

SOLUTIONS FOR ALL YOUR APPLICATIONS

Stock No. 5750/5770/5780 User Manual

# **ACA Series**

Apartment Complex Amplifiers with Passive Return Path

| Model      | Stock No. |
|------------|-----------|
| ACA-30-55R | 5750      |
| ACA-30-75R | 5770      |
| ACA-30-86R | 5780      |



### **DESCRIPTION**

The Blonder Tongue two-way Apartment Complex Amplifiers with Passive Return Path are broadband indoor hybrid distribution amplifiers designed for RF distribution systems whose input signal source is a "cable drop", the output of an MATV headend or a small CATV headend. Three models are available: The #5750 with a 47 to 550 MHz bandpass, the #5770 with a 47 to 750 MHz bandpass, and the #5780 with a 47 to 860 MHz bandpass.

All are designed for apartment housing complex, hospital, prison or hotel applications. They have flat operational gain, which is variable within the range of a 16 dB to 31 dB (see Specifications for typical value of each model) using a built-in gain control and has a 10 dB slope control range. Using a push-pull hybrid module as its gain block, they will deliver high output level signals with low distortion.

The units can be powered by 117 volts AC with the external power transformer supplied or by 24 volts AC.

#### **FEATURES**

- Hybrid IC Circuitry for High Output with Low Distortion
- Exceptional Temperature Stability Range of -20° C to +60° C
- Low 47 MHz Band Edge
- Line Transient Protection
- Externally Accessible Gain and Slope Controls for Easy Adjustments

800-523-6049 www.blondertongue.com

Made in China

651170200H 051115 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 agnitude 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 SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

#### **NOTE TO CATV INSTALLERS**

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.

| Model:                                 | ACA-30-55R  | ACA-30-75R         | ACA-30-86R         |
|--|---|--------------------|--------------------|
| Stock No:                              | 5750  | 5770               | 5780               |
| RF                                     |   |                    |                    |
| Frequency Range (MHz):                 | 5-30<br>47-550 MHz                                | 5-30<br>47-750 MHz | 5-30<br>47-860 MHz |
| Channel Loading:                       | 77  | 110                | 129                |
| Flatness (dB):                         | ±1.00   | ±1.00              | ±1.00              |
| Gain (Reverse)(dB):                    | 31, (75)  | 31, (75)           | 31, (75)           |
| Noise Figure (dB)(a):                  | 8.5   | 9.0                | 9.0                |
| Output Level (dBmV):                   | +36/+44   | +34/+44            | +34/+44            |
| Gain Control Range (dB):               | 15  | 15                 | 15                 |
| Slope Control Range (dB):              | 10  | 10                 | 10                 |
| Composite Triple Beat - CTB (dB)(b):   | -64   | -63                | -56                |
| Cross Modulation - XMOD (dB)(b):       | -64   | -62                | -58                |
| Composite Second Order - CSO (dB)(b):  | -58   | -64                | -58                |
| Hum Modulation (dB):                   | -65   | -65                | -65                |
| Input Return Loss (dB):                | 12  | 12                 | 12                 |
| Output Return Loss (dB):               | 12  | 12                 | 12                 |
| General                                |   |                    |                    |
| Power Requirements - Voltage (VAC)(c): | 117, ±10%<br>24                                   |                    |                    |
| Power Requirements - Frequency (Hz):   | 60  |                    |                    |
| Power Requirements - Power (W):        | 19  |                    |                    |
| Operating Temperature Range (°C):      | -20 to +60  |                    |                    |
| Mechanical                             |   |                    |                    |
| Dimensions (LxWxH):                    | 6.3" x 8.86" x 2.76" in (160 mm x 225 mm x 70 mm) |                    |                    |
| Weight:                                | 3.7 lbs (1.7kg)                                   |                    |                    |

Notes: (a) Measured at full gain with OdB slope. (b) At rated output capability and channel loading. (c) The ACA-30 Series can be powered via 117VAC using the included transformer or via 24 VAC without transformer.

# **INSTALLATION CAUTION NOTES**

- 1. Connect Only to Transformer Supplied with Amplifier.
- 2. Do Not Short Power Supply Terminals. Protective Fuse Inside of Sealed Power Supply Case Will Open.

## INSTALLATION PRECAUTIONS TABLE

| PRECAUTION                               | REQUIREMENT  |
|--|--|
| Ensure easy access to rack wiring        | Allow a minimum of 18 in. (50 cm) clearance behind the equipment rack(s).  |
| Facilitate servicing and maintenance     | Allow a minimum of 36 in. (100 cm) clearance in front of equipment rack(s).  |
| Avoid direct heating or air conditioning | If unavoidable, use deflector plates.  |
| AC power source outlets                  | Locate equipment near sufficient outlets to provide power for test equipment and power tools.                        |
| Rack support                             | Make certain rack supports are sufficiently rigid to support rack(s).  |
| Building leakage                         | Beware of dripping water onto equipment from leaky roofs, waveguide roof entries, and cold water pipe condensations. |

## Returning Product for Repair (or Credit)

A Return Material Authorization (RMA) Number is required on all products returned to Blonder Tongue, regardless if the product is being returned for repair or credit. Before returning product, please contact the Blonder Tongue Service Department at 1-800-523-6049, Ext. 4256 or visit our website: www.blondertongue.com for further information.