



Wireless Conference AP Transmitter

User Manual

TS-W111

Please read this manual carefully before using the product

1. Description

The appearance of the AP supported by the AP-MountKit TS-W111 bracket is shown below. Please refer to the SUNDRAY official website for the AP parameters of each model. Subsequent new products adopt TS-W111 bracket, but the appearance or interface may change, please refer to the actual picture.



Figure 1-1 Front view

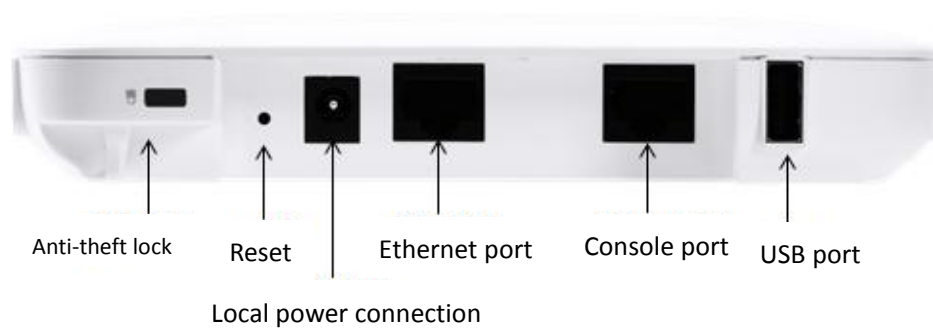


Figure 1-2 Side view (interface diagram)

2. Installation Preparation

2.1 Safety Precautions

The AP supported by the AP-MountKit TS-W111 bracket must be used indoors. For good continuous operating state and longer lifespan, the system must be in a specified operating environment.



Warning: To avoid injury to people and equipment, please read the safety precautions in this manual carefully before installing. Please install it under the guidance of professional personnel. The following precautions do not cover all possible dangerous situations.

2.1.1 Installation site selection

- ✓ Site selection should not be in an environment with high temperature, harmful gases, flammable and explosive materials, electromagnetic interference (large radar station, transmitting station, substation) and unstable voltage; please avoid large vibrations, strong noises, and various sources of pollution.
- ✓ The installation site should be dry. Avoid direct rain, splashing, ponding, seepage, dripping, condensation, etc.
- ✓ In engineering design, select an address that meets the design requirements of the communications equipment engineering environment. This should be based on not only the technical requirements of the communication network planning and communication equipment, but also hydrological, geological, seismic, electric power, transportation and other factors,

2.1.2 Temperature and humidity requirements

The operating temperature and humidity requirements of the equipment are as follows:

Items	Parameter range
Operating temperature	-10°C ~ 55°C
Storage temperature	-40°C ~ 70°C
Operating humidity	5% ~ 95% (No condensation)
Storage humidity	5% ~ 95% (No condensation)

2.2 Installation tools

For the installation and commissioning of indoor AP transmitter, different tools and instruments are required to be prepared at different stages. Please prepare your own tools and instruments in advance to avoid delay. (The company does not provide the following tools, please provide them by yourself)

Tool type	Specific tools
General tools	Slotted screwdriver, Phillips screwdriver, sleeve, cutting pliers, steel tape measure, marker pen, impact drill
Special tools	Wire stripping pliers, crimping pliers, insulating tape, wire measuring instrument
Auxiliary tools	Commissioning computer

2.3 Material preparation

The mounting bracket is standard, which contains plastic expansion tubes, expansion screws, and ordinary screws. This mounting bracket can be wall-mounted or ceiling-mounted; related products are required to be prepared by themselves.

The engineering materials involved in wall-mounted and ceiling-mounted are as follows:

Name	Details
Wall bracket, ceiling bracket	Used to fix the AP housing during wall-mounted or ceiling-mounted installation
Mounting screws	Common screw, plastic expansion tube, expansion screw

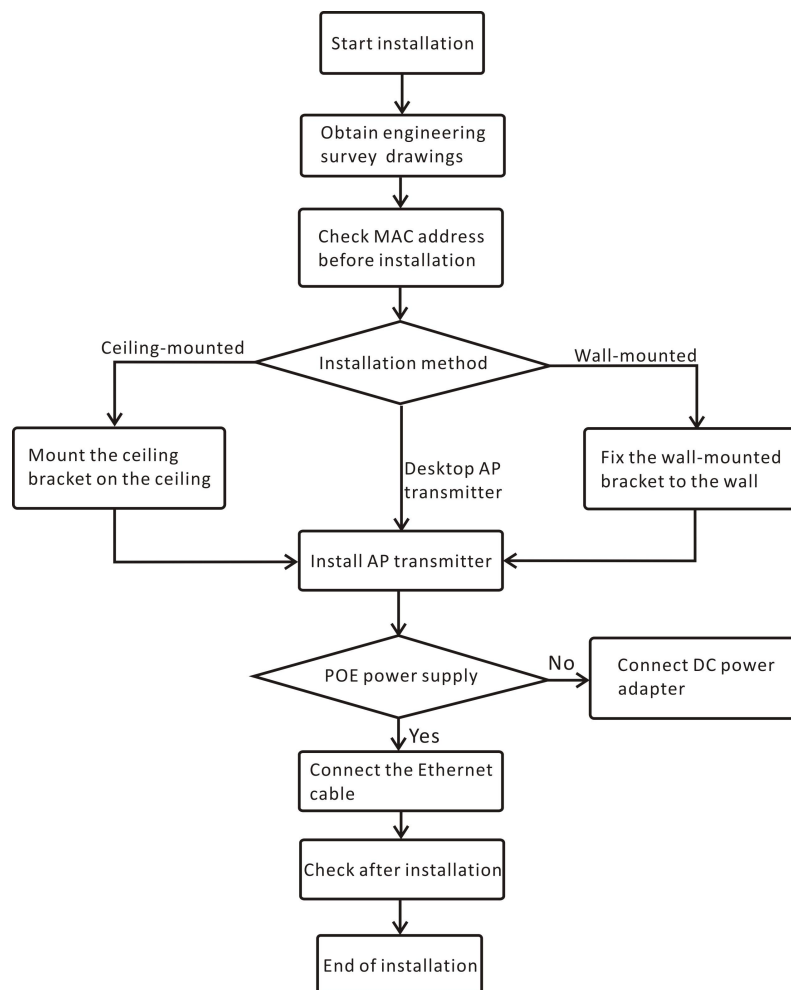
Related products are as follows:

Name	Details
Ethernet cable	Depend on the project
RJ45	Depend on the project situation

3. Product Installation

3.1 Installation process

The AP supported by the AP-MountKit TS-W111 bracket are only used indoor. Support the following installation methods: ceiling, wall, desktop.



Installation notes:

- ✓ Before installation, the engineering survey drawings are required.
- ✓ During installation, it is required to be installed according to the position on the engineering survey drawings.
- ✓ Pre-installation inspection on this position. If it is not suitable for installation, it can be moved appropriately, and the position deviation from the drawings should not exceed 0.5 meters.
- ✓ Record the correspondence between the MAC address and position of the AP transmitter (MAC address is marked on the rear, for example, MAC: D4-68-BA-00-00-01 corresponds to the hotel aisle of Room 8302), which is convenient for subsequent search and use.

3.2 Check before installation

- ✓ Minimize the number of obstacles (such as walls) between the AP transmitter and the user terminal.
- ✓ Keep it away from electronic equipment or devices (such as microwave ovens) that may generate radio frequency noise.
- ✓ The installation position is required to be as concealed as possible, so as not to hinder the daily work and life.
- ✓ Installation and wiring must avoid water accumulation, water seepage, dripping, condensation, etc.

Note:

For the normal operation and longer lifespan, please observe the following precautions:

- ✓ Please install it indoors and place it in a ventilated place.
- ✓ Please avoid placement in high temperature environment.
- ✓ Keep it away from high-voltage cables.
- ✓ Please keep it away from strong thunderstorm and strong electric field environment.
- ✓ Please keep it clean without dust.
- ✓ Please fix it firmly.

3.3 Installation

Dimensions of AP-MountKit-TS-W111

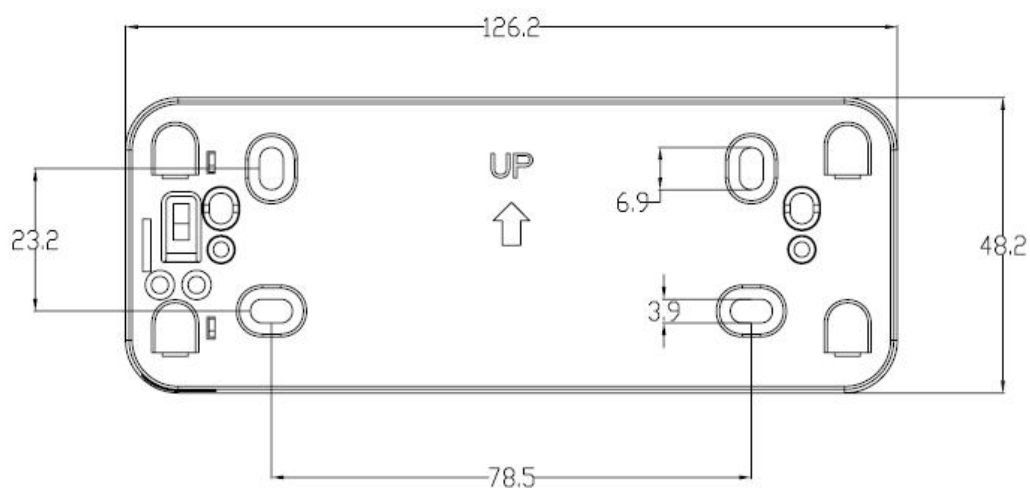


Figure 3-1 Bracket Dimensions of AP-MountKit-TS-W111(Unit: mm)

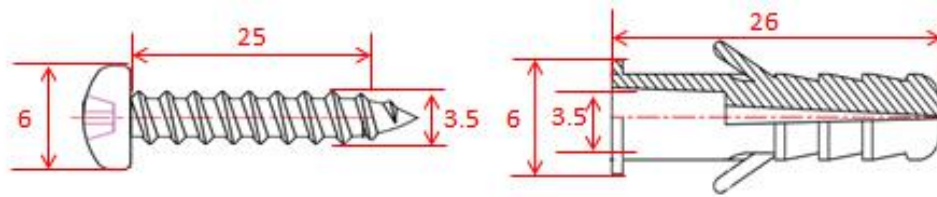


Figure 3-2 AP-MountKit-TS-W111 Wall-mounted Screw Dimensions (Unit: mm)

3.3.1 Wall mounted

If the AP is wall-mounted, a wall-mounted bracket, expansion solenoid, and screws are required. The first step is to drill holes. Drill four holes with a diameter of 5.0mm on the wall. The holes drilled correspond to the holes of the wall-mounted bracket. The four holes are four corners of a rectangle with a spacing of 78.5×23.2 mm, as shown below.

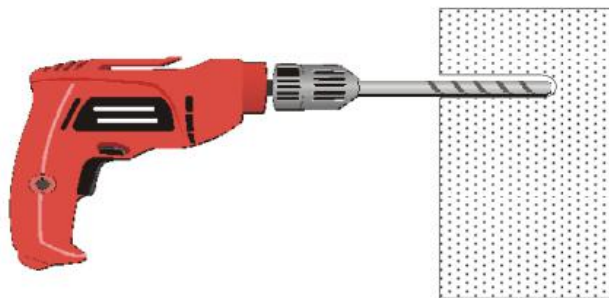
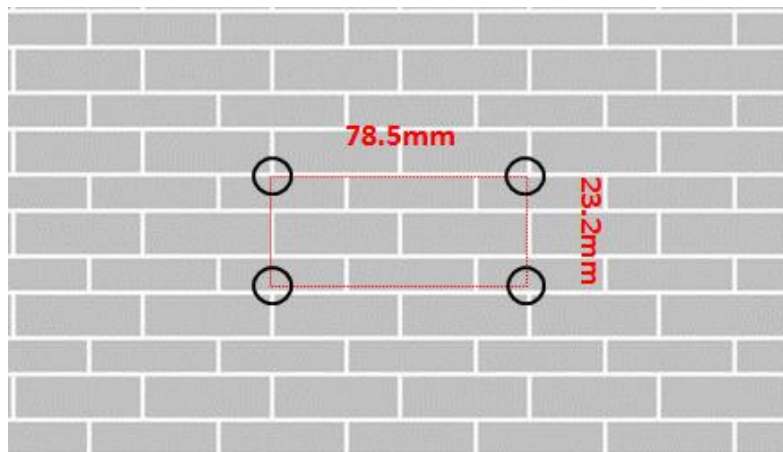


Figure 3-3 Wall drilling diagram

The second step is to fix the expansion solenoid. Insert the expansion solenoid into the drilled hole in the wall, and tap the solenoid with a hammer until the solenoid is fully inserted, as shown below.

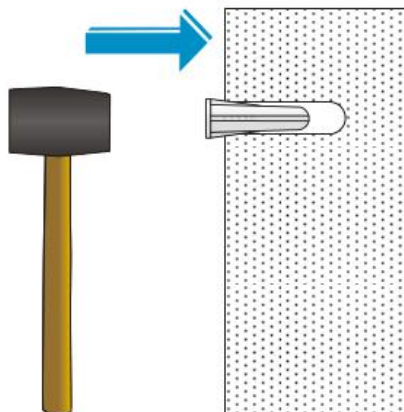


Figure 3-4 Schematic diagram of expansion solenoid fixing

The third step is to fix the wall-mounted bracket. During installation, the UP arrow of the wall bracket is upward, and then align the bracket screw holes with the expansion solenoid holes, pass the screws through the corresponding bracket mounting holes, and tighten the screws with a Phillips screwdriver, as shown below.

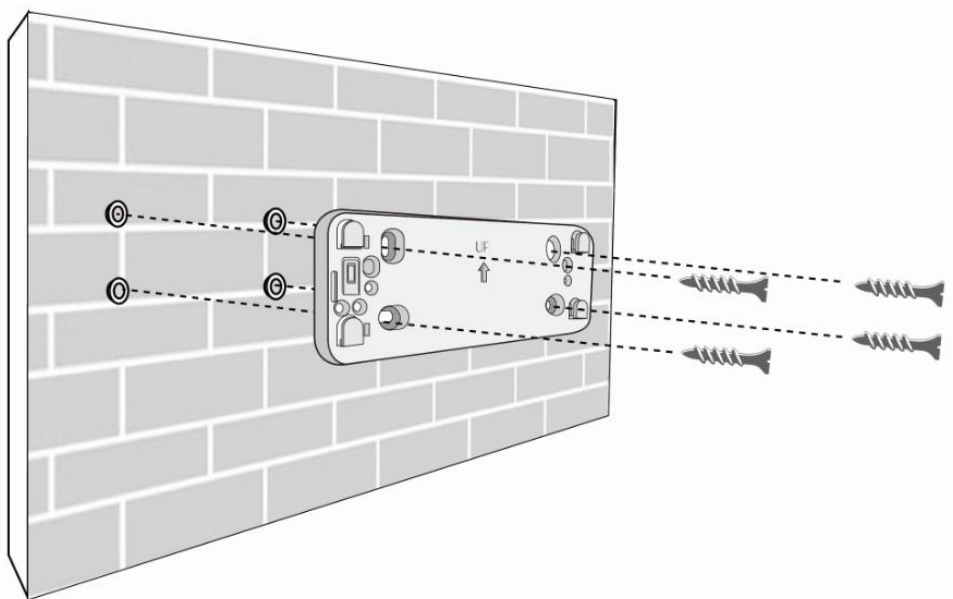


Figure 3-5 Wall-mounted bracket installation drawing

The fourth step is to connect the AP transmitter to the switch with an Ethernet cable (if it is local power supply, please connect the power cable in advance).

The fifth step is to install the AP transmitter. Align the wall-mounted holes on the back of the AP transmitter with the positions of the pegs on the bracket, and hang the AP on the bracket pegs, as shown in ① of the figure below, and press device down firmly, as shown in ② of the figure below. When you press down, a "click" sound indicate that the device is tight.

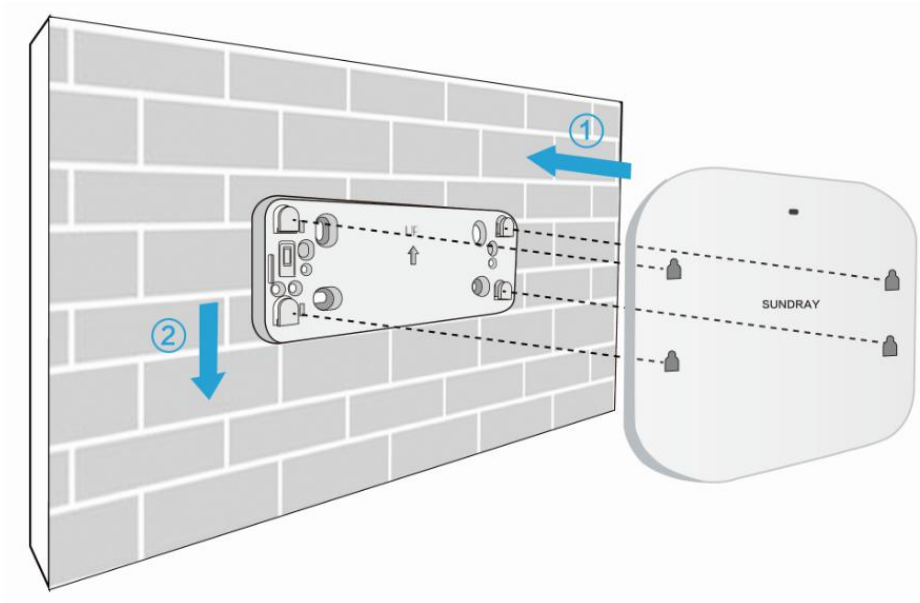


Figure 3-6 Install AP to the wall-mounted bracket

3.3.2 Ceiling mounted

If the AP is ceiling-mounted, a ceiling-mounted bracket, expansion solenoid, and plain screws are required.

The first step is to drill holes. Drill four holes with a diameter of 5.0mm on the ceiling. The holes drilled correspond to the holes of the ceiling-mounted bracket. The four holes are four corners of a rectangle with a spacing of 78.5×23.2 mm, as shown below.

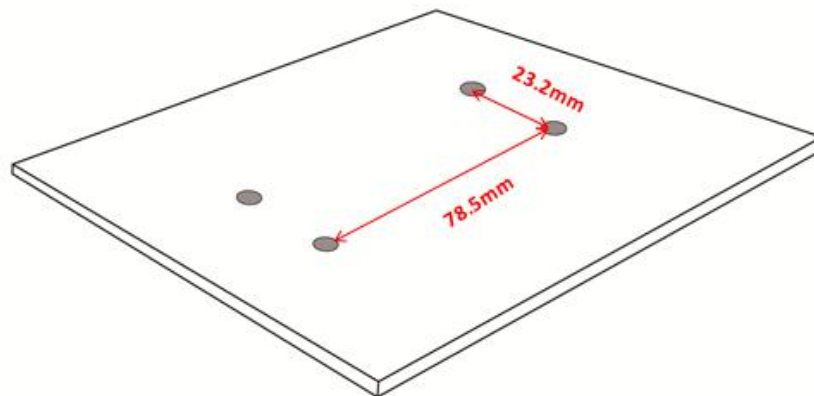


Figure 3-7 Ceiling drilling diagram

The second step is to fix the ceiling-mounted bracket, pass the long bolts through the mounting holes both on the bracket and the ceiling, and tighten the bolts with nuts on the other end of the ceiling to fix the bracket on the ceiling, as shown below.

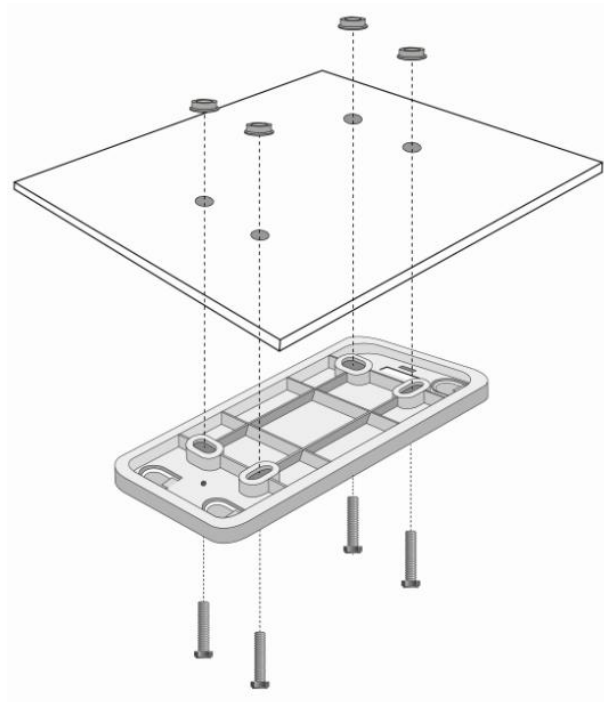


Figure 3-8 Installation drawing of ceiling bracket

The third step is to connect the AP to the switch with an Ethernet cable (if it is a local power supply, please connect the power cable in advance).

The fourth step is to install the AP transmitter. Install the AP transmitter to the ceiling-mounted bracket. Please refer to **3.3.1 Wall Mounted** for details. For suspended hard ceiling, Please refer to **3.3.1 Wall Mounted** for details.

3.3.3 Desktop AP transmitter

Do not place the AP transmitter on any metal, please choose a barrier-free place where can provide good reception effect. Moreover, make sure that the surface is flat and not easily touched.

3.4 Power supply and status check

The AP transmitter supported by the AP-MountKit-TS-W111 is compatible with 802.3af / 802.3at PoE power supply. Support local power supply 12V / 1 A. Users can choose the power supply mode according to the actual network environment.

After it is powered on, the status light on the front panel will be off in the beginning if it is normal, and it will become a blue light after a few seconds. If there is no connection to the host, the status light will flash. Once the connection is normal, the status light changes to blue and stays on.

3.5 AP network connection

Connect AP to switch by their Ethernet ports, and the AP can access the network through port.

Basic wiring and bundling process of network cables

- ✓ Adopt Cat5e cables (when the PoE power supply network cable exceeds 80 meters, it is recommended to choose Cat6 cable, the longest cannot exceed 100 meters), both ends are standard RJ-45.
- ✓ After the network cable is installed, it is required to be properly fixed to minimize the stress on the RJ-45 for a reliable and stable connection.
- ✓ The specifications, routing, cross-section and position of the network cable are required to be designed in advance, the cable is required to be neat, and the surface is required to be no damage.
- ✓ The turning of the network cable should be even and smooth, and the minimum bending radius of the turning should be greater than 60mm. Do not damage the wire insulation. The wiring must be easy to maintain and expand.
- ✓ The network cables must be bundled after wiring. The bundled network cables are required to be straight, less cross and close to each other. The appearance is required to be straight and neat, the spacing of the cable buckles is required to be uniform, the tightness is required to be moderate, and there is a margin if necessary.
- ✓ Network cable bundling requirements are required to be neat, clear and beautiful, which is generally grouped by category.
- ✓ After the network cables are bundled, they are required to be straight, neat and close to each other. When the bundled cable is turned, please try to use a large bending radius to avoid excessive core stress at the turning point, otherwise it the core may break.