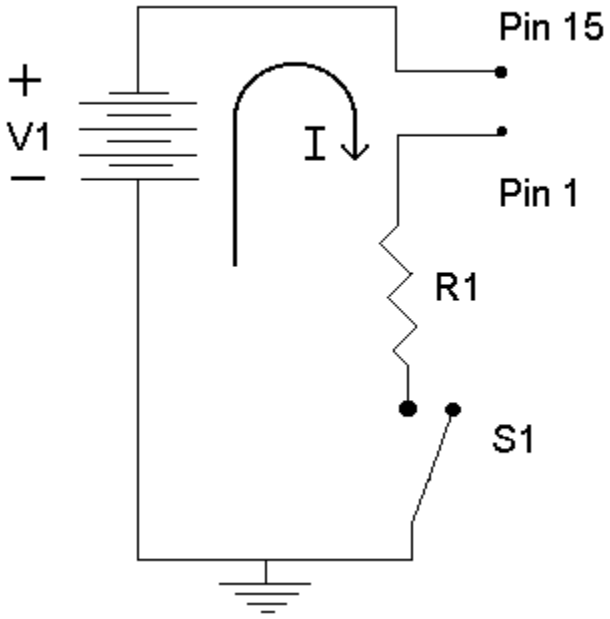
Expansion I/O I/F Circuit Usage

These instructions are valid for the TEC 372, 472, 572, 672, 872.



S1 = Switch

V1 = Signal Voltage in Volts = not to exceed 24 volts

R1 = Load Resistor in Ohms

I = Current in Amps

In order to trigger the printer, the expected input across pin 15 to pins 1-5 is 1.6 Volts at 10 Milliamps. This gives us an effective resistance of 160 Ohms for the purposes of our calculations. Remember to calculate the power dissipation of the resistor.

I must never be greater than 15 Milliamps

Important calculations:

R1 = (**V1**/**I**) - **160**

Power dissipation = **R1***I^2

Example:

R1 = unknown

V1 = **24 Volts**

I = **.01 Amps**

R1

R1 = (**24**/**.01**) **- 160**

R1 = 2400 – 160 = **2240 Ohms** or a **2.2 K Ohm** resistor

Power dissipation = **R1***I^2

Power dissipation = **2240*.01**^2

Power dissipation = **.224 Watts**

So you would require a **.5 watt** resistor to leave a margin of safety.