

# ICT Series 101-SQB-BTP

Raptor Scientific designs and manufactures a variety of Igniter Circuit Testers for the testing of squibs and other electrically detonated ordnance. Raptor Scientific 101-SQB-BTP squib testers can safely test diodes and measure resistance with great accuracy. This ICT is a combination 19-inch rackmount/benchtop unit.

### Key Benefits

- Detect missing or broken wires in the 4-wire test leads to the UUT. Diagnose and locate wiring errors that other testers would show as a resistance or open circuit reading.
- Immune to differences in lead resistances. Our squib testers are specifically designed to withstand unequal lead resistances on the 4-wire cable lines.

### Model Technical Specifications

Range	Full Scale	Resolution	Accuracy (% of full scale)
20 Ω	20 Ω	20 Ω	0.05%
200 Ω	200 Ω	20 Ω	0.025%
2 kΩ	2 kΩ	20 Ω	0.025%
20 kΩ	20 kΩ	20 Ω	0.05%
200 kΩ	200 kΩ	20 Ω	0.5%
2 MΩ	2 MΩ	20 Ω	1%
Diode	2.0 VDC	0.001 VDC	0.5%



Alternate ranges and diode testing are available. Calibration standards can be provided upon request. Additional options are available.



## Igniter Circuit Testers: Model 101-SQB-BTP

### Safety Features

- Fail-safe module limits test current. Since excessive test current could cause bodily injury or death, protection for all modes of failure or operator error is built into the squib tester. A sealed, tamperproof, fail-safe module guarantees that the test current will be less than 10 mA even under worst-case conditions of simultaneous failure of multiple circuit elements.
- Fiber-optic Interface is standard, which ensures safe meter integration and physical separation between the computer's power system and the squib.
- Isolated Power Supply. The power supply of our squib tester is 100% floating for safety isolation between the power source and the squib.

### Remote Control and Data Logging Optional Software includes:

- Data Logging: data is saved to a database and exportable to Excel.
- Scripting: Engineers can define a UUT and write a script defining the circuit paths to test, the ranges to use, and pass/fail criteria. This sequence can be followed manually by operators or run automatically.
- Optional switching matrix front end can be custom-built to your application to test multiple circuit paths automatically.
- Reporting: Individual UUT measurement and statistical report of multiple UUTs.

### Ease of Use

- 4-wire test lead arrangement automatically compensates for lead resistance.
- Quick Reading. Squib tester stabilizes readings in less than 2 seconds. Large format LCD, shows measurement range, units, battery level, calibration status.
- Calibration of the squib tester is performed digitally, with no requirement to open the meter or trim internal or external potentiometers.