



BCA-100 Basic Car Alarm

Installation Guide



Introduction

The BCA-100 alarm uses a very low power radar signal to detect movement within the car. The metal bodywork and windows of the car restrict the sensing to within the car. The signal can pass through seats and detect the rear doors and tailgate opening, and also detect windows being broken.

Alarm Installation

A great deal of thought has gone into making the alarm quick and easy to install. The alarm can be installed with little more than a couple of screwdrivers, pliers, and wire cutters, sharp knife, and electrical tape. A multimeter, soldering iron, and power drill will help making the job easier. There are only TWO wires to connect to the car. These instructions assume little electrical knowledge. We recommend reading through the installation procedure several times prior to starting the job. And should you have any questions ask someone familiar with vehicle electrics or contact us.

1. Before starting the installation, decide where the alarm module, switch, and LED are best installed. For large SUV's, the best position for the alarm module is usually in the centre (point 1 or 2). This allows the tailgate to be monitored. With smaller cars the best position is often in the plastic next to the driver's door (3 or 4). Before removing panels, we recommend connecting the alarm to a 12v supply and connecting the siren. The alarm module can then be checked in various positions to be sure it detects all the doors opening, and isn't affected by people walking close to the car.



2. **It's important the label on the alarm module faces INTO the car.**
3. Next the push button and LED need to be fitted in the plastic panels. The push button needs a 12mm hole, the LED needs a 6.5mm hole. Connect the red wire from the push button to terminal 1 on the alarm, and the black wire to terminal 2. The red wire from the LED connects to terminal 9, the blue wire to terminal 10.
4. Next you need to make a place for wires to enter the car from the engine compartment. Look where existing wires pass into the car and see if there is space available for extra wires. Often a car will have spare rubber plugs for extra wires, a small hole can be made in the plug and the new wires passed through. As a very last resort a new hole can be made for the wires. NOTE: It is very important the wires do not rub on the edge of a hole. The wire insulation can be damaged which could lead to the failure of the alarm.



5. The next step is to connect the alarm unit to the cars power. If you are familiar with car wiring, find a wire under the dash which has +12v when no key is in the ignition. If the car brake lights work without the key in the ignition, one of the wires on the brake light switch is connected directly to the battery. You'll connect the RED wire to this terminal. The black wire is then cut back and connected to the car ground, usually under a screw on the car body. If you aren't familiar with the cars wiring, the RED wire can connect directly to the car battery +12v terminal. The battery will have a + symbol at the positive terminal, it usually has a number of wires on the terminal, a RED plastic cover; the wires are usually RED or BROWN. Pass this wire into the engine compartment (see the next point) and connect the alarms RED wire to the positive terminal.



6. Next the siren needs to be installed. It must be pointing down to prevent water collecting in the cone. The driver's side is usually the best side to keep wiring short. If available, pop rivets will make installation easier. The red wire from the siren connects to terminal 3, the black wire to terminal 4.



7. Install and connect the bonnet and / boot switch (if used). Usually the best place is on the driver's side on the piece which supports the radiator. If no spare holes exist you'll need to drill one. You must be extra careful not to damage the radiator, hoses, or existing wiring. The next pictures show a bonnet switch and a suggestion where to mount the switch. This connects to terminal 5 on the alarm.

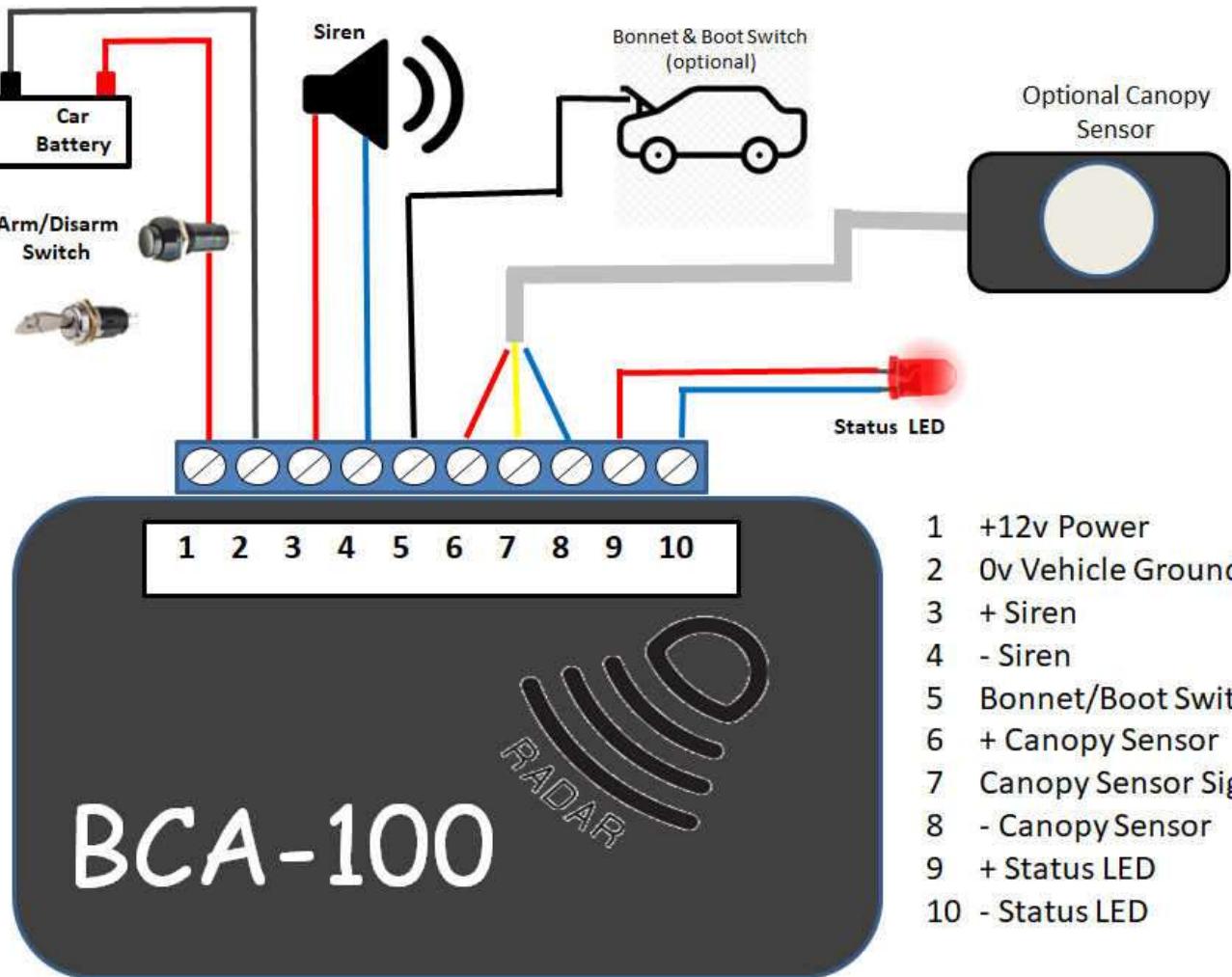


8. If a canopy sensor is used the wires are connected to terminals 6,7,8. The installation is covered in the canopy sensor documentation.

Testing the alarm after installation

The following tests help to ensure its working correctly :

Step	Action	Normal Result	Fault	
1	Switch alarm on and close car doors.	Alarm will chirp , then once more a few seconds later	Alarm chirps continually.	If used, the bonnet / boot switch may need adjustment.
2	Switch alarm on and close car doors.	LED comes on then goes off as the alarm is armed.	Alarm LED doesn't come on, siren doesn't chirp.	Recheck wires to the +12v and car ground.
3	Switch alarm on and close car doors.	After approx. 10s the siren 'chirps'	Alarm LED comes on, siren doesn't chirp.	Recheck wires to the siren for damage. Red must go to terminal 3, black to terminal 4.
4	Switch alarm on	After a further 3s the LED goes off. The alarm is armed.		No action needed, the alarm is armed.



- 1 +12v Power
- 2 0v Vehicle Ground
- 3 + Siren
- 4 - Siren
- 5 Bonnet/Boot Switch
- 6 + Canopy Sensor
- 7 Canopy Sensor Signal
- 8 - Canopy Sensor
- 9 + Status LED
- 10 - Status LED

BCA-100 Connection Diagram

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