

7000 SIREN SERIES – GENERAL INSTALLATION NOTES

See Data Sheet for information specific to your model.



Installation and Operation Read and observe the Safety Instructions provided for these products.

Power Connection Sirens are produced in 12 and 24 Volt versions. Ensure you have the correct version for your installation. Power should be routed directly from the battery through a Master Switch. A suitable fuse and holder is provided with the amplifier power loom. The Master Switch and any additional wiring should be capable of handling 20 Amps (10 Amps on 24 Volt vehicles). On occasions when the vehicle is unused for extended periods, the master switch will also prevent the minimal standby current which is present with most models.

Location The siren may become hot in use. Leave room for air flow around it, particularly the region of the fan. The siren is not waterproof.

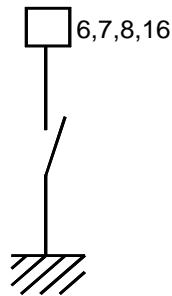
Loudspeakers Select the correct output for your loudspeaker by fitting the brown wire with the white stripe into the correct hole on the 16 way connector.

Loudspeaker	Power	Output	
1 – 58 Watt, 11 Ohm	58 Watt	All / T and / H models	Pin 2
2 – 58 Watt, 11 Ohm in parallel *	100 Watt		
1 – 100 Watt, 11 Ohm	100 Watt	12 / H models only	Pin 3
2 – 100 Watt, 11 Ohm in parallel *	200 Watt	All / T and 24 / H models	
1 – Sound Alert, 4 Ohm	-	/ H models only	
		/ S models only	

Neither loudspeaker wire should go to chassis as this would degrade audio performance.

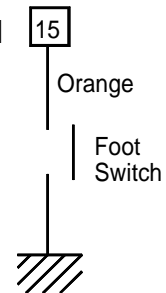
* Loudspeakers wired in parallel will achieve a greater audio output if also wired in phase e.g. brown to pin 1 and brown/white to pin 2 on each loudspeaker.

Tone Inputs The Air Horn and Tone inputs (pins 6, 7, 8, 16) are activated by connecting to chassis via a suitable switch. See Data Sheet for exact operation on your model.

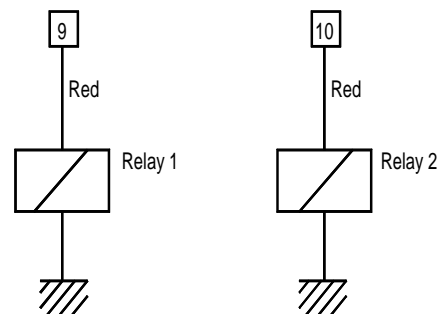


Footswitch / Horn Input

When required connect the Orange wire, (pin 15) to chassis via a momentary close switch or direct to the switched side of the horn. (In certain cases operation by horn may prove temperamental due to the design of the vehicle wiring. In this event use a relay to switch this input to chassis.)



Relay driver outputs These are low current outputs. Use an external relay for loads in excess of 0.2A. (Diodes are already fitted for back e.m.f protection.) They provide a positive signal when activated and will shut down in the event of overload. They are activated by the Accessory switch on the 7109 and in special circumstances on certain other sirens.



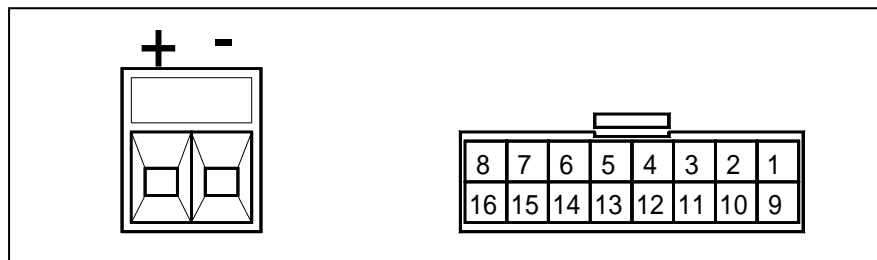
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Radio Re-broadcast facility (see further notes at end)(not 7004, 7006)
Connect the two input wires from the siren (blue, pins 5 & 13) to the radio loudspeaker terminals. Polarity is not important. A trimmer, accessible through a hole in the side of the amplifier, pre-sets the relative volume level. The volume of playback also depends on the radio and siren volume controls. If used for re-broadcast of continuous signals (e.g. broadcast radio), the amplifier may shut down due to overheating. In this event, reduce the position of the volume setting until this ceases to happen.

Beacon Interlock Input (Pin 14. Applicable only if specified on Data Sheet, leave disconnected otherwise.) Siren tones (only) will be disabled until this input receives a positive signal (+12 / 24 Volts). It should be used in conjunction with the appropriate Interlock device for full interlocking, or it may be taken direct to the switched output of your Beacon switch for a basic interlock. If you do not require *any* interlock, take this to a positive source.

Connector Layout



Power and 16 way connector **plugs** – view from wire entry side (rear of amplifier)

Connections for 16 way connector

8 Yellow /Black	7 Yellow	6 Green	5 Blue	4 Black	3 Brown (with white stripe)	2 Brown (with white stripe)	1 Brown
Input 1	Input 2	Input 3	Radio Input	Chassis return for Inputs	L/S "B" Output (See table overleaf)		L/S "A" Output
16 Violet	15 Orange	14 White	13 Blue	12 -	11 -	10 Red	9 Red
Air Horn Input	Horn / Foot-switch Input	Interlock Input	Radio Input	Slave Amplifier Connections		Relay 2 Driver Output	Relay 1 Driver Output

Equipment displaying "e" mark complies with E.U. directives 95/54/EC and 97/24/EC but care should be taken with installation in order to achieve maximum EMC.

Supplementary Installation Instructions for Radio Re-Broadcast

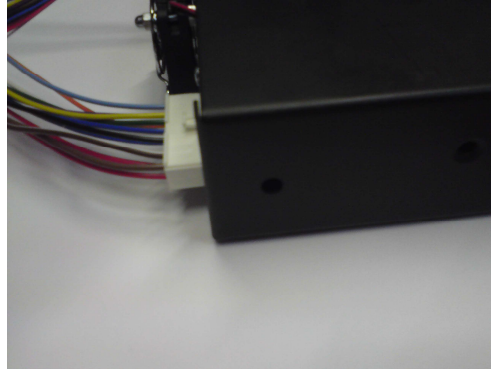


Figure 1 – Trimmer location on main siren amplifier module.

1. With the siren volume knob in the off position Turn the trimmer fully anti-clockwise.

The trimmer is accessible through a hole in the side of the amplifier (fig. 1).
The trimmer is used to pre-set the relative volume level.

2. Connect the a speaker output from the radio to the blue radio input wires of the siren, pins 5 and 13. The polarity of the connection doesn't mater.
3. Power the radio and the siren; turn the volume of the radio and the volume knob of the siren to full.
4. Then slowly adjust the trimmer clockwise until the output from the radio is audible at a good volume level with minimal distortion from the speaker. (see notes 1 and 2)

Note 1: If the preset volume level is too high, after running for a period of time the siren will overheat, shut down the speaker output and the fault light will come on. Adjusting the trimmer anticlockwise will reduce this effect and allow this siren to run for longer periods of time whilst in continuous broadcast mode.

Warning

If the trimmer is turned too far in the clockwise direction, too much of the signal can be passed through to the amplifier, which can blow the output stage of the amplifier. This will void the warranty.

Note 2: The speaker will always produce some distortion on the output as it is a compression speaker and is not intended for the broadcast of dynamic audio signals.

The radio input on the amplifier can cope with inputs from $0.5V_{p-p}$ to $35V_{p-p}$ providing that the trimmer is adjusted correctly.