STUDIO A

QUICK START GUIDE

Contact Eli Fieldsteel, Director of EMS (<u>eli@illinois.edu</u>) or Xavier Davenport (xavierd2@illinois.edu) or Jinjue Wang (jinjuew2@illinois.edu), EMS Operations Assistant for additional help beyond these instructions.

STEUP INSTRUCTIONS

(For using Studio A as a standalone stereo composition studio)

1. Power on the studio equipment using the switch on the Furman power conditioner, located in the lower-right rack space of the wheeled cabinet on the far wall, shown in Figure 1.



Figure 1: This is the Furman amplifier. This turns on the studio in multiple stages, so you will have to wait a minute or so for everything in the studio to power on before moving on to the next steps.

2. Connect your device to the 1/8" TRS jack, shown in Figure 2. The other end of this cable should be connected to inputs 1 and 2 in the back of the mixer.



Figure 2: This TRS cable lets you send signal from your device to the mixer. The other end should be plugged into the first two channel strips in the back of the mixer.

- 3. At the mixer, ensure that the button marked **LINE** in the first and second channel strips is depressed and all other buttons in that strip are NOT depressed, as shown in Figure 3.
- 4. Ensure that the purple gain knob at the top of the first and second channel strips is set at 12 o' clock, as shown in Figure 3.



Figure 3: Signals you send along the TRS cable are LINE level, so the mixer needs to be set accordingly. If after completing all the steps in this set of instructions you find the volume is too low, you may raise the gain level by rotating the purple knobs on channels 1 and 2 clockwise.

- 5. Turn both **PAN** knobs just above the faders all the way to the left and right in opposite directions as shown in Figure 4. Channel 1 goes to the left, channel 2 goes to the right.
- 6. Depress the button marked L-R in the first and second channel strips as shown in Figure 4.



Figure 4: The left channel signal from your device is now being hard panned to the left before being sent to the left near-field monitor. The right channel is similarly sent to the right nearfield monitor.

- 7. Bring the channel 1 and channel 2 faders up to **0** (also known as unity) as shown in Figures 4 and 5.
- 8. Send a loud audio signal from your device you will not hear it yet, though you will likely see green lights flashing on the channel strips on the board as shown in Figure 5.



Figure 5: Get a visual confirmation of your signal here before moving onto the next steps to ensure you don't play something dangerously loud on accident.

9. Slowly bring up the blue fader on the bottom right corner of the board. Ensure that the monitor dial located above the blue fader is turned up. You should now hear audio coming from the near-field monitors.



Figure 6: The blue fader controls the level for both the left and right nearfield monitors. If you want to individually control the levels of the left and right monitors, you can do so by adjusting the input faders on channels 1 and 2.

STEREO IN 6 CHANNELS (Left 3 and right 3 loudspeakers)

1. After completing the previous setup, turn down all the faders, then release the **L-R** button on channel 1 and 2, and depress the buttons labeled **1-2**, **3-4**, and **5-6** as shown in Figure 7.

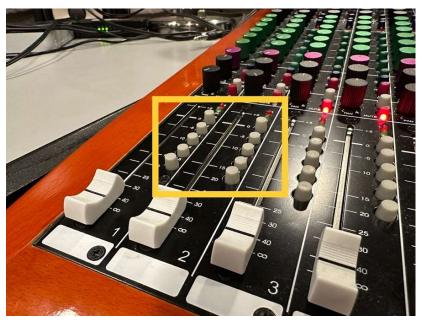


Figure 7: Instead of sending to the nearfield monitors, we will send the signal to submasters 1-6.

2. At the patch bay, route cables from TOFT SUBMASTER OUT 1 through 6 to SURROUND IN 1 through 6, as shown in Figure 8.



Figure 8: Be sure to connect submaster 1 to surround 1, submaster 2 to surround 2, etc.

3. Raise the volume to a comfortable level using the first six red submaster faders on the bottom right of the mixing board, as shown in Figure 9.



Figure 9: The way we routed the signal, these red submaster faders are organized as a series of stereo pairs. Fader 1 sends to the front-left monitor and fader 2 sends to the front-right monitor. Faders 3 and 4 are sent to the side-left and side-right, and faders 5 and 6 are sent to the back-left and back-right respectively.

USING THE SUBWOOFER

1. In the first two channel strips, rotate the green aux 2 knob to the 3 o'clock position and depress the AUX 2 button next to it, as shown in Figure 10.



Figure 10: By raising this auxiliary channel dial, we are sending a copy of the left and right channels to an auxiliary output

channel. By depressing the AUX 2 button, we are ensuring that the level being sent to the auxiliary channel is independent of the fader at the bottom of the channel strip.

2. At the patch bay, connect TOFT AUX MASTER SENDS 2 to SUB IN, as shown in Figure 11.

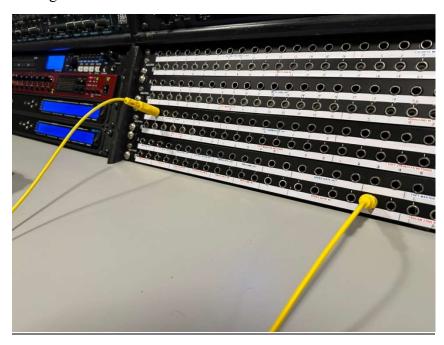


Figure 11: You may hear a small squeaking noise when you first make this connection, that is just the subwoofer starting up.

3. Rotate AUXILIARY MASTER 2 to a comfortable volume, as shown in Figure 12.



Figure 12: This is where you control the volume of the subwoofer.

RECORDING INSTRUCTION

 A microphone is located in the drawer next to the Studio Power button, as shown in Figure 13.



Figure 13: Stored in this drawer are a microphone, headphones, and an XLR cable.

2. After setting up the microphone, you will be able to replace XLR input 9 in the back of

- mixer with another XLR cable connected to the microphone. (You don't necessarily need to use channel 9. We use channel 9 here because we assume up to 8 output channels going to the speakers.)
- 3. Ensure that the **I/P rev** button is depressed, and all other buttons in the channel strip are released. If the microphone requires the phantom power, depress the red button labeled +48V at the very top of channel strips.
- 4. Connect the **MOTU USB** cable to your device, shown in Figure 14.



Figure 14: This USB device can be connected to your computer in order to send and receive audio from the MOTU audio device. Software necessary to connect your device can be downloaded here: https://motu.com/en-us/download/#category=1&product=317. You can also go to the MOTU website and look in the download center for software related to the MOTU 24ai audio interface.

- With the cable connected, you will be able to use your DAW to record that sound. (eg. Audacity or Logic)
- 6. (optional) To monitor with headphones while recording, do the following. (The headphones are located in the same drawer as the microphone.)
 - a) Turn the **PHONES LEVEL** knob (magenta, top right) all the way down (counterclockwise).
 - b) Set the **SOLO MASTER** knob (immediately above **PHONES LEVEL**) at approximately the 1 or 2 o'clock position.

- c) Ensure the monitor level dial is down.
- d) Press the L-R button on the channel you want to monitor and raise the monitor to the safe level.

****TIPS for recording****

- 1. Whatever channel in the mixer you choose for recording is the channel you will need to select in the DAW. In our setup above, we need to record the 9 channels in Audacity to see our microphone signal.
- 2. The purple gain knobs used to adjust the input gain are located at the top of the channel strips.
- 3. The input fader on your microphone channel also needs to be up for your signal to leave the mixer.
- 4. If the audio device does not appear on your computer, try turning off the studio, waiting a minute, then turning it back on.
- 5. The name of audio device appearing in your computer may vary. It could be "MOTU" or "Audio out" for example.