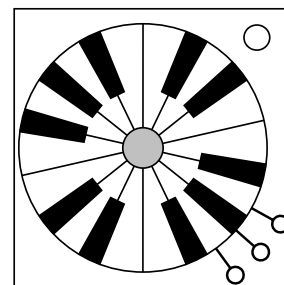# On the Subject of Simon Sings

Never gonna sing in tune, never gonna flash maroon, never gonna call up Simon and show up. Never gonna seal your fate, never gonna detonate, never gonna solve your modules and blow up.

- This module consists of a round piano board with colored keys. There is also a light in the center of the module that flashes the colors of some of the keys.

- The light cycles through a sequence of 8 colors. Black indicates a space between repetitions. Identify which piano keys have these colors and translate them to binary digits according to Table 1 below. If the condition in the table is true, the digit is a 1; otherwise, a 0. Each group of 4 constitutes one 4-digit binary number.

- The module consists of three stages. In each stage, the two binary numbers point to two new piano keys to press according to Table 2. In each stage, press the keys from the previous stages plus the new ones.

- The keyboard has two octaves, one on the left half of the wheel and the other on the right. Each key to press is on the other side from the previous. Start on the left if the serial number has a vowel and on the right otherwise.

- A strike will reset the input for the current stage. Long-press the light in the center to reset the entire module (only available in stages 2-3).

Table 1

C	This is the first or last digit in its 4-digit binary number.
C♯/D♭	This is the second or third digit in its 4-digit binary number.
D	If this is the first of the 8 digits: The last digit of the serial number is odd. Otherwise: The previous digit was 0.
D♯/E♭	The position of this digit in its 4-digit number matches the number of port plates.
E	If there are no port plates: There is an odd number of batteries. Otherwise: The position of this digit in its 4-digit number matches the number of ports on the port plate with the most ports on it.
F	We are in the third stage of the module.
F♯/G♭	The current stage number matches the number of letters in the serial number minus one.

G	If this is the first digit in its 4-digit binary number: There is an odd number of indicators. Otherwise: This number's first color referred to a sharp/flat key.
G#/Ab	If we are in the first stage: There is an odd number of ports. Otherwise: Two colors flashing consecutively in the previous stage refer to sharp/flat keys.
A	If we are in the first stage: There is an even number of indicators. Otherwise: One (or both) of the 4-digit numbers in the previous stage was less than 5.
A#/Bb	Another color in this 4-digit number refers to F or F#/Gb.
B	This digit's number would be a prime number if this digit is 1.

Table 2

Binary	#	Key	Binary	#	Key	Binary	#	Meaning
0000	0	C	0110	6	F#	1100	12	1st key in this number
0001	1	C#	0111	7	G	1101	13	2nd key in this number
0010	2	D	1000	8	G#	1110	14	3rd key in this number
0011	3	D#	1001	9	A	1111	15	4th key in this number
0100	4	E	1010	10	A#			
0101	5	F	1011	11	B			

Key/note chart