

1. This document was created to support maximum accessibility for all learners. If you would like to print a hard copy of this document, please follow the general instructions below to print multiple slides on a single page or in black and white.
2. This handout is for reference only. Non-essential images have been removed for your convenience. Any links included in the handout are current at the time of the live webinar, but are subject to change and may not be current at a later date.
3. Copyright: Images used in this course are used in compliance with copyright laws and where required, permission has been secured to use the images in this course. All use of these images outside of this course may be in violation of copyright laws and is strictly prohibited.
4. Social Workers: For additional information regarding standards and indicators for cultural competence, please review the NASW resource: [Standards and Indicators for Cultural Competence in Social Work Practice](#)
5. Need Help? Select the “Help” option in the member dashboard to access FAQs or contact us.

How to Print Handouts

- On a Mac
 - Open PDF in Preview
 - Click File
 - Click Print
 - Click dropdown menu on the right “preview”
 - Click layout
 - Choose # of pages per sheet from dropdown menu
 - Checkmark Black & White if wanted.
- On a PC
 - Open PDF
 - Click Print
 - Choose # of pages per sheet from dropdown menu
 - Choose Black and White from “Color” dropdown

No part of the materials available through the continued.com site may be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of continued.com, LLC. Any other reproduction in any form without such written permission is prohibited. All materials contained on this site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior written permission of continued.com, LLC. Users must not access or use for any commercial purposes any part of the site or any services or materials available through the site.



Beltone Serene CROS Transmitter

Single-Sided **Deafness**

- The loss of all or almost all hearing in one ear
- Congenital
- Acquired
 - Acoustic neuroma
 - Viral or bacterial infections
 - Autoimmune diseases
 - Physical injury to the ear or head
 - Acoustic injury due to noise
 - Circulatory disorder
 - Unknown etiology



39

Main **Consequences**



Hearing
speech from
the impaired
side



Poor sound
localization



Understanding
speech in
noise



Auditory
fatigue



Reduced
quality of life
than
compared to
a binaural
loss*



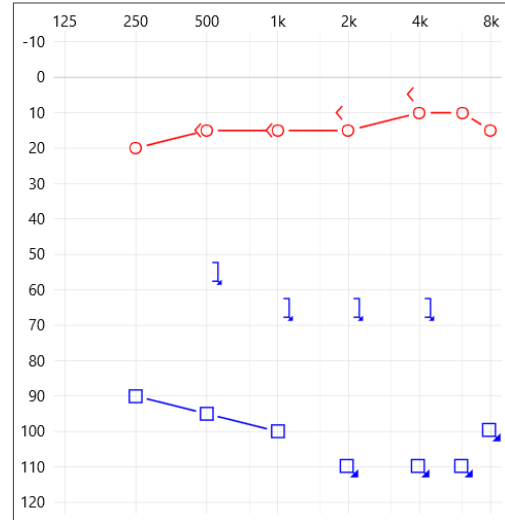
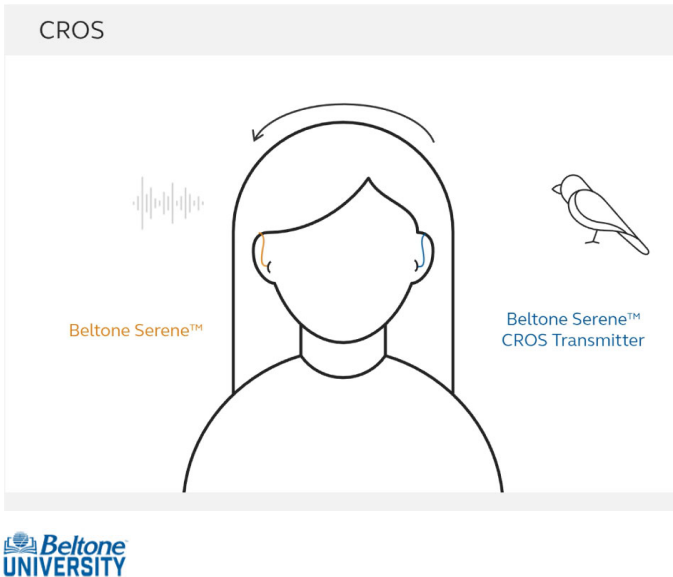
Greatly
impact
socialization,
learning and
work
productivity*



* Snapp and Ausili, 2020

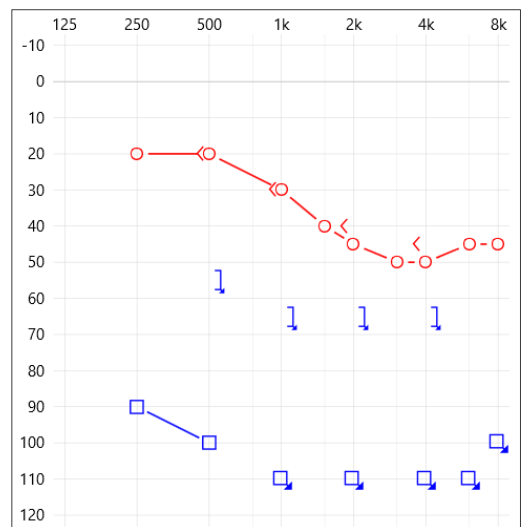
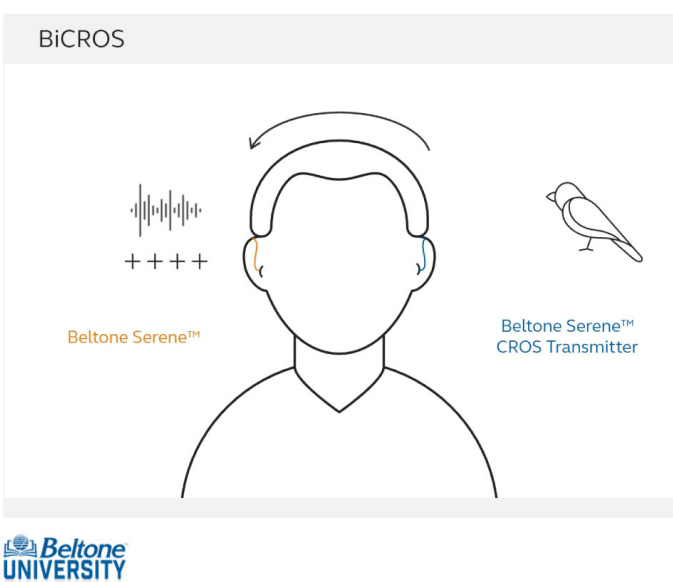
40

Beltone Serene CROS



41

Beltone Serene BiCROS



42

CROS Transmitter hardware

- Only available in the microRIE style
- Has TapControl
- In the same 8 colors and IP 68 rated



- Uses the same 3 charger types



16h

Battery life when streaming audio to the opposite ear

- Supports fitting with SureFit 3 LP, MP, and HP receivers

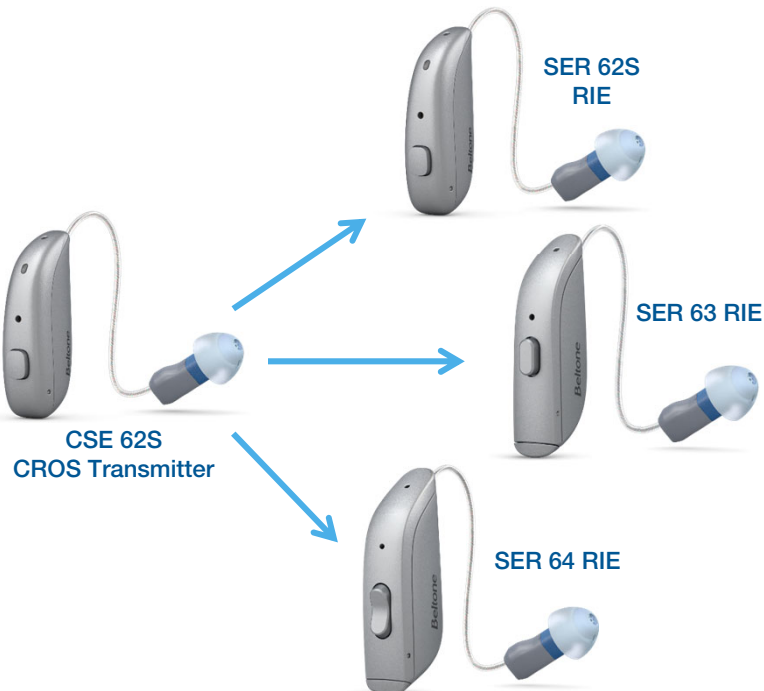


- Can use any SureFit 3 dome or earmold that helps with retention



43

The CROS Transmitter
Can be Fit
With



44

Beltone Serene Rechargeable microRIE



microRIE SER 62S

- Lithium ion/induction rechargeability
- All day battery on 1 charge
- All-Weatherproof (IP 68)
- Push to assign, LED Light, Push Button
- 2.4 GHz and E2E communication
- MFi and Hands-free calls
- ASHA

Plus

- TapControl
- Compatible with new TV-Streamer+
- Bluetooth Low Energy Audio (Auracast ready)



45

Beltone Serene Replaceable Battery RIEs



63 RIE
using 312
battery

64 RIE
using 13
battery

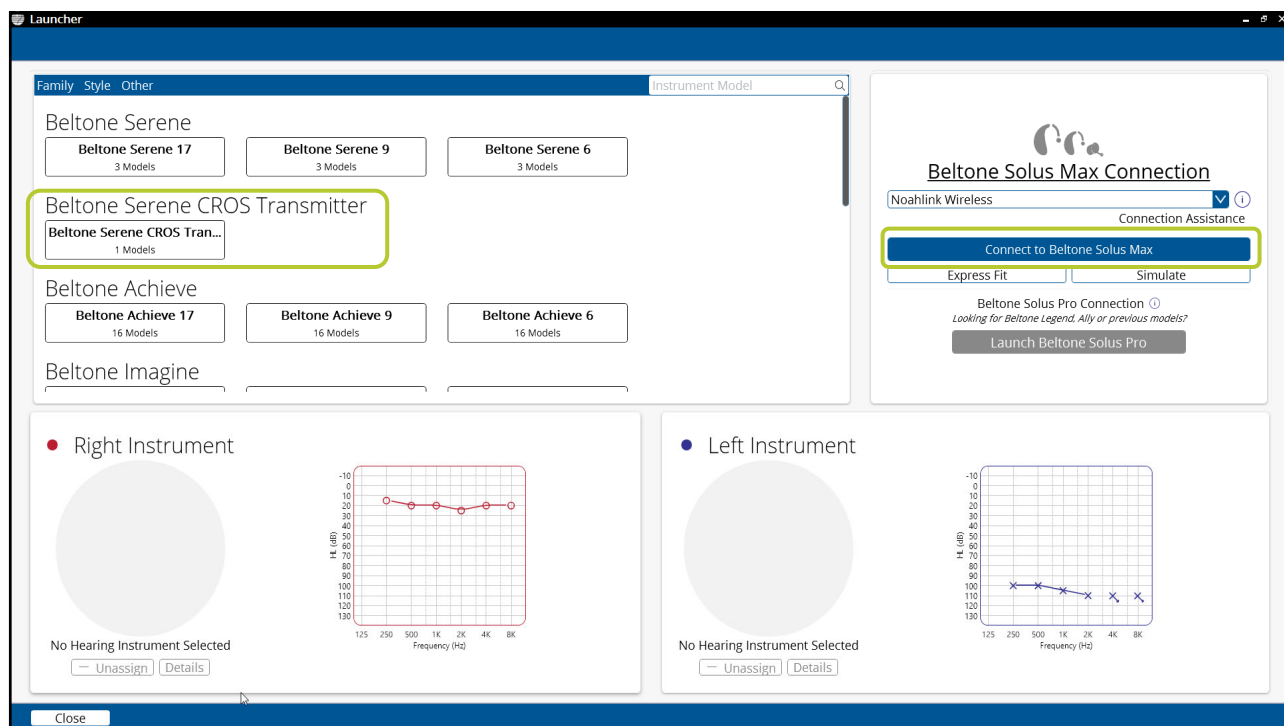
- Push Button/Multi Toggle button
- All-Weatherproof (IP 68)
- Push to assign
- 2.4 GHz and E2E communication
- MFi and Hands-free calls
- ASHA

Plus

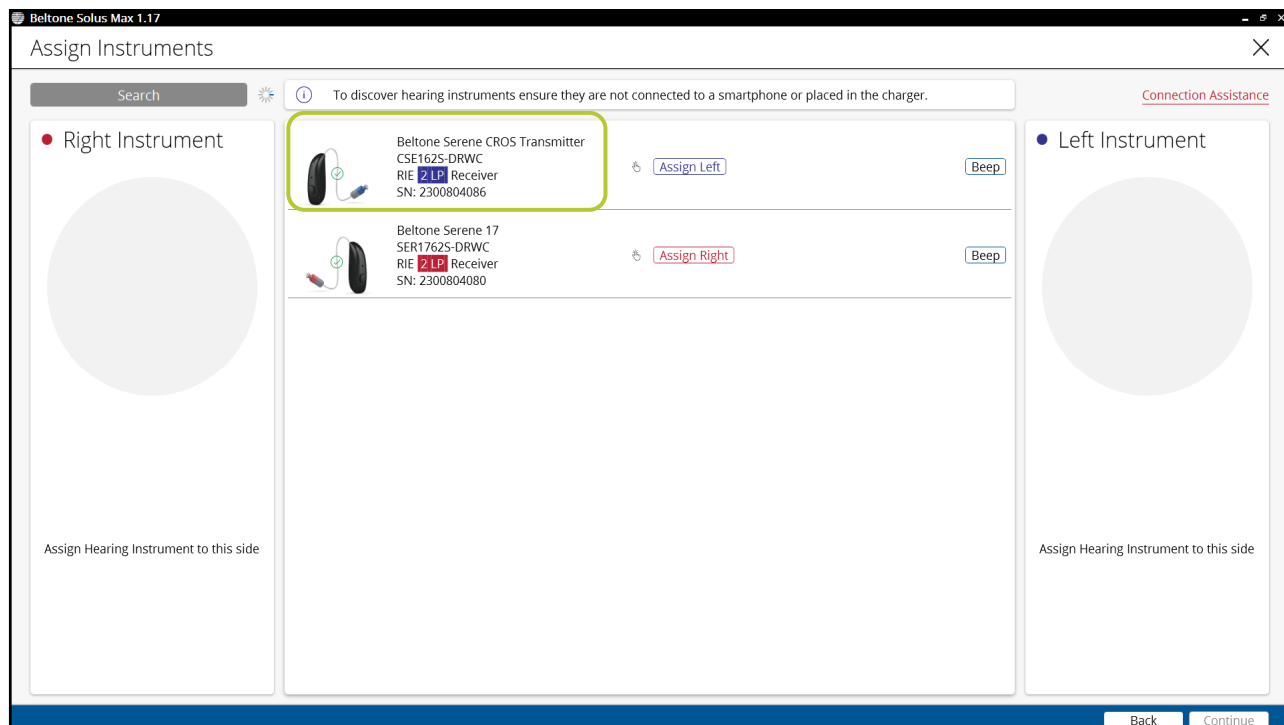
- Compatible with new TV-Streamer+
- Bluetooth Low Energy Audio (Auracast ready)



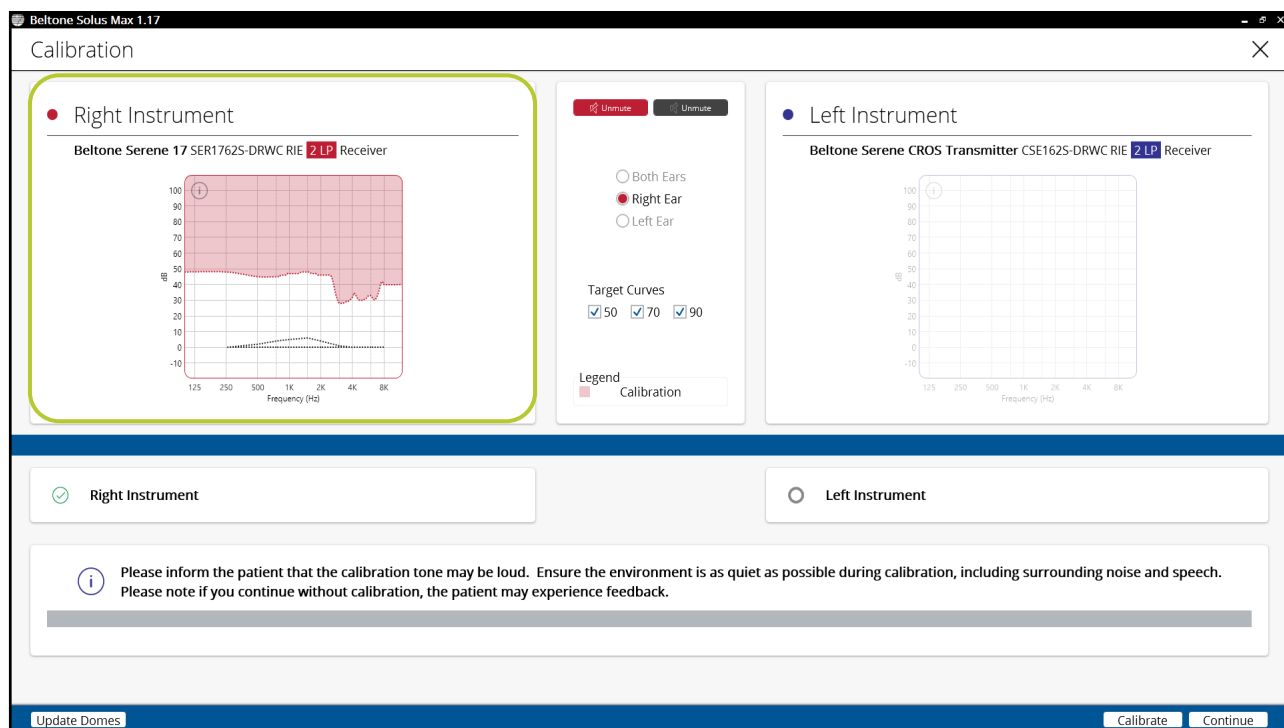
46



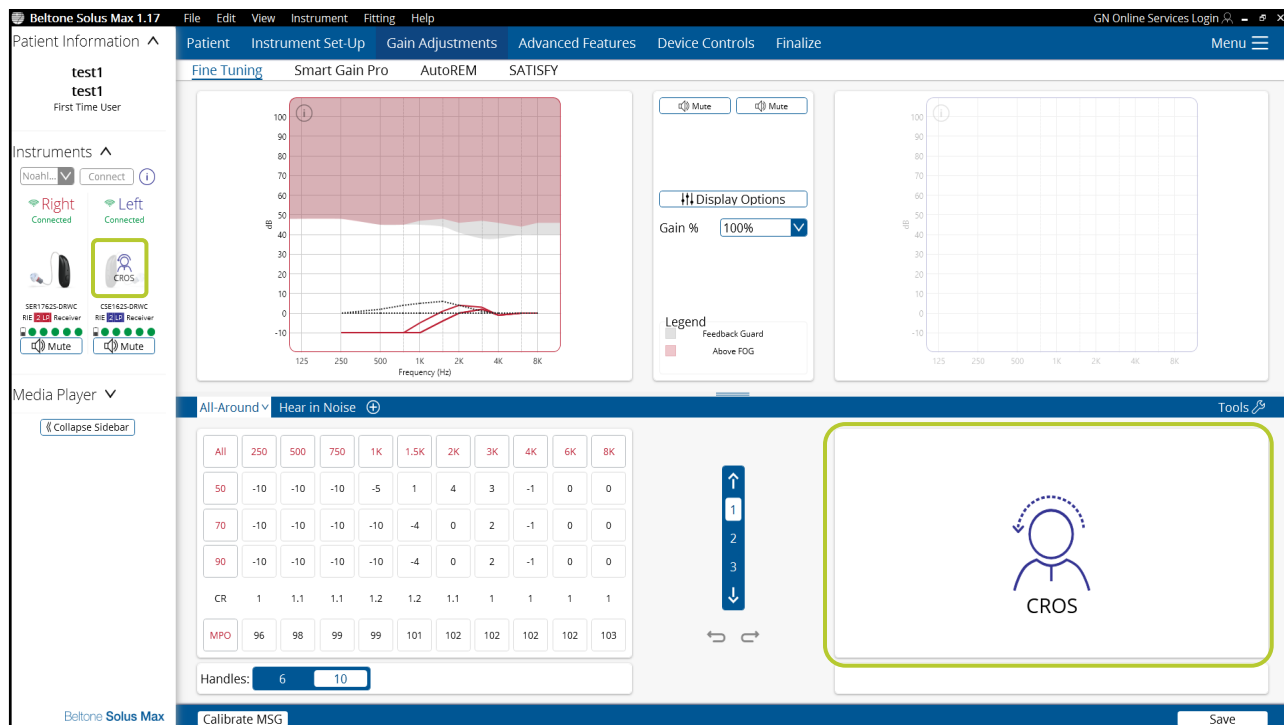
47



48



51



52

Negative Gain Values

Helps with occlusion for any type of fitting

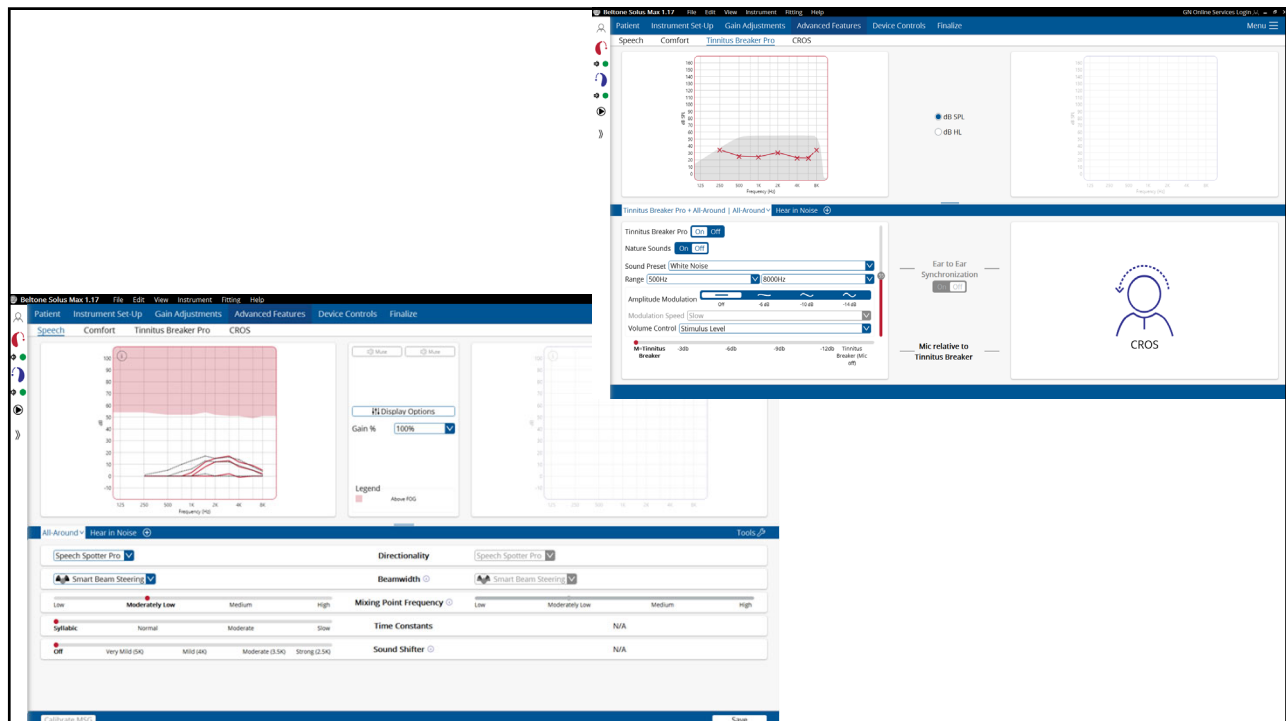
With a CROS fitting

- Good ear could still have too much occlusion even with an open dome
- Hearing aid microphones are on

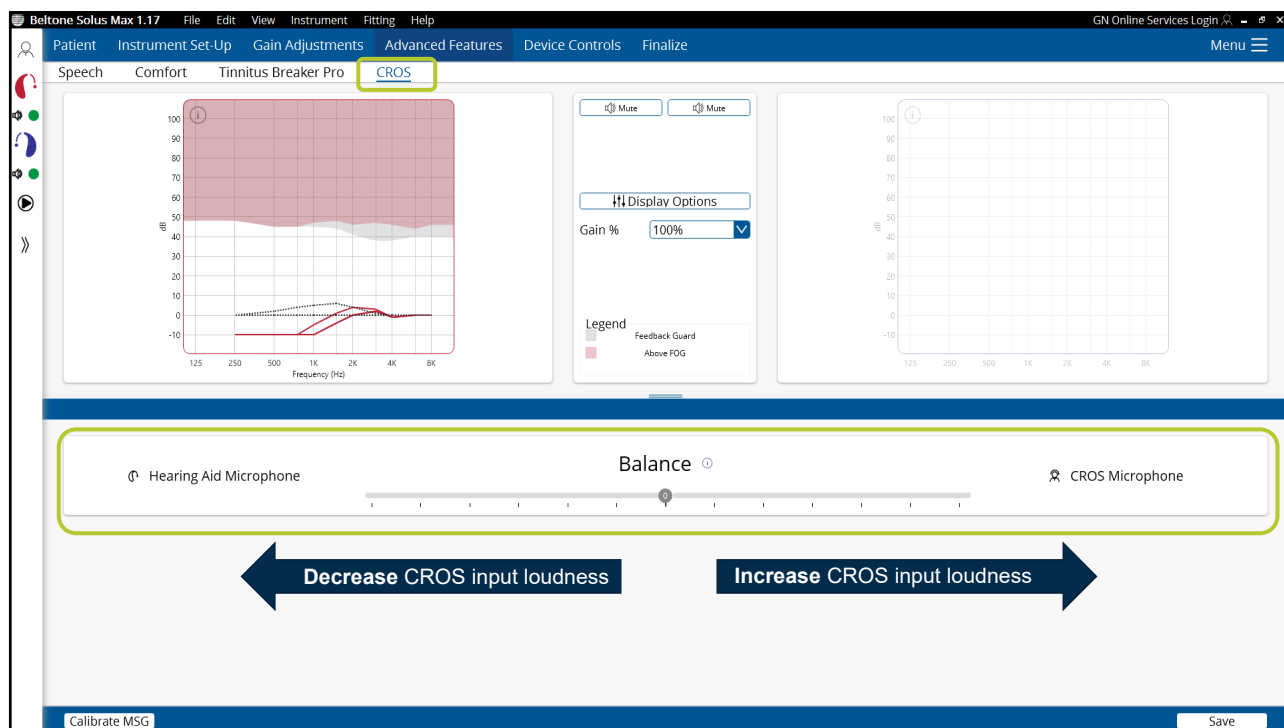
All	250	500	750	1K	1.5K	2K	3K	4K	6K	8K
50	-10	-10	-10	-5	1	4	3	-1	0	0
70	-10	-10	-10	-10	-4	0	2	-1	0	0
90	-10	-10	-10	-10	-4	0	2	-1	0	0
CR	1	1.1	1.1	1.2	1.2	1.1	1	1	1	1
MPO	96	98	99	99	101	102	102	102	102	103



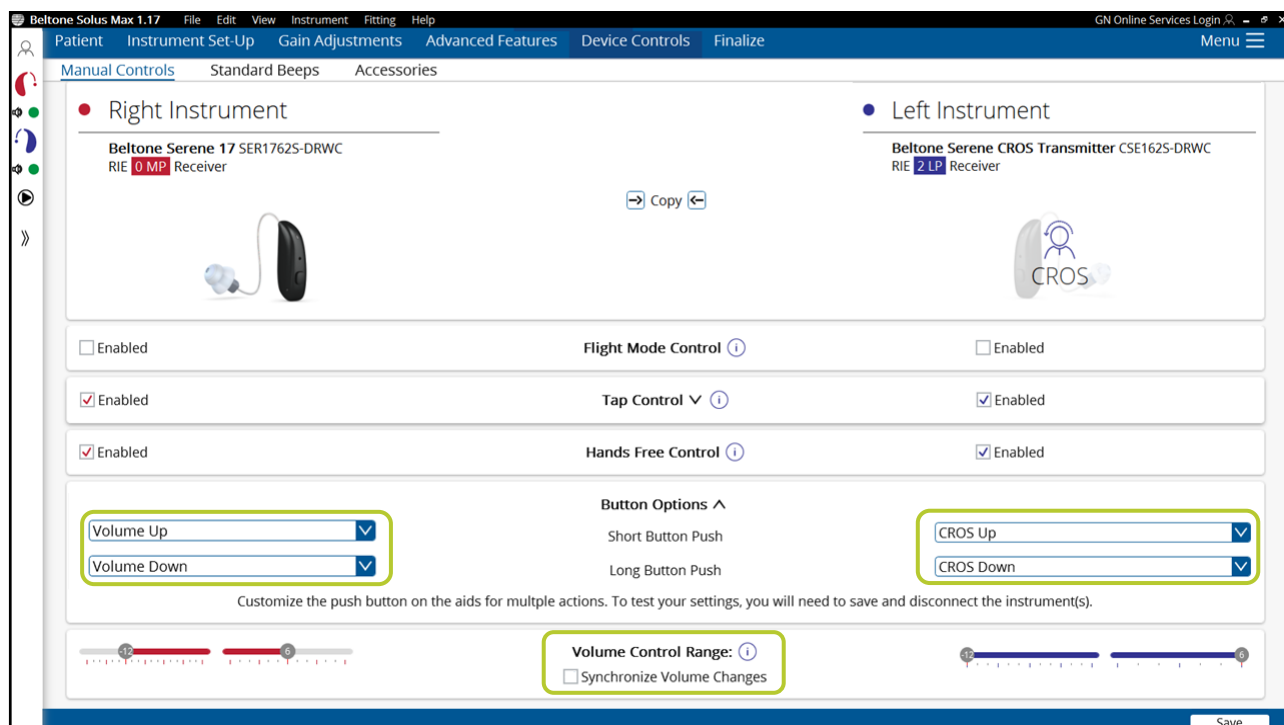
53



54



55



56

CROS Feature Animation

Help

Guides

Counseling

Connection Assistance

Feature Demonstrations

Beltone Website

Check for Updates

CROS Quick Fitting Guide

About DSL

About Beltone Solus Max

Feature Demo Player

CROS/BiCROS

CROS/BiCROS

For a user with unilateral unaidable hearing loss, only aiding the better ear may not produce adequate speech understanding, particularly in noise. This is primarily due to the head shadow effect, which results in up to a 7dB reduction of the signal coming from the side of the poorer ear to the better ear. Fitting a CROS transmitter to the poorer ear will stream the sound typically lost to the head shadow effect to the hearing aid fitted to the opposite ear.

Close

CROS/BiCROS

For a user with unilateral unaidable hearing loss, only aiding the better ear may not produce adequate speech understanding, particularly in noise. This is primarily due to the head shadow effect, which results in up to a 7dB reduction of the signal coming from the side of the poorer ear to the better ear. Fitting a CROS transmitter to the poorer ear will stream the sound typically lost to the head shadow effect to the hearing aid fitted to the opposite ear.

Those users with normal hearing on the side fitted with the hearing aid will not have amplification; only the streaming signal from the poorer ear will be heard in the ear with normal hearing (CROS).

Should the user have hearing loss in the better ear as well, the hearing aid fitted on the aidable ear will provide amplification as well as the streamed signal from the opposite ear (BiCROS).



57

Beltone

HearMax app

CROS/BiCROS

Fitting

Back

Laura's Hearing Aids

Laura's Hearing Aids

Beltone SER1762S-DRWC

Beltone CSE162S-DRWC

Stream to right hearing device

Stream to left hearing device

Adjust Independently

MICROPHONE LEVEL

67

Treble

0

Bass

0

LEFT PRESETS

All-Around

Hear in Noise

RIGHT PRESETS

All-Around

All-Around

Noise filter

Speech clarity

R

L

Sound Enhancer

Home

Status

My Beltone

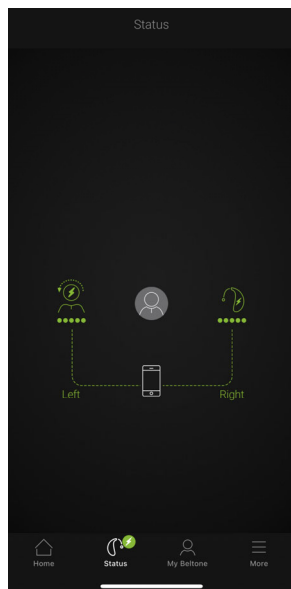
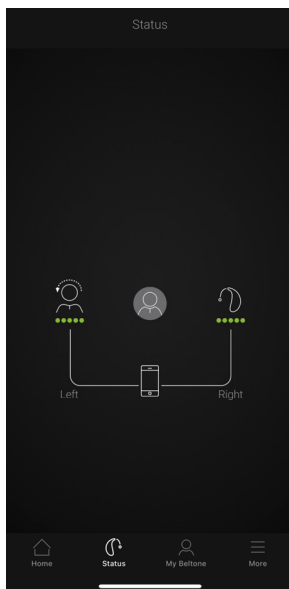
More

58

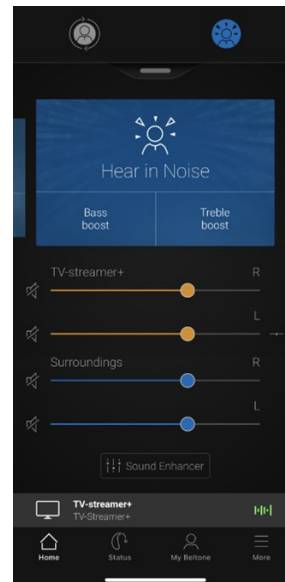
Presented in partnership with
continued

10

Status Screen



Accessory Streaming with a CROS Transmitter



59

Learning Summary

1

Identify the difference between a CROS and BiCROS fitting for single sided deafness.

2

Describe the hardware needed to fit a CROS/BiCROS system.

3

List the appropriate steps for fitting a CROS/BiCROS system in Beltone Solus Max.

60