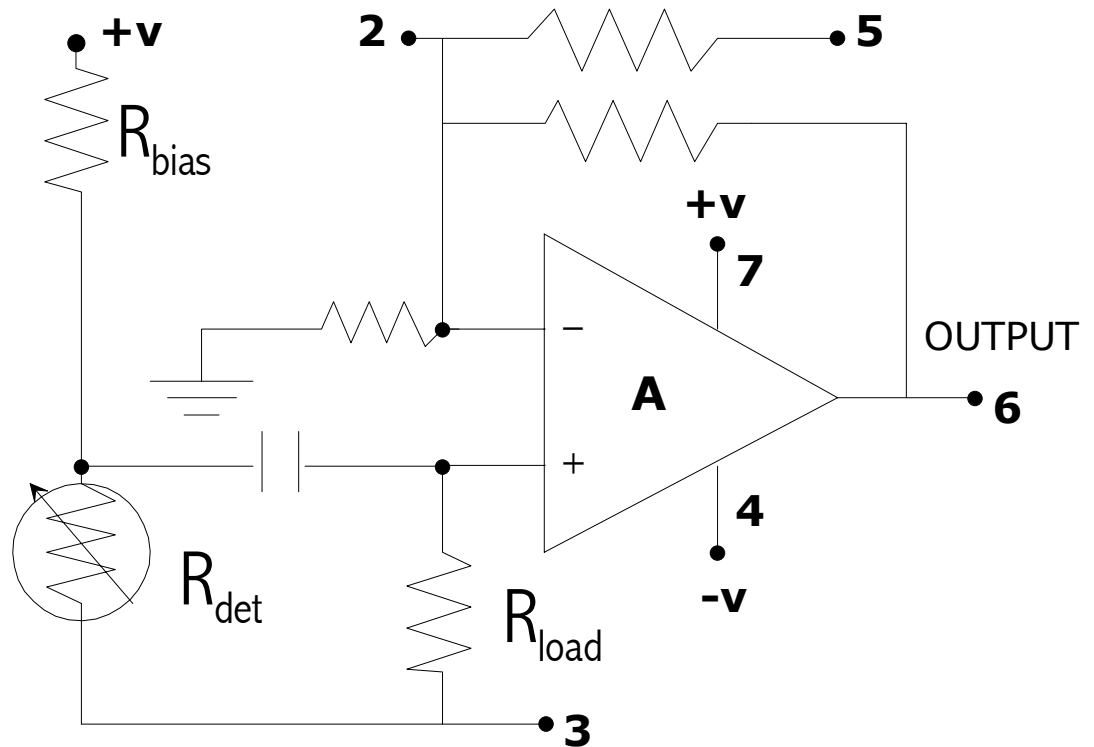
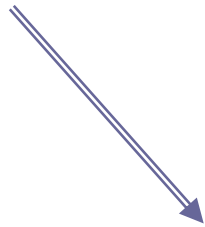


E8 PHOTODETECTOR/AMPLIFIER

PHOTODETECTOR CIRCUIT

[Simplified Schematic]



OPERATING THE E8 PHOTODETECTOR/AMPLIFIER

POWER SUPPLY: A bipolar power supply is required, +,- 6VDC to +,-15VDC, 20mA. The power supply pins should be bypassed physically close to the amplifier module. Double check wiring prior to turning on power. Improper /reverse wiring will damage the unit.

GAIN SELECT: The unit is supplied with a gain resistor equal to 10^7 ohms. For convenience, a 10^6 ohm resistor has also been installed inside the module, giving a 10:1 gain decrease by shorting pins 5 & 6. Other gain settings may be obtained by installing external resistances between pins 2 & 6. The frequency response can also be rolled off at lower frequencies by installing external capacitance between pins 2 & 6.

AMBIENT LIGHT: Because of the high gains involved, the unit should be shielded from ambient background light during operation. Measurement errors and/or saturation can result from improper shielding.

NOTES ON SOLDERING: Because of the high impedance values associated with the photodiode and the amplifier circuit it is extremely important install the unit properly. All residues from the solder and flux must be thoroughly cleaned/removed or leakages will occur resulting in measurement errors and/or saturation of the unit. The photodiode and amplifier are static sensitive and should be handled in a static-controlled workstation. Use only grounded-tip soldering irons. Do not overheat the header pins.