

STANDARD FEATURES

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

OPTIONS

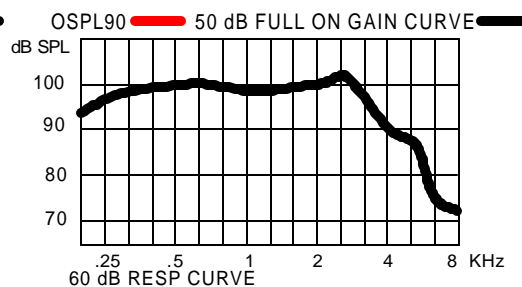
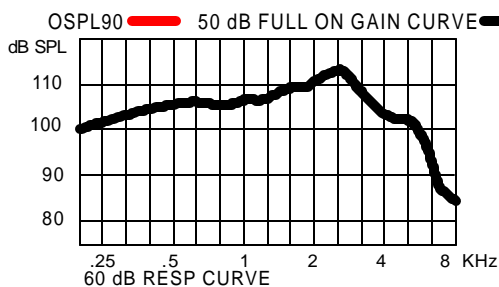
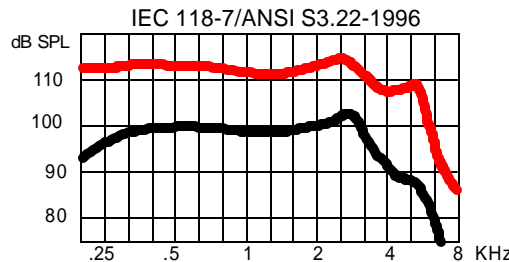
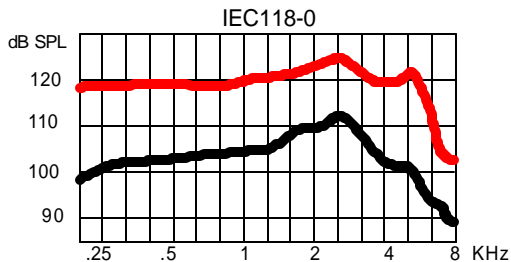
- Programmable volume control
- Multi-memory(2-4) with tone indicator
- Programmable telephone coil
- Program thru faceplate
- **FRONTWAVE** 2 microphone directional system
- Trimmer volume control
- On/Off switch
- Foto-coat
- Flip Top wax trap
- Windscoop/windhood

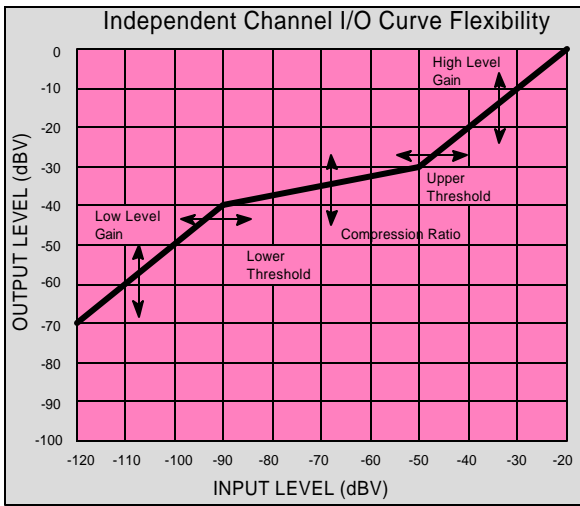
Description

- The FSS INSTINCT is cutting-edge technology featuring the latest in digital processing strategies; Intuitive Feedback Cancellation and Automatic Noise Reduction algorithms.
- Intuitive Feedback Reduction automatically reduces feedback without reducing gain. Spectral Information is maintained.
- 16 bands of gain adjustment for precise target matching
- Four selectable noise reduction algorithms
- Highly configurable digital signal processor provides excellent versatility, with independent channel compression characteristics including four(4) parameter I/O adjustment
- Three(3) adjustable crossover frequencies
- Full dynamic range, low noise and 16kHz bandwidth offers true, high fidelity audio processing without compromise
- Three(3) selectable time constants for each channel
- AGC-o compression limiting
- Effective dynamic range of 95dB
- Low Battery Indicator
- Multi Memory Tone Indicator
- Programmable with HiPro or the 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	115	125	115	+/- 3
	F Reference	dB SPL	113	120	113	+/- 3
	HF Average	dB SPL			113	+/- 3
Full-on Gain (Input: 50dB SPL)	Peak	dB	55	62	55	+/- 4
	F Reference	dB	49	58	48	+/- 4
	HF Average	dB			50	+/- 4
Nominal Reference Test Gain (RTG)		dB	38	48	36	
Frequency Range		Hz	200-7500			
Volume Control Range		dB	<40			
Total Harmonic Distortion at RTG:						
70 dB SPL in	500 Hz	%			1	<4
	800 Hz	%	1	1	1	<4
65 dB SPL in	1600 Hz	%			1	<4
Equivalent Input Noise Level		dB	30	30	30	<33
		dB			30	<33
Maximum Telecoil Sensitivity		dB	101			
FOG; Input 10mA/m @ RTF		dB				
RTG; Input 31.6mA/m @ RTF		dB		105		
FOG; Input 31.6mA/m @ RTF		dB			104	
SPLITS @ RTF		dB			96	
HF Average		dB			98	
STS		dB			1.0	
Supply Current	input dB SPL		60	65		
at RTG		mA	0.90	0.90		<1.0
Battery Life	Type 13 Zinc-Air(220mAh)	hrs	240	240		
	Type 312 Zinc-Air(110mAh)	hrs	120	120		
AGC @ 2KHz	Attack	mS	60	60	60	+/-50%
	Release	mS	800	800	800	+/-50%
Reference Test Frequency(RTF)		Hz	1600	1000	1000	





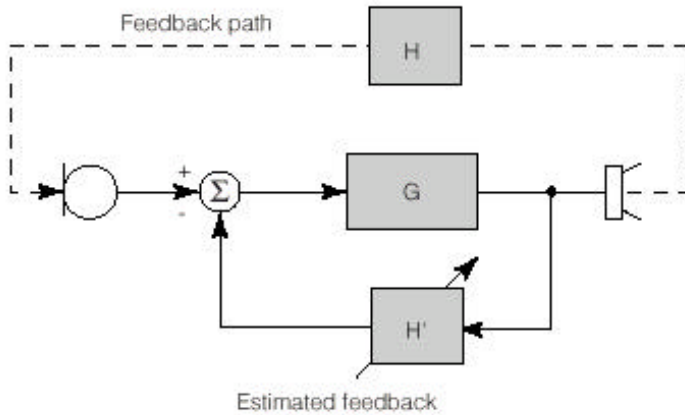
CHANNEL PROCESSING

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)

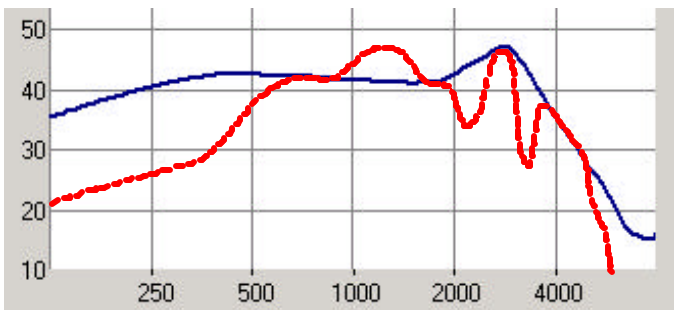
The I/O characteristics can be adjusted in four(4) ways:

- *Low level gain
- *Lower threshold
- *Upper threshold
- *Compression Ratio



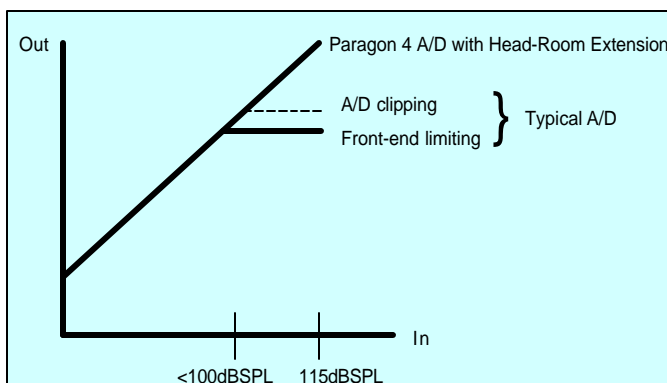
Intuitive Feedback Reduction

The intuitive feedback reduction(IFB) reduces the acoustic feedback by forming an estimate from the feedback signal and then subtracting this estimate from the hearing aid input. Therefore the forward path of the hearing is not affected. Unlike adaptive notch filter approaches, Instinct's IFB does not reduce the hearing aid's gain. The IFB is based on a time-domain model of the feedback path.



Sixteen-Band Gain Adjustment

- For precise target matching
- Low Frequency Shaping
- High Frequency Shaping
- Resonance Smoothing
- Feedback Notches
- Peak Shifting



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.