KSE1200SYS

Analog Electrostatic Earphone System

The Shure analog electrostatic earphone system, KSE1200SYS, user guide.
Version: 5 (2020-G)

Table of Contents

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IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. ONLY USE KSE earphones with KSA amplifiers.
8. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
9. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. ONLY USE attachments/accessories specified by the manufacturer.
11. REFER all servicing to qualified service personnel. Servicing is required when the apparatus 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 apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
12. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
13. The MAINS plug or an appliance coupler shall remain readily operable.
14. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
15. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
16. Operate this product within its specified operating temperature range.
17. PROTECT the earphone cable from being pinched or cut.
18. DO NOT use this apparatus if the earphone cable, housing, or connector is damaged.

This product is intended for professional use only. This product should only be sold through professional sales channels.

	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.
	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING: Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting.

Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate this equipment.

WARNING FOR ALL EARPHONES!

For safe and correct use of earphones, read this manual before use. Keep the manual and safety information in a convenient place for future reference.

WARNING

LISTENING TO AUDIO AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE. USE AS LOW A VOLUME AS POSSIBLE. Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss (NIHL). Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.

90 dB SPL **at 8 hours**	**95 dB SPL** at 4 hours	**100 dB SPL** at 2 hours	**105 dB SPL** at 1 hour
110 dB SPL **at ½ hour**	**115 dB SPL** at 15 minutes	**120 dB SPL** Avoid or damage may occur	

WARNING

- Do not use when a failure to hear your surroundings could be dangerous, such as while driving, or when biking, walking, or jogging where traffic is present and accidents could occur.
- Keep this product and its accessories out of reach of children. Handling or use by children may pose a risk of death or serious injury. Contains small parts and cords that may pose risk of choking or strangulation.
- Set the volume level of the audio device to a minimum, and then after connecting the earphones, adjust the volume gradually. Sudden exposure to loud noises could cause hearing damage.
- Turn up the volume control only far enough to hear properly.
- Ringing in the ears may indicate that the volume level is too high. Try lowering the volume.
- If you connect these earphones to an airplane’s sound system, listen at low levels so that loud messages from the pilot do not cause discomfort.
- Have your hearing checked by an audiologist on a regular basis. If you experience wax buildup, discontinue use until a medical professional has examined your ears.
- Failure to use, clean, or maintain earphone sleeves and nozzles according to manufacturer’s instructions may increase the risk of sleeves detaching from the nozzle and becoming lodged in your ear.
- Prior to inserting the earphone, always recheck the sleeve to make sure it is firmly attached to the nozzle.
- If a sleeve becomes lodged in your ear, seek skilled medical assistance to remove the sleeve. Damage to the ear may be caused by non-professionals attempting to remove the sleeve.
- Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.

CAUTION

- Do not immerse in water, such as while taking a bath or washing your face, otherwise sound deterioration or failures may result.
- Do not use while sleeping as accidents may result.
- Use a slow twisting motion to remove the earphones. Never pull on the earphone cord.
- Stop using the earphones immediately if they are causing great discomfort, irritation, rash, discharge, or any other uncomfortable reaction.
- If you are currently receiving ear treatment, consult your physician before using this device.

WARNING

- Battery packs may explode or release toxic materials. Risk of fire or burns. Do not open, crush, modify, disassemble, heat above 140°F (60°C), or incinerate.
- Follow instructions from manufacturer
- Do not short circuit; may cause burns or catch fire

- Do not charge with products other than those specified in this user guide.
- Dispose of battery packs properly. Check with local vendor for proper disposal of used battery packs.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like

Note: Use only with the included power supply or a Shure-approved equivalent.

(Manufacturer: Click Technology, Model: CPS008050100, SBC10-USB)

Note: Battery replacement to be performed only by Shure authorized service personnel.

Please follow your regional recycling scheme for batteries, packaging, and electronic waste.

General Description

The Shure KSE1500 analog electrostatic earphones are the result of many years of research, development, and technological advancements from the Shure engineering team. The electrostatic drivers deliver premium quality, high definition audio for the first time in an in-ear design, which provides superior comfort and isolation from outside noise. The earphones are powered by the KSA1200: a compact, portable, analog electrostatic amplifier for connecting to your preferred audio source. A full set of furnished accessories includes interchangeable sound isolating sleeves for a comfortable, personalized fit. From studio monitoring to casual listening, the KSE1200SYS reveals the detail and nuances to satisfy the most critical ears.

Features

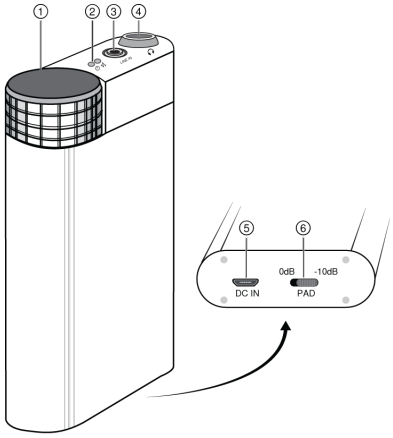
Portable Electrostatic Amplifier

- 100% analog signal path
- Powered by an internal, rechargeable Lithium-ion battery
- -10db input pad
- Input sensing and audio metering LED

Earphones

- Low distortion characteristics
- Transparent, high-definition sound
- Excellent transient response
- Full range frequency response
- Formable wire ensuring secure cable around ear

KSA1200 Amplifier



① Power / Control Knob

Rotate to adjust volume level. Turn clockwise to turn unit on. Turn counter-clockwise all the way to turn the unit off.

② Status Indicator

Power LED	Input Level LED
Red: Low battery.	**Red:** The input level is too high.
Amber: Battery is charging.	**Amber:** Ideal input level.
Green: The amplifier is charged and powered on.	**Green:** The amplifier is receiving audio signal.
Off: The amplifier is off and not connected to power.	**Off:** The amplifier is not receiving signal or the signal is too low.

③ Line Audio Input

3.5 mm stereo input for connecting to analog audio sources

④ Earphone Output

Lemo output to connect Shure KSE1500 earphones

⑤ DC Input

Connect to a computer, external battery, or AC power source using a USB type A to Micro-B cable to automatically recharge the battery.

⑥ Input Pad Switch

Select 0dB or -10dB. The pad attenuates the analog input signal to prevent clipping from high output audio sources. Enable the pad when the audio meter indicates clipping. Attenuate the source volume if the signal continues to clip with the -10 dB pad engaged.

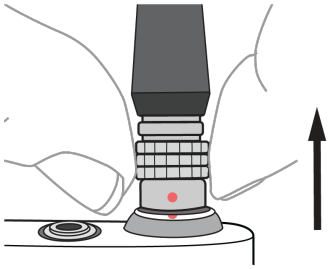
Note: *Use a high quality audio source for the optimal listening experience.*

Setup

Step 1: Safely connect the earphones to the amplifier

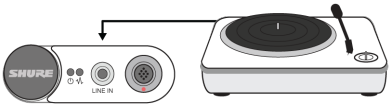
Plug into the amplifier with the amplifier powered off. This is recommended to avoid hearing damage.

Note: Align the red dot on the earphone cable connector with the red dot on the amplifier earphone output. To Disconnect from the amplifier: Pull the knurled connector collar up to safely release the lock on the earphone cable.



Step 2: Connect a sound source to the amplifier.

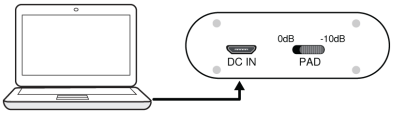
Plug the audio device into the LINE IN input.



Step 3: Power on the amplifier

To charge the battery while listening to audio, connect the amplifier to a computer, external battery, or AC power source.

Note: Volume should be adjusted only by using the amp volume knob for best performance. Ensure that volume is optimized in your audio source.



Lithium-ion Rechargeable Batteries

Storing Batteries

To avoid degrading battery health, keep the storage temperature range between 10°C to 25°C (50°F to 77°F).

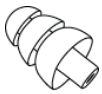
Battery Repair and Replacement

Lithium-ion batteries have no “memory effect”, and instead experience a more linear reduction in capacity. Contact Shure Service and Repair to replace the battery if you experience any issues.

Using Earphones

Choosing a Sleeve

Select an earphone sleeve that provides the best fit and sound isolation. It should be easy to insert, fit comfortably, and easy to remove.

	**Soft Flex Sleeves:** In small, medium, and large sizes. Made from pliable rubber.
	**Soft Foam Sleeves:** Compress the foam sleeve between your fingers and insert into the ear canal. Hold in place for about ten seconds while the foam expands.
	**Triple-Flange Sleeves:** If desired, use scissors to trim the stem on the sleeve.

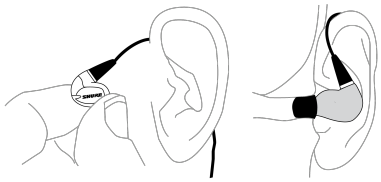
Wearing the Earphones

1. Carefully insert the earphone into the ear like an earplug, so that a tight seal is formed.

   Important: If there is a lack of low frequency response (bass), the earphone sleeve may not be forming a proper seal. Gently push the earphone deeper into the ear canal or try using a a different sleeve.

   Warning: Do not push the earphone sleeve beyond the ear canal opening.

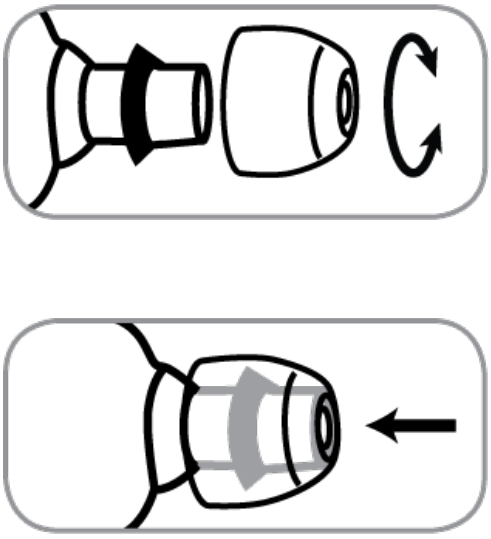
2. Wear earphone cables over the back of the ear to keep them in place during physical activity. Guide the cable down either the front or back of the body, and use the cable cinch to tighten up the remaining slack.



The fit of the earphone can greatly affect sound quality.

Changing Sleeves

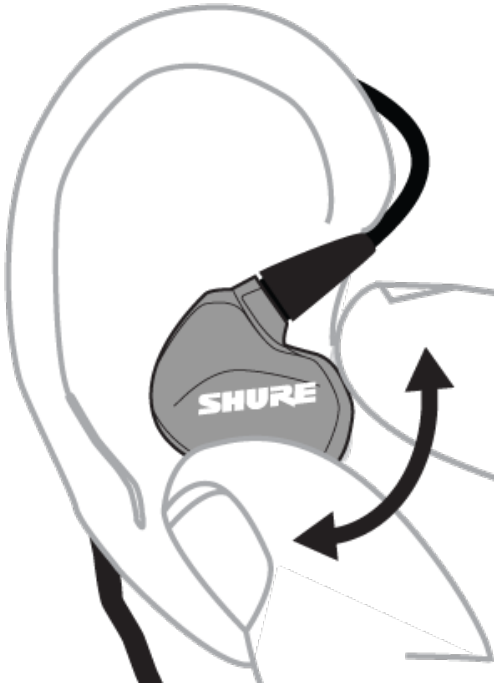
- Twist and pull to remove the sleeve from the nozzle.
- Slide on a new sleeve so that it completely covers the barb and the nozzle.



Caution: If the barb or any of the nozzle is exposed, the sleeve is not properly installed. Replace sleeves if they do not tightly grip the nozzle. To ensure proper fit and performance, use only sleeves supplied by Shure (unless using custom molded sleeves).

Removing the Earphones

Grasp the body of earphone and gently twist to remove.



Note: Do not pull on cable to remove earphone.

Maintenance and Cleaning

Careful maintenance ensures a tight seal between the sleeve and nozzle, improving sound quality and product safety.

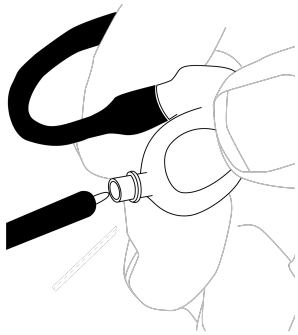
- Keep the earphones and sleeves as clean and dry as possible.

- To clean sleeves, remove them from earphones, gently rinse in warm water and air dry. Foam sleeves require a longer drying time. Inspect for damage and replace if necessary. Ear sleeves must be completely dry before reusing.
- Wipe the earphones and sleeves with mild antiseptic to avoid infections. Do not use alcohol-based disinfectants.
- Do not expose earphones to extreme temperatures.
- Replace sleeves if they do not fit properly.
- Do not attempt to modify this product. Doing so will void the warranty and could result in personal injury and/or product failure.

Cleaning the Earphone Nozzle

If you notice a change in sound quality, remove the sleeve and check the nozzle of your earphone. If nozzle is blocked, clear obstruction by using wire loop end of cleaning tool.

If no obstruction is found or if sound quality does not improve, replace the sleeve with a new sleeve.



Caution: When cleaning, do not force any object through the earphone nozzle! This will damage the earphone sound filter.

Warning: The cleaning tool is only to be used to clean the earphones. Any other use, such as using the tool to clean ears or foam sleeve, could result in injury.

The cable connectors to the earphones may collect debris or other deposits that can affect audio quality. If this happens, disconnect the cables and clean them using a dry cotton swab.

Troubleshooting

Issue	Solution
The device appears to be working but no sound is audible	Check that cable connections are secure Check that pad is not enabled and reducing level
Audio is distorted	Confirm the audio from the source is not distorted before entering the amplifier Check that cable connections are secure Check the amplifier input meter to make sure the amplifier input is not overloading
Amplifier does not power on	The battery may require recharging If the amplifier is plugged in, try a different micro-B USB port (or AC outlet if plugged into the power adapter)

Issue	Solution
Earphones sound dull or muffled	Follow the instructions on cleaning the earphone nozzles with the supplied cleaning tool.
Battery no longer holds charge	Contact Shure Service and Repair to arrange to have the battery replaced. There are no user-serviceable parts.

設備名稱：隨身聽音樂擴音器，型號（型式）：KSA1200
Equipment name　Type designation (Type)

單元Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr+6)	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
電路板	○	○	○	○	○	○
金屬外殼	○	○	○	○	○	○
電位器	—	○	○	○	○	○
電子零件	—	○	○	○	○	○
耳機配件	—	○	○	○	○	○

備考1.〝超出0.1 wt%〞及〝超出0.01 wt%〞係指限用物質之百分比含量超出百分比含量基準值。
Note 1 : "Exceeding 0.1 wt%" and "exceeding 0.01 wt%" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.
備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2 : "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference
備考3.〝－〞係指該項限用物質為排除項目。
Note 3 : The "–" indicates that the restricted substance corresponds to the exemption.

Accessories

Furnished Accessories

- Square zipper pouch
- Fit Kit with assorted sleeves
- Clip assembly
- 6-inch male to male 3.5mm cable
- 36-inch male to male 3.5mm cable
- ¼-inch (6.3mm) to ⅛-inch (3.5mm) stereo adapter
- Rubber amp security bands
- USB Cable, Type A to Micro-B

Specifications

Kit Specifications

Bias Voltage

200 V DC

Output Voltage

±200 V, max.

Output Current

≤ 1 mA

Sound Isolation
≤ 37 dB

Operating Temperature Range
-18 to 57 °C (0 to 135 °F)

Earphone Specifications

Transducer Type
Electrostatic

Connector Type
Lemo Connector

Frequency Response
10 Hz to 50 kHz

Maximum SPL
1 kHz at 3% THD

113 dB SPL

Net Weight
44.0 g (1.55 oz.)

KSA1200 Amplifier Specifications

Signal-to-Noise Ratio
up to 107 dB A-weighted

Adjustable Gain Range
-40 dB to +60 dB

Line-In Input
3.5 mm (1/8")

USB Input
USB Micro-B Receptacle, DC input

Housing
Black Anodized Aluminum

Net Weight
155.0 g (5.47oz.)

Dimensions
93 x 59 x 21 mm H x W x D

Battery Specifications

Battery Type
Rechargeable Li-Ion

Nominal Voltage
3.6 V DC

Battery Life
up to 12 hours

Charging Requirements
USB-powered: 5 V/0.5 A to 1 A

Charging Time
Up to 3 hours to full charge with 1A charger

Battery Charging Temperature Range
0 to 45 °C (32 to 113 °F)

Certifications

Industry Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

Note: Testing is based on the use of supplied and recommended cable types. The use of other than shielded (screened) cable types may degrade EMC performance.

The product complies with the Appliance Efficiency Regulations (California Code of Regulations, Title 20, Sections 1601 through 1608), dated July 2015 for Small Battery Charger Systems, and is eligible for BC marking.

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from: www.shure.com/europe/compliance

Authorized European representative:
Shure Europe GmbH
Headquarters Europe, Middle East & Africa
Department: EMEA Approval
Jakob-Dieffenbacher-Str. 12
75031 Eppingen, Germany
Phone: +49-7262-92 49 0
Fax: +49-7262-92 49 11 4
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Product(s) are Certified under:

UL 60065
CAN/CSA-C22.2 No. 60065-03
IEC 60065
- Charging Temperature Range: 0°C - 27°C
- Operational Temperature Range: -18°C - 35°C

Patent Notice

U.S. patent number

- 9,210,497

Information to the user

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.
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 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 to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Battery Label Information