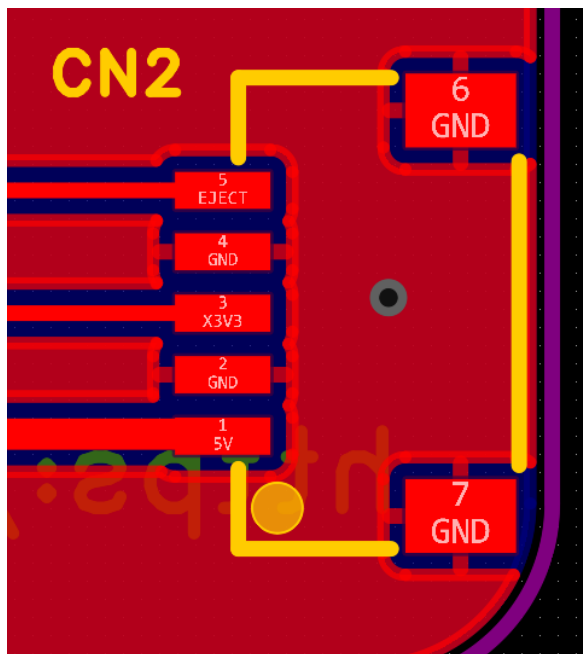# X-Sound Usage and Installation
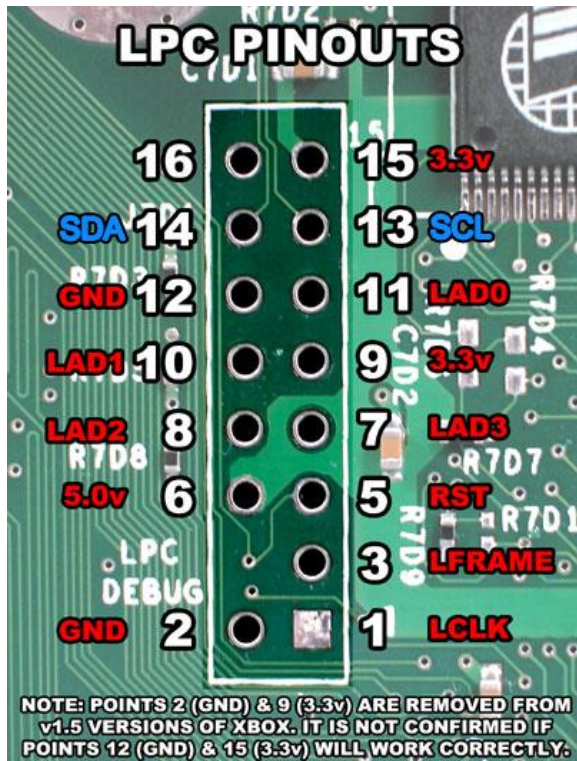

Hardware installation:

X-Sound requires the following connections:

5V
GND
3.3V
Eject

3 of the 4 signals can be tapped from the XBOX's LPC header for ease of installation. As wiring harness colors may not be standardized here is the pinout of CN2:
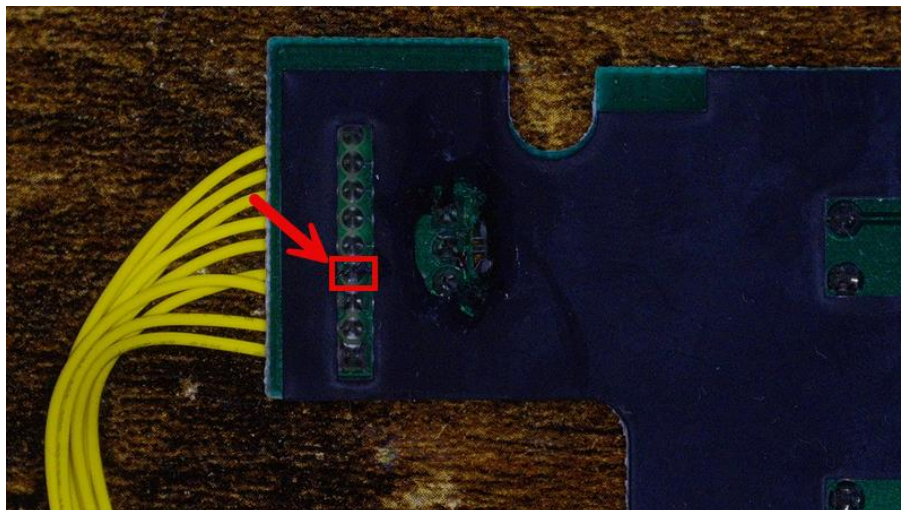

XBOX LPC header:

LPC PINOUTS

16	15	3.3v
SDA 14	13	SCL
GND 12	11	LAD0
LAD1 10	9	3.3v
LAD2 8	7	LAD3
R7D8		R7D7
5.0v 6	5	RST
LPC DEBUG	3	LFRAME
GND 2	1	LCLK

NOTE: POINTS 2 (GND) & 9 (3.3v) ARE REMOVED FROM v1.5 VERSIONS OF XBOX. IT IS NOT CONFIRMED IF POINTS 12 (GND) & 15 (3.3v) WILL WORK CORRECTLY.

For eject, it's recommended to tap this from the back of the XBOX front panel, as it has ample routing and is easiest to access>
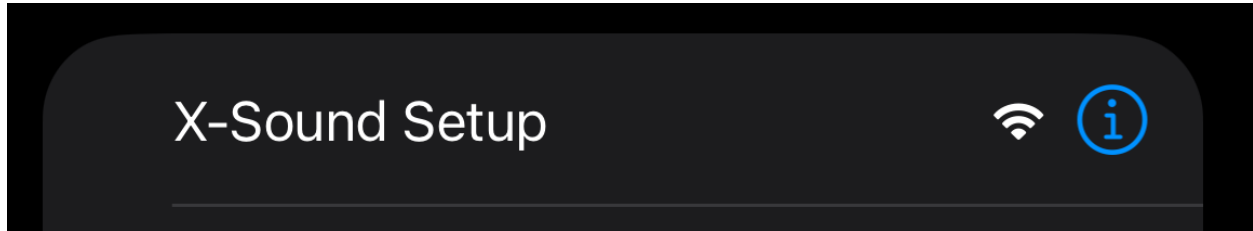
Eject Solder Point:
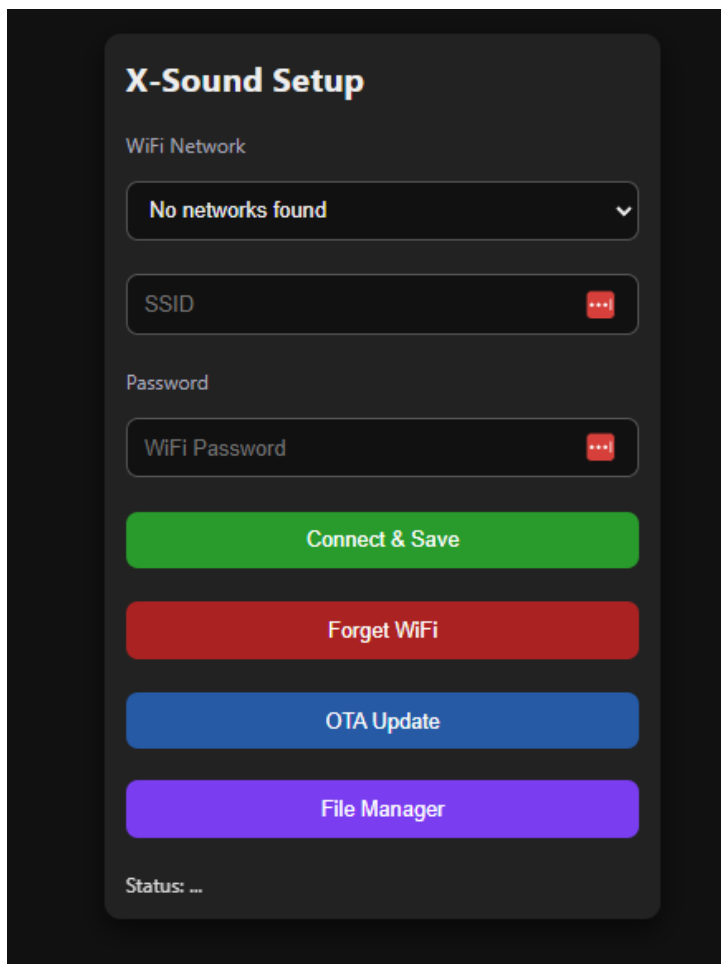
Example Routing:

Finally connect your speaker

Recommended placement for X-Sound can vary by the installation; you can download the STL from the GitHub repo and opt for a mounted installation (recommended) or mount it to the inside of your XBOX. Ideally, you want the speaker and X-Sound mounted to non-conductive surfaces.

First Boot / Setup:

After installation on first power-up, X-Sound's LED will go white, then blink purple for a second, then go to flashing red. Don't panic, this is normal and simply means boot.mp3 is not found. To get started, connect X-Sound to choose a WiFi network (WiFi is not strictly required but is recommended).
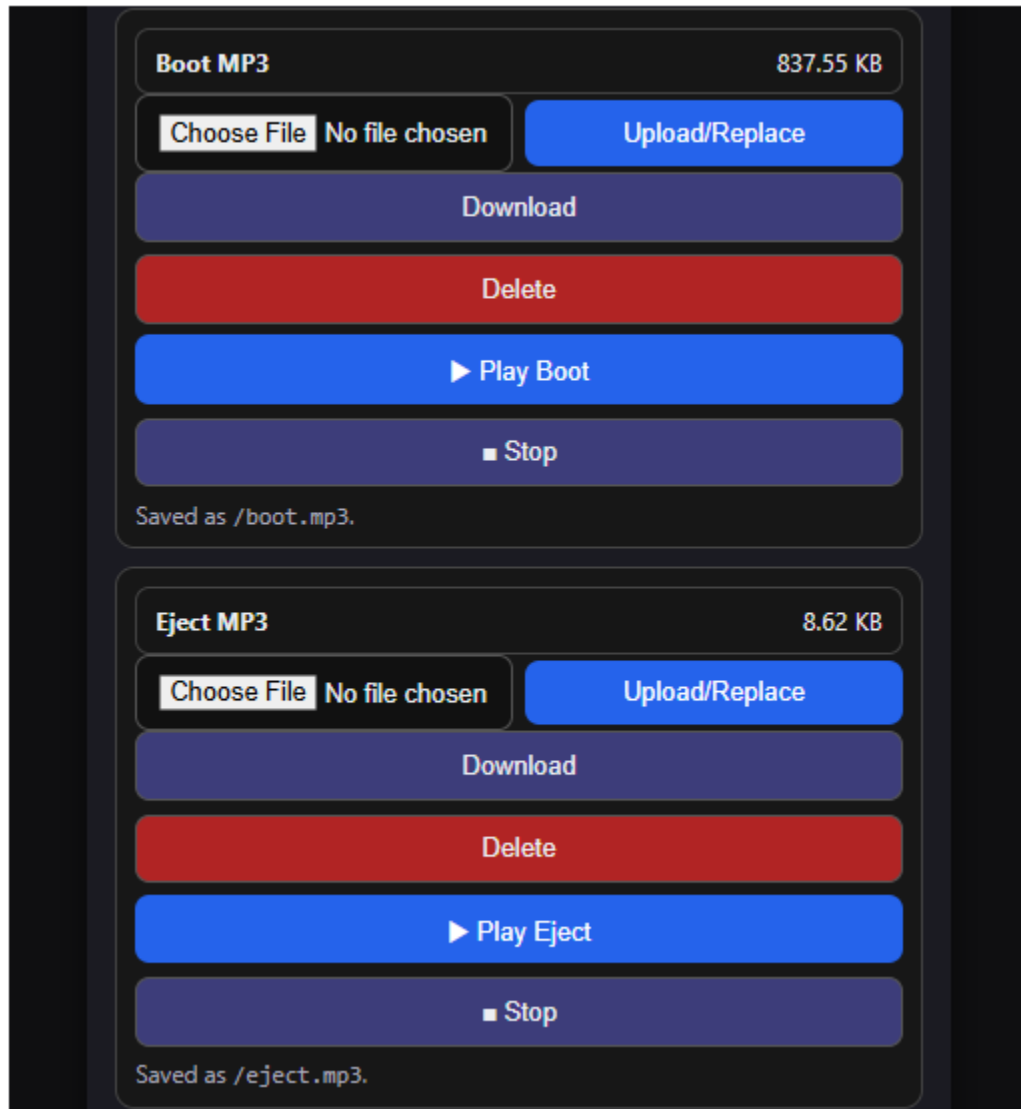

Once connected, you will be at the Configuration screen. Start by connecting to your WiFi network of choice

Once you have selected your network, click on Connect & Save. Once connected your X-Sound is accessible from http://xsound.local.
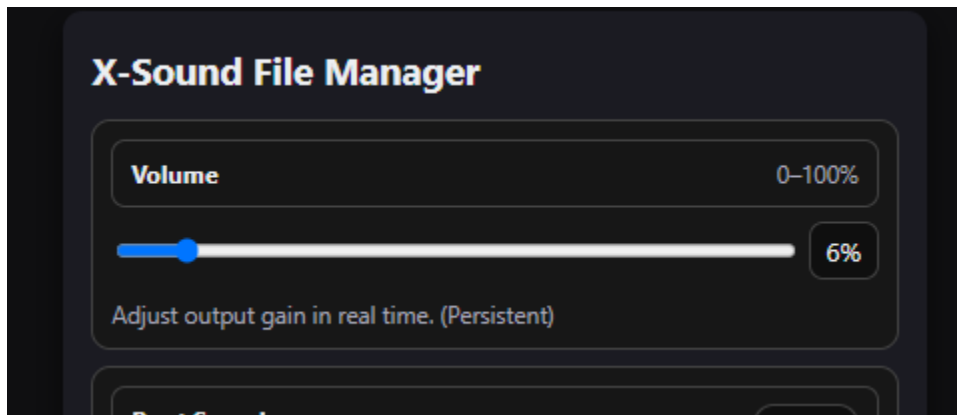
Sound Configuration:

X-Sound at the time of writing supports .mp3 files. Its suggested your files are 96 – 128 kbps and in mono, stereo can be put on X-Sound but X-Sound only currently supports mono playback. For your boot sounds its recommended to keep it to less than 1 minute as you will only have 1.5mb for both boot and eject sounds.

For both boot and eject, the process is exactly the same: Choose your file, then click Upload/Replace. X-Sound will rename the file for you, so no need to change the name beforehand.
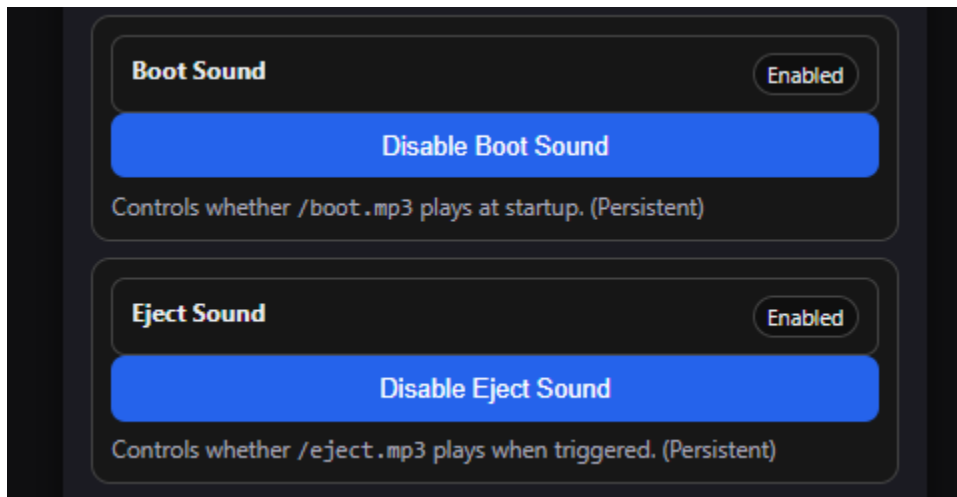
The UI also gives you a few additional file management features such as: Downloading your currently saved sound, deleting your sound, playing your sound from the WebUI, and stopping your Sound from the WebUI.

Setting Volume:

Simply drag the slider to your desired volume level X-Sound will remember your setting and apply it instantly. It will also remember this for every boot.

Additional options:

X-Sound does give you the ability to disable boot and eject so theirs no need to disconnect anything.

LED Statuses:

X-Sound has a few different LED statuses. Here's what they mean.

White = Booting
Green = Connected to WiFi
Red (solid) = Unable to Connect to WiFi
Purple (blinking) = WiFi portal mode
Magenta (blinking) = Currently playing a sound (will trigger on boot or eject)
Red (fast flash) = No boot or eject.mp3 found

Troubleshooting:

Issue	Solution
No web page	Retry http://xsound.local or check LED status — Green = Wi-Fi connected, Red = no Wi-Fi
No audio	Verify /boot.mp3 & /eject.mp3 exist and are valid MP3s
Distortion	Lower volume or re-encode audio as 44.1 kHz mono @128 kbps
Eject not working	Check GPIO9 pull-up and Xbox signal polarity
Fast blinking red LED	Error with file playback, ensure file is the proper format (MP3 **96 - 128kpbs** 44.1kHz mono under 30s)