YPS20 Deployment and Connection

Yealink Usage of YPS20 with SkySound Solution

The Yealink solution uses YPS20 to monitor the presence of physical partitions in the split and merge meeting room to control the merge and split operation of two rooms. When a partition board is detected

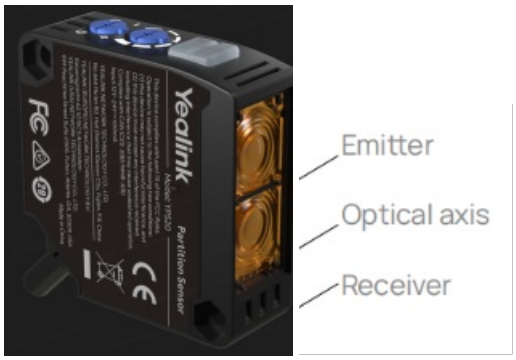
Deployment Steps:

Step1:Determining Sensor Deployment Location

Identify a suitable location within the meeting room to deploy the YPS20 sensor, ensuring the following conditions are met:

The sensor must be positioned where it is generally inaccessible to people or free from interference by moving objects or individuals within its operational range. Options include ceiling installation or mounting on a sidewall.

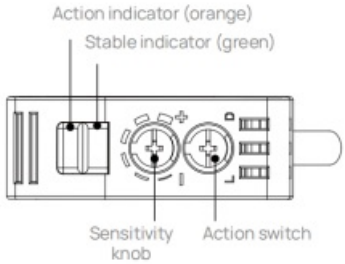
Ensure that the optical axis is as perpendicular as possible to the partition. If a perfect perpendicular alignment cannot be achieved, maintain an angle of less than 30°.



After deployment, the sensor must maintain a distance less than 1.5 meters from the partition. Additionally, when the partition is opened, there should be no structural beams or obstacles behind it that could block the optical path and interfere with its detection accuracy. （Check the details on the Table1 ）

If other objects behind the partition could cause false readings of the partition open/closed status, reduce the sensor's sensitivity to mitigate interference from these objects.

How should this sensitivity adjustment be performed.



Adjust the **sensitivity knob** to **ensure that the deployment position of the YPS20 to the Partition is less than the effective distance and the interference object behind the partition is greater than the interference distance.**

There are a total of 6 Levels on the YPS20, and the corresponding effective distance and interference object distance for each setting are as follows:

	Level1	Level2	Level3	Level 4	Level5	Level 6
Active Distance	0	0.05m	0.5m	0.7m	1.3m	1.5m
Interference Distance	0	0.2m	0.8m	1.0m	1.8m	4m

Table 1

(There may be a 10% variation in values between individual units.)

Step2:Wiring Connection Between YPS20 and AP08

Connect the YPS20 to the Phoenix terminal male connector,then connect it to the **AP08 GPIO Phoenix terminal female connector**.Line connection showed as below.Then power on the AP08.

Step3:Check the Position is correct or not

- After selecting the installation position and connect the YPS20 to AP08, open and close the partition while observing the indicator lights to verify that the sensor's detection status is normal before securing it in place.
- And make sure the "Action switch" keep on "D"position.

If any of the following abnormalities occur, the sensor's signal reception is faulty:

- **Green light turns off or flashes:**
  The sensor may be too far from the partition or operating at the edge of its detection range. Solution: Reduce the distance between the sensor and the partition.
- **Green light remains steady, but the orange light flashes or turns on when rooms are merged:**
  Indicates that an obstruction is still interfering with the sensor's detection. Solution: Increase the sensor-partition distance or lower the sensitivity.
- **Green light remains steady, but the orange light turns off when rooms are divided:**
  The sensor fails to detect the partition (especially if it is black). Solution: Decrease the sensor-partition distance.

Step4:Deployment Considerations

- Estimate the distance between the sensor deployment location and the AP08 installation position. If this distance is less than 10 meters, the cable length provided with the YPS20 will be sufficient for deployment.
- If the estimated distance is likely to exceed 10 meters, determine the required additional cable length based on the estimation. You may use AWG26 wire to extend the cable (maximum extension: 20 meters).
- Once the location is confirmed to meet the sensing requirements, proceed with securing and deploying the sensor.

Step5:Handling Special Cases

- Under normal circumstances, we require the sensor's infrared beam to be perpendicular to the partition. However, when the partition's position makes true perpendicular alignment impossible, a limited deviation angle is permitted. This angle must generally not exceed 30°,and should keep the distance between YPS20 to Partition less than 1.5m.
- The sensor operates by emitting infrared light that reflects off the partition to detect its open/closed status. An angled installation will reduce the effective detection range, which can be compensated for by slightly decreasing the distance between the sensor and the partition.
- Whenever possible, avoid installing the sensor in locations exposed to direct sunlight or strong indoor lighting, as intense light interference may cause false readings.

Step6:Room Designer setting

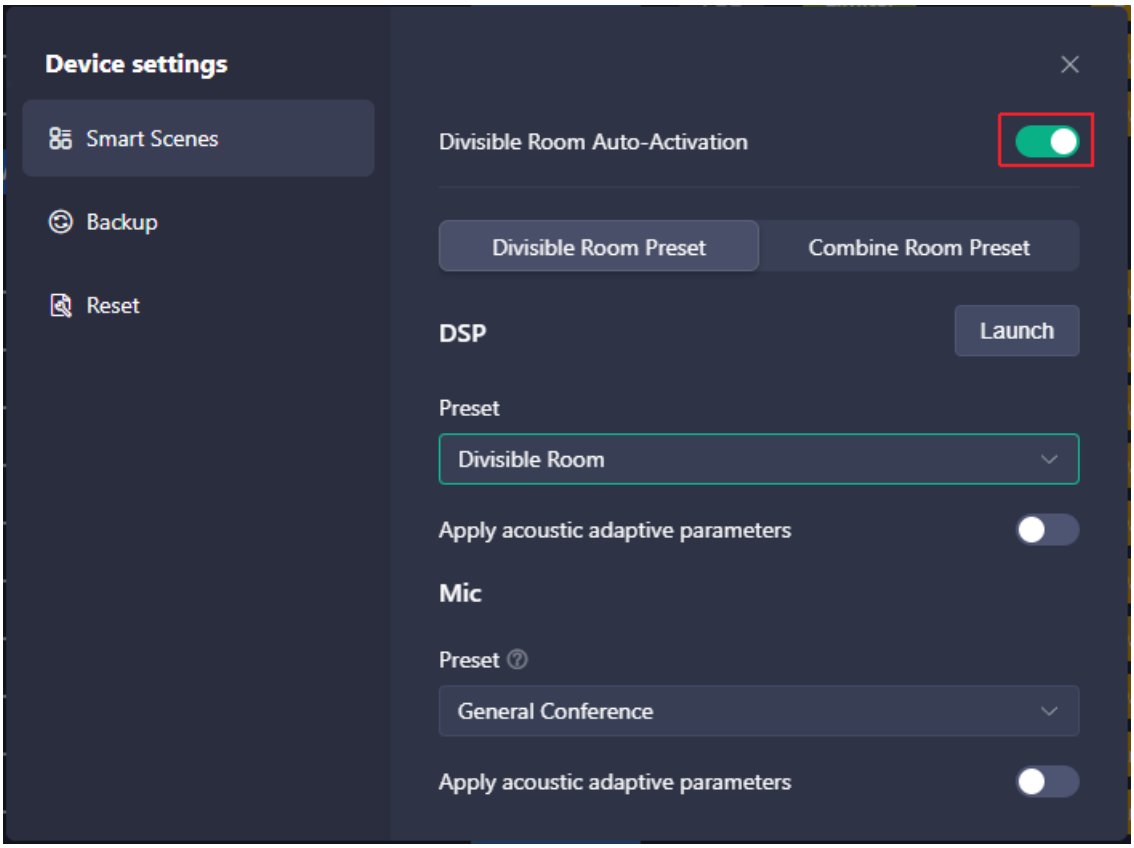
①Setup Divisible Room

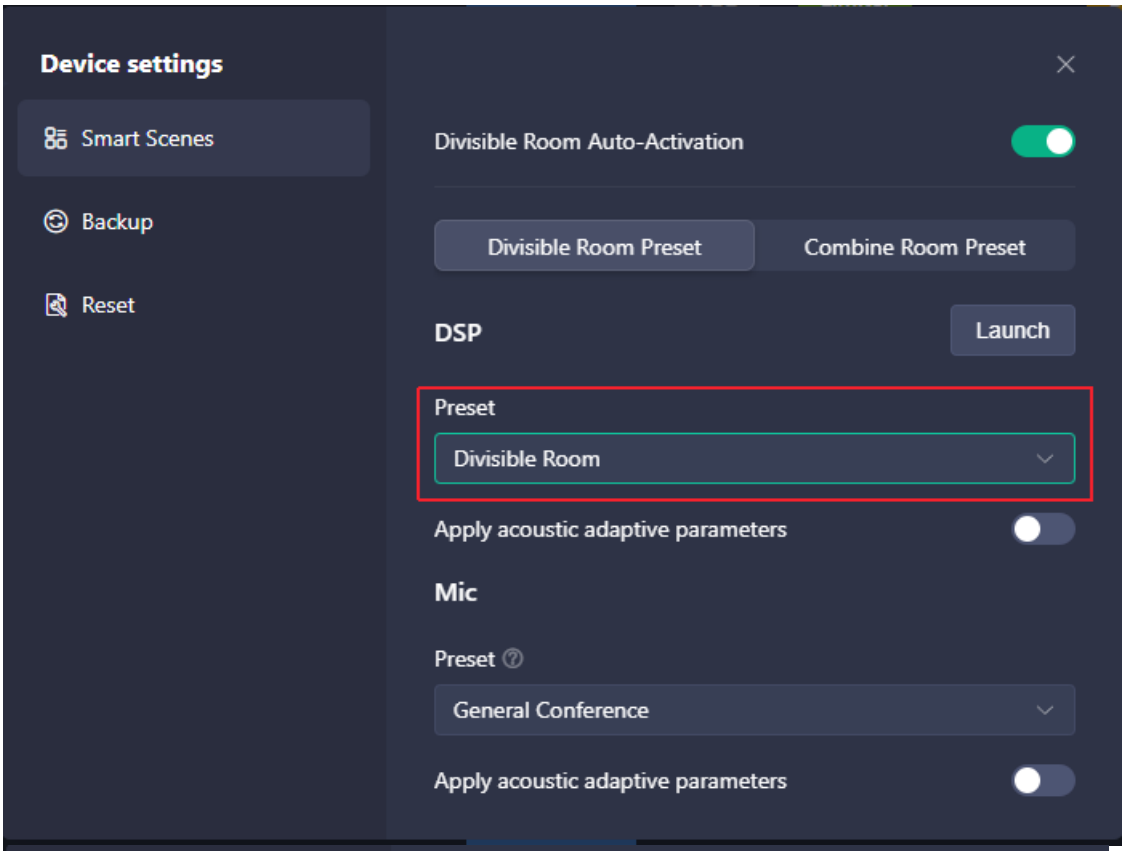
②Fill in the room data

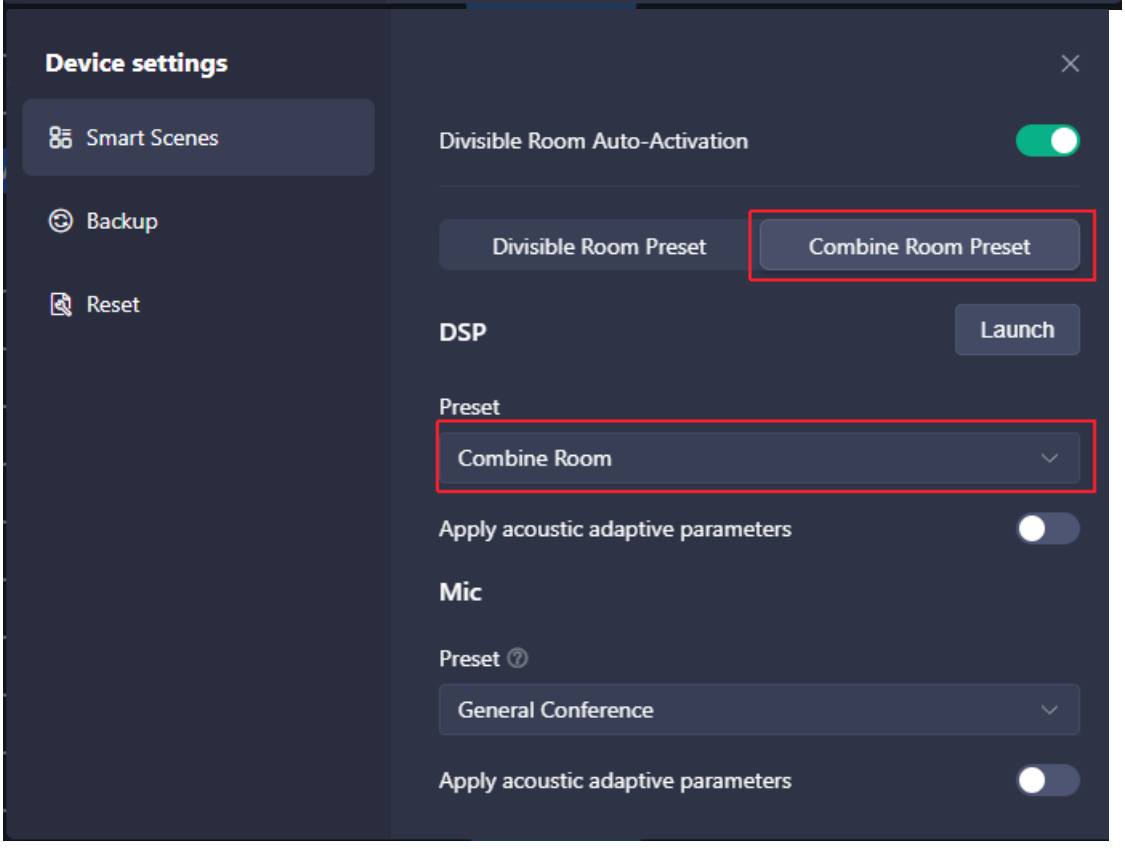
③Enter the Link View, click on AP08 to access the AP08 Link View

④Click the Device settings

⑤ Active the "Divisible Room Auto-Activation"，choose the preset for "Divisible Room Preset" and "Combine Room Preset"；







How to Connect YPS20 with AP08

For actual deployment, the YPS20 will be used to connect the Yealink AP08 DSP to transmit the merge split signal. Here is the connection between YPS20 and AP08 via GPIO. YPS20 has a total of four twisted wires, which are brown, white, blue and black. The brown wire is connected to the positive electrode of the power supply, the blue wire is

grounded, the white wire is used for signal transmission, and the black wire is not used.