










GENERAL SETUP


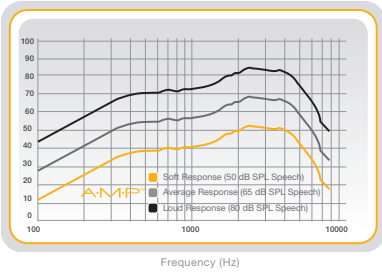

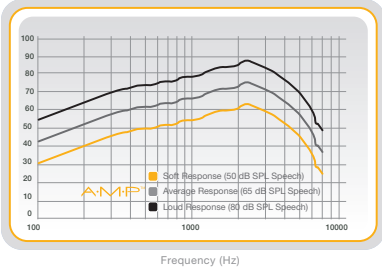

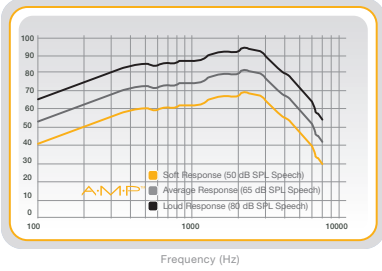
This application generates audible tones to make specific adjustments to AMP hearing aids. **For best programming results, headphones should be used to play the tones in the patient's ears.** The built-in speaker system on the mobile device may be used with this application; however, the tones must be loud enough to be detected by the AMP hearing aids. If there are no headphones attached to your mobile device then simply position the speaker output on your mobile device next to the patient's ear when an adjustment is made.

The power on the AMP hearing aid must be cycled (turned on and off) to enable programming. If there are no programming commands presented within 10 minutes of turning on the AMP, or within 10 minutes of each individual adjustment command, then the AMP hearing aid will need to be re-enabled for programming.

APPLICATION ICON OVERVIEW

ICON	DESCRIPTION
	<p>Fit Icon Icon is enabled during a fitting session.</p>
	<p>Ear Selection Icon Controls whether the tone sequences will be played monaurally or binaurally. This is available for headphones only. The three options are: right (monaural), left (monaural) or binaural (delivered to both ears simultaneously).</p>
	<p>Headphone Selection Icon No headphones are detected. Speakers will be used to deliver the tones.</p>
	<p>Headphone Selection Icon Headphones are detected and will be used to deliver the tones.</p>
	<p>Fitting Preset Icons Icons represent the four fitting presets. There are three based on audiometric configurations and one that is full-on gain. (Please see Fitting Preset Guide below)</p>
	<p>Adjustment Icon Decreases the parameter setting. These values are relative to the selected preset and each step size is 2dB. Gain value changes are tracked for each ear and are indicated with L and R for left and right devices, respectively.</p>
	<p>Adjustment Icon Increases the parameter setting. These values are relative to the selected preset and each step size is 2dB. Gain value changes are tracked for each ear and are indicated with L and R for left and right devices, respectively.</p>

AMP PRESET CONFIGURATIONS

PRESET	CANDIDACY	PREDICTED REAL EAR RESPONSE	SPECIAL CONSIDERATIONS
1			Select this preset for mild high frequency hearing losses and those patients who prefer linear amplification.
2			Select this preset for mild-to-moderate sloping hearing losses and those patients who prefer non-linear amplification.
3			Select this preset for moderate hearing losses and those patients who prefer non-linear amplification.

TONE SEQUENCES

There are two methods where tones are generated through the fitting process: 1) tonal sequences emitted from the mobile device representing the adjustment commands and 2) tones emitted from the AMP hearing aids in response to the changes to the settings.

ADJUSTMENT COMMANDS

This application uses Dual Tone Multi-frequency (DTMF) signals as the adjustment commands. Each adjustment command has a unique, tonal sequence consisting of three DTMF signals, representing the adjustment commands. The audio level of the adjustment commands is controlled by the audio level of the mobile device.

INDICATORS

The AMP hearing aid will play audible tones that provide confirmation that an adjustment command has been applied successfully. Tones will play to confirm the chosen preset (one tone for Preset 1, two tones for Preset 2, three tones for Preset 3 and four tones for Full-On Gain). Immediately following the adjustment command tonal sequence, the AMP hearing aid will respond with one of two tonal sequences: 1) a warble tone sequence confirming the change or 2) a series of high and low tones representing that no further adjustments can be made for that particular setting.

The levels of the indicators are set, with presets 1 & 2 using the same level and 3 & 4 being 10 dB louder. The indicators are also adaptive in nature, which means that the level will be adjusted louder in volume if there is measurable background noise in the environment during the fitting process. If the patient does not hear an audible tone generated in the device after an adjustment has been made, repeat the adjustment. If using a speaker, move the speaker of the device closer to the AMP hearing aid and repeat the adjustment.