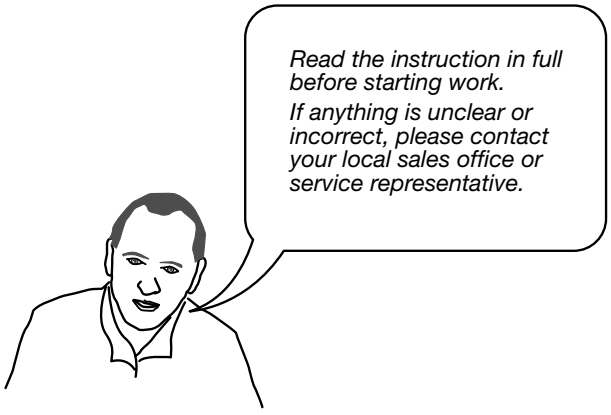
Instruction

Installation of Site wireless board

Washers and Dryers with Compass Pro & Washers with Clarus Vibe

Kit No. 988807301, 432731901



438907726/EN
2025.02.11

1 Safety Precautions for Site wireless board

Note!

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been constructed so that it can operate in at least one EU Member State and thereby complies with Article 10 (2). The product complies with Article 10 (10) as it has no restrictions on putting into service in any EU Member State.
- This equipment is equipped with WiFi that operates in the frequency band of 2.4 GHz with a maximum power less than 20 dBm in that band.
- This equipment is equipped with BLE that operates in the frequency band of 2.4 GHz with a maximum power less than 10 dBm in that band.
- The maximum output current of the power supply connected via USB type C to the equipment must be less than 8A.
- The equipment must not be installed at a height over 2 meters without being well secured to its place.
- Before starting the installation of the Site wireless board, you must provide a network cable per “Site wireless board” with a length NOT exceeding 30 meters.

- เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.
- 当該機器には電波法に基づく、技術基準適合証明等を受けた特定無線設 備を装着している。

1.1 Additional Safety Precautions for Site wireless board

- The WiFi frequency band consists of 13 channels from 2412MHz to 2472MHz with 5MHz separation; channels are used according to country regulations.
- The WiFi modulation/transmission techniques are: 802.11b → CCK, DSSS; 802.11 g/n → OFDM.
- The BLE modulation/transmission techniques are: GFSK.
- For Peru, the maximum WiFi transmitter power is 16.5dBm with an antenna gain of 3.4/3.5dB for a maximum radiated power of 20dBm, and the maximum BLE transmitter power is 0dBm with an antenna gain of 3.4/3.5dB for a maximum radiated power of 3.5dBm.
- Wireless communication standards are Wifi: 802.11 b/g/n; BLE.

2 Dimension drawing

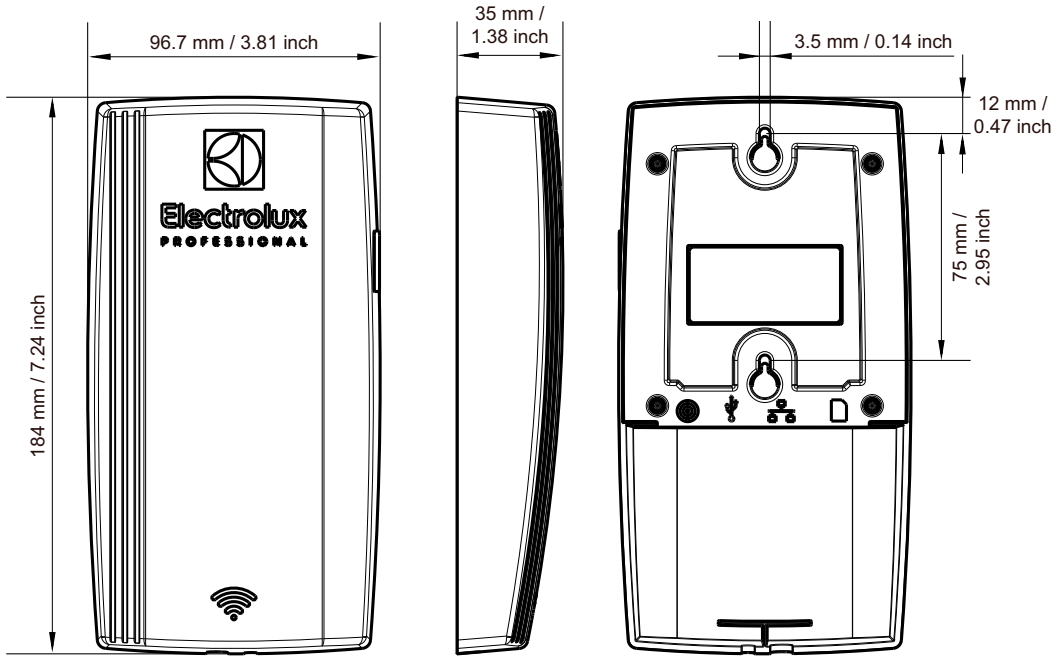


fig.X03632

3 Contents of the kit

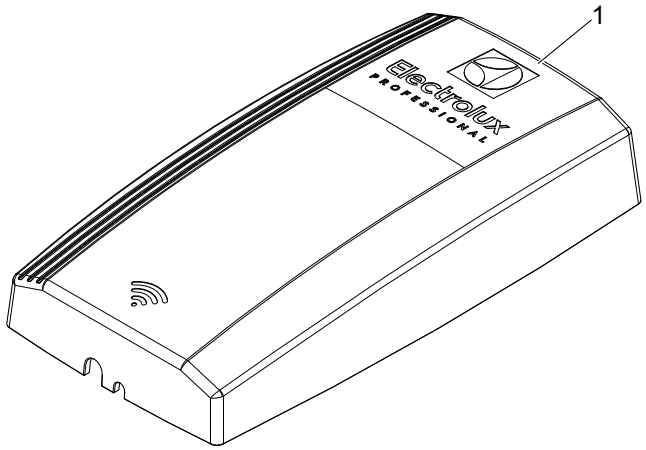


fig.X02835A

1	432689301	Site Wireless Board x 1

4 Recycling instruction for packaging

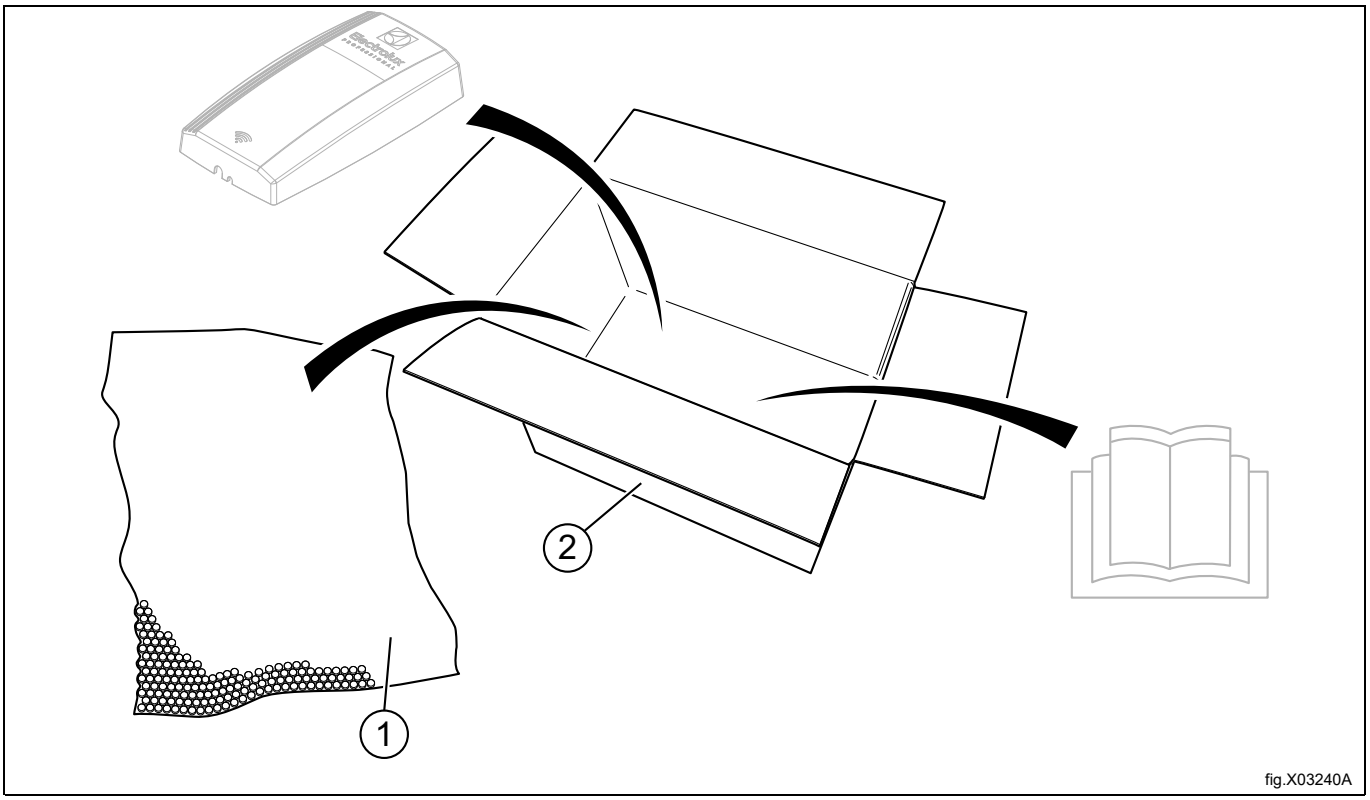


fig.X03240A

Fig.	Description	Code	Type
1	Bubble foil	PE-LD	Low density polyethylene
2	Cardboard packaging	PAP 20	Corrugated card board

5 Connection of the Site wireless board

May only be carried out by qualified personnel.

Follow the instructions carefully in order for a correct and safe installation and interconnection of the equipment.

Note!

The equipment must not be installed at a height over 2 meters without being well secured to its place.
The maximum output current of the power supply connected via USB type C to the Site wireless board must be less than 8A (option).

5.1 Network overview

To be able to use Electrolux Professional provided Connectivity and Management Software Tools, ELS network should be established.

The Machine wireless board is a part of ELS Network, it should be installed on each machine with Compass Pro/Clarus Vibe control system or Vibe interface and it shall be connected to the CPU RS232 port via a quick connection port behind or on top of the machine.

The Site wireless board is designed to be connected to PoE (Power over Ethernet according to IEEE 802.3at) port on the ethernet router otherwise a power supply (D) connected via USB type C with output 5V DC / 8A Max. is required to be connected to the Site wireless board if there is no power supply over ethernet cable.

Network details:

- Machine wireless board on each machine (B)
- Site wireless board (C)
- Power supply, output: USB type C 5 VDC / 8A Max. (option) (D)
- Router with PoE (Power over Ethernet according to IEEE 802.3at (E)
- Web application (G)

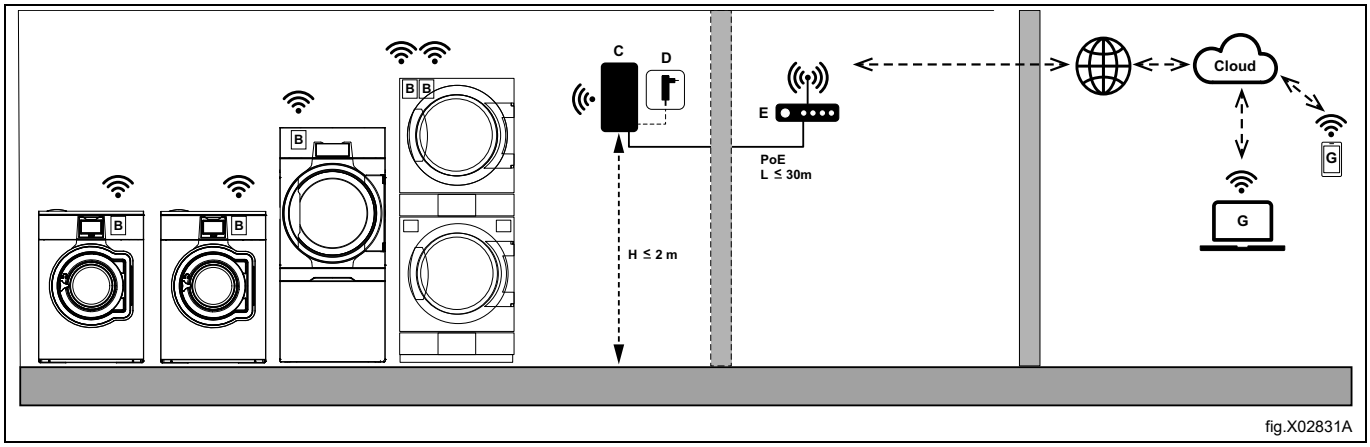


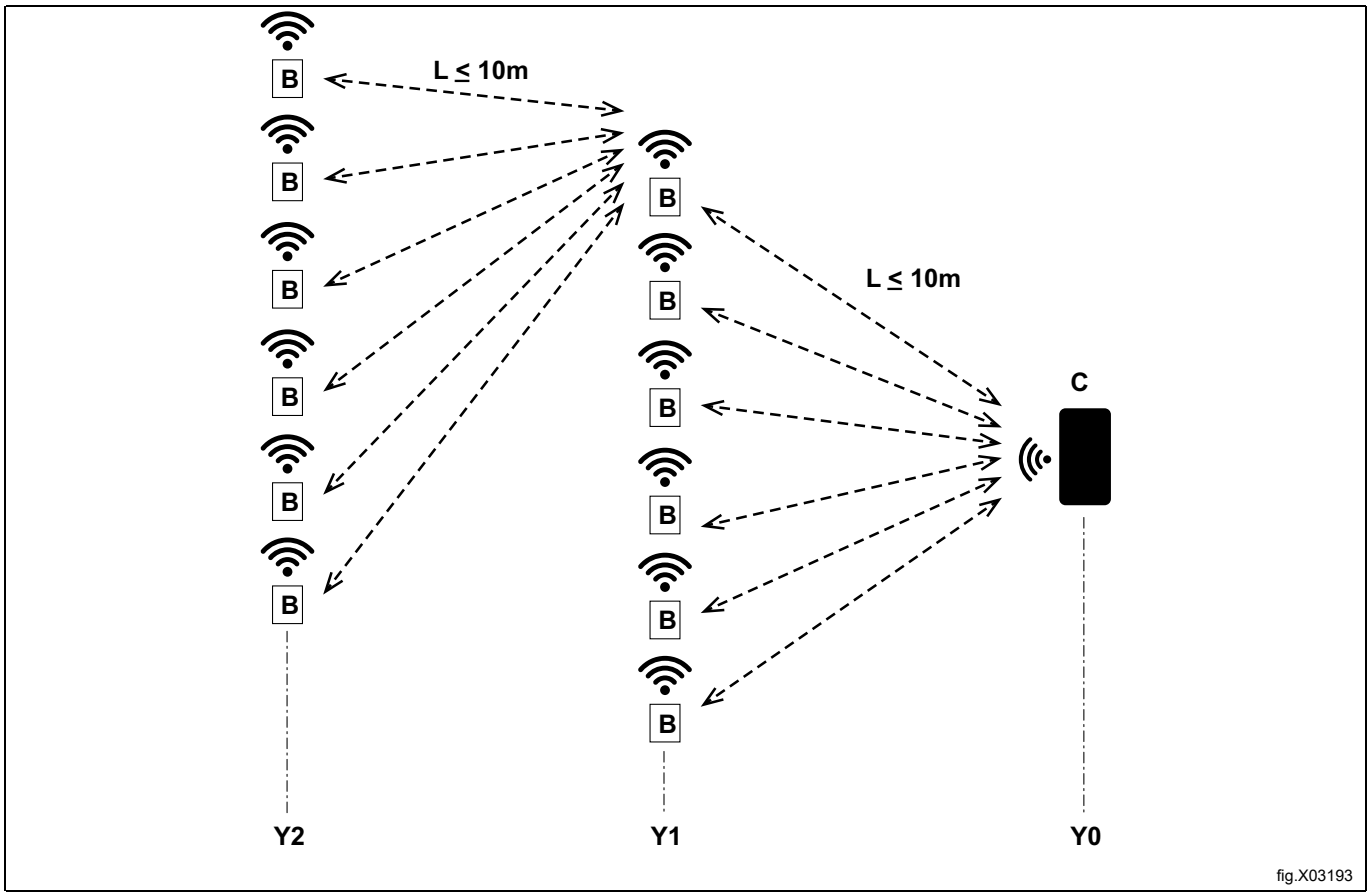
fig.X02831A

Warning

The Site wireless board is possibly at risk of damage while connecting to the PoE: please make sure the Router with PoE is switched OFF when connecting or disconnecting the ethernet cable to the Site wireless board.

WIFI-MESH

- Fixed root (C)
- Max. 16 layers (Y0–Y16)
- Max. 6 children per node (B)
- Max. 20 nodes (B) per root (C)



5.2 System requirements

- Min. requirements for commercial router:
  - Alt. 1: A router with PoE (Power over Ethernet according to IEEE 802.3at).
  - Alt. 2: A router without PoE and a Power supply (output: USB type C 5 VDC / 2A Min.–8A Max.).
- Min. requirements for internet connection with indication of port used:
  - Internet connection for Cloud connection. Min. 1 Mbps (higher than 5 Mbps is recommended) for upload and 10Mbps for download speed
  - Network Firewall

    The Internet connection used by the "Site wireless board" must be allowed outbound traffic on port
    - 8883 (MQTTS, tcp): `mqtt.eprlc.com`, `*.azure-devices.net`
    - 443 (HTTPS, tcp): `ipapi.co`, `portal.eprlc.com`, `*.azure-devices.net`, `api.iot.epr-apps.com`, `*.blob.core.windows.net`
    - 123 (NTP, udp): `pool.ntp.org`

    These ports used to send the data to the cloud. Be sure to properly setup your Network Firewall or protection system in your network if necessary
  - DCHP enabled (not possible to set IP address manually at this point)
- Network cables:
  - Standard Ethernet cables, type UTP, CAT 6 or CAT 5, both ends terminated with RJ45 connectors. (Patch cable and its length must NOT exceed 30 meters) (obtained locally).

5.3 Installing the Site wireless board

Decide a proper location where the Site wireless board shall be installed.

- The equipment must not be installed at a height over 2 meters without being well secured to its place.
- The length of the network cable must not exceed 30 meters.
- The Site wireless board shall be installed away from devices (e.g.: large transformers), or power supplies (e.g.: main power mains), that may induce a radiofrequency disturbance.
- Please make sure that the WiFi signal between the Site wireless board and the machines is not obstructed or disturbed by thick or concrete walls.

A basic overview can look as in the figure.

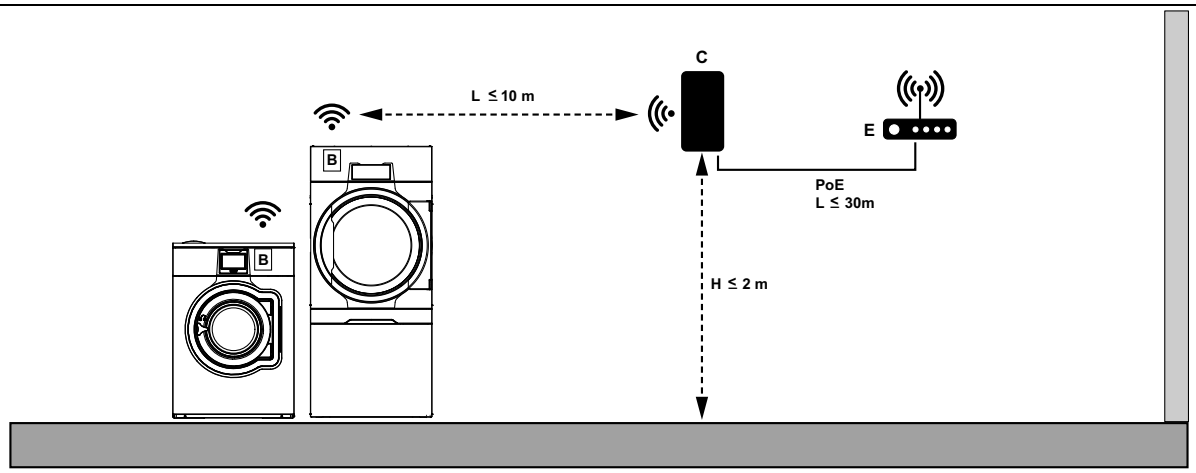


fig.X02839

Mount 2 screws (or 2 nails) suitable for the type of wall. The distance between the 2 screws shall be 75 mm.

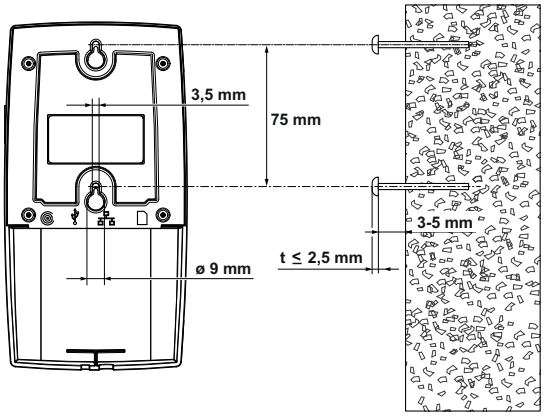
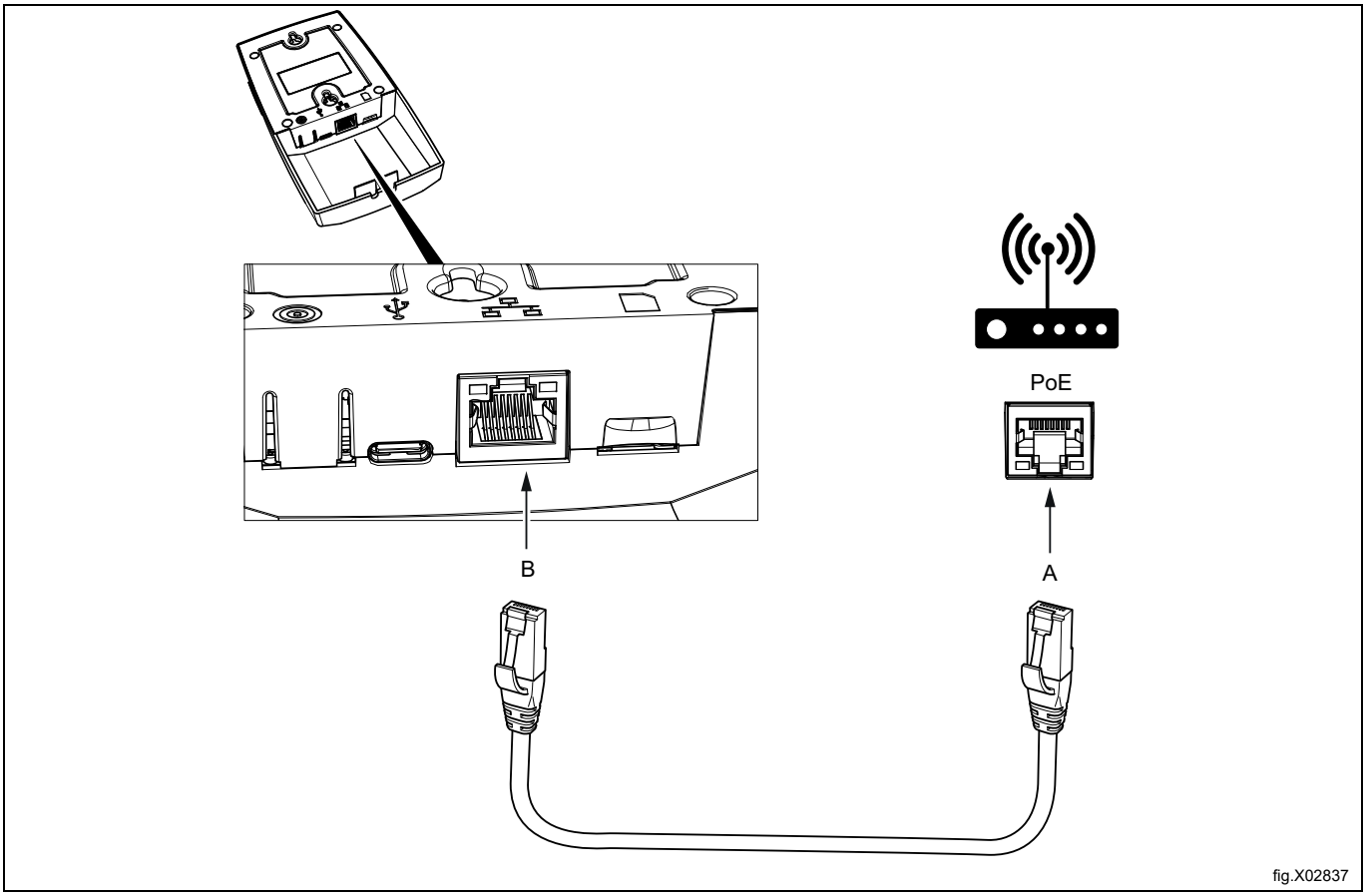


fig.X02836

Warning

The Site wireless board is possibly at risk of damage while connecting to the PoE: please make sure the Router with PoE is switched OFF when connecting or disconnecting the ethernet cable to the Site wireless board.

Connect one end of the network cable to the PoE port on the router (A) and the other end to the Site Wireless Board (B).



If the router (C) has no PoE, the local power supply connected via USB-C with output 5V DC/2A Min. – 8A Max. (D) is required to be connected to the Site wireless board.

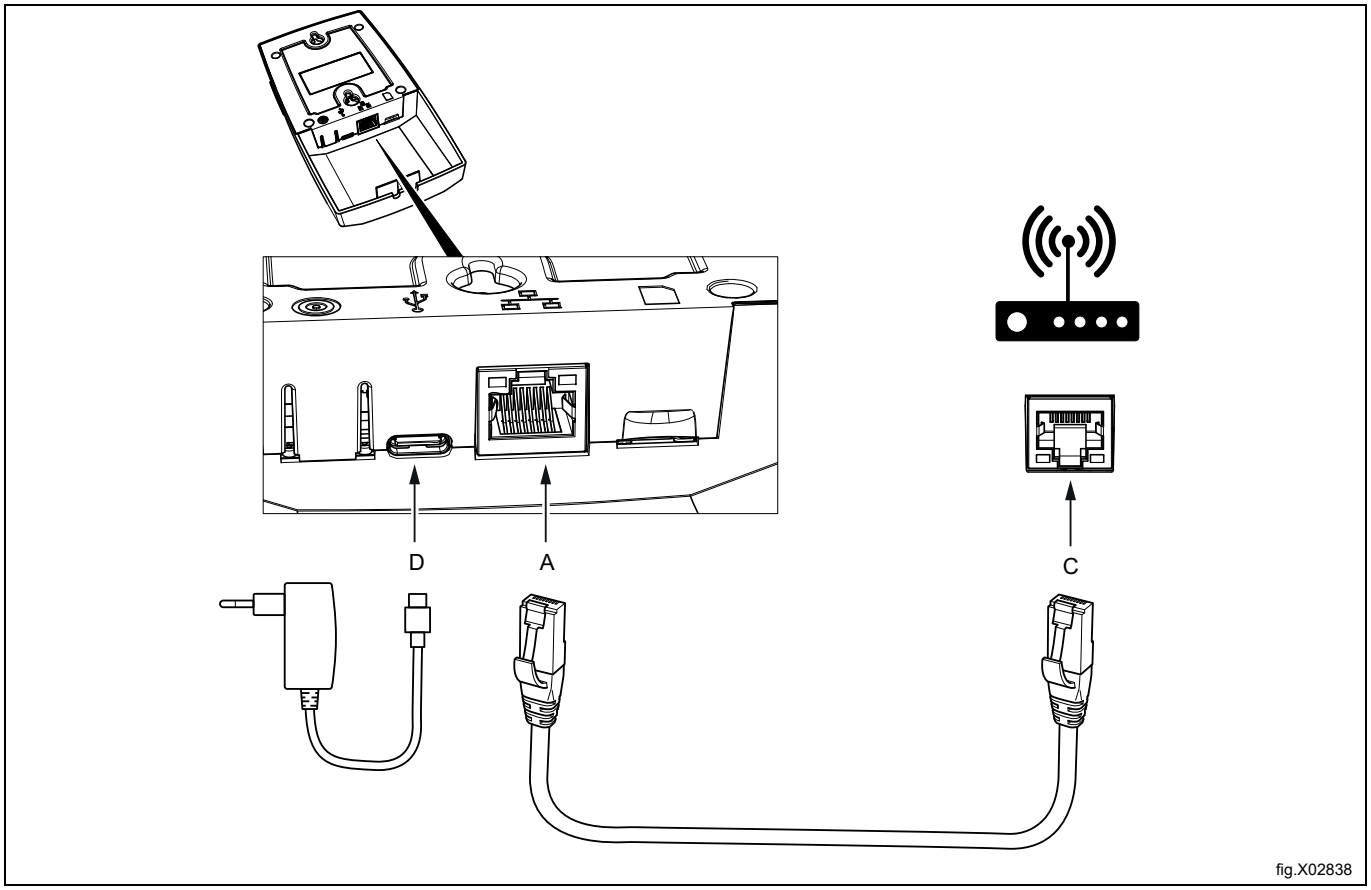


fig.X02838

Take a photo or take a note of the P/N & S/N of the Site wireless board (root node), they are needed in the provisioning step.

When the Site Wireless Board is ready, mount it to the wall.

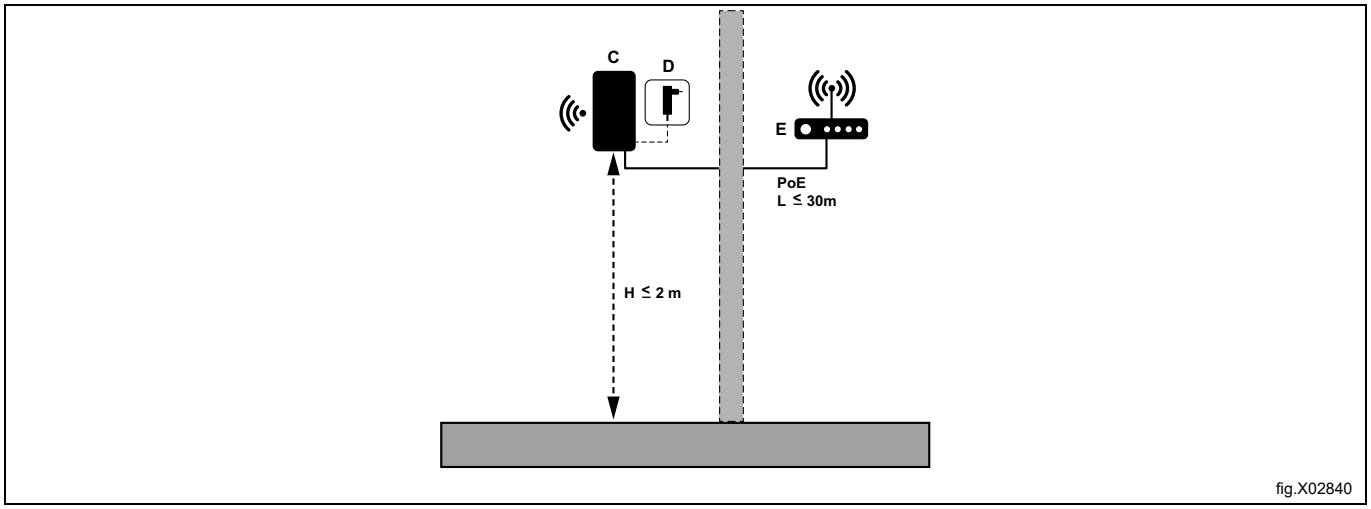


fig.X02840

When the machine wireless board and the site wireless board have been installed, follow the attached INOM and the videos (scan on the QR code) to complete the provisioning.

6 Adding an extra site wireless board as a repeater

If the WiFi signal between the Site wireless board (C) and the Machine wireless board (B) is weak. (Or between the machine (B) and the another machine (B)).

There is a possibility to increase the WiFi strength by adding an extra Wireless site board which is switched to be a repeater (RE) in between as illustrated in the below figure.

It is recommended to install the repeater (RE) where the WiFi signal between Root to Node or Node to Node is weaker than -88dBm (e.g. -89dBm...).

The WiFi strength can be viewed using LCC after the site has been completely provisioned. (The site is connected to the One connected platform).

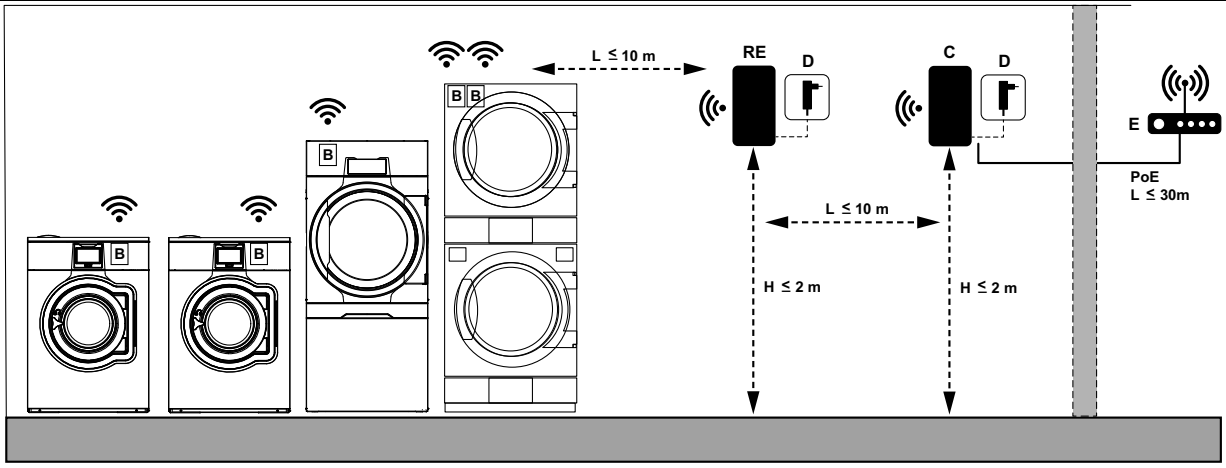


fig.X02831B

6.1 Installing the Site wireless board as a repeater

Install the Site wireless board as a repeater where the WiFi signal between Root to Node or Node to Node is weaker than -88dBm (e.g. -89dBm...).

The equipment must not be installed at a height over 2 meters without being well secured to its place.

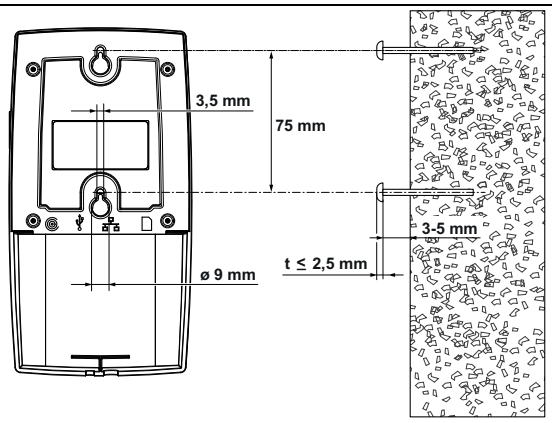


fig.X02836

Connect the local power supply connected via USB-C with output 5V DC/8A Max. (D) to the Site wireless board.
When the board is powered on, change the Site wireless board to be repeater (RE) mode:

- Press and hold the button (E) for 5 seconds, then release the button.

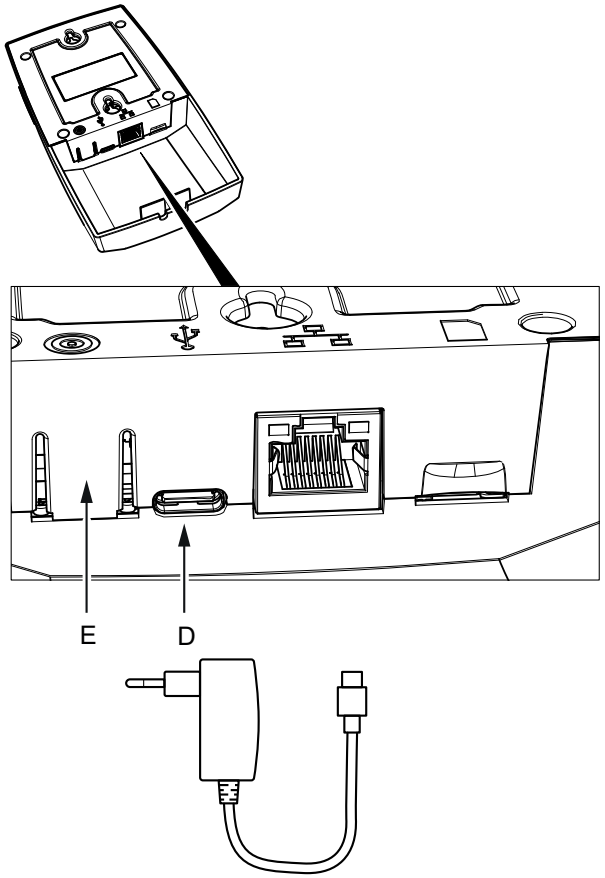


fig.X02838A

- The unit will restart and show a pattern with short blinks.

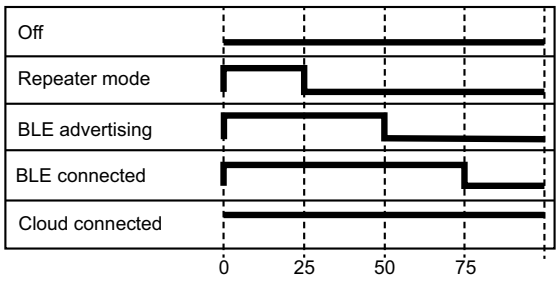


fig.X03251E

When the repeater is ready, mount it to the wall.

7 Button & LEDs for Site wireless board

Press and hold the button for 5 seconds, then release when it is toggling between Repeater mode and router (normal) mode.

A short press (< 1.5s) on the button is toggling the BLE on/off.

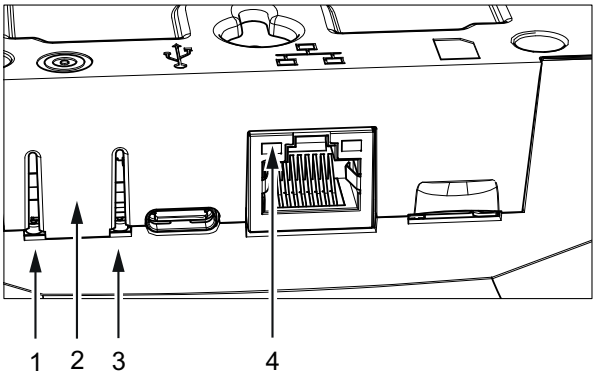


fig.X02838B

1	D12: Green color / Power
2	Button
3	D10: Blue color / Function
4	LAN

Description for LED

Note!

Period time is 1 second for all LED's which is blinking.

D12: Green color / Power:

- Off: Board not powered (or broken).
- On: Board powered.

D10: Blue color / Function:

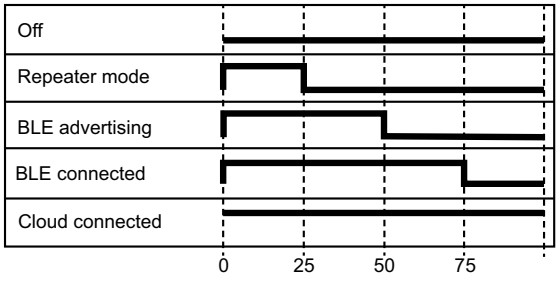


fig.X03251E

Cloud is not connected in the Off mode and Repeater mode.

- BLE indication is hiding the Cloud connection indication, which means if BLE is indicated, the Cloud may/not be connected.
- BLE is off if LED mode is Off/Repeater/Cloud connected.

LAN

Green lights when link is up.

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