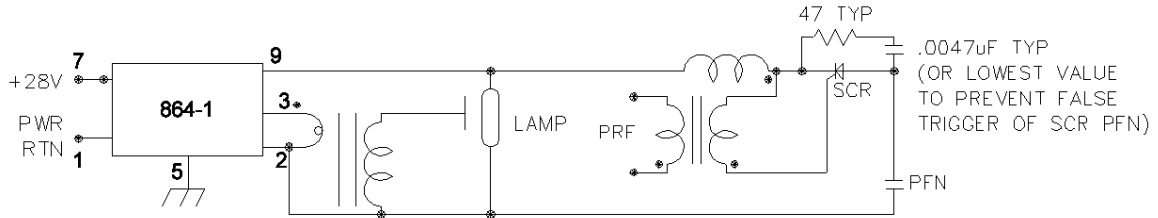




# ANALOG MODULES, INC.

Specialists in Analog and Laser Electronics

## MODEL 864A-1 INTERFACE DESCRIPTION



TYPICAL EXTERNAL TRIGGER CIRCUIT

NOTE: BECAUSE OF THE WIDE VARIATIONS IN FLASHLAMPS, ANALOG MODULES, INC. CANNOT GUARANTEE SIMMER OPERATIONS WITH ALL LAMPS.

**PIN 1 + 24 VOLT RETURN** Main 24 V power return. Filtered by 3 mH common mode EMI suppression choke (reference Figure 1).

**PIN 2 HIGH VOLTAGE OUTPUT AND TRIGGER RETURN** High voltage output, and trigger return. This return is fully isolated from input return, and chassis ground (reference Figure 4).

**PIN 3 HIGH VOLTAGE TRIGGER** 63 mJ, -520 V trigger pulse at  $\approx 20$  Hz. rate. This signal is present when connected to a trigger transformer referenced to pin 8 (high voltage return) and output voltage is open circuit (reference Figure 4).

**PIN 4 ENABLE INPUT** Opto coupled enable input with 470  $\Omega$  of input impedance. 5 – 20 mA of current to enable module referenced to enable return (reference Figure 3).

**PIN 5 CASE GROUND** Chassis ground which is not common to either high voltage return or input return.

**PIN 6 CURRENT SENSE COLLECTOR** Collector output of opto coupler which turns on when lamp current is present. Do not exceed 35 V, 10 mA (reference Figure 2).

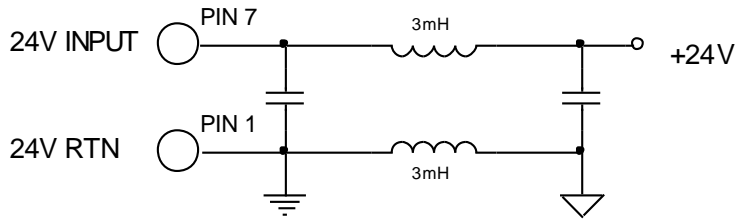
**PIN 7 +24 VOLT INPUT** 24 VDC at up to 3.5 A required to power module. Filtered by 3 mH common mode EMI suppression choke (reference Figure 1).

**PIN 8 CURRENT SENSE EMITTER** Emitter output of opto coupler which turns on when lamp current is present (reference Figure 2).

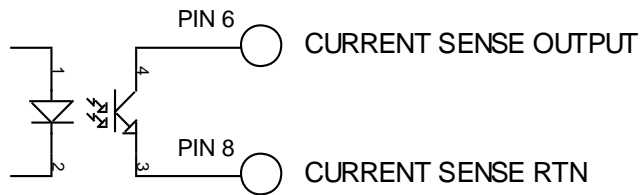
**PIN 9 HIGH VOLTAGE OUTPUT** High voltage output of simmer (reference Figure 4).

# MODEL 864-1 INTERFACE CIRCUITS

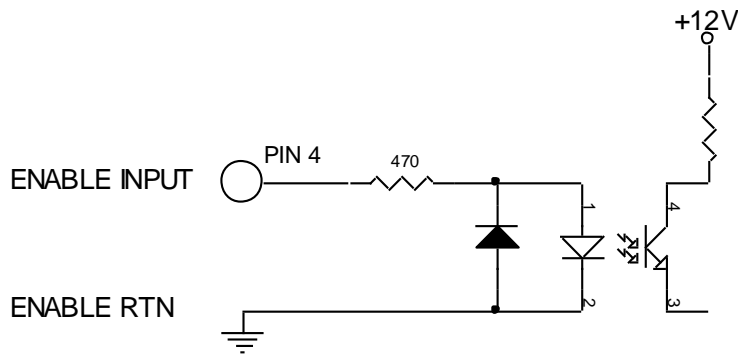
## FIG.1 POWER INPUT



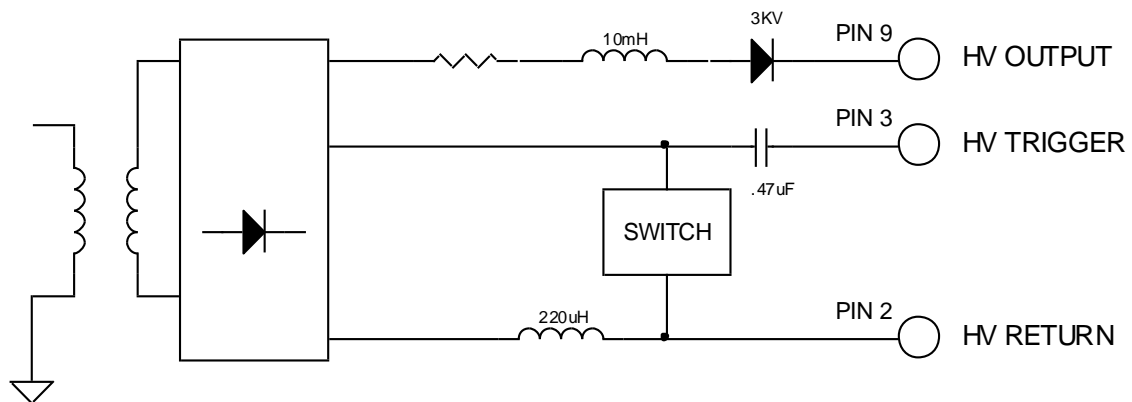
## FIG.2 CURRENT SENSE



## FIG.3 ENABLE



## FIG.4 HV/TRIGGER OUTPUT



5021B.SH3