

### STANDARD FEATURES

- On/off volume control
- Four(4) pin socket
- Variable vent system
- Windscreen
- 1 year loss or damage
- 1 year warranty

### OPTIONS

- Programmable volume control
- Multi-memory(2-4) with tone indicator
- Programmable telephone coil
- Flexstrip Programming
- Trimmer volume control
- On/Off switch
- Foto-coat
- Flip Top wax trap
- 10A Mini canal
- Windscoop/windhood

### Description

The 312S Paragon 2 an advanced 2 channel Digital Wide Dynamic Range Compression system.

Highly configurable digital signal processor provides excellent versatility, with independent channel compression characteristics including four(4) parameter I/O adjustment

Adjustable crossover frequency from 300Hz to 6300Hz

Independent active low cut and high cut filters

Full dynamic range, low noise and 16kHz bandwidth offers true, high fidelity audio processing without compromise

Adjustable low level expansion for quieter performance

Twin Average Detectors in each channel

AGC-o compression limiting

Effective dynamic range of 95dB

Variable notch filter with dynamic depth to help reduce acoustic feedback

Low Battery Indicator

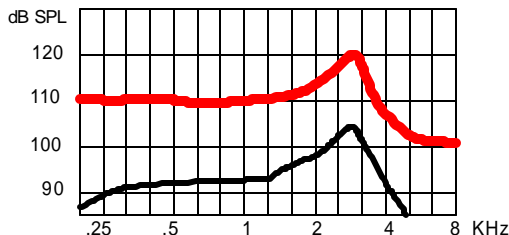
Multi Memory Tone Indicator

Programmable with HiPro or Microconnect card and the Audina ezFit software(NOAH or Standalone)

### Performance Data:

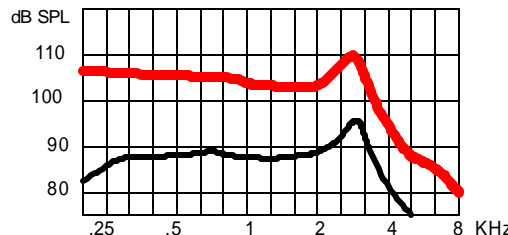
			Coupler 2cc IEC 118-7/94	Coupler MZ (7/1) IEC 118-0/94	Coupler 2cc ANSI S3.22-1996	Limits
SATURATION (OSPL 90)	Peak	dB SPL	110	120	110	+/- 3
	F Reference	dB SPL	103	113	104	+/- 3
	HF Average	dB SPL		112	105	+/- 3
Full-on Gain (Input: 50dB SPL)	Peak	dB	45	53	45	+/- 4
	F Reference	dB	38	46	38	+/- 4
	HF Average	dB			40	+/- 4
Nominal Reference Test Gain (RTG)		dB	26	41	28	
Frequency Range		Hz	200-8000			
Volume Control Range		dB	<40			
Total Harmonic Distortion at RTG:						
70 dB SPL in	500 Hz	%	1	1	1	<4
	800 Hz	%				
65 dB SPL in	1600 Hz	%			1	<4
Equivalent Input Noise Level		dB	30	30	30	<33
		dB			30	<33
Maximum Telecoil Sensitivity						
FOG; Input 10mA/m @ RTF		dB	91	95	94	
RTG; Input 31.6mA/m @ RTF		dB				
FOG; Input 31.6mA/m @ RTF		dB				
SPLITS @ RTF		dB			86	
HF Average		dB			88	
STS		dB			1.0	
Supply Current at RTG	input dB SPL		60	65		
		mA	0.90	0.90		<1.0
Battery Life	Type 312 Zinc-Air(110mAh)	hrs	120	120		
	Type 10A Zinc-Air(60mAh)	hrs	65	65		
AGC @ 2KHz	Attack	mS	60	60	60	+/-50%
	Release	mS	800	800	800	+/-50%
Reference Test Frequency(RTF)		Hz	1600	1000	1000	

IEC118-0

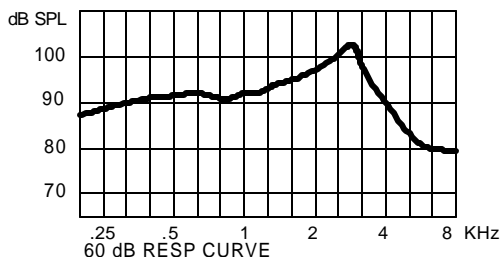


OSPL90 50 dB FULL ON GAIN CURVE

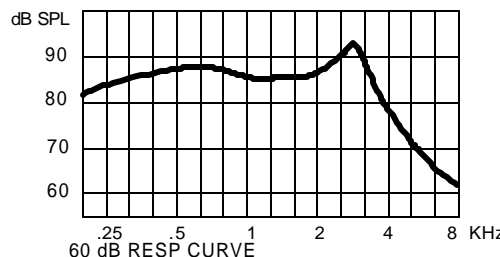
IEC 118-7/ANSI S3.22-1996



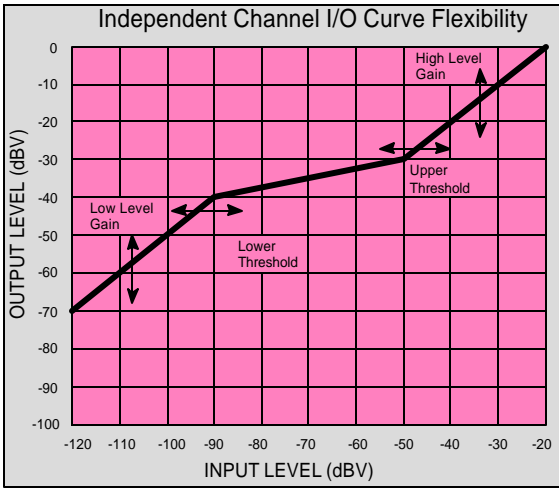
OSPL90 50 dB FULL ON GAIN CURVE



60 dB RESP CURVE



60 dB RESP CURVE



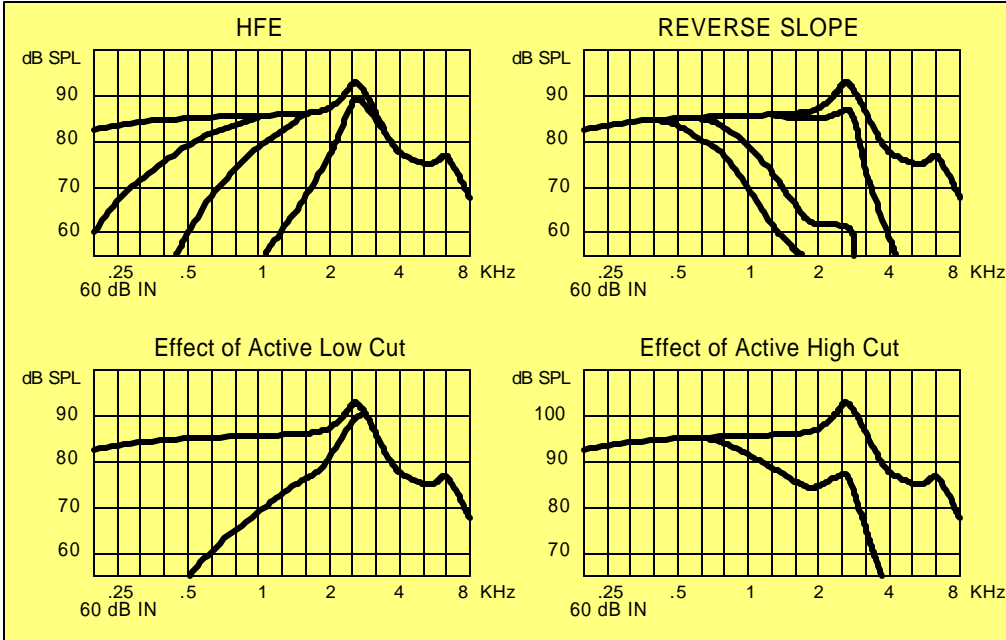
**CHANNEL PROCESSING**

This figure represents the I/O characteristics of independent AGC channel processing. The I/O curve can be divided into three(3) main regions:

- \*Low input level linear region
- \*Compression region
- \*High input level linear region (return to linear)

The I/O characteristics can be adjusted in four(4) ways:

- \*Low level gain
- \*Lower threshold
- \*Upper threshold
- \*Upper level gain

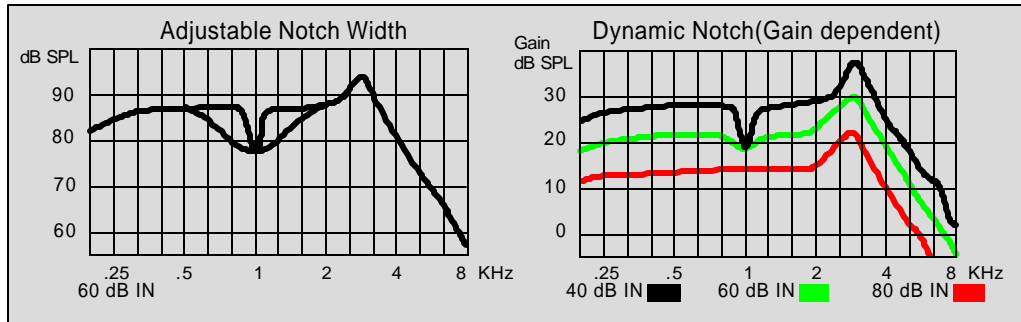


**FREQUENCY SHAPING**

The response curves to the left show the flexibility you get with the independent AGC channel processing and the adjustable crossover frequency you have with the Paragon 2.

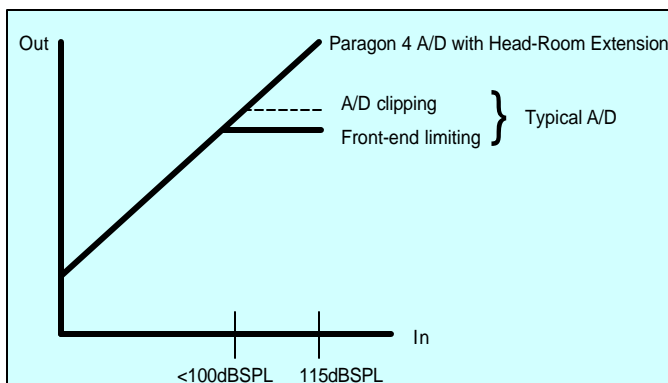
**FREQUENCY SHAPING**

The response curves to the left show the effect of the active low and the high cut controls.



**FEEDBACK MANAGEMENT**

To help control feedback the Paragon 4 incorporates a dynamic(gain dependent) notch filter. The notch center is adjustable from .8kHz to 5kHz in fifteen(15) steps. The width is also adjustable from 1/12 octave to a full octave.



**HIGH FIDELITY DIGITAL SYSTEM**

Dual A/D converters are combined with the Head-Room Extension Algorithm to yield a 16kHz bandwidth and a 95dB of full dynamic range hearing instrument.