

Model D Firmware

Version 1.1.1 - (19 December 2018)

Firmware Update Tools

Note: This is a software synth tool for MODEL D. The latest firmware is bundled within the application, there is no requirement for a separate firmware file.

- **Environment Requirement:** Microsoft Windows 7 or above
Mac OS v10.11 or above
- **Model Name:** Model D
- **Model Code:** P0CQJ
- **Firmware version:** 1.1.1

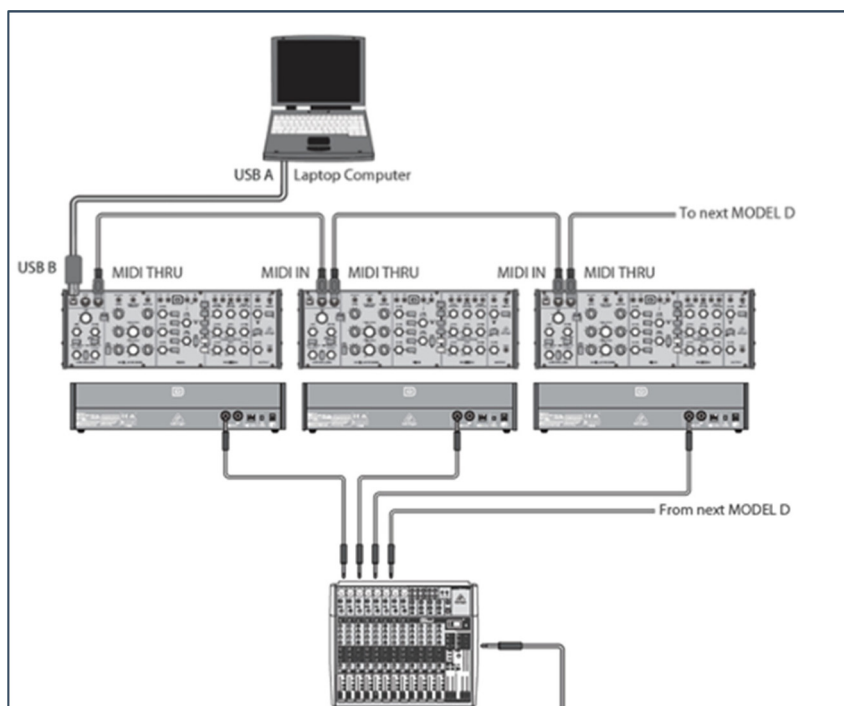
Addressed Issues

1. New Synth Tool app for easier configuration of the MODEL D via the USB input.
2. Added new Mac OS support.
3. Improved the Poly Chain function to make it easier to setup and use.
4. Improved re-trigger reliability when playing with legato notes.
5. Mac version doesn't support the firmware earlier than v1.0.5.
6. Add a function to SAVE and LOAD user setting file to the APP.
7. Fixed the notes logic issue in legato mode (multi-trigger off mode) found in the v1.1.0.

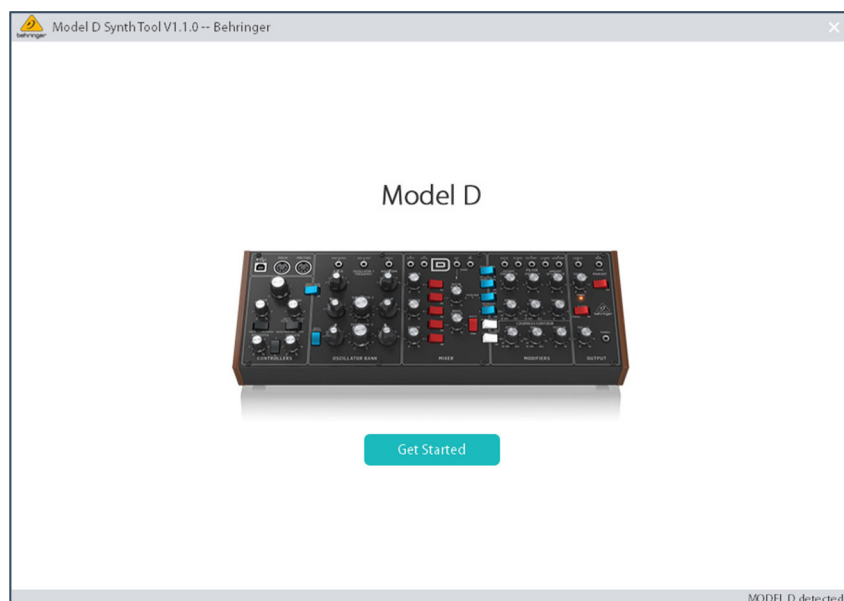
Introducing the New Poly Chain

Now if you have multiple MODEL D units you can connect them together and easily produce polyphonic timbres and sounds. Poly Chain is no longer enabled/disabled by SysEx messages and must be configured the first time via the MODEL D Synth Tool. To enable and configure the Poly Chain mode:

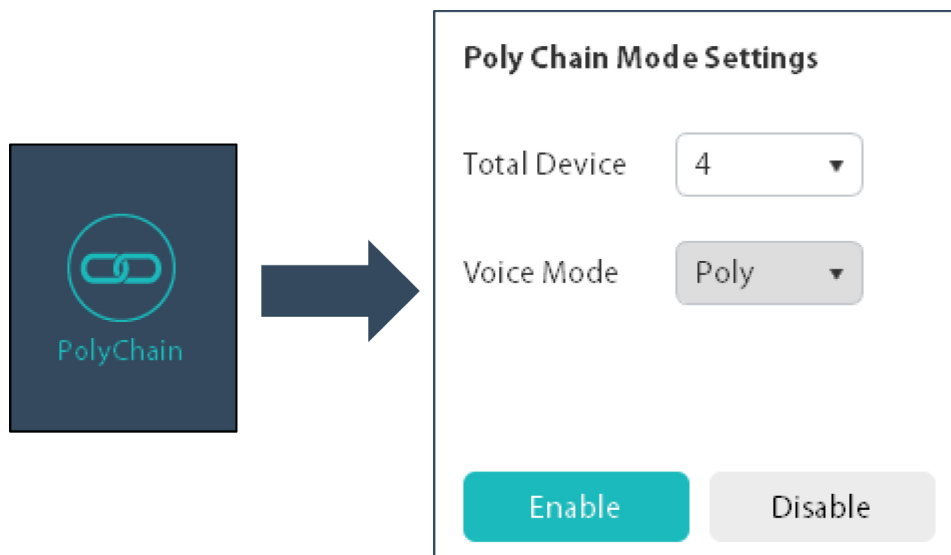
1. Connect your MODEL D units together as shown in the illustration below.



2. Power on your units and start the "MODEL D Synth Tool".



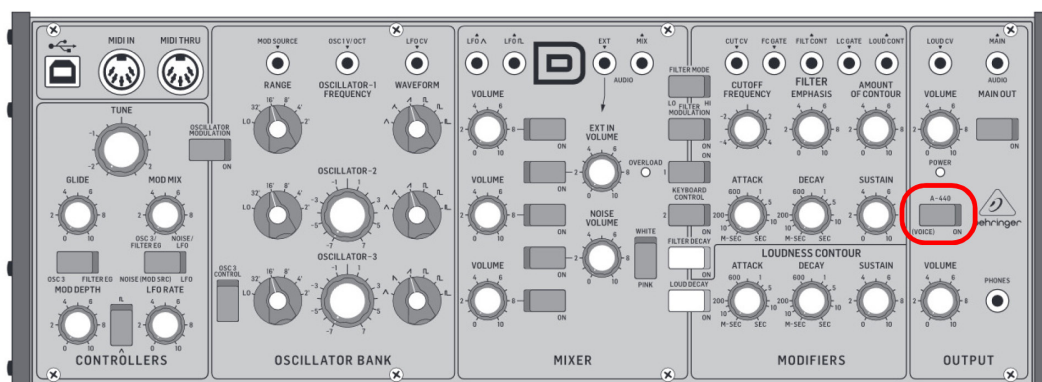
- On the Poly Chain Tab select the total devices, voice mode (Poly, Unison, Mono) and then click "Enable".



- Wait for the power LED to flash four times on the first MODEL D in the chain. The units are now set in Poly Chain Mode.

Poly Chain mode is persistent over power cycling. To disable Poly Chain mode, connect all devices as previously and in the "MODEL D Synth Tool" click disable.

Or



Switch the "A440" switch 4 times within the first 5 seconds after power up to disable the Poly Chain. You will see the power LED flash 4 times slowly to confirm Poly Chain has been disabled.

*Please note, if a MODEL D is set in Poly Chain Mode, both the MIDI Channel selection switch and SysEx command for MIDI channel are disabled. Current note priority is ignored as Poly Chain has its own note priority to handle multiple notes. *

Poly Chain Information:

The new Poly Chain feature supports up to 16 MODEL D's at once. Here are some examples of how the new Poly Chain feature works:

Poly Chain Mode Settings

Total Device

Voice Mode

Priority

Total Device

Select the total number of MODEL D's to be used in the Poly Chain. Selecting above the total number of units connected will lead to unknown behaviour and is best avoided. Selecting below the total number of units connected will lead to the extra units on the Poly Chain being ignored.

Voice Mode

Select the Poly Chain voice mode. There is a more detailed description on the next page.

Priority

(Only available in Mono Voice Mode) Select the note priority option when using the Poly Chain. More details about note priority are available in the manual.





VOICE MODES

There are currently 3 types of voice mode to select from.

VOICE MODE - POLY (4 Devices)





Single Notes:

Playing single notes will play via a different unit each time. The order in which unit's play is random.

Note being played	Unit			
	#1	#2	#3	#4
	C2			
		C2		
			C2	
				C2

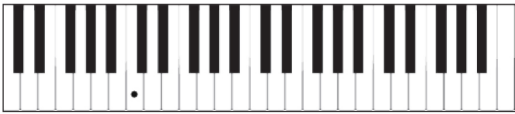

Chords:

It is possible to play chords in Poly Chain mode. Each note will be assigned to the next MODEL-D in the chain, if there is not enough MODEL-D's connected to complete the chord a last note priority is applied to the notes.

Note being played	Unit			
	#1	#2	#3	#4
	C2	E2		
	C2	E2	G2	
	C2	E2	G2	B2
	C4	E2	G2	B2


VOICE MODE - Unison-2 (4 Devices)

This is like the Poly Mode but instead two units are assigned to each note.

Note being played	Unit			
	#1	#2	#3	#4
	C2	C2		
	C2	C2	E2	E2

VOICE MODE - MONO (4 Devices)

This option allows the user to select the number of units that will play when a note is triggered. The note priority can be set in this mode, the options are High, Low and Last note priority modes.

Note being played	Mono Setting	Unit			
		#1	#2	#3	#4
	Mono-1	C2			
	Mono-2	C2	C2		
	Mono-3	C2	C2	C2	
	Mono-4	C2	C2	C2	C2