

Model	Bandwidth
HEA37 (1GHz/42)	5-42 MHz / 54-1000 MHz
HEA37 (1GHz/65)	5-65 MHz / 85-1000 MHz



**FEATURES**

- 1 GHz forward bandwidth,
- GaAs Power Doubler Hybrid for high output levels with low distortions,
- Active Push Pull reverse path with separate output, field selectable active/passive operation,
- Both fixed plug-in and variable gain/equalization controls, all accessible from front panel,
- Rack Mount - 1 EIA (1.75") spacing, rugged aluminum chassis
- Surge protection at all ports,
- UL and CE listed power transformers,

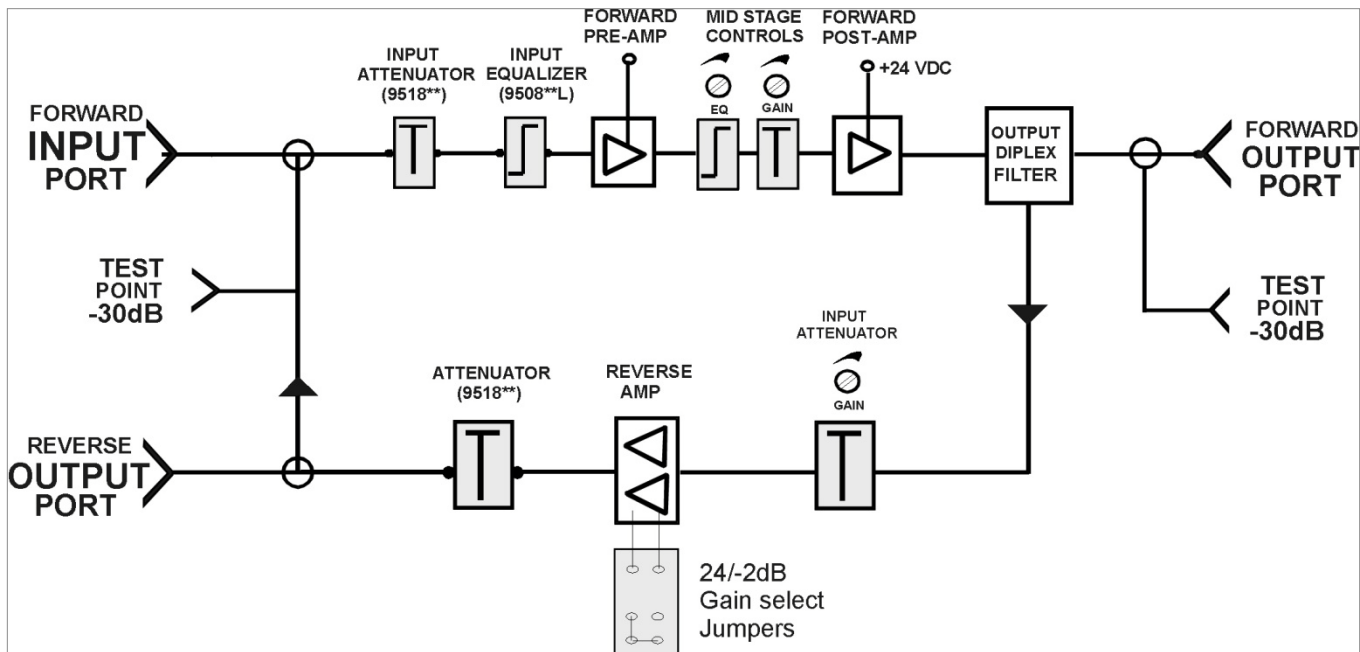
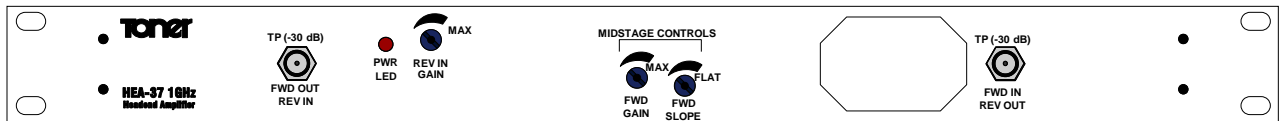


Figure 1 – Block Diagram

**INSTALLATION NOTES :**

1. Unpack the distribution amplifier.
2. Mount the amplifier in the desired location inside the rack cabinet. Please leave 1U rack space below and above the amplifier for proper ventilation.
3. Connect the input and output cables to the amplifier.
4. This product is shipped with default 0 dB pad for all plug-in attenuator and equalizers.
5. Before applying power to the amplifier make sure that the forward input level to the amplifier is not too high or damage to the amplifier might occur. To be on the safe side, you should select the input fixed attenuator to a max. value (e.g:20 dB) before powering the amplifier or preset forward path slope control fully clockwise. Forward input pad and equalizer plug in modules are reachable under the front panel window cover. Variable control for midstage equalizer is present at the front panel.
6. Ground connection is provided at the rear panel to ensure proper grounding to the amplifier.
7. Please use the power adapter supplied with the amplifier, plug the power line cord into a 115VAC/60Hz power source.



**Front Panel**

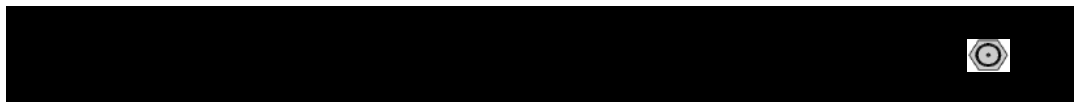
8. After applying power to the amplifier measure the amplifier forward output level at the 30 dB output test point. If it is very low then adjust the value of input fixed attenuator until the desired output level is reached at the highest operating frequency. Remember that the level measured at the test point is 30 dB lower than the real signal level.

9. Install a plug-in pad in order to activate the forward input equalization to adjust the output level to be flat across the full bandwidth.

10. Now adjust the mid-stage forward slope and attenuator controls to achieve as close as possible to the desired output signal level and slope.

11. Reverse gain can be set as 24dB or -2dB from the jumper settings reachable behind the front panel window.

**Fixed Module & Controls Layout under front pannel window.**



**Rear Panel**

SPECIFICATIONS	Forward Path	Return Path
Technology	Power Doubling, GaAs, Hybrid	Push Pull, Si-Bipolar
Frequency Range	54-1000 MHz (85-1000MHz optional)	5-42 MHz (5-65MHz optional)
Gain	38 dB (+/-1dB)	24 / -2dB switchable
Input Gain Control	Plug-in, fixed value , 0 to 20dB in 2dB steps,	0 to 18dB variable
Second Stage Gain Control	0 to 10dB variable, mid stage	Plug-in, fixed value , 0 to 20dB in 2dB steps
Input Slope Control	Plug in, fixed value, 0 to 20dB in 2dB steps	NA
Second Stage Slope Control	0 to 10dB variable, mid stage	NA
Input / Output Return Loss	14 dB	14dB
Noise Figure	5 dB	6 dB
Channel Loading / Output Level	NCTA 79ch, Flat Output / 47dBmV	4
Output Level	47dBmV	52 dBmV
Composite Tripple Beat (CTB)	-67 dBc	-60 dBc
Composite Second Order (CSO)	-71 dBc	-60 dBc
Crossmodulation (XMOD)	-63 dBc	-58 dBc
Max. Input Level (per channel, without using fixed input attenuator)	20dBmV @ 79ch 18dBmV @ 110ch	
Optimum Input Level Range	+7 dBmV to 12dBmV	
Impedance	75 ohm	75 ohm
Hum Modulation	-70 dBc	-70 dBc
Input / Output Test Port Level	-30 +/- 1dB	
Operating Temperature Range	-10C .....+55 degree C.	
Input / Output Connections	F type	
Surge Withstand (IN/OUT)	IEEE C62.41 Cat.A3(6kV,200A)	
Power Requirement	Wall Power Transformer, Input = 90-240VAC , 50-60Hz, 1A Output = 24 +/-1VDC, 1.25A	
Size (L x W x H)	22" x 15,75" x 3"	
Shipping Weight	6,75 lbs	

**Ordering Information – Plug In Accessories**

Attenuator Pads 870MHz 0 to 22dB in 1dB steps	<b>9518**</b> (replace ** with dB value)	Forward Equalizer 870MHz 0 to 22dB in 1dB steps	<b>9508** L</b> (replace ** with dB value)
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