SmartCart : Operating Instructions

How to turn on and operate SmartCart

Power up:

Use Controls Reference for the following steps:

http://www.ece.ucsb.edu/Faculty/Johnson/ECE189/controls/smartcart.pdf

1. Make sure switches are in correct Power Up positions:
   - **Component 5**: Bootloader for processor
     - SET RIGHT [NOT IN BOOTLOADER MODE]
   - **Component 6**: ~Reset for processor and TFT connector
     - SET LEFT TO RESET
   - **Component 7**: ~Forceoff for Level Shifter
     - SET LEFT [TO USE LOGIC HIGH]
   - **Component 8**: Forceon for Level Shifter
     - SET LEFT [TO USE LOGIC HIGH]
   - **Component 9**: Connected to NOTHING
     - SETTING IRRELEVANT SINCE ITS CONNECTED TO NOTHING
   - **Component 10**: 10. Switch (S2), Reset for RFID module
     - NEVER RESET MODULE or else complications will arise and RFID system
       will no longer work due to voltage changes.

2. Apply power to:
   - **5V to Component 11**: RS232 DB9 DTE Connector,
   - **5V to Component 17**: Barrel Power Jack Connector,
   - **19.2V to Component 14**: Barrel Power Jack Connector - Optional Backlight Power
     for TFT

3. Wait for system to boot

User Interface:
Boot mode to install code:

**Code Installation using LPC2000 Flash Utility:**

1. Make sure switches are in correct positions:
   - **Component 5**, Bootloader for processor
     - SET LEFT (IN BOOTLOADER MODE)
   - Make sure to **reset** board
     - **Component 6** set left, then back to right position

2. Make sure LPC2000 settings are correct
3. Click Upload

**Putty for debugging:**

1. Make sure switches are in correct positions:
   - **Component 5**, Bootloader for processor
     - SET RIGHT
   - Make sure to **reset** board
     - **Component 6** set left, then back to right position