

Devil's Music + 30 (1985/2015)
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In the original *Devil's Music* (1985) fragments of radio broadcasts were digitally sampled, looped, re-triggered, reversed and occasionally detuned. All material was taken from transmissions occurring during the performance. The performer played off certain musical ground-rules intrinsic to the sampling system (which consisted of three modified ElectroHarmonix effect devices) to develop the quirky rhythmic interplay that characterizes the piece. In 2002 I wrote a computer program to emulate the original hardware. This latest revision of the software coincides with the 30th anniversary of *Devil's Music*.

This MaxPlay application emulates and extends the original circuitry and expands the *Devil's Music* to allow the sampling and processing of sound files on the user's computer, when a radio is not available. The program requires some additional files (a json and some numbered text files) that must be kept in the same folder as the application.

The software should be reasonably self-explanatory, but clicking the blue **HELP ME!** button opens a comprehensive help file, while clicking the legend at the top of any module (**Input**, **HarmoNix**, etc.) opens a shorter text relevant to that specific module only.

The **Input** module selects and enables the audio interface (built-in or external). It selects the audio source: **Vintage** (external radio), **FileJockey** (4-station pseudo-radio made from audio files on the user's computer), **myTunes** (single "jukebox" of user audio files). It sets audio level and compression (if desired) feeding subsequent samplers.

Selecting **myTunes** mode in the **Input Module** opens a small panel with which you select the folder on your computer from which the program creates a randomly shuffled "jukebox"; typically you will just use your main music folder (i.e., "iTune Music"), but you can create a dedicated "Devil's Music sound library" if you prefer. **FileJockey** opens extends the main patch to reveal **MyRadio**, a bank of four identical file players similar to that of **myTunes**. Each module can be loaded from a specific folder on your hard drive, so you can set up four distinct "radio stations" for sampling – i.e., "Dance Music", "Spoken Word", "Sound Effects", "Easy Listening".

(NOTE: When streaming MP3s and other compressed audio files the program writes temporary uncompressed versions to your hard drive. These self-erase after 30 days, but if you wish to reclaim your disk space earlier you can trash the contents of this folder: /Users/(your_user)/Library/Application Support/Cycling '74/Max 7/Cache.)

Three identical **HarmoNix** modules sample and process the incoming audio stream in emulation of the original ElectroHarmonix devices and other similar signal processors. Sounds are recorded as long as the **GRAB** button is depressed (up to 16 seconds). The sampling **SOURCE** can be toggled between the audio **Input** or a **Resample** of the output of the other two HarmoNix modules. Playback begins automatically after the **GRAB** button is released, and is retriggered by peaks or beats in the incoming audio; the character of this retriggering is determined by the drop-down **MODE** menu:

- **Loop**: simple repeating loop.
- **16 Second**: emulates a hacked ElectroHarmonix "16 Second Delay". Peaks in the incoming audio signal reverse playback direction of loop.

- **Super Replay:** emulates a hacked ElectroHarmonix "Super Replay". Peaks in the incoming audio signal retrigger loop from start (classic early hip-hop "stuttering" sampler).
- **Ursa Major:** emulates a hacked Ursa Major "Stargate" digital reverb. Peaks in the incoming audio signal retrigger loop from random locations instead of the start.
- **Scratchmaster:** emulates turntable back-scratching. Peaks in the incoming audio signal reverse playback direction of loop, like "16 Second" mode but with pitch swoop at each reversal.

Other buttons in this module set the **OUTPUT** left/ right routing, **MUTE** the output, and **CLEAR** the audio buffer. A scrollable number box sets the retriggering sensitivity (**STUTTER**). Two faders adjust **PITCH** and **LEVEL**.

The **Output Routing** module maps the output of the samplers (to be sent to the PA system) and the input signal (to be monitored over headphones, like a DJ cuing with headphones) to the output channels of your audio interface. There are level faders and buttons to **MUTE** either output.

On-screen buttons frequently used in performance are mapped to keys on your computer keyboard, which are indicated in legends on the buttons. You can record into multiple samplers simultaneously by pressing multiple keys mapped to **GRAB**. You can **REMAP** or **RESET** the **KEYMAP** via buttons on the lowest panel in the patch.

The performance can be recorded as a stereo AIFF file by clicking the yellow **RECORD** button. The file appears on your desktop with the name "Devil'sMusic_DATE_TIME."

PERFORMANCE INSTRUCTIONS

Performing *Devil's Music* in its original incarnation resembled DJ-ing with an unpredictable live radio instead of a collection of known recordings. The latest software expands the piece to incorporate your own music files, albeit randomly shuffled and (in the case of the "My Radio" option) organized into stylistic "stations". While one sample or a set of samples are running through automatic variations you scan through the radio dial or shuffle your audio files, listening for the "right" next sound, to be dropped in at the right time. The mix can go from thin (one sample playing) to thick (three copies of the same sample) to thicker (three different samples) to silent. The samples can be long enough to be identifiable, or so short as to be drones and ratchets. Pitch shift can also be used to render sources unrecognizable (and take advantage of any subwoofers.) Samples can also be cut in and out rhythmically by means of the mute commands.

Just as DJ cues a record before bringing it up in the mix, it is important to be able to listen to the radio that is feeding the samplers, so make sure you have made provisions for monitoring this signal.

Devil's Music can be performed as a solo, as a sequence of overlapping solos, or (with care) in an ensemble format. Duration is open, and this piece works well as a late night concert closer, especially in a club context.

devilmusic181015.1

DEVIL'S MUSIC +30 (1985 - 2015) Nicolas Collins

Input

DSP **ON** status

SOURCE Vintage

EXTERNAL RADIO
ch# boost
2 1

127

comp on

HarmoNix SOURCE

INPUT

MODE 16 Second

STUTTER 41 sens. ○

PITCH LEVEL

OUTPUT LEFT OUT

SAMPLE mute "z" clear GRAB "1"

HarmoNix SOURCE

INPUT

MODE Super Replay

STUTTER 35 sens. ○

PITCH LEVEL

OUTPUT RIGHT OUT

SAMPLE mute "x" clear GRAB "2"

HarmoNix SOURCE

RESAMPLE

MODE Ursa Major

STUTTER 38 sens. ○

PITCH LEVEL

OUTPUT STEREO

SAMPLE mute "c" clear GRAB "3"

Output Routing

INPUT MONITOR

Ch 3 & 4

MUTE "m"

SAMPLERS

Ch 1 & 2

MUTE "space"

HELP ME! REMAP KEYS RESET KEYMAP CLEAR ALL SAMPLES "del" RECORD 0:00

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Input

DSP **ON** status

SOURCE myTunes

MYTUNES
LOAD >>|
Sax 12 Alto

127

comp on

HarmoNix SOURCE

INPUT

MODE 16 Second

STUTTER 41 sens. ○

PITCH LEVEL

OUTPUT LEFT OUT

SAMPLE mute "z" clear GRAB "1"

HarmoNix SOURCE

INPUT

MODE Super Replay

STUTTER 35 sens. ○

PITCH LEVEL

OUTPUT RIGHT OUT

SAMPLE mute "x" clear GRAB "2"

HarmoNix SOURCE

RESAMPLE

MODE Ursa Major

STUTTER 38 sens. ○

PITCH LEVEL

OUTPUT STEREO

SAMPLE mute "c" clear GRAB "3"

Output Routing

INPUT MONITOR

Ch 3 & 4

MUTE "m"

SAMPLERS

Ch 1 & 2

MUTE "space"

HELP ME! REMAP KEYS RESET KEYMAP CLEAR ALL SAMPLES "del" RECORD 0:00

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Input

DSP **ON** status

SOURCE FileJockey

127

comp on

HarmoNix SOURCE

INPUT

MODE 16 Second

STUTTER 41 sens. ○

PITCH LEVEL

OUTPUT LEFT OUT

SAMPLE mute "z" clear GRAB "1"

HarmoNix SOURCE

INPUT

MODE Super Replay

STUTTER 35 sens. ○

PITCH LEVEL

OUTPUT RIGHT OUT

SAMPLE mute "x" clear GRAB "2"

HarmoNix SOURCE

RESAMPLE

MODE Ursa Major

STUTTER 38 sens. ○

PITCH LEVEL

OUTPUT STEREO

SAMPLE mute "c" clear GRAB "3"

Output Routing

INPUT MONITOR

Ch 3 & 4

MUTE "m"

SAMPLERS

Ch 1 & 2

MUTE "space"

MyRadio

CH 1	LOAD	ON
Track 3 3	now	total
	895	1139
		next >>

CH 2	LOAD	ON
n A Bar Killed I	now	total
	174	230
		next >>

CH 3	LOAD	ON
ono Radio20rM	now	total
	18	75
		next >>

CH 4	LOAD	ON
ono Radio52IM	now	total
	12	15
		next >>

^ = station up station down = v
next station >>| = return

HELP ME! REMAP KEYS RESET KEYMAP CLEAR ALL SAMPLES "del" RECORD 0:00