

# Stinger SB100 Exploder / Circuit Tester



## Description

The SB100 exploder / circuit tester is a dual-function unit enclosed in a robust glass filled Nylon case. The case is dust and splash resistant.

The SB100 is a 100-shot capacitor discharge exploder, powered by a 9.6V rechargeable NiCad battery. A removable magnetic key controls the security of the firing mechanism and a push button operates the firing circuit. A READY light is illuminated when the firing capacitor is fully charged.

The rechargeable battery also powers the circuit tester section. It is an auto-ranging type incorporating a highly visible digital read-out with figures 10 mm high.

The complete unit is enclosed in a leather carrying case with shoulder strap.

## Safety Exploder

It is the Shot Firer's responsibility to ensure that relevant legislation, standards, and approved safety procedures are complied with.

The magnetic key should not be kept with the SB100 to prevent unauthorised use of the device. The key should be removed after firing.

Firing of the SB100 is disabled until the firing capacitor has reached the required charge. The READY light will only illuminate when the capacitor is up to a charge that will guarantee the maximum number of detonators can be fired.

Firing can be safely aborted after the READY light has illuminated by removing the magnetic key.

Rubber covered terminal nuts minimise the risk of electric shock to the user.

**CAUTION: DO NOT TOUCH TERMINALS OR CABLES WHEN FIRING. POTENTIALLY LETHAL VOLTAGE ACROSS TERMINALS WHEN FIRING.**

If the battery voltage falls to a level too low for effective operation, the display will indicate LOW BATTERY (indicating that the battery needs recharging). The exploder will not operate if the battery level is too low to guarantee adequate charge

## Circuit Tester

The circuit testing current is restricted to 1mA. The requirement, of the applicable standard, is that a circuit tester will deliver less than 50mA when short-circuited.

The display reads to nearest 0.1 ohm, enabling accurate testing of individual detonators as well as complete firing circuits.

If the battery voltage falls to a level too low for effective operation, the display will indicate LOW BATTERY when testing is attempted. In this condition any resistance values displayed are unreliable and should not be accepted.

The complete unit complies with the recommendations of Australian Standard AS2187 - Part 2, 1993.

## Application

This exploder is suitable for use in all mining, quarrying, construction and general blasting applications except in underground coal mines.

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## Technical Properties

### Firing Capacity

The SB100 will reliably fire up to 1 to 100 standard detonators connected in a single series (total circuit resistance not more than 324 ohm).

### Specifications

Exploder Type:	Capacitor discharge
Capacity:	100 shot, 47µF, 450V, 4.8J
Tester Range:	0 - 1999.9Ω
Tester Resolution:	0.1 ohm
Tester Accuracy:	better than 2%
Dimensions:	170 x 90 x 70 mm
Mass:	1250g

## Recommendations for Use

### Exploder

Connect the firing cable leads to the exploder terminals. Screw down the terminal nuts firmly. Insert the magnetic firing key into the white socket. The READY light will illuminate almost immediately. Press the red PRESS TO FIRE button to fire the charge. Remove the key after firing and disconnect the cable.

### Circuit Tester

The circuit tester is switched on by connecting the circuit to be measured to the measuring terminals. It is switched off by taking off the firing cable.

The indicated value corresponds to the firing circuit resistance in ohms.

The circuit tester should be checked for operation prior to testing a firing circuit. This is accomplished by placing a conductor across the CIRCUIT TEST terminals. All zeros should appear on the display. If the zeros are not present, this is an indication that the unit is defective. Contact your local Orica Explosives sales office for advice on calibration and repair.

Place detonator leads or firing cable leads on the CIRCUIT TEST terminals and read the resistance in the display.

## Packaging

The SB100 is supplied in a cardboard box containing operating instructions. Each unit is stamped with its serial number on the leather strap of the carrying case.

## Trademarks

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