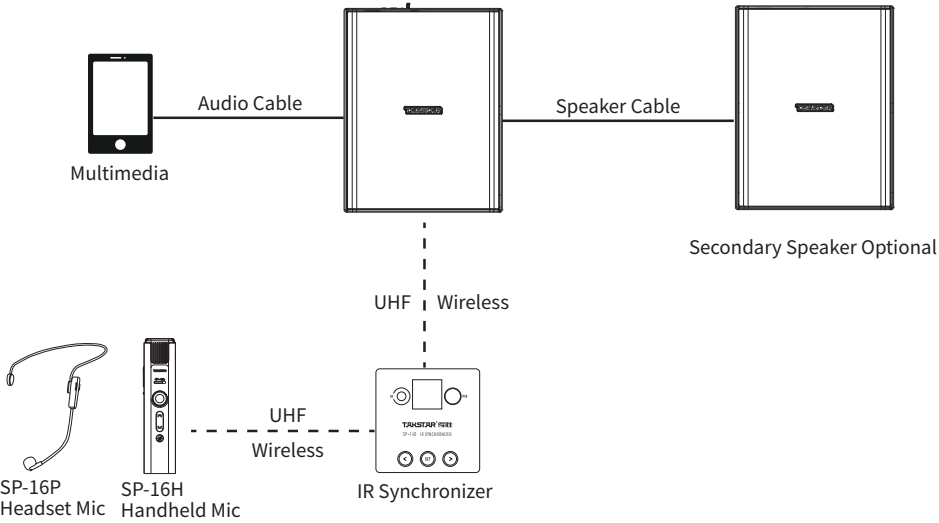


# SP-16A/SP-16F Planar Speaker

Note: If there is interference during use, change the frequency or address code of the synchronizer to avoid interference. Align the front IR window of the synchronizer with the infrared receiver window of the speaker (within 1.5 meters). Change the system frequency and address code directly (wired connection not required). When the POWER LINK indicator on the speaker flashes red, it indicates successful system parameter update.

## Installation Instructions

### I. Planar Speaker System Connection Overview



Note: The typical configuration includes one SP-14D infrared synchronizer, one set of SP-14 wall speakers, and several wireless mics (choose between SP-16P wireless headset mic or SP-16H wireless handheld mic).

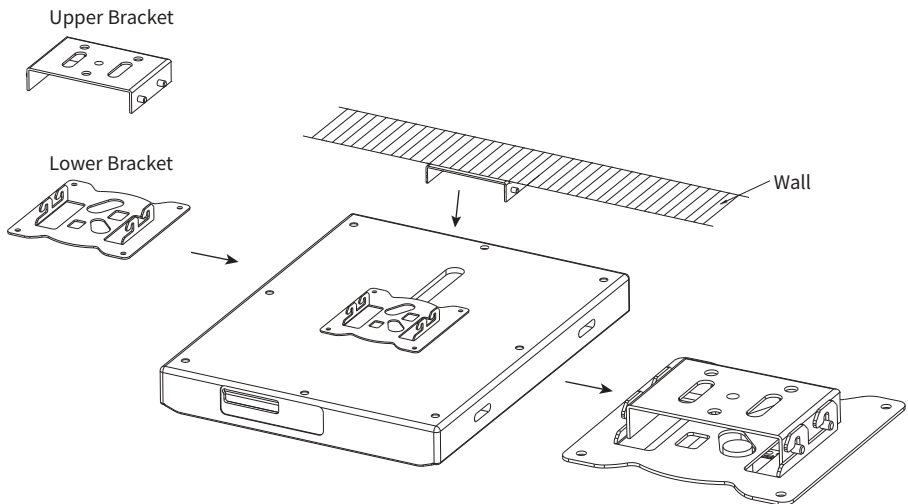
# SP-16A/SP-16F Planar Speaker

## II. Planar Speaker Installation Diagram

The planar speaker offers two installation methods: wall bracket installation and suspension rod installation (suspension rod is an optional accessory and needs to be purchased separately).

### Method 1: Wall Bracket Installation

1. The speaker comes with an upper and lower wall bracket set. Attach the upper bracket to the wall and secure the lower bracket to the speaker.
2. Connect the adapter power plug to the speaker's power input port, and insert the  $\text{\O}3.5\text{mm}$  audio cable into the speaker's audio input port. If using a secondary speaker, connect a speaker cable with a recommended diameter below  $0.68\text{ mm}^2$  to the phoenix interface on the back of the speaker. (Ensure correct polarity to avoid reverse connection.)
3. Switch on the power button to activate the speaker. Organize the cables through the groove on the back of the speaker and assemble the lower bracket onto the speaker.
4. Use a 6mm alloy impact drill bit to drill holes with a depth of 25mm (same as the length of the wall anchor) on the wall, guided by the upper wall bracket installation points. Insert wall anchors into the holes, then secure the upper bracket onto the wall with stainless steel screws.
5. Align the four support points of the upper bracket with the grooves on the lower bracket. Push it in and slide sideways to lock in place. Check the tightness and stability of the brackets.

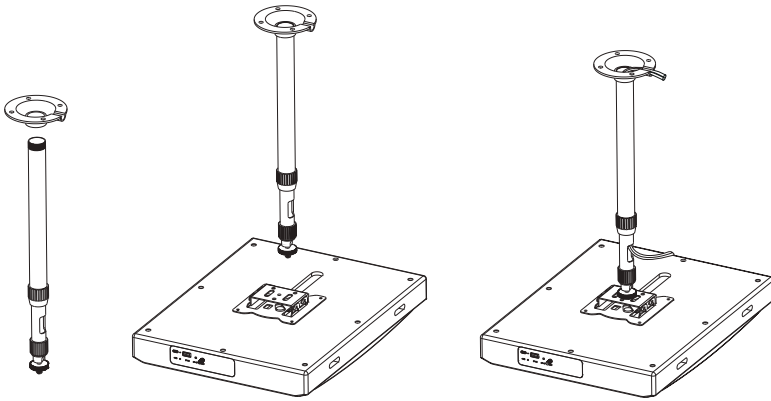


# SP-16A/SP-16F Planar Speaker

---

## Method 2: Suspension Rod Installation

1. If there is a suspended ceiling on the roof, you may choose to use the suspension rod installation method. The installation is similar to the wall bracket method, except that the upper bracket is screwed onto the rod instead of the wall, and the other end of the rod is fixed to the ceiling. The connection cable, power cable, and audio input cable can be threaded through the suspension rod body and then pulled out from the top.

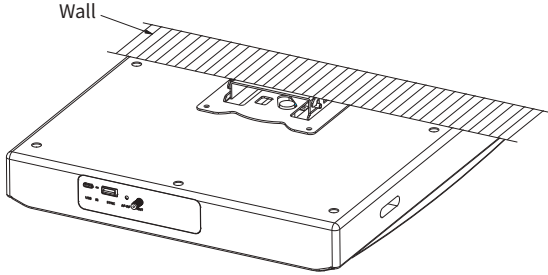


2. The optional suspension rod has an adjustable reach of 30cm-60cm. If you need a different size suspension rod, please purchase it separately.

Note: The installation method for the main and secondary speakers is the same for both wall bracket and suspension rod installation.

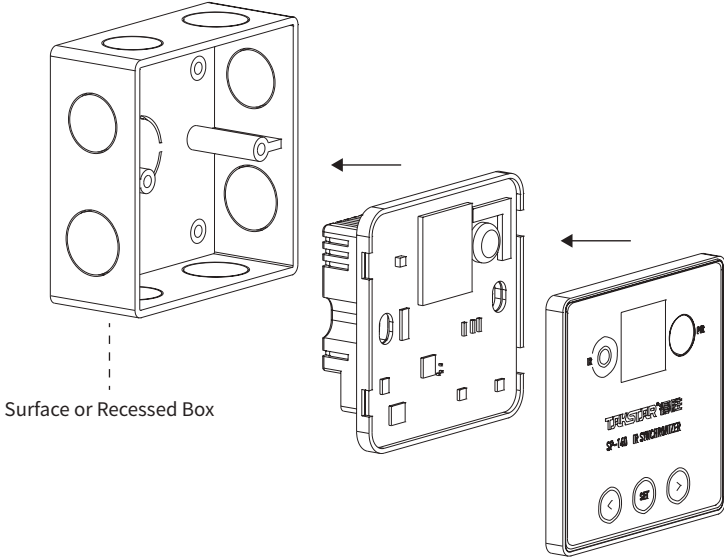
# SP-16A/SP-16F Planar Speaker

## III. Post-Installation Inspection for Planar Speakers



Note: After securely fastening the speaker, check if it is properly hung in place under the force of gravity. Ensure that the four support points of the upper wall bracket are securely inserted into the inner grooves of the lower bracket. Organize the connection cables, power cord, and audio input cable (audio cable needs to be purchased separately) to a suitable position to prevent exposure.

## IV. IR Synchronizer Installation Overview



# SP-16A/SP-16F Planar Speaker

---

1. The infrared frequency synchronizer is designed to fit a standard 86\*86mm recessed socket.
2. Choose an appropriate installation location (recommended height around 1.2 meters). If surface-mounted, install a suitable surface-mount electrical box (to be purchased separately) first.
3. The installation method is the same as that of a recessed power outlet on the wall. Remove the panel of the IR synchronizer, connect the 220V AC power to the phoenix connector (ensure correct L/N polarity), secure the plate using the provided screws onto the corresponding screw column of the mounting box (recessed or surface-mounted), and finally, attach the panel to complete the installation.

## ■ 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 by yourself to avoid injury. If you have any questions or require any services, please contact our local after-sales service.

# SP-16A/SP-16F Planar Speaker

---

## ■ 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/>

Copyright ©2024 TAKSTAR. TAKSTAR, 得胜 and their respective logos are registered trademarks or trademarks of Guangdong Takstar Electronic Co., Ltd. in the PRC, and/or other countries. All other trademarks are the property of their respective owners.

## 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（不包括港澳台地区）。

# 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



扫一扫，了解更多产品  
Scan for more  
product information

## **广东省电声工程技术研究中心 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