1 Example of using LED Controller (profiles A5-38-08 and D2-40-00)

This example shows, how to configure gateway EnOcean/Modbus to work with a LED driver.

The LED driver is controlled by A5-38-08 telegram and changes of its state are reported by D2-40-00 telegram. Two channels must be configured, as shown in Fig. 1.1. In this example, CH1 and CH2 are used.
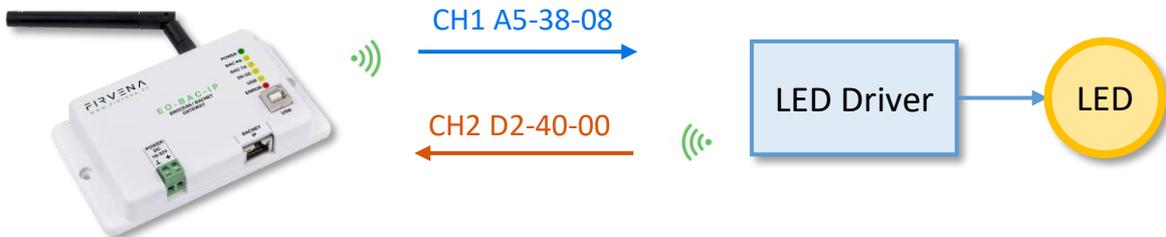

Fig. 1.1 Overview

1.1 Receiving Status

One channel has to be configured to receive the telegrams D2-40-00. To link the device to a channel, do the unidirectional teach-in (= pairing) procedure (see Fig. 1.2):

1. Click the "Add new" icon, a dialog box appears.
2. Push the pairing button to transmit a teach-in telegram (see note 1).
3. The received telegram is displayed in the dialog box.
4. Choose the channel number 2.
5. Click "Save" to confirm changes
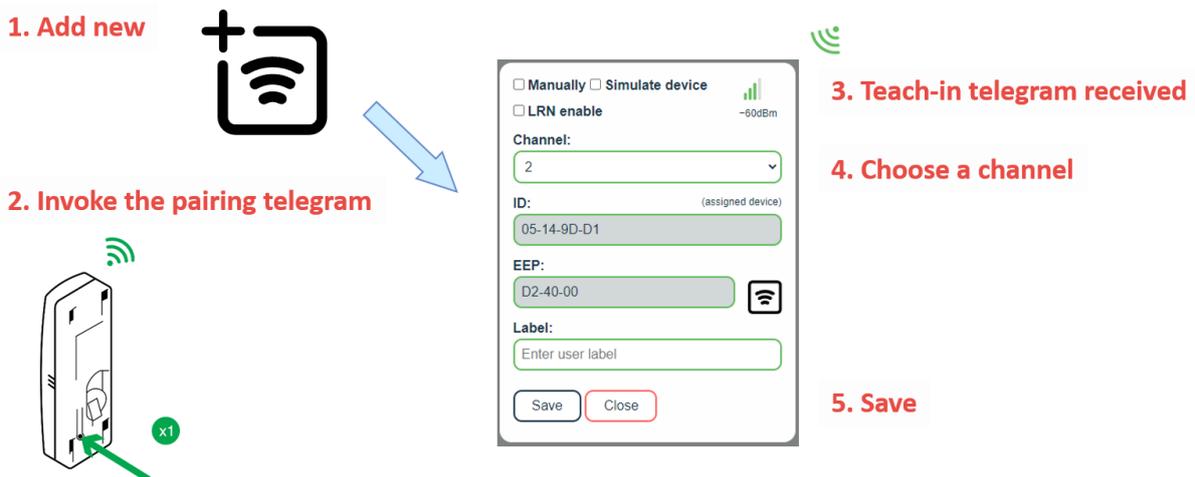6. Now the device is linked to channel 2 as EEP D2-40-00 and its data will be available.

Fig. 1.2 Linking a device to the gateway – teach-in procedure

A device can also by linked manually by entering its EnOcean ID and EEP (see Fig. 1.3). This information is usually provided on a label as text or QR code. Some EnOcean devices also have the NFC interface that allows to get information about the device.

1. Add new

2. Check Manually

3. Choose a channel

☑ Manually ☐ Simulate device

Channel:
2

ID: (assigned device)
05-14-9D-D1

EEP:
D2-40-00

Label:
Enter user label

Save   Close

4. Fill in the ID and EEP
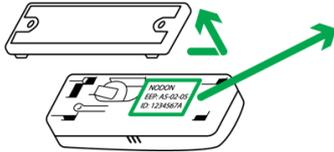
5. Save

Fig. 1.3 Linking a device to the gateway – manually

Notes:
1) The point 2 is manufacturer specific, please refer to the datasheet or manual of the device.

1.2 Sending Commands

One channel has to be configured to send the telegrams A5-38-08. To link the channel to the device, do the unidirectional teach-in (= pairing) procedure in the opposite direction. First, you need to define a virtual device (see Fig. 1.4):

1. Click the "Add new" icon, a dialog box appears.
2. Check "Simulate device"
3. Choose the channel number 1
4. Select the type of device (A5-38-08) and optionally configure the IDs (see note 1)
5. Click "Save" to confirm changes
6. Now the channel 1 can be used to send telegrams as EEP A5-38-08.

1. Add new

2. Check Simulate device

3. Choose a channel

☑ Manually ☑ Simulate device

Channel:
1

ID: (assigned device)
FF-FF-FF-FF

MyID: (this device = gateway)
autoselect (FF-FF-FF-FF)
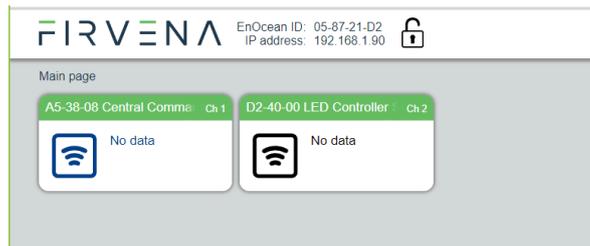
EEP:
A5-38-08

Label:
Enter user label

Save   Close

4. Fill in the EEP

5. Save

Fig. 1.4 Definition of a virtual device

The dashboard looks like this now:

Second, link the channel 1 to the device:

1. Click on the channel 1 box to see channel details (Fig. 1.5)
2. Put the device to the pairing mode (see note 2)
3. In channel details click on the "Send LRN" button
4. The gateway will transmit a teach-in telegram of the virtual device
5. The device will receive the teach-in telegram and save the virtual device. The device should signalize a successful teach-in.
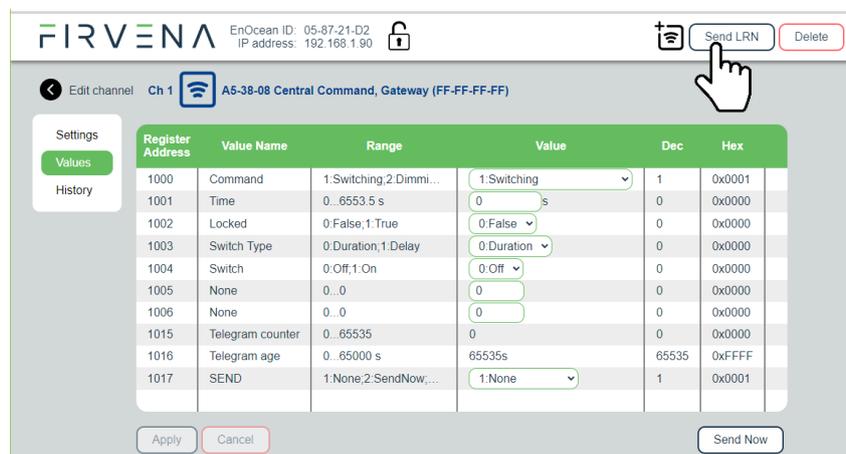

Fig. 1.5 Virtual device – sending a teach-in telegram

Notes:

1) **ID setting:** *Leave it FF-FF-FF-FF for broadcast or use the EnOcean ID of the device that is to receive the commands. In broadcast mode, multiple LED drivers can be controlled by a single channel.*
   MyID setting: *This is the EnOcean ID of the virtual device. Each virtual device must have a unique ID. The "autoselect" option sets MyID = BaseID + ChannelNumber – 1.*
2) *The point 2 is manufacturer specific, please refer to the datasheet or manual of the device.*

LED Controllers are controlled by the "Dimming" command. Set "Command" to "2:Dimming" and use "Apply". Then you can test it, enter values and use "Send Now".