

You must perform this procedure manually for now.

Make sure you have already run "full_initial_configuration.sh" with no errors and all IDs are set up and services have never been started (or you will have to delete the .homeassistant folder before continuing)

Setting Up Home Assistant

1. You have to run Home Assistant at least once manually before the .homeassistant folder is created, see the below terminal commands for how to do it
 - a. `source ~/ha/bin/activate`
 - b. `hass`
2. Now that Home Assistant has initialized you have to open **localhost:8123** in the browser and follow the setup with the instructions below
 - a. While you are setting it up, the page might refresh or reset, just refill it
 - b. The page might also freeze for a while, just be patient or refresh if it takes too long
 - c. Choose the name to be flashsysXXX where XXX is the device ID (the username field should autofill to be the same as the name)
 - d. Choose the password be the same as the device's
 - e. Name the installation the same as the username
 - f. If you are NOT at a participant's home, click Detect to set the metrics, then zoom out and move the location pin far away from the current location
 - g. Do not select anything to share, this should already be the default so just click "Next"
 - h. Ignore the devices and click "Finish"
3. Now we have to make sure that the native Bluetooth module is configured
 - a. Click Settings on the bottom left
 - b. Click Devices & Services
 - c. If the Bluetooth module is already configured, it should be showing an address and should NOT have a "Configure" button, continue to the next step
 - d. If the native Bluetooth module is **NOT** already configured, click "Configure" to do it
4. Now make sure that the smart plugs in the darkroom are shown in the list, they should be named Plug Mini "YYYY" where YYYY is an alphanumeric code.
 - a. Do NOT connect to the smart plugs unless doing internal testing.
 - b. YYYY might not always show up but this is just a visual bug.
5. Ignore all other devices and disable the default ones if you wish (Weather, Radio, etc.) as they might fill up the stdout log with errors when the Wi-Fi is off.

At Homes

1. Take out the plug from the box and note the four character ID of the smart plug on the side
 - a. **Convert the ID to lowercase for the next step**
 - b. Put the plug into a socket and plug the TV into it
2. **THIS STEP IS VERY IMPORTANT FOR FUTURE STEPS AS WELL**, run `participant_change.sh` and correctly enter the ID for the plug (lowercase), device, and family when prompted, making sure there are NO TYPOS.
 - a. Open "configuration.yaml" in the "~/.homeassistant" folder and make sure that the lowercase plug ID is copied to the correct line
3. **Start the Home Assistant service** ("`sudo systemctl start homeassistant-run-on-boot.service`") and make sure there are no relevant errors
4. Open the internet browser and enter "localhost:8123" into the address bar
 - a. This should open the Home Assistant interface, you might need to login
5. Now we need to make sure that the smart plug is detected
 - a. Click Settings on the bottom left
 - b. Click Devices & Services
 - c. Look for "Plug Mini YYYY SwitchBot" where YYYY is the alphanumeric ID labeled on the side of the plug
 - d. If the smart plug does not show up, try pressing the button on its side to make sure it's turned on (there should be a white LED light visible)
6. Click Configure and set up the smart plug
 - a. Set the area to whatever matches, you can name a new area if necessary
7. Now make sure that the power data is coming in
 - a. Click the "History" tab on the middle left
 - b. Click "Choose entity"
 - c. Select the option that looks like "Plug Mini YYYY Power"
 - d. If the data is coming in as expected, continue, otherwise troubleshoot
8. **Start the Home Assistant service again** ("`sudo systemctl start homeassistant-run-on-boot.service`") and make sure there are no relevant errors
9. Look for and open "123XXX_tv_power_5s.csv" in "~/.data/123XXX_data" to make sure the .csv log is being written

Changing Participants/Plugs and Reusing the Device

1. Make sure that all data from Home Assistant is copied and saved in multiple ways (.csv in "~/data/123XXX_data folder", .csv from addon, .db from "~/homeassistant" folder, etc.)
 - a. Make sure the FLASH-TV data ("~/data" folder) is copied and saved as well just case
 - b. It's easiest to just save all of "~/data" and "~/homeassistant"
2. **Make sure that the Home Assistant service is stopped ("sudo systemctl stop homeassistant-run-on-boot.service")**
3. Delete the "~/flash-tv-scripts" folder (this is to reset all the IDs), the "~/homeassistant" folder, and the .csv file in the "~/data/123XXX_data folder" (or the entire data folder if necessary)
4. Reclone the flash-tv-scripts folder from GitHub
5. Redo the "Setting Up Home Assistant" section from the beginning **while making sure the Home Assistant service is disabled**
6. Redo the "At Homes" section when you are at the new participant's home