CONNECTING IIWARI DEVICES

1 Check if the right devices are available

(And the right number of devices)

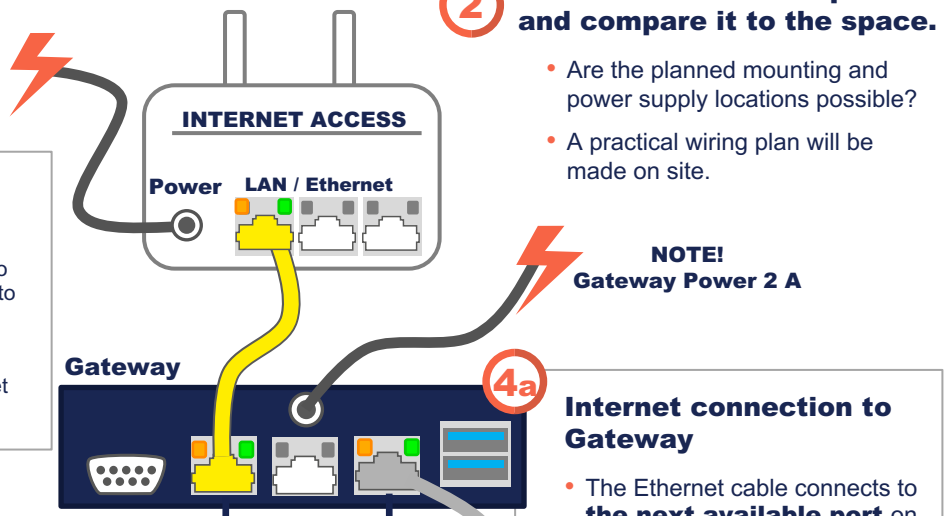
- Gateway
- Switches
- Ethernet cables
- Master Base Stations
- Base Stations
- 12 V power supplies
- 12 V power cords
- Positioning tags

Necessary tools

- Installation tablet
- Portable laser measuring device
- Cable ties
- Side cutter
- Ladder / lift
- Adequate safety equipment

2 View the installation plan and compare it to the space.

- Are the planned mounting and power supply locations possible?
- A practical wiring plan will be made on site.



3 Internet connection, optional

- **Option 1:** Plug the power cord into the WLAN / 4G router and plug it into an electrical outlet.
- **Option 2:** If you already have an Internet connection, use its Ethernet cable in the next step.

4a Internet connection to Gateway

- The Ethernet cable connects to **the next available port** on the WLAN / 4G router, the other end to the **WAN** port on the Gateway.

4b Activating Gateway

- Activate the Gateway by reading the **bar code** from the device with Iiwari tablet computer.
- Each Gateway has its own serial number, which appears on Dashboard when the Ean code is scanned.

5 Gateway to PoE switch

- The right side of the gateway has an **MBS** port, connect an Ethernet cable to it, and connect it to the PoE switch.
- Plug **the power cord** into the PoE switch and into an electrical outlet.
- The switch **usually** has a port on the right side to which the Ethernet cable from the GW is connected.
- Check that the switch **lights up green** to let you know that the connection is OK.

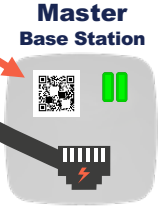
There are many different kinds of switches, they can have different numbers of ports. However, they operate on the same principle.

6 The Installation of a Master Base Station

- Activate the Master Base Station by reading the **QR code** from the device.

7 PoE switch to the Master Base Station

- Connect the **PoE cable** to the Master Base Station, check that the **green light** on both the Master and the switch is on and the system is working.
- You do not need to connect the power cord when the PoE cable is in use. **Power flows through the PoE cable.**



TIP to facilitate post-production

- On the switch port, mark the number of the cell to which the connection cable is going to the Master Base Station.
- For example, **port # 1** ➡ **cell # 1**

(Marking can be done for example with a permanent marker)

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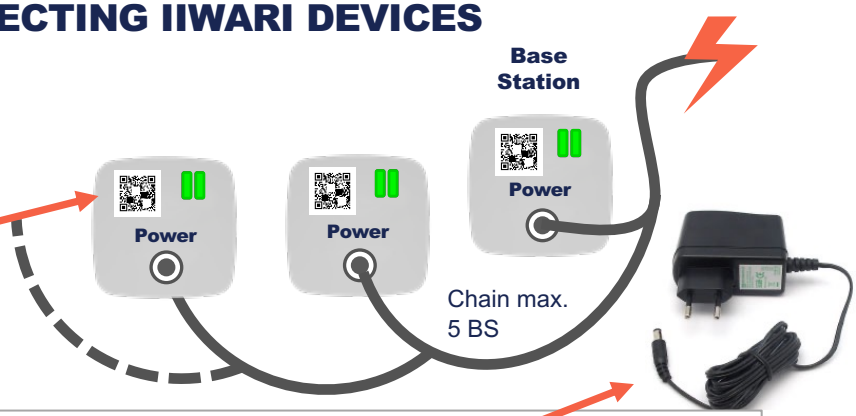
8 The Installation of a Base Station

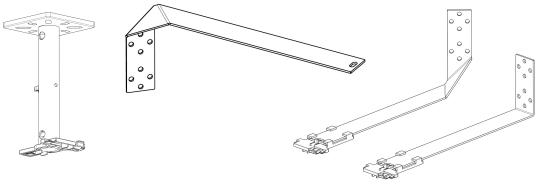
- Activate the Base Station by reading the **QR code** from the device.



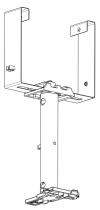
9 Power to the Base Station

- The base station is wireless and requires only a **12 V power connection.**
- The power cord is installed on the Base Station, and the power supply is plugged into an electrical outlet. **Check that the light flashes** in the Base Station.
- If you need to bring power from a longer distance, connect the power cord to a longer **extension cable**. **Splitter cables** can be used to chain the power forward to the next Base Station. The power cables are 1 to 10 m long and can be connected with locking pieces to **withstand the pull** of the power cord.
- In order to ensure that there is enough power for all base stations, it is advisable to chain **max. 5 Base Stations** at a distance of approx. **50 m**.
- The last part of the cord is always a splitter cable that **lacks a locking part** to hold it to the Base Station.

The 5 different mechanical fasteners



Ceiling fastener | **Corner fastener** | **Wall fastener**



Light rail bracket

Power rail bracket

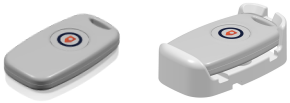
The MBS and BS must be installed so, that the Iiwari logo is facing the floor.

Device location measurement, MBS and BS

- Measure the height of the device (z value) from the floor and save it to the system via the Android tablet interface.
- Measure the locations of the devices (x and y values from the origin) with a portable laser measuring device and save them to the application.
- The location of a few easily measurable devices is measured and **autocalibration** calculates the locations of the remaining devices. The locations of the measured devices are locked in the Dashboard.
- Check that within the cell, **all base stations have a line of sight to the master base station**

To activate the tag, push the button.

The tag can be attached with its own stand, it can be hung around the neck, attached with a cable tie, etc.



Test walk

- Positioning functionality is tested by transporting a tag in space in a route that covers the entire space (e.g., all shelf spaces in the store, all rooms and corridors in the office) and ensuring that the location matches the route displayed in the user interface.

Follow up

- The system is monitored remotely, and care is taken to ensure that each device is operational. If necessary, replace inoperative devices.

Iiwari's customer service will be happy to help in the event of any problems.

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