

INSTRUCTION MANUAL

ORDER NO. 553

FERRITE BALUN
 MODEL BN-27A

PN 805665

Description The Hy-Gain Model 553 is a ferrite, weather-sealed balun capable of handling power levels beyond maximum legal limit. With a transformation ratio of 1:1, the balun will couple into any 52-ohm balanced system such as dipoles and beam antennas.

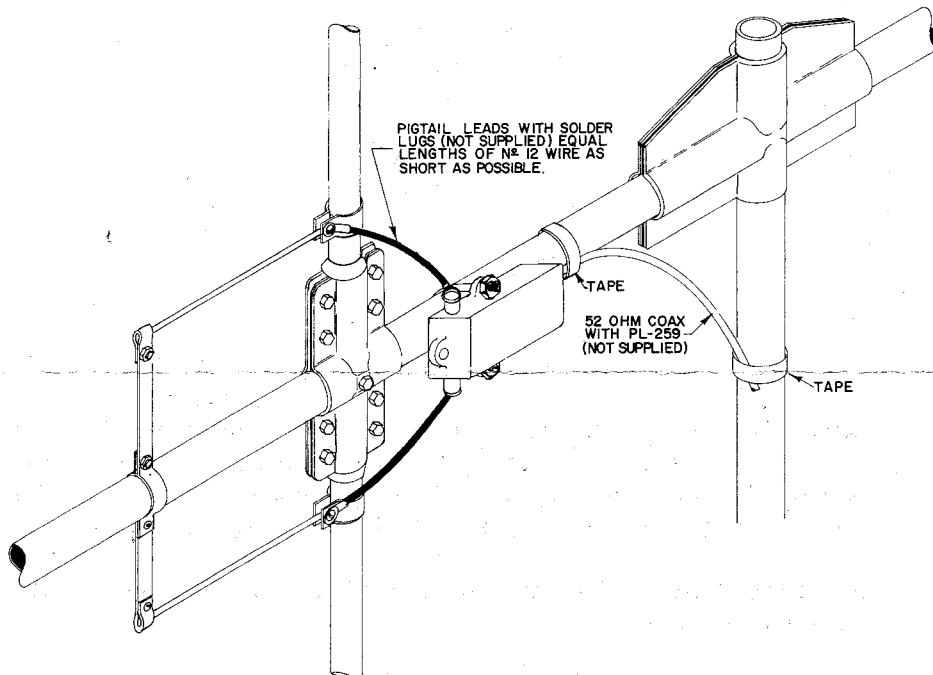
Specifications

Mechanical

- Weight 1 lb.
- Dimension 3-1/4" x 6-1/4"
- Input receptacle SO-239
- Output receptacle standard terminal lugs
- Weather protection weatherproof housing with condensation drain opening
- Housing material high impact injection molded Cicolac plastic

Electrical

- Impedance 52 ohms
- Frequency range citizens band
- Insertion loss negligible
- Power handling capabilities ... beyond maximum legal limits



Typical Single Beam Installation

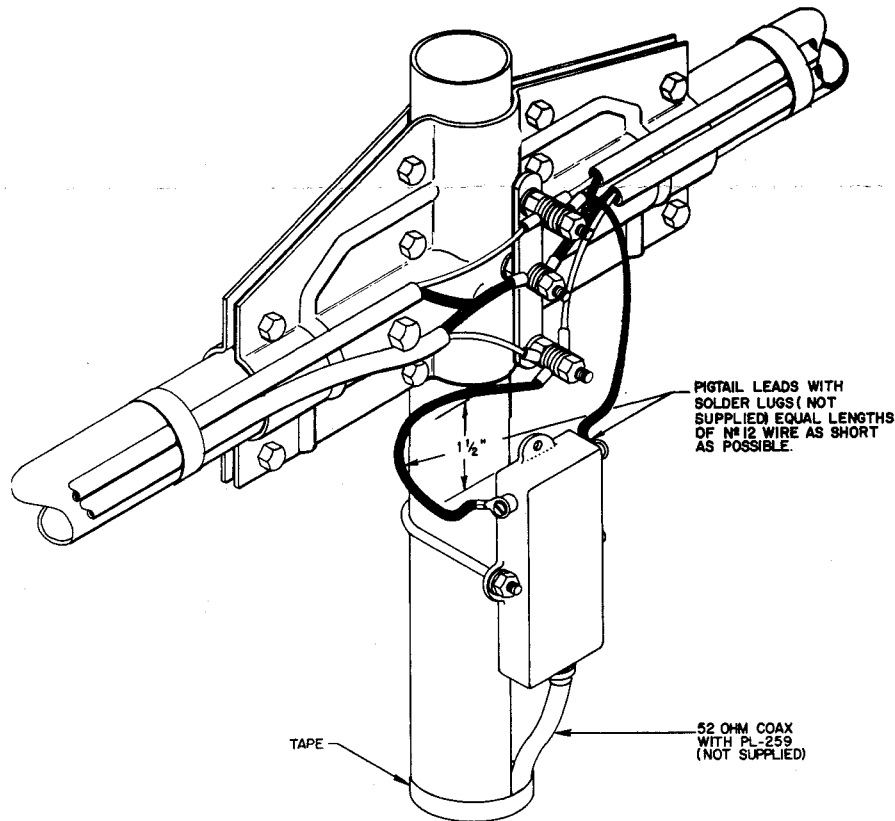
Installation

The Model 553 will mount on either a boom or mast with diameters of 1-3/8" x 2-3/8". To install the Model 553, proceed as follows:

- () Place the U-bolt around mast or boom.

- () Place balun against mast or boom, inserting U-bolt through holes on sides of balun.
- () Tighten nuts securely.
- () Connect leads to driven element.
- () Connect coax to receptacle on balun.

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Typical Duo-Beam Installation

NOTE: Fasten the balun as close as possible to the driven element. Leads from the two terminal outputs to the driven element should not exceed either 7" or existing lengths of the fanned coax leads. Longer lengths will lower the resonant frequency of the entire antenna system.

The coaxial connections should be weatherproofed with some material such as neoprene.

NOTE: An ohmmeter check of the balun at all points will show a DC short. THIS IS NORMAL! This is not a short with respect to rf energy at the balun's design frequency.

Parts List

Part No.	Description	Qty
873481	balun assembly	1
873476	Parts Pack	1
505540	screw, 1/4"-20 x 3/8"	2
567110	lockwasher, 1/4"	2
556970	nut, 10-24 hex	2
541363	U-bolt, 10-24 x 2-1/2"	1

90-DAY LIMITED WARRANTY

Hy-Gain Electronics Corporation warrants each new product manufactured to be free from defects in material and workmanship and agrees to remedy any such defect or to furnish a new part in exchange for any part of any unit which under normal installation, use, and service, discloses such defect within the ninety-day term of this warranty, dated from the date of purchase by the original owner. This warranty applies only to the original purchaser.

This warranty does not extend to any of our products which have been subjected to misuse, neglect, accident, incorrect wiring not our own, improper installation, or to use in violation of instructions furnished by us. Nor does it extend to units which have been repaired or altered outside of our factory, nor to accessories used therewith not of our own manufacture.

Upon receipt of equipment, the purchaser is responsible for checking the contents for damage. Any shipping damage should be referred to the carrier.

Hy-Gain Electronics Corporation reserves the right to make any changes deemed necessary or desirable without advance notice or incurring any obligation to make like changes in units previously manufactured or sold.

This warranty does not cover transportation costs that may be incurred. Hy-Gain Electronics Corporation's sole liability is the remedy of any defect for the ninety-day period of this warranty. Hy-Gain Electronics Corporation is not responsible for

personal injury or property damage resulting from improper or careless installation, or usage not intended by the manufacturer.

No person is authorized to assume for us any other liability in connection with the sale of our products.

All warranties are void and terminated one year after the last unit of its type and design has been manufactured by us.

All claims of defect or shortage should be addressed to:

Hy Gain Warranty Service
Hy-Gain Electronics Corporation
4900 Superior Ave.
Lincoln, Nebraska 68504

You must furnish model number, date, place, and proof of purchase, such as a copy of the sales receipt to establish warranty. Your letter should include all pertinent details along with part or item numbers involved. Do not return anything until requested to do so. No warranty card is furnished; you must supply the above information.

Any returned items must have prior authorization. Unexpected returns are greatly delayed in handling. These delays can be avoided by writing in advance and furnishing the necessary information.