



LōKēTM



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LōKē Owners Manual

Safety

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use Lökē near water.
6. Clean amplifier with dry cloth only.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of any polarized or grounding—type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two prongs and a third grounding point. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the amplifier.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the enclosure specified by the manufacturer, or sold with the amplifier. When a cart is used, use caution when moving the cart/Lökē combination to avoid injury from the enclosure tipping over.
13. Unplug Lökē during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the amplifier or driver has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the enclosure, the amplifier has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **WARNING:** To reduce the risk of fire or electric shock, Lökē should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this product.
16. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.



IMPORTANT SAFETY INSTRUCTIONS

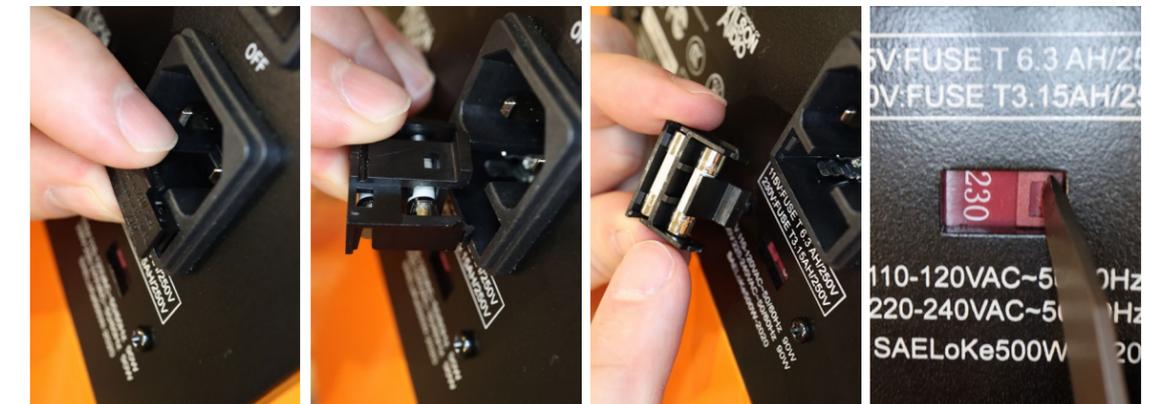
To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel. To reduce the risk of fire and shock do not expose unit to rain or moisture. The unit should be connected to an earth grounded AC electrical socket. The unit should be operated in a well ventilated area. Minimum clearance is 2 inches from the ventilation openings.

NOTE: Unit is set at the factory based on the voltage sticker placed over the power connection. If the voltage operation needs to be changed, be sure to change the fuse and voltage selector to the appropriate rating before use. Use the 6.3A rated fuse for 115V and the 3.15A rated fuse for 230V.

Also on Wilson Audio's FAQ
wilsonaudio.com/support/faq



Fuse Replacement
Tutorial



Step 1

Step 2

Step 3

Step 4

6 LÖKĒ INSTALLATION AND CARE GUIDE

FCC Statement

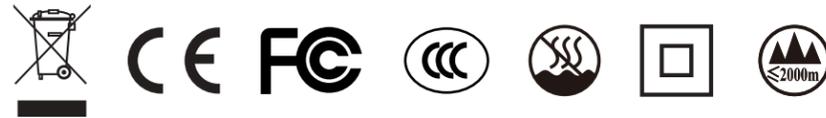
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your Dealer for further assistance.



wilsonaudio.com/support/dealers



Contact your Dealer

wilsonaudio.com/support



Contact Us for Lökē
Certifications



Lökē Placement Guidelines

Because the Lökē's frequency range is limited to the sub-frequency bass range, its placement requirements are slightly different than for a full frequency speaker. The Lökē is shipped with casters installed on the bottom of the enclosure. Leave the casters installed as you move Lökē to the desired location.

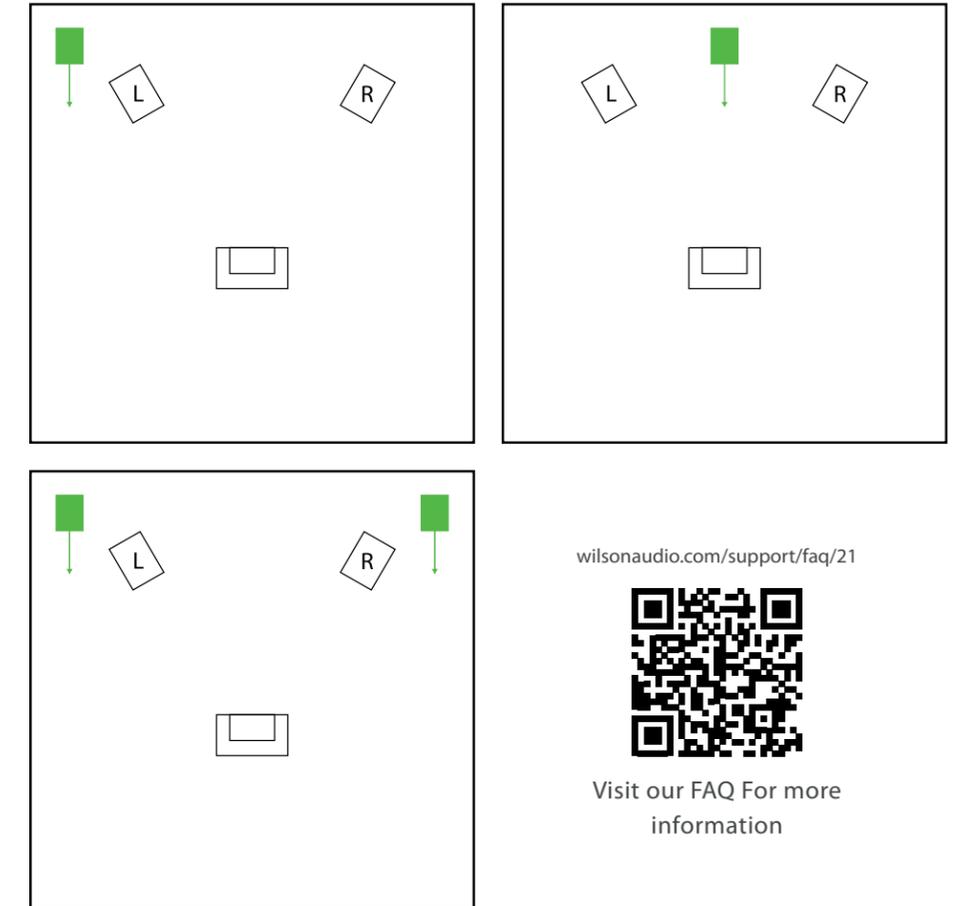
The ideal position of the Lökē subwoofer is somewhat dependent on its primary use. In home theaters, where the Lökē is used as the Low Frequency Effects (LFE) Channel, it may be located in a variety of positions, depending on architectural considerations. Your Authorized Wilson Audio Dealer will have the best insights for helping you install your Lökē in any configuration.

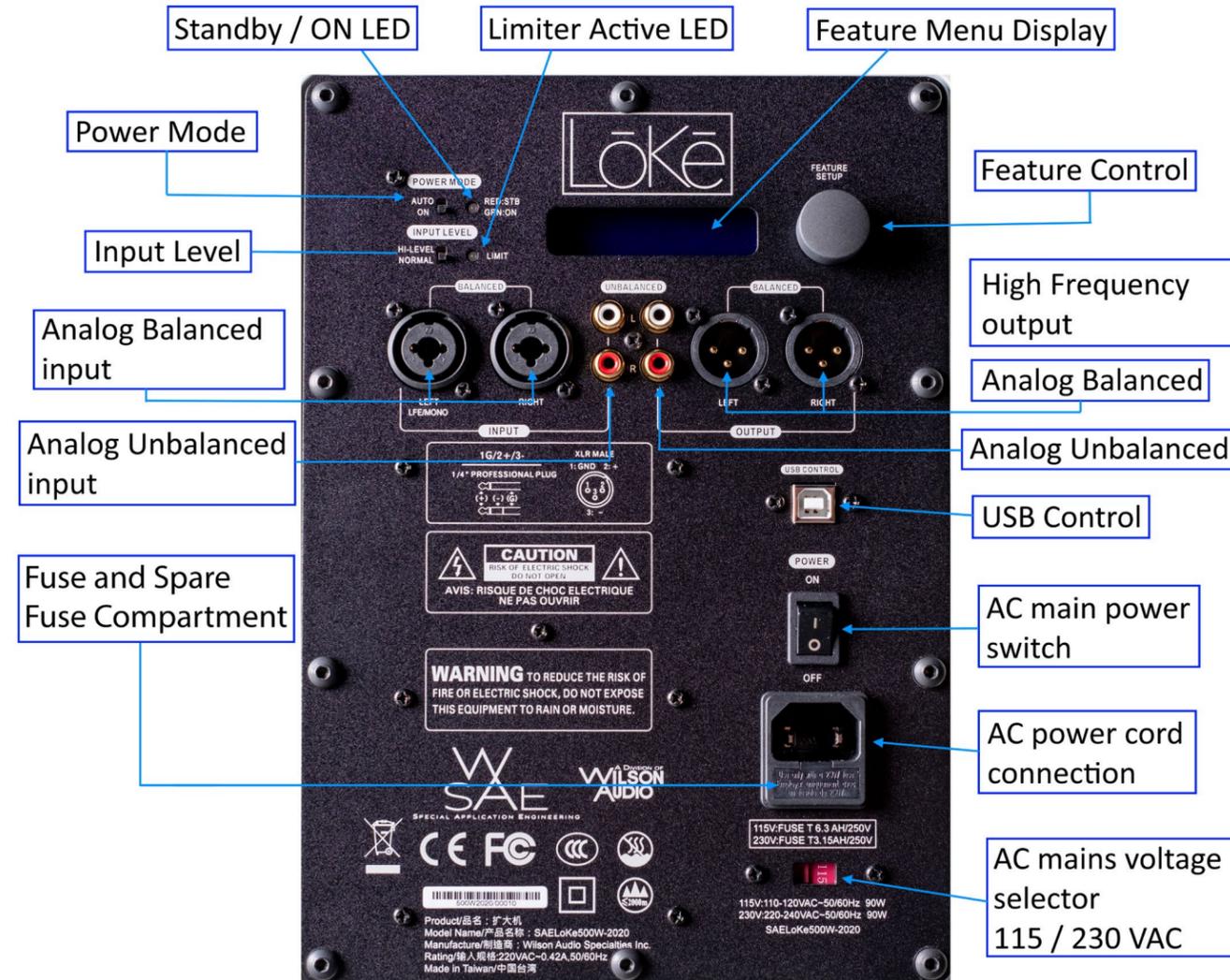
In general, the lower frequency range will be reinforced by room boundaries and corners. Since most of the information contained in the LFE channel is in the sub-frequency bass range, with little information in the mid and upper bass, there are some advantages to placing the Lökē near the room boundaries or near a corner. Some care is needed to avoid introducing up-per-bass colorations caused by corner placement.

While surround processors provide the low frequency equalized signal for the LFE Channel, it has been our experience that in some systems it is desirable to use the Low Pass crossover (via the internal Low Pass Function of the amplifier control) to additionally limit the upper bass range. This is particularly important and useful when the Lökē is placed in the corner.

Since all Wilson Audio Speakers are phase and time coherent, it is very important to time align the Lökē in the room using the Phase Function found in the Lökē's amplifier menu. Please contact your Authorized Wilson Audio Dealer to help you install your Lökē.

Suggested Installation Locations





Back panel and input/output (I/O) definition

- Power Mode:** Select either energy-saving “AUTO” or always-on “ON” power mode.

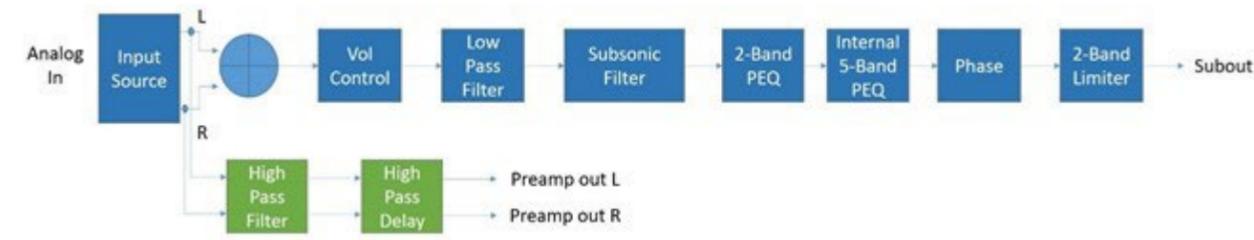
 - Auto:** Amp goes into standby 20 minutes after no detected input signal.
 - On:** Amp is always on, regardless of input signal status.

Amp will automatically turn on (typically in one second or less) when audio signals are detected while in standby mode.
- Analog input attenuation:** Affects analog balanced and unbalanced inputs only.

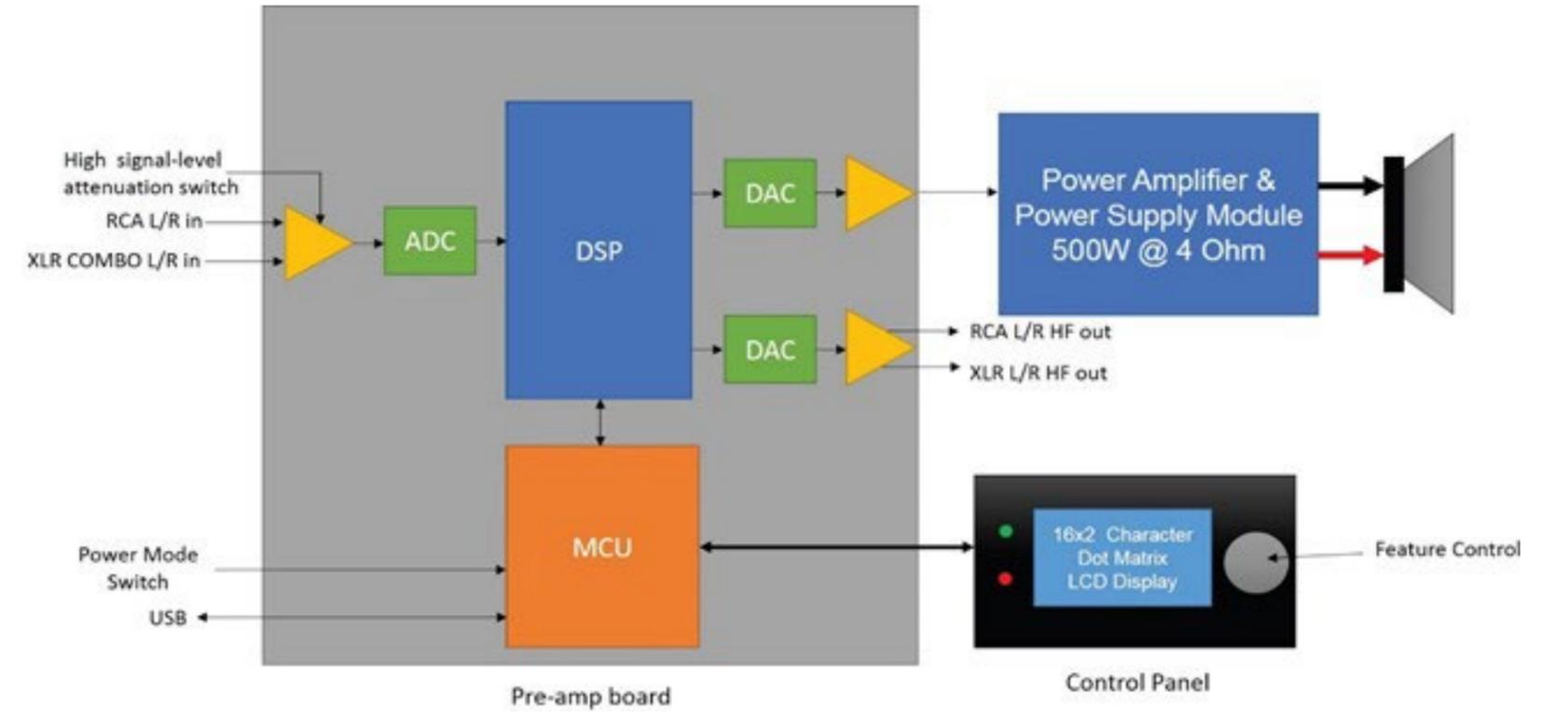
 - Normal:** No attenuation.
 - Hi:** Attenuates input signal by -6dB.
- USB Control:** Used for PC-GUI communication with custom PC software. Software only available upon request and will rarely be needed (*software is PC only, not Apple compatible*).
- Feature Control:** Single knob digital actuator with single/double-click enabled with rotary scrolling to navigate the amp’s extensive feature menu.
- Limiter LED:** Lit when Limiter is active (Red).
- Standby/On LED:**

 - Red when amp is in energy saving “stand by” state.
 - Green when amp is operating normally.
- Analog Balanced inputs** are XLR or ¼ inch tip ring sleeve receptacles.
- Analog Outputs** are high frequency (high pass) signal output after the high pass filter.
- AC main power switch** needs to be in the “ON” position for the AUTO power mode to function.
- AC mains voltage selector** needs to be set to the required voltage and the correct fuse installed for the region before power is applied.

DSP Processing Block Diagram



Amp System Block Diagram



Feature Menu Display

Needed definitions: **“Single-click”** - push the rotary control knob in until you feel/hear a click, once. **“Double-click”** - push the rotary control knob in until you feel/hear a click, twice in quick succession.

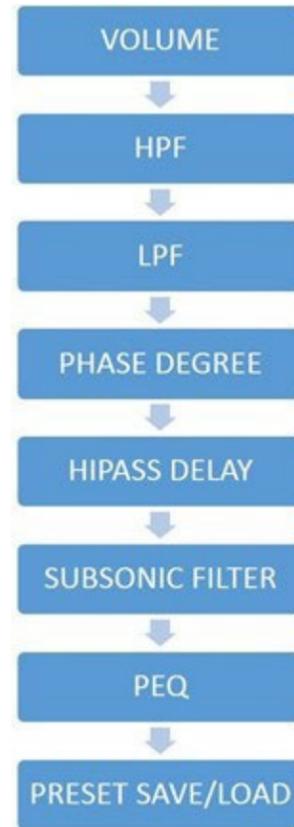
Volume, Phase, Low-Pass Filters, and all other function controls are accessible via the rotary control knob. An example usage is described below for the Volume function. The same process can be used for the other functions.

Volume (shown above as it will show on the display) is selected by a **“single click”** when Volume is displayed on the screen. After the single click, the level is set by rotating the knob which allows 0.1dB adjustment up or down. When the desired level is displayed on the screen, a **“double-click”** sets the value and brings you back to the Main Menu. Subsequent rotation of the control knob, when in the Menu function, navigates you through a series of setup menus as shown on the right.

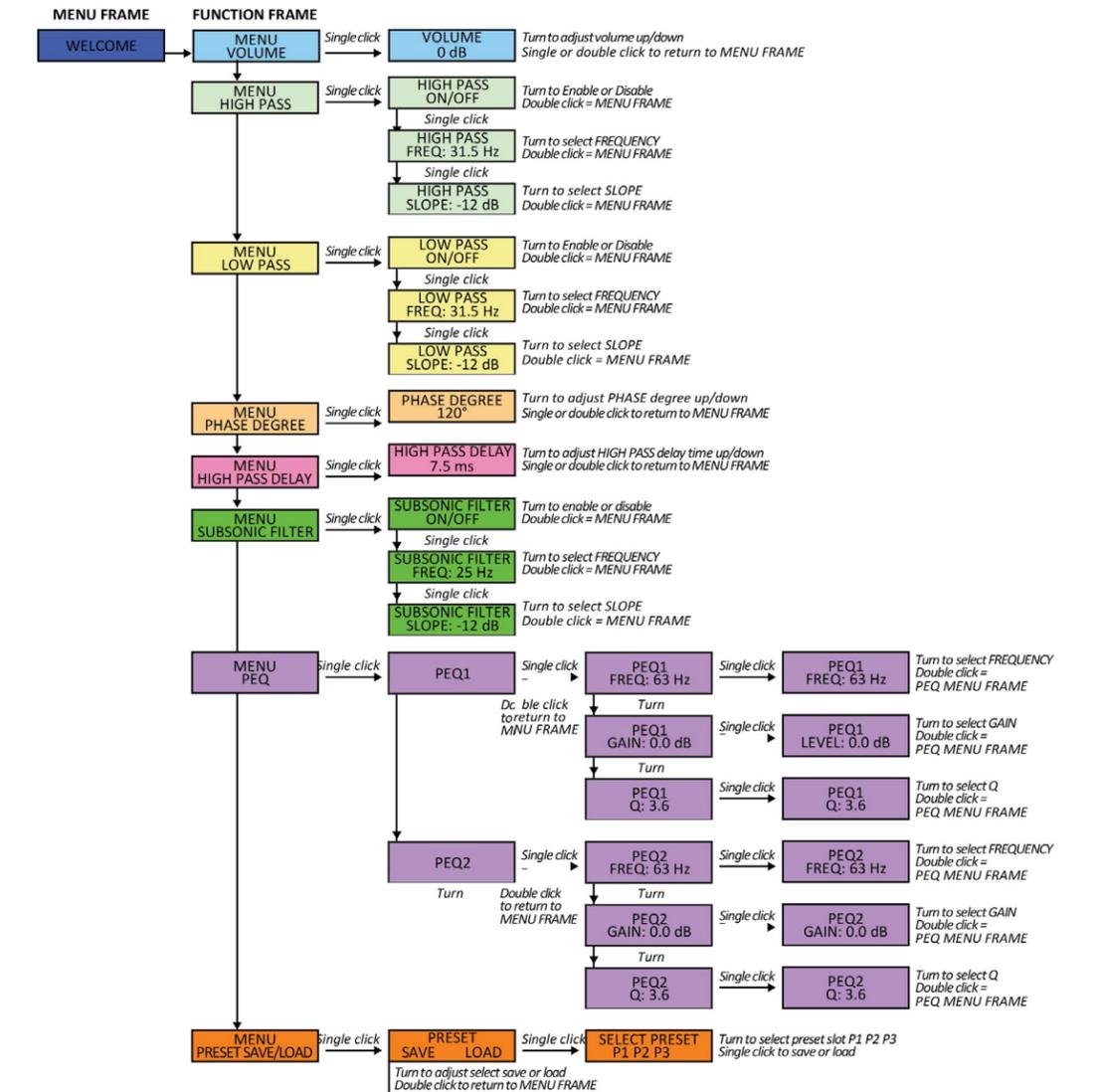
Each of the “Functions” at right correspond to the major feature controls on the amp. Each feature control uses the same single/double-click navigation.

NOTE: the detailed features and sub-features that are accessible via the menu functions and control knob, are shown on the next page. The values shown in the graphic are for example only. The function values will need to be set according to your specific system/room needs.

It is recommended that you take time to scroll through your amp’s features and get familiar with its simple single-click and double-click feature adjustment and selections before installing in its final location.

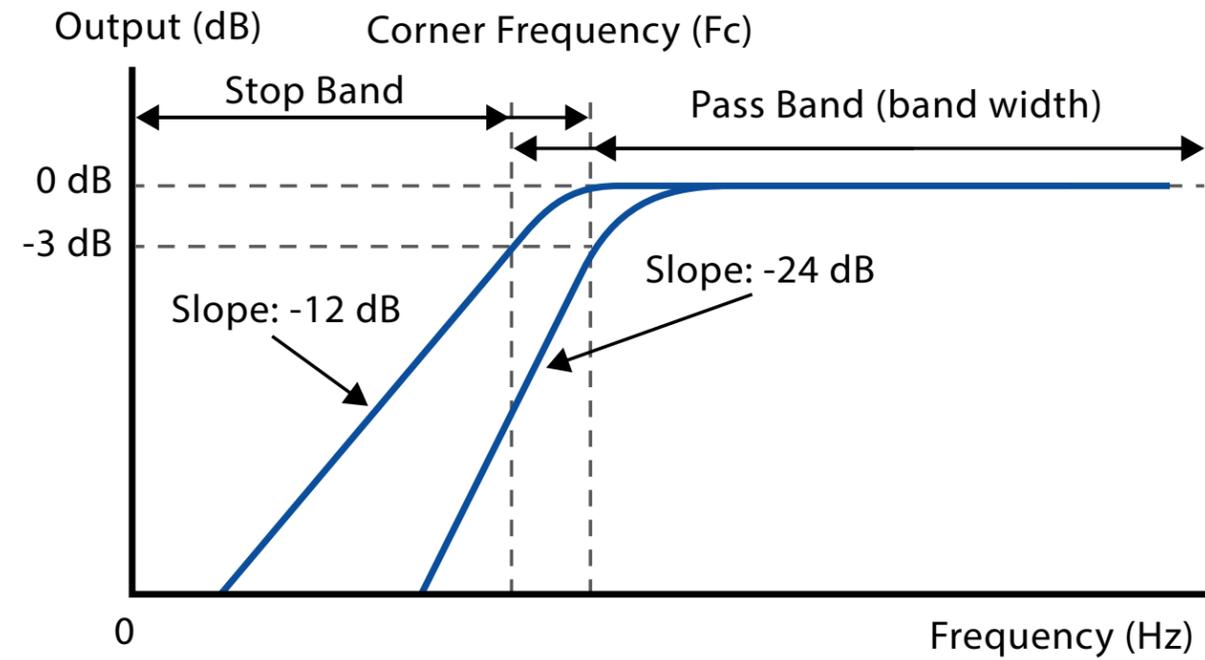


- VOLUME
- HIGH PASS
- LOW PASS
- PHASE DEGREE
- HIGH PASS DELAY
- SUBSONIC FILTER
- PEQ
- PRESET SAVE/LOAD



High Pass Filter

High Pass Filter concept graphic showing adjustable features.

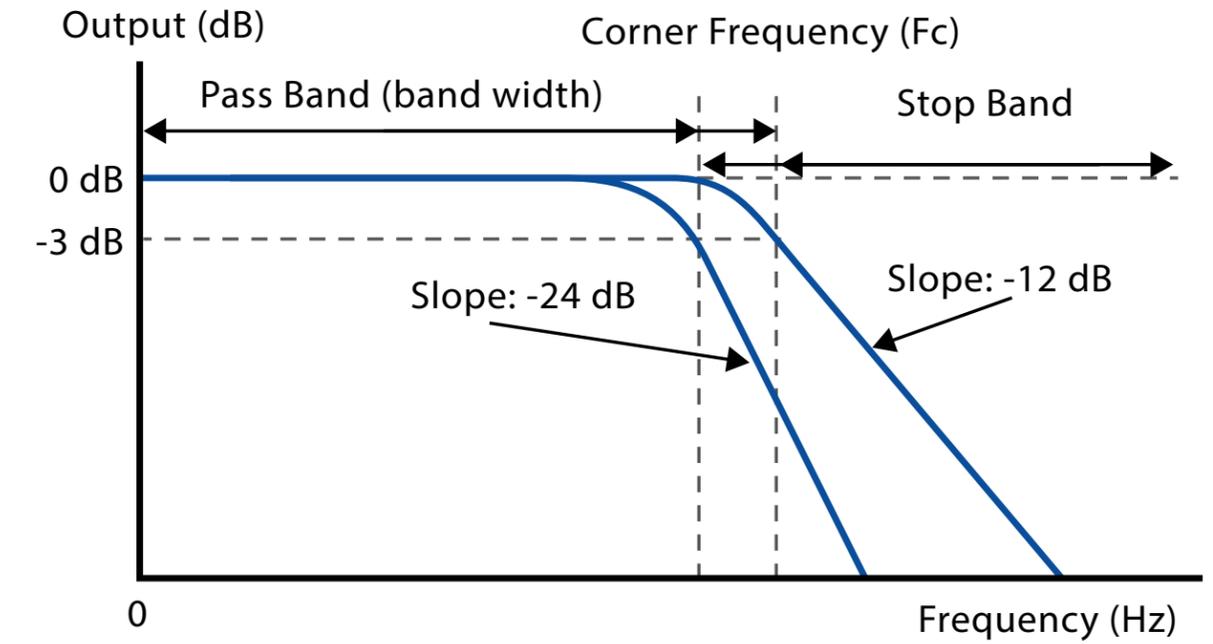


Adjustable Features:

- High Pass: Filter On/Off
- High Pass: Frequency
- High Pass: Slope

Low Pass Filter

Low Pass Filter concept graphic showing adjustable features.

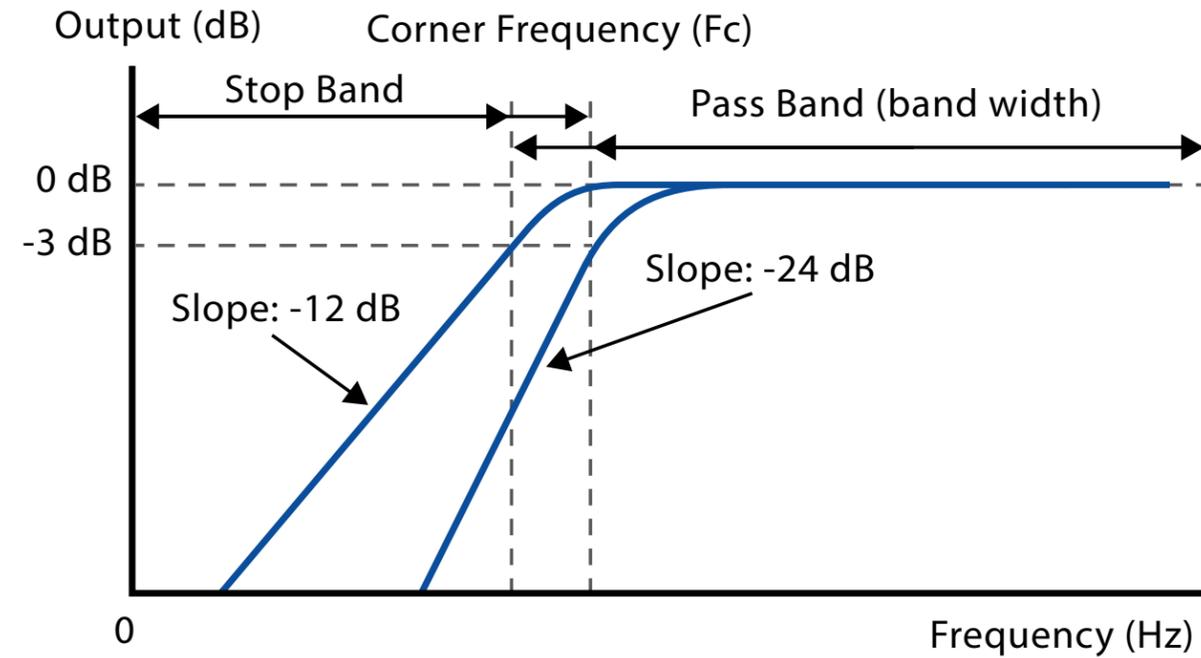


Adjustable Features:

- Low Pass: Filter On/Off
- Low Pass: Frequency
- Low Pass: Slope

Subsonic Filter

Subsonic Filter concept graphic showing adjustable features.

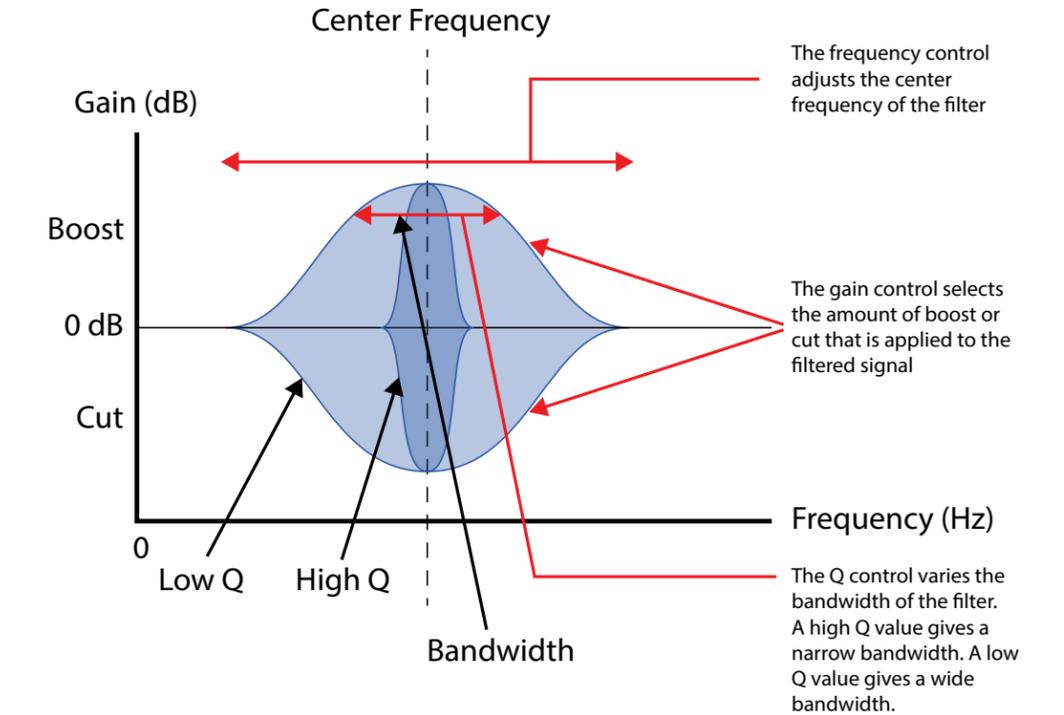


Adjustable Features:

- Subsonic: Filter on/Off
- Subsonic: Frequency
- Subsonic: Slope

2 - Band Parametric Equalizer (PEQ)

2 - Band Parametric Equalizer graphic showing adjustable features.



Adjustable Features:

- Band: On/Off
- Band: Center Frequency
- Band: Gain
- Band: Q

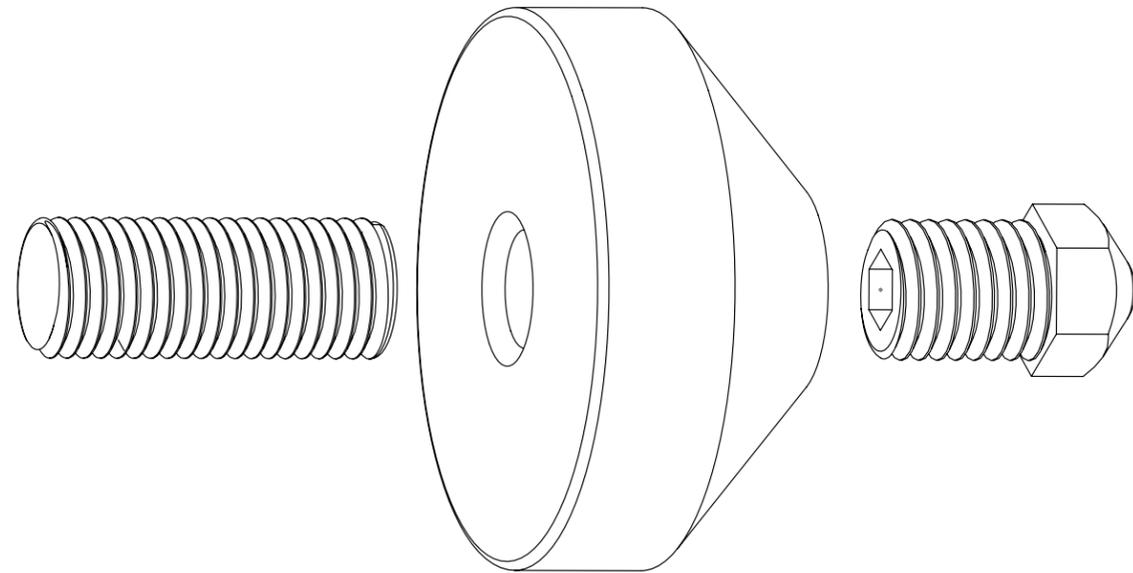
DSP Functions

Feature range values of the Controller (LCD matrix display, knob rotatory selector)

1. **Volume Range:** 0dB ~ -99dB (0.1dB/step)
2. **High Pass Filter:** (line level output only)
 - **Frequency Range:** 30~125Hz (1Hz/step)
 - **Slope Select:** Disabled/-12dB/-24dB
3. **High Pass Delay:** 0~10msec(0.1msec/step)
4. **Low Pass Filter:** (subwoofer amp output only)
 - **Frequency Range:** 30~125Hz (1Hz/step)
 - **Slope Select:** Disabled/-12dB/-24dB
5. **Variable Phase:** 0°~ 180°(1°/step)
6. **Subsonic Filter:** (subwoofer amp output only)
 - **Frequency Range:** 25~40Hz (1Hz/step)
 - **Slope Select:** Disabled/-12dB/-24dB
7. **P-EQ1/P-EQ2 Adjustment:** (subwoofer amp output only)
 - **Frequency Range:** 30~125Hz (1Hz/step)
 - **Level Range:** -12dB ~ +6dB (0.1dB/step)
 - **Q Factor Range:** 0.6~14 (0.1/step)
8. **Preset Save/Load:** 3 Presets



Spike & Diode Installation



Scan QR Code for
Leveling Instruction
Video

Spike & Diode Assembly

- Gather the threaded spikes and install the spike into the diode housing until the base of the spike is against the diode.

Note: Do not tighten the spike against the diode. You may need to unscrew them a little when you level the LÖKē later.

- Place the set screw into the other end of the diode with the Allen head toward the spike. This will ensure that if for any reason you have to remove your LÖKē spikes, you will be able to withdraw the set screw safely using the supplied Allen Wrench. Screw the set screw into the diode until it stops turning.
- Place the spike & diode assemblies out of the traffic pattern until they are needed during the installation.

Materials Required/Useful for Spike & Diode Installation

- 4x assembled Spike & Diodes per LÖKē
- Swivel Caster Wrench
- If available, the Wilson Audio Jack (“Lift”) and Jack Socket Wrench
- If the Wilson Audio Jack is unavailable, carefully lay LÖKē on its side on a clean blanket

Note: Ideally there would be two people available to assist in this process. Be careful if you are attempting this by yourself. The LÖKē weighs over 110 lbs (49.9 kg) each and may seriously injure someone if that weight drops on the person installing the spike & diodes.

Spike & Diode Installation Procedure

1. If available, slide the Wilson Audio Jack under the front of the LÖKē, centered between the casters, so that the Jack’s lift bolt is exposed. Place the lift plate so it is positioned about an inch behind the front facade of the LÖKē enclosure.

Note: An assistant should stand by the LÖKĒ helping to steady it during this process.

2. Attach the Jack Socket Wrench to the lift bolt and begin to slowly raise the front of the LÖKĒ by turning the bolt clockwise.
3. After the front of the LÖKĒ is high enough (you will need at least 1.5 inches of clearance beneath the caster), use a 3/4" crescent wrench to loosen and remove the nut attaching the caster to the enclosure. After removing the caster, remove the set screw installed for shipping purposes. Note: the shipping set screw is too long to be used with the diode and spike.
4. Insert and screw-in the finished spike & diode assembly. Hand tighten only!

Note: Be very careful not to cross-thread the spikes. The base of the LÖKĒ is made of X-Material and can be cross-threaded if installed on an angle.

5. With one person stabilizing the LÖKĒ, lower the LÖKĒ by turning the jack wrench counter-clockwise. If the spike pads are going to be used, place them under the spike & diode tips as you lower the LÖKĒ down. Note that the LÖKĒ will now sit lower in the front as the spike & diode assembly is shorter than the caster. Use caution.
6. Repeat the previous process of the caster removal/spike & diode installation on the opposite side of the enclosure.

Leveling the LÖKĒ

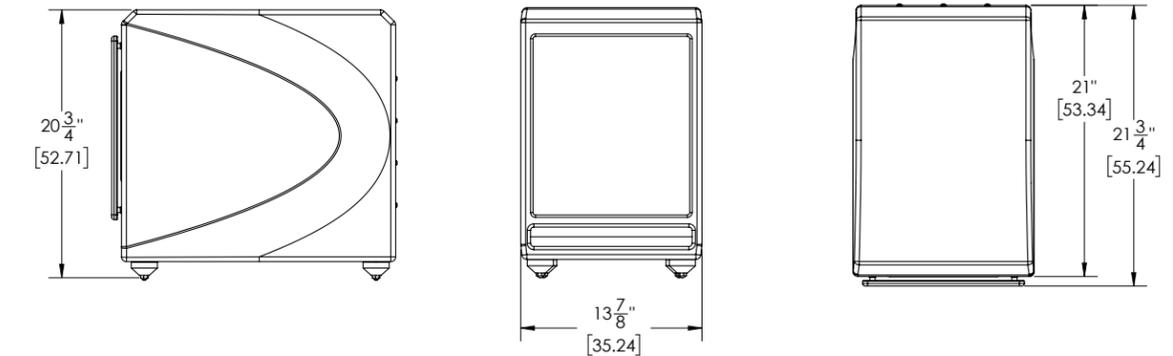
1. It is not necessary to use the jack to level the LÖKĒ, but can be a useful tool in this process.
2. Place a level on the top of the LÖKĒ enclosure, centered, to check the left-to-right axis and the front-to-back axis. If the LÖKĒ is level left-to-right, move to the next step.
3. To find out which spike & diode is lowest, grasp the LÖKĒ and gently rock it back and forth. This will identify the spike that is out of level from the other three.
4. Adjust the spike & diodes shorter and/or longer until the bubble shows the speaker is level.

LÖKĒ Specifications

Overall Dimensions: Height— 20 3/4 inches (52.71 cm)
 Width— 13 7/8 inches (35.24 cm)
 Depth (With Grill)— 21 3/4 inches (55.24 cm)
 Depth (No Grill) — 21 inches (53.34 cm)

System Weight: 110 lbs each (49.9 kg)

Total System Shipping Weight (Approximate): 175 lbs (79.38 kg)

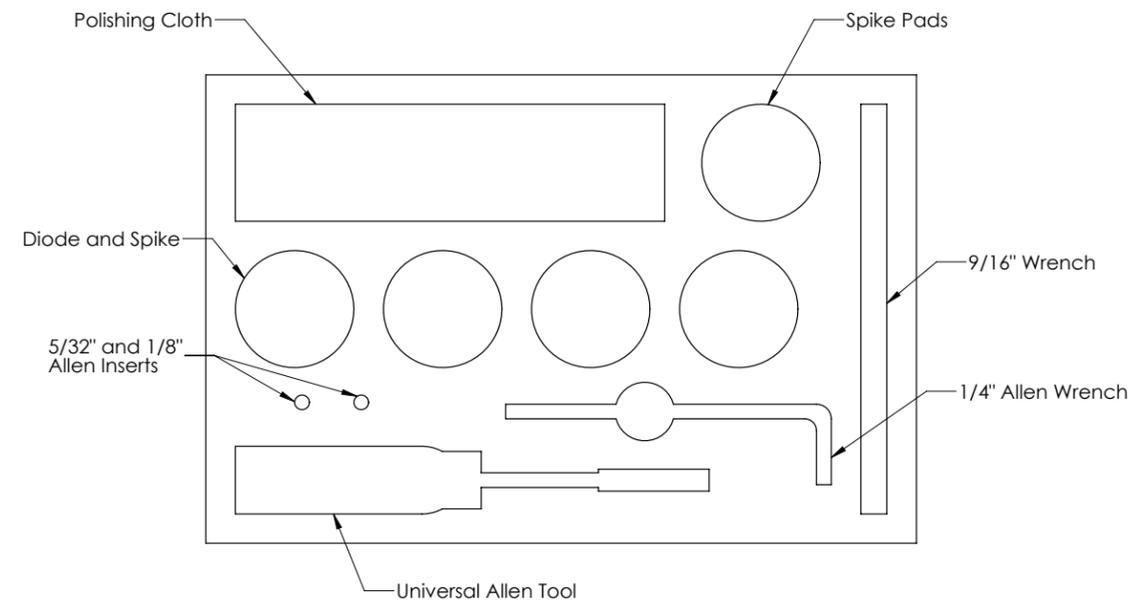


Specifications

Parameters	Test conditions	Typical value
Input Sensitivity (L+R)	RCA IN 520W/4ohms @115VAC	-10dBV
	XLR IN 500W/4ohms @115VAC	-10dBV
Input Sensitivity (L+R)	RCA IN Normal input level switch	310 mVrms
	RCA IN Hi-Level input level switch	620 mVrms
(Signal in Left and Right)	XLR IN Normal input level switch	630 mVrms
	XLR IN Hi-Level input level switch	1.25 Vrms
Max Input Level (L+R)	RCA IN Normal input level switch	1.1 Vrms
	RCA IN Hi-Level input level switch	2.3 Vrms
	XLR IN Normal input level switch	2.4 Vrms
	XLR IN Hi-Level input level switch	4.6 Vrms
Input Impedance	RCA IN	10k ohms
	XLR IN	20k ohms
Gain	AMP output 100Hz @ 1W output	+43.3 dB (normal)
		+37.2 dB (Hi- Level IN)
Input Saturation Level	RCA left or right 100Hz	>2V (Hi-Level IN)
	XLR left or right 100Hz	>2V (Hi-Level IN)
Noise Level	volume=0dB (MAX)@A weighted	-62.3dBV
S/N Ratio	volume=0dB (MAX)@A weighted	98.4 dB
THD+N Ratio	20-20kHz Filter, Rated Power @100Hz	< 1%
Frequency Response	Amplifier output	20 Hz to 250 Hz (+/- 1 dB)
Output Power (4Ω)	100Hz@115VAC, Input: -10dBV (L+R)	500 W
Auto ON/OFF		
Auto ON Sensitivity	RCA Left ,100Hz	3mV
Auto OFF Time		20mins
Time Delay		2ms

Parameters	Test conditions	Typical value
Power Amplifier Protection	A- Short-circuit and under load protection	A-Yes
	B- Thermal protection	B-Yes
	C-Power Supply Protection-Full Power Protection	C-Yes
Power Consumption:	@230Vac/60Hz A- Standby mode	A- 0.5 W 0.05 A
	@230Vac/60Hz B- ON mode	B- 8.0 W 0.13 A
	@230Vac/60Hz C- 1/8 power	C- 83 W 0.88 A
	@230Vac/60Hz D- 1/4 power	D- 157 W 1.61 A
	@230Vac/60Hz E- Rated power	E- 626 W 5.6 A
	@115Vac/60Hz A- Standby mode	A- 0.5 W 0.05 A
	@115Vac/60Hz B- ON mode	B- 7.7 W 0.18 A
	@115Vac/60Hz C- 1/8 power	C- 83 W 1.51 A
	@115Vac/60Hz D- 1/4 power	D- 162 W 2.78 A
@115Vac/60Hz E- Rated power	E- 654 W 9.4 A	

LÖKĒ Tool Kit



Warranty Details

Limited Warranty

Subject to the conditions set forth herein, Wilson Audio warrants its electronics to be free of manufacturing defects in material and workmanship for the Warranty Period. The Warranty Period is a period of 90 days from the date of purchase by the original purchaser, or if both of the following two requirements are met, the Warranty Period is a period of five (5) years from the date of purchase by the original purchaser:

Requirement No. 1. No later than 30 days after product delivery to the customer, the customer must have returned the Warranty Registration Form to Wilson Audio. Alternatively, the warranty may be filled out on-line.

Requirement No. 2. The product must have been professionally installed by the Wilson Audio Dealer that sold the product to the customer.

FAILURE TO COMPLY WITH EITHER REQUIREMENT NO. 1 OR REQUIREMENT NO. 2 WILL RESULT IN THE WARRANTY PERIOD BEING LIMITED TO A PERIOD OF 90 DAYS ONLY.

Conditions

This Limited Warranty is also subject to the following conditions and limitations. The Limited Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, or has been abused or misused, damaged by accident or neglect or in being transported, or if the product has been tampered with or service or repair of the product has been attempted or performed by anyone other than Wilson Audio, an authorized Wilson Audio Dealer Technician or a service or repair center authorized by Wilson Audio to service or repair the product. Contact Wilson Audio at (801) 377-2233 for information on location of Wilson Audio Dealers and authorized service and repair centers. Most repairs can be made in the field. In instances where return to Wilson Audio's factory is required, the Dealer or customer must first obtain a return authorization. Purchaser must pay for shipping to Wilson Audio, and Wilson Audio will pay for shipping of its choice to return the product to purchaser. A RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT. Wilson Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

Remedy

In the event that the product fails to meet the above Limited Warranty and the conditions set forth herein have been met, the purchaser's sole remedy under this Limited Warranty shall be to: (1) contact an authorized Wilson Audio Dealer within the Warranty Period for service or repair of the product without charge for parts or labor, which service or repair, at the Dealer's option, shall take place either at the location where the product is installed or at the Dealer's place of business; or (2) if purchaser has timely sought service or repair and the product cannot be serviced or repaired by the Dealer, then purchaser may obtain a return

authorization from Wilson Audio and at purchaser's expense return the product to Wilson Audio where the defect will be rectified without charge for parts or labor.

Warranty Limited to Original Purchaser

This Limited Warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product, unless the product is purchased by the subsequent purchaser from an authorized Wilson Audio Dealer who has certified the product in accordance with Wilson Audio standards and requirements and the certification has been accepted by Wilson Audio, in which event the Limited Warranty for the product so purchased and certified shall expire at the end of the original Warranty Period applicable to the product.

Demonstration Equipment

Equipment, while used by an authorized Dealer for demonstration purposes, is warranted to be free of manufacturing defects in materials and workmanship for a period of five (5) years from the date of shipment to the Dealer. Demo equipment needing warranty service may be repaired on-site or, if necessary, correctly packed and returned to Wilson Audio by the Dealer at Dealer's sole expense. Wilson Audio will pay return freight of its choice. A returned product must be accompanied by a written description of the defect. Dealer owned demonstration equipment sold at retail within two (2) years of date of shipment to the Dealer is warranted to the first retail customer to be free of manufacturing defects in materials and workmanship for the same time periods as if the product had originally been bought for immediate resale to the retail customer. Wilson Audio products are warranted for a period of 90 days, unless extended to 5 years, as provided above, by return and filing of completed Warranty Registration at Wilson Audio within 30 days after product delivery to customer and the product was professionally installed by the Wilson Audio Dealer that sold the product to the customer.

Miscellaneous

ALL EXPRESS AND IMPLIED WARRANTIES NOT PROVIDED FOR HEREIN ARE HEREBY EXPRESSLY DISCLAIMED. ANY LEGALLY IMPOSED IMPLIED WARRANTIES RELATING TO THE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER.

Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.





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