



School bus electronic eight-lamp flasher also controls stop-arms and crossing gates.

Technical Description

The Model SBF94 is an advanced connector based warning light flasher in a very small package. Its 2.30 inch x 1.25 inch footprint and Amp Multilock connector makes it ideal for OEM applications, as well as a replacement for Amp Multilock based flashers currently on the market. The SBF94 flasher's industry standard functionality provides sequential and non-sequential operation, and will accommodate both 4-lamp and 8-lamp warning light configurations. Each of the lamp outputs (two red and two amber) are rated at 16 amps. The output for the stop arm is rated at 3 amps.

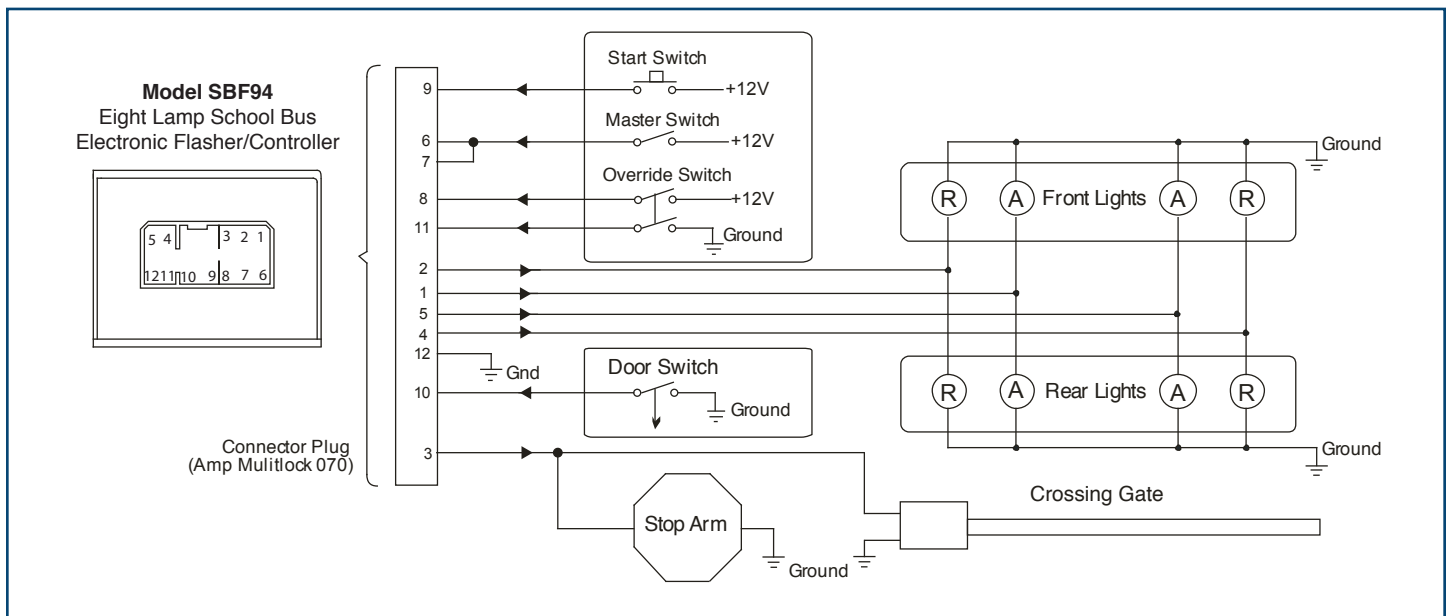
Key Features

- Ultra Compact Size - Occupies less space than conventional flashers.
- Connector Based Wiring Terminations - Saves manufacturing time and reduces errors.
- Industry Standard Functions - Compatible with existing bus designs.
- Highly Efficient Power Switching Design - Very low heat loss.
- Rugged Anodized Aluminum Case.

The design includes safeguards for over current, over temperature, short circuit, and loss of ground. A highly efficient current switching circuit is employed that produces very little heat loss. The circuits are made in-house on our very own SMT line. Its metal case is made of rugged anodized aluminum.

The SBF94 utilizes the Tyco/Amp Multilock Series 070 connector system. The 12-pin header (containing male pins) is integral to the flasher case. The 12-pin connector plug (not supplied with the flasher) uses female pins.

System Diagram



Specifications

Electrical

Input Voltage:	8 to 16 volts
Output Current (Pins 7, 9, 10 & 12):	16 Amps
Output Current (Pin 4):	3 Amps

Mechanical

Weight:	0.15 lbs
Case Material:	Anodized Aluminum
Operating Temperature:	-40° C to +85° C
Storage temperature:	-50° C to +85° C

Connector System:

Cap (On Flasher):	Tyco/Amp Multilock Series 070 12-pin (Amp p/n 174957)
Plug Housing:	12-pin (Amp p/n 173851 or 176116)
Cap Contacts:	Male Pins (supplied with flasher)
Plug Housing Contacts:	Female Socket (Amp p/n 173631-1 or 175027-
Reference:	Tyco/Amp Catalog 65839

Pin Assignments

1	Left Amber	To Left Amber Lamp
2	Left Red	To Left Red Lamp
3	Stop Arm	To Stop Arm Solenoid
4	Right Red	To Right Red Lamp
5	Right Amber	To Right Amber Lamp
6, 7	Master	To Master Switch (+12V)
8	Override	To Override Switch (+12V)
9	Start	To Start Switch (+12V)
10	FRAA	(Flash Red After Amber). To Door Sw. for Sequential, or no connection for Non-Sequential.
11	FR	(Flash Red When Door is Opened). To Override Sw. for Sequential, or Door Sw. (Gnd) for Non-Sequential.
12	Ground	To Ground Chassis Ground (Baterly Negative).

Mechanical Drawing

