

Electronic Shelf Label Implementation Standard and Precautions

In order to ensure the smooth operation of the overall system, implementation must be carried out in strict accordance with these standards.

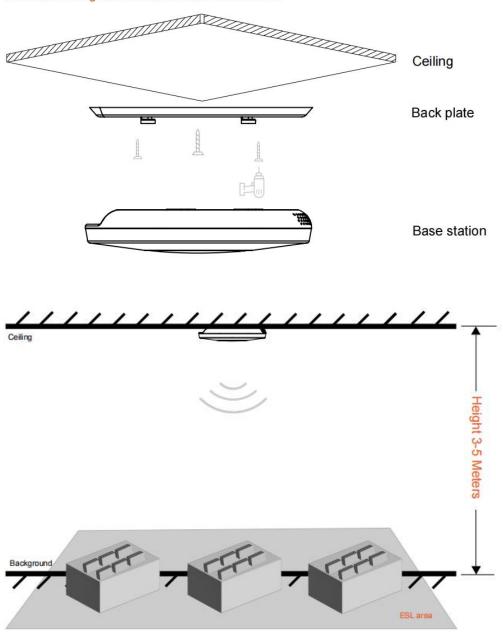
1. Network Deployment

- 1.1 All network cables, if the customer has no special requirements, use the Cat5 cable by default. If it involves a large amount of long-term data information and multiple devices, the default use of Cat6 cable.
- 1.2 The laying length of the network cable should not exceed 80 meters at the longest. If the solution exceeds 80 meters, replace it with optical fiber or other solutions;
- 1.3 After the implementation and deployment of the network cable is completed, use a special label to record the network cable with a clear and difficult-to-smear label;
- 1.4 If the network wiring is POE, you can use the POE adapter provided from us to work with the base station, the specification of the POE adapter is 48V to 5V, 2.4A.

2. Installation of the base station

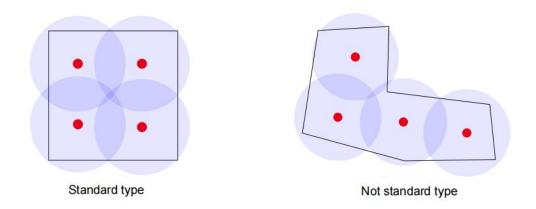
- 2.1 The installation location has no strong corrosiveness and no interference from strong magnetic equipment;
- 2.2 The strong power supply must be ensured near the installation location, and the distance should not exceed 50cm;
- 2.3 The surrounding environment of the installation location must ensure that there is no large-area weighing wall, no large-area metal bracket, and no equipment and environment that may easily interfere with 2.4G signals. Ensure that the base station signal can be sent and received normally;
- 2.4 The indoor temperature and humidity cannot exceed the range that the base station can bear;
- 2.5 The base station should be installed between 3 to 4 meters away from the ground. It should not be installed too high or too low, otherwise it will easily affect the signal coverage area; Install the base station with a 2-3 meters rod suspension to shorten the distance between the base station and the ground; If the floor height is 6 meters, it is recommended to install with a 3-meter rod suspension; if the floor height is 5 meters, it is recommended to use a 2-meter rod suspension.
- 2.6 The installation location of the base station should be easy for subsequent operation and maintenance;
- 2.7 The base station should be kept at least 10 meters away from the WiFi router.
- 2.8 To reduce after-sales costs, one more backup base station can be installed in the store. For example, if 2 are actually needed, 3 can be installed;

Schematic diagram of base station installation:



2.9 Multiple Base Station Area Deployment Reference:

When the area is large and multiple base station devices need to be installed, the distance between the device and the device should be more than 20 meters.



-- Channel settings of the base station

In the case where multiple base stations are installed in the same space, in addition to ensuring that the distance between base station equipment is normal, in order to improve the data transmission rate, it is recommended to set the channel of each base station. The channels should be separated by more than 5 channels. For example, the channel of the A base station is 10, and the channel of the B base station adjacent to the A base station can be set to 16.

The operation of base station channel settings is very easy and can be achieved through our base station configuration software tool. Our technical support staff will provide you with the software tool and its instructions.

-- Channel settings of the WiFi router

In order to reduce the interference of the WiFi router to the base station, it is recommended to make certain settings for the wifi channel.

For large supermarkets, it is recommended to set the WIFI channel to 1, 6, 11.

For small convenience stores and small supermarkets, it is recommended to set the WIFI channel to 1 or 6.

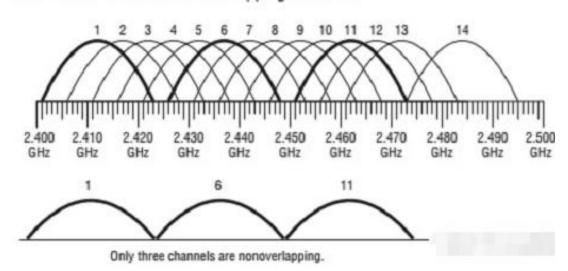


FIGURE 12.6 2.4 GHz nonoverlapping channels

3. Electronic shelf label installation

- 3.1 When the electronic shelf label accessories need to be fixed with screws, you should confirm with the customer whether screw fixing is applicable. Otherwise, 3M tap is used as the fixing method;
- 3.2 For freezer area, the common temperature ESLs can be installed outside the freezer. If you need to install ESLs inside the freezer, you need to use freezer series ESL.
- 3.3 In the aquatic area, such as area for live fish and shrimp, ESL tags may be soaked in water, you need to install water-proof tags.
- 3.4 Electronic Shelf Label implementation real shot

Mounting rails





Display of the ESLs





ESLs with suspension accessories





Waterproof tags with clips



Any questions about the implementation of Electronic Shelf Label, you are welcome to contact us by support@yalatechnology.com.