Normal Operation of the SIS-8C

After the SIS-8C has been programmed, there are two possible modes of operation:

**Mode 1 (Mode pin=H)** -- “Toggle Mode“

Output (1-8) will toggle (change to the opposite logic level) each time its corresponding IR code is received.
(If the Mode pin is left unconnected, the default mode is Toggle Mode.)

**Mode 2 (Mode pin=L)** -- “Momentary Mode“

Output (1-8) will change from low to high when its corresponding IR code is received.
(After an IR signal is recognized, the output pin will stay high (Vdd) for as long as IR signal is being received.)
**IR receiver selection**

For the SIS-8C to work with the widest range of IR remotes, it is necessary to use an IR receiver with a bandwidth of approximately 36-57KHz. The TSOP-2140 is highly recommended for this. It has a center frequency of 40KHz, but is also sensitive to a broader range of frequencies at useful distances.

If the frequency of the remote that will be used to program the SIS-8C is known and will not vary, for example 38KHz, then use a 38KHz receiver.

If the frequency of the remote that will be used to program the SIS-8C is not known or may change then use a wider band receiver like the TSOP-2140.

**Programming the SIS-8C**

Outputs 1-8 are controlled by the 1st-8th IR remote button used during the programming process.

So that the IR codes are properly captured by the SIS-8C during the programming process, each IR remote button will be pressed two (2) times.

For visual feedback during the programming process, it’s assumed that the Pgm Status pin is series connected to an LED and resistor to ground -- 220 ohm or higher.

**To program the SIS-8C:**

1. Select the buttons from your IR remote(s) that you want the SIS-8C to recognize.

2. Momentarily ground the Program pin until the Pgm Status LED lights, indicating that programming mode is active.

3. At a distance no closer than 15cm, aim the remote at the IR receiver and press and hold down the IR remote button. When the Pgm Status LED switches off and stays off, release the IR remote button. The Pgm Status LED will then re-light.

4. Once again, aim the remote at the IR receiver and press and hold down the IR remote button. When the Pgm Status LED switches off and stays off, release the IR remote button. The Pgm Status LED will blink, indicating that programming for this button is complete.

Repeat steps 3 and 4 for up to a total of eight (8) IR buttons.

If fewer than eight IR remote buttons are programmed, then momentarily ground the Program pin to end programming.

If all eight IR remote buttons are programmed, the Pgm Status LED will automatically switch off and stay off, indicating that programming has ended.

The SIS-8C is now ready for normal use.