

Welcome to the Production Suite at The Music Company

Production Suite Introduction & System Startup

Welcome to the Production Suite. This is our more relaxed creative space, featuring the bulk of our collection of analog synths and effects, as well as a few other random things to help spark new ideas. While it is set up with producers mainly in mind, we enjoy tracking vocals, guitars, and found sounds in here too, with a more free-flowing atmosphere than the focused sessions of the Seaside Studio.

Interface Channel Assignments:

The interface has 10 input channels:

- **1:** Mic/Line 1
- **2:** Mic/Line 2
- **3/4:** Analog 1/2 (Yamaha Mixer)
- **5/6:** Analog 3/4 (Filter Factory)
- **7/8:** Analog 5/6 (Kurzweil)
- **9/10:** Analog 7/8 (Digitech DI)

It also has 10 output channels:

- **1/2:** Monitors
- **3/4:** Analog 1/2 (unassigned)
- **5/6:** Analog 3/4 (Filter Factory)
- **7/8:** Analog 5/6 (Kurzweil)
- **9/10:** Analog 7/8 (unassigned)

Getting Started

1. **Turn on the rack** to your right with the big red switch on the top.
2. **Turn on the monitors.** (Front LED is ON)
3. **Turn on the TD-3** on the shelf on the right. (small power button on top)

Steps 4-7 only apply if you're using your own computer. If you're using ours, skip to step 8.

4. Apple Silicon Macs (M1, M2 etc.) ONLY: **Unlock your computer's security settings** (only needs to be done once per computer):
 - a. motu.com/techsupport/technotes/apple-silicon-motu-audio-inst
 - b. After installing the driver, navigate to Security within System Preferences. Click the lock icon in the bottom left corner, enter your password, and click "Allow" next to the message about MOTU system extensions. You'll need to reboot after this.

5. **Download and install** the correct driver for the audio interface.
 - a. motu.com/download
 - b. "Audio Interfaces" -> "828x"
 - c. You'll need to reboot your computer after installation.
6. **Connect the interface** to your computer with the black Thunderbolt cable labeled "MOTU Interface", connected to our computer with a white dongle. This needs to connect directly to a port on your computer, not a USB hub.
7. (Optional) **Connect to other peripherals:**
 - a. Move the HDMI cable labeled "Raven" from our computer to yours.
 - b. *Macs only:* Move the USB cable labeled "Lightning" from our computer to yours. Connect the Lightning cable in the keyboard to the mouse for a few seconds. Both should connect automatically via Bluetooth.
 - c. Move the USB cable labeled "USB Hub" from our computer to yours. This gives you access to the MIDI keyboard to your left.
8. **Open your DAW** of choice and set the audio output and input to "MOTU 828x".
9. **Turn up the volume** using the silver knob to the left of the screen. Make sure output #1 is selected.

Using A Mic

1. **Connect the mic** to one of the two Mic/Line inputs on the front of the interface.
2. **Turn on phantom power** if applicable. (Only for condenser mics)
 - a. Phantom power is controlled by a small button by each mic's trim knob.
3. **Set microphone gain** to the appropriate level.
 - a. Two gain knobs are located on the front of the interface, one per mic input.
 - b. Each mic indicator light has two vertical columns: one is green, reaching up to zero (unity) gain, and the other is orange/red, showing that input is too high.
4. **Connect headphones** to the two headphone outputs on the interface.
 - a. You'll find a headphone extension cable for the pair by the mic.
 - b. Both headphone outputs are hardwired to the main outputs; they'll play the same thing as the speakers.
 - c. The top headphone jack only responds to the main volume; the bottom one is *also* reduced by the headphone volume control. We recommend primarily setting the volume with the main volume knob.
5. **To turn off the monitors during takes**, either roll the silver knob down to zero, or select any of the output buttons other than output #1.
6. **Ask a staff member** to help find new mics, stands, pop filters, etc.

The Analog Stuff

1. **You'll access most of the analog equipment** using the 8 Aux inputs and outputs of the MOTU interface.
 - a. These will be numbered input/output 3-10 in your DAW. **Input 1/2** are the mic/line inputs on the front, and **output 1/2** are the main speaker outputs.
 - b. These are accessed through the patch bay on the rack and the USB audio channels in your DAW.
2. **The patch bay is just an accessible hub** for all the inputs and outputs we need.
 - a. Outputs are always on the top, and inputs are always on the bottom. You can use patch cables to connect any output to any input.
 - b. If you don't connect a cable, an output will send its signal to the input directly below it. This is called *normalling*, and essentially it lets us have some defaults.
 - c. All of the patchbay assignments are labeled on the piece of cardboard above it.
3. **Most of the synthesizers send their output** to the small Yamaha mixer on the right side of the desk. By default, this mixer's outputs flow to **Analog Inputs 1/2** (USB In 3/4).
 - a. This includes the **Moog**, the **JX-3P**, the **OB-8**, the **Waldorf**, the **TD-3**, the **Monotribe**, and the **2600**.
 - b. Select **Analog Inputs 1/2** (USB 3/4) and turn up the volume knob for the desired device on the Yamaha mixer.
4. **Some of the synthesizers and effects connect directly** to the patchbay. Some have default connections to the interface, and some need to be patched in with cables.
 - a. **The Filter Factory** and the **Kurzweil Mangler** are both effects units. By default they connect through the patch bay to channels on the interface.
 - i. Effects can be accessed through "External Effect" insert devices or similar through your DAW, or by sending a track directly to the effect's inputs and receiving its outputs on a new track.
 - b. **The Digitech 2120** guitar effects unit is an effects unit, but unlike the other effects, its input is on the front, unconnected to anything. You can send outputs from the rack to this with a patch cable, or connect a guitar or other instrument.
 - i. Its outputs are connected by default to **Analog Inputs 7/8** (USB In 9/10)
 - c. **The Proteus Pop/Rock** and the **Korg Wavestation** are both synthesizers. They're controlled by a MIDI keyboard and contain a collection of sounds and samples, sort of like a big preset bank.

- i. The outputs of these two devices are not routed to any input by default. You'll need to grab a couple of ¼" patch cables and connect these outputs to any of the interface inputs.
5. The MIDI controller sends MIDI signals to all of the synths at once (except the JX-3P). They all must be turned on.
 - a. MIDI signal is indicated on the "MIDI" light on the Korg Wavestation.
 - b. You can send external MIDI from the computer to the MPK249 controller to send sequenced notes into the synths. Make sure this channel doesn't also receive MIDI from the controller or you'll create a feedback loop.

Some Synth Tips

1. **This is not a full manual** for each synth; we recommend looking online for detailed instructions.
2. **The Behringer 2600** can look intimidating, but it's just subtractive synthesis with basic shapes (think Serum).
 - a. MIDI notes can give it envelope triggers and change the pitch.
 - b. The VCA amplifier sends output and can be controlled by envelopes.
 - c. The VCF filter has a small mixer section that allows oscillators to be routed in, and LFOs or anything else to open and close the filter.
 - d. The oscillators themselves have a frequency, a few slots for frequency modulation (FM), and the ability to be used as LFOs.
 - e. Many sounds can be made with no patch cables. The plain white labels are outputs; the ones with orange backgrounds signify default inputs. Try different combinations for different sounds; the most basic is changing an oscillator's waveform, by sending a different one of its outputs to the mixer of the VCF.
3. **The JX-3P** likes to clip its own output. If it sounds too crackly and distorted, try turning down its Volume knob and turning up gain later in the chain.
4. **The TD-3** produces classic acid bass sounds if you send looping MIDI melodies through it and play with the filters.
5. **The OB-8** you'll notice some of the voices are off/glitchy. Yes, we know, this is OK. Enjoy the sound design possibilities.
6. **The Digitech 2120** has lots of cool effects and presets, but it also makes a great clean preamp if you click the "Bypass" button.
7. **Yes, you can use guitar pedals with anything** via the patch bay. Bring your favorites next time!

Troubleshooting

- The interface doesn't show up as an input/output.
 - Did you install the drivers?
 - If using a newer (Apple Silicon) Mac, have you gone to Security in System Preferences and chosen to "Allow" MOTU system extensions?
 - If you don't have this option, have you unlocked your security settings by rebooting into Startup Options?
 - Have you restarted your computer after both installation and allowing extensions?
- I can't hear any sound coming out.
 - Did you select "Motu 828x" as the output device?
 - Did you turn up the silver volume knob to the left of the desk?
 - Did you select output #1 on that silver volume controller?
 - Are the monitors on?
 - Try turning the interface off and on again.
- I'm not getting a signal from the mic.
 - If you see input lights on the interface, did you select the right channel?
 - If you don't, does the mic need power? If it's a condenser mic, it does.
- The MIDI keyboard isn't working properly.
 - Try a different USB cable.
 - Try eliminating port hubs to connect more directly to it.
 - Make sure you have MIDI control enabled in your DAW.
- It's hot in here.
 - The thermostat is to the left of the desk, on the red wall.