

BTE Relay

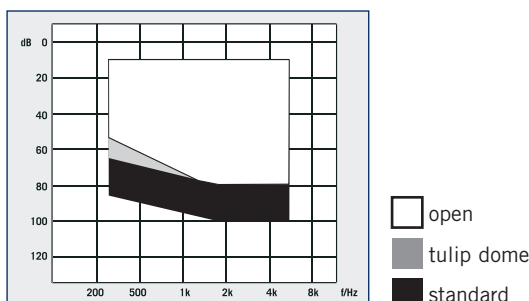
Technical Datasheet

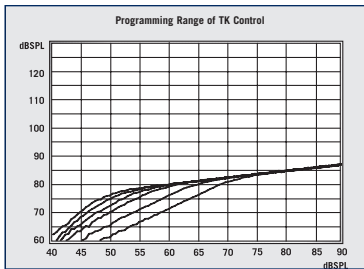
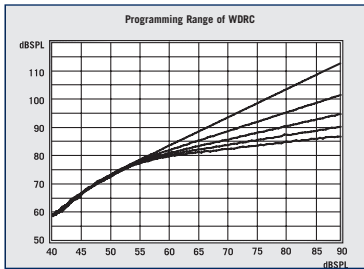
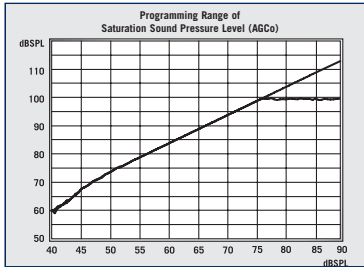
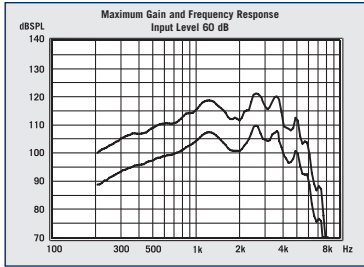
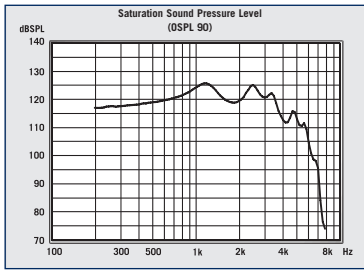


For your CROS and BiCROS fitting needs, Relay represents the most effective and easiest solution. For your customer, Relay represents the most attractive and most comfortable CROS device available. Relay is the most technically advanced and most dedicated device in the CROS fitting segment. Its uniqueness is not only based on its undersized stand alone concept without any external adapters or transmitters. Using interference-free Digital Wireless Transmission, Interton is one of the first companies in the world to introduce this technology for CROS systems.

Swift Compression	Swift compression simulates the filter characteristics of the auditory system. Swift filter bands widen logarithmically with frequency in the same way that human auditory filters do, a characteristic that is designed to provide the most natural listening experience.
Sound Field Input Control	This unique software feature displays the signal level entering the hearing aid microphone. It allows test signal levels to be adjusted appropriately before sound field testing is performed.
Background and Mic. noise reduction	Both background and microphone noise are automatically and selectively reduced, depending on the listening environment.
Datalogging	The datalogging feature keeps track of the most important aspects of the client's hearing aid use. Datalogging monitors overall time of use, time spent in each memory and volume control position. This information can be used to fine tune the aid and for counseling clients.
Feedback Prewarning	During the fitting, a message is displayed that indicates when gain is approaching an unstable level.
Standard Features	<ul style="list-style-type: none"> • 12 independently working frequency bands • Up to 2 memories (programmable as either CROS, BiCROS or Monaural), selectable via toggle switch • Adaptive Feedback Cancellation • Audible selection tones + low battery warning; programmable in both frequency and intensity • Programmable t-coil • Thin tube fitting optional • Transmission distance: 11" (30 cm) • Transmission frequency of 405 MHz • Transmission power: 0,001 mW • Mixing ratio for BiCROS is adjustable via CompuFit • Volume control and memory switch (1-2-0)
Software	<ul style="list-style-type: none"> • NOAH or Standalone • CompuFit 4.4
Colours	beige, gray, steelgray, brown/steelgray

Fitting range





Diagrams of IEC 118-7 / ANSI S3.22

Electroacoustic performance	IEC 118-7		IEC 118-0		ANSI S3.22	
	Standard	Open	Standard	Open	Standard	Open
Acoustic gain at 1600 Hz (dB) (IEC) Peak value (dB)	53 61	41 53	62 70	49 63	- 61	- 53
Saturation sound pressure level SSPL at 1600 Hz (dB) (IEC) Peak value (dB SPL)	119 124	110 120	126 132	118 128	- 124	- 120
ANSI-HFA Acoustic gain (dB) Saturation sound pressure level (dB SPL)	- -	- -	- -	- -	55 122	45 112
Low-frequency limit (Hz) High-frequency limit (Hz)	200 6000		200 6000		200 6000	
Sensitivity of induction coil at 1600 Hz and 1 mA/m (dB) HFA SPLITS (dB) RSETS (dB)	84 - -		90 - -		- 95 1	
Harmonic Distortion (THD) at 500 Hz (%) at 800 Hz (%) at 1600 Hz (%)	1 1 1		1 1 1		1 1 1	
Equivalent input noise (dB)	16	27	16	24	14	22
Power consumption (mA)	2.90		2.90		2.90	
Battery type	13		13		13	

Technical specifications	
Signal processor	12 channel swift filter (WDRC) with psycho-acoustic band width
DSP clock speed	5,12 MHz
Sampling rate	16 kHz
Signal transmission	Resolution 16 bit
AGCi	Independently programmable in low, mid and high frequency channels
Compression ratio CR	Adjustable via gain for soft & loud sounds independently
Attack time AC / Release time RC	Channel dependent
Threshold	45 to 66 dB, in 3 dB steps
AGCo	Broadband AGCo from 0 to -21 dB SPL in 3 dB steps
Adaptive Noise reduction	Off/On with fixed presets in various frequency ranges
Microphone Noise Reduction	Off/On with fixed presets in various frequency ranges
Adaptive Feedback Manager (AFM)	Cancellation up to 18 dB additional gain possible; automatically detects and removes feedback
Volume control can be deactivated in software Gain reserve	+/-3 dB; +/-6 dB; +/-10 dB