

# Model 44900 8-Way School Bus Flasher

The 44900 8-Way School Bus Flasher operates eight 80 watt warning lamps and the stop arm. It can be wired to operate in Sequential Mode (red lamps only after ambers) by wiring the door switch to the terminal 9 (FRAA - Flash Red After Amber), or in Non-Sequential Mode by grounding terminal 10 (FR - Flash Red).

## Wiring Instructions and Technical Description

Pin 1 Override	<b>Override Switch</b> - An override switch may be used to function as a backup device as well as a means to immediately start the red lights flashing, bypassing the door switch and start button. The +12 volt power must be adequately fused. The override switch requires two contacts, one for Pin 1 and the second for Pin 10.	
+12 Volts Power Input		
Pin 2 Master Switch	<b>Master Switch</b> - This is the input for the 12 volt power, and must be adequately fused.	
+12 Volts @ 16 amps Max. Output	Pin 3 Right Amber	<b>Right Amber Lights</b> - This output provides the +12 volt power to flash the right front and right rear amber lights at a rate of 75 flashes per minute at a 50% duty cycle.
+12 Volts @ 16 amps Max. Output	Pin 4 Right Red	<b>Right Red Lights</b> - This output provides the +12 volt power to flash the right front and right rear red lights at a rate of 75 flashes per minute at a 50% duty cycle.
+12 Volts @ 3 amps Max. Output	Pin 5 Stop Arm	<b>Stop Arm</b> - This output supplies +12 volt power to actuate the stop arm device(s) when the red lights operate. If the load is more than 3 amps a relay circuit should be used to handle the higher current.
+12 Volts @ 16 amps Max. Output	Pin 6 Left Red	<b>Left Red Lights</b> - This output provides the +12 volt power to flash the left front and left rear red lights at a rate of 75 flashes per minute at a 50% duty cycle.
+12 Volts @ 16 amps Max. Output	Pin 7 Left Amber	<b>Left Amber Lights</b> - This output provides the +12 volt power to flash the left front and left rear amber lights at a rate of 75 flashes per minute at a 50% duty cycle.
+12 volts to Activate Input	Pin 8 Start	<b>Start Switch</b> - This input requires +12 volts from a momentary contact closure to start the flash sequence.
Ground to Activate Input	Pin 9 FRAA	<b>Flash Red ONLY After Amber</b> - This input requires a ground from the door switch and causes the red lights to flash. This works only after the start switch is activated and the amber lights are flashing.
Ground to Activate Input	Pin 10 FR	<b>Flash Red When Door is Opened</b> - This input requires a ground from the door switch and causes the red lights to flash anytime the door is opened (non-sequential operation).
Ground Input	Pin 11 Ground	<b>Ground</b> - Logic and power ground for the flasher/controller unit. This must be a good quality ground connection.

### Installation

1. Locate the 44900 in a dry area.
2. Before wiring the 44900, disconnect the 12 volt power by removing the battery connection.
3. Ensure that the power to the 44900 is fused.
4. It is very important to provide a good quality ground wire from the flasher to the chassis/battery negative.
5. Secure the 44900 wiring to prevent damage from vibration and stress on the connections.

**If you need further instructions please visit [www.grote.com/instructions](http://www.grote.com/instructions)**



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