Copyright and Trademark notices

iSynth and iSynth manual are copyright - 2001 More Electronic Sounds - All rights reserved. iSynth uses MAXplay, the runtime environment for Max, published by Cycling’74. Max and MAXplay are copyright - 1990-2001 Cycling’74 and l’IRCAM, l’Institut de Recherche et de Coordination Acoustique/Musique. iSynth also uses the runtime environment for MSP. MSP is copyright - 1997-2001 Cycling’74 - All rights reserved. iSynth is a trademark of More Electronic Sounds. Max, MSP and Pluggo are trademarks of Cycling’74. All trademarks are properties of their respective owners.

About illicite copies…

More and more, people make illicite copies of software, thinking that software is not a material thing and that it is not worth paying for it. Making illicite copies is easy and no system of protection will ever stop people from copying software or cds. Illicite copies have different effects on software production: it represents an enormous financial loss for developers and in the long term, it will stop small independant companies from designing new software, while big companies will have a monopoly. Not making illicite copies ensures the diffusion of independent companies’ software for the future.

iSynth has been developed by a very small team. So, in respect for our work, we thank you for not making illicite copies of iSynth. The low price of iSynth makes it affordable to anyone. So, don’t copy it, buy it! Thank you!

Who’s who

Designer and Developer : Marc SIRGUY
Graphic Design : Denis GERMAIN
Author of the manual : Emmanuelle GALLIN
## Table

### Introduction
- How to use this manual
- Installation
- System requirements
- ISynth installer
- Registration
- Getting started: the transport bar and the main menu

### Composition & Sound Design
- Composition
  - Sequencers and instruments types
  - Common functions
  - Drums sequencer
  - Bass sequencer
  - Sampler sequencer
  - Synthesizer sequencer
  - Loops sequencer
- Sound Design
  - ISynth instruments
  - Common functions
  - Sound Design with analogue modelling-based instruments
  - Pineapple Synth
  - Blue Bass

### Create Beats
- Tangerine Drums

### Play Samples
- Cherry Sampler
- Black Loops

### Create your own songs
- Timelines
- FXs
  - FX1
  - FX2
  - FX3
- Mixer
- Save your song
Play Live

Live mode
- Keyboards shortcuts
- What is MIDI ?
- How to play with a master keyboard
- Control iSynth with MIDI
- I/O window

Play with other sequencers
- ISynth player
- Play with Cubase™
- Play with Logic Audio™
- Play with ProTools™

MIDI implementation table

Updates & support

Index
INTRODUCTION

Thank you for buying the software iSynth. You will now enter a world in which making music becomes really simple. iSynth provides you with everything you need to make music. You don’t need anything else except iSynth to create, edit, mix and record your best pieces of music.

The way we thought of it makes it an easy tool to anyone to use, whether you are a beginner or more familiar with computer music. Its high quality makes it a powerful tool which will enable you to turn your computer into a real music workstation.

Composition and Sound Design
Create Beats
Play Samples
Create your own songs
Play live

How to use this manual

Along with the description of iSynth, you will be able to recreate the tutorial song step by step. Follow the instructions! For each examples, the sound 1 of each instruments will be used if not others specified. At any moment, you will be able to listen to the composition by selecting the pattern mode and activate the play button of the transport bar window.

This sign indicates definitions.
INSTALLATION

System Requirements

- iMac/G3 or higher with 25 MB Ram and 200 MB free hard disk space
- Compatible CD ROM drive
- 800 x 600 or higher resolution monitor with 256 or more colors
- MacOS 8.6 or higher

iSynth Installer
Follow the instructions of the dialog box to install iSynth. Disabling the virtual memory will give you more timing accuracy.

Enter the PWD code printed on the sticker inside the box of iSynth to install it.

You will need the registration code to download updates.

Registration
Please, fill in the registration form and mail it back to MES.
Getting started: the transport bar and the main menu

The transport bar

When you open iSynth, the transport bar is displayed. It will allow you to open the different pages of iSynth and provides common features for playing and recording your songs.

- **MIDI signal**
- **I/O**
- **Open the Timelines window**
- **Open the sequencers window**
- **Open the mixer**
- **Enable/disable pattern mode**
- **Enable/disable live mode**
- **Record patterns ans sounds settings at song position**
- **Enable/disable automation record**
- **Clear automation between locators**
- **Loops mode between locator**
- **One step forward**
- **Play/Stop**
- **One step backward**
- **Back to step one**
Locator slider
The locator slider shows the song position when the song is played.

Locator
Song position number

Locator in/out
To loop or to edit a part of your song, you must define a start point (locator in) and an end point (locator out).

Tempo
Speed of your song (between 30 and 250).

Maximum step number
Select how many steps will be played for one pattern from 1 to 16.

Shuffle
The shuffle will create a groove in your song. The more you add shuffle (from 0 to 9), the more the even steps will be delayed.

Global transposition
You may transpose the whole song from –6 semi-tones to +6 semi-tones.

The main menu

File
Open : open a song
Close : close windows
Save : save your song
Save as : save as a new song
New song : create a new song
Start record to disc

Window
All windows active
Status : report from any problems and memory available

Display
You can open iSynth windows from selecting them in this menu.
Composition and Sound Design

Composition

To make the composition process easy, iSynth provides 5 pattern-oriented sequencers, one for each instruments. Simply click on the notes or play from a MIDI keyboard to create drum loops, bass lines and analogue sounds compositions. You can also combine samples to create your own presets. Meanwhile, the sequencer window allows you to keep a global view of your composition.

What is a pattern?

Rhythm structure are here composed of a maximum of 16 steps, which represent a common time in traditional notation.

The sequencers window can be opened from the main menu (display>sequencers) or from the transport bar window by clicking on the sequencer icon.

Sequencers and instruments types:

Drums: Drums notes do not need to be transposed. The velocity corresponds to each note.

Monophonic Instruments: two values for each note: the velocity (the button) and the pitch (the fader).

Polyphonic Instruments: to play chords: the sequencer is a grid where you can select the notes of one scale.

Black Loops: allow to quickly select the sound to be played.
Common functions

Recording patterns

Each sequencer has a green, a red and a blue button, which are the copy, paste and erase functions.

Copy: Click on the red button to copy an entire pattern

Paste: Click on the green button to paste an entire pattern

Erase: Click on the blue button to erase an entire pattern

Velocity
For each sound (except for loops sounds), you can choose the velocity.

Velocity: amplitude (or volume) of the note. The velocity determines the volume of the note played. A light pressure corresponds to a light velocity: the sound volume will be low; a strong pressure corresponds to a higher velocity: the sound volume will be louder. iSynth represents the velocity value with colors. If you select a note on the drums sequencer, the note will be displayed in red. If you slowly drag to the bottom with your mouse, the LED will turn orange, yellow and green. These different colors represent a waning velocity. You can check the velocity value displayed in numbers.

Transposition
For the bass, sampler and synth sounds, you can transpose the sounds from –4 to +4 octaves from the middle C.
Drums sequencer

The Drums sequencer has 8 vertical lines for 16 steps. Each vertical line represents one instrument (from S1 to S8).
You can easily create beats by clicking on the LEDs to activate the sounds. For each note, the velocity can be adjusted by clicking on the LED and moving the mouse down. The value of the velocity is displayed at the top of the window.
To remove a note, just click on the LED of the note.

To recreate the tutorial song, click on the LEDs as shown on this fig. This new pattern will be automatically recorded as pattern 1.

The pattern 2 is to be a variation from the pattern 1. Click on the red LED to copy the pattern 1, click on the up arrow to go on the pattern 2 location and click on the green LED to paste the pattern 1 on the pattern 2. Then add the note just as shown on this fig.

The pattern 3 is also a variation of the pattern 1. Copy and paste the pattern 1 onto the pattern 3 location. Adjust the velocity as shown on this fig.
Bass sequencer

To activate a note, click on the round led and move up the fader to create the note you want to play. The round led represent the gates of the notes with their velocity. You can adjust the velocity by clicking on the led & moving the mouse down. The color of the led will change, indicating the velocity changes. The value of the velocity is displayed at the top of the window. The pitch of the note will be displayed at the top of the window. You can transpose the note by clicking on the little up and down arrows from –4 to +4.

For the bass pattern 1, place the notes as shown on this fig.

Sampler sequencer

Click on the bars to activate the sound at the note you want to play. You can create longer sounds with a single movement of the mouse to the right to light up a part of the row or the entire row. The velocity can be adjusted just like it does with the other sequencers. You can transpose the sounds with the up & down arrows of the transposition button.

For the sampler pattern 1, place the notes as shown on this fig.
Synthesizer sequence

To activate a note, click on the round led and move up the fader to create the note you want to play. The round led represents the gates of the notes with their velocity. You can adjust the velocity by clicking on the led & moving the mouse down. The color of the led will change, indicating the velocity changes. The value of the velocity is displayed at the top of the window. The pitch of the note will be displayed at the top of the window. You can transpose the note by clicking on the little up and down arrows from −4 to +4.

For the synth pattern 1, place the notes as shown on this fig.

Loops sequencer

Each line represents one loop from 1 to 8. You can play up to 8 loops simultaneously. Place your loops by one single click of the mouse on the grid. A red rectangle will appear showing the beginning of the loop. You can choose the end of the loop by clicking twice on the grid. A black rectangle will appear.

For the loops pattern 1, place the notes as shown on this fig.
Sound Design

ISynth instruments

ISynth provides 5 instruments: 2 analogue modelling-based instruments, the Pineapple Synth and the Blue Bass and 3 sample-based instruments, the Tangerine Drums, the Cherry Sampler and the Black Loops.

Common functions

How to open instruments?

You can open instruments from different paths:

From the mixer window, click on the edit buttons dedicated to each instruments
Or
From the general menu > Display >
Or
From the keyboard (keys F1 to F5)

To open the Pineapple Synth, click on F4. To open the Blue Bass, click on F2.

Selecting and recording sounds or presets

To select and record presets, use the red and green buttons on the grey line at the bottom of each instrument. These functions are also used in the fxs section of the mixer window.

To select a preset, click on the up and down arrows. To record a preset, click on the red button. It will blink. Select the location you want with the up and down arrows and click on the green button to confirm your recording.
Sound design with analogue modelling-based instruments

Create your own analogue sounds from the analogue modelling-based Pineapple Synth with 3 oscillators, LFOs, filters as well as envelope and modulation capabilities. All kinds of sounds can be created, from the lowest to the highest, including numberless modulations. Or use the analogue modelling-based Blue Bass with 1 oscillator, filter, LFO and envelope to create deeper sounds. The Pineapple Synth and the Blue Bass are based on subtractive synthesis.

What are analogue modelling-based sounds?
Analogue modelling-based instruments generate sounds in real time with algorithms calculated in real time by the processor. These instruments use the subtractive synthesis, which use a complex sound composed of multiple harmonics generated by the oscillator which will be filtered by the filter. You can add an envelope to this sound to imitate the characteristics of a natural sound. LFOs and other modulations will create light variations and will bring a color to the sound.

What is an oscillator?
Oscillators are sounds generators. You can choose the waveform of the sound from the richer to the poorer (noise, saw, square, pulse, sinus). Oscillators can be detuned to broaden the sound.

What is subtractive synthesis?
"Subtractive synthesis implies the use of filters to shape the spectrum of a source sound. As the source signal passes through a filter, the filter boosts or attenuates selected regions of the frequency spectrum. If the original source is spectrally rich and the filter is flexible, subtractive synthesis can sculpt close approximations of many natural sounds (such as voices and traditional instruments) as well as a wide variety of new and unclassified timbres."

Pineapple Synth

You might activate one or more oscillators to create sounds. Choose the waveform you want, its octave and its volume.

For the oscillator 1, you can choose between pulsewidth modulation (PWM) or saw.
For the oscillators 2 & 3, you can choose between saw, square, triangle, spectrum 1, spectrum 2, spectrum 3 or noise.

**What is a waveform ?**
A sound is composed of a signal which can have different waveform: sinus, saw, square, triangle, noise...

**Sinus**: The sinus waveform has only the fundamental harmonic.
**PWM**: Square waveform with a variable phase.
**Saw**: The waveform “SAW” has all played harmonics.
**Square**: The “SQUARE” waveform only has odd harmonics until 22050 Hz.
**Spectrum**: A complex waveform.
**Noise**: This waveform has the whole spectrum.
How to create a big sound?

Detune the osc. 2 and 3 from the osc. 1. Set a high volume. If you choose an osc. an octave higher, you will get a bigger sound. Play with the oscillators features to see how the sound responds to the parameters you set.

If the osc. 1 is set on PWM, you can set the phase of the impulsion with the knob p. width and its modulation amount with the knob pwm lfo2.

LFOs Section

What is a LFO?

A Low Frequency Oscillator (LFO) is a generator of sound between 0 and 20 Hz. These Low Frequency Oscillators allow to modulate the sound. For example, you can modulate the filter cutoff or the tune of the oscillator to create a vibrato, the oscillator amplitude to create a tremolo, the pulsewidth (PWM) to create a fat sound. LFOs waveforms are saw, square and sinus.

The Pineapple Synth has two LFOs, LFO 1 and LFO 2. For each LFO, you can set the waveform and the speed.

Filters Section

What is a filter?

« A filter can be literally any operation on a signal (Rabiner et al. 1972) ! But the most common use of the term describes devices that boost or attenuate regions of a sound spectrum. » (Curtis Roads, op. cit., 1996)

Filters usually have different parameters : the cutoff and the resonance. Cutoff : frequence at which the filter start to affect the sound Resonance : amplify the frequences close to the cutoff frequence

There are many kinds of filters. The most common ones are the low-pass filters, the band-pass filters, the high-pass filters and all-pass filters. Low-pass filter : Filter which allows only low frequency to go through. Hi-pass filter : Filter which allows only high frequency to go through. Band-pass filter : Filter which allows only medium frequency to go through.

The Pineapple Synth uses a 12dB/octave multimode filter (low-pass filter, hi-pass filter and band-pass filter).

The Blue Bass uses a 12dB/octave low-pass filter.
Envelopes

What is an envelope?
Envelopes modify the volume of the sound. You can set the attack, decay, sustain, release of the sound.

Envelope ADSR: Attack - Decay - Sustain – Release
- **Attack**: Determine the time the sound will take to reach its maximum volume.
- **Decay**: Determine the time the sound will take to reach the sustain.
- **Sustain**: Sustain level of the sound
- **Release**: Time the note takes to fade away.

AM (Amplitude Modulation)

Modulations Section

What are modulations?
Modulators let you use the output of one part of your synthesizers (the source) to control another part of the synthesizer (the destination). You can use an oscillator, an envelope generator, or a low frequency oscillator (LFO) modulation sources, and use them to control (modulate) other oscillators, filters, and envelope generators.

In the modulation section, you can set:

- The modulation amount of the env2 on the filter
- The modulation amount of the lfo1 on the filter
- The modulation amount of the env2 on the frequency of each oscillator
- The modulation amount of the lfo2 on the frequency

**Volume and glide**: you can set the general volume with the potentiometer VOL, the glide, with the knob glide.

What is the glide?
Also called Portamento, the glide determines the speed with which the sound slides continuously from one note to another.

Use the Pineapple Synth: how to create a pad?

To create a pad with the Pineapple Synth, select the waveform PWM for the first oscillator and the waveform square for the second one. Lighly detune the oscillators. Set PW on a medium position, set the cutoff to 0 and choose a high resonance. Set the envelope 1 to a variable attack, a medium decay, a high sustain and release. Set the envelope 2 like the envelope 1, but with a lighter sustain. In the modulations section, set PWM lfo2 at a medium amount. Set filter mod env2 at a medium amount. Select the waveform triangle for LFO1 with a variable speed, as shown on the fig. of the Pineapple Synth.
Blue Bass

The Blue Bass is also based on subtrative synthesis. Just like with the Pineapple Synth, you will be able to set the waveform of the oscillator (saw or square), its octave (from 0 to –2), its glide and its LFO waveform (triangle or square).

The Blue Bass also has a low-pass filter, for which you can set the cutoff, the resonance, the envelope modulation amount, the LFO modulation amount, the ADSR envelope, the volume, the amplitude and different mode: gate mode, envelope mode, legato mode and velocity mode.

**Gate mode**: when selected, on note on, the gate opens and closes on note off.

**Envelope mode**: when selected, the amplitude responds to the envelope.

**Legato mode**: when selected, the amplitude responds to the envelope but stops at the sustain level. If you release the note, it will still be played.

**Velocity mode**:
When VEL is selected, it responds to the velocity.
When glide is selected, the velocity will be > 63 when the glide is on. When it is off, the velocity will be < 63.
When CUT is selected, the velocity responds to the cutoff frequency.

**Use the Blue Bass: how to create strong basses**
To create strong basses with the Blue Bass, set the cutoff very low, the resonance high enough but not on its maximum, with a high envelope modulation amount and a low LFO modulation amount. The envelope must be in gate mode, so it only affects the filter. Choose a short attack for the envelope, set the decay, set the sustain to 0 and select a slow speed for the LFO, as shown on the fig. of the Blue Bass.
Create your own beats with the Tangerine Drums. Load up to 8 samples with the click of the mouse or drag and drop files to play the beats you choose! Sample names appear on each voice of the Tangerine Drums so there is no way you can confuse samples numbers. In addition, for optimal fine-tuning, you can set the tune and the volume for each voice independently.

**Tangerine Drums**

![Tangerine Drums Interface](image)

You can load up to 8 samples in the Tangerine Drums, from 1 to 8. To load samples, click on the sound file name and select the sample to be played from the Sounds file, or simply drag and drop a file in the sound file name section. Then, proceed the same way to load the second sample to be played, and so on.

You can listen to the sounds by clicking on the loud speaker icon. You can set the volume and the tune for each sound.

Fx route allows you to select the routing of each sound to fx1/2 or to the master bus.

The green knob with no name is very useful for hi-hats. When on, the sounds 3 and 4 become monophonic and cannot be played together!

🎵 To create the beats from the tutorial song, place the presets as shown on the fig. of the Tangerine Drums
Play samples easily with the Cherry Sampler and the Black Loops. The Cherry Sampler, which was designed for instruments, has 4 voices to play a unique sample. On the other hand, with the Black Loops, you can enjoy 8 voices to play up to 8 samples simultaneously! Simply load samples with the click of the mouse or by dragging and dropping aiff. or wav. files into the Black Loops.

**Cherry Sampler**

You can only load one sample in the Cherry Sampler. This sampler has been made for pads, voices chords, organs... Click on the sound file name to load a sample from the Sounds file. You can also drag and drop files in the sound file name.

You can modify the envelope of the sample in setting the Attack, Decay, Sustain and Release, the volume. You can also set the root note and loop the file by clicking on the button loop. Listen to the file by clicking on the button play. It will play C4.

♫ To insert the sample played by the Cherry Sampler in the tutorial song, play the preset 9 "slow pad" by clicking on the up and down arrows, and adjust the ADSR as shown on the fig. of the Cherry Sampler.
Black Loops

You can load up to 8 samples in the Black Loops. Load the samples by clicking on the sound file name and select the sample to be played from the Sounds file. You can also drag and drop files in the sound file name. The Black Loops has been designed to insert voices, entire drums patterns... Samples can be read at the same time. You can set the tune and the speed of the sample.

Tune samples!
To tune a sample, click on the sel blue button of the sample you want to tune. The sel button will turn green when selected. The setting of the tune fader will be affected to the selected samples. To restore the value at its original position, click on the blue button on the right of the fader.

♫
To insert the samples played by the Black Loops in the tutorial song, play the preset 4 “female loops” by clicking on the up and down arrows, as shown on the fig.
Create your own songs!

Create your own songs with the Timelines by choosing the pattern order. Of course, you can also insert mutes and fxs at will.

Timelines

You can open the Timelines window from the transport bar or from the main menu (display>Timelines). The Timelines allows to visualize your song. For each step, you can see the selected patterns, the selected instruments programs and the selected individual mutes.

Basic functions

To update or set your timeline, click on the left or right arrows on each side of the grid.

To select a part of your song, use the red bar (locator in/out) at the top of the window.

Copy, Replace, Insert, Cut, Clear

With the five knobs on the right of the Timelines (Copy, Replace, Insert, Cut, Clear), you will be able to compose a song very quickly.
Copy: copy the selection between the locators

Replace: paste the copied selection at the beginning of the locator

Insert: insert the copied selection at locator in new rows

Cut: cut the selection and deplace all rows to the left

Clear: clear a row but do not erase it

Activated presets and mutes

Presets

To modify a preset or a pattern number, click in the location box you want and adjust the number you want by dropping up or down the mouse.

When you want to play the same pattern on different steps, adjust the pattern number for the first step. You can keep the other step locations empty until a new pattern number and it will play the pattern on as many steps you want before meeting a new pattern number.

For example, on the fig. of the Timelines, the pattern 1 from the Drums is played from step 1 to step 3, even if no pattern numbers are specified for the steps 2 and 3.

If you don’t want any pattern to be played on a certain step, simply mute this pattern for this step.

Global transposition

The global transposition works the same way, except that when there is nothing specified, there is no transposition.

Mutes

When red, patterns are played (no mutes).
When blue, patterns are not played (activated mutes)

To go on with the tutorial song, set the preset order and the mutes as shown on the fig.
FXs

The Fxs section is located in the mixer window. You can open the mixer window from the transport bar or from the main menu (display>mixer).

ISynth includes both insert fxs and post-fader fxs which can be chosen from the fx1, fx2 and fx3 sections.

Fx1 and fx2 are insert fxs. You can choose between fx1 or fx2 by clicking on the buttons fx1/2 per instruments. When fx1 is chosen, the selected button will turn green and indicates 1. When fx2 is chosen, the selected button will turn green and indicates 2. If no fxs are selected, the buttons are blue.
Fx1

Fx1 are tempo-synchronized fxs. They have one parameter you can set with the knob and one LCD where you will draw the shape of the other parameter. These fxs include:

**Lowpass**: low-pass filter  
Resonance: from 0 to 1  
Cutoff: frequency

**Gater**:
Open and close a quick envelope. The LCD allows to set the envelope triggering with the volume. The button sets the length of the envelope.  
Synchronized Gate: for each step you can select the amplitude of the gate, AR of the gate.  
Gatetime: from 0 ms to 1 ms (depending on the tempo)  
Volume for each step

**Autopan**: panning  
Pan from right to left

**Patter Delay**:
Feedback from 0 to 1  
Fixed delay to 1/16 of the tempo value  
Delay level for each step

Fx2

Fx2 have 4 parameters you can set with the 4 knobs.

**Chorus**: Create light delays of the sound to create a chorus (different instruments are played at the same time with a light detune).  
Speed: selects the speed of the chorus from 0 to 16 Hz  
Depth: depth modulation amount of the chorus, from 0 to 127

**Flanger**: Uses the same delay effects as the chorus. The output also has a regenerative feedback loop.  
Feedback, from 0 to 1  
Speed, from 0 to 10 Hz  
Depth, from 0 to 127

**Phaser**: Create a dephasing of the signal.  
Delay, from 0 to 27,500 ms  
Resonance, from 0 to 1  
Speed, from 0 to 16 Hz  
Depth, from 0 to 127

**Delay**: provide 2 delays (right and left) which are not synchronized  
DelayL, from 0 to 1000 ms  
DelayR, from 0 to 1000 ms  
Feedback, from 0 to 1  
Vol, from 0 to 1
**Overdrive**: saturation of the signal. The signal is going through a resonant low-pass filter. The higher the gain, the higher the saturation.
- Drive, from 0 to 9
- Lowcut, from 0 to 1000 Hz
- Reso, from 0 to 1

**2BandEQ**: The equalizer has 2 bands, one for the highest notes, one for the lowest notes. The gain treats the filter cutoff to amplify low notes or high notes.
- Low Gain, from +/- 10 dB
- Hi Gain, from +/- 10 dB
- Low Freq, from 20 to 270 Hz
- Hi Freq, from 800 to 2000 Hz

**Ring Mod**: A ring modulator multiplies the bipolar signals of two oscillators to create a rich sound with many harmonics.
- Mix, wet/dry
- Tune, from 3 to 375 Hz
- Fine tune, from +/- 10 Hz

**Lowpass**: a synchronized low-pass filter. For each step, select the cutoff frequency, resonance and the LFO speed and depth.
- Cutoff, from 25 to 10000 Hz
- Reso, from 0 to 1
- LFO Speed, from 4/1 to 1/32
- Depth, from 0 to 127

**HiPass**: a synchronized hi-pass filter. For each step, select the cutoff frequency, resonance and the LFO speed and depth.
- Cutoff, from 25 to 10000 Hz
- Reso, from 0 to 1
- LFO Speed, from 4/1 to 1/32
- Depth, from 0 to 127
Fx3

fxs 3 are post fader fxs.

**Chorus** : Create light delays of the sound to create a chorus (different instruments are played at the same time with a light detune).
Speed : selects the speed of the chorus from 0 to 16 Hz
Depth : depth modulation amount of the chorus, from 0 to 127

**Synced delay** : this delay is synced to MIDI bpm. You can select for each channel the delay time with values from 1/32 to 1/2, from 1/8T to 1/2 T.
Release time knob : selects the release time of the delay
TimeL, from 1/32 to 1/2
TimeR, from 1/32 to 1/2
FeedbackL, from 0 to 1
FeedbackR, from 0 to 1

**Short Delay** : setup of a short delay left/right to create a stereo effect.
TimeL, from 2 to 260 ms
TimeR, from 2 to 260 ms

**Cheesy Verb** : a lo-fi reverb
Release, from 1 to 2500 ms

🎵 Insert fxs in the tutorial song!

Insert the autopan from the FX1 on the Pineapple Synth.
Set the autopan values as shown on the fig. of the fx's section and select 1 on the button FX1/2 from the Pineapple Synth by clicking on it. The button FX1/2 will turn green with a 1 inscribed inside of it.
Insert the hipass from the FX2 on the Tangerine Drums.
Set the hipass values as shown on the fig. and select 2 on the button FX1/2 from the Tangerine Drums by clicking on it. The button FX1/2 will turn green with a 2 inscribed inside of it.
Insert a synced delay post fader effect. Set the synced delay values as shown on the fig. Insert this fx on the Cherry Sampler, the Pineapple Synth and the Black Loops by setting the values with the knobs FX3.
**Mixer**

Mix your songs with the 5 voices mixer!

The mixer has 5 voices: drum, bass, samp, synth and loops.

- **Pattern**: select and display the actual pattern number
- **Edit**: open the instruments windows
- **Sound**: select and display the actual sound
- **Fx1/2**: enable/disable fx1/2
- **Fx3**: send fx3 amount
- **Pan**: set pan 1/2
- **Vol**: set the volume
- **Mute**: mute one voice
  - On the left, individual mutes for each drum sound can be muted
- **AUTO**: enable/disable automation
  - Master volume and global mute (audio on/off)
  - Fx1/2 return level
  - Fx3 return level
  - Fx1/2>fx3 send level

♫ Mix the tutorial song!
  - Set the volumes at your will.
  - Set the FX1/2 return, FX3 return and FX1/2>FX3 as shown on the fig. You can try different values to understand how the sound will be affected by those values.
Save your song

Once your song is composed and mixed, you will be able to record it onto your hard-drive (in aiff., wav., Sound Designer II, au, or raw format) with a single click of the mouse.

Where are sounds, patterns and songs saved before I record it on my disc?

Sounds and patterns from the analogue modelling-based instruments are saved in presets.
For the sample-based instruments, samples are saved at aiff format on the hard-disc. Preset calls back the different samples. Samples must be saved in the Sounds folder. Sounds are saved in a special format specific to iSynth.

How many sounds, patterns and songs can be saved?

You can save up to 99 sounds (or groups of sounds) per instrument.
You can save up to 99 patterns (or groups of patterns) per instrument per song.
You can save as many songs as you want on the hard-disc.

Record-to disc

To record your song on the hard-disc, select "start record to disc" from the main menu>file>start record to disc.
Then, play the song. It will be recorded as soon as you press the play button. The recording will stop when you press the stop button.
Songs are saved at aiff., wav., Sound Designer II, au, or raw format.

Automation

You can enable/disable automation from the button AU on the transport bar. When enabled, each knob you are moving during the playback will be recorded at the specified song step.

If you want to delete an automation, you can click on the button C to clear the automation between locators.

AUTO OFF (on the mixer) will disable automation as well.
Live mode

With its automated mutes and many keyboard shortcuts which allow real time play, iSynth can also be a great live tool.

You can activate the live mode from the transport bar.

In this mode, you will be able to go from one song step to another with keyboard shortcuts. On Channel 6, MIDI notes become song steps, starting at 36=1, 37=2, etc.

### Mutes and other keyboard shortcuts

<table>
<thead>
<tr>
<th>Step number</th>
<th>Azerty keyboards</th>
<th>Qwerty keyboards</th>
<th>Azerty keyboards</th>
<th>Qwerty keyboards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;</td>
<td>'</td>
<td>1 (num)</td>
<td>1 (num)</td>
</tr>
<tr>
<td>2</td>
<td>w</td>
<td>z</td>
<td>2 (num)</td>
<td>2 (num)</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
<td>x</td>
<td>3 (num)</td>
<td>3 (num)</td>
</tr>
<tr>
<td>4</td>
<td>c</td>
<td>c</td>
<td>4 (num)</td>
<td>4 (num)</td>
</tr>
<tr>
<td>5</td>
<td>v</td>
<td>v</td>
<td>5 (num)</td>
<td>5 (num)</td>
</tr>
<tr>
<td>6</td>
<td>b</td>
<td>b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>n</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>,</td>
<td>m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>;</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>,</td>
<td>,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>!</td>
<td>/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>q</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>s</td>
<td>s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>d</td>
<td>d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>f</td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>g</td>
<td>g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>h</td>
<td>h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>j</td>
<td>j</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>k</td>
<td>k</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>l</td>
<td>l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>m</td>
<td>;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>ü</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>*</td>
<td>\</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Drums sounds</strong></td>
<td></td>
<td></td>
<td><strong>Others</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>&amp;</td>
<td>1</td>
<td>Tap tempo $</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>é</td>
<td>2</td>
<td>Start Enter</td>
<td>Enter</td>
</tr>
<tr>
<td>3</td>
<td>&quot;</td>
<td>3</td>
<td>Stop Space bar</td>
<td>Space bar</td>
</tr>
<tr>
<td>4</td>
<td>'</td>
<td>4</td>
<td>All note off @</td>
<td>@</td>
</tr>
<tr>
<td>5</td>
<td>(</td>
<td>5</td>
<td>Tempo +/-</td>
<td>+/-</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>6</td>
<td>Tune Bl. Loops Pg up/Pg down</td>
<td>Pg up/Pg down</td>
</tr>
<tr>
<td>7</td>
<td>è</td>
<td>7</td>
<td><strong>Modules</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>_</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mutes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangerine Dr.</td>
<td>1 (num)</td>
<td>1 (num)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Bass</td>
<td>2 (num)</td>
<td>2 (num)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry Sampl.</td>
<td>3 (num)</td>
<td>3 (num)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pineapple Synt</td>
<td>4 (num)</td>
<td>4 (num)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Loops</td>
<td>5 (num)</td>
<td>5 (num)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modules</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangerine Dr.</td>
<td>F1</td>
<td>F1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Bass</td>
<td>F2</td>
<td>F2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry Sampl.</td>
<td>F3</td>
<td>F3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pineapple Synt</td>
<td>F4</td>
<td>F4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Loops</td>
<td>F5</td>
<td>F5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
iSynth and MIDI

What is MIDI?

MIDI is a communication protocol between music instruments which have MIDI connections.

How to play with a master keyboard?

To connect a master keyboard to your computer, you need a MIDI interface and a MIDI keyboard. On Macintosh, MIDI gestion is made by OMS (free). When you have installed OMS, connect the MIDI keyboard MIDI out to the MIDI interface MIDI in with a MIDI cable.

Controlling iSynth using MIDI?

You can control iSynth with MIDI with a keyboard or an external controller. Data from the MIDI interface will be routed to the instrument. See MIDI Implementation Table.

iSynth can also control external devices. Connect the MIDI interface MIDI out to your external expander or synthesizer MIDI in. In the I/O window, you will be able to route data from the patterns to external synths. In the section MIDI out channel sel, select the destination MIDI channel.
I/O window

You can open the I/O window from the transport bar. The I/O (in/out) window provides you with the features you need to set the basics audio settings (audio drivers selection, MIDI, internal clock, arpeggiator and audio).

Audio out

**Audio Driver** : ASIO, DirectConnect, Rewire, SoundManager

- **ASIO** : for sound cards with ASIO drivers
- **SoundManager** : internal audio hardware from Mac
- **Rewire** : if you use iSynth as a plug-in for a Rewire host application like Cubase™ or Logic Audio™
- **DirectConnect** : if you use iSynth as a plug-in for ProTools™

To use ASIO drivers, you need to copy your ASIO driver in the ASIO Driver Folder.

To use Rewire, remove the Rewire MSP extension from the audio stuff folder to the extension folder.

To use DirectConnect, remove the MSP-PI extension from the audio stuff folder to the plug-in folder from the DAE folder. You will need the DirectConnect plug-in, which is provided by Digidesign™.

**Signal size**

The smaller the signal size is, the fastest iSynth will be. Then, it will need more cpu. Normal use is between 64 and 128.

**I/O vector size** : selection of the buffer size
Cpu limit  
Allows you to select the maximum cpu utilization from 40 to 90%. Normal use is between 50-60 %.

Cpu utilization  
Indicate the cpu utilization

MIDI I/O  
Select a MIDI input

Instrument select  
All : each instrument is setted to a MIDI Channel

If you select one instrument, MIDI will be directly affected to this instrument.  
Tangerine Drums > Channel 1  
Blue Bass > Channel 2  
Cherry sampler > Channel 3  
Pineapple Synth > Channel 4  
Black Loops > Channel 5

RealTime record  
When activated, the sounds played with a MIDI keyboard will be recorded into the sequencer.

Clock  
iSynth responds to MIDI clock. You can choose between internal, external or send. Send uses internal clock but sends external MIDI clock messages.

Arpeggiator  
The arpeggiator creates arpeggios from a chord played on a keyboard. Notes can be played up, down and unsorted.  
Unsorted : when you play notes, they are played in the order you played them.  
Up : the notes played are played in crescent order.  
Down : the notes played are played in decrescent order.

The arpeggiator only plays when the sequencer plays. It is synced to the step of the song.

MIDI out channel select  
 Allows you to select for each Channel the MIDI Channel which will be used as MIDI output.

You can also use iSynth as a MIDI sequencer. This allows you to choose the MIDI out Channel for each sequencer track.

ASIO Driver Button  
This button allows to open the control panel of the ASIO driver.
Play with other sequencers

Use iSynth with Cubase™, Logic Audio™ or other sequencer softwares

Open the Arpeggiator window and select MIDI All. Modules from 1 to 5 correspond to MIDI channels 1 to 5. With OMS, select the IAC Bus Port which allows the interconnection between two softwares inside one computer. In Cubase, select IAC Bus as MIDI out. Cubase channels 1 to 5 will be sent to iSynth channels 1 to 5.

Use iSynth Player

iSynth player will allow you to use iSynth instruments within other sequencer without using iSynth mixer neither iSynth sequencers.

To open iSynth player, click on the iSynth player icon in the iSynth folder.

Note: You cannot use iSynth player and iSynth together!

For each instrument, you can open the edit window, select the sounds, adjust the volumes and mute them.

The master section only has a master volume and a master mute.

A small led informs you about incoming MIDI messages.

The I/O window is the same as in iSynth (see I/O window section).
Play with Cubase™

Create 5 MIDI tracks (ch. 1 to 5). Select IAC Bus as output.
Open the Rewire input 1 & 2 for master stereo bus, 3 to 7 for individual outputs of each instruments, 8 auxiliary outputs for the Tangerine Drums.

Play with Logic Audio™

Create 5 MIDI tracks (ch. 1 to 5). Select IAC Bus as output.
Create audio tracks for each output and select the MSP 1 to 8 outputs.

Play with ProTools™

Create 5 MIDI tracks (ch. 1 to 5). Select IAC Bus as output.
Create 1 auxiliary stereo track for the master output.
In the insert section of the mixer, select MSP stereo and choose output 1-2.
Create auxiliary mono tracks for each individual outputs and In the insert section of the mixer, select MSP stereo and choose output 3 to 8.
### MIDI Implementation Table

<table>
<thead>
<tr>
<th>CC</th>
<th>Ch. 1</th>
<th>Ch. 2</th>
<th>Ch. 3</th>
<th>Ch. 4</th>
<th>Ch. 5</th>
<th>Ch. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drums</td>
<td>Blue Bass</td>
<td>Sampler</td>
<td>Pineapple Syn</td>
<td>Black Loops</td>
<td>Mixer</td>
</tr>
<tr>
<td>1</td>
<td>Vol 1</td>
<td>Cutoff</td>
<td>Attack</td>
<td>Cutoff</td>
<td>Vol 1</td>
<td>Vol 1</td>
</tr>
<tr>
<td>2</td>
<td>Vol 2</td>
<td>Resonance</td>
<td>Decay</td>
<td>Resonance</td>
<td>Vol 2</td>
<td>Vol 2</td>
</tr>
<tr>
<td>3</td>
<td>Vol 3</td>
<td>Lfo speed</td>
<td>Sustain</td>
<td>Lfo 1 freq</td>
<td>Vol 3</td>
<td>Vol 3</td>
</tr>
<tr>
<td>4</td>
<td>Vol 4</td>
<td>Env mod</td>
<td>Release</td>
<td>Lfo 2 freq</td>
<td>Vol 4</td>
<td>Vol 4</td>
</tr>
<tr>
<td>5</td>
<td>Vol 5</td>
<td>Lfo mod</td>
<td>Volume</td>
<td>Lfo 1 &gt; filter</td>
<td>Vol 5</td>
<td>Vol 5</td>
</tr>
<tr>
<td>6</td>
<td>Vol 6</td>
<td>Lfo type</td>
<td>Root</td>
<td>Lfo 2 &gt; freq</td>
<td>Vol 6</td>
<td>Vol 6</td>
</tr>
<tr>
<td>7</td>
<td>Vol 7</td>
<td>Glide</td>
<td>loop</td>
<td>ENV 2 &gt; filter</td>
<td>Vol 7</td>
<td>Pan 1</td>
</tr>
<tr>
<td>8</td>
<td>Vol 8</td>
<td>Attaque</td>
<td>ENV 2 &gt; freq</td>
<td>Vol 8</td>
<td>Pan 2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Tune 1</td>
<td>Decaye</td>
<td>Attaque 1</td>
<td>Tune 1</td>
<td>Pan 3</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tune 2</td>
<td>Sustain</td>
<td>Decay 1</td>
<td>Tune 2</td>
<td>Pan 4</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Tune 3</td>
<td>Release</td>
<td>Sustain 1</td>
<td>Tune 3</td>
<td>Pan 5</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Tune 4</td>
<td>Env. type</td>
<td>Release 1</td>
<td>Tune 4</td>
<td>Send 1</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Tune 5</td>
<td>Volume</td>
<td>Attack 2</td>
<td>Tune 5</td>
<td>Send 2</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Tune 6</td>
<td>Velocity to</td>
<td>Decay 2</td>
<td>Tune 6</td>
<td>Send 3</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Tune 7</td>
<td>Transpose 0-2</td>
<td>Sustain 2</td>
<td>Tune 7</td>
<td>Send 4</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Tune 8</td>
<td>Osc type</td>
<td>Release 2</td>
<td>Tune 8</td>
<td>Send 5</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>Tune 1</td>
<td></td>
<td>Insert 1</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>Tune 2</td>
<td></td>
<td>Insert 2</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>Tune 3</td>
<td></td>
<td>Insert 3</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>Vol 1</td>
<td></td>
<td>Insert 4</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>Vol 2</td>
<td></td>
<td>Insert 5</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>Vol 3</td>
<td></td>
<td>Fx 1/2 ret</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>Pwm</td>
<td></td>
<td>Fx 3 return</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>Pwm</td>
<td></td>
<td>Fx 1/2 &gt; fx 3</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>Wave 1</td>
<td></td>
<td>Fx 1 parameter</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td>Wave 2</td>
<td></td>
<td>Fx 2 parameter 1</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>Wave 3</td>
<td></td>
<td>Fx 2 parameter 2</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>Oct 1</td>
<td></td>
<td>Fx 2 parameter 3</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>Oct 2</td>
<td></td>
<td>Fx 2 parameter 4</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>Oct 3</td>
<td></td>
<td>Fx 3 parameter 1</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>Lfo Type 1</td>
<td></td>
<td>Fx 3 parameter 2</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td>Lfo Type 2</td>
<td></td>
<td>Fx 3 parameter 3</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td>Filter</td>
<td></td>
<td>Fx 3 parameter 4</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
<td>Glide</td>
<td></td>
<td>Volume</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
updates

iSynth is always in development, so we strongly recommend you watch the iSynth web site for new updates that will increase iSynth capabilities.

Support

Any problems or questions about iSynth? Contact us via email at info@i-synth.fr
## INDEX

- 2BandEQ, 27
- aiff., 22, 31
- analogue modelling-based instruments, 15, 31
- analogue sounds, 9, 15
- arpeggiator, 33, 34
- ASIO, 33, 35
- attack, 18, 22
- au., 31
- audio, 30, 33
- automation, 7, 30, 31
- autotune, 26
- Black Loops, 9, 14, 22, 23, 34
- Blue Bass, 14, 15, 20, 34
- Cheesy Verb, 28
- Cherry Sampler, 14, 22
- chorus, 27, 28
- cpu utilization, 34
- decay, 18, 22
- delay, 26, 27
- DirectConnect, 33
- drag and drop, 21, 22, 23
- envelope, 15, 18, 19, 20, 22, 26
- envelope mode, 20
- filter, 15, 17, 18, 19, 20, 27, 28
- flanger, 27
- Fx1/2, 30
- Fx3, 28, 30
- fx, 14, 24, 26, 28
- gate mode, 20
- gater, 26
- glide, 19, 20
- global transposition, 8, 25
- hipass, 28
- I/O window, 33
- internal clock, 33, 34
- iSynth player, 35
- legato mode, 20
- LFO, 15, 17, 18, 20, 28
- lowpass, 26, 28
- low-pass filters, 18
- MIDI, 7, 9, 28, 32, 33, 34, 35
- MIDI clock, 34
- MIDI Implementation Table, 32
- MIDI keyboard, 32
- mixer, 7, 14, 29, 31
- mutes, 24, 25, 30, 32
- OMS, 32, 35
- oscillator, 15, 16, 17, 19, 20
- overdrive, 27
- pattern delay, 26
- pattern, 5, 7, 9, 10, 11, 12, 13, 24, 30
- phaser, 27
- Pineapple Synth, 14, 15, 16, 18, 19, 20, 34
- preset, 14, 25
- pulsedwidth modulation, 16
- PWM, 16, 17, 19
- raw, 31
- release, 18, 22, 28
- Rewire, 33
- ring modulator, 27
- sample-based instruments, 14, 31
- samples, 9, 21, 22, 23, 31
- sequencers, 7, 9, 12, 35
- short delay, 28
- shuffle, 8
- signal size, 33
- songs, 31
- Sound Designer II, 31
- SoundManager, 33
- subtrative synthesis, 15, 20
- sustain, 18, 22
- synced delay, 28
- Tangerine Drums, 14, 21, 34
- tempo, 8
- Timelines, 7, 24
- transport bar, 5, 7, 9, 31, 33
- velocity, 9, 10, 11, 12, 13, 20
- velocity mode, 20
- virtual memory, 6
- wav., 22, 31
- waveform, 15, 16, 17, 18, 19, 20