

Detailed description of the information the transmitter is sending to the PC and what device is being controlled.

The Transmitter is a set of nine manually operated switches. Each of these nine switches is programmed to send a fixed unique 'recognition code". as described here:

The recognition code consists of a Start pulse plus 22 code bits:

Bit	Function
1	"Guard" bit (always 0)
2-11	Transmitter ID number (between 1 and 1023)
12	Switch State (1 closed, 0=open)
13	"Toggle" (Alternates 1/0)
14-17	Switch Number (between 1 and 9)
18-21	Checksum
22	"Guard" bit (always 0)

- The "Guard" bits are always binary zeros and are used only to mark the beginning and end of the code word.
- The transmitter ID is used to identify the specific transmitter being used.
- The Switch state bit is "1" while the switch is being held closed manually and "0" when released and open. The transmitter continues to send the recognition code for only one second after the switch is released.
- The Toggle bit alternates between a "1" and a "0" each time a switch is pressed and released. This permits detection when a switch is released and then pressed again, as compared to a switch that remained pressed.
- The Switch Number indicates which of the nine switches on the transmitter is manually pressed.
- The Checksum is calculated as the number of the binary "0" bits in the recognition code, excluding the checksum itself and the two Guard bits. This number is compared to the same calculation performed on the received code, if they are not equal the received code is rejected for containing errors.

This is the only code that is sent and it is fixed for each switch on each transmitter. The transmitter does not measure or collect any data. The code transmitted only to identify which switch is manually activated.

We believe that this Transmitter is operating pursuant to Section 15.231(a) of the Rules for the following reasons:

- This Transmitter operates periodically @ 315MHz
- The signal transmitted is a fixed "recognition code" identifying a specific remote switch that has been manually activated.
- The manually operated transmitter automatically deactivates the transmitter at one second after the switch is released.
- This Transmitter is
 - Not used to control toys
 - Not continuously transmitting voice, video or data
 - Not activated automatically
 - Not video transmitting at regular predetermined intervals
 - Not used to signal an alarm

This Transmitter directly interacts and controls the Sidekeys Receiver. This Receiver is a computer peripheral, connected between the personal computer's keyboard and its CPU. The Transmitter does not directly interact with the computer. It only sends a "recognition code" to the Receiver. The receiver accepts this recognition code, indicating that a specific switch has been pressed on the transmitter. This specific recognition code is defined, within the Receiver, to trigger a specific keyboard character scan code. This scan code is "learned" by the Receiver from the attached keyboard, also connected to the computer, through the Receiver. The Receiver sends the scan code associated with that keystroke into the CPU. The computer accepts and interprets this scan code as text characters or other keyboard characters, just as if it had been sent by the keyboard.

The Transmitter, therefore, indirectly controls the computer, through the Receiver, by allowing for remote wireless input of keyboard characters into the personal computer. The Transmitter does not send data or even keyboard character scan codes directly into the computer.