

Flairmesh Over-the-Air (OTA) Firmware Upgrade Quick Guide

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1. Introduction

This document describes a common procedure to perform Over-the-Air (OTA) firmware upgrade of Flairmesh's Bluetooth modules and USB dongles.

2. Preparation

To make the, we need an iOS App "GoFlooGoo" from Apple's AppStore. The direct link is, <https://apps.apple.com/us/app/gofloogoo/id1621927554>

3. Configure Target's UUID128 in GooFlooGoo

After installing "GoFlooGoo", before open it, we shall configure its BLE service UUID128 so it only searches and connects to the expected module or dongle.

Go to the "Settings" of the iPhone and search for "UUID128", open the item of "UUID128/GoFlooGoo", and set the value as Table 3.1.

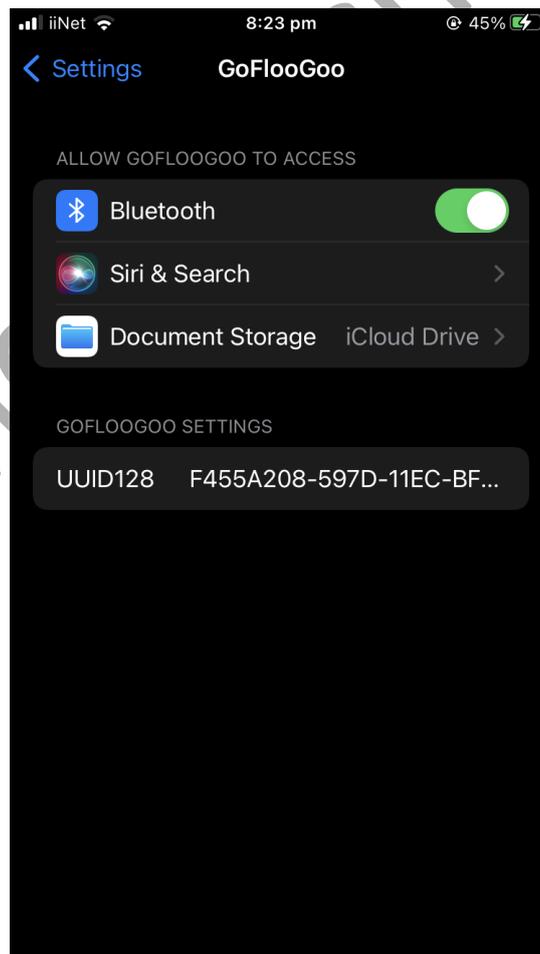


Figure 1: Setting of UUID128 of FMA100

Table 3.1 Default BLE GATT Service UUID128

Model	UUID128	Comments
FMA100	F455A208-597D-11EC-BF63-0242AC130002	
FMB100	1AAA5F34-3A93-4B89-B05B-1B4A89930CE0	The UUID128 can be read by "BC:LU" command on its UART interface. Refer to the programming interface manual.
FMD100	1AAA5F34-3A93-4B89-B05B-1B4A89930CE0	Same as above.

4. OTA Procedure

Run "GoFlooGoo", click the "New Pairing" button at top-right corner to connect the device to be upgraded.

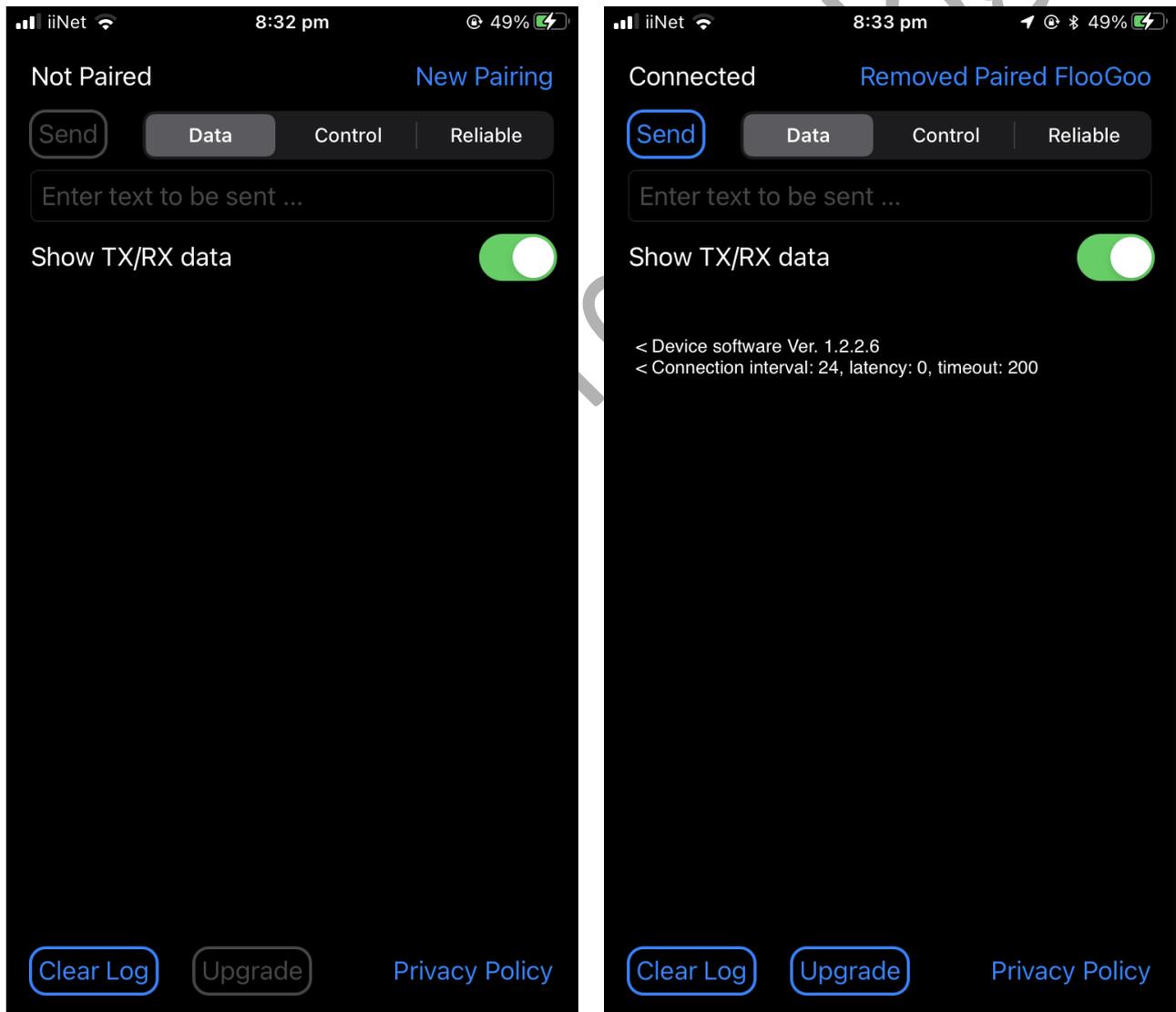


Figure 2: Make a Connection to the Device

When connected, the "Upgrade" button turns on. Click on it opens a file browser. Choose the "*.bin" firmware file that has been copied onto the phone, in the screenshot a firmware "FMA100_1_2_2_6...bin" on the Cloud drive is

shown as an example. Click on the file starts the OTA procedure,

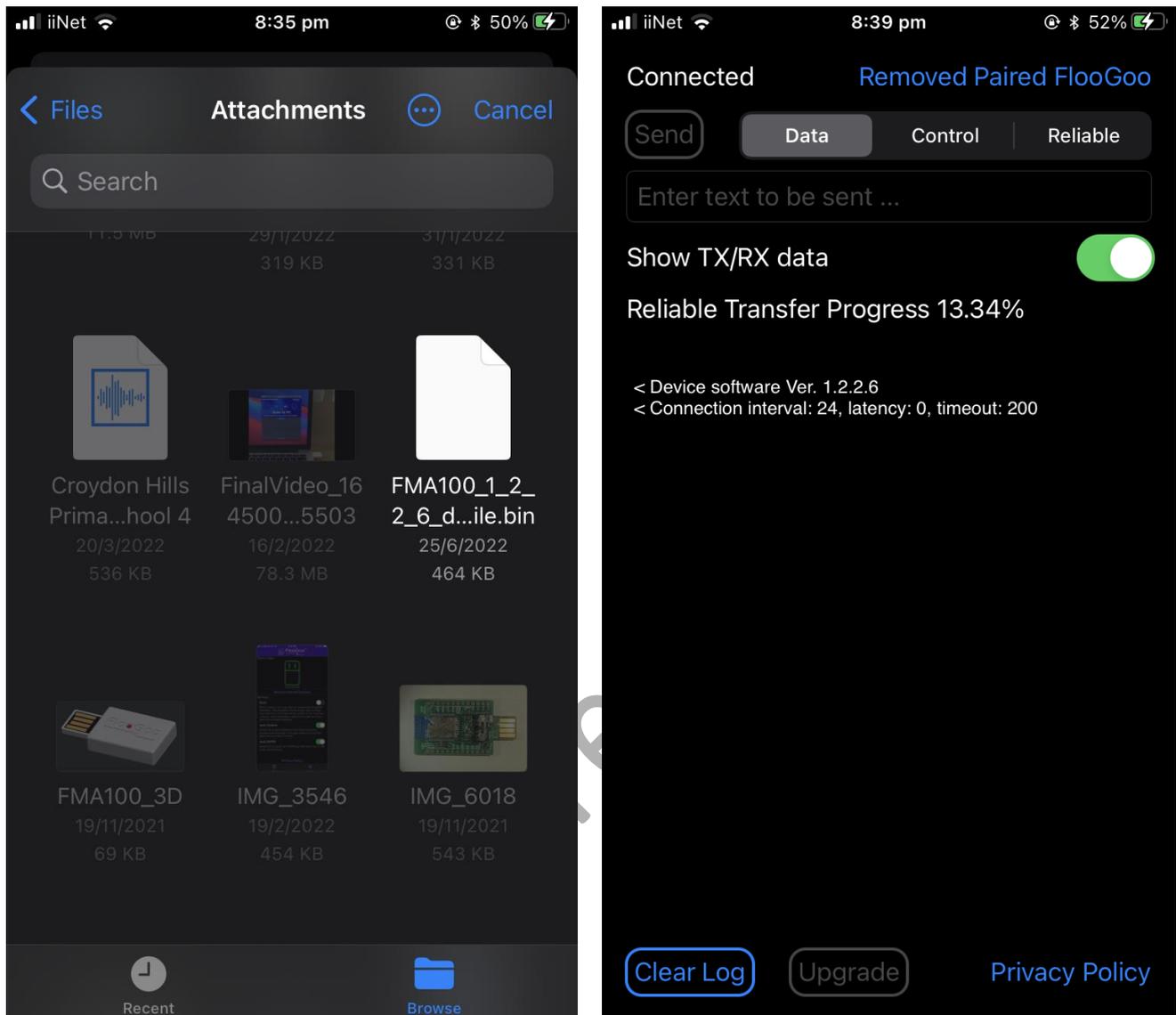


Figure 3: Choose Firmware File and Start OTA

When the progress reaches 100%, the device will validate the firmware (5~10seconds) and then reset itself, the connection will break for several seconds and resume. After reconnected, the state shall become "Ota Done" which indicates a success. After that, the device will reset itself again to fully shift onto the new firmware. In the following screenshot that excluding the first "1.2.2.6" (which shall be the original firmware version for the device), there're two of "1.2.2.6" (which is the new firmware version after OTA, it's harmless to perform OTA on the same version). When it reaches here, it's done and click the button "Remove Paired FlooGoo" to disconnect with it.

If any error happens, the device will return to the old firmware after the failure. The bootloader always checks and only switches to the new firmware after a successful verification. A new OTA can be performed once it resumes working and connectable in the old firmware.



Figure 4: Success of OTA