

ANALOG MODULES, INC.



FLASHLAMP SIMMER SUPPLY

- **ADJUSTABLE CURRENT TO 300mA**
- **1300V OPEN CIRCUIT VOLTAGE**
- **AUTOMATIC BOOST TO MAINTAIN ARC**
- **UP TO 45W OUTPUT**
- SCR DRIVE FOR TRIGGER TRANSFORMER



DESCRIPTION:

The Model 863 simmer supply is designed to strike and maintain a low-level current discharge in flashlamps. Initially, the simmer output open circuit voltage rises to a stabilized 1300V. The simmer trigger output provides an SCR discharge of 550V at 66mJ to drive a trigger transformer. When the lamp is struck, the trigger pulses are inhibited and the supply provides a constant current to the flashlamp. Immediately after PFN discharge, the current is boosted automatically to maintain the arc. An external ballast is not normally required. Model 863 is recommended for higher simmer current (>160mA) applications.

SPECIFICATIONS:

Voltage

+24VDC to +32VDC at 2A typical (Up to 3A average with boost enabled)

Simmer Output

Voltage

Up to 150V (depending on flashlamp.)

Flashlamps should be processed for

simmer operation. 1300V. ±75V

Open Circuit Current

Boost Current

Up to 300mA Current Control Internal 25T trimpot Up to 1A for 4ms

For >30Hz laser PRF, boost must be

Enable

disabled (Add -D to part number.) +3.0 to +32V enables simmer, 18k

impedance.

Efficiency 75% typical including internal ballast

Simmer Trigger

Voltage -550V pulse at 66mJ

Pulsewidth ≥1µs

Repetition Rate Automatic restrike at ≈30Hz, if

lamp is not lit.

0° to 70°C, with output current **Temperature**

derating.

Connections

Input/Output/ Power

Molex, 19-09-1099

Mating Molex. 19-09-2098

5.78" x 3.68" x 2.03" Size

Specifications subject to change without notice.

APPLICATIONS:

Full Simmer Supply with SCR Trigger Drive for Flashlamps



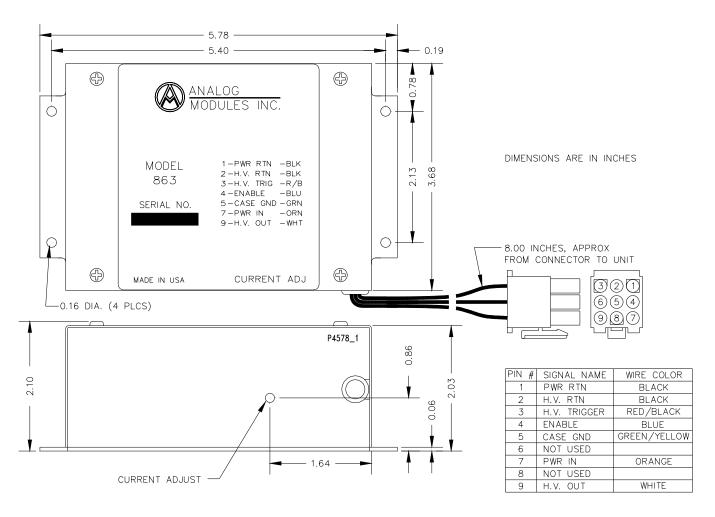
MODEL NUMBER

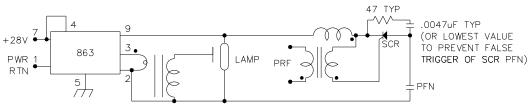
		OUTPUT CURRENT
		300mA
INPUT VOLTAGE	+24VDC TO +32VDC	863

Typical Part Number: 863-D = Input Voltage: +24 to 32VDC

Output Current: 300mA

Automatic Boost: Disabled for >30Hz laser PRF application





TYPICAL EXTERNAL TRIGGER CIRCUIT

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