# 6-VOICE ANALOG SYNTHESIZER

# Contents

## 1. Introduction

- 1.1 Key features
- 1.2 Included in the box
- 1.3 Signal flow diagram
- 1.4 Menu Map
- 1.5 Connections

## 2. Getting started with the Nymphes

- 2.1 Power considerations
- 2.2 Quick Start Guide

## 3. Programming the Nymphes

- 3.1 The Basics of How a Synth Works
- 3.2 Shift Button
- 3.3 Oscillator
- 3.4 Filter
- 3.5 Envelope
- <u>3.6 LFO</u>
- 3.7 Notes about modulation

#### 4. Saving and Loading

- 4.1 Loading a patch
- 4.2 Saving a patch

#### 5. Menu Accessible Parameters

- 5.1 MODE
- 5.2 CHORD
- 5.3 LFO 2
- 5.4 REVERB
- 5.5 MOD W (modulation wheel)
- 5.6 VELO (keyboard velocity)
- 5.7 AFTER (keyboard aftertouch)
- 5.8 MIDI C (midi channel)
- 5.9 The Four Assignable Modulation Sources

## 6. Global Settings

- 7. Preset List
- 8. CC List

#### Introduction Note

We came across the general idea for the Nymphes around March 2020. I was playing with my vintage Sequential Six-track, which is a fairly simple yet effective synth concept. With only a simple reverb pedal connected to it, you can actually achieve a wide variety of sounds. Not a modulation monster, just an oscillator and a noise generator through a filter and an amp. Yet, it had some advanced technology when it was released, as it was the first multi-timbral synthesizer. The Six-track, was made so as to be an affordable polyphonic synth for its time and without sound compromises.

Nymphes is not multitimbral, it does not have a keyboard or a sequencer and the modulation matrix is far more complex than the Six-track. Yet, it keeps the exact same idea, affordable to the masses with no sound compromises.

Also, on March 2020 is when a new world order was introduced. People were locked inside their houses, in fear of a new virus. This went on for months. In Greece we had to send a text message in order to be able to go out. Restaurants, bars, shopping malls and any kind of entertainment were closed - even the parks were shut. You were able to go out only for very specific reasons such as supermarkets, grocery stores, pharmacy, a visit to the doctor, a walk with your dog or exercise. Each case had its own sms code.You had to send your name and address and you got a reply saying if you are allowed to leave your house. We also had a curfew from 21:00 until 05:00.

Cops went wild - they suddenly took their jobs far more seriously than they should. There were incidents where they just bullied simple civilians and even families. Sometimes police brutality was worse, hitting people just because they were more than 4 people together or because they were sitting in a "forbidden" bench in the town square.. Yet our politicians seemed to have an asylum on these same measures they voted. They could go to parks and they arranged feasts with 100 people or even more. Some of them even made FB photo posts, posing , stating "I II do whatever I want - and you can do nothing about it".

People were stressed inside their houses, some of them didn't understand or didn't accept those extreme measures, so they got angry. Monsters that were hidden in plain site now emerged and domestic violence rised. Femicides are now back and abused women are just a rising number. Greece of course is just a mild case. There are countries around the world that do not consider women part of the thinking society. They are not allowed to be educated, play sports, or work. They are forced to marry men they don't want and are simply used as a reproducing and house-keeping tool.

I could go on for many more pages, but what does all these have to do with a synth that is used in a capitalistic society and will of course bring profits/make a living to all the people that are working on it?! That means not only the owners of this company, but also the employees, distributors, shops, music magazines and websites, you-tubers, electronic part makers, PCB factories, metal workers, courier companies, printing press etc) and the list could go on forever....

Well actually, nothing....!! It's just a synth where its destiny is to make music. It is in the hands of the artist to transform this into a message tool.

So it is.....Nymphes....ancient Greek nature deities. They were supposed to live in larger groups, completely independent from everyone and that was their main strength. Nymphes were later renamed as fairies in the medieval era and unfortunately their original name was associated with something completely different than they used to be. Maybe because men were afraid them. Or maybe not. Nonetheless, the real Nymphes are still all around us, trying to keep this men's world in a balance.

Athens, 15 December 2021 Dimitra and Yiannis

# 1. Introduction

## 1.1 Key features

- All analog Synthesizer (except of the reverb)
- 6 voices of Polyphony
- Lush digital reverb
- 12 envelopes and 7 LFO's (2envelope/voice, 1LFO/voice + 1 generic)
- 6 different playing modes
- 98 Presets Memory (49 user and 49 factory)
- MIDI in/out over USB or via MIDI out via DIN5
- Compact, USB powered for maximum portability
- Metal enclosure

## 1.2 Included in the box

- Nymphes synthesizer
- Quick start guide
- Menu map card
- USB cable
- DIN5 to 3,5mm cable

Please note that a USB mains adapter or power supply is not included. Almost any USB adapter will work with the Nymphes, but there are some power considerations, so please check the "Connections" section of the manual before plugging in your Nymphes.

## 1.3 Schematic diagram



## 1.4 Menu Map



#### 1.5 Connections

![](_page_3_Picture_3.jpeg)

# 2. Getting started with the Nymphes

## 2.1 Powering considerations

Even though the Nymphes is an analog synthesizer, it can be powered with a simple USB cable. Giving the unit some extra mobility, you can just use a power bank and play anywhere (with a 20.000 mAh power bank you could power and play the unit for up to 55 hours).

Most households nowadays have at least a dozen or so USB cables and power adapters available.

So, you're thinking, "Can I use any USB power supply?"

Yes, but there are some things you need to take into consideration.

Not having a dedicated power adapter means that

depending on the USB power supply quality or your connection, could result in a dirty synth and noise floor. You can easily avoid those situations by following these simple rules:

- When you turn the Nymphes on, there is a burst of noise occurring. This is normal but in order for this to happen, make sure you have the level of your monitor/amp turned off.

- Power the Nymphes and all the devices connected to it, from the same mains power line. You should specifically avoid using different mains. For example a mains line for Nymphes and a different one for your amp/monitor that have internal protection circuit. This can produce a constant noise generation from the output of the synthesizer, which can only be eliminated by reseting the unit.

- When powering the Nymphes from a computer, if you use a DAW to work with the MIDI CC documentation, a ground loop can be created, causing a noticeable hum. In that case, you should power the Nymphes from a different power supply and not from the same computer that you're running the DAW on.

You can do that with the use of a USB data/power splitter.

- Using a very long USB cable can also cause line noise. For cleaner sounding performance it is also better to use a USB cable that has a ferrite bead installed.

- Make sure your USB power adapter is rated for at least 1A - Poor quality USB power adapters should be avoided.

- Also have in mind - as mentioned before - when using a power bank, make sure it's a good quality one.

You can also power a keyboard controller with the same power bank.

## 2.1.1 Bad power supply (or cable) side effects

- May not boot Nymphes
- Lots of noise, abnormal sound elements
- Wobbly oscillators
- Firmware update may not work

If you have any of the above effects, replace your adapter and/or cable asap.

You should also avoid leaving the synth on power when you are not going to use it for a long period of time (and that should be a rule for every electrical/electronic device) for various reasons.

Most important reasons are:

- Expanded life circle
- Protection of the environment

# 2.2 Quick Start Guide

## FIRST OF ALL

As NYMPHES is an analog synthesizer (and should be treated like one), when you power it on for the first time, we strongly suggest to let it warm up for 5-10 minutes and then force it to auto-tune.

Press and Hold **MENU + LOAD** for 1 second. The process will take about 1 minute and should be audible. It's ok to play with the synth while it is warming up, but during the auto-tuning procedure the synth will not be responsive.

## THE SHIFT BUTTON

**Double click** the **SHIFT** button and its LED will be lit. You can now control all the parameters labeled above the sliders.

Another way to access these parameters is by **holding down** the **SHIFT** button while changing the values of the parameters in the pink areas (similar to how you use the SHIFT button on a computer's keyboard).

![](_page_5_Figure_7.jpeg)

#### HOW TO LOAD A PRESET

**1.** Press the **LOAD** button and its LED will flash.

2. With the SHIFT button ON, select a bank with the rotary switch. **3.** With the **SHIFT** button OFF, select a preset with the rotary switch.

**4.** Press the **LOAD** button to recall the selected user preset **OR** Hold down the **LOAD** button to recall the factory preset.

#### If you want to reload your current preset, just skip step 2 and 3.

![](_page_5_Picture_14.jpeg)

![](_page_5_Picture_15.jpeg)

![](_page_5_Picture_16.jpeg)

![](_page_5_Picture_17.jpeg)

## HOW TO SAVE A USER PRESET

1. While holding down SHIFT, press SAVE. Its LED will flash. 2. With the SHIFT button ON, select a bank with the rotary switch. **3.** With the **SHIFT** button OFF, select a preset with the rotary switch.

**4.** Press **SAVE** to store the selected user preset.

#### If you want to save on your current edited preset, just skip step 2 and 3.

![](_page_6_Picture_6.jpeg)

![](_page_6_Picture_7.jpeg)

![](_page_6_Picture_8.jpeg)

![](_page_6_Picture_9.jpeg)

## HOW TO CONTROL THE MENU

![](_page_6_Picture_11.jpeg)

Press the **MENU** button to access the numeric menu. While the MENU LED is lit, use the rotary switch to select the desired MENU option. Some of the MENU options will also have submenus used to access more parameters.

![](_page_6_Picture_13.jpeg)

**Rotary Switch** 

When an option has a submenu (like MODE), press the MENU button again and its LED will flash, to indicate that the rotary switch is now selecting the submenu options.

Numeric Menu

![](_page_7_Picture_0.jpeg)

2. These sliders set the LFO 2 modulation destinations and amounts, corresponding to either SHIFT ON or SHIFT OFF parameter. **3.** These sliders set the **LFO 2** controls, corresponding to either **SHIFT ON** or **SHIFT OFF** parameter.

## CHANGING PLAY MODE

1. Press MENU and select MODE.

![](_page_7_Picture_5.jpeg)

**2.** Press **MENU** again. Its LED will start blinking.

![](_page_7_Picture_7.jpeg)

![](_page_7_Picture_8.jpeg)

## **MODE LIST**

- 1. POLY: 6 Voices to 6 keys
- **2. UNI A:** 6 Voices to 1 key
- **3. UNI B:** 4 Voices to 1 key
- **4. TRI:** 2 Voices to 3 keys
- **5. DUO:** 3 Voices to 2 keys
- **6. MONO:** 1 Voice to 1key

**7. CHORD:** This is not a Play Mode. When selecting it, you are accessing the Chord editing page. Chords are active only on modes 2, 3, 4, 5 and can be accessed via the dedicated slider.

**3.** Select a Play Mode. Press **MENU** again to confirm your selection.

## ADDING REVERB

1. Press **MENU** and select **REVERB**.

MENU

1 MODE

ZLFOZ

ч mod w

VELO

MIDI C

5

6

3 REVERB UNI B

AFTER MONO

POLY

UNI A

TRI

DUO

CHORD 7

ı.

Z

Э

ч

5

б

**2.** These sliders are now corresponding to the  $2^{nd}$  indicated top row.

The rest of the synthesizer's controls are inactive.

![](_page_8_Figure_4.jpeg)

ESET CONTRO

## HOW TO USE MOD WHEEL, VELOCITY AND AFTERTOUCH

PRESET CONTROL

BCDEFG

OSCILLATOR	FILTER		<b>O</b>	1. Press MENU and select either MOD W,
PU GLD DTN CHORD EG				AFTER. 3. Press MENU to exit.

**2.** These sliders set the modulation destinations and amounts, corresponding to either **SHIFT ON** or **SHIFT OFF** parameter.

9

#### 3.1 The Basics of How a Synth works

You can find a lot of information on this topic all over the internet, but here are at least a few of the basic concepts that might help you understand this synth a bit more.

The oscillator serves as the source for the basic noise or sound in a synthesizer. The tone of that sound depends on the shape of the wave produced by the oscillator. Classic-style analog synthesizers usually offer a similar list of waveforms, and the Nymphes as well offers all the usual suspects: saw, square, pulse, and triangle. After a synthesizer's waveform produces a tone, it is usually sent to the filter.

The filter does exactly that: it lets you filter out or remove harmonics from the basic waveform, making the tone brighter or duller depending on how the filter is set. Another feature of some filters is resonance or Q. This accents the harmonics near the filter cutoff frequency, providing that classic squelchy and squeaky quality that synths are so well known for. After the filter, a synth usually sends the signal to the amplification section.

The amplification section of a synth is the part that controls the amplitude or how loud the sound is. Usually, the amplification of the tone is controlled by a 4-step envelope that provides an attack phase, a decay phase, a sustain phase (where the amplitude is held constant), and a decay phase, where the amplitude drops to zero after the sustain phase. This attack, decay, sustain, and release envelope is frequently referred to as an ADSR envelope.

The last key piece of the synth puzzle is the modulation. A modulator is simply something (a source) that modulates, changes, or controls something else (a destination). In the case of a synthesizer, usually there is a low frequency oscillator (LFO) or an envelope generator (EG) that can be used to modulate another parameter or value on the synthesizer. For example, you can create vibrato by using an LFO to slightly change the oscillator pitch in a cyclic way. You could also use an LFO to modulate the filter cutoff value to create an auto-wah effect, alternately changing how bright or dull a tone is. The possibilities are almost endless and that is what makes programming synths such an interesting activity.

![](_page_10_Picture_0.jpeg)

#### 3.2 The SHIFT Button

Though there are only 14 sliders on the Nymphes, by using just the **SHIFT** button with those 14 sliders, you can easily access 28 parameters for controlling and programming the synth. When the **SHIFT** button is lit, the 14 labels on top of the sliders describe the parameter that each slider controls.

PW	GLD	DTN	CHORD	EG	)	HPF	TRACK	LFO	A	D	S	R	VCA	DELAY	FADE

When the **SHIFT** button is not lit (off), then the 14 labels underneath the sliders describe what each of the 14 sliders control.

![](_page_10_Figure_5.jpeg)

You can either temporarily press the **SHIFT** button, and it will light up, or you can quickly double-click the shift button, and it will stay lit. Again, it's important to remember, as long as the **SHIFT** button is lit, the sliders will control the parameters labeled at the top.

#### 3.3 Oscillator

The 10 available settings in the oscillator section are controlled with the 5 sliders and the shift button. Most importantly, these settings let you program the shape, the tuning/pitch, and the amplitude of the oscillator waveform and sub oscillator.

**WAVE** (slider 1) - the **oscillator waveform** control lets you select the shape of the continuously variable waveform, morphing between sawtooth, square, and triangle shapes.

**LVL** (slider 2) - the **level** control lets you set the amplitude or loudness of the oscillator waveform.

**SUB** (slider 3) - the **sub-oscillator** control lets you add a square wave, pitched one octave below the pitch of the oscillator waveform

**NOISE** (slider 4) - the **noise source** control lets you add white noise mixed with the main oscillator and sub-oscillator.

![](_page_10_Picture_13.jpeg)

**LFO** (slider 5) - the **low frequency oscillator** control sets how much LFO 1 modulates the pitch of the waveform. This can be used to create just a subtle vibrato to more extreme sound effects.

**PW** (shift-slider 1) - the **pulse-width** control lets you adjust the pulse-width of the pulse or square wave, changing the characteristics of the sound. Modulating the PW with an LFO can produce a slightly-detuned sound that Nick from Sonic State loves. As long as there is some pulse-wave selected, the pulse width can be adjusted. When the waveshape is strictly a saw wave or a triangle, changing the pulse width has no effect. Modulating the PW requires the use of LFO2

**GLD** (shift-slider 2) - the **glide** control (also referred to as portamento) lets you set the glide rate between successively played notes. Glide is fixed-rate, not a fixed-time and polyphonic. Whether the glide reacts to legato playing or not is set through the menu. See the MENU MAP for how to change the legato setting. On the polyphony, note that glide is heavily depending on the number of voices, and whether there is a free available voice or not.

**DTN** (shift-slider 3) - the **detune** control lets you detune the intervals between notes, from a slight effect to a dramatic. The detune can be used in any of the various polyphonic or unison modes, creating some incredibly thick sounding notes.

**CHORD** (shift-slider 4) - the **chord control** lets you use the slider to choose different predefined chords that can be programmed via the MENU function. On POLY and MONO modes, this has no effect

**EG** (shift-slider 5) - the **envelope generator** control lets you program how much the filter envelope modulates the pitch of the oscillator. Important to note, envelopes are unipolar.

#### 3.4 Filter

The Nymphes has a 24db lowpass (LP), resonant filter which feeds into a 6db High Pass (HP), non-resonant filter. The 6 available settings in the filter section are controlled with the 3 sliders and the shift button. These 6 settings let you program parameters for both filters like cutoff and resonance, as well as modulations like key tracking, envelope, and LFO.

**CUT** (slider 6) - the **filter cutoff** control lets you set the cutoff frequency of the LP filter. Frequency range is from 32,7 hZ up to 16.744 hZ

**RES** (slider 7) - the **filter resonance** control let you set the amount of resonance, also sometimes referred to as Q. At it's max setting it will self oscillate.

**EG** (slider 8) - **filter envelope generator** (EG) control lets you set how much the filter envelope modulates the filter cutoff

**HPF** (shift-slider 6) - the **high-pass filter** control lets you set the frequency cutoff for the high-pass filter. Note, the HPF is routed in series after the LPF, giving you a band-pass effect.

**TRACK** (shift-slider 7) - the **filter key tracking** control lets you set how much the filter frequency cutoff follows the keys. When the slider is all the way up, the filter cutoff will track to the oscillator pitch at a 1:1 ratio (the cutoff will increase 1 octave for every octave the pitch of the note increases).

**LFO** (shift-slider 8) - the **low frequency oscillator** control sets how much the LFO 1 modulates the filter frequency cutoff.

**Playing only with the filter as a source:** Set up the Oscillator LVL, SUB and NOISE to 0% and then on the filter : CUT = 0%, RES= 100%, EG=0%, HPF=0%, TRACK=100%, LFO= 0%. This will allow for the filter to be in perfect tune and matched with the oscillator's frequency.

![](_page_11_Picture_15.jpeg)

## 3.5 Envelope

The 8 available settings in the envelope section are controlled with the 4 sliders and the shift button (discussed later in the manual, these controls can also be used to program the reverb effect). The sliders allow you to shape the envelope generator or EG for modulating both the filter cutoff and the amplitude or volume of output.

#### Filter Cutoff and Pitch Envelope

**A** (slider 9) - the **attack** control sets how fast or how slow the envelope rises to its peak filter cutoff value.

**D** (slider 10) - the **decay** control sets how fast or how slow the envelope drops from its peak value filter cutoff value to its sustain value.

**S** (slider 11) - the **sustain** control lets you set the level filter cutoff sustain value.

**R** (slider 12) - the **release** control lets you set how fast or how slow the envelope drops from the filter cutoff sustain value to a zero value, totally closing the filter cutoff.

#### Amplitude Envelope

A (shift-slider 9) - the attack control sets how fast or how slow the amplitude envelope rises to its peak value.

**D** (shift-slider 10) - the **decay** control sets how fast or how slow the amplitude envelope drops from its peak value to the value the envelope will sustain at.

**S** (shift-slider 11) - the **sustain** control lets you set the amplitude envelope's sustain value.

**R** (shift-slider 12) - the **release** control determines how fast or how slow the envelope drops from the amplitude sustain value to value of zero.

#### 3.6 LFO

The Nymphes has 2 Low Frequency Oscillators or LFO's referred to as LFO1 and LFO2. Both are bipolar and can be used to modulate various parameters on the synth. LFO 1 is polyphonic and can only modulate 1) the frequency or pitch of the oscillator and 2) the filter cutoff. LFO 2 is monophonic but can be programmed as a modulation source for 24 different destinations.

Both LFO 1 and 2 have four different rate settings accessed through the MENU, and both can be set to 1) low, 2) high, 3) track (where the rate is determined by key tracking), and 4) BPM (where the rate can sync to midi clock). Lastly, KEY SYNC can be switched on or off for both LFOs. When the Rate is set to BPM, but no clock is send, it automatically works on low rate mode.

**RATE** (slider 13) - the **LFO frequency rate** control sets the LFO 1 frequency or how fast it will cycle.

**WAVE** (slider 14) - the **LFO wave shape** control lets you select the wave shape for LFO1. Unlike the Nymphes oscillator waveforms that are continuously variable, the LFO wave forms are five discreet (individual) wave forms including: 1) triangle, 2) saw/ramp down, 3) saw/ramp up, 4) square, and 5) random (sample-and-hold).

 ENVELOPE

 REVERB

 R
 D
 S
 R
 VCR

 SIZE
 DEC
 FILT
 MIX

 10
 12

 9
 11
 1

 9
 1
 1

 9
 1
 1

 8
 D
 S
 R

![](_page_12_Figure_18.jpeg)

**DELAY** (shift-slider 13) - the **LFO amplitude delay** control lets you set an amount of time or delay before the LFO amplitude increases.

**FADE** (shift-slider 14) - the **LFO amplitude fade** control lets you set an amount of time or delay before the LFO 1 amplitude fades out. If the FADE setting is zero, the amount of LFO modulation will remain constant.

**TIP! One Shot LFO:** If the **DELAY** slider is set to zero and the **FADE** slider is set to full (or all the way up) then the LFO will only cycle one time, and can also be used like a secondary envelope shaped by the LFO waveform.

#### 3.7 Notes about modulation

The Nymphes offers a respectable selection of modulation options, letting you manipulate and modulate the sound in various ways. Some of the modulation sources are not assignable, meaning they are already assigned to certain modulation destinations.

For example, both LFO 1 and the filter envelope are already routed to the oscillator pitch and the filter cutoff, and cannot be assigned to any other destinations. Only the amount of the modulation can be changed by the user. Fortunately, there are other modulation sources that offer more flexibility and can be assigned to a large list of destinations.

How to set up the assignable modulation sources is discussed in **"5. Menu Accessible Parameters"** below in the user guide.

## 4.1 Loading a patch

The Nymphes has 49 factory preset patches and 49 user patches. Each of the 49 storage locations, A1 through G7 can contain both a factory preset patch or a user patch. How to load either a preset or user patch is described below.

To load a patch, simply run through the following steps:

1) Press the **LOAD** button which will then slowly blink.

2) With the **SHIFT** button lit, turn the rotary selector to choose bank A through G. If you are already in the bank you want, you can skip this step.

3) With the **SHIFT** button off (not lit), turn the rotary selector to the desired patch number 1 through 7.

4) For this last step, it's important to understand you have 2 options:

a. If you **<u>quickly click</u>** the LOAD button, it will rapidly blink, and <u>a user patch will</u> <u>be loaded</u> or

b. If you press and hold the LOAD button until it starts rapidly blinking, <u>a</u> factory preset patch will be loaded

#### Tips:

- You can quickly reload your current preset by double clicking the load button

- If you switch to a different preset than the one you are already at, the **LOAD** button will start blinking at a different interval.

#### 4.2 Saving a patch

To save a user patch in any of the 49 storage locations, just follow these steps.

1) While holding SHIFT, press the SAVE button which will start flashing after being pressed.

2) With the **SHIFT** button lit, turn the rotary selector to choose bank A through G. If you are already in the bank where you want to store your patch, you can skip this step.

3) Next, turn off the SHIFT button (it should be unlit), and turn the rotary switch to your desired patch location 1 - 7.
4) Finally, press the SAVE button which will flash, showing your patch is now saved.

#### Tips:

- You can quickly save your current preset by clicking **SHIFT+SAVE** and then **SAVE** again.

- If you switch to a different preset than the one you are already at, the **SAVE** button will start blinking at a different interval.

- Save and Load have a different LED blinking pattern

![](_page_14_Picture_22.jpeg)

# 5. Menu Accessible Parameters

The menu section lets you access parameters and settings that help you further:

- 1) program your patches and
- 2) configure how the Nymphes operates.

To access any of the menu items, just press the **MENU** button, which will light up, and using the rotary selector, choose numbers 1 through 7. When you're finished editing whatever menu option, just press the **MENU** button again to return to normal operation.

![](_page_15_Picture_5.jpeg)

#### 5.1 Play MODE (MENU item 1)

This option lets you set how many oscillators will sound with each note, which will overall affect the polyphony as well. See the table below that describes each mode.

MODE	Submenu #	Polyphony	Oscillators per Note
POLY	1	6	1
UNI A	2	1	6
UNI B	3	1	4
TRI	4	3	2
DUO	5	2	3
MONO	6	1	1

#### 5.2 CHORD Edit Mode

Also accessed under the **MODE** submenu is the **CHORD** option (submenu item 7). With any of the four unison play modes **(UNI A, UNI B, TRI, and DUO)**, this submenu option lets you program 7 different chords that are stored with the patch and can be changed with the **CHORD** slider (shift-slider 4). The slider accesses the 7 chords from lowest to highest, meaning when the slider is at about 5% (at 0% CHORD is disabled), chord **EDIT 1** is playing, and as you push the slider up, it will select the next chord sequentially (**EDIT 2**, then **EDIT 3**, etc) until the slider is all the way up, and chord **EDIT 7** is playing.

#### **Programming Chords**

Programming chords is fairly easy, though a bit lengthy, and naturally starts with a click of the MENU button: 1) Press the **MENU** button, which will light up.

- 2) With the rotary switch, select option 1, PLAY MODE.
- 3) Press the **MENU** button again, which will begin to blink.
- 4) With the rotary switch, select option 7, CHORD EDIT.

5) Press the **MENU button** again (which will blink faster still), and the **EDIT 7** chord will begin to play automatically.

6) Select the chord **EDIT** number you want to program, and simply play the chord, which is automatically saved.

7) Select any other chord **EDIT** numbers, program the chords you want and hit the **MENU** button to return to normal operation when you're done.

**An interesting thing to try:** Adding some interesting possibilities, the **CHORD** selection slider (shift-slider 4) can be a modulation destination, letting you sequence through the chords using a modulation source, like the mod wheel or an LFO.

#### 5.3 LFO 2 (MENU item 2)

This option lets you program the parameters of a second low frequency oscillator, LFO 2, as a modulation source, and also link LFO 2 to multiple modulation destinations and set the modulation amounts. To link one of the slider parameters as a modulation destination, just move the slider for the parameter. You may have to use the SHIFT button in combination to alternate parameters a slider can control.

#### 5.4 REVERB (MENU item 3)

This lets you activate the 4 ADSR sliders to program the reverb for the Nymphes. Using just these four sliders you can:

- 1) Adjust the reverb space (SIZE) with slider 9.
- 2) Adjust the decay of the reverb (DEC) with slider 10.
- 3) Set the amount of a lowpass filter (FILT) with slider 11.
- 4) Adjust the mix of dry and wet signal (MIX) with slider 12.

#### 5.5 MOD W (MENU item 4)

This lets you use the modulation wheel to modulate any of the 28 slider parameters. As a quick tip, by linking the mod wheel to the oscillator LFO (slider 5) using a triangle wave, you can manually add vibrato to the sound.

#### 5.6 VELO (MENU item 5)

This lets you use keyboard velocity (how hard you strike a note on a keyboard) to modulate any of the 28 slider parameters, assuming your keyboard controller has velocity sensitive keys.

#### 5.7 AFTER (MENU item 6)

This lets you use keyboard aftertouch to modulate any of the 28 slider parameters.

#### 5.8 MIDI C (MENU item 7)

This option lets you set the midi channel the Nymphes will respond to. Press the MENU button to access the menu options. Select 7 with the rotary switch. Press the MENU button a second time to access the sub-menu (the MENU button will flash after the second press). Use the rotary switch to select 1 through 7 representing midi channels 1 through 7, and then press the MENU button again to exit.

#### 5.9 The Four Assignable Modulation Sources

The four modulation sources accessed through the MENU (LFO 2, MOD W, VEL, and AFTER) are all set up and assigned to mod destinations in a similar way.

With the exception of LFO 2 (which cannot modulate the LFO 1 parameters), all the parameter values controlled by the sliders can be set as modulation destinations. LFO 2 can modulate 24 destinations linked to the parameters controlled by the first 12 sliders. The modulation wheel (MOD W), velocity (VEL) and aftertouch (AFTER) can each modulate any of 28 destinations linked to the parameters controlled by the 14 sliders. It can get quite extreme, where you could modulate every slider parameter value with a modulation source if you really wanted to.

#### **Assigning Modulations**

To assign any of the four modulation sources to any of the destinations, you merely need to:

1) Press the MENU button, which will remain lit.

2) With the **rotary selector, select numbers 2, 4, 5, or 6,** to select either the **LFO 2**, mod wheel (**MOD W**), velocity (**VEL**), or aftertouch (**AFTER**) as the modulation source.

3) **Select the modulation destination or destinations** by moving the sliders for the parameters you want modulated, where the position of the slider determines the amount of modulation. If the slider is all the way up, the modulation amount will be 100%. If the slider is half way up, the modulation amount will be 50%. If the slider is all the way down, the modulation is 0% or basically turned off.

4) **Press the MENU button to exit**, the MENU light will go off, and the Nymphes is now back in normal operation.

#### **Canceling Modulations**

An easy way to cancel all modulation destinations for a given modulation source is to:

#### 1) Press the MENU button,

- 2) Select the mod source with the rotary selector, and then
- 3) Press and hold the MENU button for one second.
- 4) The MENU button light will go out, and any mod destinations for that mod source are now reset or turned
- off (see the MENU MAP for more details on this).

#### **Modulation Behavior**

An important point to note is when modulating a parameter, with the exception of the LFO's, the modulation amount from the source is added to the current destination parameter setting. For example, if the programmed amplitude of the oscillator is already maximum (the LVL setting), then you can't use the modulation wheel (MOD W) to increase the value anymore. It is already at its maximum. You would first need to reduce the oscillator level setting (LVL), so using the modulation wheel would have room to add value to the parameter and control the increase in amplitude.

For LFO2 though, modulations will be added in a mixing method. That means that the slider value sets the starting point and then LFO 2 is mixed in there. If LFO2 amount is at max, the slider value will have no effect.

We strongly suggest you to experiment with modulations and the way they are added, especially with LFO2, as we consider it on of the strongest morphing points that Nymphes has to offer.

# 6. Global Settings

The global settings offer six more parameters that affect the Nymphes' operation. These are the only parameters that are saved outside of the normal patch settings. See the MENU MAP for a graphic description of the steps outlined below.

To access the Global Settings:

- 1) Press the MENU button, which will light
- 2) Select option 7 (MIDI CHANNELS)
- 3) With SHIFT lit, press the MENU button again, which will start flashing slowly
- 4) With the rotary switch, select options 1 through 6 to access to the various Global Settings
- 5) With either the LFO RATE slider (slider 13) or the LFO WAVE slider (slider 14), adjust the settings as desired.

#### The list of Global Settings

No.	Setting Name	Possible Values	Description
1	PITCH WHEEL	From 0 to 12 semitones	Lets you set how much the pitch wheel will fully shift the pitch. Use the LFO <b>WAVE</b> slider (slider 14) to adjust.
2	FINE TUNE	+/- 4 Semitones	Lets you fine tune the instrument as a whole. Use the LFO <b>WAVE</b> slider (slider 14) to adjust.
3	SLIDERS	Jump or Catch	Lets you decide whether the slider value automatically jumps to the position of the slider, or you have to move the slider past the stored value before it responds ( <b>catch</b> ). Use the LFO <b>WAVE</b> slider (slider 14) to select.
4	LOAD PREVIEW	Off/On	Lets you turn patch preview on or off, where you can preview the stored patch before loading it. Use the LFO <b>WAVE</b> slider (slider 14) to turn on or off.
5	CC	In: Off/On Out: Off/On	Lets you turn on or off whether the Nymphes responds to midi CC values. Use LFO <b>RATE</b> slider (slider 13) to set. Lets you turn on or off whether the Nymphes sends midi CC values. Use the LFO <b>WAVE</b> slider (slider 14) to set.
6	PROGRAM CHANGE	In: Off/On Out: Off/On	Lets you turn on or off whether the Nymphes responds to program change messages. Use the LFO <b>RATE</b> slider (slider 13) to set. Lets you turn on or off whether the Nymphes sends program change messages. Use the LFO <b>WAVE</b> slider (slider 14) to turn to set.

# 7. Preset List

No.	NAME	MODE	REVERB	MOD WHEEL	VELOCITY	AFTERTOUCH	LFO1 MODE	LFO2 MODE
A1	LONG PAD 1	POLY	LONG	PITCH LFO	Х	Х	LOW	LOW
A2	MOVING PAD	POLY	SMALL	WAVE	LFO1 RATE	Х	HIGH	LOW
A3	SOFT PAD 1	POLY	MEDIUM	PITCH LFO	Х	Х	LOW	LOW
A4	LEAD	TRI	Х	PITCH LFO	Х	Х	LOW	LOW
A5	ETHEREAL 1	POLY	LONG	SUB	Х	Х	LOW	LOW
A6	BASS 1	UNI A	Х	PITCH LFO	Х	CUT LFO + RES	LOW	LOW
A7	ETHEREAL 2	POLY	LONG	MULTIPLE	Х	Х	LOW	LOW
B1	PAD 1	POLY	Х	LFO RATE	Х	Х	TRACK	LOW
B2	SOFT PAD 2	POLY	Х	CUT	CUT	PITCH LFO	LOW	LOW
B3	DEEP PAD 1	TRI	MEDIUM	PITCH LFO	Х	Х	LOW	LOW
B4	NIĽS LEAD	POLY	Х	PITCH LFO	Х	Х	LOW	LOW
B5	PAD 2	POLY	Х	PITCH LFO	Х	Х	LOW	LOW
B6	SHEARING	POLY	LONG	CUT	Х	Х	TRACK	TRACK
B7	THIN PAD	POLY	Х	RES	Х	Х	LOW	TRACK
C1	EPIC	TRI	LONG	PITCH LFO	Х	Х	LOW	LOW
C2	RADIO	POLY	MEDIUM	LF01 WAVE	Х	Х	TRACK	TRACK
C3	SPACE 1	POLY	LONG	NOISE	RES	Х	LOW/KEY	LOW
C4	DEEP PAD 2	POLY	LONG	Х	Х	Х	LOW	LOW
C5	SPACE 2	POLY	MEDIUM	Х	Х	Х	LOW	LOW
C6	ETHEREAL 3	POLY	LONG	PITCH LFO	Х	Х	LOW	LOW
C7	ETHEREAL 4	POLY	MEDIUM	MULTIPLE	Х	Х	LOW	LOW
D1	BRASS 1	POLY	SMALL	RES	Х	CUT	LOW	LOW
D2	BRASS 2	POLY	SMALL	PITCH LFO	Х	Х	LOW	LOW
D3	BRASS 3	POLY	SMALL	PITCH LFO	Х	Х	LOW	LOW
D4	PIANO	POLY	SMALL	AMP D +R	VCA LVL	Х	LOW	LOW
D5	ORGAN	POLY	Х	CUT	Х	Х	LOW	LOW
D6	ELC PIANO	POLY	Х	AMP D +R	Х	Х	LOW	LOW
D7	FLUTE	MONO	SMALL	AMP S	VCA LVL	Х	LOW	LOW
E1	FAT UNISON	UNI A	Х	PITCH LFO	Х	CUT LFO + RES	LOW	LOW
E2	RUN ARP	DUO	Х	CUT	Х	Х	LOW	LOW
E3	MONOPHONIC	MONO	Х	AMP R	Х	Х	LOW	LOW
E4	SLIDE CHORD	UNI A	Х	CHORD	Х	Х	LOW	LOW
E5	BASS 2	UNI A	Х	CUT	Х	Х	LOW	LOW
<b>E6</b>	CHORD PROG	UNI B	MEDIUM	CUT + RES	Х	Х	LOW	LOW
E7	BASS 3	DUO	Х	PITCH LFO	X	X	LOW	LOW
<b>F1</b>	KICK	MONO	Х	VCF EG	X	X	LOW	LOW
F2	SNARE	POLY	SMALL	X	X	X	LOW	LOW
F3	ТОМ	POLY	X	X	X	X	LOW	LOW
F4	HAT	MONO	X	AMP D +R	X	X	LOW	LOW
F5	CLAP	POLY	SMALL	X	X	X	HIGH/KEY	HIGH/KEY
<b>F6</b>	STICK	POLY	X	X	X	X	HIGH	HIGH
F7	DISCO	POLY	X	X	X	X	LOW	LOW
G1	CLICKY	POLY	X	PITCH LFO	X	X	LOW	LOW
G2	PSEUDO DELAY	POLY	X	LFO RATE	X	X	LOW/KEY	LOW
G3	S+H VCF	POLY	LONG	PIICHLFO	X	X	IRACK	LOW
G4	BROKEN	POLY	X	X	X	X	IRACK	IRACK
G5	SEASIDE	MONO	X	Χ	X	Χ	LOW	LOW
G6	INITIAL (POLY)	POLY	X	PITCH LFO	VCA LVL	CUT	TRACK	LOW
G7	INITIAL (UNISON)	UNI A	Х	PITCH LFO	X	CUT	LOW	LOW

# 8. CC List

Controls	CC	Value	Notes
Modwheel	1	0-127	
Filter Control			
HPF Cutoff	3	0-127	
LPF Cutoff	4	0-127	
Glide	5	0-127	
LPF Tracking	6	0-127	
AMP Level	7	0-127	
Resonance	8	0-127	
LPF EG Depth	9	0-127	
LPF Cutoff LFO Depth	10	0-127	
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Oscillator Control			
PulseWidth	11	0-127	
OSC Wave	12	0-127	
OSC Level	13	0-127	
Sub Level	14	0-127	
Noise Level	15	0-127	
LFO Pitch Depth	16	0-127	
EG Pitch Depth	17	0-127	
Detune	18	0-127	
Chord Selector	19	0-127	
Envelope Control			
Filter EG Attack	20	0-127	
Filter FG Decay	21	0-127	
Filter EG Sustain	22	0-127	
Filter EG Release	23	0-127	
AMP FG Attack	24	0-127	
AMP EG Decav	25	0-127	
AMP EG Sustain	26	0-127	
AMP EG Release	27	0-127	
Play MODE	30	0-5	POLY / UNI A / UNI B / TRI / DUO / MONO
LFO Control			
LFO 1 Rate	31	0-127	
LFO 1 Wave	32	0-127	
LFO 1 Delay	33	0-127	
LFO 1 Fade	34	0-127	
LFO 1 Type	35	0-3	BPM / LOW / HIGH / TRACK
LF0 1 SYNC	36	0-1	FREE / KEY SYNC
LFO 2 Rate Depth	37	0-127	
LFO 2 Wave	38	0-127	
LFO 2 Delay Depth	39	0-127	
LFO 2 Fade Depth	40	0-127	
LFO 2 TYPE	41	0-3	LOW / HIGH / TRACK / BPM
LFO 2 SYNC	42	0-1	FREE / KEY SYNC

Reverb Control			
Reverb Size	44	0-127	
Reverb Decay	45	0-127	
Reverb Filter	46	0-127	
Reverb Mix	47	0-127	
Mod Source Control			
Mod Source Selector	50	0-3	LFO 2, ModWheel, Velocity, Aftertouch
Mod			
Mod Source OSC Wave Depth	51	0-127	
Mod Source OSC Level Depth	52	0-127	
Mod Source Sub Level Depth	53	0-127	
Mod Source Noise Level Depth	54	0-127	
Mod Source LFO Pitch Depth Depth	55	0-127	
Mod Source PulseWidth Depth	56	0-127	
Mod Source Glide Depth	57	0-127	
Mod Source Detune Depth	58	0-127	
Mod Source Chord Selector Depth	59	0-127	
Mod Source EG Pitch Depth Depth	60	0-127	
Mod Source LPF Cutoff Depth	61	0-127	
Mod Source Resonance Depth	62	0-127	
Mod Source LPF EG Depth Depth	63	0-127	
Sustain Pedal	64	0-1	
Mod Source HPF Cutoff Depth	65	0-127	
Mod Source LPF Tracking Depth	66	0-127	
Mod Source LPF Cutoff LFO Depth Depth	67	0-127	
Legato	68	0-1	
Mod Source Filter EG Attack Depth	69	0-127	
Mod Source Filter EG Decay Depth	70	0-127	
Mod Source Filter EG Sustain Depth	71	0-127	
Mod Source Filter EG Release Depth	72	0-127	
Mod Source AMP EG Attack Depth	73	0-127	
Mod Source AMP EG Decay Depth	74	0-127	
Mod Source AMP EG Sustain Depth	75	0-127	
Mod Source AMP EG Release Depth	76	0-127	
Mod Source LFO 1 Rate Depth	77	0-127	
Mod Source LFO 1 Wave Depth	78	0-127	
Mod Source LFO 1 Delay Depth	79	0-127	
Mod Source LFO 1 Fade Depth	80	0-127	
Mod Source LFO 2 Rate Depth	81	0-127	
Mod Source LFO 2 Wave Depth	82	0-127	
Mod Source LFO 2 Delay Depth	83	0-127	
Mod Source LFO 2 Fade Depth	84	0-127	