SIS-PC

2 Output, Universal IR Remote Control Receiver Switch

General Description:

The SIS-PC makes it simple to implement an infrared (IR) remote controllable switching solution for a PC or Home Theater PC (HTPC). When used with an inexpensive IR receiver module, The SIS-PC recognizes IR signals from 2 independent IR remote control sources, providing switching for PC power and hibernation or stand-by. The IR sources can be from the same or multiple remotes.

Works with over 99% of IR remotes, both universal and dedicated types. IR code is easily "taught" by user with a few simple button presses on the IR remote. IR code is stored in non-volatile, re-programmable memory.



Vdd (with respect to Vss): 2-5.5V Max current on I/O pins: 25 ma Package: 300mil wide Plastic DIP Current consumption (Vdd=5V): < 2mA IR in from IR module: No signal = Vdd, Pulses = Vss IR code is stored in non-volatile, re-programmable memory. Logic levels of Outputs 1, 2 on power up: High impedance

Application Example



Programming the SIS-PC

Output 1(pin 3) is controlled by the first IR code that is learned during the programming process. Output 2 (pin 2) is controlled by the second IR code that is learned during the programming process.

To program the SIS-PC:

- 1. Select the button from your IR remote that you want the SIS-PC to recognize to control PC on/off.
- 2. Momentarily pull pin 6 low until pin 7 goes high, indicating that learning mode is active.
- 3. Aim the remote at the IR receiver and press the remote button, and release when pin 7 goes low.
- 4. Pin 7 will go back high after about 2 seconds. Repeat step 3 three more times.

After the above steps are completed, pin three will pulse several times, then remain high. This indicates that the SIS-PC has learned the IR code for button 1 and is now ready to learn the IR code for button 2 for controlling hibernation or standby (pin 2 on the SIS-PC). If you do not plan on using pin 2, then simply leave it disconnected, cycle the power on the SIS-2, and skip steps 6-8 below.

If you plan on using pin 2 of the SIS-2 to control standby, hibernation, or some other function, then the steps for programming button 2 are identical to button 1, specifically:

- 6. Aim the remote at the IR receiver and press button 2. When pin 7 goes low, release button 2.
- 7. Pin 7 will go back high after about 2 seconds. Repeat step 6 three more times.
- 8. After the above steps are completed, pin three will pulse several and remain high. This indicates that programming is complete.

The SIS-PC is now ready for normal use.

Considerations Using the SIS-PC

Delay Between Repeated IR Remote Button Presses

There is a minimum of a 250ms delay between consecutive IR code recognition. This is designed to prevent unwanted toggling of the output if the user presses the IR remote button a little too long.

Incompatible IR Remotes

The SIS-PC is known to work with over 99% of existing IR remotes. However, it has not been tested with Bang & Olufsen, high-frequency remotes, and is assumed not to work.

IR Receiver Modules

The vast majority of IR receiver modules are use negative logic -- the output from the receiver is high when no IR signal is being detected. The SIS-PC requires a negative logic signal on pin 5. If you choose to use a positive logic IR receiver module, simply use an inverter between the receiver's output and pin 5 of the SIS-PC.

If you have a problem or questions regarding the SIS-PC, contact us: SUPPORT@SIMEREC.com