MantaMate User Manual

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Preface

Thank you for purchasing the *MantaMate*! The *MantaMate* is a Eurorack module intended for interfacing a variety of control devices with the world of Eurorack. As you may have guessed, the primary device we had in mind was the *Snyderphonics Manta*, but the module is in no way limited to just the *Manta*.

The *MantaMate* combined with a traditional control device acts as a CV converter.

The *MantaMate* combined with the *Manata* acts as a control device as well as a fully-featured pitch and rhythm sequencer. These features include:

- Two sequencers running in parallel, each of up to 32 steps
- Each sequencer can be a pitch or trigger sequencer
- Variable note length
- Variable CV control: four CV values per note, per sequencer allowing up to eight controllable CV outputs
- Pitch and CV glide
- Composition mode to chain together sequences into longer tracks
- Up to 89 (????) saved compositions, each of up to 32x2 sequences
- On-the-fly control for both in-studio and performance use

If you have any questions, feel free to reach out to Jeff Snyder <jeff@snyderphonics.com>

Section 1

Manta Input Device

This section covers using a *Manta* HOST device with particular focus on sequencer/composition mode.

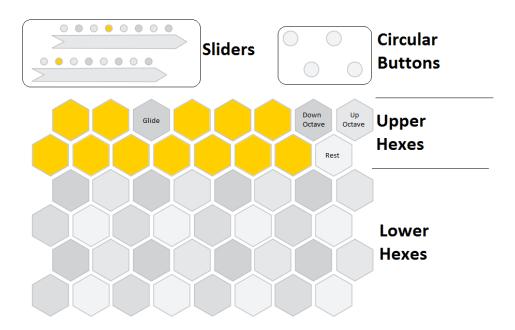
1.1 Manta Presets

With a *Manta* HOST device, the *MantaMate's* 00-06 presets represent different ways the *Manta* can be used as an instrument. The remaining 10-99 presets are user-saved, where sequencer compositions can be saved. The active preset is shown on the *MantaMate's* digital display.

- 00 Blank composition sequencer (default)
- 01 Monophonic controller
- 02 Duophonic controller
- 03 Triophonic controller
- 04 Tetraphonic controller
- 05 Trigger controller
- 06 CV controller
- 07-09 Unused
- $\bullet~10\mbox{--}99$ User-saved compositions.

1.2 Composition/Sequencer Preset

When in a blank composition, the *Manta* will default to a single sequencer that can have up to 32 steps activated. This mode will be referred to as Single-Sequence Pitched sequencer mode.



1.2.1 Getting Started/Basic Use

To get up and running with the *Manta*, you will start in Play Mode. In play mode, you can press the lower hexes in order to add them to the sequence. All hexes added to the active sequence will be lit up amber. Initially after pressing a hex, you can press the upper hexes and sliders to change that hexes values.

To further edit hexes that are already added, you can hit the top-right circular bottom and it will turn amber to indicate you are in Edit Mode. You can now select hexes to edit their pitch and CV values, as well as the note length. If you would like to edit more than one hex value at once, you can multi-select in Edit Mode by holding a selected hex down and picking more hexes. Once you have selected a hex (or hexes, indicated by red LED), the list below covers all the values that can be changed for that hex (or hexes) and how to do so:

- 1V/O Pitch Class: Pick the note on the keybed presented on the upper hexes.
- 1V/O Octave: Press the top-right most hexes to transpose down or up and octave.
- CV1 Value: Press the top slider to change CV1 output value.
- CV2 Value: Press the bottom slider to change CV2 output value.

- CV3 Value: First, access the secondary CV values by pressing the top-left circular button until it is amber. Then, press the top slider to change CV3 output value.
- CV4 Value: First, access the secondary CV values by pressing the top-left circular button until it is amber. Then, press the bottom slider to change CV3 output value.
- Octave Value: First, access the access the misc. slider values by pressing the top-left circular button until it is red. Then, press the top slider to change to change the octave value.
- Note Length Value: First, access the access the misc. slider values by pressing the top-left circular button until it is red. Then, press the bottom slider to change to change the note length value.
- Pitch Glide Time: Press and hold the upper hex that lies between D# and F# to access the glide times. Press the top slider to change the pitch glide time. Note this is the time to glide TO this note.
- CV Glide Time: Press and hold the upper hex that lies between D# and F# to access the glide times. Press the bottom slider to change the CV glide time. Note this is the time to glide TO this note.

All the above values can be changed for each of the 32 hexes in the sequence. It should be noted that you actually have two sequencers running at once! Pressing the bottom-left circular button will turn it red and present you with the Menu Page. From here you can select Sequencer Mode and Order (covered below), but most importantly you can access the second sequencer by pressing the top-right most hex.

The second sequencer (S2) acts similarly to the first (S1) but they run in parallel.

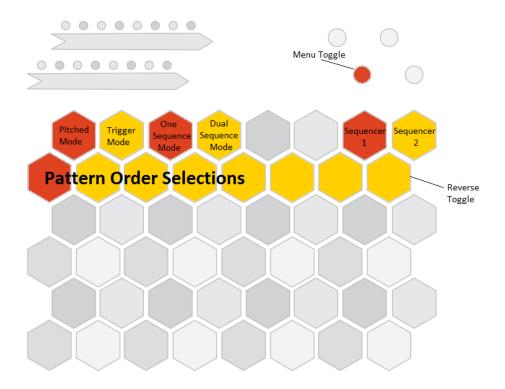
Okay, so I've changed all these values, but now how do I get these values out of my MantaMate?! First, we need to clock the MantaMate from the ClkIn input. Then you can get the pitch/CV/clock from the respective outputs (where each cell represents a MantaMate output):

S1:	S1:	S1:
1V/0	CV1	CV3
S1:	S1:	S1:
Clock	CV2	CV4
S2:	S2:	S2:
1V/0	CV1	CV3
S2:	S2:	S2:
Clock	CV2	CV4

The clock out for each sequencer is used for outputting the clock modified by the note length values of each hex, useful for triggering an ADSR or the like.

$\begin{array}{ccc} \textbf{1.2.2} & \textbf{Changing } \textit{Manta} \ \textbf{Sequencer} \ \textbf{Mode and Sequence} \\ \textbf{Order} & \end{array}$

In order to change the sequencer mode and order, first access the Menu Page by hitting the bottom-left circular button on the Manta.



There are four (TODO: Five?) sequencer modes the Manta can be in that are accessed by the top-left four Hexes in the Menu Page:

From left to right:

- Pitched (default)
- Dual-Sequence Pitched
- Trigger
- Dual-Sequence Trigger
- Mixed (TODO?)

Although the naming seems to imply otherwise, both Pitched Mode and Dual-Sequence Pitched Mode have two running sequences. The difference lies in that the Dual-Sequence Pitched Mode presents the user both sequences on the same page, while the two sequences in Pitched Mode must be flipped between using the two rightmost hexes in the Menu Page.

The above is also true of Trigger Mode and Dual-Sequence Trigger Mode. The Menu Page also allows you to switch the sequence order mode, these can be changed by the second row of hexes:

From left to right:

- Left to right, bottom to top
- Left to right, top to bottom
- Diagonally up
- Diagonally down
- Caterpillar
- Order in which hexes are added
- Random
- Reverse the currently selected order mode. Or turn random mode to a random walk pattern.

1.2.3 Pitched Modes

Below outlines the MantaMate's output while in either of the Pitched Sequencer modes.

Note: S1 refers to Sequencer 1 and S2 naturally refers to Sequencer 2.

S1:	S1:	S1:
1V/0	CV1	CV3
S1:	S1:	S1:
Clock	CV2	CV4
S2:	S2:	S2:
1V/0	CV1	CV3
S2:	S2:	S2:
Clock	CV@	CV4

1.2.4 Trigger Modes

Below outlines the *MantaMate's* output while in either of the Trigger Sequencer modes.

S1:	S1:
CV1	CV3
S1:	S1:
CV2	CV4
S2:	S2:
CV1	CV3
S2:	S2:
CV2	CV4
	CV1 S1: CV2 S2: CV1 S2:

1.2.5 Saving a Composition

Currently undefined

1.3 Monophonic Preset

Currently undefined

1.4 Duophonic Preset

Currently undefined

1.5 Triophonic Preset

Currently undefined

1.6 Trigger Preset

Currently undefined

1.7 CV Preset

Currently undefined

Section 2

Other Input Devices

This section covers using other HOST devices with the *MantaMate*. We hope that any input device you can think of works with the *MantaMate*, but we cannot make any guarantees. Below outlines some of the devices we tested and ensured worked as one would expect!

2.1 Computer/DAW

This works right? I think Jeff mentioned it worked? It'd be killer if it did.

2.2 USB-MIDI Keyboard Controller

This definitely works but I don't know to what extent (are we guessing knobs MIDI channels and then converting that to CV???? If we are, we are awesome)

2.3 USB Game Controller

Gotta test this again too

2.4 Guitar Hero Controller

This would be silly but fun

2.5 DDR Dance Pad

Maybe only vaguely usable but who else can say they have DDR working on Eurorack!?