



## Unison Essential BTE Series

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

### HEARING AID FEATURES

- 3 channels and 6 bands provide flexibility for fitting 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
- Multi-channel quiet mode expansion reduces gain for very soft inputs, yet preserves moderately soft inputs such as speech for more pure, natural sound
- Intelligent power management responds to environmental inputs more efficiently to maximize battery life
- Choice of moderate gain, power or high power versions
- 1 program + telecoil program
- Telecoil (T) mode or Microphone/Telecoil (MT) mode fixed in telecoil program
- Wearers choose program through push button; audible beep confirms selection
- Ideal volume indicator provides beep notification when correct gain is reached on the volume control
- Manual volume control can be disabled through Unifit™
- Off position in volume control on high power
- Low battery warning
- Direct audio input - MLx compatible
- Battery size 13; high power 675
- Unison Essential can be programmed using Noah-compatible Unifit software or standalone Unifit

### OPTIONS

- Tamper resistant battery door
- Tamper resistant volume control
- Filtered earhook
- Choice of shell colours
- Direct audio input battery door unit



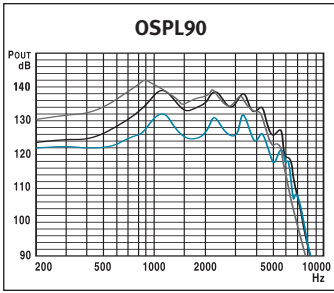
IEC 118-0 TECHNICAL DATA			
Styles	Unison Essential	Unison Essential P	Unison Essential HP
Frequency Range (Hz)	100-6400	100-5800	200-5500
Peak Gain	67 dB	76 dB	82 dB
Peak Output	132 dB	139 dB	142 dB
Reference Test Gain	49 dB	55 dB	61 dB
Full on Average Gain*	60 dB	68 dB	73 dB
Average Output*	126 dB	132 dB	138 dB
Reference Test Frequency	1.6 kHz	1.6 kHz	1.6 kHz
Full on Gain at 1.6 kHz	61 dB	67 dB	71 dB
Output at 1.6 kHz	125 dB	133 dB	136 dB
Typical Battery Life (Zinc Air Premium)	265 h	220 h	430 h
Current Drain at RTG	1.1 mA	1.3 mA	1.4 mA
Output with Inductive Input at 1.6kHz Quiet Mode Expansion "off"	90 dB	98 dB	103 dB
Equivalent Input Noise at RTG	15 dB	15 dB	15 dB
Fast Time Constant			
Attack Time	< 40 ms	< 40 ms	< 40 ms
Release Time	100 ms	100 ms	50 ms
Slow Time Constant			
Attack Time	250 ms	250 ms	250 ms
Release Time	300 ms	300 ms	300 ms
Compression Ratio			
Wide Dynamic Range Compression	4:1 to 1:1	4:1 to 1:1	4:1 to 1:1

\*Average of 500, 1000, and 2000 Hz

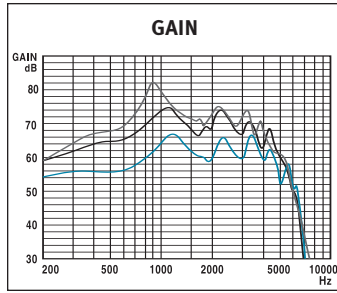
IEC 118-7 2CC COUPLER			
Peak Gain	60 dB	70 dB	76 dB
Peak Output	127 dB	135 dB	138 dB
Reference Test Gain	40 dB	48 dB	51 dB
Full on Gain at 1.6 kHz	52 dB	60 dB	63 dB
Output at 1.6 kHz	116 dB	125 dB	126 dB
Frequency Range (Hz)	100-5800	100-5700	200-5900

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

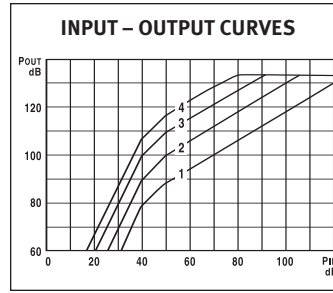
# UNISON ESSENTIAL DIGITAL BTE SERIES IEC 118-0 EAR SIMULATOR SPECIFICATIONS



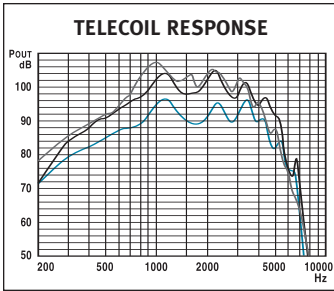
Input sound pressure level: 90 dB  
Volume control: full on



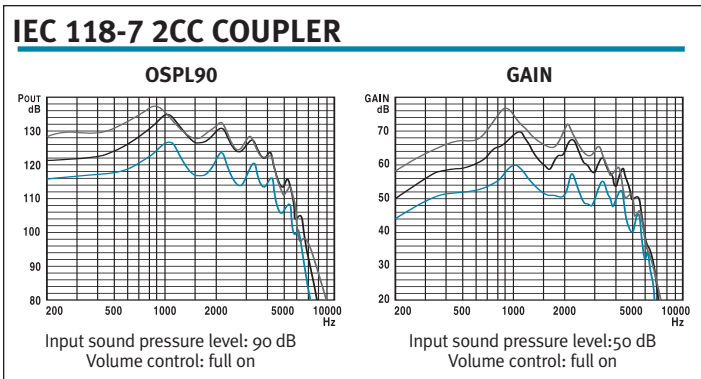
Input sound pressure level: 50 dB  
Volume control: full on



Unison Essential P - Input at 1600 Hz  
Volume control: as shown



Input 1 mA/m  
Volume control: full on



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

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

- Unison Essential
- Unison EssentialP
- Unison EssentialHP

## TEST CONDITIONS

RTG-IEC: Reference Test Gain of the Volume Control: RTG  
 BATTERY: 13 / 675 Zinc Air Premium  
 SOURCE: Voltage 1.3 V  
 Impedance 6 / 3.5 Ohms  
 EARHOOK: Unfiltered  
 TUBING: Length 25 mm,  
 Inside Diameter 1.93 mm  
 Refer to: "Summary of Test Conditions and Limits" for more details.

## AID MARKING:

Unison Essential,  
 Unison Essential P  
 Unison Essential HP

## 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 EN 60118-0/A1 February, 1994  
 JIS: Japanese Industrial Standard JIS C 5512-2000

Caution: Hearing aids and batteries can be harmful if swallowed or improperly used. Sound pressure level of this hearing aid exceeds 132 dB SPL.

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.

