



Solutions for Children with Severe to Profound Hearing Loss

A Sonova brand

PHONAK
life is on



**From cradle to career,
Phonak partners with you to help young people live a life without limits**

Unique considerations developing technology for severe to profound hearing loss



Insight

A person with a severe to profound hearing loss is not a person with a mild hearing loss who needs more power.



Agenda

Hearing solutions for children with severe to profound hearing loss:

- Sky Marvel review
- New Sky Link M
- New Naida P-UP
- New Roger solutions
 - Roger On (new microphone)
 - Roger NeckLoop
 - Roger Focus II



The starting line-up



Sky Marvel

Tried-and-true solution

Your go to pediatric product line



Sky Link M

Progressive Hearing Loss

-
- **Sky Marvel product created for children who may end up in a bimodal hearing solution**



Naida P-UP

Most profound of losses

-
- **The Most powerful Phonak hearing aid and first ultrapower offering universal connectivity.**

Sky Marvel



Sky Marvel

Tried-and-true solution

Your go to pediatric product line

14 Colors and 7 tone hook colors

- 3 Technology Levels (90/70/50)
- Autosense Sky OS pediatric OS
- Indicator light
- myPhonak Junior app
- Universal Connectivity



Sky Link M

Progressive Hearing Loss



Naida P-UP

Most profound of losses

Sky Marvel: Models

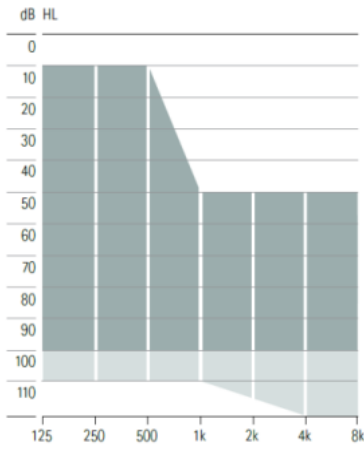
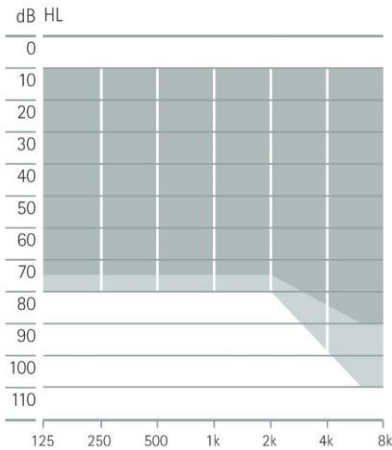
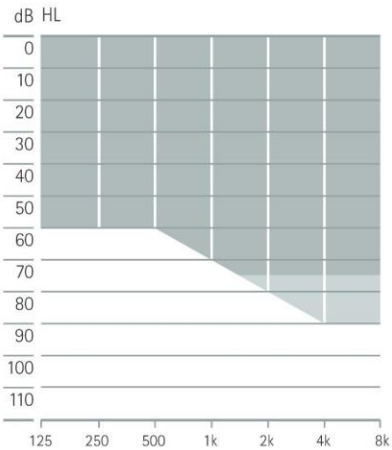
3 form factors in 4 performance levels – 90, 70, 50



Sky M-M
BTE

Sky M-PR
BTE

Sky M-SP
BTE



*Requires NoahLink Wireless
to fit [058-0139]

Battery
size

SlimTube HE

Regular Tube

Sky Marvel offers



Clear
rich sound



Connects to
smartphones,
Roger™ mics and
more



Rechargeable
model



Child-specific
design

5 year

standard warranty

for hospitals, clinics and school purchasers

AutoSense Sky OS 3.0: developed with AI

AutoSense OS 3.0 was developed using artificial intelligence (AI) to automatically



Detect



Adapt

More natural listening experience

Provide the best hearing experience in any listening environment

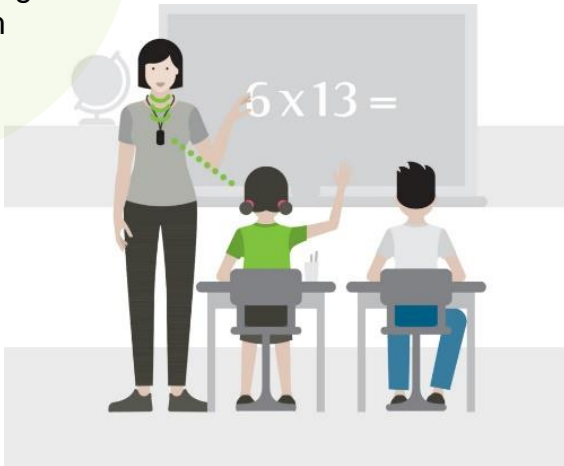
Rich, powerful sound

AutoSense Sky OS: The world's first operating system designed for children

Up to

30%

more precise during
noisy classroom
activities¹



Up to

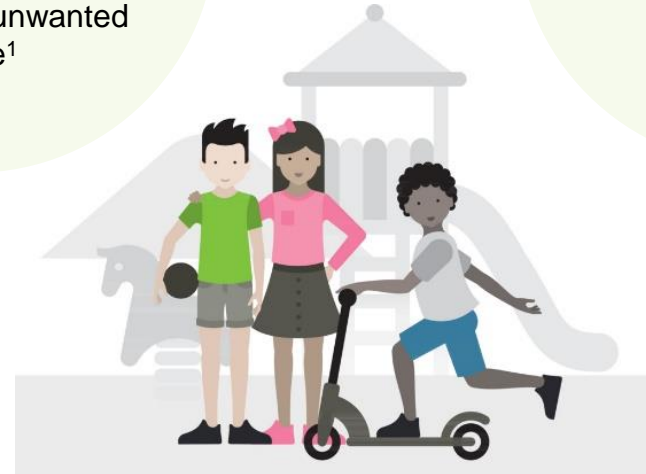
39%

more accurate in
recognizing yelling and
shouting as unwanted
noise¹

Provides up to

24%

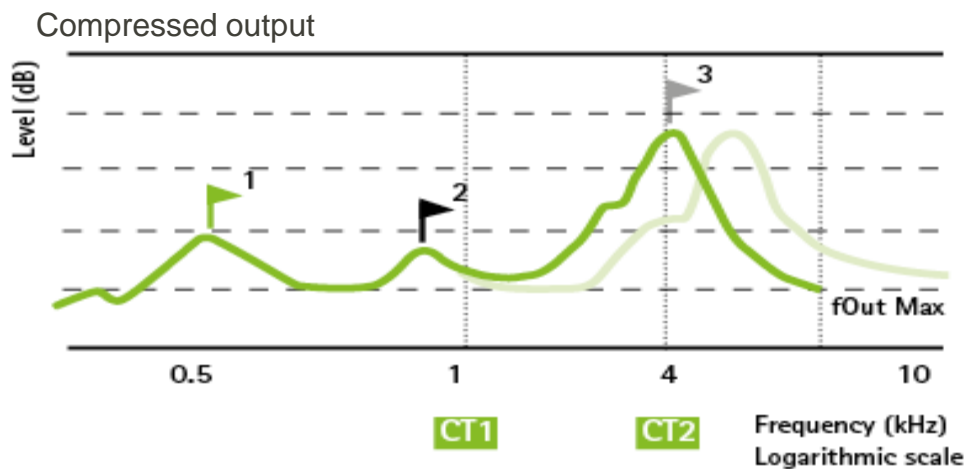
improvement in
sentence recognition in
noise²



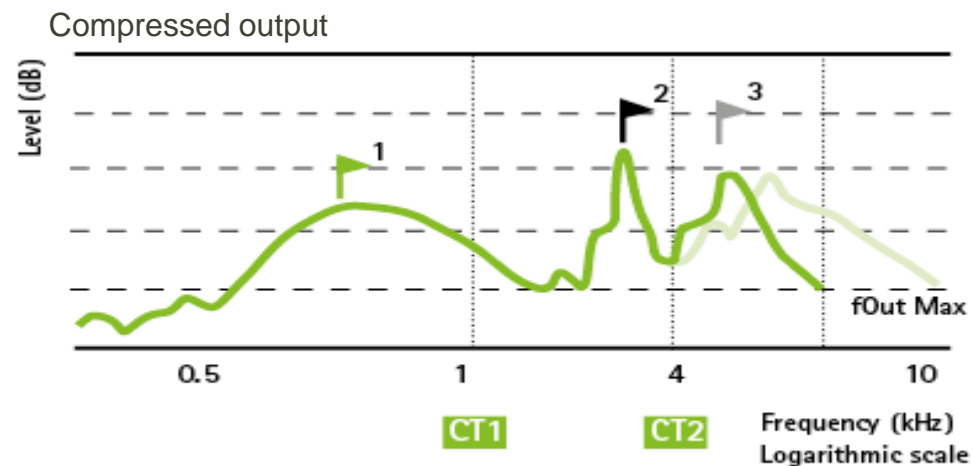
¹¹
¹. Feilner et al., (2016), 2. Wolfe, et al., (2018),

Adaptive nature of SoundRecover2

Input with significant **high frequency** energy present



Input with significant **low/mid frequency** energy present



Benefits of SoundRecover2 pre-calculation

No risk of
deprivation

No risk for distortion
of low and mid
frequencies

Provides even
greater benefit for
severe to profound
users than before

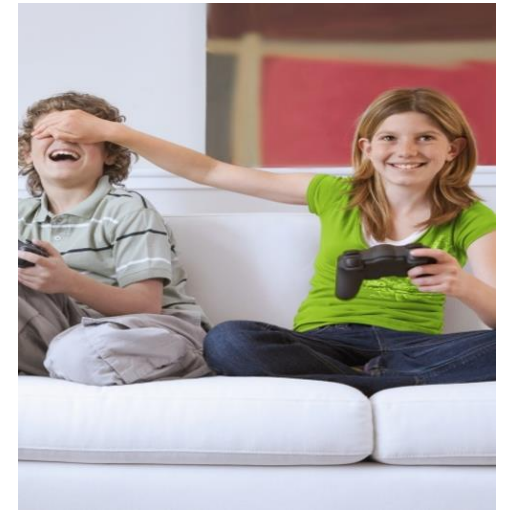
Connects to smartphones, Roger™ mics and more



The **world's first** pediatric hearing aids that directly stream from **both iOS and Android** devices



The **world's first** pediatric hearing aids with direct streaming of Roger



Enjoy direct streaming from multimedia sources through the TV Connector

Smart devices – clever kids



Tablet and smartphone use is widespread



of elementary school students report that they regularly use a tablet or smartphone

Schools have adopted them in education



of surveyed schools reported use of tablets in school



Child-specific design



Smaller and lighter
with RogerDirect



Industry leading
robustness



Safe thanks to
new tamperproof
features



Indicator light





Share the moments of love
Sky Link M

A Sonova brand



Cutting edge
technology

Extensive
rehabilitation
expertise



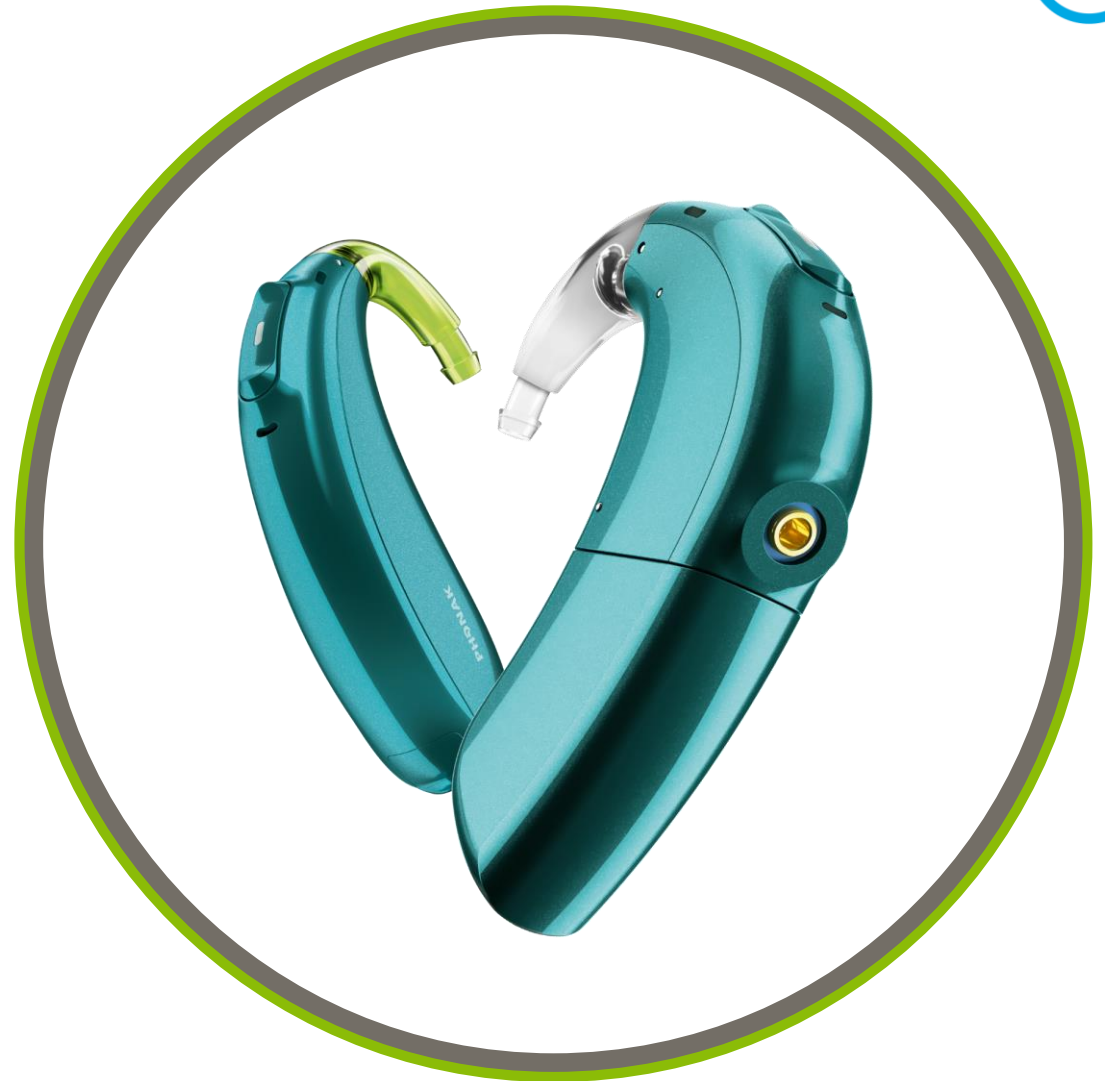
45 + years
development of
pediatric hearing
aids



Helping kids share the moments of love



**Phonak Naída™ Link M &
AB Naída™ CI M**



**Phonak Sky™ Link M &
AB Sky CI™ M**

Sky Link M



Sky Marvel

Tried-and-true solution



Sky Link M

Progressive Hearing Loss

- Sky Marvel product created for children who may end up in a bimodal hearing solution
- 1 Technology level (90)
- 6 Colors and 7 Tone hooks
- Autosense Sky OS Pediatric OS
- Indicator light
- MyPhonak Junior App
- Universal Connectivity



Naida P-UP

Most profound of losses

A pediatric bimodal solution

World's
first



Sky Link M

World's
first

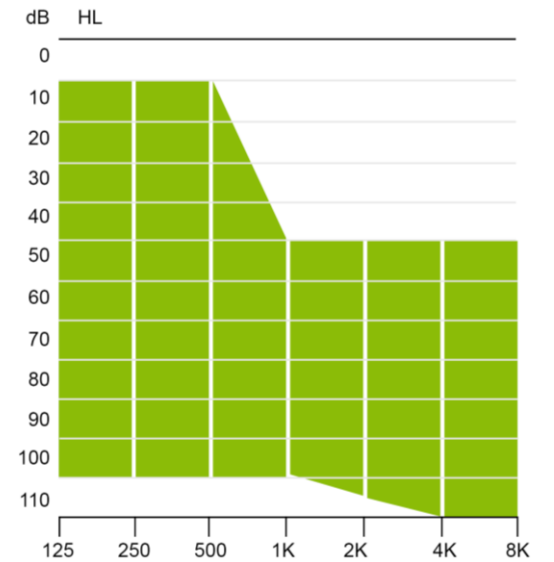
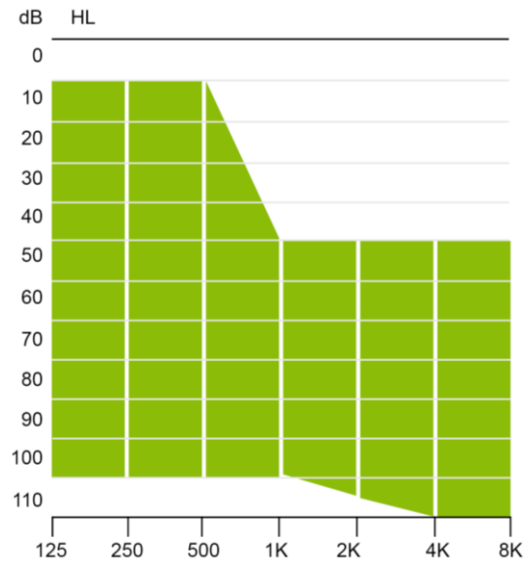


Sky CI M

The combination of Sky Link M and Sky CI M is the world's first truly pediatric dedicated bimodal solution.

Sky Link M versus Sky M SP

Moderate to profound hearing loss, all audiometric configurations



Marvel brings wireless connectivity to Sky Link M and Sky CI M



Why is bimodal important?

Benefits of **bimodal** fittings may include¹:

- Improved speech recognition in quiet and in noise
- Improved sound localization compared with unilateral CI use
- Improved speech quality
- Improved music appreciation
- Improved ease of listening



1. Vroegop, J. L., Homans, N. C., van der Schroeff, M. P., & Goedegebure, A. (2019). Comparing Two Hearing Aid Fitting Algorithms for Bimodal cochlear implant Users, *Ear and Hearing*: 40(1) 98-106. doi: 10.1097/AUD.0000000000000597

Research into bimodal benefit in kids

Washington University

“For children with the most profound losses, early bilateral CIs **provide the greatest opportunity** for developing good spoken language skills“



“For those with moderate-to-severe losses, however, a prescribed period of **bimodal use may be more advantageous** than early simultaneous bilateral cochlear implants”

- The Ohio State University

- “A **period of early bimodal stimulation** provides a benefit to **early language acquisition** for children undergoing cochlear implantation”.

- “These early benefits **translate into later benefits** in phonemic awareness, working memory, expressive vocabulary, and reading ability.”

Factors which influence Sky Link M recommendation

- Family wishes
- Physical constraints of the child
- Local implant candidacy criteria:
 - **Degree of hearing loss**
 - **Age of implantation**
 - **Unilateral vs bilateral**
 - **Simultaneous or sequential**
- Reimbursement/financial considerations



Sky Link M or Sky M-SP – Initial fitting

Pathway 1:

- Lesser degrees of hearing loss
- Local requirements indicate fitting of an SP-level device

Pathway 2:

- Child fulfills cochlear implant candidacy criteria
- Family interested
- Local regulations promote **simultaneous** implantation
- Financially viable for cochlear implant

Pathway 3:

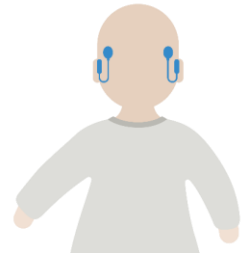
- Family interested
- Child fulfills cochlear implant candidacy criteria
- Local regulations promote **unilateral or sequential bilateral** implantation
- Financially viable for cochlear implant



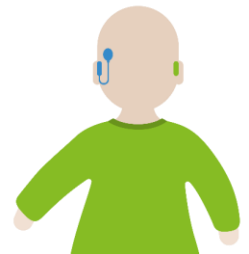
Bilateral
Sky M-SP



Bilateral
Sky M-SP



Bilateral
Sky Link M



Sky Link M or Sky M-SP – Subsequent fitting

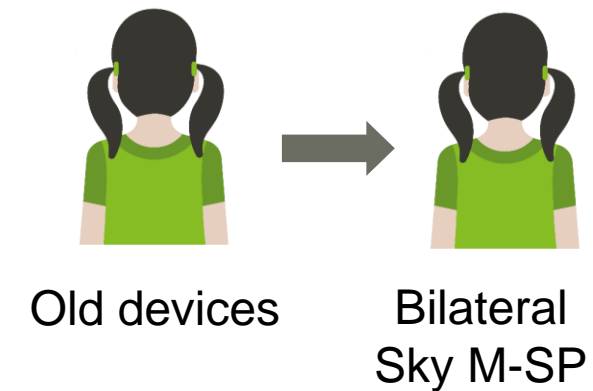
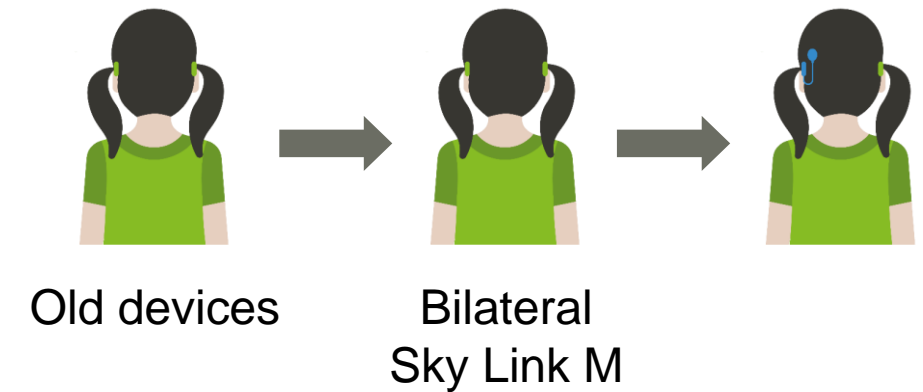
Which device is most suitable?

Pathway 1:

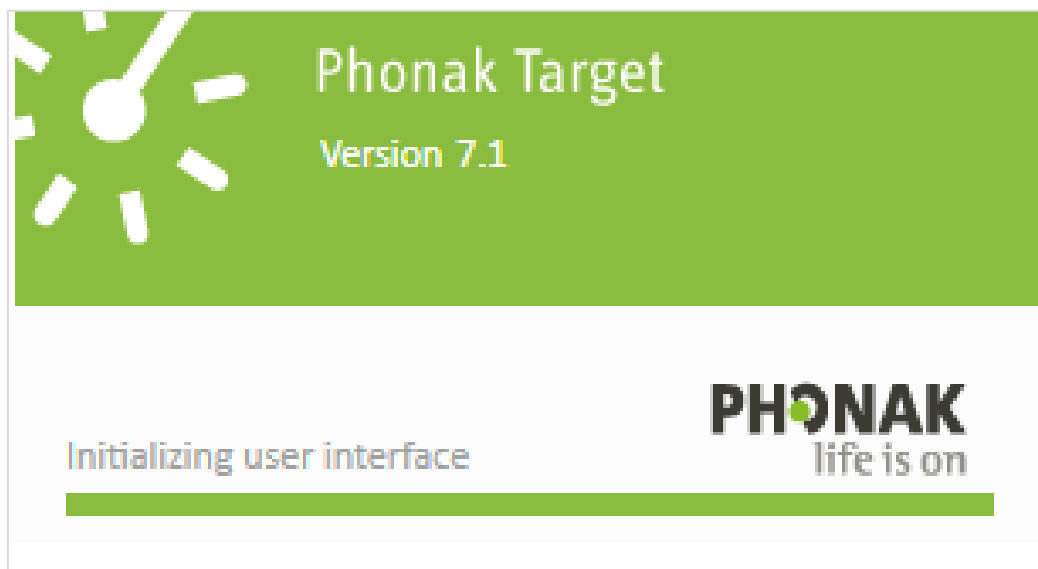
- Need new hearing aids
- Not progressing as well with hearing aids as hoped
- Deteriorating hearing loss
- Fulfills cochlear implant candidacy criteria
- Unilateral implantation or sequential binaural implantation

Pathway 2:

- Needs new hearing aids
- Child fulfills cochlear implant candidacy criteria
- Contraindication for cochlear implant
- Family NOT interested



Target 7.1 & Target CI



Class IIa

- Sky Link M and Naída Link M
- Phonak Target



Class III

- Sky CI M and Naída CI M
- Advanced Bionics Target CI

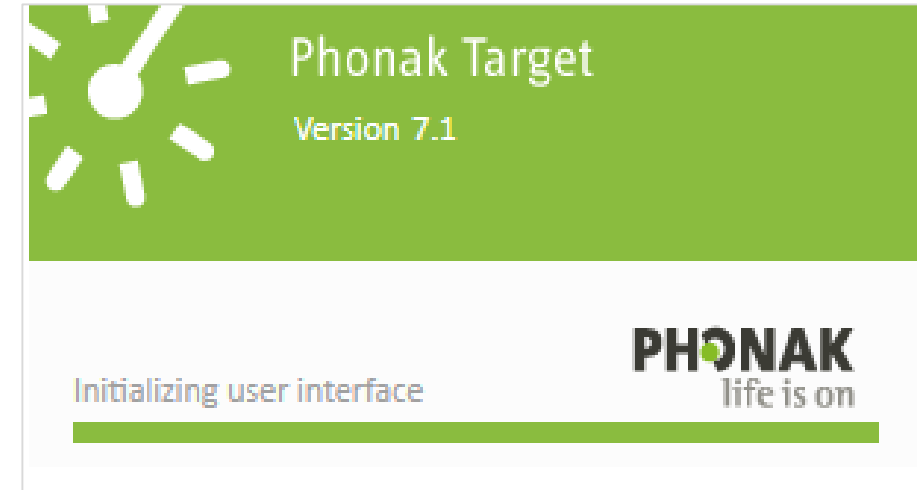




- Sky Link M fitting – full control
- Bimodal fitting– full control of both devices

Sky CI M is the primary device

Target 7.1 cannot write to Sky CI M



- Sky Link M fitting - full control
- Bimodal fitting -
 - Connect to Sky CI M and Sky Link M
 - Read Sky CI M
 - Automatic alignment of features and programs between devices
 - Adjust certain setting on Sky Link M
 - Create a new bimodal fitting if needed



Sky Marvel

Tried-and-true solution



Sky Link M

Progressive Hearing Loss



Naida P-UP

Most profound of losses

- The Most powerful Phonak hearing aid and first ultrapower offering universal connectivity.
- 4 technology levels (90,70,50,30)
- 7 Colors (Non pediatric)
- Universal Connectivity
- 2 Active Bluetooth classic connections
- myPhonak Junior app (P-UP) or myPhonak app



There's
nothing like
the sound of
Naída Paradise

Naída Paradise

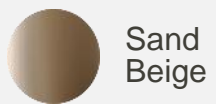


P-UP

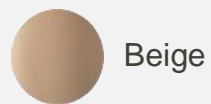


P-PR

Available in:



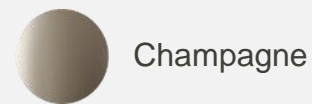
Sand
Beige



Beige



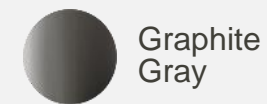
Chestnut



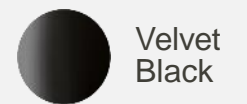
Champagne



Silver
Gray

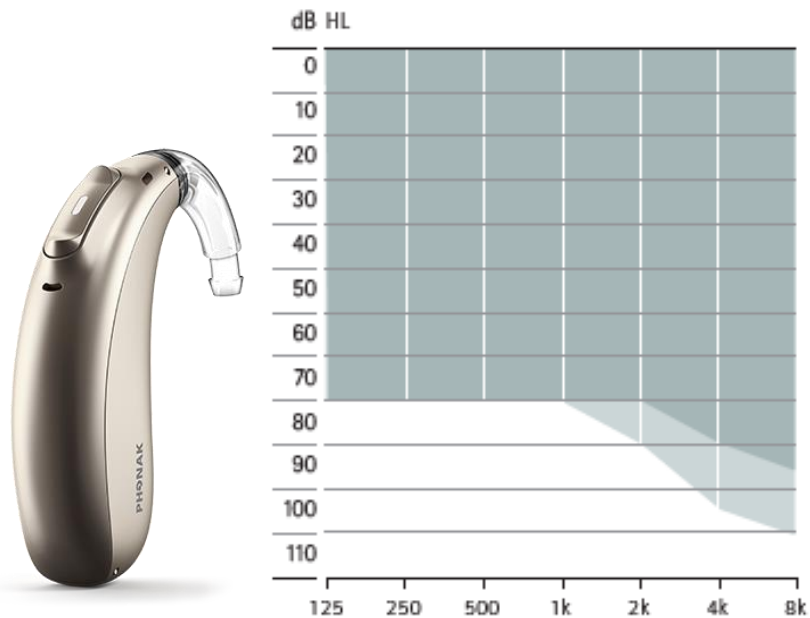


Graphite
Gray



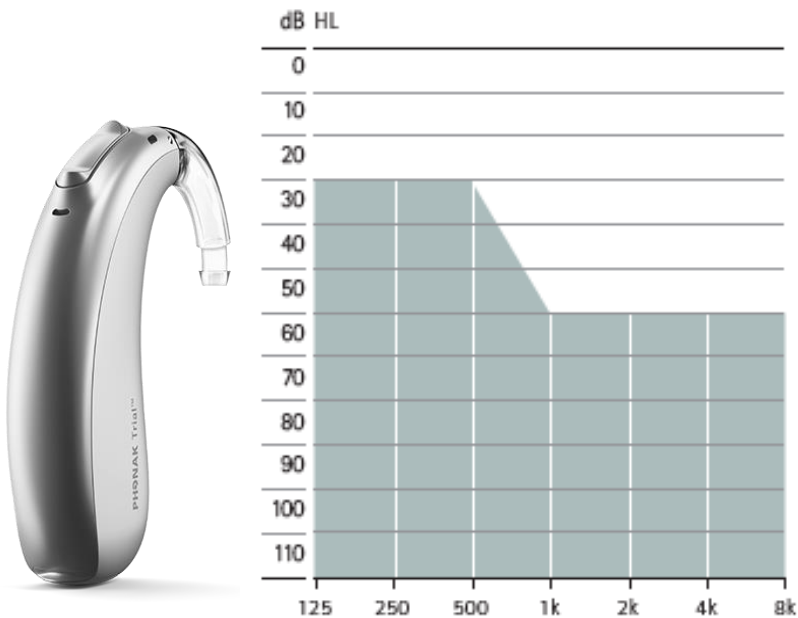
Velvet
Black

Naída Paradise



Naída P-PR

	SlimTube 4.0	HE11 680
Max Power Output (dB SPL)	129	130
Max Gain (dB)	69	68



Naída P-UP

	HE11	HE11 680
Max Power Output (dB SPL)	141	134
Max Gain (dB)	84	78

Naída breaks down connectivity barriers for UP wearers

**Universal
connectivity**

**World's
First**

**Hands-free
calls**

**World's
First**

RogerDirect™

**World's
First**

**Multiple
Bluetooth®
connections**

**World's
First**



Universal connectivity



Naída P-UP battery life



11 days of battery life

Based upon 16 hour day including:
8 hours: Autosense 4.0, 4 hours Bluetooth streaming 4 hours of Roger/AirStream

Summary



Sky Marvel

Tried-and-true solution

Your go to pediatric product line

14 Colors and 7 tone hook colors

- 3 Technology Levels (90/70/50)
- Autosense Sky OS pediatric OS
- Indicator light
- myPhonak Junior app (Spring 21)
- Universal Connectivity



Sky Link M

Progressive Hearing Loss

-
- **Sky Marvel product created for children who may end up in a bimodal hearing solution**
 - 3 Pediatric Colors and 7 Tone hooks
 - Autosense Sky OS Pediatric OS
 - Indicator light
 - myPhonak Junior App (Spring 21)
 - Universal Connectivity



Naida P-UP

Most profound of losses

-
- **The Most powerful Phonak hearing aid and first ultrapower offering universal connectivity.**
 - 4 technology levels (90,70,50,30)
 - 7 Colors
 - All of Marvels features and more..
 - myPhonak Junior app (P-UP) or myPhonak app
 - Universal Connectivity with 2 Active Bluetooth Classic connections

Introducing New Roger Solutions



Roger On™

Hearing Performance

- MultiBeam 2.0 Technology
- Stereo sound quality
- Pointing mode 2.0
- Orientation independent in presenter mode
- Available Spring 2021



Ease of use

- Switch automatically between different modes
- Adapts to environment and use case
- myRogerMic app
- Display
- IP 54, protected against splashes of water

Designed for versatility

- Compatible with almost every hearing aid and cochlear implant
- Covers virtually all use cases
 - Table mode
 - Presenter mode
 - Pointing mode
- Streaming from TV, stream music and more

Roger On

Available
Late
spring

Display

- Microphone mode
- Device status
- Battery status

Three microphones in a triangle

- MultiBeam 2.0
Technology

Three microphones in a row

- Pointing mode 2.0

Button

Two colors

- Champagne
- Graphite grey

On/off

- Clear indication of
on/off

Clip

Charging

- USB-C
- 8 hours usage
- 3 hours charging



Three modes with automatic switching



Pointing mode 2.0
with three microphones



Presenter mode
with orientation-independent in
presenter mode



Table mode
with MultiBeam 2.0 Technology

Pointing Mode 2.0

- Improved Pointing mode 2.0 uses three microphones
- Creates a well-defined microphone beam
- Zoom in to a speaker in a conversation or classroom



Orientation-independent in Presenter mode

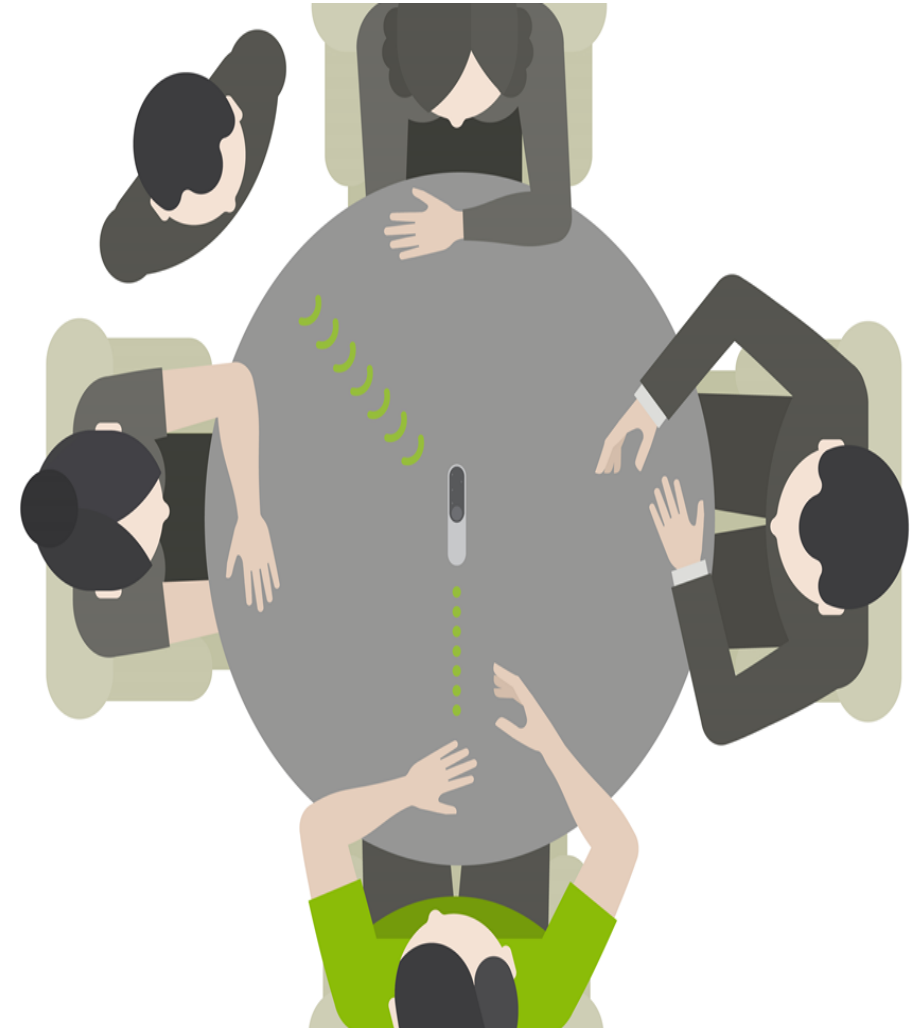
- Accelerometer activates upward pointing beam. It knows what position it is placed in so you don't have to use the lanyard.
- Equal speech quality is maintained independent of the position*
- Easier to Use



*According to technical measurements at RISE (Research Institute of Sweden) 16 April 2019.

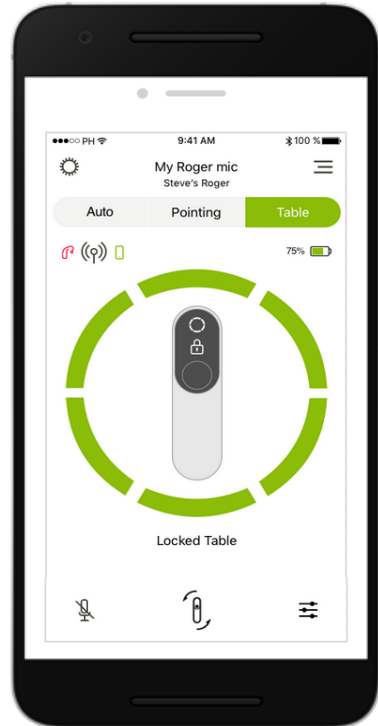
Table mode

- Three embedded microphones; six beam combinations
- Automatic activation of microphone beam with best SNR
- Provides the listener with improved **speech intelligibility**
- MultiBeam 2.0 Technology* found in Roger On



*MultiBeam 2.0 Technology is only available using Sonova hearing devices with RogerDirect.

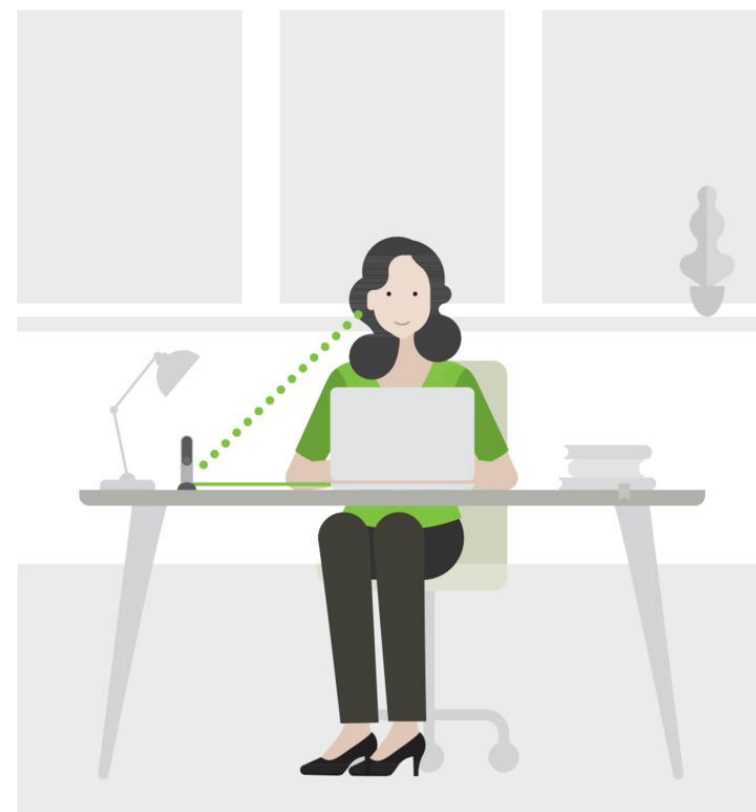
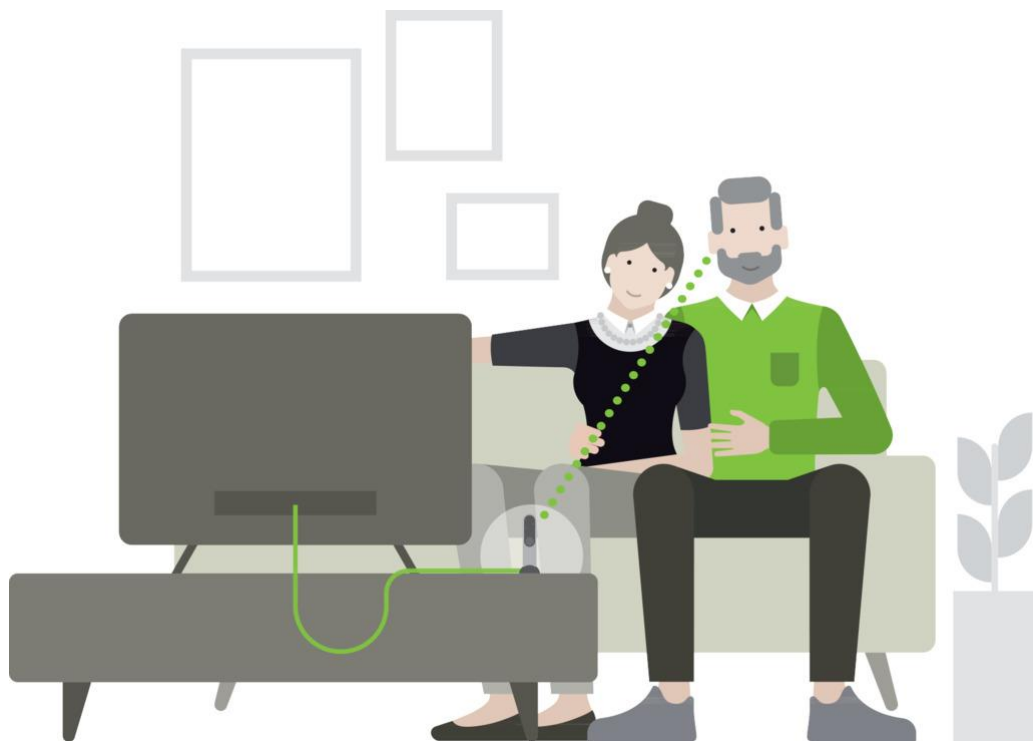
Ease of Use – The myRogerMic app



- Switch microphone mode
- Change beam steering selection
- Mute/unmute
- Check battery status
- Configure up to 2 custom programs



Streaming TV and Multimedia



Receiver Compatibility

Roger On is compatible with 02 and 03 Roger receivers used on hearing aids, cochlear implants and BAHAs



RogerDirect installed

RogerDirect License



Roger X

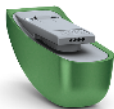


Roger Focus II



Roger NeckLoop

Universal receivers



Roger 17



Roger 18



Roger 19



Roger 20



Roger 21

Integrated receivers

Roger NeckLoop

A Universal Solution

Roger NeckLoop can be used with all hearing instruments with T-coil



- Hearing aids
- Cochlear implants
- BAHA- with a T-coil

Roger NeckLoop is available as 02 and 03 version.



Roger NeckLoop features

Detachable neck loop

- Available two lengths, 60 and 80 cm

On/off

- Clear indication of on/off

Two-sided housing

USB-C

- Charging
- Digital output



Battery

- Indication for battery status
- Up to 10 hours use, 3 hours charging

Volume control

Display

- Volume setting
- Connection status

Roger NeckLoop



Can be used with
hearing
aids, CIs, BAHA with
a **T-coil**



Easy to use and demo
Roger
Available in 02 and 03



Can be used with
Speech to Text
applications



Roger NeckLoop
brings the
conversation closer
with headphones

Speech to text



Roger NeckLoop can be **connected** to laptop/tablet or mobile phone with a **speech to text app**



Speech to text gives a **texted** version of Roger inputs

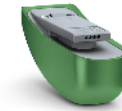
Roger NeckLoop vs. Ear-level Receivers

Benefits of Ear-level receivers:

- Better sound quality
- Access to a broader frequency bandwidth
- Automatic activation of Roger when used with Marvel and Paradise hearing aids
- No additional manual program needed

When to choose the Roger NeckLoop:

- If Roger is only accessible via T-coil
- If looking for a Speech to Text solution using Roger



Roger 17



Roger 18



Roger 19



Roger 20



Roger 21



Roger X

VS.



NEW! Roger NeckLoop

Roger NeckLoop

A universal receiver for all patients

- Compatible with Non-Phonak hearing instruments
- Students ranging from elementary to higher education
- Working young adults



Roger Focus II

Who could this be?



Unilateral Hearing Loss (UHL)

Difficulties with:

Understanding speech in noise

Challenges with localization

Decreased engagement

Increased anxiety levels

Behavioral Issues. ^{1,2,3.}



Auditory Processing Disorder (APD)

Difficulties with:

Spatial sound processing

Auditory discrimination

Auditory pattern recognition

Auditory temporal processing

Degraded auditory information in competing sound



Autism Spectrum Disorder (ASD)

Impaired auditory filtering¹

Hear, function, and complete tasks in the presence of background noise

Critical for hearing in real-world environments

Roger Focus II: Listening performance at school and home



Form factors

Up to

20

Hrs battery life
on a full charge



Roger Focus II
Rechargeable



The image shows a blue Roger Focus II Rechargeable hearing aid. To its left is a circular graphic with a vertical double-headed arrow and the number 20, indicating battery life. Below the hearing aid is a white and green charging case with two pink hearing aids inside.

Up to

52

Hrs battery life



Roger Focus II-312
Zinc-Air

The image shows a black Roger Focus II-312 Zinc-Air hearing aid. To its left is a circular graphic with a vertical double-headed arrow and the number 52, indicating battery life.

Roger Focus II ...



Listening performance
at school and home



Personalized choices



Safety

...helps children and teens focused on what matters

Resources



HearingSuccess

BabyBeats™ early intervention resource

Bond with your child using musical activities to start developing early listening & communication skills. Have fun together experiencing music and creating new precious moments.

LEARN MORE

GO >

TOOLS for TODDLERS

Help your infant or toddler get a strong start after identification of hearing loss.

LEARN MORE

GO >

The Listening Room™
rehabilitation support website

TOOLS for SCHOOLS

HEARINGJOURNEY™
online forum

LIVE WEBINARS

Webinars On Demand

A Sound Foundation Through Early Amplification 2021

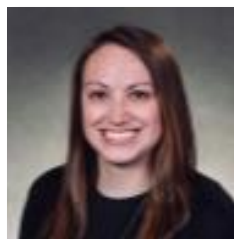
8th International Pediatric Audiology Conference
March 28 — 31, 2021

**We hope you
can join us!**



Register at Phonakpro.com
Trainings and Events tab/Phonak Events

The Phonak pediatric team



Sarah Benner
Pediatric Territory
Manager
AK, N CA, ID, MT,
OR, WA, and WY
x 9648



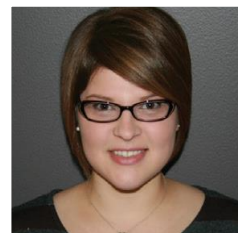
Evan Claytor
Pediatric Territory
Manager
DE, NJ, NY, and
E PA
x 9635



Stacy Michels
Pediatric Territory
Manager
IL, IA, KS, MN, NE,
ND, SD, and WI
x 5171



Patty Shappell
Pediatric Territory
Manager
AZ, CO, HI, NV, UT,
S. CA, and Guam
x 5003



Dana Ulakovic
Pediatric Territory
Manager
CT, ME, MD, MA,
NH, NC, RI, VT,
VA, and DC
x 9568



Morgan White
Pediatric Territory
Manager
IN, KY, MI, OH, W. PA,
E. TN, and WV
x 9524



Cybill Johnson
Pediatric
Account Specialist
x5293



Dawn Aerts
Director of
Pediatric Sales
x5275



Coming Soon!
AL, FL, GA, MS,
SC, W. TN

AR, LA, MO, NM,
OK, TX

First.Last@phonak.com

Together,
we change lives