Yealink Network Technology CO., LTD

Yealink VC880 Full HD Video Conferencing System Quick Start Guide

V40.10

Applies to firmware version 63.40.0.10 or later

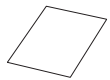
English | 简体中文

Package Contents

VC880 Codec

VCR11
Remote Control

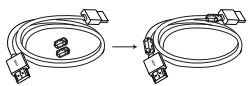
AAA Battery×2



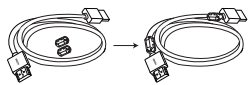
VCR11
Quick Reference Guide

VCH50 Video
Conferencing Hub

1.2m
Mini-DP Cable
(for content sharing)

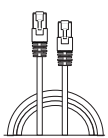


1.2m
HDMI Cable
(for content sharing)

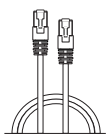


1.8m
HDMI Cable×2
(for display device)

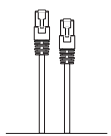
Cable Tie×5



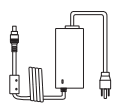
7.5m
Ethernet Cable



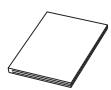
3m
Ethernet Cable



0.5m
Ethernet Cable



Power Adapter

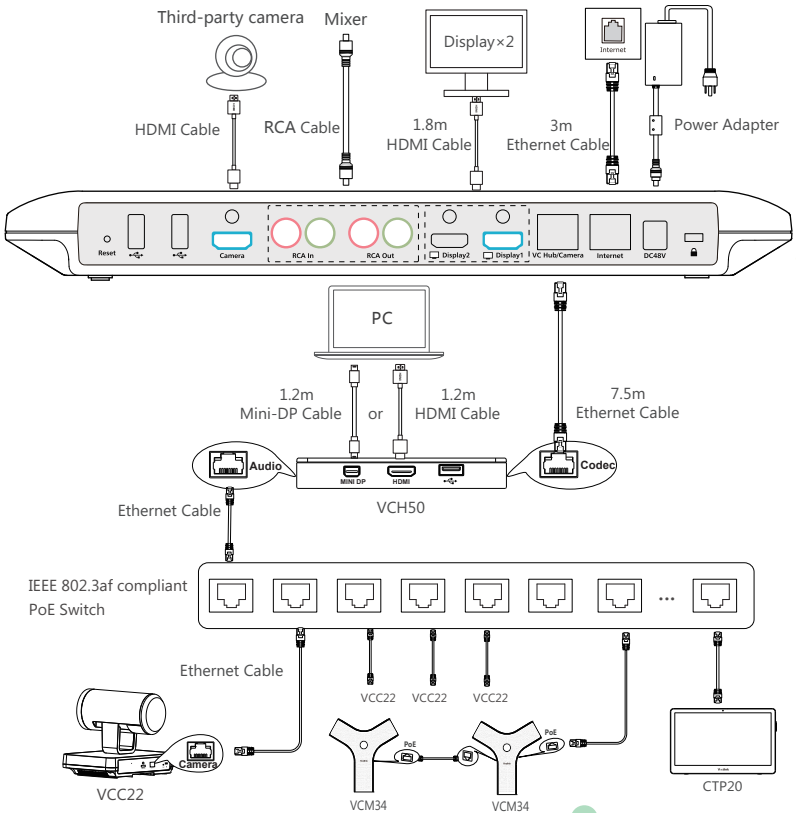


VC880
Quick Start Guide

We recommend that you use the accessories provided or approved by Yealink. The use of unapproved third-party accessories may result in poor performance.

Put the magnet rings on the HDMI cable to prevent electromagnetic interference.

Connections



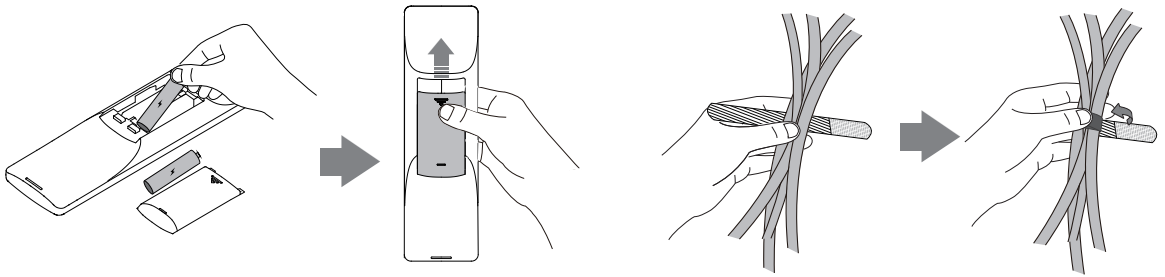
The system should be used with Yealink original power adapter (48V/0.7A) only. The use of the third-party power adapter may damage the system. The cable should be replaced at once if its skin is broken.

The system can connect up to 9 VCC22 video conferencing cameras.

VCC22 video conferencing cameras, VCM34 video conferencing microphone array, CTP20 collaboration touch panel, PoE switch and Ethernet cables should be purchased separately. In order to ensure the best network signal, please purchase UL certified CAT5E Ethernet cables and recommended PoE switch. The maximum length of each Ethernet cable is 100 meters. Contact the agents or hotline support to get the recommended PoE switch models.

If you do not need wired sharing, VCH50 video conferencing hub is unnecessary.

Remote Control and Cable Ties Installation



Network Environment

Bandwidth Requirements

Video Resolution	Recommended Bandwidth
Full HD 1080P	1.3Mb
People 1080P+Content 1080P	2.6Mb

Both downlink bandwidth and uplink bandwidth should meet above requirements.

The bandwidth mentioned above is based on a two-way call. Bandwidth in head office should be increased along with the growing number of connected branch offices.

Network Deployment

Choose Cloud deployment or traditional deployment according to your need.

Cloud Deployment

Cloud deployment does not need complex network settings. You only need to get account information from your system administrator, and log into video conference platform.

Do the following to log into video conference platform via remote control:

1. Select **More**->**Setting**->**Advanced** (Default Admin Password:0000)->**Video Conference Platform**.
2. In the **Cloud Account** field, check the **Enabled** checkbox.
3. Select the desired platform from the pull-down list of **Platform Type**.
4. Configure the desired platform and log in.

Traditional Deployment

If you deploy the system in the head office, make sure it is reachable from public network.
If you deploy the system in the branch office, use intelligent traversal to deploy it or just follow the same steps as for the head office.

Head Office

If you deploy the system in the head office, at least one static public IP address is required to allow branch offices to connect.
Do one of the following to deploy the system:
Option1: Assign a static public IP address to your system.
Option2: If you deploy the system in an Intranet (behind the firewall), assign a static private IP address to it and do port mapping on the firewall.

Configure a Static IP Address

The following introduces how to use the remote control to configure a static IPv4 address:
1. Select **More**->**Setting**->**Advanced** (Default Admin Password: 0000)->**Wired Network**.
2. Select **IPv4** from the pull-down list of **IP Mode**.
3. Select **IPv4** , and then press OK key.

4. Uncheck the **DHCP** checkbox.
5. Enter the IP address, subnet mask, gateway and DNS information in corresponding fields.
6. Save the change.
   The display device prompts “Reboot now?”.
7. Select OK to reboot the system.

Configure Port Mapping

If you deploye system in an Intranet, you must forward the following ports to the public network on the firewall, so that your system can receive a public-to-private call.

Function	Port	Protocol Type
H.323 signal port	1719-1720	UDP/TCP
Audio & Video media stream port	50000-51000	TCP/UDP
Web management port（optional）	443	TCP
SIP（optional）	5060-5061	TCP/UDP

Branch Office

If you deploy the system in the branch office, do one of the following to deploy it:

Option1: Deploy the system following the same steps as for the head office. In this way, both inbound and outbound calls are available.

Option2: Deploy the system using intelligent traversal. You only need to assign a private IP address to your system. Make sure this private IP address can access the public network. Only outbound calls are available when using this method.

When you use intelligent traversal to deploy your system, you have to open following ports on your firewall if they are restricted.

Function	Port	Protocol Type
H.323 signal port	1719-1720	UDP/TCP
Audio & Video media stream port	50000-51000	TCP/UDP
SIP（optional）	5060-5061	TCP/UDP

It is recommended that you forward the web management port(443/TCP) to the public network, so that the head office can remotely manage the branch office.

Troubleshooting

Testing Connectivity

After installation and deployment, you can test the system by dialing the Yealink Demo Room (117.28.251.50 or 117.28.234.45). If you can't dial out successfully, please contact your IT administrator to check the network.

Configuring Static NAT

If you do not use Cloud platform and deploy your system in an Intranet, you have configured port mapping on the firewall or gateway, but you find that local system appears black screen and you cannot hear sound when you call Yealink Demo or other systems. The most likely reason is that the firewall or gateway in your environment does not support the ALG feature. In this situation, please enable static NAT feature on the system to solve this problem.

To configure static NAT via the remote control:

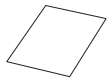
1. Select **More**->**Setting**->**Advanced** (Default Admin Password:0000)->**NAT/Firewall**.
2. Select **Auto** from the pull-down list of **Type**, the system will obtain public IP address automatically.
3. If the system does not obtain a public IP address automatically, select **Manual Settings** from the pull-down list of **Type**, and then enter the public IP address in the **Public IP Address** field.
4. Save the change.

包装清单

VC880主机

VCR11遥控器

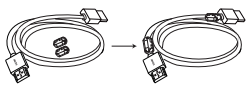
7号电池 ×2



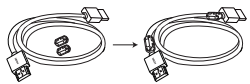
VCR11使用说明单页

VCH50接线盒

1.2米Mini-DP线
（用于分享辅流）

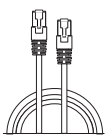


1.2米HDMI线
（用于分享辅流）

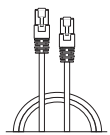


1.8米HDMI线x 2
（用于接显示设备）

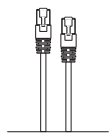
束线带 x5



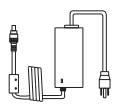
7.5米网线



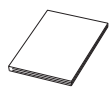
3米网线



0.8米网线



电源适配器

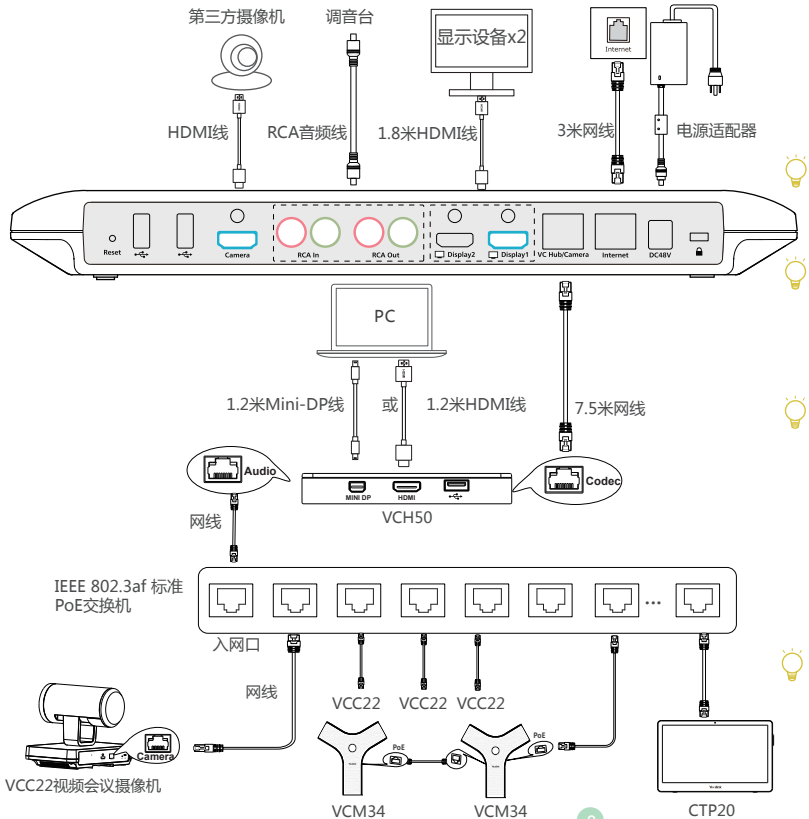


快速入门指南

我们推荐使用由Yealink提供或经Yealink认可的配件和线缆，使用未经认可的第三方配件和线缆可能会导致性能的下降。

使用HDMI线前，请套上磁环用于抗电磁干扰。

连接终端



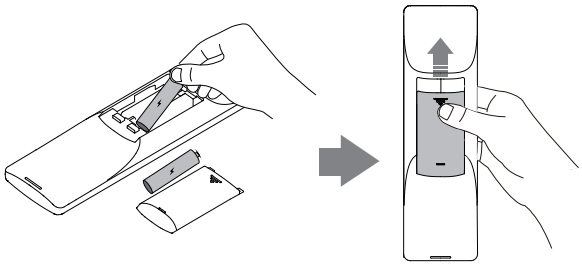
我们要求使用Yealink原装电源（48V/0.7A），使用第三方电源可能会导致终端损坏。如果使用过程中发现线缆破皮，请立即更换。

终端最多可连接9台VCC22视频会议摄像机。只连接一台VCC22视频会议摄像机时，你可以将VCC22的Camera口直接连在VCH50接线盒的Audio接口上。

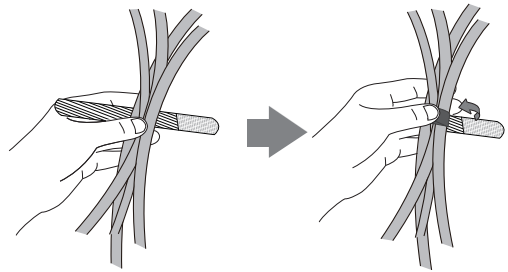
VCC22视频会议摄像机、PoE交换机、VCM34可级联阵列麦克风、CTP20协作触控平板和相关网线需要另外购买。为确保最佳的网络信号，请购买通过UL认证的CAT5E网线及亿联推荐的PoE交换机。每根网线的长度最大可支持100米。亿联推荐的PoE交换机型号，请联系代理商或拨打技术支持热线咨询技术人员。

如果你无需使用VCH50进行演示，可以不用连接VCH50接线盒。

安装遥控器电池



使用束线带

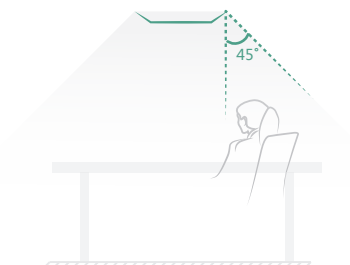


视频会议室部署

视频会议室的部署可分为如下几个模块：光线、摄像机放置、拾音/声音播放、画面显示、接线。以下是针对这些模块的具体建议，在会议室装修与视频会议设备部署的过程中可参考以下内容取得更佳的视频会议效果。

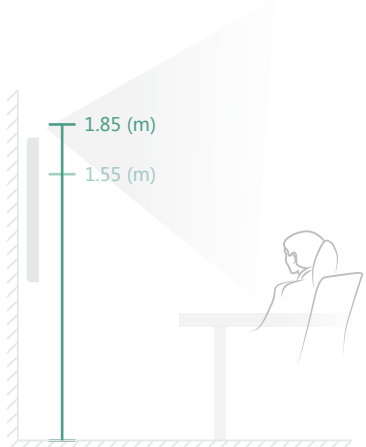
光线

- 会议室的灯光应更多地聚焦在会议桌与参会人的位置，以 45° 斜照向参会人面部是较为理想的光照条件。
- 如会议室原有的光线不足可考虑加装平面光源，色温以4000~5000k，光照强度以300~500lux为宜。光线充足与否可以视频画面中面部肤色是否真实还原作为评判标准。
- 即使会议室采光条件良好，也建议在会议过程中打开会议室灯光，以确保会议桌与参会人区域有充足且均匀的光照度。
- 摄像头避免正对强光源，例如窗户。以免出现人物图像逆光现象。如果摄像头不可避免地朝向窗口，可装配窗帘。



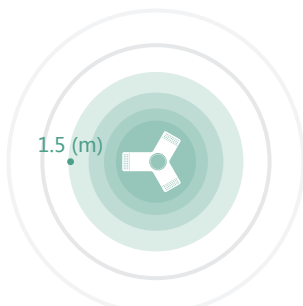
摄像机放置

- 根据实际的会议室情况，摄像头安装高度建议在 1.55~1.85 米之间。如果是较大型的会议室/会场则不受限于此建议高度，可根据被摄物体距离确定摄像头高度。
- 建议将摄像头放置于电视顶部水平居中的位置。如果显示设备较大（大于80寸）或应用了拼接屏，可考虑将摄像头固定在显示设备下方，但应高于会议桌高度。
- 为提升视频会议中的眼神交流与互动感，尽可能将摄像头靠近显示对方视频画面的屏幕。
- 投影+电视作为显示设备的情况下，将电视架推车尽可能靠近投影幕布，摄像头放置于电视上靠近投影幕布的一侧。
- 面积较大的会议室/会场可考虑吊顶倒装摄像头，但需避免摄像头直接安装于天花板推荐使用吊架降低摄像头高度。需注意摄像头高度/角度调节范围相对第一排参会者距离的关系。以摄像头离地 2.5m 为例，第一排参会者与摄像头的距离应至少 2m 为宜。
- 如需多角度画面或更广的视角范围，可选购扩展摄像头 VCC22。



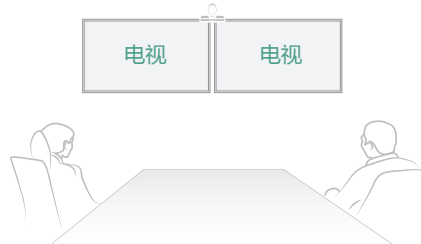
拾音/声音播放

- 参会者与麦克风的距离在0.5~1.5m范围内可获得最佳的拾音效果。
- 当会议室面积大于50㎡或会议桌长于4m时建议配备扩展麦克风或采用多个麦克风。
- 会议电话的内置扬声器通常能够满足60㎡以下会议室的需求。当会议室面积大于60㎡时可考虑级联会议电话或连接外部音响，确保声音有效覆盖所有参会人。
- 如使用电视扬声器播放声音，将电视音量调整到合适的大小，避免音量过大出现破音。麦克风应与电视保持一定距离，建议大于2m。



画面显示

- 因投影仪的显示效果相对较差且容易受到光照情况影响，所以建议使用液晶电视作为视频会议的显示设备。如需同时使用电视和投影仪，尽可能将电视放置在靠近投影仪的位置，减少视线跨度。
- 由于投影效果易受光照情况影响，在使用投影仪时应尽可能减少照射向投影幕的灯光，增加参会者区域的光照度。
- 如果使用辅流的需求较多，建议使用双屏显示，如此可同时全屏观看视频画面与辅流内容。



线材

- 尽可能选择具备线材收纳功能的会议桌，以确保桌面整洁。
- 如果会议室未进行走线设计，电视至桌面的线材可使用金属线槽贴地走线。
- 遇到线长不够需要更换线材或需要转接的情况，请联系代理商或拨打技术支持热线咨询技术人员确定线材规格，避免自行配线影响使用效果，甚至造成不必要的损失。

网络快速部署

网络带宽需求

视频分辨率	建议带宽需求
全高清视频1080P	1.3Mb
人像1080P+内容1080P	2.6Mb

终端所需网络带宽需求为上下行带宽需求，网络的上行带宽及下行带宽均需要满足需求

以上带宽需求为两方通话的带宽需求，主会场带宽需要根据分会场数量进行相应的增加

网络部署

你可以使用云服务方式或传统方式部署终端。

• 云服务方式部署

云服务方式部署无需复杂的网络配置，登录云平台就可以实现各会场间的互联互通。账号信息请从管理员处获取。

通过遥控器登录平台：

1. 选择**更多**->**设置**->**高级设置**（默认密码：0000）->**视频会议服务平台。**
2. 勾选**启用云功能**复选框。
3. 从**登录平台**下拉框中选择你想要登录的平台。
4. 填写平台登录的相关信息并登录。

传统方式部署

请根据你的会场所处的角色进行设置，主会场必须公网可达，分会场可参考主会场设置或采用智能穿透方式部署。

部署主会场

如果将终端部署在主会场，则它必须至少拥有一个固定公网IP地址，以便其它终端可以通过网络访问到你的终端，你可以任选以下一种方式部署主会场：

选项一：如果你将终端直接部署在公网，请为其设置一个固定的公网IP地址。

选项二：如果你将终端部署在内网(防火墙后)，除了为其设置一个固定的内网IP地址之外，还需要在防火墙上设置端口映射。

设置固定IP地址

以下介绍如何通过遥控器为终端配置一个固定的IPv4地址：

1. 选择**更多**->**设置**->**高级设置**（默认密码：0000）->**有线网络。**
2. 从**IP模式**下拉框中选择**IPv4。**
3. 按遥控器的上下方向键选择**IPv4**，再按OK键。
4. 取消勾选**DHCP** 复选框 。
5. 在相应的区域中输入：IP地址、子网掩码、网关、DNS主服务器和DNS备份服务器。
6. 按遥控器的上下方向键选择**保存**，再按OK键。
   显示器的液晶屏幕提示【需要重启系统使配置生效，是否立即重启？】
7. 选择**确认**重启终端。

设置端口映射

如果你将终端部署在内网，您需要在防火墙上将以下端口映射至公网。终端才可以正常接听来自公网的呼叫：

描述	端口	类型
H.323 信令端口	1719-1720	UDP/TCP
音视频媒体流端口	50000-51000	TCP/UDP
网页管理端口（可选）	443	TCP
SIP信令端口（可选）	5060-5061	TCP/UDP

部署分会场

如果将终端部署在分会场，你可以任选以下一种方式部署分会场：

选项一：分会场可以采用与主会场相同的部署方式。使用该种方式时终端可呼入、可呼出。

选项二：采用智能穿透方式进行部署，仅需为终端分配一个可访问公网的IP地址即可。使用该种方式时终端只能呼出不能呼入。

采用智能穿透方式部署时，如果你的网络有端口限制，需要开放以下端口权限

描述	端口	类型
H.323 信令端口	1719-1720	UDP/TCP
音视频媒体流端口	50000-51000	TCP/UDP
SIP信令端口（可选）	5060-5061	TCP/UDP

建议分会场将网页管理端口（443/TCP）映射至公网，以便主会场可以远程管理、支持分会场

故障排查

连通性测试

完成终端的安装部署后，你可以拨打Yealink Demo环境（117.28.251.50、117.28.234.45）来测试终端是否工作正常，如果无法呼通Demo环境，请联系网络管理员检查你的内部网络是否通畅。

配置静态NAT功能

如果你将终端部署在内网(防火墙后)，并且已在防火墙或网关上配置了端口映射，当跨公网呼叫其他会场的终端或Yealink Demo时, 本地出现黑屏无声的问题，极有可能是因为本会场网络环境中的防火墙或者网关不支持ALG功能。要解决这个问题，请使用遥控器开启终端上的静态NAT功能：

1. 选择**更多**->**设置**->**高级设置**（默认密码：0000）->**NAT/防火墙。**
2. 从**类型**下拉框中选择**自动**，终端将自动获取当前网络的公网IP地址。
3. 如果终端未能自动获取到公网IP地址，你可以在**类型**下拉框中选择**手动设置，**然后在**公网IP地址**区域输入当前网络的公网IP地址。
4. 按遥控器的上下方向键选择**保存**，再按OK键保存当前配置。

Regulatory Notices

Operating Ambient Temperatures

- Operating temperature: +32 to 104°F (0 to 40°C)
- Relative humidity: 5% to 90%, noncondensing
- Storage temperature: -22 to +160°F (-30 to +70°C)

Warranty

Our product warranty is limited only to the unit itself, when used normally in accordance with the operating instructions and the system environment. We are not liable for damage or loss resulting from the use of this product, or for any claim from a third party. We are not liable for problems with Yealink device arising from the use of this product; we are not liable for financial damages, lost profits, claims from third parties, etc., arising from the use of this product.

Explanation of the symbols

- DC symbol

⎓ is the DC voltage symbol.

- WEEE Warning symbol

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Restriction of Hazardous Substances Directive (RoHS)

This device complies with the requirements of the EU RoHS Directive. Statements of compliance can be obtained by contacting support@yealink.com.

Safety Instructions

Save these instructions. Read these safety instructions before use!

⚠ General Requirements

- Before you install and use the device, read the safety instructions carefully and observe the situation during operation.
- During the process of storage, transportation, and operation, please always keep the device dry and clean, avoid collision and crash.
- Please attempt not to dismantle the device by yourself. In case of any discrepancy, please contact the appointed maintenance center for repair.
- Please refer to the relevant laws and statutes while using the device. Legal rights of others should be respected as well.

⚠ Environmental Requirements

- Place the device at a well-ventilated place. Do not expose the device under direct sunlight.
- Keep the device dry and free of dusts.
- Do not place the device on or near any inflammable or fire-vulnerable object, such as rubber-made materials.
- Keep the device away from any heat source or bare fire, such as a candle or an electric heater.

⚠ Operating Requirements

- Do not let a child operate the device without guidance.
- Do not let a child play with the device or any accessory in case of accidental swallowing.
- Please use the accessories provided or authorized by the manufacturer only.
- The power supply of the device shall meet the requirements of the input voltage of the device. Please use the provided surge protection power socket only.
- Before plugging or unplugging any cable, make sure that your hands are completely dry.
- Do not spill liquid of any kind on the product or use the equipment near water, for example, near a bathtub, washbowl, kitchen sink, wet basement or near a swimming pool.
- During a thunderstorm, stop using the device and disconnect it from the power supply. Unplug the power plug and the Asymmetric Digital Subscriber Line (ADSL) twisted pair (the radio frequency cable) to avoid lightning strike.
- If the device is left unused for a rather long time, disconnect it from the power supply and unplug the power plug.
- When there is smoke emitted from the device, or some abnormal noise or smell, disconnect the device from the power supply, and unplug the power plug immediately.
- Contact the specified maintenance center for repair.
- Do not insert any object into equipment slots that is not part of the product or auxiliary product.
- Before connecting a cable, connect the grounding cable of the device first. Do not disconnect the grounding cable until you disconnect all other cables.

⚠ Cleaning Requirements

- Before cleaning the device, disconnect it from the power supply.
- Use a piece of soft, dry and anti-static cloth to clean the device.
- Keep the power plug clean and dry.

Troubleshooting

The unit cannot supply power to device other than Yealink device.

There is a bad connection with the plug.

1. Clean the plug with a dry cloth.
2. Connect it to another wall outlet.

The usage environment is out of operating temperature range.

1. Use in the operating temperature range.

The cable between the unit and the Yealink device is connected incorrectly.

1. Connect the cable correctly.

You cannot connect the cable properly.

1. You may have connected a wrong Yealink device.
2. Use the correct power supply.

Some dust, etc., may be in the port.

1. Clean the port.

Contact your dealer or authorized service facility for any further questions.

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IC Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) this device may not cause interference; and

(2) this device must accept any interference, including interference that may cause undesired operation of the device. CAN ICES-3(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage;

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.NMB-3(B)

Contact Information

YEALINK NETWORK TECHNOLOGY CO.,LTD.
309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
YEALINK (EUROPE) NETWORK TECHNOLOGY B.V.
Strawinskylaan 3127, Atrium Building, 8th floor, 1077ZX Amsterdam, The Netherlands
YEALINK (USA) NETWORK TECHNOLOGY CO., LTD.
999 Peachtree Street Suite 2300, Fulton, Atlanta, GA, 30309, USA

Made in China

About Yealink

Yealink is a global leading provider of enterprise communication and collaboration solutions, offering video conferencing service to worldwide enterprises. Focusing on research and development, Yealink also insists on innovation and creation. With the outstanding technical patents of cloud computing, audio, video and image processing technology, Yealink has built up a panoramic collaboration solution of audio and video conferencing by merging its cloud services with a series of endpoints products. As one of the best providers in more than 140 countries and regions including the US, the UK and Australia, Yealink ranks No.1 in the global market share of SIP phones shipments.

Technical Support

Visit Yealink WIKI (http://support.yealink.com/) for the latest firmware, guides, FAQ, Product documents, and more. For better service, we sincerely recommend you to use Yealink Ticketing system (https://ticket.yealink.com) to submit all your technical issues.

VC880- EN+CN

YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.
Web: www.yealink.com
Copyright©2019 YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.All rights reserved.