

## How to run HttpLD (HLD) on a Raspberry Pi (RPi)

### Preparation:

1. Prepare a RPi SD card with the preferred Raspbian image from <https://www.raspberrypi.org/downloads/raspbian>.
  - a. Choose the LITE image for a minimal, low power terminal environment. (recommended)
  - b. Choose the DESKTOP image for a robust desktop environment, but it has large download size and requires more power. (not recommended)
2. Transfer arm\_httpld\_X.XXX.deb to RPi device.
3. Navigate in a terminal to where you put the package.
4. Run these commands to extract the package, set it up as a service, and start it automatically:
  - a. `sudo dpkg -i arm_httpld_X.XXX.deb`
  - b. `sudo update-rc.d httpld defaults`
5. Ensure that your Model 831 is attached to the RPi via USB, with an additional power source to ensure the 831 does not shutdown when the RPi reboots.
6. Then reboot the RPi device. The httpld service should start up during boot.
  - a. You may check to make sure it is running in a terminal with this command:
    - i. `sudo service httpld status`
  - b. If it is not running, enable the service (see below), reboot, and check again.

### Running HLD

The .deb package will set HLD to run as a service. You may disable the service and run HLD manually.

1. Execute HLD with `sudo /home/ld831/httpld -r /home/ld831/Resources`
2. To enable or disable HLD service to run at boot use this command:
  - a. `sudo update-rc.d httpld {enable|disable}`
3. To start, stop, or restart the service use this command:
  - a. `sudo service httpld {start|stop|restart}`

### Selecting specific port for HLD

1. Pass the port (-p) parameter to HLD on manual startup.
  - a. For example: `sudo /home/ld831/httpld -r /home/ld831/Resources -p 2001`
  - b. If this parameter is not specified, HLD will default to using ports 80 & 2001.
2. Edit httpld startup script.
  - a. Stop the HLD service.
  - b. Open `/etc/init.d/httpld` in a text editor with root access.
  - c. On line 12, edit the IP\_PORT variable with the desired port number.
  - d. Save and close the file.
  - e. Start the HLD service.

### Testing HLD

1. Open a Web Browser to the URL: <http://<IP address of your RPi>:2001/sdk?func=getPageStatus>
2. Response will show serial number of 831 and other information.
3. See the "Using HttpLD" manual for more information on using your configured RPi.