

MCS-SSA INSTALLATION GUIDE



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1) Specification

1.1) **Absolute Maximum Ratings**

- Supply Voltage: 34 Volts DC.
- Supply Current: 15 Amps
- Standby Current: Standby Switch deactivated
 - Typical: 7 milliamps. (@13.8VDC, no peripherals attached)
- Standby Current: Standby Switch activated
 - Typical: 25 milliamps. (@13.8VDC, no peripherals attached)
 - Max: 35 milliamps. (@13.8VDC, no peripherals attached)
- Standby Temperature: -20 °C – 70 °C
- Operating Temperature: -20 °C – 65 °C

1.2) **Power**

- 1 x 40Amp DC pins on pluggable connector.
 - This **MUST** be fused with a 10 Amp fuse.
- 1 x Ground / chassis connections.
 - The ground chassis line should be rated to handle 15Amps or more.

1.3) **Digital Inputs**

- 1 x Positive Switching
- 2 x Positive Switched (HRT, Airhorn)
- 2 x Negative Switched (HRT, Airhorn)

1.4) **Analog Monitoring**

- Incoming system voltage sense.
- Internal temperature monitor.
- Siren system current monitor.
-

1.5) **Outputs**

- 1 x High switching 500mAmp rated transistor with internal resettable fuse protection.
- 100W siren speaker output 8 or 11 ohm selectable.

2) Installation Requirements

2.1) **Fuse**

- Supply lines **MUST** be protected with 15 Amp fuses, preferably at (or near to) the battery terminal.

2.2) **Airflow**

- DO NOT obstruct air vents along the front, back and underneath surfaces of the MCS-SSA. Do not install any equipment on top or underneath the MCS-SSA.

The above installation requirement must be followed for safe operating and extended product lifetime

3) **System Description**

3.1) **Siren System**

The siren module supports 100W (8 Ohm or 11 Ohm) output speakers.

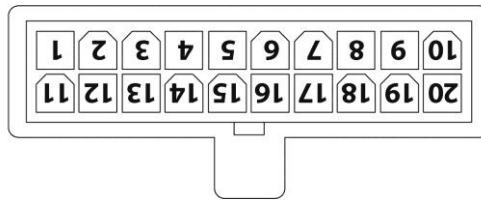
To enable the siren system, turn the Standby switch to Active high at the Operation Switch Input. To activate the siren use the HRT or Airhorn inputs on the siren.

3.2) **Low Current Outputs**

The output is rated to a maximum of 500mAmps and named as Data Out / Aux1 (used to send a confirmation to a data logger that the siren is operating or activate a relay for other functions in the vehicle).

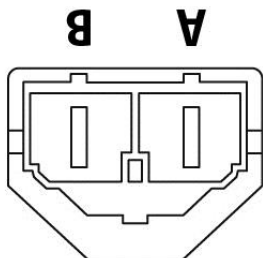
4) Wiring and Connections

4.1) System Bus Connector



Pin	Name	Function	
1		NA	
2		NA	
3	Airhorn Negative	Input	Active Low
4		NA	
5		NA	
6		NA	
7	Ground		
8		NA	
9	11 Ohm Output	Output	
10	8 Ohm Output	Output	
11	Operation Switch	Input	Active High
12	HRT Negative	Input	Active low
13	Input 1	Input	Positive or Negative switching
14	Airhorn Positive	Input	Active High
15	HRT Positive	Input	Active High
16		NA	
17	Data out / Auxillary Output 1	Output	500mA MAX Positive or Negative switching
18		NA	
19	11 Ohm Output	Output	
20	8 Ohm Output	Output	

4.1) Power Connector.



Pin	Name	Function	
A	Ground		
B	12V or 24 VDC	Input	15A MAX

Fault Light Diagnosis

LED Flashes When There Is A Fault	
Flashes	<i>Troubleshooting</i>
1	Siren current is high or there is a short on loudspeaker circuit.
2	Battery voltage too high or too low.
3	Over temperature or overheating.

5) Version History

<i>Version</i>	<i>Changes</i>	<i>Responsible Person(s)</i>	<i>Date</i>
1V0	Original Version	SW/RN	
1V1	Layout changed to represent the product better	SW	04/02/2015