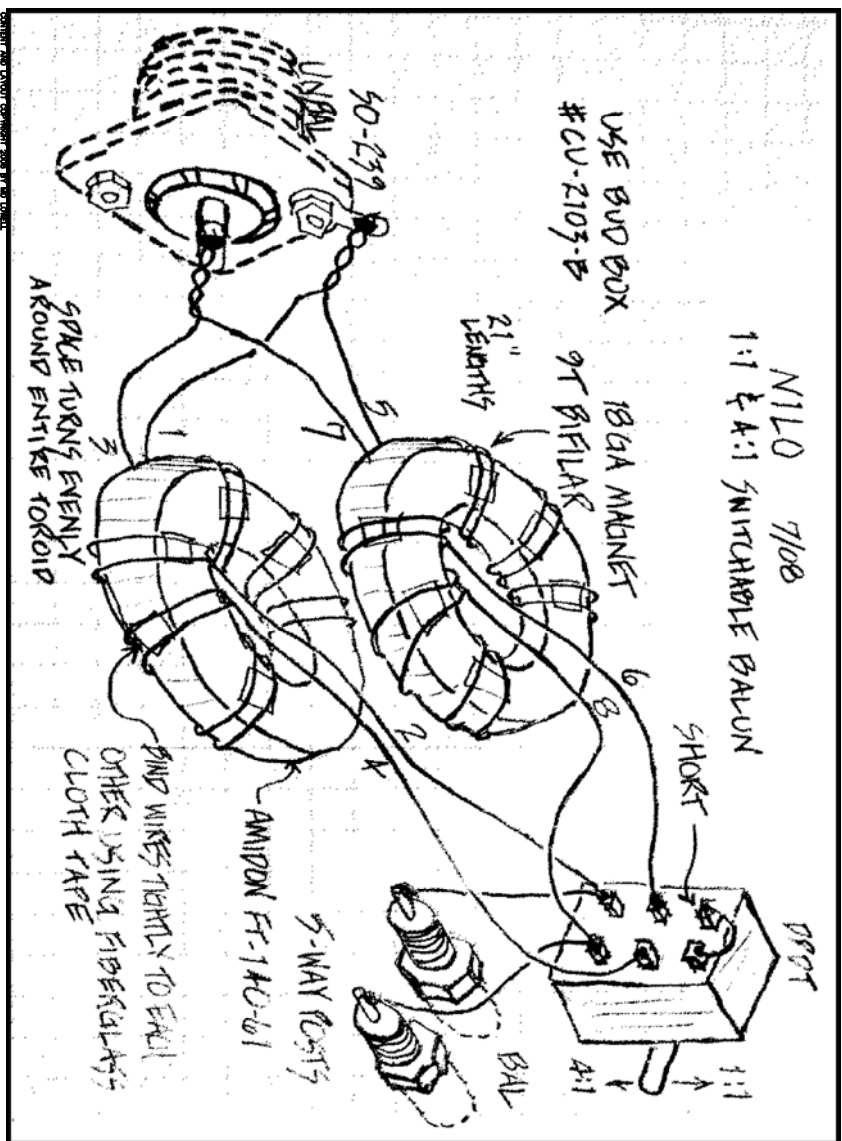




PARTS LIST (AS OF JULY 2008)
 TOROIDS - AMIDON FT-140-61 (.75X1.14X.55 OD, u=125)
 8" 18 GA THERMALIZE MAGNET WIRE - AMIDON #AWG #18 HAPT
 12" FIBERGLASS TAPE (1/2" WIDE) - SCOTCH #27
 BUD BOX 2.25X2.25X4" - #CU-2103-B MOUSER #563-CU-2103-B
 SO-239 UHF PANEL JACK - MOUSER #523-83-1R
 5 WAY BINDING POST - MOUSER #530-111-0107-1
 MINIATURE DPDT SW - MOUSER #108-0010-EVX
 SCREWS - #4-40 X 3/8"

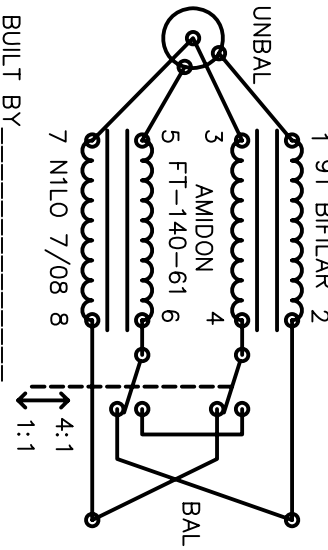
NOTES (LAST UPDATE 20080719)
 This balun is intended for 100W into multiband antennas fed with parallel line. Switch impedances as needed for the best/easiest match with your tuner, or change the feedline length a few feet (optimal electrical length is odd multiples of 1/8 wavelength). Using either 50 (@1:1) or 200 (@4:1) ohm resistors, I measured an SWR below 1.3:1 on 160-10m.

Use the template to mark the hole positions and a punch or step drill to make them. Drill the screw holes after placing the jack in the 5/8" hole. Put some ventilation holes in the sides to help you detect excess heat in the case of a poor match.

The two toroids are wound identically. Each is a Guanella 1:1 current balun by itself. Use 3/8" lengths for each tape wrap and space them 3/8" apart. Avoid twists and space the windings evenly around the entire toroid. Follow the schematic and use tic marks to number the wires. Using a torch, followed by scotchbrite or sandpaper, will minimize the scraping necessary to remove the wire's enamel insulation.

---...MARK_N1LO...---

PRINT THIS ACTUAL SIZE ON 8.5X11 PAPER. THIS LENGTH MUST BE 10.0" AFTER PRINTING FOR THE TEMPLATE TO MATCH THE BOX: ————

N1LO BALUN BOX TEMPLATE FOR BUD BOX #CU-2103-B	 Ø5/8	CUT N PASTE INSIDE LID  BUILT BY _____	ALIGN WITH BOTTOM OF SIDE-->  Ø5/16  Ø1/4  Ø5/16
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