



## Unison Essential Custom

1 Program

3 Channels with 6 Bands, Digital WDRC<sup>3</sup>

### HEARING AID FEATURES

- 3 channels and 6 bands for fitting a wide range of audiometric configurations
- Digital Wide Dynamic Range Compression (Digital WDRC<sup>3</sup>)
- Multiband feedback manager at time of fitting via Unifit™ software
- Intelligent power management responds to environmental inputs more efficiently to maximize battery life
- Multi-channel quiet mode expansion reduces gain for very soft inputs, yet preserves moderately soft inputs such as speech for more pure, natural sound
- 1 program + optional telecoil program
- Wearers choose telecoil program through push button; audible beep confirms selection
- Low battery warning
- Manual volume control can be disabled in Unifit™
- Ideal volume indicator provides beep notification when correct gain is reached on the volume control
- Unison Essential can be programmed using Noah-compatible Unifit or standalone Unifit

### OPTIONS

- Telecoil (T) mode or Microphone/Telecoil (MT) mode fixed in additional telecoil program. Offered with canal, half-shell, and full-shell
- Easy t-coil for automatic telecoil operation

**SUITABLE FOR FITTING MILD TO SEVERE HEARING LOSSES**

**Fitting Guide**

Can fit audiogram configurations ranging from reverse to precipitously sloping.

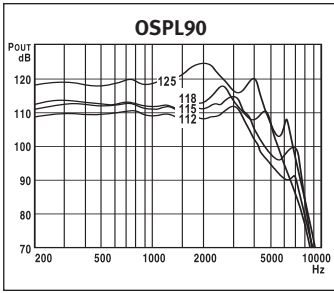
IEC 118-7 2CC COUPLER					
Styles	CIC	Mini-canal	Canal/ Half-shell	Full-shell	Full-shell power
Frequency Range (Hz)	100-7100	100-7100	100-7100	100-7100	100-6200
Peak Gain	40 dB	45 dB	45 dB	50 dB	60 dB
Peak Output	112 dB	112 dB	115 dB	118 dB	125 dB
Reference Test Gain	21 dB	23 dB	24 dB	29 dB	41 dB
Full on Average Gain*	30 dB	34 dB	34 dB	41 dB	51 dB
Average Output*	109 dB	109 dB	111 dB	113 dB	120 dB
Reference Test Frequency					1.6 kHz
Full on Gain at 1.6 kHz	31 dB	35 dB	35 dB	41 dB	53 dB
Output at 1.6 kHz	108 dB	108 dB	111 dB	112 dB	122 dB
Typical Battery Life	90 h	90 h	150 h	150/290 h	265 h
Zinc Air Premium	10A	10A	312	312/13	13
Current Drain at RTG	1.0 mA	1.0 mA	1.0 mA	1.0 mA	1.1 mA
Output with Inductive Input at 1.6 kHz	N/A	66 dB	66 dB	72 dB	83 dB
Quiet Mode Expansion "Off"					
Equivalent Input Noise at RTG 50 dB in	22 dB	22 dB	22 dB	21 dB	21 dB
Fast Time Constant					
Attack Time					< 40 ms
Release Time					100 ms
Slow Time Constant					
Attack Time					200 ms
Release Time					300 ms
Compression Ratio					
Wide Dynamic Range Compression					4:1 to 1:1

Note: Technical data generated with Quiet Mode Expansion "On"

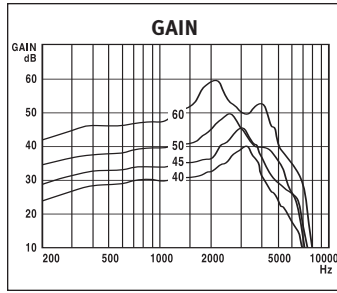
\*Average of: 500, 1000, and 2000 Hz

IEC 118-0 EAR SIMULATOR TECHNICAL DATA					
Styles	CIC	Mini-canal	Canal/ Half-shell	Full-shell	Full-shell power
Frequency Range (Hz)	100-7200	100-7200	100-7200	100-7200	100-7000
Peak Gain	52 dB	56 dB	56 dB	61 dB	70 dB
Peak Output	124 dB	124 dB	126 dB	128 dB	134 dB
Reference Test Gain	30 dB	33 dB	33 dB	38 dB	49 dB
Full on Gain at 1.6 kHz	40 dB	44 dB	44 dB	50 dB	61 dB
Output at 1.6 kHz	117 dB	117 dB	119 dB	121 dB	130 dB

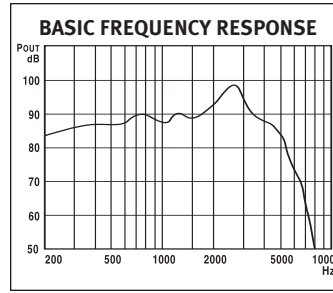
# UNISON ESSENTIAL CUSTOM IEC 118-7 2CC COUPLER SPECIFICATIONS



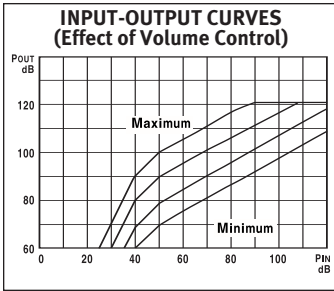
Input sound pressure level: 90 dB  
Volume control: full on



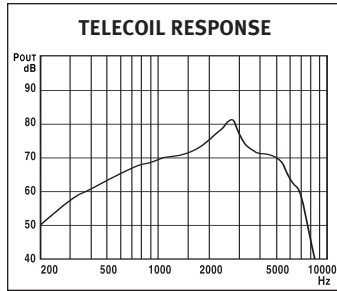
Input sound pressure level: 50 dB  
Volume control: full on



Input sound pressure level: 60 dB\*  
Volume control: RTG

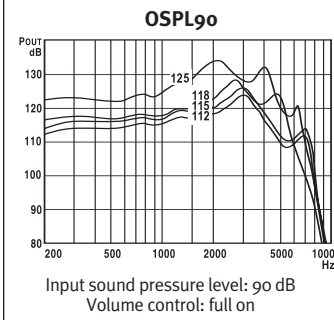


Input : at 1600 Hz\*  
Volume control: as shown

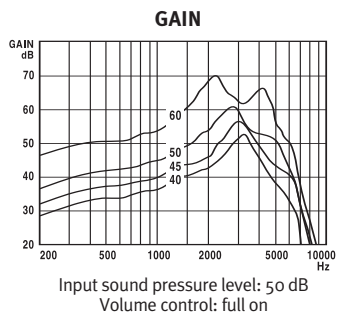


Input 1 mA/m\*  
Volume control: full on

## IEC 118-0 EAR SIMULATOR



Input sound pressure level: 90 dB  
Volume control: full on



Input sound pressure level: 50 dB  
Volume control: full on

\*Note: The performance was measured based on the Unison Essential full-shell: 118/50.

### TEST CONDITIONS

RTG-IEC: Reference Test Gain of the Volume Control  
 BATTERY: 13 Zinc Air Premium  
 SOURCE: Voltage 1.3 V  
 Impedance 6 Ohms  
 COUPLER: IEC-711, IEC-126  
 VENT: Closed at canal end  
 Refer to: "Summary of Test Conditions and Limits" for more details.

**AID MARKING:** Unison Essential

### COMPLIANCE

Our products are designed to meet all of the limits required when tested in accordance with the applicable standard.

### REFERENCES

IEC: International Electrotechnical Commission Publication 118-0, 118-7 (1983)  
 European Standard EN60118-0/A1 February, 1994

Caution: Hearing aids and batteries can be harmful if swallowed or improperly used.

This product is manufactured under the protection of U.S. Patent #4349082 & #5204917.

We reserve the right to change specification data without notice as improvements are introduced.

