

# LHA35-RM – 1 GHz

## Distribution Amplifier



LHA series CATV Distribution Amplifiers with active return are broadband indoor GaAs-Fet / PushPull distribution amplifiers designed for RF distribution systems such as those in Cable Television Apartments, Hotels, Hospitals and other applications where a high quality low noise figure amplifier is necessary to amplify the signals in both the forward and return paths.

***Revolutionary Technologies from Lindsay Broadband Inc.  
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Designed with flat operational gain of 35 dB in the forward bandwidth and 18 dB in the reverse bandwidth. They have an input variable equalizer and plug-in interstage equalization feature in the forward bandwidth for balancing , a forward 20 dB gain control and a 20 dB reverse gain control.

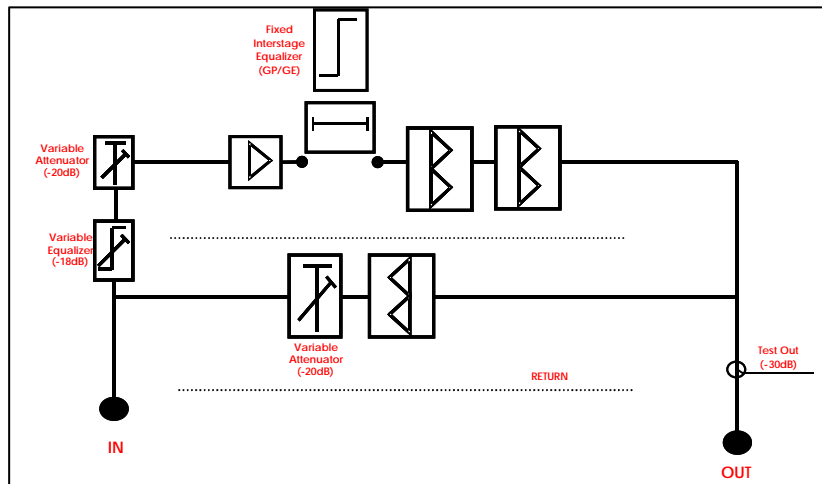
Plug in, midstage equalizer modules are available in several values and for 550, 750, 860 and 1000 MHz bandwidths.

The amplifiers are self powered and available in 117 and 230 volt.

### FEATURES

- GaAs-Fet Push Pull for high output levels with low distortions
  - Active reverse
- Gain and equalization controls
  - RFI housing
- Surge protection on all ports
- Diecast aluminium housing for heat dissipation
  - 117 and 230 Volt power

### Block Diagram



Ordering Information	GE-xx-yyy Plug in Equalizer				
Complete Stations	yyy (MHz)	550	750	860	1000
Model	Xx(dB)				
LHA35-RM 30/45	2	4-535	4-508	4-548	
LHA35-RM 42-54	4	4-536	4-509	4-549	
LHA35-RM 65/85	6	4-537	4-510	4-550	
	8	4-538	4-511	4-551	
	10	4-539	4-512	4-552	
	12	4-540	4-513	4-553	4-644
	14	4-541	4-514	4-554	4-645
	16	4-542	4-515	4-555	
	18	4-543	4-516	4-556	
	20	4-544	4-517	4-557	
	22	4-545	4-518	4-558	
	24	4-546	4-519	4-559	
	26	4-547	4-520	4-560	

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Typical, for T = 20degC, Zin = Zout = 75 ohms

Parameter	Notes	Forward GaAs-FET Push Pull	Reverse	Units
Bandwidth		54 to 1000	5 to 42	MHz
Min Full Gain		35	18	dB
Flatness		+/-1	+/-1	"
Return Loss, IN / OUT		-16	-16	"
RF Test Points		-30 (Out)		"
Gain Control, variable		0-20 (input)	0-20 (output)	"
Slope Control, variable		0-20 (input)	---	dB cable
Fixed Equalizers		0, to 26 in 2dB steps (midstage)	---	"
Forward Distortions, 79 channels:	42dBmV Flat Output			
CTB	on ch78	-62	---	dBc
CSO	on ch78	-66	---	"
Xmod	on ch2	-60	---	"
Forward Distortions, 79 channels	12dB interstage slope (54-1000MHz),ref 44dBmV			
CTB	on ch78	-65	---	dBc
CSO	on ch78	-72	---	"
Xmod	on ch2	-63	---	"
Reverse Distortions, 4 ch	52dBmV flat output			
3rd on T10	T8+T9-T7	---	-68	dBc
2nd on T9	T7+12MHz	---	-65	"
Xmod on T10	T7, T8, T9, T10	---	-64	"
Noise Figure		7	7	dB
Fwd Group Delay:	55.25-58.83MHz	max.38	---	nsec
Rev Group Delay:	41-42MHz	---	max.35	nsec
Hum Modulation		-70		dB
RFI Isolation	5-1000MHz	-100		"
Surge Withstand	IN / OUT	IEEEEC62.41 Cat.A3(6kV,200A)		
Powering		Mains, 117		Vac
Power Consumption		8.0		Watts
Temperature		-10 to +55		degC
Enclosure		IP54 Category, Diecast Aluminium		
Weight		3.8 / 1,7		lbs / kgs
Dimensions		19,5 * 13,6 * 7,5 cm / 7-5/8" * 5-3/8" * 3" inches		

## Notes for Specifications:

1. Equalizers available in 2 dB steps from 0 to 26 dB at 550, 750 or 860 MHz
2. Digital output levels are lower
3. Specifications are typical
4. Tolerance on station gain is  $\pm 2.0$  dB
5. All specifications are subject to change