SHARP®

SOUND PARTNER
MODEL
AN-SS2
AN-SS2M

OPERATION MANUAL

BC

Bluetooth®   Qualcomm® aptX™ Low Latency

SHARP CORPORATION

TINSE560AWZZ   21C R AS ①

Introduction

Thank you for purchasing this SHARP product. To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.
• AN-SS2 consists of AN-SS2 Sound Partner and AN-WD3 (*Bluetooth*® Transmitter).
• AN-SS2M consists of AN-SS2 Sound Partner only.

Special Notes

1. Radio frequency exposure
Sound Partner AN-SS2 is a radio transmitter and receiver. When in operation it communicates with a *Bluetooth*® equipped mobile device by receiving and transmitting radio frequency (RF) electromagnetic fields (microwaves) in the frequency range 2.4 to 2.48 GHz. This product is designed to operate in compliance with the RF exposure guidelines and limits set by national authorities and international health agencies when using compatible mobile phone.
Note: Sound Partner AN-SS2M is radio receiver without transmitter.

2. Battery information
- A rechargeable battery has a long service life if treated properly.
- A new battery or one that has not been used for a long period of time could have reduced capacity the first few times it is used. Do not expose the battery to extreme temperatures, never above 50°C (122°F) or below -10°C (14°F).
- For maximum battery capacity, use the battery at room temperature.
- If the battery is used in low temperatures, the battery capacity will be reduced. The battery can only be charged in temperatures between 5°C (41°F) and 40°C (104°F).
- RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

3. Removal of waste batteries and accumulators
 (Product with embedded battery ONLY)
- In case this product contains a battery incorporated within the product which cannot be readily removed by end users, SHARP recommends that only qualified professionals remove the battery, either for replacement or for recycling at the end of this product's working life. To prevent damage to the product, and for their own safety, users should not attempt to remove the battery and should contact authorised independent service providers for advice.

CAUTION:
Internal lithium battery in the unit should not be replaced by end users due to danger of explosion if battery is incorrectly replaced and must be replaced with the exact type battery by authorised service providers.

Avoiding hearing damage
If volume on the headset is too high, permanent hearing loss may occur. Please set the volume to a safe level. You can become habitual to hear at high volume that may sound normal but can damage your ears. If you experience ringing in your ears or muffled speech, stop listening and have your ears checked by the specialist doctor. The louder the volume, the more quickly the hearing can be damaged.
Hearing experts suggest how to protect your hearing
• Limit the amount of time you use the headset at high volume.
• Avoid the habit of increasing the volume so that you do not hear the loud noises around you.
• Turn the volume down if you cannot hear people speaking around you.
 For setting the maximum volume limit of the connection device, refer to the instruction manual supplied with the connection device.
 Class B equipment (home-use broadcasting communication equipment):
 This equipment is intended for home-use (Class B) electromagnetic compatibility equipment and can be used in all areas.

Special Notes (continued)

● The *Bluetooth*® word mark and logos are registered trademarks owned by *Bluetooth* SIG, Inc. and any use of such marks by SHARP is under license. Other trademarks and trade names are those of their respective owners.
● Qualcomm aptX and Qualcomm cVc are products of Qualcomm Technologies, Inc. and/or its subsidiaries.
● Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries. aptX and cVc are trademarks of Qualcomm Technologies International, Ltd., registered in the United States and other countries.

Warning:
This unit contains no user serviceable parts. Never remove covers unless qualified to do so.

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to relevant law in your country.

Accessories
The following accessories are included.

Bluetooth Transmitter x 1 (AN-WD3) (AN-SS2 only)	Audio Cable x 1 (AN-SS2 only)	Micro USB Power Cable x 1 (AN-SS2 only)	Micro USB Charging Cable x 1

Precautions

■ General

● Do not drop, throw, or give a strong shock to this unit.
● Do not replace the battery, the unit may explode.
● This device is not a medical device.
● If you have a medical device implanted, contact your doctor before using this unit.
● Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic / electrical equipment which generate electrical noise.
● **Do not expose the unit to moisture, to higher temperatures or to extremely low temperatures.**
● Do not repair or disassemble the unit. Refer internal service to your local SHARP service facility.
● No naked flame sources, such lighted candles, should be placed on the apparatus.

● Make sure that an infant or a child does not swallow a small components of the product.
● If the unit is exposed to a large amount of sweat, wipe the product clean.
● The apparatus is designed for use in moderate climates.
● Attention should be drawn to the environmental aspects of battery disposal.
● The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
● To prevent fire or shock hazard, do not expose this appliance to dripping or splashing. No object filled with liquids, such as vases, shall be placed on the apparatus.
● Do not use chemicals for cleaning (benzine, thinner or alcohol). Also do not allow volatile substances such as insecticides, cosmetics (perfumes, creams, sprays, etc.), sunscreens, insect repellents, etc. to adhere to the unit's surface. It may damage the surface finish or cause discoloration.

Controls and indicators

■ Sound partner

1. Speakers
2. Microphone
3. Clear Voice Button
4. Volume Up/Down/Skip Up/Reverse Button

5. Play/Pause, Function Button
6. *Bluetooth* Button
7. Power Button
8. Power Indicator
9. Micro USB Charging Terminal

■ *Bluetooth* Transmitter (AN-SS2 only)

1. Optical/Audio Switch
2. Pairing Button
3. DC IN Socket
4. Optical In Socket
5. Audio In Socket
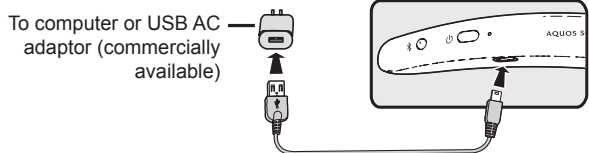
Controls and indicators (continued)

Bluetooth transmitter Indicator (AN-SS2 only)

Power Indicator

■ Sound partner indicator status

Status	Power indicator (Blue/Purple/Red)
Power Off	Turns off.
Battery status	When the power is turned on, the power indicator blinks three times according to the battery status. ● Blue : approximately 70% charge ● Purple : approximately 70% - 20% charge ● Red : approximately 20% remaining
During pairing	Blinks in purple once in every seconds.
Unconnected	Blinks in blue twice every 5 seconds
Connected	Blinks in blue once every 5 seconds
Clear voice	ON : blinks in purple once OFF : blinks in purple twice
Charging	Blinks once every seconds.(The power indicator color changes according to the remaining battery status)
Fully charged	Turns off.

■ *Bluetooth* transmitter indicator status (AN-SS2 only)

Status	*Bluetooth* transmitter indicator (Blue)
Connected	Blinks once every 5 seconds
Unconnected	Blinks twice every 5 seconds.
No power source	Turns off.
During pairing	Blinks once in every seconds.
Successful pairing	Lights up for about 3 seconds.

Charging the Sound Partner

■ Charging the battery

1. Connect the micro USB charging cable to the micro USB charging terminal.
2. Plug the other end of micro USB charging cable into a computer or USB AC adaptor (5V, 1A) that is powered on.
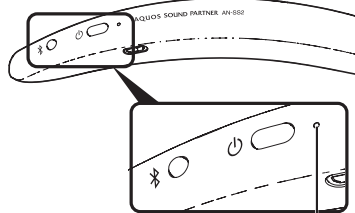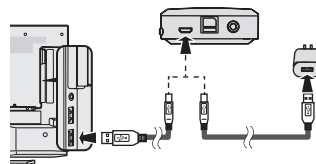
Note:
The sound partner does not operate while charging.

To computer or USB AC adaptor (commercially available)

Charging Indication:

Power Indicator

Power Indicator	Blinks in red	Blinks in purple	Blinks in blue
Battery status	20% remaining	20% - 70 %	approximately 70%

Note:
● During voice prompt enable mode:
 -When the battery is about 70% or more the voice prompt "BATTERY HIGH" is heard.
 -When the battery is about 20% or less the voice prompt "BATTERY LOW" is heard.
● When charging, the power indicator takes some time to indicate the actual battery status.

Cautions:
● For safety of the built-in battery, the function to stop charging works depending on the ambient temperature. Charge the battery at room temperature 5° C or above.
● At extremely high or low temperatures, the battery may not be fully charged.
● To maintain functionality, the device needs to be charged at least once every six months.
● Battery of the device has limited life, as with any other rechargeable batteries.
● Capacity may gradually be decreased over time of which extent may vary depending on the conditions of use and external environment.
● There are multiple factors such as volume level, external environment etc that may affect the time of device power turning off, other than the percentage of battery left.
● Use this product only with an agency approved power supply which meets local regulatory requirements.
● The equipment shall be connected only to a power supply with limited power source.

Bluetooth transmitter connections to TVs (AN-SS2 only)

■ Supplying power to the *Bluetooth* transmitter

If you attach the included *Bluetooth* transmitter to your TV, you can enjoy the sound of the TV with your sound partner.

● Power supply can be obtained from USB AC adaptor or TV/monitor using micro USB charging cable.

USB AC adaptor (commercially available)
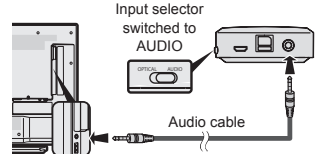
■ *Bluetooth* transmitter connections

Caution:
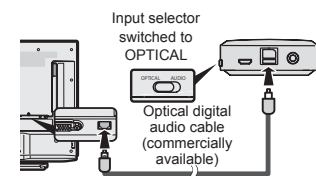Turn off all other equipment before making any connections.

Notes:
● Refer the operation manual of the equipment to be connected.
● Fully insert the plugs to avoid noises.

Audio cable connection:

Input selector switched to AUDIO

Audio cable

Optical cable connection:

Input selector switched to OPTICAL
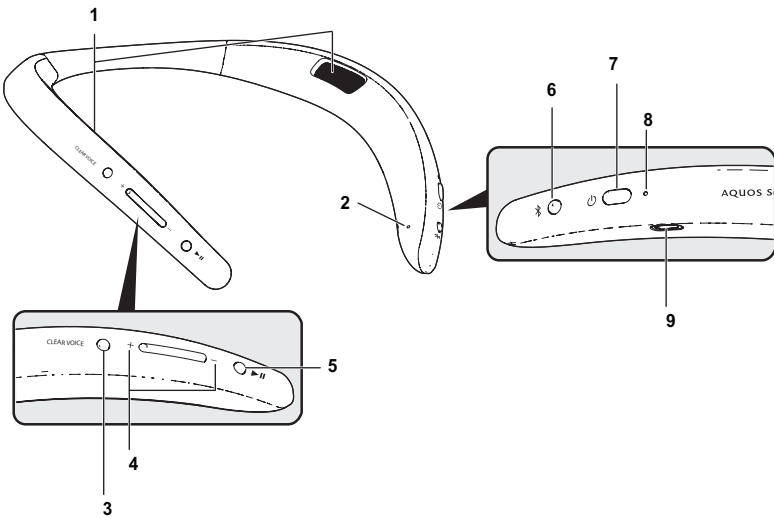
Optical digital audio cable (commercially available)

● If the TV/monitor does not have the optical output, connect it to the headphone socket.
● If you want to hear sound from both the television speaker and the sound partner, see the instruction manual for the television. Some TVs may not be able to output audio from both.
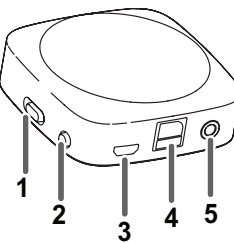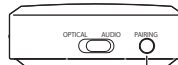
Connecting with *Bluetooth* transmitter (pairing) (AN-SS2 only)

■ Pairing with *Bluetooth* transmitter

1. Connect the *Bluetooth* transmitter to a TV etc. Set the "input select" switch to the connected audio cable or optical cable.

2. Press and hold the PAIRING button on the *Bluetooth* transmitter for about 2 seconds. *Bluetooth* transmitter indicator blinks blue.

3. Press and hold the POWER button on the sound partner for about 2 seconds to turn it on.
 ● When pairing is completed, you can hear the sound "CONNECTED" from sound partner.
 ● If you cannot pair automatically, please keep pressing the "*Bluetooth*" button of the sound partner for about 2 seconds.

Pairing Button

Bluetooth transmitter Indicator

Notes:
● The *Bluetooth* transmitter is only for the sound partner (AN-SS2). It cannot connect to other devices.
● If the connection between the supplied *Bluetooth* transmitter and the sound partner does not work well, press and hold the *Bluetooth* transmitter PAIRING button for about 10 seconds to reset, and try again.
● Two sound partner units can be connected to one supplied *Bluetooth* transmitter. If you want to connect to the second sound partner, turn off the power of the first sound partner, and then hold the *Bluetooth* transmitter's PAIRING button for about 2 seconds to pair with the second sound partner. Turn on the second sound partner unit and hold the *Bluetooth* button for about 2 seconds. When the second pairing is complete, please power on the first sound partner. Once the sound partners are turned off, to listen again from both units simply turn them on.

Indicator status:

Status	Status indicator (Blue)
During pairing	Blinks once in every seconds.
Successful pairing	Lights up for about 3 seconds.
Connected	Blinks once every 5 seconds.
Unconnected	Blinks twice every 5 seconds.

AN-SS2_OM_ASEAN_EN_fold_512.indd   1   2021-02-03   05:43:32

Listening to the TV sound (AN-SS2 only)

1. Connect the paired *Bluetooth* transmitter to the TV
2. Set the *Bluetooth* transmitter's input selector switch to the connected audio cable or optical cable.
3. Turn on the TV and hold the POWER button on the sound partner's for 2 seconds to turn it on.

If the sound partner does not connect, make the connection again following the procedure on page 7.

■ Volume control

Press the + button to increase the volume and press the – button to decrease the volume.
– When the volume level is set to maximum or minimum the beep sound will be heard.
– The volume does not change when the buttons are pressed quickly and continuously or held.

Volume Button

▶❚❚ Play/Pause Button
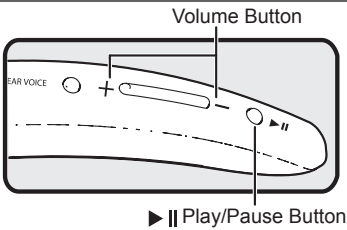
■ Muting

The volume is muted temporarily when pressing the ▶❚❚ button.
Press again to restore the volume.

Notes:
● When you are listening to audio by connecting an audio cable to the headphone socket, the sound of the TV may be lower even if you increase the volume of the sound partner unit, please increase the headphone volume on the TV.
– If you want to output audio from both the TV speakers and the sound partner, please refer to the TV instruction manual.
– If the product does not output audio from the TV's speaker with the audio cable connected, disconnect the audio cable from the headphone socket before listening to audio using the TV's speaker.

Listening to *Bluetooth* enabled devices

■ Bluetooth

Bluetooth wireless technology is a short-range radio technology that enables wireless communication between various types of digital devices, such as mobile phone or computer. It operates within a range of about 10 meters (32 feet) without the hassle of having to use cables to connect these devices.

AN-SS2 supports the following:
Communication System: *Bluetooth* Specification version 5.0.
Supported Profiles: HSP (Headset Profile), HFP (Hands-free Profile), A2DP (Advance Audio Distribution Profile), and AVRCP (Audio/Video Remote Control Profile)

Qualcomm® aptX™ audio
Qualcomm® aptX™ audio is a *Bluetooth* wireless technology that prevents loss of sound and provides CD-quality audio. You can enjoy clear audio sound when listening to music and watching movies. Qualcomm® aptX™ audio works automatically only on the phones or the audio devices that support Qualcomm® aptX™ audio.
● Qualcomm aptX and Qualcomm cVc are products of Qualcomm Technologies, Inc. and/or its subsidiaries.
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Notes when using unit with a mobile phone
● Please refer to the operating manual supplied with the mobile phone for details on operation of your mobile phone while transmitting the sound using a *Bluetooth* connection.

Bluetooth devices need to be initially paired first before they can exchange data. This unit can memorise up to a maximum of 8 devices. Once paired, it is not necessary to pair them again unless:
● pairing is made with more than 8 devices. Pairing can only be made one device at a time. If subsequent device is paired, the oldest device paired will be deleted and replaced with the new one.
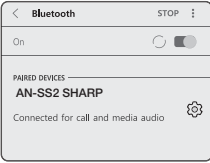
■ Pairing *Bluetooth* devices

1. Press the POWER button to turn on the sound partner.
2. Press and hold the *Bluetooth* button for about 2 seconds.
   Bluetooth indicator blinks quickly. The sound partner is now in pairing mode and is ready to be paired with other *Bluetooth* source device.
3. Perform pairing procedure on the source device to detect this sound partner. "AN-SS2 SHARP" will appear in the detected devices list (if available) in the source device. (Refer the source device operating manual for details).
4. When pairing is completed the voice prompts will be notified.
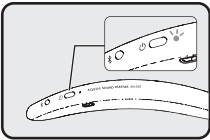
Notes:
● To pair with other device, repeat steps 1-4 for each device. During pairing mode the power indicator turns purple.
● Due to the security feature of the *Bluetooth* device, some devices may not be able to be paired.
● Make the *Bluetooth* connection again if the source device is not turned on, or its *Bluetooth* functionality is off or is in sleep mode.
● Once a device is ousted or deleted from the pairing list, the pairing information for the device is also deleted. To listen to the sound from the device again, it needs to be re-paired. Perform steps 1-4 to pair the device again.
● If this unit or the source device is turned off before *Bluetooth* connection is completed, pairing will not be completed and the pairing information will not be memorised. Start pairing again.

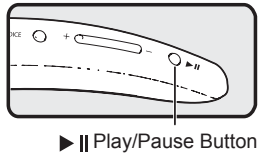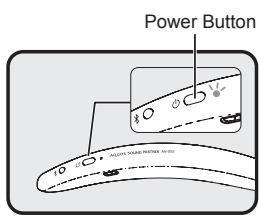
Listening to *Bluetooth* enabled devices (continued)

● If a device such as microwave oven, wireless LAN card, *Bluetooth* device or any other device that uses the same 2.4 GHz frequency is placed near the system, some sound interruption may be heard.
● The transmission distance of the wireless signal between the device and the unit is about 10 meters (32 feet), but may vary depending on your operating environment.
● If a steel concrete or metallic wall is between the device and the unit, the system may not operate at all, because the wireless signal cannot penetrate metal.

■ Listening to the sound

Check that:
● The source device *Bluetooth* functionality is ON.
● Pairing of this sound partner and the source device is completed.
● The transmission distance of the wireless signal between the device and the sound partner is about 10 meters (32 feet).

1. Press the POWER button to turn on the sound partner.
During connecting the power indicator blinks in blue.
2. When connected the *Bluetooth* indicator will blinking once every 5 seconds.
3. Press the ▶❚❚ button on the source device to start *Bluetooth* streaming Playback.

Power Button

▶❚❚ Play/Pause Button

■ About playback operation

Function	Operation
Play/Pause	Press the ▶❚❚ button.
Volume up	Press the + button.
Volume down	Press the – button.
Reverse	Press and hold the – button for about 2 seconds.
Skip Up	Press and hold the + button for about 2 seconds.
CLEAR VOICE on/off	Press the CLEAR VOICE button to switch to On (beep sound once)/ Off (beep sound twice) the function. (It's is a mode to listen to the voice of a person more clearly)
Enable *Bluetooth* device Voice Control	Press *Bluetooth* button. ● You can access voice controls on mobile devices to make calls, play music, ask for weather, check sports scores, etc. ● This function does not work when the mobile device is not compatible.
Switching a paired device	Press and hold the *Bluetooth* and ▶❚❚ for about 5 seconds. Pairing will be canceled, so please pair with the device you want to switch to in the meantime.

Notes:
Some *Bluetooth* devices may not be able to perform the above operations, such as limited playback operations.

Call functions

You can receive a call through this sound partner when it is connected to a mobile device such as a smartphone via *Bluetooth*.

■ About call operation

Function	Operation
Answer a call	Press the ▶❚❚ button.
End a call	Press and hold the ▶❚❚ button for about 2 seconds.
Switch voice to smartphone	Press and hold the + button for about 2 seconds. ● Press and hold the + button for about 2 seconds again to switch the sound to sound partner.
Mute a call	Press and hold the – button for about 2 seconds.
Unmute a call	Press and hold the – button for about 2 seconds.
Decline an incoming call	Press and hold the ▶❚❚ button for about 2 seconds.

Note:
Some mobile devices do not support the Call Function feature.
Thus, this operation may not work.

■ Disable or change language of voice prompts

The sound partner performs voice guidance according to the operation. If you want to disable or change language of voice prompts, use the following procedure.
Press and hold the CLEAR VOICE button and ▶❚❚ button simultaneously for about 2 seconds.

English ⟶ Chinese ⟶ Off ⟶ Japanese

Troubleshooting

Many potential problems can be resolved by the owner without calling a service technician.
If something is wrong with this product, check the following before calling your authorised SHARP dealer or service center.

Symptom	Possible cause
No sound is heard.	● The volume level set to minimum. ● Are the connections made correctly. ● Is the input selector switch properly switched?. ● Is the volume of the source device set to "0". ● Is the connected device powered on?. ● Is the connected device properly connected to this unit? ● Is the pairing information for the device you want to use by pairing another *Bluetooth* device deleted? Please try pairing again. ● Is the distance between this unit and the *Bluetooth* device too long? ● Is the *Bluetooth* setting of the connected device turned off?
Sound is heard from one side only.	● The audio cable may not be connected correctly. Insert the cable plug all the way into the terminals of the *Bluetooth* transmitter and TV ● Is the audio cable using a 3.5 mm / 3 pole type?
The unit does not respond.	● Turn off the power of this unit and then turn it on again.
The power is not turned on	● Charging may be low. Charge using the supplied micro USB cable. ● If the battery does not turn on after charging, or if it turns off immediately, the battery may be exhausted.
The howling sound during call	● Is the sound partner too near to the device used to make the call? Lower the unit's volume or move it away.
Poor sound quality	● The unit is too near to a device that generates electromagnetic radiation. ● There is an obstacle between the unit and the *Bluetooth* stereo audio source device ● Is the volume to high, please lower the volume.
Power Off without notice	● The sound partner will automatically power off if there is no sound for a while. ● When charging is slow, the power will automatically drop. Use the supplied micro USB cable to charge. ● If the temperature of the environment you are using is high, the power is turned off for safety. Please use within the operating temperature range.

Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual unit.

■ Sound partner

Music playback time	Approx. 16 hours (*1)
Battery charge time	Approx. 2 hours 30 minutes (*1)
Dimension	Width : 184mm, Depth: 185mm, Height: 18mm
Weight	88g
Terminal	Micro USB
Bluetooth Frequency band	2.402GHz - 2.480GHz
Compatible *Bluetooth* Profile	*Bluetooth* 5.0 (HSP / HFP / A2DP / AVRCP)
Maximum communication range	Line of sight approx. 10 m (32')
Supported content protection method	SCMS-T
Supported coded	SBC /MPEG-2 AAC / Qualcomm aptX / Qualcomm aptX Low Latency
Output power	1.4W (0.7W + 0.7W) (10% T.H.D.)
Operating temperature	0°C - 40°C

(*1) The time may vary depending on the ambient temperature and the conditions used.

■ *Bluetooth* transmitter (AN-SS2 only)

Dimension	Width: 60mm, Depth: 60mm, Height: 22mm
Weight	40g
Terminal	Micro USB, Optical digital input, Audio Input
Bluetooth Frequency band	2.402GHz - 2.480 GHz
Compatible *Bluetooth* Profile	*Bluetooth* 5.0 (A2DP)
Maximum communication range	Line of sight approx. 10 m (32')
Supported coded	SBC / Qualcomm aptX / Qualcomm aptX Low Latency
Operating temperature	0°C - 40°C
Number of simultaneous connections	Up to 2 sound partners per *Bluetooth* transmitter (*2)

(*2) Qualcomm aptX Low Latency is not supported when two units are connected simultaneously.