

YOLINK

YoLink Hub

YS1603-UC (FCC), YS1603-EC (CE+UKCA)

Installation Manual & User Guide

Rev 1.4

A Introduction

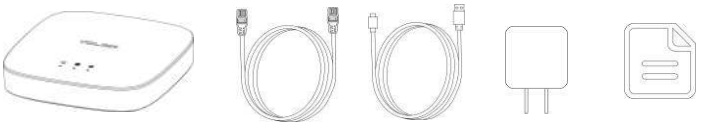
Thank you for purchasing YoLink products! Whether you are adding additional hubs to expand your system's range or if this is your first YoLink system, we appreciate you trusting YoLink for your smart home/home automation needs. Your 100% satisfaction is our goal. If you experience any problems with your installation, with our product or if you have any questions that this manual does not answer, please contact us right away. See the **Customer Support** section for more info.

The **YoLink Hub** is the **central controller** of your YoLink system and the **gateway to the Internet** for your YoLink devices. As opposed to many smart home systems, the individual devices (sensors, switches, outlets, etc.) are not on your network or Wi-FI and are not directly connected to the internet. Instead, your devices communicate with the Hub, which connects to the internet, the cloud server and the app.

The Hub connects to the internet via a **wired and/or WiFi** connection to your network. As the wired method is "plug & play" we recommend using this method, because it is the easiest to set-up and it does not require making changes to settings for your phone or network equipment (now, or in the future -- changing your WiFi password later would require changing the password for the Hub). The Hub may otherwise be connected to the internet via a **2.4GHz** (only*) band WiFi provided by your network. See the Support section of this manual for more information. *5GHz band is not supported at this time.

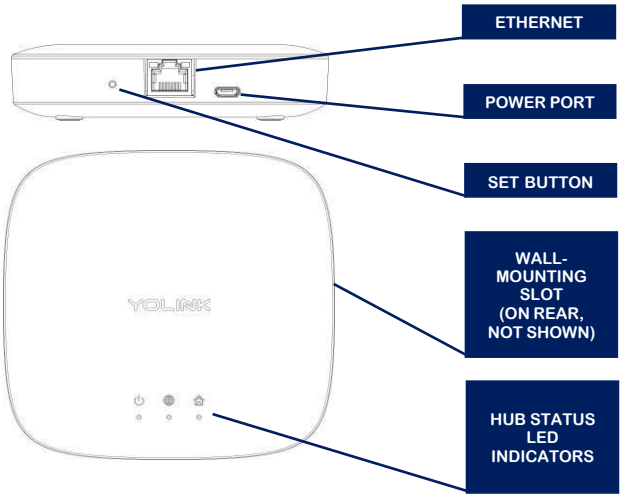
Your system may have more than one Hub, due to the number of devices (one Hub can support at least 300 devices), and/or the physical size of your home or building(s) and/or property. YoLink's unique Semtech® LoRa®-based long-range/low-power system offers industry-leading range - up to 1/4 mile reach in open air!

B In the Box



YoLink Hub | Ethernet Cable ("Patch Cord") | USB Cable (Micro B) | AC/DC Power Supply Adapter | Quick-Start Guide ("QSG")

C Get to Know Your Hub

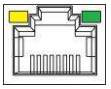


LED INDICATORS	POWER	INTERNET	FEATURE
HUB STATUS			
NORMAL (ON, CONNECTED TO INTERNET)			
ABNORMAL (ON, INTERNET NOT CONNECTED)			
WIFI SETTINGS CHANGE:			
RESTORING TO FACTORY DEFAULTS:			
DEVICE UPDATING:			

LED BEHAVIORS KEY

OFF | ON | BLINK | SLOW BLINK

ETHERNET JACK LED BEHAVIORS



Fast blinking yellow indicates normal data transmission

Slow blinking yellow indicates no response from the router

Green light on indicates port is connected to router or switch

Either light off indicates something is wrong

(Disregard LEDs if port is not being used)

D Set-Up: Install YoLink App

If you have an existing account, proceed to Part E

1 Install the free **YoLink app** on your phone or tablet (search in the store or click the QR code below)

Available on the App Store

ANDROID APP ON Google Play

iOS 9.0 and above or Android 4.4 and above

2 Allow the app to send notifications, if requested

3 Click on **Sign up for an account** to create your new account

Please retain your password in a secure location, as the Hub is the gateway to your YoLink smart home environment!

If you encounter an error message attempting to create an account, please turn off your phone's Wi-Fi, ensuring you are connected to the internet via your phone's cell service, and try again

E Add Your Hub to the App

1 In the **app**, click on the device scanner icon:

2 Allow access to your phone's camera, if requested

2 The scanner screen appears as shown below. Holding your phone over the Hub, place the QR code within the viewing window



3 When prompted, click **Bind Device**. A message the device has been bound appears

4 Close the pop-up message by clicking **Close**

5 Click **Done** (Figure 1)

6 Refer to Figure 2 for the Hub successfully added to the app

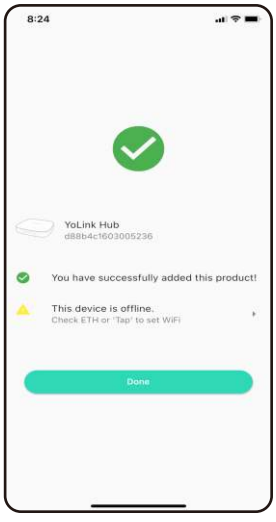


Figure 1

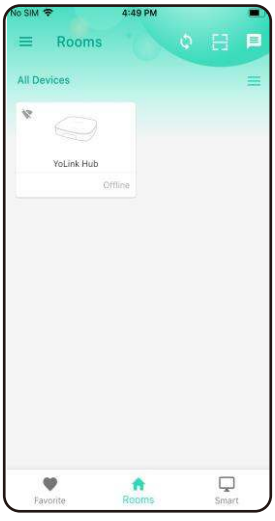


Figure 2

If your Hub will be connected to the internet, only via ethernet cable, not WiFi, proceed to Part G

F WiFi Considerations

Your Hub must be connected to the Internet via WiFi and/or a wired (Ethernet) connection. (In this user guide, these methods will be referred to as WiFi-Only, Ethernet-Only or Ethernet/WiFi.) For easy plug & play installation with no need to change phone or Hub settings, now or later, a wired, or Ethernet-Only connection, is recommended. A wired connection may be best for you, if any of these apply to you:

- You are not the owner/administrator of the WiFi, or you forgot or do not have the password
- Your WiFi has a second verification process or additional security
- Your WiFi is not dependable
- You'd rather not share your WiFi credentials with additional apps

G Power-Up

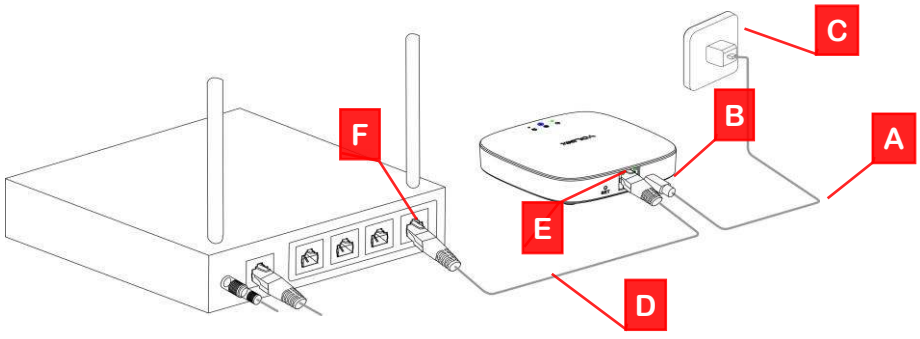


Figure 1

1. As shown, power up the Hub by connecting one end the USB cable (A) to the power jack (B) on the Hub, and the other end to the power adapter (C), plugged into an outlet

2. The **green power indicator** should flash:

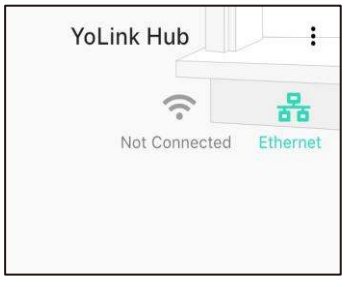


3. It is recommended that you connect your Hub to the network/internet even if WiFi-Only is your intended format. Using the supplied Ethernet patch cord (D), connect one end (E) to the Hub, and the other end (F) to an open port on your router or switch. The blue Internet indicator should turn on:



4. In the app, the Hub is now shown to be Online, with the Ethernet icon green as shown:

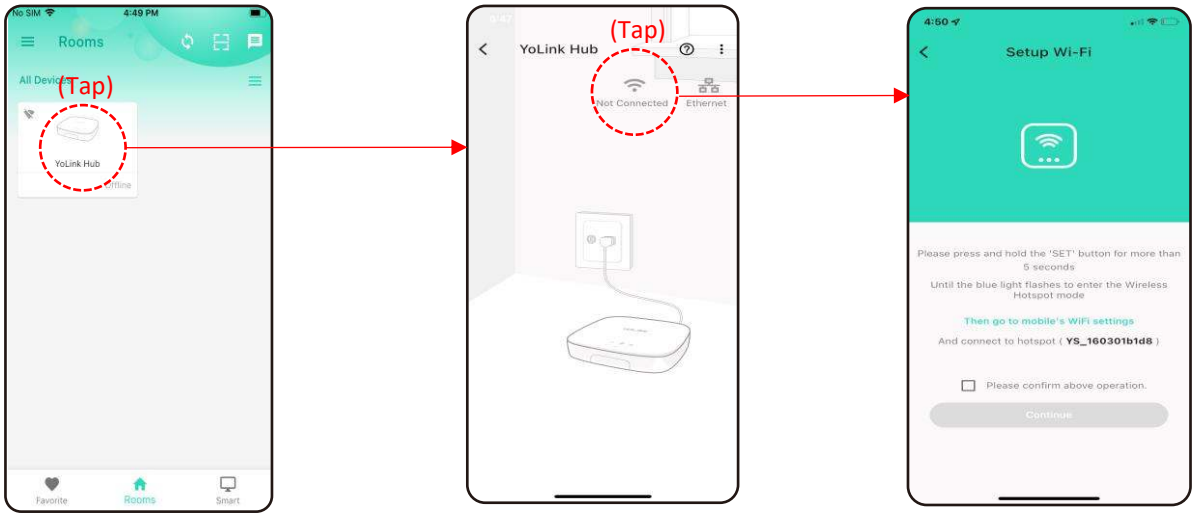




If your Hub is **NOT** Online after this step, please double-check your cable connections. Check LED indicators on the Ethernet jack on your Hub (refer to section C). There should be similar LED activity on your router or switch (refer to your router/switch documentation)

H WiFi Set-up

1 If using a WiFi-Only or Ethernet/WiFi connection, in the app, tap the Hub image, as shown, then tap the WiFi icon. If the screen that appears resembles that shown, proceed to step 2, otherwise skip to step 7.



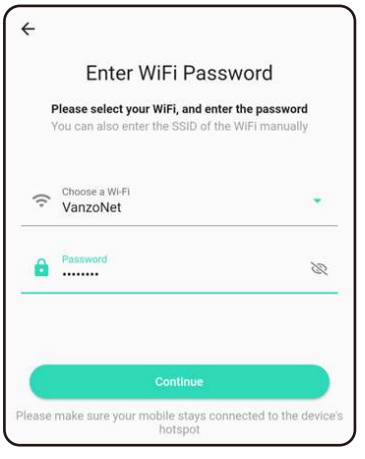
2 Review the instructions on the screen fully before proceeding. Do not close or exit the app. As instructed, hold the SET button on the Hub for 5 seconds, until the blue internet icon on the top of the Hub flashes.

3 On the app, tap the "**Then go to mobile's WiFi settings**" link. While your phone may be currently connected to your WiFi, connect instead to the new YS_160301b1d8 hotspot.

4 Return to the app, and tap the "Please confirm above operation" checkbox, then tap Continue. If you get an error message, tap Close to close the popup message. If the blue LED is not still flashing, return to step 2, otherwise return to step 3, to try again.

5 As shown in the figure to the right, in the Choose a WiFi box, select or enter your 2.4 GHz SSID (unless it is hidden, it should appear in the list, when you tap in this area). Enter your WiFi password, then tap Continue

6 If there are no error messages, a Connected Successfully screen will be displayed. Proceed to section J, otherwise follow the steps beginning at #7.



7 iOS phones only: if prompted, enable Local Network Access. (Search "iOS location services: for more information or scan the QR code to the right.

8 If prompted, grant access to your location. Tap Allow Once. (This is required for the next steps.)

H WiFi Set-up, Continued

To check or edit Location Services on your phone:

iOS:   

Go to Settings, tap Privacy, tap **Location Services**

Ensure **Location Services** is on/enabled

Scroll down to and tap the YoLink app

Select **While Using the App**

Enable **Precise Location**

Scroll down to and tap the YoLink app

Android:  

Icons can vary by phone manufacturer

Go to Settings, tap **Location**

Ensure Location is On

Tap **App Permissions**

Scroll down to and tap the YoLink app

Set permision to **Allowed Only While in Use**

9 In your phone, open WiFi settings (Settings, WiFi)

10 Identify your 2.4GHz network, if possible. If you recognize only one network as yours, this is the one you will use

11 Select the appropriate network and log-in, if needed

12 If your SSID is hidden, you must manually log into it on your phone, by selecting "Other..." in Other Networks or Choose a Network

13 Ensure the network is displayed in the Current WiFi SSID box. If not, click refresh 

14 Enter your Wi-Fi password in the Password box. Tap Continue

15 As directed in the app, press and hold the Hub's SET button for 5 seconds, until the blue internet indicator on the top of the Hub blinks. The Hub is now in Linking Mode. Linking Mode will cease if no action is taken; please proceed to the next step right away

16 In the app, click the "**Please confirm above operation**" checkbox, click Continue. A "Connecting" screen will appear on the app, as shown in Figure 3

17 Please wait until a Connected Successfully screen is displayed. At this time, you may leave the patch cord connected (for dual wired/wireless internet connection) or remove it. Click Done and proceed to section K, Installation.

J Troubleshooting

TROUBLESHOOTING STEPS

A If linking fails, and if you have multiple SSIDs, please click Cancel and return to step 11 and log into the other SSID.

B If you continue to experience difficulties connecting the Hub to your WiFi, try temporarily disabling or turning off your 5 GHz band. Check for this option in your router's settings. These settings are typically accessed by an app, or by using a browser interface. Consult your router's documentation or support resources for additional information.

C Visit our Hub Support Page, by visiting our website (www.yosmart.com), then click or tap Support, then Product Support, then Hub Support Page, or by scanning the QR code on the last page of this user guide.

K Installation

Please consider **where** you will install your Hub. Whether you plan to use a wired or WiFi internet connection, your Hub should be plugged in to your network switch or router for the initial set-up. This will be the permanent installation if you're only using the wired method and the permanent or temporary connection (for express set-up) if using the WiFi method.

Due to the industry-leading **long-range** of YoLink's LoRa-based wireless communication technology, most customers will experience no issues whatsoever with system **signal strength**, no matter where they place their Hub in their home or business. Generally, most place their Hub next to their router, which is often a convenient location, with open Ethernet ports. Larger homes or applications requiring coverage to out-buildings and more remote outdoor areas may require alternative placement or additional Hubs, for optimal coverage.

You may wish to set-up your Hub at a **temporary location**, until you are ready to put it in its permanent location, and that is OK. This may be at the router/switch/satelite or at a desk, as long as your Ethernet cord can reach (or perhaps your home or business has in-wall data jacks), Plan to use the included **Ethernet cable** (sometimes referred to as a "patch cord") to connect your Hub to your network equipment. Or, if you need lengths longer than 3 feet, longer cords are readily available where computer accessories are sold. Your Hub may be **shelf- or countertop- or wall-mounted**. If wall-mounting, utilize the mounting slot on the back of the Hub, and hang the Hub from a screw or nail in the wall. Mounting it in a vertical or horizontal position will not impact the operation of Hub.

For systems with critical equipment monitoring and control, a **UPS** or other form of **back-up power** for the Hub is recommended. Your router, your internet service provider's equipment and additional network equipment for the Hub's internet connection must also be on back-up power. Your internet service may already be protected against power outages by your internet service provider.

Your Hub wants to be **indoors, clean and dry**! Please refer to the specifications section for additional environmental limitations for your Hub. Installing and using your Hub outside of the environmental limitations may damage your Hub and is likely to void the manufacturer warranty.

Do not place your Hub near sources of **heat** that may damage your Hub, such as space heaters, radiators, stoves, and even home entertainment & audio amplifiers. If it gets hot or very warm, this is not a good location for your Hub.

Avoid placing your Hub inside or near **metal** or sources of **radio or electromagnetic energy** or interference. Do not place your Hub under or on top of your Wi-Fi router, satellites or equipment.

1. Once your Hub is working satisfactorily, complete the physical installation, if applicable - if you temporarily set up your Hub before a more permanent installation, find a suitable permanent location for it. Please familiarize yourself with the **Installation Considerations** section before you finalize your installation

2. Wall-mount the Hub, or place it on a stable, clean and dry surface, as desired. Please do not stack your Hub on top of or very close to your router, sound/radio equipment or any source of magnetic or radio (RF) energy, as this may effect the operation

L Adding Devices

Your Hub will be awfully lonely without some devices, like smart locks, light switches, water leak sensors or sirens to interact with! Now is the time to add your device(s). You already know how to do this, because you added your Hub to the app; it is the same process of scanning the QR code that is on each device. Look again at part F for a refresher

1 For each new device, refer to the instructions in the **quick start guide*** packaged with each product. It directs you to download the full Installation & User Guide, using the QR code in the "QSG". Refer to the full manual, and when directed, scan the device's QR code to add it to your system

* **The quick start guide, or QSG, is a small and basic set of instructions that are packaged with each product. The QSG is NOT intended to guide you through the entire installation and user guide process, but it is only meant to be an overview. The full manual is too large to be included, plus, while the QSGs may be printed in advance, the manuals are always kept current with the latest updates to your products and app. Please always download the full Installation Manual & User Guide, to ensure the smoothest installation**

2 When directed in the manual, turn on your device (typically by pressing the SET button)

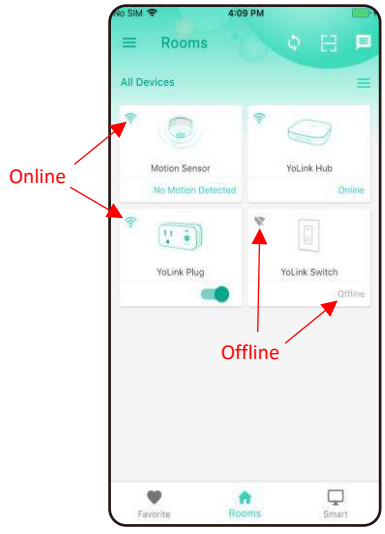


Figure 1

3 Always confirm your device is online in the app before proceeding to the next device. Refer to Figure 1, for an example of of online and offline devices

Introduction to the App: Device Details

1 Immediately after opening the app for the first time, the app will give you a quick visual tour, highlighting and identifying the various areas of the app. Don't worry if the parts are not clear; they will be explained in detail later

2 See Figure 1, below, for an example **Rooms** screen, which serves as the **default*** home screen for the app. Your Hub will appear on this page, along with any other devices you have bound

* In Settings, you can set your default home page as the Rooms page or as the Favorite page. The app will always open to this page

Rooms Page

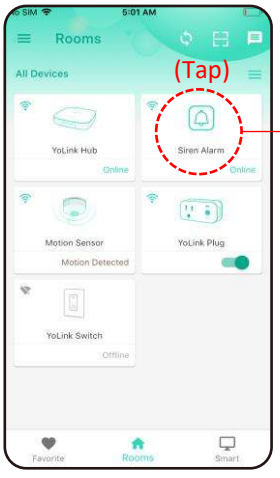


Figure 1

Device Page

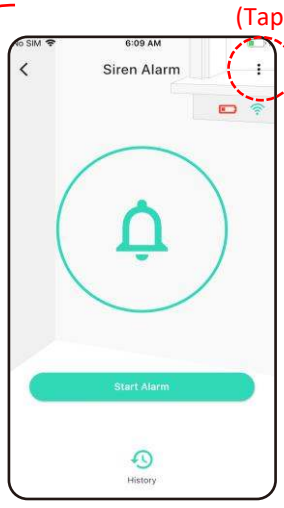


Figure 2

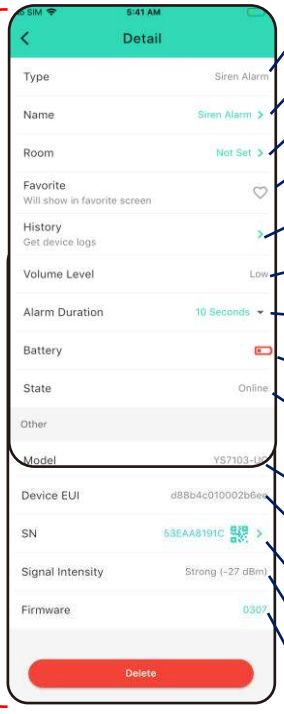


Figure 3

TYPE OF DEVICE (FACTORY SET)

DEVICE NAME (TAP TO EDIT)

DEVICE'S ROOM (TAP TO EDIT)

FAVORITE (TAP TO ADD TO FAVORITES)

HISTORY (TAP TO VIEW)

DEVICE SETTINGS: SIREN VOLUME (TAP TO EDIT)

DEVICE SETTINGS: ALARM DURATION (TAP TO EDIT)

BATTERY LEVEL

ONLINE/OFFLINE STATUS

MODEL NUMBER (FACTORY SET)

UNIQUE EUI NUMBER

UNIQUE DEVICE SERIAL NUMBER

DEVICE SIGNAL LEVEL

FIRMWARE REVISION

3 Tap the device image to open the **Device Page**. This is the Device Page for the Siren Alarm. The Device Page for your Hub and any other devices will be similar. You can view the status of your device, the **history*** of the device, and if your device is an output type (sirens, lights, plugs, etc.) you can control the device (manually turn it off/on)

* Please note, you can view the device's history (historical activity logs) from the Device Page (Figure 2) as well the Detail page (Figure 3). This information can be helpful for you to confirm your automations are working properly, as well as for troubleshooting when there is a problem

4 Refer to Figure 2. Tap the 3 dots icon to access the **Detail Page**. Refer to Figure 3. To exit, tap the "<" icon. Any changes you made to the device name or settings will be saved

N Firmware Update

Your YoLink products are constantly being improved, with new features added. It is periodically necessary to make changes to your device's firmware. For optimal performance of your system, and to give you access to all available features for your devices, these firmware updates should be installed when they become available

1. Refer to Figure 1. An update is available, as indicated by the "#### ready now" information
2. Tap on the revision number to start the update
3. The device will update automatically, indicating progress in a percentage complete. You may use your device during the update, as the update is performed "in the background". The feature indicating light will slowly blink red during the update, and the update may continue for several minutes beyond the light turning off

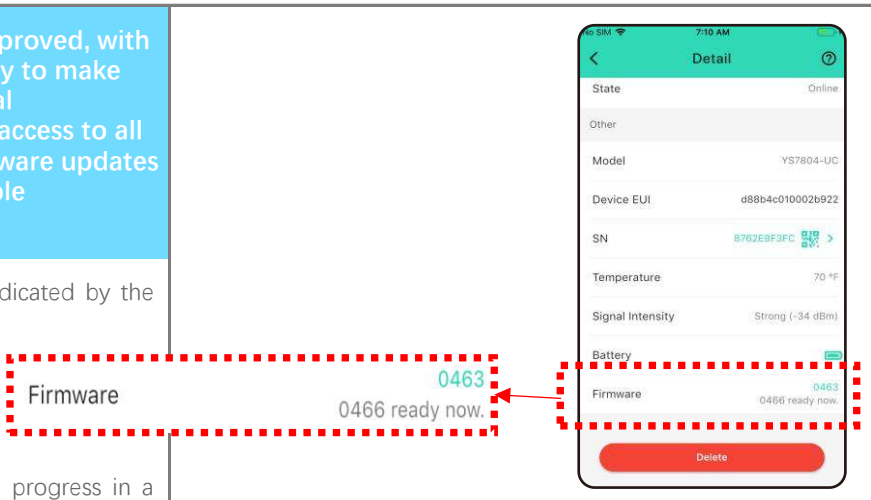


Figure 1

O Specifications

Description:	YoLink Hub
Voltage/Current Draw:	5 Volts DC, 1 Amp
Dimensions:	4.33 x 4.33 x 1.06 Inches
Environment (Temp):	-4° - 104°F (-20° - 50°)
Environment (Humidity):	<90 % Condensing

Operating Frequencies (YS1603-UC):

LoRa:	923.3 MHz
WiFi:	2412 - 2462 MHz

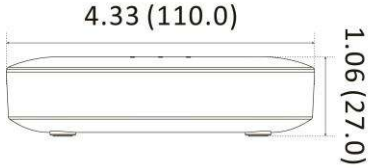
Operating Frequencies (YS1603-EC):

SRD (TX):	865.9 MHz
WiFi:	IEEE 802.11b/g/n
HT20:	2412-2472 MHz
HT40:	2422-2462 MHz

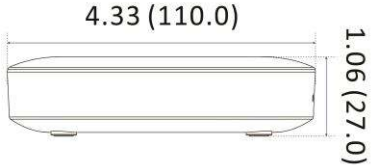
Max RF Output Power (YS1603-EC):

SRD:	4.34 dBm
WiFi (2.4G):	12.63 dBm

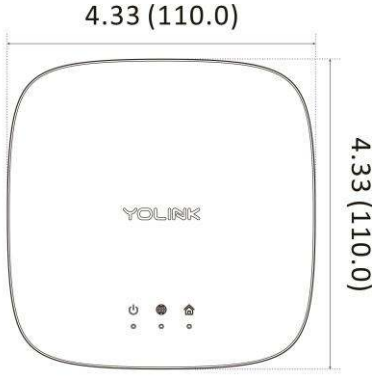
INCHES (MILLIMETERS)



FRONT



SIDE



TOP

P Warnings

Power the Hub with the provided adapter, only

The hub is designed and intended for indoor use and is not waterproof. Install indoors, avoiding subjecting the Hub to water or damp conditions

Do not install the hub inside or near metals, ferromagnetism or any other environment which may interface with the signal

Do not install the Hub near flames/fire or expose to high temperatures

Please do not use strong chemicals or cleaning agents to clean the hub. Please use a clean, dry cloth to wipe the hub to avoid dust and other foreign elements entering the Hub and affecting the operation of the Hub

Avoid allowing the hub to be exposed to strong impacts or vibration, which may damage the device, causing malfunctions or failure

Q FCC Statement

Product Name:	Responsible Party:	Telephone:
YoLink Hub	YoSmart, Inc.	(949) 825-5958
Model Number:	Address:	E-mail:
YS1603-UC, YS1603-UA	15375 Barranca Parkway, Ste J-107 Irvine, CA 92618, USA	service@yosmart.com

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful
interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna, connect the equipment into an outlet on a circuit different from that to which the receiver is connected, increase the separation between the equipment and receiver, consult the dealer or an experienced radio / TV technician for help.
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
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.

R CE Mark Warning

Product Name:	Responsible Party:	Telephone:
YoLink Hub	YoSmart, Inc.	(949) 825-5958
Model Number:	Address:	E-mail:
YS1603-EC, YS1603-EA	15375 Barranca Parkway, Ste J-107 Irvine, CA 92618, USA	service@yosmart.com

The host manufacturer has the responsibility that the host device should be compliance with all essential requirement of RER. This restriction will be applied in all member states. The simplified UK declaration of conformity referred shall be provided as follows: Hereby, YoSmart Inc. declare that the radio equipment type YoLink Hub is in compliance with Directive UK Radio Equipment Regulations (SI 2017/1206); UK Electrical Equipment (Safety) Regulation (SI 2016/1101); and UK Electromagnetic Compatibility Regulations (SI 2016/1091); The full text of the UK declaration of conformity is available at the following internet address: 15375 Barranca Parkway, Ste G-105 Irvine, CA 92618, USA

Warranty: 2 Year Limited Electrical Warranty

YoSmart warrants to the original residential user of this product that it will be free from defects in materials and workmanship, under normal use, for 2 years from the date of purchase. User must provide a copy of original purchase receipt. This warranty does not cover abuse or misused products or products used in commercial applications. This warranty does not apply to YoLink Hubs that have been improperly installed, modified, put to a use other than designed, or subjected to acts of God (such as floods, lightning, earthquakes, etc.). This warranty is limited to repair or replacement of the YoLink Hub only at YoSmart's sole discretion. YoSmart will NOT be liable for the cost of installing, removing, nor reinstalling this product, nor direct, indirect, or consequential damages to persons or property resulting from the use of this product. This warranty only covers the cost of replacement parts or replacement units, it does not cover shipping & handling fees. Please contact us, to implement this warranty (see Customer Support, below, for contact information)

Customer Support

We are here for you, if you ever need *any* assistance installing, setting up or using a YoLink product, including our app. Please email us 24/7 at **service@yosmart.com**, or you can use our online chat service, 24/7, by visiting our website, **www.yosmart.com**

Find additional support, information, video tutorials, and more, on our YoLink Hub Product Support page by visiting

https://shop.yosmart.com/pages/yolink-hub-product-support

or by scanning the QR code.

YOLINK

15375 Barranca Parkway

Suite J-107

Irvine, CA 92618

Revision: 8/25/2022

IC Caution:

-English:

This device complies with Industry Canada licence-exempt RSS standard(s).

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.

To maintain compliance with RSS-102 RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

-French:

Le présentappareilestconf orme aux CNR d' Industrie Canada applicables aux appareils radio exempts de licence. L'exploitationestautorisée aux deux conditions suivantes:

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

(2) l' utilisateur de l'appareildoit accepter tout brouillageradioélectriquesubi, mêmesi le brouillageest susceptible d'encompromettre le fonctionnement.

Pour être conforme aux lignes directrices d’exposition RF RSS-102, cet équipement doit être installé et exploité à une distance minimale de 20cm entre le radiateur et votre corps: n’utilisez que l’antenne fournie.