

# Low coolant got you hot under the collar?

The LCA1224 low coolant alarm can be used in a 12V or 24V automotive system or remote water pumping system to monitor radiator coolant level. It will provide a visual and audible alarm if the coolant falls below the chosen level or if the pump loses priming. It will give warning of a sudden loss of coolant (from a burst radiator hose, for example) alerting you to switch off the engine, preventing any damage due to overheating.

## Primary benefits

- AC sensing - the probe is supplied with AC, it doesn't produce electrolysis that causes corrosion
- Dual voltage - suitable for 12V or 24V, negative or positive earth systems
- Self-test - on ignition turn on, the LED flashes twice and the audible alarm emits four short bursts
- Broken wire detection - if the wire to the probe is broken it will sound the alarm and operate the buzzer
- Anti-slosh delay - if the radiator is not quite full, the LED flashes after ½ second but the audible alarm will not turn on for 3-4 seconds... there is a visual reminder to top up but no annoying alarms
- External warning outputs allow a dashboard lamp and/or a buzzer to be used when the LCA1224 is not visible to the driver

## Applications

### Stationary engines

- Generators

### Industrial

- Forklifts
- Tractors
- Earthmoving equipment

### Automotive

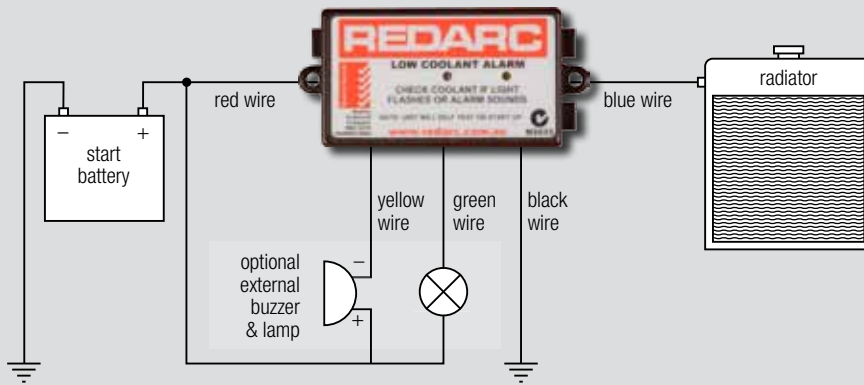
- Passenger vehicles
- 4WD vehicles
- Trucks
- Buses



# REDARC®

THE POWER CONVERSION SPECIALISTS

## LCA1224 wiring



## Warning

The LCA1224 is an emergency warning system only. It warns of sudden loss of coolant while the vehicle is operating. It will provide an indication when gradual loss has reached the low level, **but should not be used to avoid regular visual checks of the cooling system.**

In the event of any loss of coolant, the cause should be investigated rather than just using the LCA1224 as a reminder to top up the radiator.

## Installation

Redarc strongly recommends that the probe be installed by a suitably qualified person.

- 1 Allow the engine to cool completely before commencing any work on the radiator.
- 2 Select the position on the radiator header tank for the lowest safe coolant level (the point where alarm is to sound).
- 3 Drain coolant (to at least below the probe mounting point).
- 4 Drill and mount the coolant level probe, taking care to avoid any drilling swarf entering cooling system:
  - For a metal tank, solder in the threaded brass boss supplied with the low coolant alarm. When cool, screw the probe in using thread tape.
  - For a plastic tank, thread the hole then screw the probe in using thread tape.
- 5 Refill the cooling system.
- 6 Mount the LCA1224 where it can be seen and heard from the driving position (or use external warnings, see below).
- 7 Connect the wires

<b>Black</b>	Battery negative
<b>Red</b>	Ignition positive
<b>Blue</b>	Probe
<b>Yellow</b>	Ground for external buzzer (0.5A max). If not used, this wire should be folded/taped over.
<b>Green</b>	Ground for external lamp (0.5A max). If not used, this wire should be folded/taped over.

The external warning outputs (yellow and green wires) are ground outputs, so the other terminal of the lamp or alarm must be connected to ignition positive (same point as red wire). The warning lamp may be a LED with a suitable series resistor or a filament lamp. The maximum load on these wires must not exceed 0.5A. To operate higher loads on either output use the wire to operate an external relay.

## Specifications

Model	LCA1224	Current draw (alarm on)	Approx 15mA
Part number	ACX4556	Warning	LED & Beeper
Supply range	11-32V	Dimensions	65 x 40 x 25mm
Current draw (alarm off)	<2mA	Weight	<40gm
		Warranty	2 years

See the Redarc low coolant alarm at your nearest automotive parts dealer



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