


Programming the 808: A project-based unit for rhythm pedagogy

Justin London
SMT 2017 Pedagogy SIG

Meet and Greet the 808



Meet and Greet the 808

- Listen to famous tracks using the 808
 - Talking Head's "Psycho Killer"
 - Marvin Gaye's "Sexual Healing" 
- Play around with the controls
 - Note what the control layout presumes (4/4)
 - Note what sounds the 808 attempts to replicate
- Demonstration programming
 - <https://www.youtube.com/watch?v=XRCdLN-brkl>

Reset

PATTERN WRITE

1st PART 2nd PART

MANUAL PLAY

PLAY

COMPOSE

PATTERN CLEAR

STEP NUMBER

TRACK CLEAR

PRE-SCALE Drag to a Step Button to set Pattern Length

INSTRUMENT-SELECT

RHYTHM TRACK

HT RS CP CB CY OH CH

MT 5 6 7 8

LT 4

SD 3

BD 2

AC 1 12

LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL
TONE	TONE	TUNING	TUNING	TUNING				TONE		DECAY	DECAY	
DECAY	SNAPPY	LOW CONGA	MID CONGA	HI CONGA	CLAVES	MARACAS						
ACCENT	BASS DRUM	SNARE DRUM	LOW TOM	MID TOM	HI TOM	RIM SHOT	HAND CLAP	COW BELL	CYMBAL	OPEN HIHAT	CLOSED HIHAT	

TEMPO

MANUAL

MEASURES AUTO FILL IN FINE

SLOW FAST

Rhythm Composer iO-808

Browser Controlled

MIN MAX MASTER VOLUME

BASIC VARIATION

A AB B

START STOP

PRE-SCALE

1 2 3 4

STEP NO

1st PART

2nd PART

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

I/F - VARIATION

A B

INTRO SET FILL IN TRIGGER

TAP

BASIC RHYTHM

1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4

INTRO/FILL IN

Tutorial

Made with ♥ by Vincent Riemer

Report an Issue

Meet and Greet the 808

SynthMania quick tip #6

Marvin Gaye's "Sexual Healing" Roland TR-808 pattern

by SynthMania.com

January 29, 2012



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Assignment #1: Programming

- Task is to create two “beats” (drum loop patterns)
 - A “good” pattern that is interesting and danceable
 - A “bad” pattern that is, well, not
- Students document the process by which they created their good and bad drum loops
- Drum loops are presented in class, ranked, and discussed.

Assign. #2: Representing Rhythm

- Having created a good and a bad beat, students then must notate them:
 - Using TUBS notation
 - Single-line using traditional rhythm orthography
- Students then reflect as to which form of notation is most useful for . . .
 - Enabling someone to recreate the 808 loop
 - Allowing someone to perform the pattern
 - Studying the pattern

In Class: Rhythmic Complexity

- Students read chapters from Godfried Toussaint's *Geometry of Musical Rhythm*
 - They learn to turn their notation into a binary necklace: “101010010100”
 - They learn to index the interval content of their necklace, represented as histograms
 - They learn how calculate the Shannon Entropy of their rhythms based upon the total interval context of their pattern

Assign. #3: Analytic Essay

- After listening to, discussing, notating, and analyzing your rhythms, defend one of the following claims (you must pick one):
 - My good rhythm really is better than my bad rhythm
 - My bad rhythm, I have come to realize, is actually better than my good rhythm
 - My good rhythm isn't really any better or worse than my bad rhythm.
- Use of their representation and entropy/complexity calculations is required
- Proper citations, etc., etc., also required.

Desiderata

- Gets students to grasp how technology embodies musical culture and practice
- Allows for creative play
- Allows for substantive engagement for students with widely varying musical backgrounds
- Integrates composition, analysis, and writing
- Stimulates student interaction and discussion

And your students can do this
too.