

## Background

EmaLink hardware and firmware was improved to report the estimate remaining battery capacity. The estimate is not perfect but should still be a decent indicator of remaining battery life. In order to see the remaining charge in Loop or FreeAps, you need to implement some changes to one of its components: rileylink\_ios. There are 2 ways to do it, both require some software skills.

### Solution 1 (medium): use a different rileylink\_ios in your build

Steps:

- start from Loop dev branch
- in the Cartfile, change from github "ps2/rileylink\_ios" "dev" to github "Andrei0105/rileylink\_ios" "battery-dev"
- delete cartfile.resolved or execute carthage update
- build loop; first build may fail but the second build always works

### Solution 2 (hard): create a patch for your rileylink\_ios of choice

Apply this patch below to the rileylink\_ios that you want to use. This may require some changes as rileylink\_ios code might be already different

[https://github.com/Andrei0105/rileylink\\_ios/commit/bdadeebf08977e7428b871b4ec696280328220d8](https://github.com/Andrei0105/rileylink_ios/commit/bdadeebf08977e7428b871b4ec696280328220d8)