

Customizing Audio MIDI Setup (AMS)

Demonstration is with macOS Catalina 10.15.7

Earlier versions look slightly different

This first page describes in detail how to use AMS to create a configuration that matches the MIDI equipment you have. All MIDI software can then make use of this information. If changes are made in the future, the software can easily adapt and route signal to the correct devices.

Open AMS

- Located in the Applications/Utilities folder on your System drive.
- It can also be opened from Digital Performer (DP) in the Studio menu.
- You can place it on your Dock for quick access in the future.
- When launched it may show the Audio Devices or MIDI Studio window, both, or none.
- Select MIDI Studio from Window menu if it's not visible already.
- You can set Preferences to automatically open MIDI Studio if you like.

Create New Configuration from MIDI Studio menu or popup menu in MIDI Studio Toolbar

- The Mac will auto detect some MIDI interfaces, some audio interfaces, USB keyboards etc.
- You can create multiple Configurations for different setups like live, studio, or home.
- They are stored here: ~/Users/yourname/Library/Audio/MIDI Configurations

Add new device from the MIDI Studio menu or by clicking the + button in the Toolbar

- Double-click the device icon to see the Properties window.
- Alternately with the icon highlighted you can choose Get Device Info from the MIDI Studio menu or click Show Info in the MIDI Studio window toolbar.
- In the Properties/Info window choose a Manufacturer from popup menu.
- This will populate that company's Model list from its .middev file.
- Choose a Model from the popup menu and it will fill in the attributes for that device.
- You can click the icon in this window to choose your picture of choice.
- Click the Apply button make your choices stick, then close the Properties/Info window.
- Repeat for each external MIDI device.

Attach MIDI devices to your MIDI interface (or audio interface with MIDI inputs/outputs)

- Triangles pointing away from a device are the MIDI Outs, towards the device are MIDI Ins.
- You create connections by clicking and dragging from one triangle to another.
- Only valid connections are from a MIDI Out to a MIDI In.
- The software doesn't show MIDI Thru connectors. If you have multiple devices wired this way simply connect their MIDI In ports to the same MIDI Out port.
- Don't lie to the program. The configuration you create here should match reality, meaning having actual MIDI cables hooked up between your devices and interfaces as on screen.

Choose Test Setup from the MIDI Studio menu or click the keyboard icon in the toolbar to verify MIDI connections. You can't create connections or move icons when this is On.

- Playing or moving controls will light up the MIDI In triangle on an interface.
- Clicking the MIDI Out triangle from an interface will generate random MIDI notes on all 16 MIDI channels. **WARNING** - this can cause receiving devices to make very **LOUD** noises. If devices are properly connected they may display a blinking LED or indicator.
- If either of the above is not working, verify that your MIDI and audio connections are correct then test again.

Below describes some ways to customize the MIDI information your system has to work with. The files we'll be working with are all located here: System drive/Library/Audio/MIDI Devices.

Custom icons or images for items in your MIDI Configuration

- Create a folder at this location and give it a name.
- Inside that folder create a folder called Images.
- You can place jpg, tiff, png, or pict files here that can be used by any device in your AMS configuration. Other image formats may also work, and there may be size limits.
- When you click the Icon Browser in any Properties window for a device, you will see your folder of images, along with a folder of the ones provided in AMS.

Adding Manufacturers and Models to the list of devices in the Properties windows

- Manufacturers and Models need to be listed in a .middev document. The document must be named for the Manufacturer, the way you'd like it to appear in AMS.
- A template of a generic .middev document has been included to use as a starting point if you want to create your own for a Manufacturer that may be missing.
- By viewing the Template.middev document you can see the basic format and type of information included for each model made by a single manufacturer.
- If you want to add or change an existing document you should make a copy first just in case there are errors in your typing. These documents are like a programming language, and can be very picky about syntax, extra characters, illegal characters, missing brackets/quotes etc.
- You can use Apple's TextEdit to create or change these documents. In the Save As... dialog box there is a setting for Plain Text Encoding, and you MUST choose "Unicode (UTF-8)". These documents have a very specific format that must end with the .middev extension and NOT the .txt extension that will be the default in TextEdit.
- I like to add any new or changed documents to the MOTU folder that is in the MIDI Devices folder. There are some great examples here you can study for further insight.

Creating Patchlists that can be used by Digital Performer and other DAWs

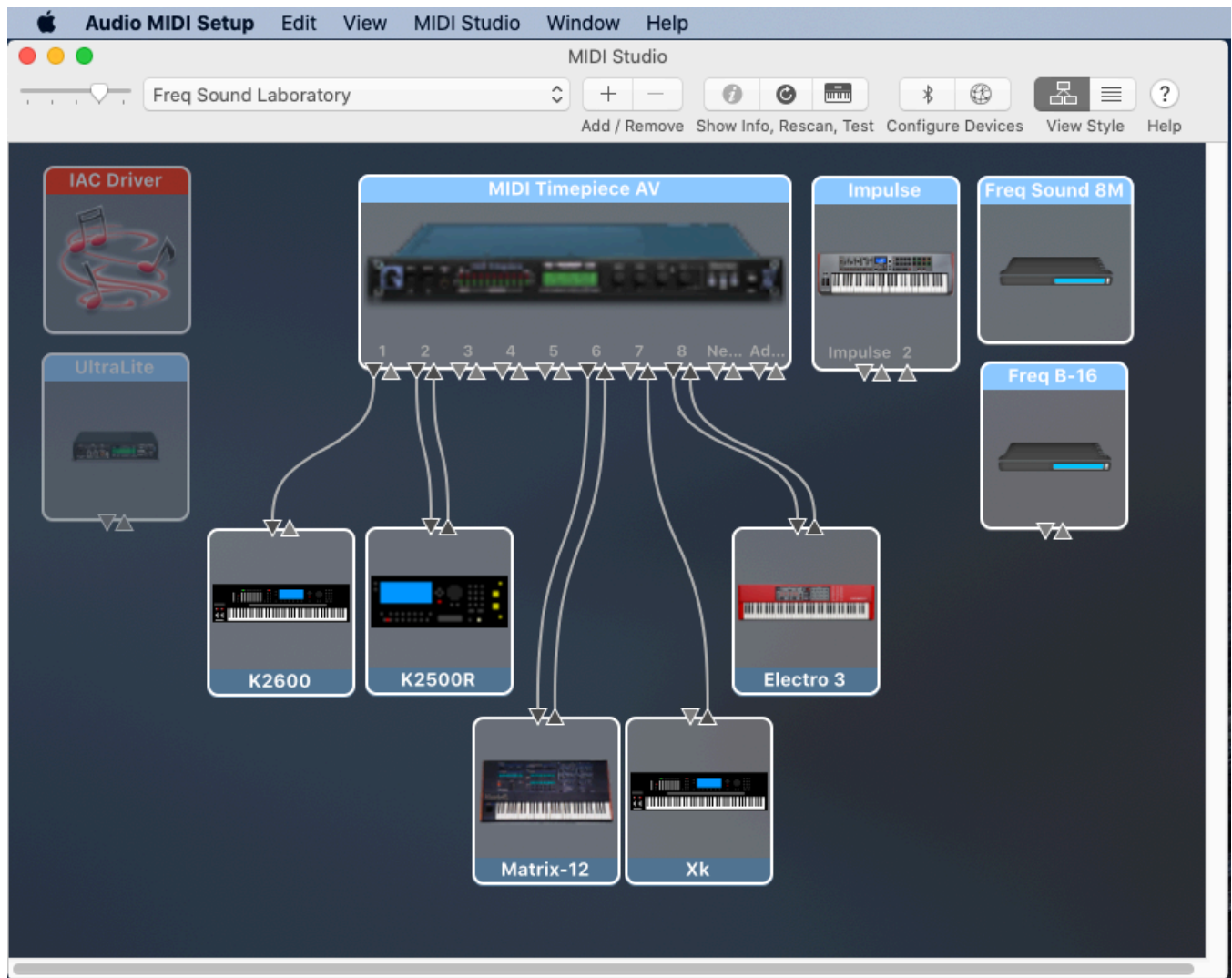
- The companion for any Manufacturer/Model is a .midnam file that contains a simple patchlist, or a complicated one with multiple banks or sounds grouped by category.
- A template of a generic .midnam document has been included to use as a starting point if you want to create your own for a Model that may be missing.
- By viewing the Template.midnam document you can see the basic format for creating a single bank patchlist for any Model.
- A Model MUST appear in a Manufacturers .middev file for it to use a .midnam patchlist.
- If you want to add or change an existing document you should make a copy first just in case there are errors in your typing. These documents are like a programming language, and can be very picky about syntax, extra characters, illegal characters, missing brackets/quotes etc.
- You can use Apple's TextEdit to create or change these documents. In the Save As... dialog box there is a setting for Plain Text Encoding, and you MUST choose "Unicode (UTF-8)".
- These documents have a very specific format that must end with the .midnam extension and NOT the .txt extension that will be the default in TextEdit.

Organization

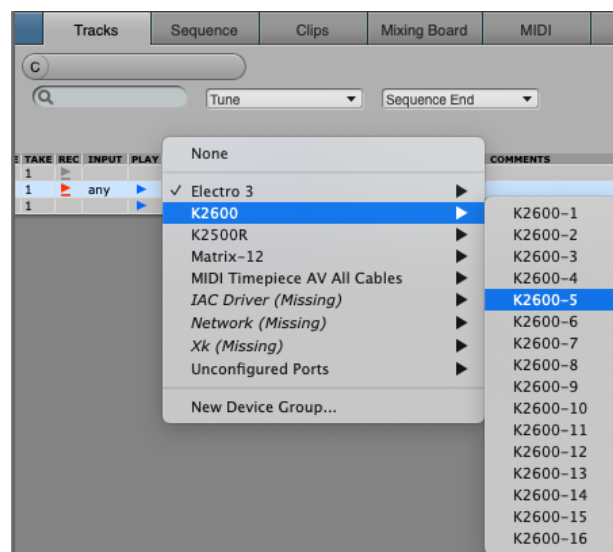
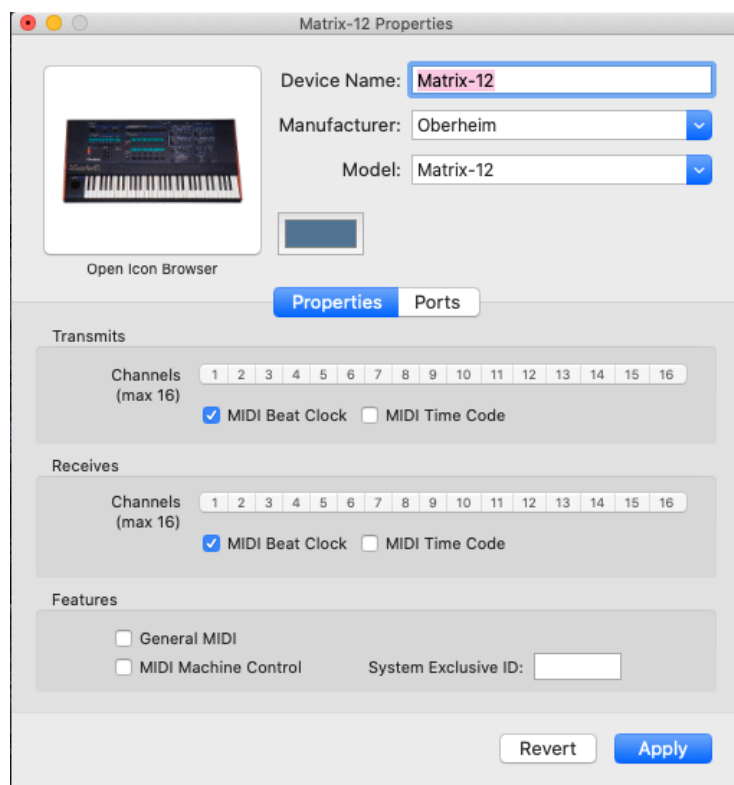
- It is OK to have just a .middev file for a Manufacturer. However if you have .midnam files that are associated with that Manufacturer you belong in a folder.
- The folder should have the same exact name as the Manufacturer, and both the .middev and related .midnam files for that company should be kept together.
- I suggest putting those folders here: /Library/Audio/MIDI Devices/MOTU

An example of an Audio MIDI Setup configuration

- Items that are currently not connected are dim (IAC and UltraLite).
- The MIDI Timepiece AV is a USB multi-port MIDI interface with several devices connected by MIDI cables.
- In this example the Xk is a MIDI input device only, a controller that doesn't make sound.
- The K6000 is a MIDI output device only, it only listens to the computer.
- The K2500R, Matrix-12, and Electro 3 are both MIDI input and output devices.
- The Impulse is connected directly to the computer with a USB cable. It can also act as a simple MIDI interface with one in and one out port.
- The 2 audio interfaces are a MOTU 8M which has no MIDI ports, and a MOTU B-16 which also can act as a simple MIDI interface with one in and one out port.



Below is an example of the Properties window for a device in the Audio MIDI Setup



Above is how devices in the AMS setup might appear in DP's Tracks Window.

Below is how a patchlist from a .midnam file might appear in DP's Tracks Window.

