VusionGroup
EdgeSense Digital Shelf System

Vusion EdgeSense Digital Shelf System Installation Guide

Contents

VusionGroup

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Product Information

Specifications

- **Wireless Technology:** Bluetooth Low Energy (Bluetooth LE)
- **Operating Frequency:** 2.4 GHz ISM band

- **Protocol:** RAN2.0
- **Components:** Rail, Rail Controller, End Cap, Power Unit

Product Usage Instructions

Hardware Setup

Attach Rail Controller and End Cap
To attach the Rail Controller to the EdgeSense Rail:

1. Slide the Rail Controller into the right side of the rail until the locking mechanism snaps into place.
2. Attach the EndCap on the opposite side of the rail.
3. To remove either component, press the button with a plastic rod.

Insert Power Unit
To attach the ES-C Power EdgeSense Rail:
Place the battery pack on the rail and slide it towards the rail controller until fully inserted.

Check Functionality
When installing the Power Unit:

- The LED on the Rail Controller will flash 3 times in green (RC is powering on) or 3 times red (Battery voltage is low).
- After boot up, the LED will follow a traffic light scheme indicating different states.
- Bus errors are indicated with red flashing.

Plugging in Displays
To attach a Rail Display to an EdgeSense Rail:

1. Slide the display from the bottom into the rail until a clicking sound is heard.
2. Ensure the display sits in the rail without gaps and the hooks are in place.

Frequently Asked Questions (FAQ)

- **What should I do if the LED on the Rail Controller flashes red?**
  If the LED flashes red, it indicates low battery voltage. Make sure to charge or replace the battery pack.
- **How do I know if the device has been onboarded?**
  The LED will flash green continuously for 5 minutes when the device has been successfully onboarded.

Introduction

- The EdgeSense® is a plastic rail system based on a 3-wire bus for power supply and data transmission. Rail displays are using mechanical contacts to connect to the bus.
- The ES-C Controller contains a radio component to receive data from and transmit data to an Access Point wireless. The radio is based on Bluetooth Low Energy (Bluetooth LE) technology and is operating in the 2.4 GHz ISM band. The protocol implementation is called “RAN2.0”.

Components

- **Rail – plastic rail** + 3-wire bus
- **Rail Controller –** “bridge” between radio and 3-wire bus of the rail
- **Battery pack** – non-rechargeable
- **Rail Displays –** E-ink displays
- **Bluetooth LE Access Point** – transmitter device

Figure 1 - EndCap, Rail, Rail Controller, and Power Unit

Figure 2 - Assembled Rail

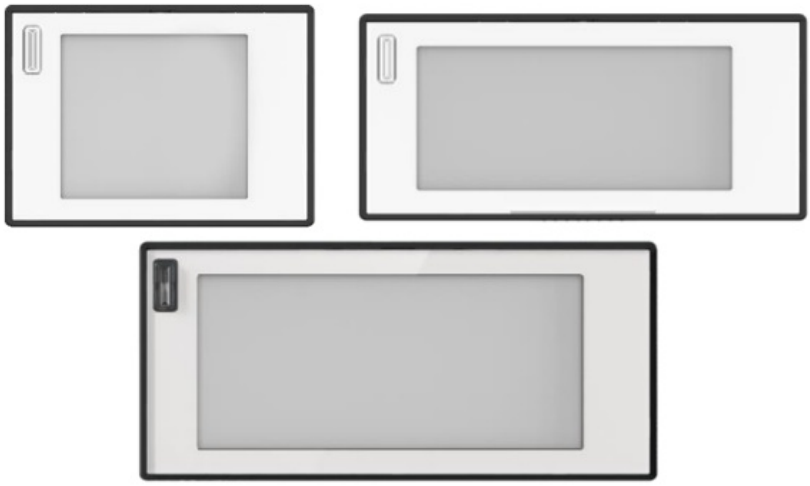

Figure 3 - 1.5", 2.1", and 2.6" Rail Displays

Figure 4 - Vusion Gate BLE

Hardware Setup

Attach Rail Controller and End Cap

- To attach the Rail Controller to the EdgeSense Rail, it must be fully slide in on the right side of the rail until the locking mechanism is snaped into place.

Figure 5 - Slide in the Rail Controller into the Rail

- Proceed on with the EndCap on the opposite side of rail. To remove the Rail Controller or the Endcap, press the button with a plastic rod.

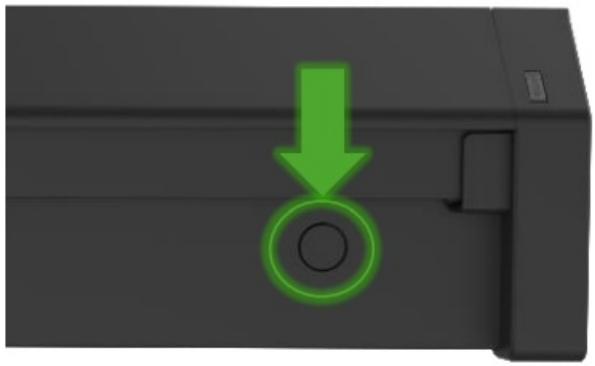

Figure 6 - Removal of RailController or EndCap

Insert Power Unit
To attach the ES-C Power EdgeSense Rail, make sure that the battery pack sits on the rail and move it towards the rail controller until it is fully slided in.

Figure 7 - Slide in the EdgeSense Power Pack

Check Functionality

- When installing the Power Unit, the LED on the Rail Controller will start flashing 3 times in green (RC is powering on) or 3 times red (Battery voltage is low).

Figure 8 - LED Status

- After the boot up, the LED will flash according to the following traffic light scheme:
  - **Red (=Dormant mode):** device does not see any Access Point and is waiting for a wakeup package (WUP)
  - **Yellow (Advertising):** Device has received a WUP and is advertising itself to the APs.
  - **Green (Onboarded):** Device has been onboarded (will stop after 5 minutes).
- Bus errors are indicated with red flashing.

Note: legacy patterns used green, yellow, blue instead of red, yellow, green.

Plugging in Displays

- To attach a Rail Display to an EdgeSense Rail, it must be slide from the bottom into the rail until a clicking sound can be heard. Make sure that the display is sitting in the rail without any gaps and the bottom hooks are in the right position.

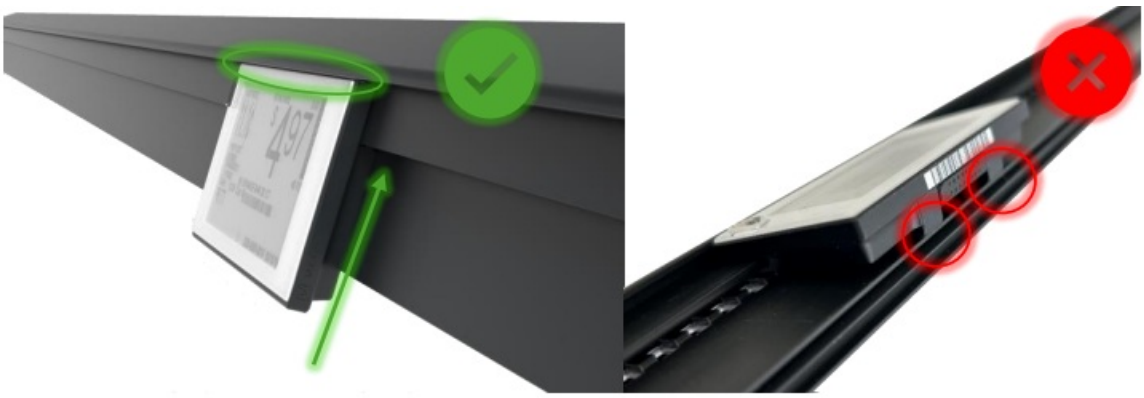

Figure 9 - Insertion of Rail Display

- When the display is connected for the first time, the screen will show the initial bar code page. The LED will indicate the connection with
  - 1 green flashing if the display is not known in Vusion Cloud
  - 1 blue flashing if the display is known in the Vusion Cloud

Removing a Display
To remove a display from a rail, the button on the bottom of the display must be pressed to release the locking mechanism. Keep it pressed and slide the display to the bottom of the rail until it is fully removed.

Figure 10 - Press the release button to unlock the display

Safe Handling of Lithium Batteries

- The EdgeSense® is powered by a lithium pouch cell battery, which can present certain risks if not handled properly.
  - Lithium button batteries are flammable if not stored properly.
  - Improper storage of your batteries above 130°C significantly increases the risk of your batteries igniting.
  - Only use original EdgeSense Power Units for replacement.
  - Do not open the EdgeSense Power unit and try to replace the included pouch cell of an on your own.

Always use an original EdgeSense Power Unit and do not try to recharge it.
    - If a battery is damaged, we advise you not to store it with other discharged batteries but to store them individually.
- All used components had passed the test UN 37.3 and all other relevant safety standards. The EdgeSense Power Unit comes with an integrated battery overcharge / discharge protection circuit.

WARNING

- Battery may explode or catch fire if misused.
- Do not disassemble, incinerate, or expose to high temperature above 212°F (100°C).
- Keep away from children.
- Read QR-Code-content for further use.

FCC

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.

CAUTION TO USERS
Changes or modifications not expressly approved by the party responsible for compliance could void the user`s authority to operate the equipment.

ABOUT COMPANY

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Documents / Resources

 EdgeSense Installation Manual	Vusion EdgeSense Digital Shelf System [pdf] Installation Guide ERC3-BT01-A, 2ACQM-ERC3-BT01-A, 2ACQMERC3BT01A, EdgeSense Digital Shelf System, EdgeSense, Digital Shelf System, Shelf System, System

References

- User Manual