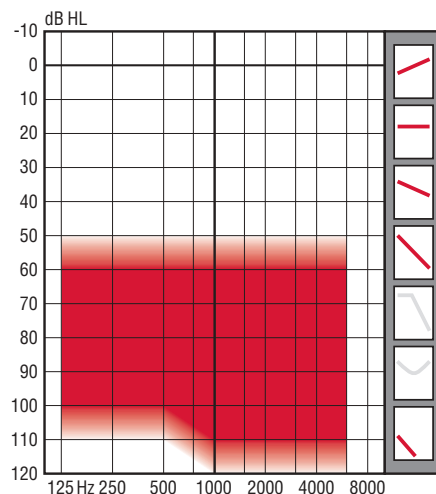




Fitting range



General information

Swift 120+ is a very reliable and powerful programmable BTE instrument for people with severe and profound hearing losses.

Swift 120+ features a special Battery Management System. This ensures a long battery lifetime and consistently high output levels throughout the lifetime of the battery. The instrument is also less sensitive to the choice of battery brand.

Swift 120+ is programmed via the PC based Noah/Genie software or the EasyFit programmer. Initial fitting is straightforward based on well known linear fitting rationales ensuring high levels of user satisfaction.

Swift 120+ advantages

- Reliable
- Low distortion, excellent sound quality
- Low battery consumption
- Economical

User groups

- Most sensorineural, conductive and mixed hearing losses in the categories of severe and profound.

User benefits

- High MPO, clear sound and low distortion
- Full-size performance in a smaller size case
- Excellent battery economy
- Good ergonomics

Dispensing features

- Easy fitting procedure
- Customised to the needs of clients with severe/profound HL
- Effective feedback manager
- Supported by Noah/Genie 2.0 and EasyFit II stand alone programmer
- Wide range of fitting rationales
- Standard Oticon programming cable (#3)

Standard Features

- MPO: 144 dB SPL
Peak gain: 84 dB
- Digitally programmable
- A-Gram Slope control (4th order LF/HF cut)
- Hearing Level control (simultaneous adjustment of Gain and MPO)
- Output limiting, PC and AGCo
- Feedback Manager
- Telecoil, M-MT-T with programmable disable function
- Volume control disable function
- Non-damped sound hook
- DAI
- FM compatible
- Colour: Beige
- Fitting rationales: POGO II+BC (default), NAL-RP, DSL i/o (Lin), SSM+ and Corell-2

Options and accessories

- Hooks:
 - 5 dB damped
 - Paediatric
- Interlocking DAI and FM shoes
- Tamper resistant battery drawer
- Spectacles adaptor
- CROS and BI-CROS

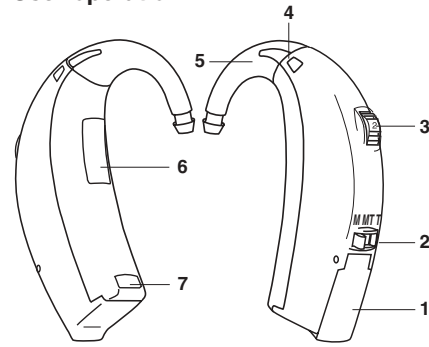
Warning to hearing instrument dispensers

The maximum output capability of this hearing instrument may exceed 132 dB SPL. Special care should be exercised in selecting and fitting the instrument as there may be risk of impairing the remaining hearing of the hearing instrument user.

FITTING INFORMATION

SWIFT 120+

User operation



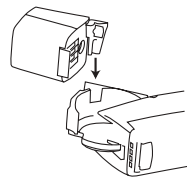
- 1 Battery drawer and built-in on-off switch
- 2 Telecoil switch
- 3 Volume control
- 4 Microphone opening
- 5 Click hook
- 6 Number plate
- 7 Right (red) and Left (blue) identification

Dispenser operation

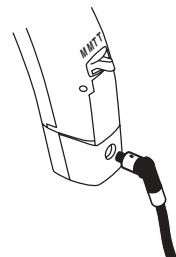
Swift 120+ is programmed using the Genie 2.0 fitting software compatible with NOAH 2.0-3.0 or the EasyFit II programmer. The cables used are the same for either programming device.

Programming shoe no. 390-01-320-04
 HI-PRO cable # 3 Right (Red) . . no. 384-20-014-00
 HI-PRO cable # 3 Left (Blue) . . no. 384-20-015-01

Connecting the Programming shoe



- 1 Open the battery drawer on Swift 120+ and slide the programming shoe into the guide as shown. Insert battery.



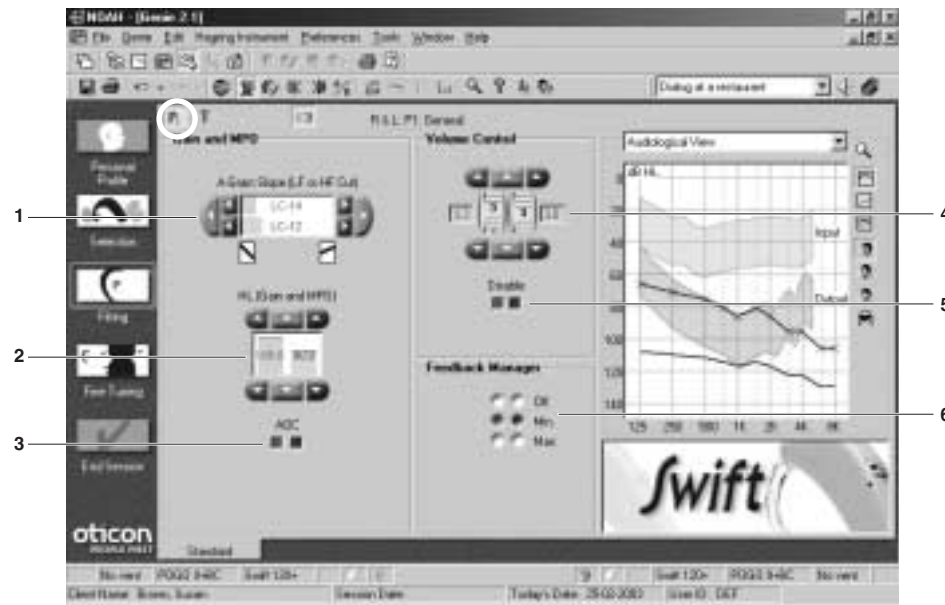
- 2 Close the battery drawer and attach the programming cable ensuring that the red dot on the plug matches the red dot on the shoe. **Do not twist the plug!**

During programming, the instrument must be switched on, and in M-position.

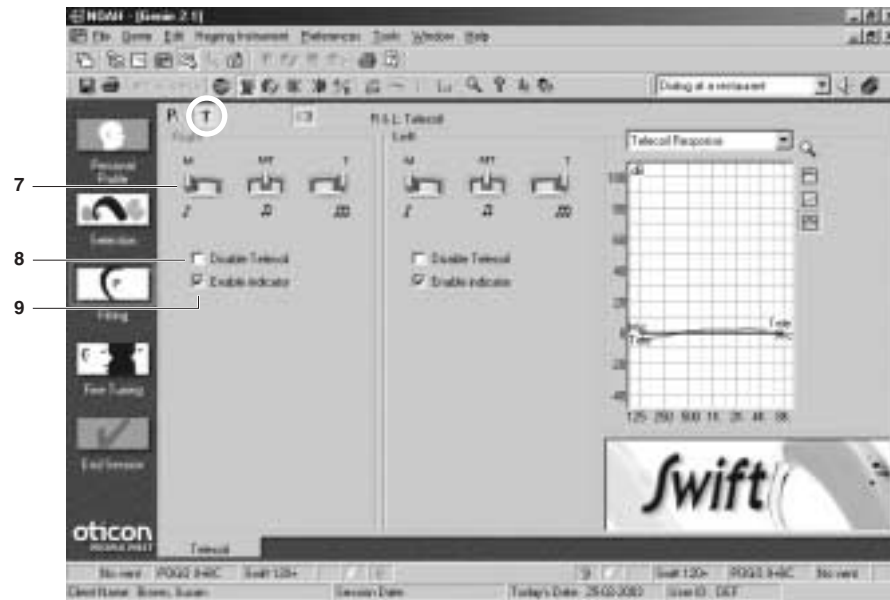
Fitting controls in Genie and EasyFit

The calculated prescribed settings for Swift 120+ are based on standard rationales for linear instruments. The options are POGO II+BC, NAL-RP, DSL i/o, SSM+ and Corell-2. Default rationale is POGO II+BC. POGO II has been revised to include the Air-Bone gap in the prescription. The gain compensation for conductive and mixed hearing losses is 1:1 for the conductive element. The prescribed setting will in most cases provide a good fit. Further adjustments can, if necessary, be done directly via the Fitting step or the Fine Tuning step.

Genie

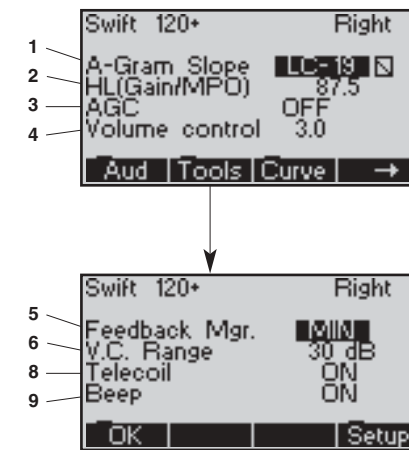


To access the fitting controls, click Fitting in the Genie Organizer and P1 in the sub-tool bar.



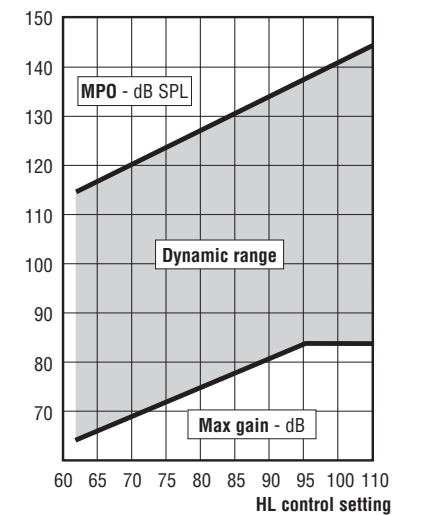
The Telecoil screen is accessed by clicking T in the sub-tool bar.

EasyFit



The display in EasyFit gives access to the same fitting tools as with Genie, including the Feedback Manager and Telecoil options.

- 1 **A-Gram Slope** cuts low (LC) or high (HC) frequencies according to the overall slope of the audiogram.
- 2 **HL.** The Hearing Level control simultaneously adjusts both Gain and MPO. Ideally this should be set to a comfortable level with the volume control around 3. This will leave the user with approximately 10 dB reserve gain. The figure displayed in the window is an indication of the level of the hearing loss and will vary widely depending on the type and shape of the hearing loss and upon the fitting rationale chosen.
- 3 **AGC** activates the output AGC. The AGC works in combination with the PC to enable comfortable, low distortion output limiting.
- 4 **Volume Control** allows on-screen adjustment of the instrument's volume control during the fitting. Manual operation overrides the on-screen setting of the volume control.
- 5 **VC Disable** (EasyFit: V.C. Range) disables the physical volume control wheel and may be used where manual operation is undesirable.
- 6 **Feedback Manager** eliminates acoustical feedback by reducing the HF gain at higher volume control settings. The options are Off, Min and Max, indicating the level of HF roll off. The prescribed algorithm pre-sets the Feedback Manager to Min with the purpose of avoiding feedback when the fitting session is opened. It is strongly recommended to test for feedback at higher VC settings before the fitting session is ended.
- 7 **Telecoil.** The Telecoil switch has three positions, M, MT and T. An audible beep indicator is activated when the user switches between the different modes.
- 8 **Disable telecoil** disconnects the physical telecoil giving a microphone signal at any setting of the Telecoil switch (MT and T).
- 9 **Enable indicator** (EasyFit: Beep). By removing the check symbol, the audible beep indicator is disabled.



HL (Gain / MPO) control function
 The HL control simultaneously adjusts Gain and MPO. The graph above shows the relationship which exists between the Peak Gain and the Peak MPO for each setting of the HL control (Ear Simulator).

Fitting infants and children

Infants and young children have smaller ear canals with different acoustic properties than the average adult. These differences are extremely important to take into account, especially when fitting powerful hearing instruments as there may be risk of impairing the remaining hearing of the user. Genie and EasyFit support age and audiometry information as explained below.



With Genie, the age parameters are found in Personal Profile. Select the relevant age and open the RECD and REUR dialog to enter Audiometry method and - if available - individual RECD and REUR measurements. Default Audiometry is Headphone.



With EasyFit, the age and RECD parameters are found in Aud view. Individual measurements can not be entered. EasyFit uses the prediction method only.

Audiometry method

The acoustics of standard measurement couplers are not representative for the small ears of infants and children. Since hearing instrument and audiometer calibrations are performed with these couplers, corrections are needed for small ears. The Audiometry field in Genie and EasyFit gives access to specify the transducer that was used for the audiogram. This field has no impact on persons older than 7 years. Choices are:

- Headphone: Default
- Free Field: Use of a loudspeaker in free field
- Insert earphone: Use of standard insert earphones
- Insert earphone + own mould: Use of insert earphones and the child's own earmoulds

Genie and EasyFit corrects the audiometric data according to the selected Audiometry option.

Real Ear to Coupler Difference (RECD)

Hearing instruments and earmoulds block the ear canal, creating a closed space between the earmould and eardrum. In a child's ear canal, the space has a smaller volume than in the adult canal, resulting in greater sound pressure at the eardrum.

The relative size of the ear canal can be expressed by the use of RECD which is the difference between the output measured in the ear and in the 2cc coupler, given the same HA setting. RECD is found by measuring the dB SPL in the child's ear - preferably using the child's own earmould - and subtracting the measured dB SPL in a 2cc coupler.

Genie uses either predicted RECD values or individual measured values in the prescription algorithm. EasyFit uses predicted RECD values only. The predicted values depends on the selected age category and, to some degree, on the fitting rationale chosen. In Genie, the age category is selected from the Personal Profile step. With EasyFit, it is found in the RECD dialogue.

Real Ear Unaided Response (REUR)

The ear canal resonance of adults is around 3 kHz.

It is the length of the ear canal that determines the resonance frequency. Compared with adults, the ear canals of children are shorter, thus the resonance frequency is higher. The REUR for a child may therefore be very different from an adult REUR.

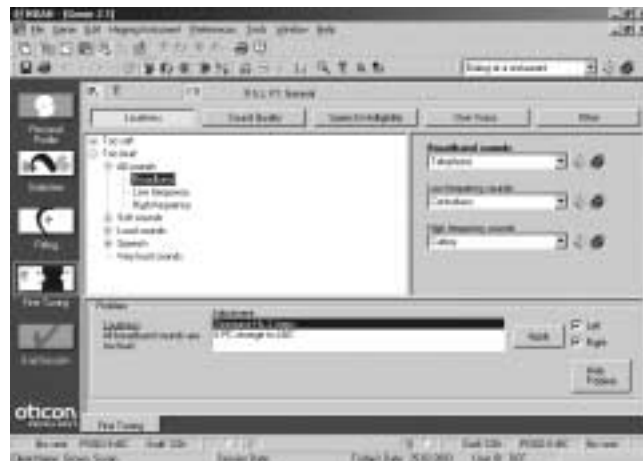
Genie and EasyFit use predicted REUR values. The predicted values depend on the age category selected. In Genie you may also enter the individually measured values.

Fine Tuning

Both Genie and EasyFit provide help when fine tuning. In Genie, fine tuning is integrated in the fitting flow via the Fine Tuning step (see below).

When a problem is identified, relevant groups of sounds and pictures will automatically be accessible. This will facilitate the dialogue with the client when specifying the problem further. EasyFit has a Quick Guide that will suggest solutions for the specified problems.

Using either of the tools will make it easy to involve the client in the fine tuning process. If the client has filled in the diary, it may be easier to identify and solve possible problems. The areas that are covered are Loudness, Sound Quality, Speech Intelligibility, Own Voice, Other (i.e. feedback problems) and Telecoil.



Genie supports fine tuning in the fitting flow. Verification of problems and solutions may be done through an interactive dialog and with sound demos.

Sound hooks

Swift 120+ comes standard with a non-damped sound hook ensuring high gain and output in the mid frequencies. A smoother response may be obtained by using the 5 dB damped hook. Damped hooks tend to collect more moisture than ordinary hooks and may become clogged. It is recommended that they are replaced twice yearly.

Hook size	Non-damped	5 dB damped
Standard	571-01-770-04	571-05-290-02



Paediatric	571-01-780-06	571-05-270-08
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Spectacles adaptor

Swift 120+ may be adapted to most spectacles by using a special adaptor.

	Non-damped	5 dB damped
	571-04-240-08	571-04-230-06



Earmould information

When fitting super power instruments, the importance of a tight fitting earmould cannot be over-emphasized. Oticon recommends the use of non-shrinking, stable impression materials such as A-Soft or A-Zilicone.

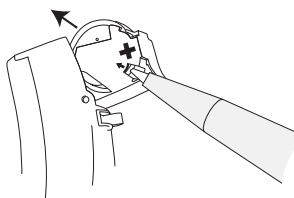
Material	40 impressions	75 impressions
A-Soft	782-50-121-08	782-50-120-07
A-Zilicone	782-50-054-07	782-50-055-08

Use of thick-walled tubing put through the earmould is recommended for the tightest possible fitting. Venting is not recommended for hearing losses above 70 dB HL.

Tamper resistant battery drawer

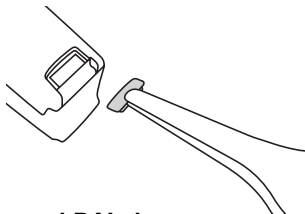
The tamper resistant battery drawer is strongly recommended when fitting children or persons of mental incapacity. Please refer to the yellow section in the Instructions for Use.

Tamper resistant battery drawer	538-07-920-09
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Right and Left identification

Swift 120+ comes standard with a red and a blue plate for easy identification of right and left instruments. The pre-mounted beige plate can be removed using a pair of tweezers as shown below:



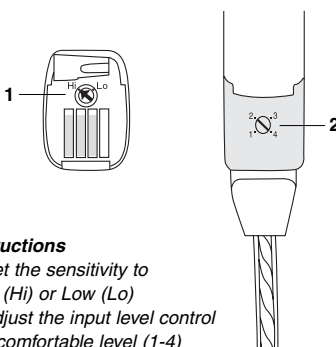
Universal DAI shoe

The universal DAI shoe for Swift 120+ provides access to a variety of external sound sources such as

- Radio, TV, Walkman, MP3 and PC equipment, 9V FM systems (**Hi** setting)
- Most FM equipments, external microphone. (**Lo** setting)

The one shoe can be used for all DAI purposes.

DAI shoe	399-50-900-08
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Instructions

- 1 Set the sensitivity to High (Hi) or Low (Lo)
- 2 Adjust the input level control to a comfortable level (1-4)

DAI cords

To connect audio equipment to DAI / hearing instrument, use one of the following cords:

Connection	Cord	Length	Oticon No.
	Monaural	75 cm	383-58-842-00
	Binaural (stereo)	75 cm	383-58-852-03
	Open end, monaural	100 cm	383-08-003-00
		600 cm	383-08-004-01

FM adaptor shoe

The FM adaptor shoe should be used with ear level wireless FM systems.

FM adaptor shoe	399-50-920-02
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