

Configuration Guidelines for Using BLE with Non-BLE Lighting Control Devices

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Overview

This guide explains the proper configuration methods for combining devices in the Keilton+autani Bluetooth network to ensure optimal performance and functionality.

Key Configuration Principle

Bluetooth controllers (FA102, FA102-W, PPA102S, PPA102S-W, PPA104S, PPA104S-CCT) should only be connected to non-Bluetooth ECO-Sensors and devices.

Non-Bluetooth controllers (PPA103S) should only be connected to Bluetooth sensors and devices.

Important: Proper configuration is critical. Devices will not perform their intended functions if configured incorrectly.

Bluetooth Controller Configuration

Connection Requirements

- Connect (hard-wire) only to ECO-Sensors
- The sensor provides occupancy and daylight harvesting (DLH) input to the BLE controller

PPA104S Series Features

- PPA104S-CCT and PPA104S-B1 include an RJ45 port for daisy-chaining up to 10 ECO-Sensors
- Only the first ECO-Sensor in the chain provides DLH input control
- PPA104S is a line-voltage BLE controller with an integrated MCU for active lighting calculation and control

Configuration Example: PPA104S with EFS107E Sensors

When connecting one PPA104S with multiple daisy-chained EFS107E sensors:

Daylight Harvesting:

- PPA104S uses photosensor data from the first EFS107E only

Occupancy/Vacancy Control:

- PPA104S uses motion sensor data from every EFS107E in the chain
- Each EFS107E can be configured individually to use PIR, Ultrasonic, or both sensor types



FA102 Controller Specifications

- Low-voltage BLE controller luminaire adapter
- Designed for integration into LED luminaires
- Connects to LED driver and ECO-Sensor (mounted in or on the luminaire)
- **Requirements:** LED driver with dim-to-OFF, 0-10VDC, and 12VDC AUX output



ECO-Sensor Identification

- Model designations end with "E" (Examples: EFS107E, MS107E)
- Non-BLE sensors will not appear in the Keilton+autani app during commissioning
- Configuration settings are managed through the BLE controller

ECO-Sensors

ECO-Sensors are non-Bluetooth sensors that work with FA102, PPA102S, or PPA104S Bluetooth controllers, offering efficient control in a compact, low-cost design.



IFS105E

IFS105E - PIR & Daylight Harvesting Sensor

- Luminaire or ceiling mount (requires RC01)
- PIR Occupancy Sensor has adjustable dual time-out delays with bi-level dimming of lights
- Daylight Harvesting provides energy savings by dynamically dimming lights in sunlit areas



IFS108E

IFS108E - PIR & Daylight Harvesting Sensor

- Luminaire mount
- PIR Occupancy Sensor has adjustable dual time-out delays with bi-level dimming of lights
- Daylight Harvesting provides energy savings by dynamically dimming lights in sunlit areas.



MWS105E

MWS105E - Microwave Sensor

- In-Luminaire mount
- Microwave Occupancy Sensor has adjustable delay time and bi-level dimming of sensors through the app
- Sensitivity Adjustment available to 0-100%



EFS107E

EFS107E - PIR/US & Daylight Harvesting Sensor

- Ceiling mount
- PIR and Ultrasonic Occupancy Sensor that has adjustable dual time-out delays with bi-level dimming. Can select either sensing technology to fit any application
- Daylight Harvesting provides energy savings by dynamically dimming lights in sunlit areas



MS107E

MS107E - PIR/US & Daylight Harvesting Sensor

- Wall or ceiling mount
- PIR and Ultrasonic Occupancy Sensor that has adjustable dual time-out delays with bi-level dimming. Can select either sensing technology to fit any application
- Daylight Harvesting provides energy savings by dynamically dimming lights in sunlit areas



MWS108E

MWS108E - Microwave Sensor

- In-Luminaire magnetic mount
- Microwave Occupancy Sensor has adjustable delay time and bi-level dimming of sensors through the app
- Sensitivity Adjustment available to 0-100%

Non-Bluetooth Controller Configuration

PPA103S Specifications

- Power pack relay without integrated BLE (MCU)
- Provides power supply to BLE sensors such as the EFS107
- The BLE sensor contains the MCU for active lighting calculation and control



PPA103S

Important Configuration Notes

- Do not daisy-chain BLE sensors
 - These sensors lack daisy-chain hardware and will conflict for control
- All BLE sensors can be grouped wirelessly using the LINKAGE feature
- BLE sensors appear in the Keilton+autani app for configuration settings



For complete product specifications and advanced configuration options, reference the [Keilton+autani Solutions Catalog](#).

Need Expert Configuration Support?

Contact our technical team to ensure optimal performance and seamless integration of your Keilton+autani lighting control system.

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