



## INSTRUCTION MANUAL

### RMDA 86A-30

### Rack Mount Distribution Amplifier/Active Return Path Series

Stock No. 5200-83

### Description

The Blonder Tongue RMDA-ARP is a completely self-contained rack mount distribution amplifier designed specifically for CATV and SMATV signal distribution systems which use a cable drop as a signal source.

The RMDA-ARP has a return gain of about 22 dB when in the active mode. Lower operating gains can be achieved by adjusting the variable attenuator. The unit can be attenuated over a range of 10 dB in the forward path and 18 dB in the return path. Gain and slope controls are located on the front panel for easy set-up and adjustment. Two -30 dB backmatched test points are provided to permit testing without interruption of service.

In applications where input signals are too high or where greater cable equalization is necessary, the RMDA-ARP can be reconfigured by using plug-in fixed attenuators (forward and return) and cable slope equalizers (forward) to meet particular requirements.

Push-pull, hybrid IC modules enable the RMDA-ARP to operate at high output levels while retaining low distortion characteristics.

The aluminum chassis is designed to provide excellent heat dissipation thus allowing operation at high ambient temperatures with no degradation of performance or reliability.

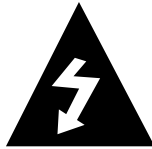
### Features

- Provides Two-Way Capability with an Active or Passive Return Path Set by Field-Changeable Jumpers.
- Hybrid IC Circuitry for High Output with Low Distortion.
- Front Panel Gain and Slope Controls for Easy Adjustments.
- Forward Path Input-Side Plug-In Fixed Attenuator and Cable Equalizer for Optimum Performance.
- Return Path Output-Side Fixed Attenuator for Optimum Performance.
- Externally Accessible Test Points Permit In-Service Testing.
- External "UL Listed" Power Transformer.



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The lightning flash with arrow-head 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.



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



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.

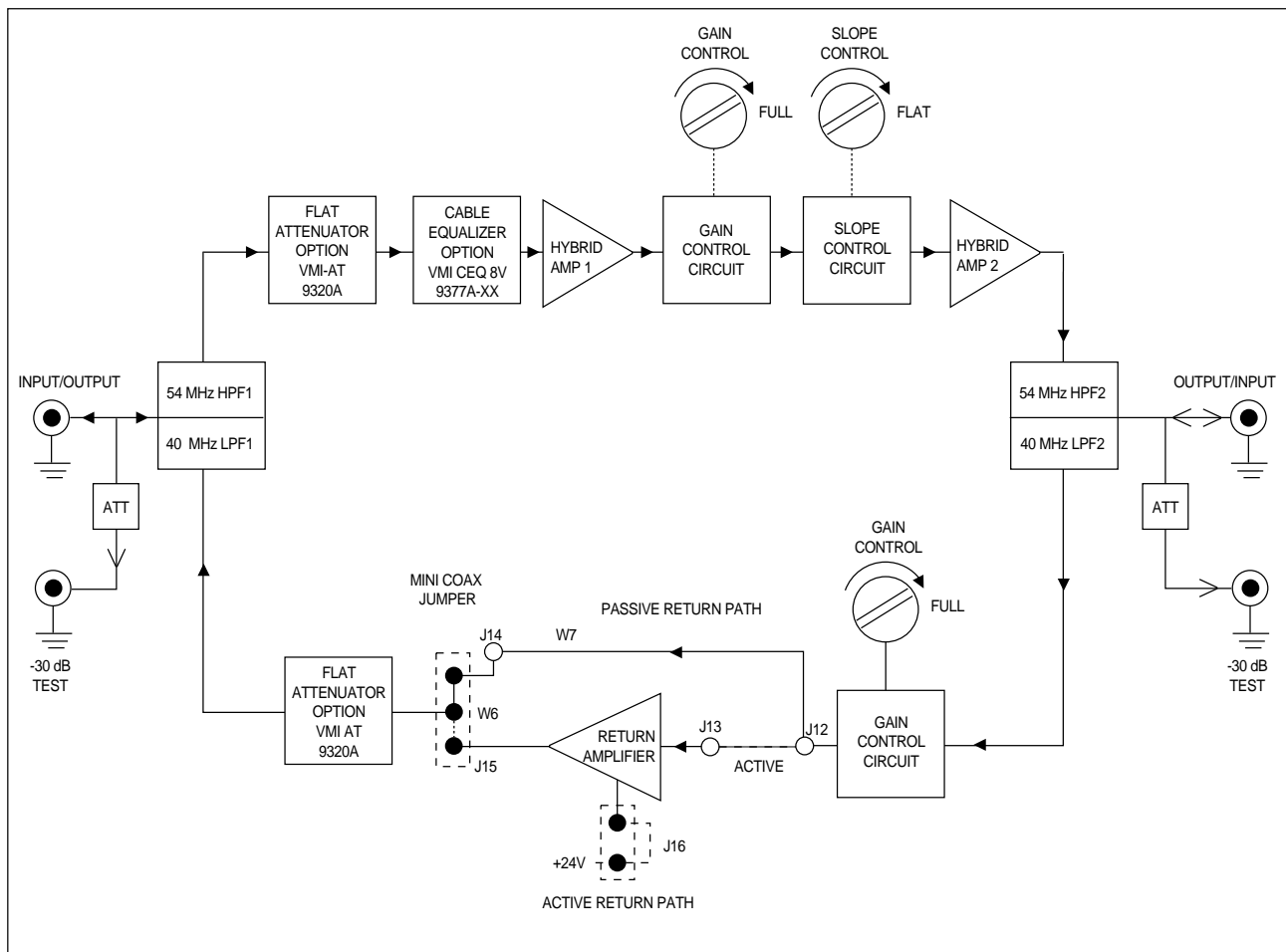


Figure 1

## Specifications

	<b>860-30 5200-83</b>	<b>Integrated Active Return Path</b>
Frequency Range:	54-860 dB	5-40 dB
Gain:	32 dB	22 dB Active, -1.5 dB Passive
Flatness:	± 0.75 dB	± 0.5 dB §
Gain Control Range:	10 dB	18 dB
Slope Control Range:	8 dB	-
Input Return Loss:	14 dB	15 dB
Output Return Loss:	14 dB	15 dB
Noise Figure:	8.5 dB	6.0 dB
No. of Channels (for CSO, CTV & XMD):	129	5
Output Level:	+34/42 dBmV	+48 dBmV
Composite Triple Beat (CTB):	-58 dB	-66 dB
Crossmodulation (XMOD):	-58 dB	-60 dB
2nd Order Composite (CSO):	-59 dB	-70 dB
Impedance:		75 dB
Hum Modulation:		-70 dB
Input/Output Test Port Level:		-30 dB, ± 2
Input/Output Port Return Level:		20 dB
Operating Temperature Range:		-20° to +60° C
Power Requirements:		Wall Power Transformer, 105-130 VAC, 60 Hz, 0.38 Amp Max.
Size (WxHxD):		19 x 1.75 x 5.13 in 483 x 44 x 130 mm
Shipping Weight:		8 lbs 3.6 kg

### Plug-in Accessories

Flat Attenuator 0-18 dB in 1 dB Steps (9320-xx)

Cable Equalizer (-4 thru 20 dB) (9377A-xx)



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