

## **INSTRUCTION MANUAL**

# **LDA-50**

## L-Band Distribution Amplifier

**Stock No. 6434** 

## **Description**

The Blonder Tongue LDA-50 is a self-contained L-band indoor distribution amplifier designed specifically for trunk line applications. The amplifier is designed to amplify the 950-2050 MHz band, thus can be used with stacked LNB systems that use this bandwidth. The output is exceptionally flat, 1 dB p/v over the entire bandwidth (relative to tilt), and has a built-in tilt of 12 dB to aid in distribution design. If the network design does not require the full gain of the unit, the gain control can be employed to prevent overdriving of the receivers.

#### **Features**

- Exceptional Temperature Stability Range of -20° C to +60° C
- 12 dB Fixed Slope
- · Gain Control of 15 dB
- Slim Line Chassis for Ease of Installation 1.25"
- Aluminum Chassis Designed for Superior Heat Dissipation to Insure Component Reliability
- High Gain, 52 dB at 2050 MHz, 40 dB at 950 MHz
- Excellent Flatness, 1 dB p/v, Relative to Tilt Over Entire Band
- Good Return Loss, (16 dB) to Prevent Distortions
- High Output Level 50 dBmV/1dBm @ 2050 MHz

Instruction Manual

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.





The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

#### NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV System Installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

## **Specifications**

Frequency Range: 950-2050 MHz

Max Gain:

52 dB @ 2050 MHz 40 dB @ 950 MHz

Max Output Level: 50 dBmV/1dBm @ 2050 MHz

Flatness: 1 dB p/v, Relative to Tilt

Tilt: 12 dB

Gain Control: 15 dB

Output Return Loss: 16 dB

Noise Figure: 6 dB

Current Consumption: 380 mA @ +5 Vdc

**Dimensions:** 

10 x 6 x 1.25 L x W x H, inches 254 x 152.4 x 31.75 L x W x H, mm

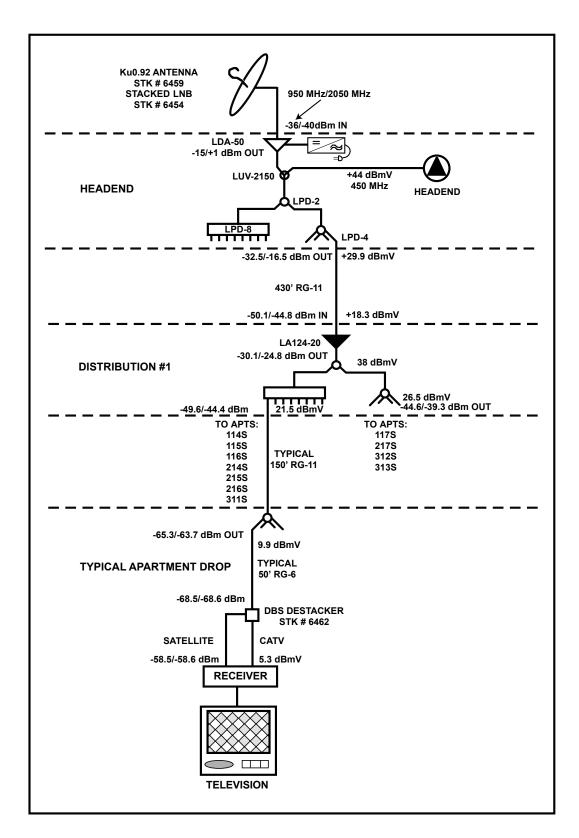
Weight:

2.5 lbs. 1.13 kg.

## **Operational Description**

Mount unit on a dry, clean surface. Connect feed from satellite dish or existing network distribution to the input connector. Input level should be below 12 dBmV / -37 dBm per transponder, with the gain control turned all the way counter clockwise, in order to prevent overdriving the unit. Connect the output to the network. Connect the power supply to the unit. The amplifier should now be operational. Adjust the gain control to optimize network performance, and prevent overdriving of the receivers.

## **Application Drawing**



### **Limited Warranty**

Blonder Tongue Laboratories, Inc. (BT) will at its sole option, either repair or replace (with a new or factory reconditioned product, as BT may determine) any product manufactured by BT which proves to be defective in materials or workmanship or fails to meet the specifications which are in effect on the date of shipment or such other specifications as may have been expressly agreed upon in writing (i) for a period of one (1) year from the date of original purchase (or such shorter period of time as may be set forth in the license agreement specific to the particular software being licensed), with respect to iCentral<sup>TM</sup> (hardware and software) and all other software products (including embedded software) licensed from BT, (ii) ) for a period of one (1) year from the date of original purchase, with respect to all fiber optics receivers, transmitters, couplers and integrated receivers/distribution amplifiers (including TRAILBLAZER<sup>TM</sup>, RETRO-LINX<sup>TM</sup> and TWIN STAR<sup>TM</sup> products) as well as for VideoCipher® & DigiCipher® satellite receivers, and (iii) for a period of three (3) years from the date of original purchase, with respect to all other BT products. Notwithstanding the foregoing, in some cases, the warranty on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in BT products and on certain private—label products manufactured by third-parties for resale by BT are of shorter duration or otherwise more limited than the standard BT limited warranty. In such cases, BT's warranty with respect to such third-party proprietary sub-assembly modules and private-label products will be limited to the duration and other terms of such third-party vendor's warranty. In addition, certain products, that are not manufactured but are resold by BT, carry the original OEM warranty for that product. The limited warranty set forth in this paragraph does not apply to any product sold by BT, which at the time of sale constituted a Closeout Product.

BT will at its sole option, either repair or replace (with a new or factory reconditioned product, as BT may determine) any product sold by BT which at the time of sale constituted a closeout item ("Closeout Product"), which proves to be defective in materials or workmanship or fails to meet the specifications which are in effect on the date of shipment or such other specifications as may have been expressly agreed upon in writing, for a period of ninety (90) days from the date of original purchase. Notwithstanding the foregoing, in some cases, the warranty on third party software and on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in BT products and on certain private—label products manufactured by third-parties for resale by BT are of shorter duration or otherwise more limited than the BT limited warranty for Closeout Products. In such cases, BT's warranty for Closeout Products constituting such third party software, third-party proprietary sub-assembly modules and private-label products will be limited to the duration and other terms of such third-party vendor's warranty. In addition, notwithstanding the foregoing, (i) certain Closeout Products that are not manufactured (but are resold) by BT, carry the original OEM warranty for such products, which may be longer or shorter than the BT limited warranty for Closeout Products. All sales of Closeout Products are final.

To obtain service under this warranty, the defective product, together with a copy of the sales receipt or other satisfactory proof of purchase and a brief description of the defect, must be shipped freight prepaid to: Blonder Tongue Laboratories, Inc., One Jake Brown Road, Old Bridge, New Jersey 08857.

This warranty does not cover damage resulting from (i) use or installation other than in strict accordance with manufacturer's written instructions, (ii) disassembly or repair by someone other than the manufacturer or a manufacturer-authorized repair center, (iii) misuse, misapplication or abuse, (iv) alteration, (v) lack of reasonable care or (vi) wind, ice, snow, rain, lightning, or any other weather conditions or acts of God.

OTHER THAN THE WARRANTIES SET FORTH ABOVE, BT MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, AS TO THE CONDITION, DESCRIPTION, FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR AS TO ANY OTHER MATTER, AND SUCH WARRANTIES SUPERSEDE ANY ORAL OR WRITTEN WARRANTIES OR REPRESENTATIONS MADE OR IMPLIED BY BT OR BY ANY OF BT'S EMPLOYEES OR REPRESENTATIVES, OR IN ANY OF BT'S BROCHURES, MANUALS, CATALOGS, LITERATURE OR OTHER MATERIALS. IN ALL CASES, BUYER'S SOLE AND EXCLUSIVE REMEDY AND BT'S SOLE OBLIGATION FOR ANY BREACH OF THE WARRANTIES CONTAINED HEREIN SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT F.O.B. SHIPPING POINT, AS BT IN ITS SOLE DISCRETION SHALL DETERMINE. BT SHALL IN NO EVENT AND UNDER NO CIRCUMSTANCES BE LIABLE OR RESPONSIBLE FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, PUNITIVE, DIRECT OR SPECIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT LIABILITY OR OTHERWISE OR ANY OTHER LEGAL THEORY ARISING DIRECTLY OR INDIRECTLY FROM THE SALE, USE, INSTALLATION OR FAILURE OF ANY PRODUCT ACQUIRED BY BUYER FROM BT.

All claims for shortages, defects and non-conforming goods must be made by Buyer in writing within five (5) days of receipt of merchandise, which writing shall state with particularity all material facts, concerning the claim then known to Buyer. Upon any such complaint, Buyer shall hold the goods complained of intact and duly protected, for a period of up to sixty (60) days. Upon the request of BT, Buyer shall ship such allegedly nonconforming or defective goods, freight prepaid to BT for examination by BT's inspection department and verification of the defect. BT, at its option, will either repair, replace or issue a credit for products determined to be defective. BT's liability and responsibility for defective products is specifically limited to the defective item or to credit towards the original billing. All such replacements by BT shall be made free of charge f.o.b. the delivery point called for in the original order. Products for which replacement has been made under the provisions of this clause shall become the property of BT. Under no circumstances are products to be returned to BT without BT's prior written authorization. BT reserves the right to scrap any unauthorized returns on a no-credit basis. Any actions for breach of this contract must be commenced by Buyer within thirteen (13) months after the cause of action has accrued. A copy of BT's standard terms and conditions of sale, including the limited warranty, is available from BT upon request. Copies of the limited warranties covering third-party proprietary sub-assembly modules and private-label products manufactured by third-parties are also available from BT on request. VideoCipher are registered trademarks of Motorola Corp.



One Jake Brown Road
Old Bridge, NJ 08857-1000 USA

(800) 523-6049 • (732) 679-4000 • FAX: (732) 679-4353