

1 The Control System

This section describes the embedded control system and user interaction. The latest system software and documentation can always be found on github at <https://github.com/hedj/fusion/>.

1.1 The Bank Controller

The bank controller is a Controllino Mega; an Arduino-based programmable-logic controller. The bank controller is in charge of the following functions:

- Capacitor-bank and HV pulse generation
- HV voltage control
- Capacitor bank charge control
- Audible alert before pulse

The top-level flow of the bank controller is shown in Fig. 1.

1.2 The Stepper Controller

1.3 The IRC Server

1.4 The Agents

1.5 Using the System

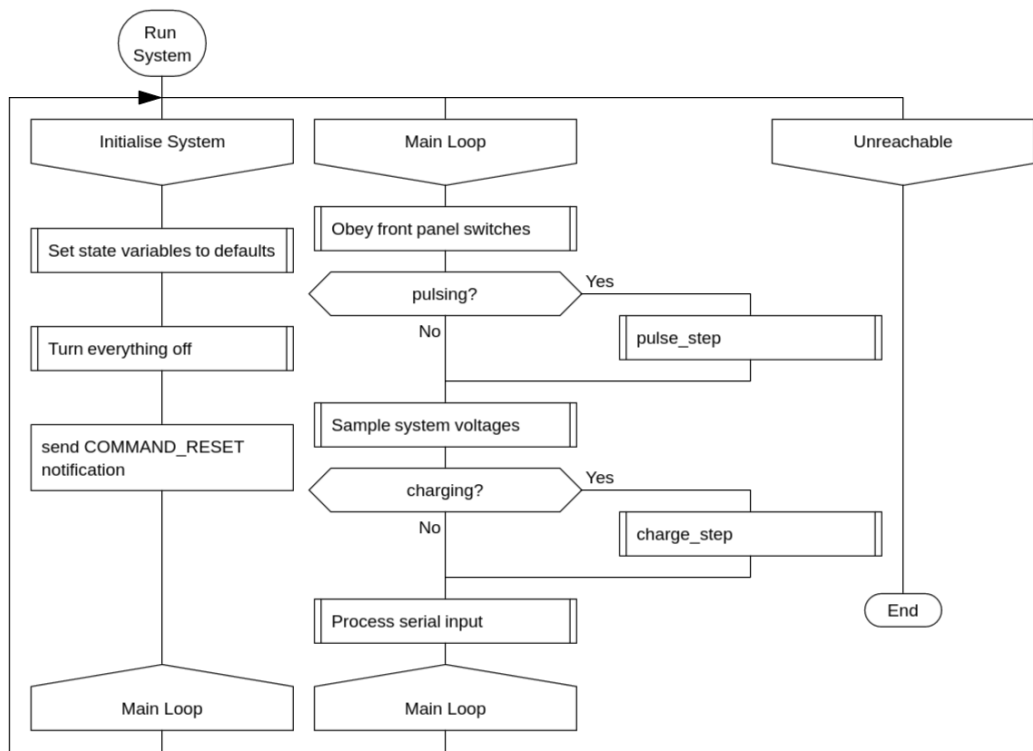


Figure 1: