

# ITE

ITC  
ITC Power

# STAGE



ISG233; ISG33;  
ISG233-P; ISG33-P

## Technical Datasheet

The Interton STAGE ITC is a new, trimmer-based product supported by the latest digital technology. The modern digital benefits of Stage combined with the traditional trimmer fitting makes this product contemporary, reliable and easy to use. And no computer is needed – you will be able to instantaneously bring your customers to the new STAGE of digital technology by simple adjustment of the trimmers.

### Standard Features

- Trimmer-based product, supported by 100% digital signal processing
- 4 channel swift compression (WDRC)
- Noise reduction in all four channels
- Expansion
- Delayed activation
- Audible tones:
  - low-battery warning
  - program change
  - delayed activation notification
- On/Off via the battery door

### Colours

Beige, Tan, Brown

### Options

- Analogue volume control
- Push button
- Programs:
  - Basic
  - Noise
  - Telecoil
- Retrieval line
- Telecoil

### Trimmers

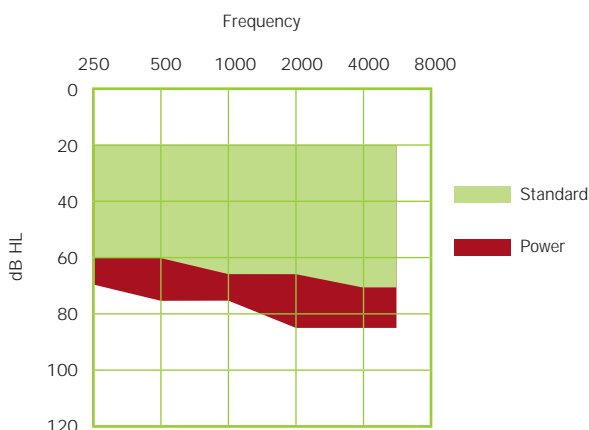
Fitting is possible through three trimmers:

- Low Frequency Cut (Green)
- Maximum Power Output (Black)
- High Frequency Cut (Yellow)

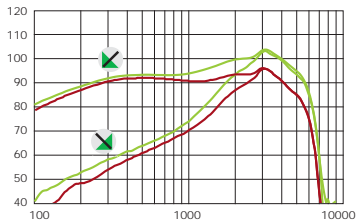
Two of these trimmers can be chosen for Stage ITC:

- ISG233 and ISG233-P have Low Frequency Cut and MPO
- ISG33 and ISG33-P are for other trimmer combinations

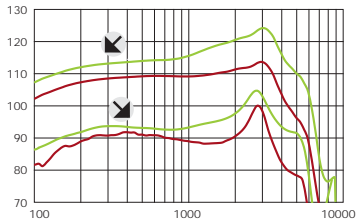
### Fitting range



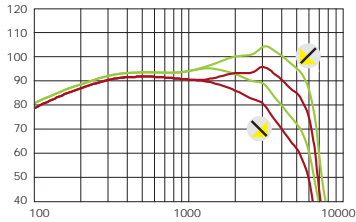
Basic frequency response and effect of Low Frequency Cut



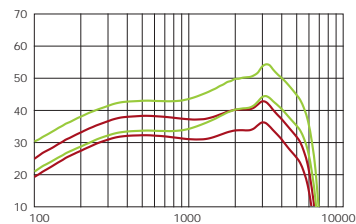
Maximum Output (OSPL90) and effect of MPO control



Basic frequency response and effect of High Frequency Cut



Full-on and Reference Test Gain



■ O.E.S. ■ 2cc

Curves reference the values of the STAGE ITC. Note that for the STAGE ITC HPG, the curves and data points are 5 dB above the displayed curves.

Notes:  
 O.E.S. = Occluded Ear Simulator  
 2cc = 2 cm<sup>3</sup> coupler  
 Pi = Acoustic input signal

Basic settings:  
 Full-on Gain, Reference Test Gain  
 MPO = Maximum Power Output  
 Maximum Band Width

Measured according IEC 118-0 1983, amendment 1994; at 1.3 V and 23°C on O.E.S. according to IEC711 1981, resp on 2cc according to IEC60118-7 2nd edition 2005 (DIN average calculated at 500 Hz, 1000 Hz and 2000 Hz; HFA average calculated at 1000 Hz, 1600 Hz and 2500 Hz; 0 dB SPL sound pressure equals 20µPa). All measurements without DSP features activated unless indicated otherwise.

## Electroacoustic Performance

# ITC/ITC Power STAGE

**Acoustic Gain**  
 at 1600 Hz (dB) (IEC)  
 Peak value (dB)

**Saturation Sound Pressure Level SSPL**  
 at 1600 Hz (dB) (IEC)  
 Peak value (dB SPL)

**ANSI-HFA**  
 Acoustic gain (dB)  
 Saturation sound pressure level (dB SPL)

Low-frequency limit (Hz)  
 High-frequency limit (Hz)

**Harmonic Distortion (THD)**  
 at 500 Hz (%)  
 at 800 Hz (%)  
 at 1600 Hz (%)

**Equivalent Input Noise (dB)**

**Power Consumption (mA)**

**Battery Size**

**Battery Life**

**Reference Test Gain**

	Standard IEC 118-7 2cc Coupler	Power IEC 118-7 2cc Coupler	Standard IEC 118-0 Ear Simulator	Power IEC 118-0 Ear Simulator	ANSI S3.22
Acoustic Gain at 1600 Hz (dB) (IEC) Peak value (dB)	38 dB 43 dB	43 dB 50 dB	45 dB 55 dB	50 dB 60 dB	- 43/50 dB
Saturation Sound Pressure Level SSPL at 1600 Hz (dB) (IEC) Peak value (dB SPL)	110 dB SPL 113 dB SPL	115 dB SPL 118 dB SPL	117 dB SPL 125 dB SPL	121 dB SPL 128 dB SPL	- 113/118
ANSI-HFA Acoustic gain (dB) Saturation sound pressure level (dB SPL)	- -	- -	- -	- -	38/43 dB 110/115
Low-frequency limit (Hz) High-frequency limit (Hz)	100 5930	100 6330	120 6260	100 6360	100 5930/6330
Harmonic Distortion (THD) at 500 Hz (%) at 800 Hz (%) at 1600 Hz (%)	1.2 % 0.8 % 0.9 %	1.1 % 0.9 % 1.1 %	2 % 1.4 % 1.3 %	2 % 1.6 % 1.6 %	1.2/1.1 % 0.8/0.9 % 0.9/1.1 %
Equivalent Input Noise (dB)	24 dB SPL	24 dB SPL	24 dB SPL	24 dB SPL	24 dB SPL
Power Consumption (mA)	1.0	0.8	0.92	0.82	1.0/0.8
Battery Size	312	312	312	312	312
Battery Life	160 hours	190 hours	174 hours	195 hours	160/190h
Reference Test Gain	32 dB	37 dB	38 dB	42 dB	32/37 dB

## Digital Trimmer Reference

### Low Frequency Cut Variable up to -30 dB at 500 Hz

Controls the low frequency amplification of the instrument. The control is active in the frequency area between 100 Hz - 3000 Hz. Low frequency sounds will be less amplified by turning the trimmer clockwise, and provide less low frequency gain.



If the sound is too „boomy“, turn the low frequency trimmer clockwise.

### MPO Control Output varies up to -24 dB

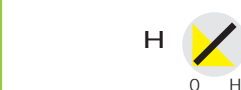
Controls the maximum output sound level of the instrument. The maximum output sound level can be increased by turning the trimmer counter-clockwise.



If the sound is too loud, turn the MPO trimmer clockwise.

### High Frequency Cut Variable up to -20 dB at 4000 Hz

This control reduces the amplification in the high frequencies. This trimmer can be used for feedback control. High frequency sounds will be less amplified by turning the trimmer clockwise.



If the sound is too „tinny“, turn the MPO and high frequency trimmers clockwise.