

# LTWB-5AC-360 Wireless Bridge

Quick Start Guide

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# Preface

## Applicable Models

This manual is applicable to the LTWB-5AC-360 wireless bridge.

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.
 <b>Caution</b>	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Danger</b>	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

## Safety Instructions

### **Danger**

- This is a class A product and may cause radio interference in which case the user may be required to take adequate measures.
- No naked flame sources, such as lighted candles, should be placed on the equipment.
- The serial port of the equipment is used for debugging only.
- Keep vertical downward when moving or using the equipment.
- If the device installation is needed:
  1. Install the device according to the instructions in this manual.
  2. To prevent injury, this device must be securely attached to the installation surface in accordance with the installation instructions.

### **Caution**

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.

- The socket-outlet shall be installed near the device and shall be easily accessible.
- Do not connect several devices to one power adapter as adapter overload may cause overheating or a fire hazard.
- If a power adapter is provided in the device package, use the provided adapter only. If no power adapter is provided, ensure the power adapter or other power supply complies with Limited Power Source. Refer to the product label for the power supply output parameters.
- Please make sure that the plug is firmly connected to the power socket.
- Do not touch the bare components (such as the metal contacts of the inlets) and wait for at least 5 minutes, since electricity may still exist after the device is powered off.
- The interface varies with the models. Please refer to the product datasheet for details.
- If the device needs to be wired by yourself, select the corresponding wire to supply power according to the electric parameters labeled on the device. Strip off wire with a standard wire stripper at corresponding position. To avoid serious consequences, the length of stripped wire shall be appropriate, and conductors shall not be exposed.
- Make sure that the power has been disconnected before you wire, install, or disassemble the device.
- If smoke, odor, or noise arises from the device, immediately turn off the power, unplug the power cable, and contact the service center.

# Chapter 1 Introduction

The wireless bridge (hereinafter referred to as the device) is used for long-distance wireless connection, which is suited for outdoor video security and transmission between sites in a LAN.

## 1.1 Interface/Button

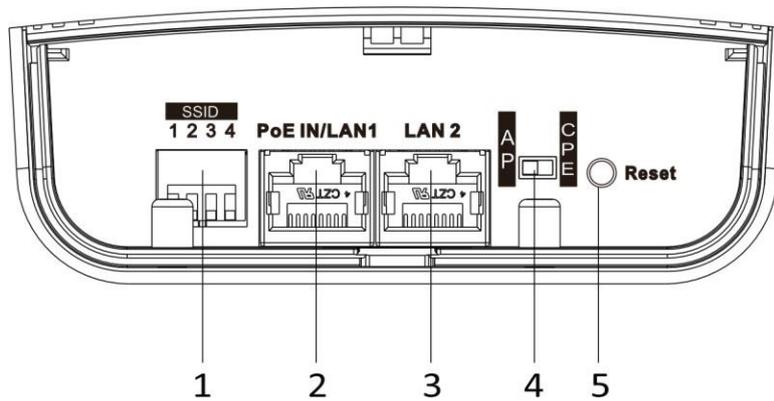


Figure 1-1 Device Interface/Button

Table 1-1 Device Interface/Button Description

No.	Interface/Button	Description
1	SSID	<p>A DIP switch (4-pin) used to realize 16 sets of matching codes by switching up or down the miniature switches. The CPE will connect to the AP when its SSID matches that of the AP.</p> <p> <b>Note</b></p> <p>The SSID of the AP should be unique.</p>
2	PoE IN/LAN 1	The 10/100/1000 Mbps adaptive RJ45 port, also can be used as a PoE port.
3	LAN 2	The 10/100/1000 Mbps adaptive RJ45 port.
4	CPE/AP DIP Switch	Switch right or left to set the device as an AP or CPE.
5	Reset	Long press for 4 seconds to restore the device to factory settings.

## 1.2 Indicator

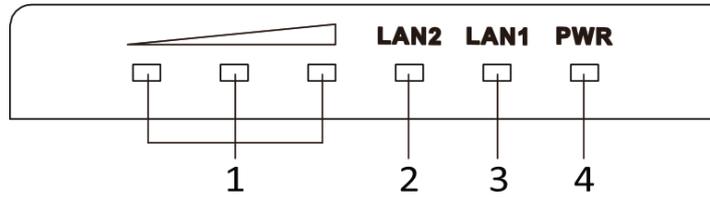


Figure 1-2 Device Indicator

Table 1-2 Device Indicator Description

No.	Indicator	Description	
1	Signal Strength Indicator	Solid on	<p>The devices are matched.</p> <ul style="list-style-type: none"> <li>● Solid red, yellow, and green: The wireless signal is strong.</li> <li>● Solid red and yellow, unlit green: The wireless signal is normal.</li> <li>● Solid red, unlit yellow and green: The wireless signal is weak. Please adjust the position and direction of the device.</li> </ul>
		Unlit	The devices are not matched.
2/3	LAN 2/LAN 1 Indicator	Solid Green	The port is connected.
		Flashing Green	The port is transmitting data. The faster the indicator flashes, the greater the transmission rate is.
		Unlit	The port is disconnected or connection is abnormal.
4	Power Indicator	Solid Green	The device is powered on normally.
		Unlit	No power supply connected or power supply is abnormal.

## 1.3 SSID

A 4-character SSID can realize 16 sets of matching codes by switching the DIP switch up or down.

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### Note

Please switch the CPE/AP DIP switch to decide the device function before setting the SSID.

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Table 1-3 SSID No. Introduction

No.	DIP	No.	DIP	No.	DIP	No.	DIP
1		2		3		4	
5		6		7		8	
9		10		11		12	
13		14		15		16	

## 1.4 Packing List

Please check if there is any damage of the package first. According to the packing list, make sure no item is lost. After checking all the items included, you can continue to install the device.

Table 1-4 Packing List

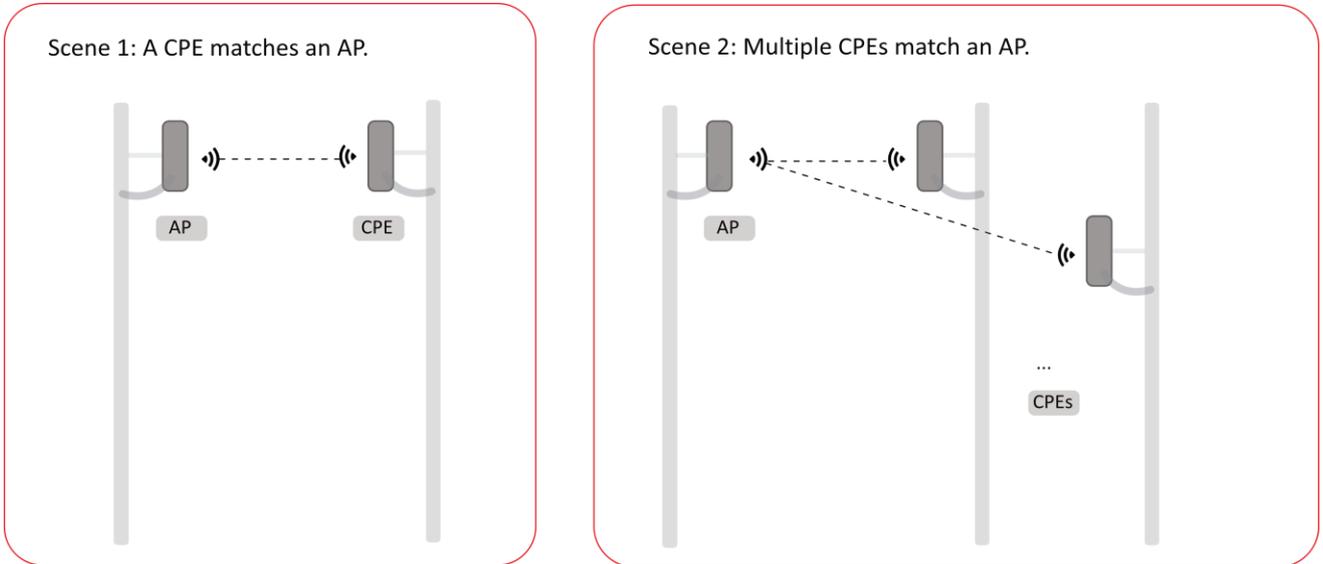
Item	Quantity
Wireless Bridge	× 1
Cable Tie	× 2
Antenna	× 1
Antenna Accessory Bag	× 1
PoE Power Adapter	× 1
Quick Start Guide	× 1
Regulatory Compliance and Safety Information	× 1

## 1.5 Application Scene

The following application scenes are for your reference only. The actual scene prevails.

**Note**

The device image used here is only for example purpose. The actual device may vary with models.



The CPE will connect to the AP when its SSID matches that of the AP. The AP's SSID should be unique.

Figure 1-3 Application Scene

# Chapter 2 Installation

## 2.1 Installation Procedure

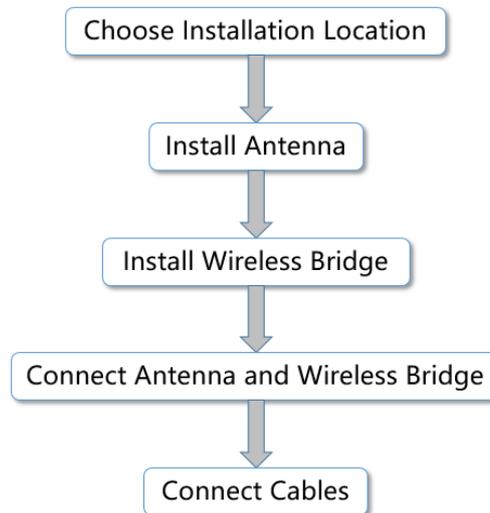


Figure 2-1 Installation Procedure

## 2.2 Preparation for Installation

To avoid device damage or personal injury caused by improper usage of the device, please follow the preparations below.

- Use the applicable power supply accessory to power the device.
- The distance between the AP and the CPE should be less than the suggested distance to secure transmission rate.
- Make sure the water-proof cover is installed.
- It is suggested to manage the gap between the cover and device with fluid dispensing.
- Install the device in the place where the maintenance personnel can operate easily.
- Disconnect the power supply when you have the device serviced.
- The temperature of the cover area will be high when the device is working. In the circumstances, only personnel with relevant professional knowledge, such as installation and maintenance personnel, are allowed to operate the device.
- Make a plan before installation to ensure there is enough room for the antenna and the wireless bridge on the selected mounting pole.

## 2.3 Antenna Installation

By using the attached accessories, the antenna can be installed onto a mounting pole (user supplied) with a diameter of 1 to 3 inches or a flat surface. We will use pole installation as an example below:

Step 1 Remove the nuts, spring washers, and flat washers from the bolts (× 4).

Step 2 Insert the bolts (× 4) into the bolt holes of the antenna.

Step 3 Place the antenna with bolts against the mounting pole.

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**Note**

Place the bottom part of the antenna against the top of the mounting pole, to ensure the antenna is not blocked by the pole.

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Step 4 Align the holes on the toothed clamp with the bolts, and fix the clamp onto the bolts by putting back the flat washers, spring washers, and nuts.

Step 5 Adjust the antenna until it is perfectly vertical and tighten the nuts to secure the whole antenna set onto the mounting pole.

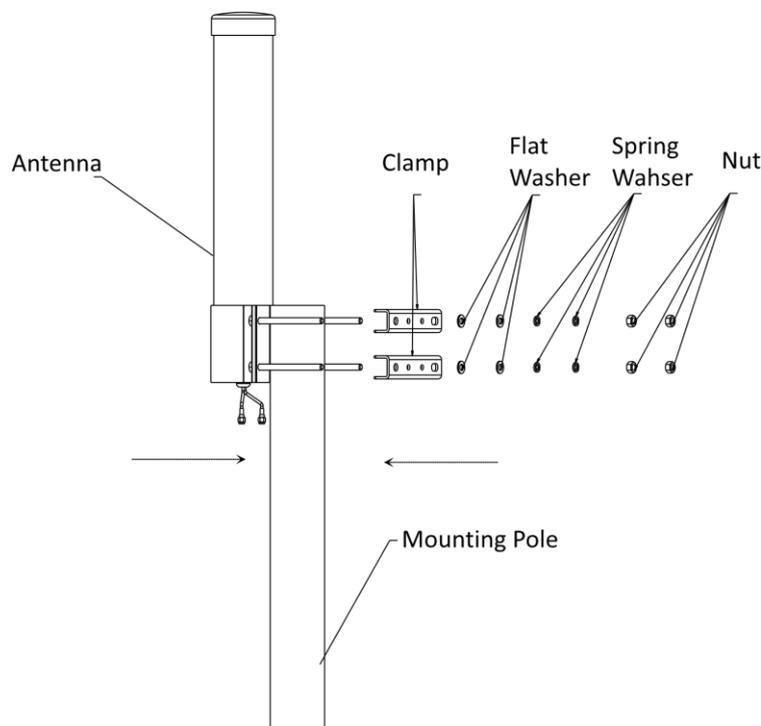


Figure 2-2 Install Antenna

## 2.4 Wireless Bridge Installation

The wireless bridge can be installed onto the mounting pole or a wall. The following simply illustrates how to install the device onto the pole.

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**Note**

It is easy to take down the wall-mounted device. You are recommended to install the device onto a mounting pole.

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Step 1 Choose an appropriate installation site for the wireless bridge below the antenna on the pole.

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**Note**

The vertical distance between the antenna and the wireless bridge should be within 4 inches.

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Step 2 Thread the cable ties (× 2) into the installation holes at the back of the wireless bridge.

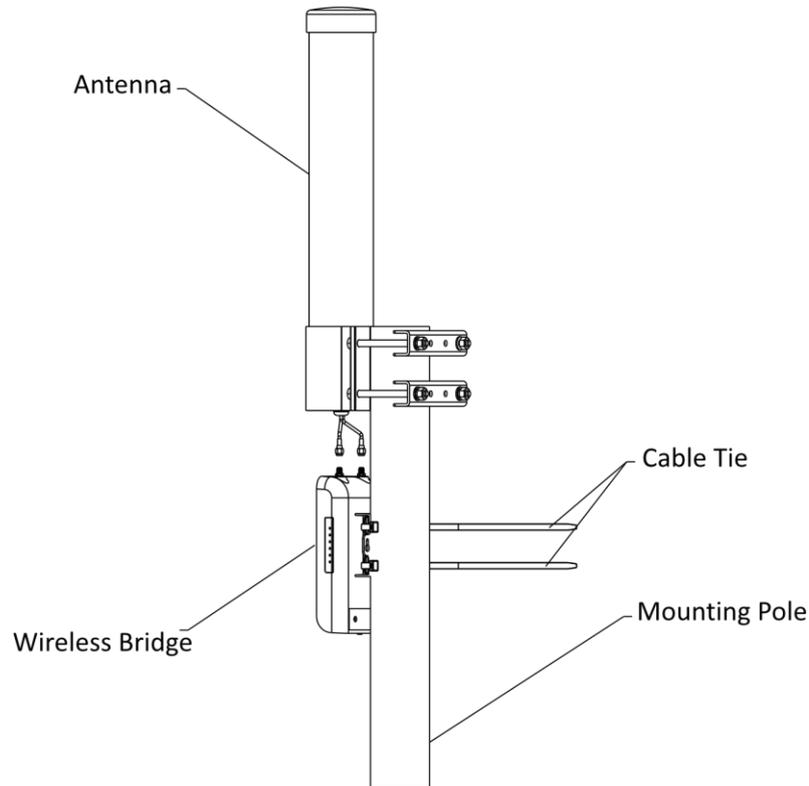


Figure 2-3 Thread Cable Ties

Step 3 Fix and fasten the cable ties on the pole.

Step 4 Adjust the direction of the device manually to keep it installed vertically.

## 2.5 Antenna Connection

After proper installation of the antenna and the wireless bridge, you are allowed to connect the antenna to the wireless bridge by connecting the antenna cables at the bottom of the antenna to the antenna connectors on the top of the wireless bridge.

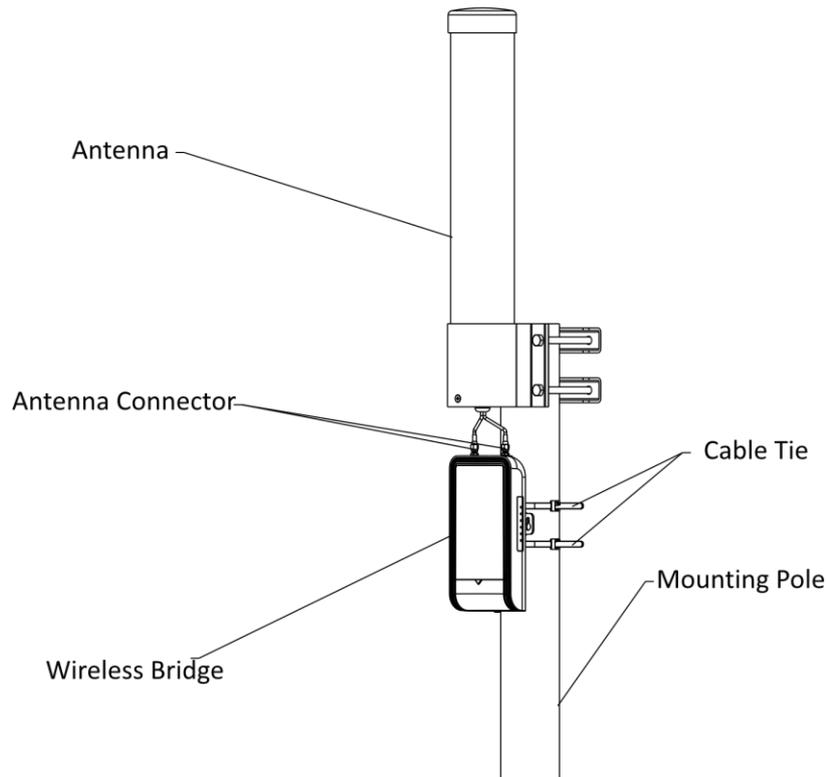


Figure 2-4 Connect Antenna

## 2.6 Cable Connection

Based on the actual situations, the device can be set to work in the AP mode or CPE mode. Refer to *Error! Reference source not found.* for detailed configuration of the device working scene. After the working scene of the device is decided, you can connect the device according to the following wiring diagrams.

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### Note

- The device can be powered on in various ways, you can use the attached PoE power adapter or use other applicable power supply accessories (user supplied) to power on the device.
  - The device should be paired with another device of the same model or another compatible wireless bridge.
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### 2.6.1 AP Connection

Step 1 Switch the CPE/AP DIP switch to set the device as an AP.

Step 2 Select an SSID No., for example, SSID No.1.

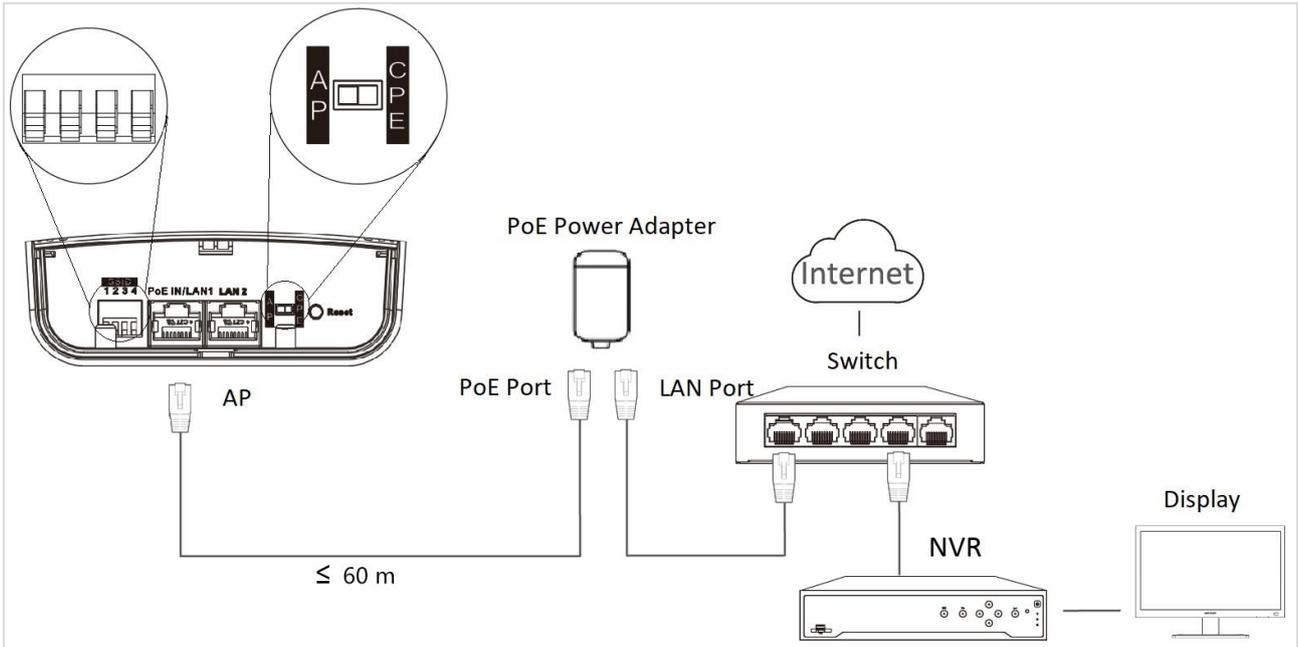


Figure 2-5 AP Connection (with PoE Power Adapter)

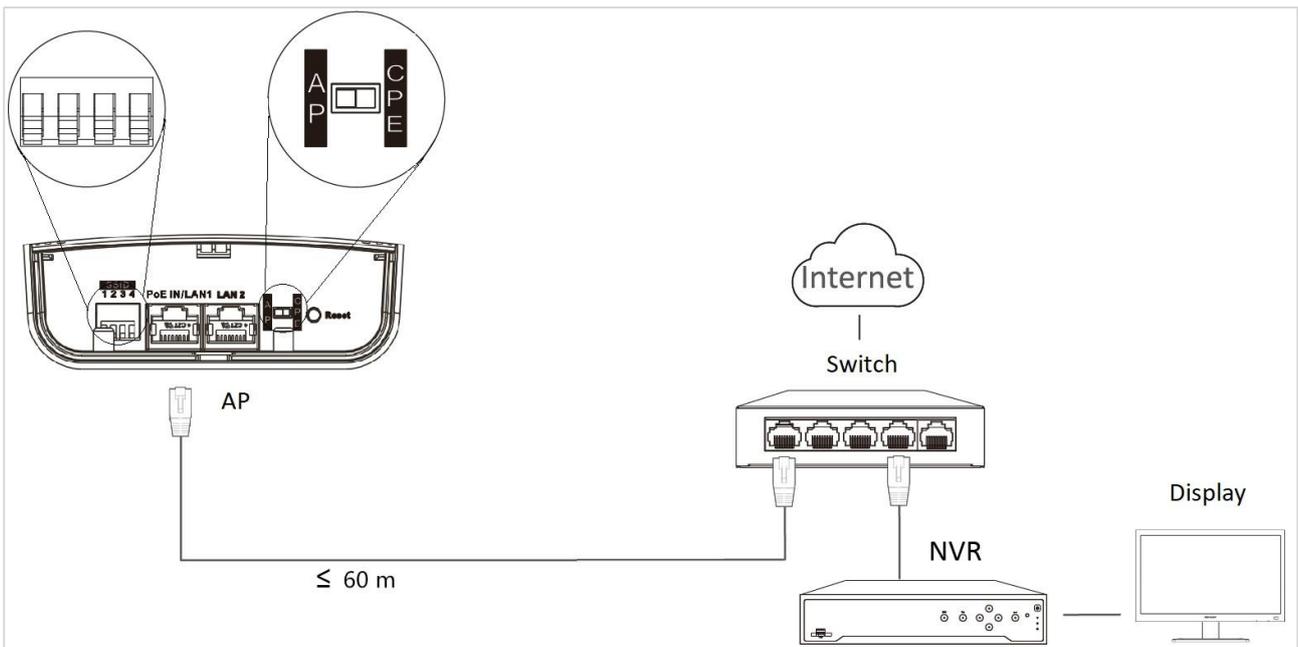


Figure 2-6 AP Connection (with PoE Switch)

**Note**

The SSIDs of APs in the same direction cannot be the same, to avoid matching failure.

## 2.6.2 CPE Connection

Step 1 Switch the CPE/AP DIP switch to set the device as a CPE.

Step 2 Select the SSID No. same as that set on the AP, for example, SSID No.1.

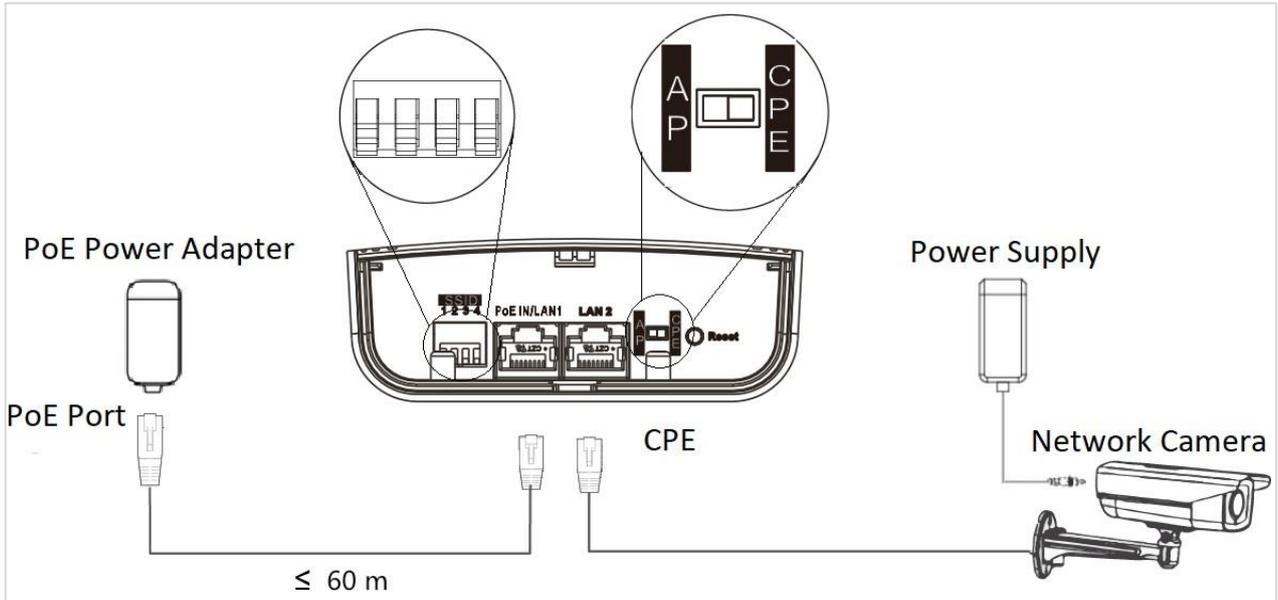


Figure 2-7 CPE Connection (with PoE Power Adapter)

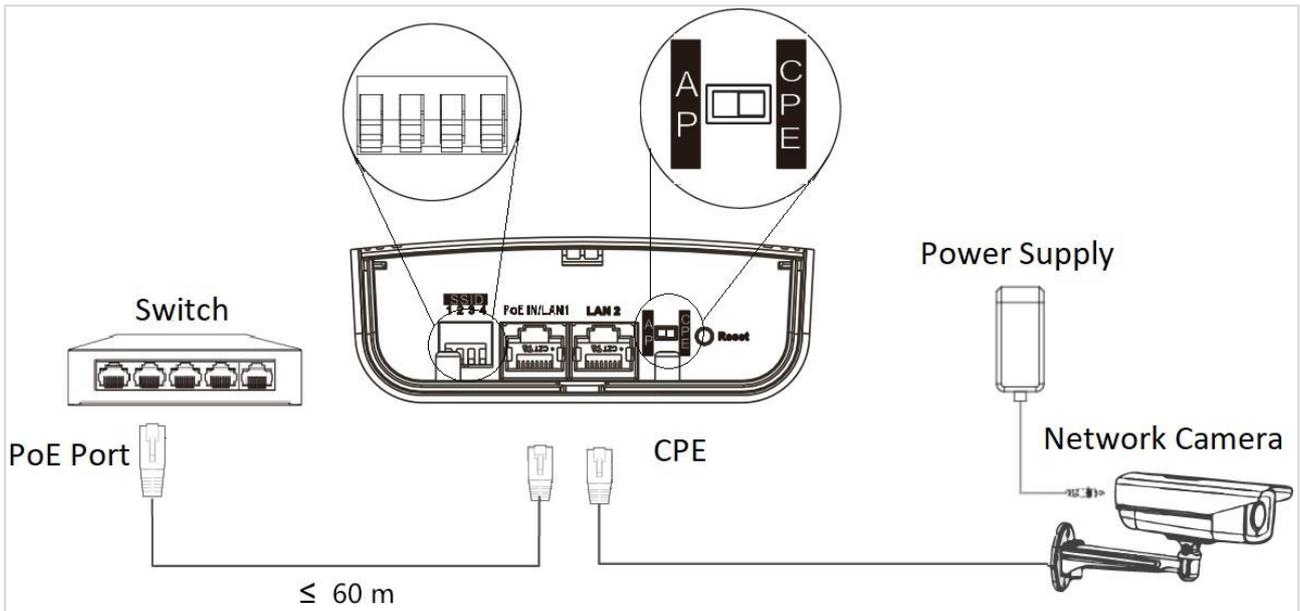


Figure 2-8 CPE Connection (with PoE Switch)

**Step 3 Optional:** If there are more than one CPE (no more than 4) to be matched with one AP, repeat the previous steps for connection.

See **1.2 Indicator** for details after device connection, to check device working status, network connection, and signal strength.

# Chapter 3 Activation

For the first-time access, you need to activate the device by setting a password. The device can be activated and managed via multiple tools, such as web browser, NVMS client, IP Portal, and XVMS. The following part introduces the activation steps of the device on the web browser and on the NVMS client. For the activation steps of the device on other tools, please contact LTS support.

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 **Note**

- The password strength of the device can be automatically checked. We highly recommend you to change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of the following categories: uppercase letters, lowercase letters, numbers, and special characters) in order to increase the security of your product.
  - We recommend you to change your password regularly, especially in the high security system. Changing the password monthly or weekly can better protect your product.
  - Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- 

## 3.1 Default Information

The device default information is shown as below.

- Default IP address: 192.168.1.36
- Default user name: admin

## 3.2 Activation Using Web Browser

### *Before you start:*

- Make sure the device is powered on and connected to the network correctly.
- Make sure the device is in the same network segment with that of the PC.

Step 1 Open the web browser.

Step 2 Enter the default IP address of the device in the address bar of the web browser.

Step 3 Press **Enter** key.

Step 4 Set **Password**.

Step 5 Read and agree with the disclaimer and select **Country/Region Code**.

Step 6 Click **OK** to finish the activation.

## 3.3 Activation Using NVMS Client

### ***Before you start:***

- Make sure you have downloaded the latest NVMS client from the official website.
- Make sure the device is powered on and connected to the network correctly.
- Make sure the device is in the same network segment with that of the PC.

Step 1 Run the NVMS client.

Step 2 Go to **Device Management**→**Device**.

Step 3 Click **Online Device** to show the online devices.

The searched online devices are displayed in the list.

Step 4 Select the inactive device and click **Activate**.

Step 5 Create a password and confirm the password.

Step 6 Click **OK**.

Step 7 Click **Add**, and set relevant parameters to add the device to the client.

Step 8 Read and agree with the disclaimer and select **Country/Region Code**.

Step 9 Click **OK** to finish the activation