Using an Audio Node

Turning it off and on

The frosted/clear section allows you to see the Raspberry Pi's green light, when it is flashing it means disk activity. On the base you can also see the Power Boost board lights.

The power button must be held on for a short time for the power to stay up. Through the frosted section of the case you can see the Raspberry Pi's green light flashing to indicate activity as it starts up. When the light is solid the Pi is ready, you should hear the speaker pop and then if you have set your PD patch to open on boot it should start a moment later.

To turn off you can do a short click of the button, the device should kill PD, start a safe shutdown and then once that is complete cut the power on the Power Boost board at which time the blue light will go off. This takes a little time, a minute or two.

Controlling the device via a terminal with SSH

Make sure your computer/device is on the same network as the pi and open a terminal. SSH into the pi with: `ssh pi@raspberrypi.local` password: `raspberry` , or whatever hostname and password you have set up already
(kudos to 'Termius' which enables you to store snippets of terminal commands and communicate with the device from your phone easily)

Some useful SSH commands:
Software Mixer – `alsamixer`
Speaker test (noise) - `speaker-test -c2`
Speaker test (WAV) - `speaker-test -c2 --test=wav -w /usr/share/sounds/alsa/Front_Center.wav`
Install MP3 stream player - `sudo apt-get install -y mpg123`
Play Radio 6 stream - `mpg123 http://bbcmedia.ic.llnwd.net/stream/bbcmedia_6music_mf_p`
Edit boot config file - `sudo nano /boot/config.txt`
Crontab edit - `crontab -e`
Configure Raspberry Pi - `sudo raspi-config`
Set time - `sudo date -s "9/26/2018 9:35"`
Shutdown - `sudo shutdown -h now`
Update - `sudo apt-get update && sudo apt-get upgrade`
Wifi scan - `sudo iwlist wlan0 scan`

Accessing a Remote Desktop

I have left VNC enabled and am running in GUI mode (i.e. not headless) so you should be able to connect with a VNC client of which there are several free ones, I use 'VNC Viewer'.

You need to put in your hostname and password details and again assure you are on the same network as the Pi. If you can not connect, then SSH in as above and:

1. Run configuration tool with: sudo raspi-config
2. Check that VNC is enabled (in 'Interfacing Options')
3. Check that boot options are not set to go into console, i.e. run headless

Transferring Files

Transferring files can be done via FTP, again there are several free options, I use 'Filezilla'. You need to put in your hostname and password details and assure you are on the same network as the Pi. You can then simply drag and drop files from your system to the device.

Working with PD

I have not had much success trying to get anything other than PD vanilla running on the Pi Zero, but in fairness I have not tried for a while and it could be possible to run one of the more feature rich forks such as Purr Data or perhaps the L2Ork distribution.

Getting your PD patch to run on startup

Refer to the 'Building and Audio Node' document, specifically the section titled 'To create your own image', steps 17 & 18 (or you could just rename your patch and move it to the same place as the original one)