# XIM GEN4 OTA UPDATE

This document explains how to perform Over The Air updates of Xicato Intelligent Module, Generation 4 (XIM Gen4) lighting modules, using the Xicato Control Panel application.

## Procedure

Open Control Panel application

### How to see the current firmware version

XIM: From the Dashboard tab, hover over the Device field module and see BLE FW Revision

XSensor: From the Dashboard tab, double-click the Device field and see BLE FW Revision

### What can be updated

Modules with FW older than revision 0.061 cannot be updated Over The Air (OTA). They must be returned to Xicato to be updated through the physical wire interface.

Modules that are FW rev 0.061 or later can be OTA updated.

Modules with FW before rev 0.074 must first be updated to rev 0.074 before they can be further updated. FW rev 0.074 is available in Control Panel v1.3.9 or later.

Modules with FW between 0.074 and 0.083 must install a stack update first, then the application (BLE) update.

#### Module Device ID must be valid

Device ID for devices up to and including FW rev 0.074 must be a unique, 4-byte address in the form xxx.xxx.xxx.xxx, where xxx is a number between 1 and 254. Each byte must be non-zero, and non-255.

"Unassigned" Device ID for FW later than rev 0.074 must be a unique, 3-byte (xxx.xxx.xxx) number between 1 and 254, inclusive. Numbers cannot be 0 or 255.

"Assigned" Device ID for FW later than rev 0.074 must be a unique, single number between 1 and 32767, inclusive. It must be non-zero.

### Updating XIM BLE firmware

- Go to the Device Setup tab
- Make sure that "Module" is selected from the bottom left pull-down menu
- Make sure that the correct XIM module is selected in the bottom-center drop-down menu.
- Go to the Firmware Update box and click on the "Browse…" button
- Navigate to the XIM firmware update directory:
  Computer / Local Disk (C) / XIM_BLE_Control_Panel / FW_Update / XIM

- Select the appropriate stack file (see "What can be updated", above)
  Stack updates, if necessary, should done first, before Application updates (e.g. BLE)
  Stack FW files will start with PRoC_BLE_Stack
- Click the "Update" button. Stack updates should take about 5 minutes.
- After the stack update has completed successfully, click on the "Browse…" button
- Navigate again to the XIM firmware update directory
- Select the appropriate application firmware update. Application firmware files will start with ProC_BLE_XIM.
- Click the "Update" button. Application firmware updates should take about 1 minute.
- Once the application update has completed successfully, the firmware update is complete

### Updating firmware of your sensor

- Go to the Device Setup tab
- Make sure the right sensor is selected (confirm that "Sensor" is selected in the lower left drop down list and your sensor is selected in the middle drop down list).
- Go to the Firmware Update box and click on the "Browse…" button
- Navigate to the XSensor firmware update directory.
- Select the stack file: PRoC_BLESensor_Stack_V#_##.cyacd
- Click the "Update" button.
- After the stack update has completed successfully, click on the "Browse…" button
- Select the application file: PRoC_BLE_Sensor_V#_##.cyacd
- Click the "Update" button
- Once the application update has completed successfully, the firmware update is complete

## Setting up a Sensor to control an XIM

Right now, one sensor can control multiple lights, but each light can only respond to one sensor. In the future, lights will be able to respond to multiple sensors.

In the Dashboard, select the XIM module you want to control, OR

Go to the Sensor Setup tab, at the bottom of the screen, pull the Device pull down to select the module you want to control.

### Setting up a LUX Sensor

Go to Device Setup

At the bottom left of the screen, pull the pull-down menu to Sensor

At the bottom center of the screen, pull the pull-down menu to select the sensor you want to configure

Under Communication Configuration, click Get. This will request from the sensor the details of how often and how "loudly" the sensor sends its data. Notice that time is in milliseconds (1000 ms = 1 second). For sensors,

- Xbeacon 1 is not yet used and should be set to 0
- Xbeacon 2 controls the sensor advertising interval – how often the sensor sends its actual sensor data.

Go back to the Sensor Setup tab.

KD, Fade: set KD to 0%, and set Fade time to at least 4-5 times the sensor advertising interval you set on the Sensor Setup tab.

KP, KI: Set KP to the same time as the Fade time, KI to 0%

Target Lux: set to the value you want the light to achieve.

Set the XIM to respond using a Linear dimming curve.

# Troubleshooting

### Q: When I change the Device ID or Name, the field turns blue.

A: A blue field indicates that you have changed something in the Control Panel, but not sent the change to the device. At the bottom of the screen, click "Send Update" to send the value update to the device.

### Q: When I try to open my Control Panel, I see the splash screen but then it shuts back down.

A: There are a few possible issues here.

Go to your Task Manager and see if there is another instance of the Control Panel already running. If so, End Task and try opening the Control Panel application again.

If this does not work, End Task again, unplug your Bluetooth module for a few seconds, then plug it back in and try re-launching your Control Panel.

If this does not work, End Task again, unplug your BLE dongle and plug it into another USB port. Now relaunch your Control Panel.

If this fails, it is a Windows issue. Try rebooting your computer.

### Q: I get an error when I try to update my XIM or Sensor

Try this:

- Deselect secure networks (i.e., selected "None" for Network.
- Power cycle the XIM or sensor
- Exit the control panel, unplug and plug in the dongle
- Reboot your system