rev 0

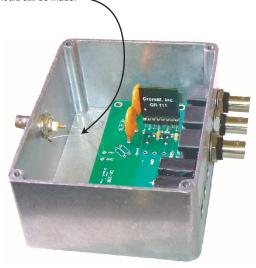
## Box dimensions: height 2.2 in.; width 4.6 in.; depth 3.6 in.

The CR-150-BOX is an unpainted die-cast aluminum housing for the CR-150 evaluation test board (see the application guide for the CR-150 for more details). Using the CR-150-BOX will simply the task of electrically shielding the CR-150 evaluation test board and the associated charge sensitive preamplifier (CSP).

Holes have been positioned on the CR-150-BOX in locations associated with BNC connector positions (detector bias, preamplifier output, and test pulser input) and banana connector positions (-12V, GND, +12V) on the CR-150 board. There is also a hole on the opposite side of the box to apply a 'panel-mount' coaxial connector, which can be connected to the input (detector) terminal of the CR-150 board via a soldered wire connection. A panel mount BNC connector is supplied for this purpose.

## Grounding

The PCB-mounted connectors on the CR-150 board do not make electrical connection to the CR-150-BOX aluminum housing. This connection can be made through the ground connection between the "input" BNC connector and the CR-150 board (see below). In the event the input BNC connector is not used in your application, this important connection between the CR-150 board and the aluminum housing should still be made.



The CR-150-BOX comes with a lid, panel-mount BNC connector, and associated hardware as shown below:





The CR-150-BOX is shown in the photos above, with the CR-150 evaluation board installed.

## **Detector bias voltage limitations**

The CR-150-BOX comes with a BNC connector to be used at the detector "input" location on the housing. In addition, the CR-150 board provides a BNC connector for use at the "bias V" connection. BNC connectors, in general, have a maximum voltage rating of 500V. If the detector bias to be used exceeds 500V, the users may wish to replace these connectors with high voltage connectors (i.e. "SHV") or use cabling directly soldered to the PC board.

Caution: Set-up of the CR-150-BOX requires the user to be comfortable with installing BNC connectors and soldering wires to PC boards. Also, the user may be exposed to the risk of electric shock, in particular the high voltages sometimes used in detector bias supplies.

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