

# ELECRAFT BL1 WIDEBAND 4:1 BALUN

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The Elecraft BL1 is a general-purpose wideband balun with a 4:1 impedance ratio. It is intended to match balanced feedlines to the unbalanced antenna connection of an Elecraft or other manufacturer's transceiver or antenna tuner.

## Specifications

Power Rating            150 watts maximum.  
Bandwidth                Input VSWR less than 1.2 when connected to a 200 resistive load, 500 kHz to 55 MHz.

## Assembly

- Perform an inventory of all parts in the kit.

## Parts List

1 Balun Printed Circuit Board	1 Right-Angle PC – mount BNC Connector
20 inches of Balun Wire, brown or white sheath	3 Thumb Screws
3 Right-Angle Output Terminals	4 Self-Adhesive Mounting Feet
6 #6 Flat Washers	1 Binocular Balun Core

- Install J1, the BNC connector, in the position indicated on the PC board silkscreen
- Cut the sheathed twisted pair cable into two 10-inch (25.4 cm.) lengths.
- Wind 3 turns of the cable through each of the balun core holes. The wire will completely fill the holes in the balun core. Leave about 1 inch (2.54 cm.) of cable exposed. Wind the turns tightly. The wire should be flat against the core. You will have to use a small screwdriver to press each turn against the inside of the core opening to get the third turn through. A few drops of rubbing alcohol as a lubricant can help get the last turn through. Be patient, it can be done. Use the photo as a guide
- Trim the cable (4 places) to about 1 inch (2.54 cm.).
- Remove the outer sheath from the trimmed ends of the cable and then strip the conductors so only about ¼ inch (6.3 mm.) of the RED and WHITE colored insulation is exposed.
- Lightly tin the exposed end of each wire.
- Mount the completed transformer in the space indicated on the PCB. Pass each stripped wire end through the hole marked with its color.
- Install the right angle output terminals in the 3 places indicated on the PCB.
- Install a thumb screw and 2 flat washers into each right angle output terminal
- Turn the PCB over and install mounting feet as shown in the photo.

