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STIHL ADVANCE ProCOM Headband Ear Protector Instruction Manual

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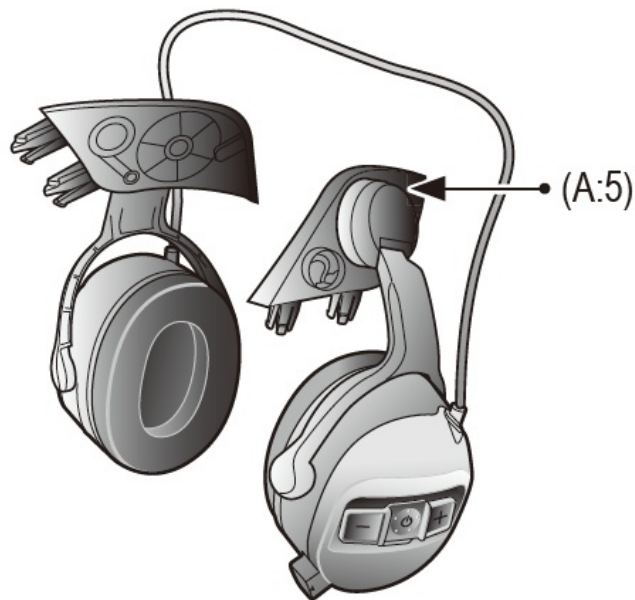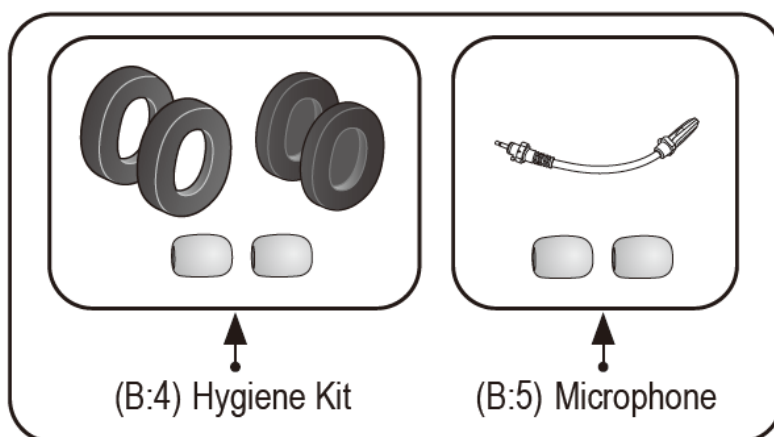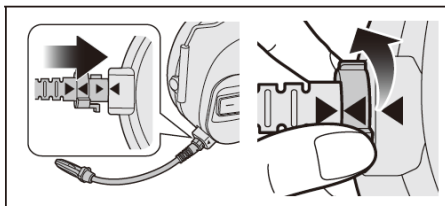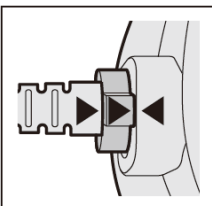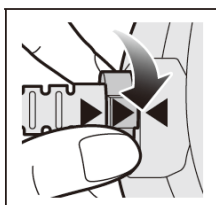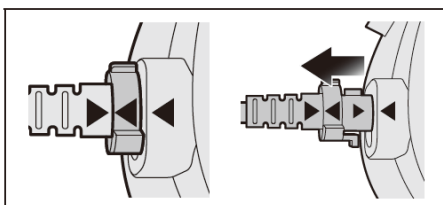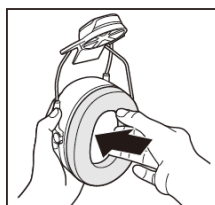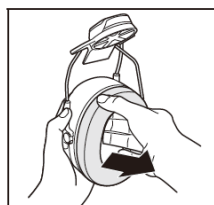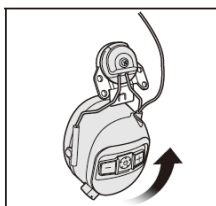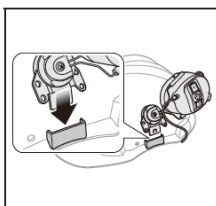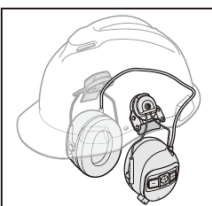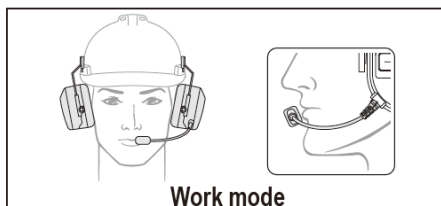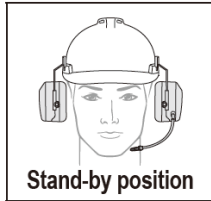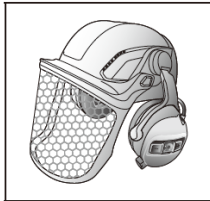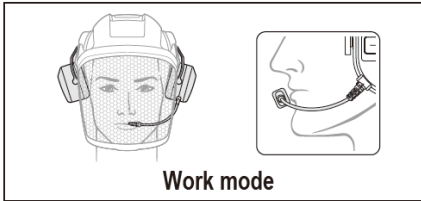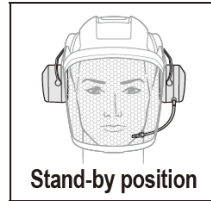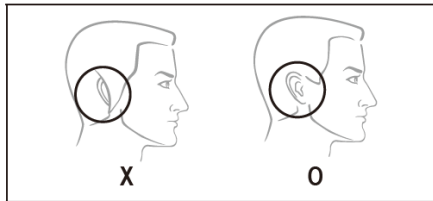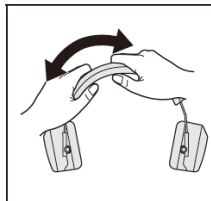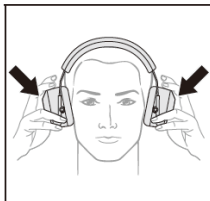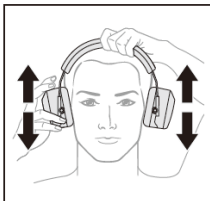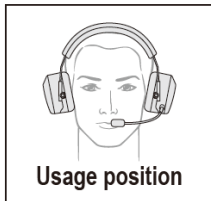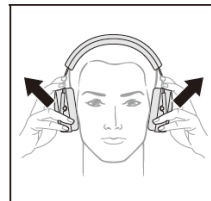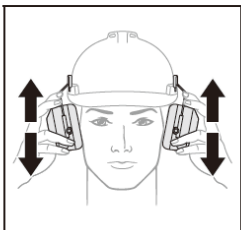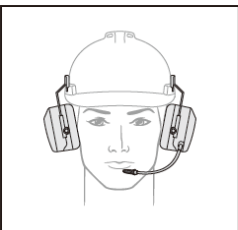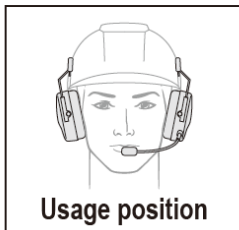
Material

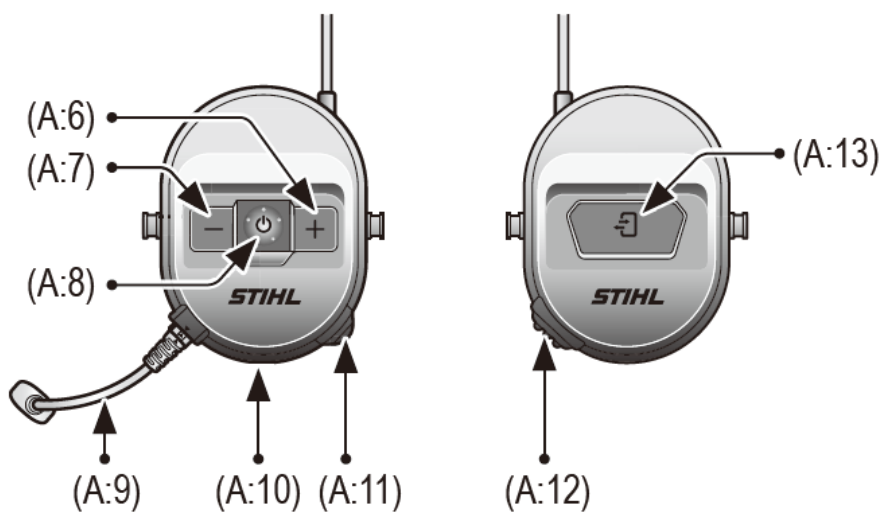| Component	ADVANCE ProCOM Head band Type	ADVANCE ProCOM – with Adaptors for Function Universal and ADVANCE X-Climb	ADVANCE ProCOM – with Adaptors for ADVANCE Vent/X-Vent
(I:1) Headband	PU, POM, SUS304 (Stainless steel wire)	N/A	N/A
(I:2) Cushions	TPU	TPU	TPU
(I:3) Ear cup supporting arms	Polyamide, glass fiber, POM, SUS304 (Stainless steel wire)	Polyamide, glass fiber, POM, SUS304 (Stainless steel wire)	PA66
(I:4) Ear cups	ABS	ABS	ABS

Mass

Category	ADVANCE ProCOM Headband Type	ADVANCE ProCOM – with Function Universal Helmet	ADVANCE ProCOM – with ADVANCE X-Climb Helmet	ADVANCE ProCOM – with ADVANCE Vent/X-Vent Helmet
(J:1) Weight	390 g (13.76 oz.)	731 g (25.79 oz.)	908 g (32.03 oz.)	879 g (31.00 oz.)

Temperature Range

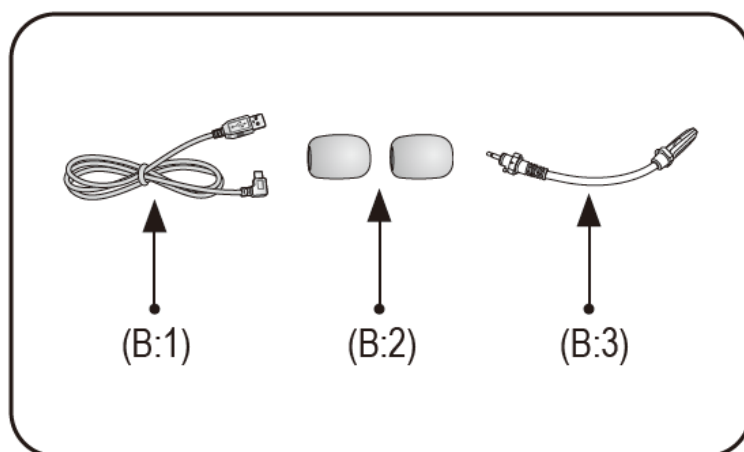| Category	ADVANCE ProCOM Head band Type	ADVANCE ProCOM – with Adaptors for Function Universal and ADVANCE X-Climb	ADVANCE ProCOM – with Adaptors for ADVANCE Vent/X-Vent
(K:1) Operating temperature range	-15°C to 50°C (5°F to 122°F)		
(K:2) Storage temperature range	-25°C to 70°C (-13°F to 158°F)		
(K:3) Charging temperature range	0 to 40°C (32°F to 104°F)		

Figure 1
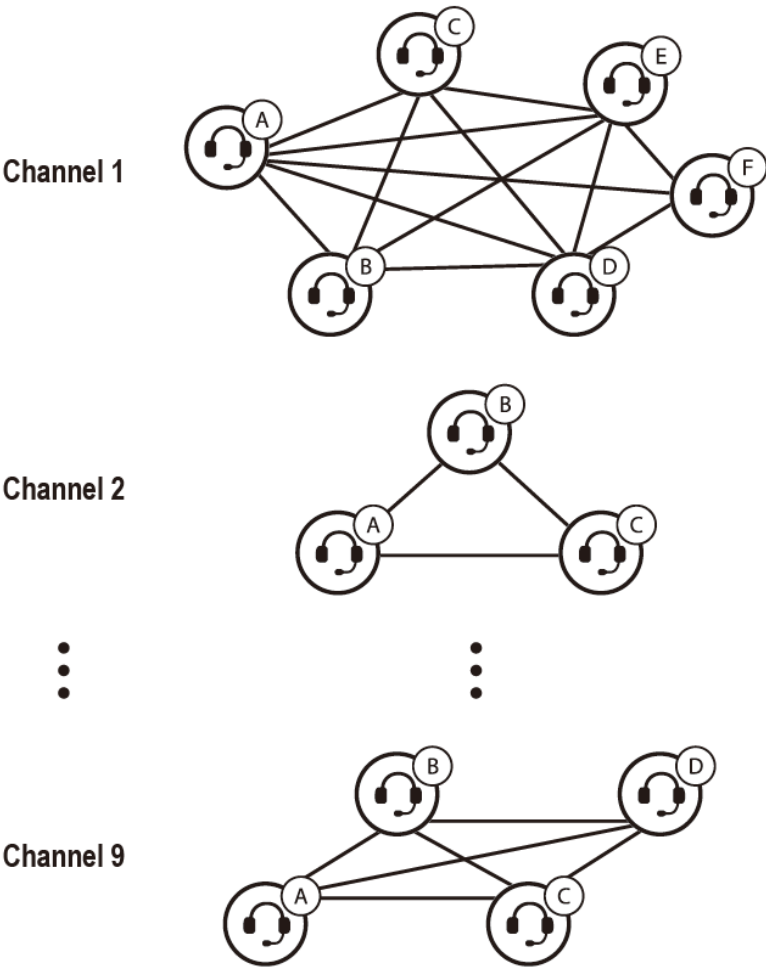
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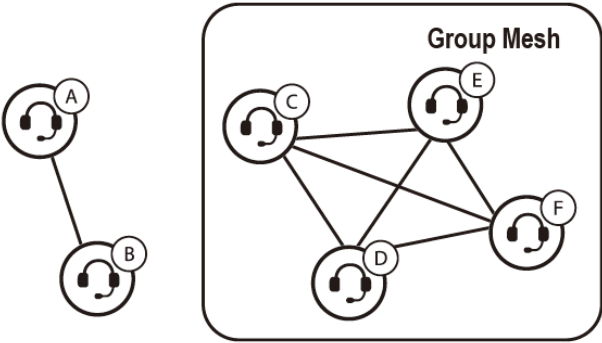
Figure 3
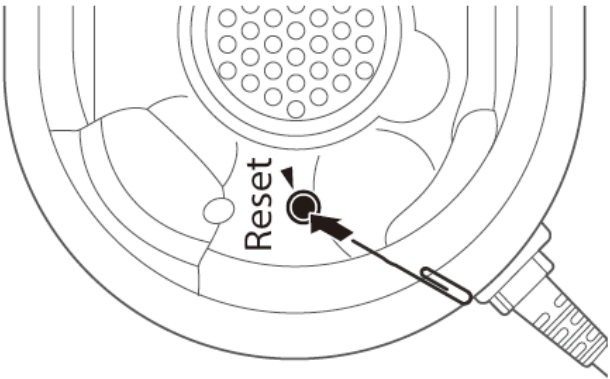
Laboratory Attenuation Tables

ADVANCE ProCOM Headband Type

(L:1) Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
(L:2) Mean Attenuation (dB)	20.7	20.1	22.1	29.1	37.0	35.6	43.2	42.0
(L:3) Std Deviation (dB)	3.8	3.3	2.8	3.2	2.3	3.6	4.9	5.2
(L:4) Assumed Protection Value (dB)	16.9	16.8	19.3	25.9	34.7	32.0	38.3	36.8

	H	M	L	SNR
	35	**29**	**23**	**32**
(L:2) Mean Attenuation (Hm, Mm, Lm, SNR m) (dB)	37.4	31.4	24.9	33.7
(L:3) Std Deviation (Hs, Ms, Ls, SNRs) (dB)	2.8	2.1	2.3	1.9

ADVANCE ProCOM – Helmet Attached Earmuff

(L:1) Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
(L:2) Mean Attenuation (dB)	17.7	17.4	21.1	28.0	36.6	37.2	41.7	40.3
(L:3) Std Deviation (dB)	4.0	3.4	1.8	2.5	2.9	2.3	3.2	4.7
(L:4) Assumed Protection Value (dB)	13.7	14.0	19.3	25.5	33.7	34.9	38.5	35.6

	H	M	L	SNR
	36	29	21	31
(L:2) Mean Attenuation (Hm, Mm, Lm, SNRm) (dB)	38.1	30.5	23.3	32.9
(L:3) Std Deviation (Hs, Ms, Ls, SNRs) (dB)	1.9	1.7	2.0	1.6

Criterion Levels EN 352-4:2020

H	115 dB(A)
M	112 dB(A)
L	97 dB(A)

Criterion Input Signal for Communication Earmuff with Bluetooth® EN 352-6:2020

Input Level dB FS	–39	–34	–29	–24	–19	–14
(L:2) Mean Attenuation (dB)	61.4	66.3	71.2	76.3	81.2	85.7
(L:3) Std Deviation (dB)	1.7	1.6	1.6	1.6	1.6	1.7
Mean + Std (dB)	63.1	67.9	72.9	77.8	82.7	87.3

Criterion input signal level: -19.7 dB FS
The maximum sound pressure level at -14 dB FS: 87.3 dB(A).
Usage time for the maximum input signal: 2.3 h at -14dB FS
Testing according to EN 352-1:2020, EN 352-3:2020, EN 352-4:2020, EN 352-6:2020, EN 352-8:2020 and annual surveillance carried out by PZT GmbH, Bismarckstr. 264B, 26389 Wilhelmshaven, Germany (EU Notified Body 1974)
SATRA Technology Centre, Wyndham Way, Telford Way, Kettering, Northamptonshire, NN16 8SD, United Kingdom (UK Approved Body 0321)

ANSI S-3.19-1974

ADVANCE ProCOM Headband Type

(M:1) Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA
(M:2) Mean Attenuation (dB)	19.7	22.4	29.3	37.0	36.0	40.5	43.5	44.6	42.1	25	A
(M:3) Std Deviation (dB)	3.0	2.4	3.6	2.4	3.2	3.3	4.6	3.3	4.7		

ADVANCE ProCOM – Helmet Attached Earmuff

(M:1) Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA
(M:2) Mean Attenuation (dB)	17.1	20.8	27.2	36.2	37.3	39.1	41.1	39.8	38.9	24	A
(M:3) Std Deviation (dB)	3.6	2.5	2.8	2.9	2.4	3.1	3.4	4.2	3.7		

The level of noise entering a person's ear, when hearing protector is worn as directed, is closely approximated by the difference between the A-weighted environmental noise level and the NRR.

Example

1. The environmental noise level as measured at the ear is 92 dB(A).
2. The NRR is 25/24 (value on label) decibels (dB).
3. The level of noise entering the ear is approximately equal to 67/68 [92 dB(A) – NRR] dB(A).

CAUTION
For noise environments dominated by frequencies below 500 Hz the C-weighted environmental noise level should be used.

WARNING
Improper fit of this device will reduce its effectiveness in attenuating noise.

AS/NZS 1270

ADVANCE ProCOM Headband Type Clamping force: 12.2 N AS/NZS 1270

(N:1) Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC80	Class
(N:2) Mean Attenuation (dB)	20.1	22.1	29.1	37.0	35.6	43.2	41.2	32	5
(N:3) Std Deviation (dB)	3.3	2.8	3.2	2.3	3.6	4.9	4.0		
(N:4) Assumed Protection Value (dB)	16.8	19.3	25.9	34.7	32.0	38.3	37.2		

ADVANCE ProCOM – Helmet Attached Earmuff Clamping force: 13.5 N AS/NZS 1270

(N:1) Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC80	Class
(N:2) Mean Attenuation (dB)	17.4	21.1	28.0	36.6	37.2	41.7	40.3	32	5
(N:3) Std Deviation (dB)	3.4	1.8	2.5	2.9	2.3	3.2	4.7		
(N:4) Assumed Protection Value (dB)	14.0	19.3	25.5	33.7	34.9	38.5	35.6		

Hearing protector Class 5 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, these protectors may be used in noise up to 110 dB(A) assuming an 85 dB(A) criterion. A lower criterion than 85 dB(A) may require a higher protector class.
Testing according to ANSI S3.19 1974, AS/NZS 1270:2002 and CSA Z94.2-2014 by PZT GmbH, Bismarckstr. 264B, 26389 Wilhelmshaven, Germany (EU Notified Body 1974)
For further information, please contact your STIHL sales company.

(O) Helmet Mounted Approved Combination
These hearing protectors should only be attached to and worn on the following helmets:

(O:1) Helmet Brand	(O:2) Helmet Model	(O:3) Size Combination	(O:4) Helmet Mount Adaptor
STIHL	Function Universal (G22)	M, L	(A:4) Adaptor A
STIHL	ADVANCE X-Climb (X5007V)	S, M, L	(A:4) Adaptor A
STIHL	ADVANCE Vent/X-Vent	M, L	(A:5) Adaptor B

(P) Region Selection
You can select the proper FM frequency range for your location:

Region	Frequency Range	Step
Worldwide	76.0 – 108.0 MHz	± 100 kHz
North America, South America, Australia	87.5 – 107.9 MHz	± 200 kHz
Asia and Europe	87.5 – 108.0 MHz	± 100 kHz
Japan	76.0 – 95.0 MHz	± 100 kHz

STIHL ADVANCE ProCOM Headset

The ADVANCE ProCOM combines modern Bluetooth® technology and a simple user-interface. The ADVANCE ProCOM is a hearing protection that allows you to communicate with your co-workers in a natural way. It combines the many benefits of a smartphone while providing hearing protection on your jobsite.

The ADVANCE ProCOM is a Mesh communication system that is intended for workers to communicate effectively in high-noise outdoor environments. The ADVANCE ProCOM provides high noise cancellation with a level-dependent functionality. Refer to the tables in "Laboratory Attenuation Tables" for precise noise attenuation values. The hearing protector is equipped with a safety-related audio input with an audio reproduction device for entertainment purposes. An innovative sound mixing makes sure, that users hear what is necessary. So when the FM radio is playing, voice calls over the Mesh communication system will automatically be prioritized. Using its Bluetooth® features, you can make hands-free calls on your Bluetooth® mobile phone, listen to music, or have full duplex Intercom conversations with other members.

The ADVANCE ProCOM is compliant with the Bluetooth® 4.1 supporting the following profiles: Headset Profile, Hands-Free Profile (HFP) and Advanced Audio Distribution Profile (A2DP). Please check with the manufacturers of other device to determine their compatibility with this headset.

INTRODUCTION

- ADVANCE ProCOM (A)
  - ADVANCE ProCOM Headband Type
  - ADVANCE ProCOM – with adaptors for Function Universal and ADVANCE X-Climb
  - ADVANCE ProCOM – with adaptors for ADVANCE Vent/X-Vent
- The ADVANCE ProCOM series features:
  - Bluetooth® 4.1
  - IP64
  - Ambient listening
  - Mesh Intercom up to 600 m (0.37 mi) in open terrain
  - High noise cancellation with a level-dependent functionality
  - Built-in FM radio tuner with a station scan and save function
  - Smartphone App for iPhone and Android
  - Firmware upgradeable

NOTICE: The audibility of warning signals at a specific workplace may be impaired while using Bluetooth® audio/sound reproduction device.

WARNING
Read and follow the important safety information below to reduce the risk of injury from improper use.

- If your hearing seems dulled or you hear a ringing or buzzing during or after any noise exposure (including gunfire), or for any other reason you suspect a hearing problem, leave the noisy environment immediately and consult a medical professional.
- Ensure that:
  - For effective noise attenuation and to reduce the risk of hearing damage, select the appropriate size ear-muffs and ensure a proper fit before starting work.
  - the earmuffs are fitted, adjusted, and maintained in accordance with the manufacturer's instructions;
  - the earmuffs are worn at all times in noisy environments;
  - the earmuffs are regularly inspected and in good conditions for the need of maintenance. If the recommendations are not adhered to, the protection afforded by the earmuffs will be severely impaired.
- Your ability to hear warning signals or other safety information may be impaired while using Bluetooth® audio.
- Use of the product at a high volume for a long period of time may damage your hearing.
- In any place where wireless communication is prohibited, such as hospitals or airplanes, turn off the power. In a place where wireless communication is prohibited, electromagnetic waves may cause hazards or accidents.
- When you use the product, use good judgment; never use it to perform work while under the influence of alcohol or drugs or when you are extremely tired.
- Hats, balaclavas, glasses or other items worn on the head may potentially prevent proper sealing and significantly reduce the level of hearing protection which can result in damage to your hearing. Although the headset offers protection against the harmful effects of impulsive noise, the NRR, SNR and SLC80 are based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noises, such as gunfire.
- When additional personal protective equipment's are necessary (e.g. safety glasses, respirators, etc.), select flexible, low profile temples or straps to minimise interference with the earmuffs cushion.
- Inspect the product for dirt damage and foreign objects each time you wear the headset. If damaged, select an undamaged headset or avoid the noisy environment.
- Earmuffs offer excellent protection if the earpieces are fitted and adjusted properly. Your ears should be completely enclosed by the ear cushions. Consult the enclosed instructions for proper fit.
- Do not allow hair to obstruct the ear or the earmuff's secure fit in any way.
- Never attempt to physically modify, bend, or overstress the headband or helmet adaptor as it could compromise fit, reduce sound attenuation, its ability to fit properly, and void the product warranty.
- The earmuffs, particularly the cushions, may deteriorate with use and should be examined at frequent interfalls.
- Putting hygiene covers on the cushions may affect the acoustic performance of the earmuffs.
- Do not use the product in direct sunlight for a long period of time. Doing so can damage the product and generate heat that can cause burns. See Table (K) for operating temperature range.
- Do not use or store the product inside cars in hot weather. It may cause the battery to generate heat, rupture, or ignite.
- Remove the charging power supply if the battery does not recharge within the specified charging time. Continuing to charge the battery may cause it to heat up, ignite, or explode.
- Do not leave the product near open flames. Do not dispose of the product in a fire. It may cause the battery to ignite or explode, resulting in cause serious injury.
- Never attempt to charge the battery with a damaged charger which has been physically damaged. It may increase the risk of fire or explosion.

- This product meets IP64 standards. However, Do not dip the product in water or allow it to come into contact with water. Doing so may cause the battery to explode or ignite.
- The earmuff is provided with level-dependent attenuation. The user should check correct operation before use. If distortion or failure is detected, the user should refer to the manufacturer's advice for maintenance.
- The performance may deteriorate with battery usage and the typical period of continuous use that can be expected from the earmuff batteries, when fully charged.
- The earmuff is provided with safety-related audio input. The user should check correct operation before use. If distortion or failure is detected, the user should refer to the manufacturer's advice for maintenance.
- The output of the audio circuit of this hearing protector may exceed the exposure limit level. Refer to table "Criterion Input Signal for Communication Earmuff with Bluetooth®" for information on exposure limits and usage time of maximum input signal.
- Do not use maximum volume on the Radio or Bluetooth®, as it might reduce the possibility of hearing important signals from outside. The same goes for using protection with excessively high damping characteristics in environments where it is not needed. Be sure to use the ambient listening function when using the Radio or Bluetooth®. Otherwise, you may not hear safety alarms or ambient sounds, which may lead to severe personal injury or death.
- Use only with helmets designed specifically for ADVANCE ProCOM. Other helmets and non-approved accessories, such as face shields, may interfere with the proper functioning and protection offered by ADVANCE ProCOM.
- STIHL is not responsible for helmets that are not designated for use with the ADVANCE ProCOM.
- Do not use with helmets and accessories, such as face shields, that are not approved for ADVANCE ProCOM, or that are from other manufacturers.
- If the product emits an unusual smell, feels hot, or appears abnormal in any other way while using or charging, stop using it immediately or remove it from the charger or disconnect the charger. Continued use or charging may cause damage, explosion, or fire. Contact your STIHL dealer if any of these problems are observed.
- Do not use the product in an explosive atmosphere or near combustible liquids or gases. If you are in such a location, turn off the power and heed any regulations, instructions, and signs in the area.
- Do not charge batteries in temperatures below 0 °C (32 °F) or above 40 °C (104 °F).
- Charge battery indoors or enclosed, dry areas.
- Always use product-specific STIHL replacement parts. Use of unauthorized replacement parts may reduce the protection you receive from this product.
- Do not disassemble or attempt to modify the product as this may damage the product.
- Do not disassemble the components, such as removing the sponge foam from the earmuff.
- Do not use the product in places colder or hotter than the specified temperature.
- Do not use the product in dangerous areas with high electricity, electrical or magnetic fields, projectiles, accelerated stones, or other flying debris.
- Do not use the product in corrosive environments.

NOTICE:

- Do not impact the product with sharp tools as this may damage the product.
- Keep the product away from pets or small children. They may damage the product.
- Keep the product free of dust. Dust may damage mechanical and electronic parts of the product.

- Do not paint the product. Paint may obstruct moving parts or interfere with the normal operation of the product.
- Do not drop or otherwise shock the product. It may damage the product or its internal electronic circuits.
- Do not disassemble or modify the product.
- Battery performance will deteriorate over time if stored for a long period of time without use.
- The earmuff provides audio signal sound pressure level limitation and the earmuff limits the entertainment audio signal 82 dB(A) effective to the ear.

DECLARATION OF CONFORMITY

Radio Equipment Directive
Hereby, ANDREAS STIHL AG & Co.KG declares that the radio equipment type ADVANCE ProCOM [SP94] is in compliance with Directive 2014/53/EU and Radio Equipment Regulations 2017. The applicable jurisdiction can be found in the Declaration of Conformity; this can be found at: www.stihl.com/conformity. This device can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.

- Product: ADVANCE ProCOM
- Model: SP94
- RF Range for Bluetooth®: 2,402-2,480 MHz
- Max Output Power (E.I.R.P.) for Bluetooth®: 17 dBm
- RF Range for Mesh: 2,410-2,475 MHz
- Max Output Power (E.I.R.P.) for Mesh: 12 dBm

Personal Protective Equipment Regulation
The products meet the requirements of PPE Regulation (EU) 2016/425 and Regulation 2016/425 on PPE as brought into UK Law and amended. The applicable jurisdiction can be found in the Declaration of Conformity; this can be found at: **www.stihl.com/conformity**

Explanation of the Attenuation Data (Table L)

- European Standard EN 352
- (L:1) Frequency (Hz)
- (L:2) Mean attenuation (dB)
- (L:3) Standard deviation (dB)
- (L:4) Assumed protection value, APV
- H = Hearing protection estimation for high frequency sounds ($f \geq 2000$ Hz)
- M = Hearing protection estimation for medium frequency sounds (500 Hz $< f <$ 2000 Hz)
- L = Hearing protection estimation for low frequency sounds ($f \leq 500$ Hz)

USA Standard ANSI S3.19-1974 (Table M)

- (M:1) Frequency (Hz)
- (M:2) Mean attenuation (dB)
- (M:3) Standard deviation (dB)
- H = Hearing protection estimation for high frequency sounds ($f \geq 2000$ Hz)
- M = Hearing protection estimation for medium frequency sounds (500 Hz $< f <$ 2000 Hz)
- L = Hearing protection estimation for low frequency sounds ($f \leq 500$ Hz)

- Australian and New Zealand Standard AU/NZS 1270:2002 (Table N)
- (N:1) Frequency (Hz)
- (N:2) Mean attenuation (dB)
- (N:3) Standard deviation (dB)
- (N:4) Assumed protection value

KNOWING THE HEADSET

Layout

- (A:1) Left Ear Cup
- (A:2) Right Ear Cup
- (A:3) Headband
- (A:4) Helmet Mount Adaptor – with Function Universal and ADVANCE X-Climb Helmet : Adaptor A
- (A:5) Helmet Mount Adaptor – with ADVANCE X-Vent Helmet : Adaptor B
- (A:6) (+) Button
- (A:7) (-) Button
- (A:8) Multi-function Button
- (A:9) Microphone
- (A:10) DC Power Charging & Firmware Upgrade Port
- (A:11) Push-To-Talk (PTT) Button
- (A:12) Mesh Button
- (A:13) S Button

Material (Table I)

- (I:1) Headband
- (I:2) Cushions
- (I:3) Ear cup supporting arms
- (I:4) Ear cups

Mass (Table J)

- (J:1) Weight

Temperature Range (Table K)

- (K:1) Operating temperature range
- (K:2) Storage temperature range
- (K:3) Charging temperature range

Approved Helmet Combinations (Table O)

- (O:1) Helmet Brand

- (O:2) Helmet Model
- (O:3) Size Combination
- (O:4) Helmet Mount Adaptor

ACCESSORIES AND SPARE PARTS

Accessories – Delivered with the Headset

- (B:1) USB Power & Data Cable (USB-C)
- (B:2) Microphone Sponge (2)
- (B:3) Microphone

Spare parts – Getting Separate from the Dealer

- (B:4) Hygiene Kit
    - Cushion (2)
    - Foam cushion (2)
    - Microphone Sponge (2)
- (B:5) Microphone
    - Microphone Sponge (2)
    - Microphone

INSTALLING THE HEADSET

Installing the Microphone

- (C:1) Align the arrows on the headset and microphone and insert the microphone.
- (C:2) Fasten the microphone by rotating it anticlockwise.

NOTICE:

- Ensure that the microphone is firmly fastened to the headset.
- Removing the Microphone
    - (D:1) Unfasten the microphone by rotating it clockwise.
    - (D:2) Align the arrows on the headset and microphone and remove the microphone.
- Do not use the headset without the microphone.

Installing ADVANCE ProCOM – with Adaptors for Function Universal and ADVANCE X-Climb

- (E:1) Rotate the helmet mount adaptors clockwise or anticlockwise so that the earmuffs are facing the backside of the helmet.
- (E:2) Attach the earmuffs to each side of the hard hat by sliding the helmet mount adaptors into the left and right slots of the hard hat. The earmuff with the microphone should be mounted on the left side of the hard hat (from the wearer's view).

- (E:3) Rotate the earmuffs downwards so that the earmuffs fit over your ears.
- (E:4) Work mode: Press the ear cup supporting arms inwards until you hear a click on both sides. Ensure that the ear cups and the ear cup supporting arms do not press against the edge of the helmet when in work mode as this can cause noise leakage. Position the microphone close to your mouth.
- (E:5) Stand-by position: Press the ear cup supporting arms outwards until you hear a click on both sides.

NOTICE:

- Ensure that the cable is laid correctly inside the helmet.
- Ensure that the hard hat adaptors are firmly mounted to the helmet.
- A firm seal should be established before entering a noisy environment.
- Do not store the helmet with the helmet attachment in stand-by position. This causes stress on the helmet attachment.
- When the helmet is not in use, ensure that the ear cups are left in parking position. This will decrease the stress on the helmet attachment.

Installing ADVANCE ProCOM – with Adaptors for ADVANCE Vent/X-Vent

- (F:1) ADVANCE ProCOM – with Adaptors for ADVANCE Vent/X-Vent is already installed to the helmet when open the packaging. If the earmuffs have to be reinstalled for any reasons please proceed as follows:
  Push the hearing protectors' helmet attachment into the helmet slot until it locks into position.
- (F:2) Work mode: Press the ear cup supporting arms inwards until you hear a click on both sides. Ensure that the ear cups and the ear cup supporting arms do not press against the edge of the helmet when in work mode as this can cause noise leakage. Position the microphone close to your mouth.
- (F:3) Stand-by position: Press the ear cup supporting arms outwards until you hear a click on both sides.

NOTICE:

- Ensure that the cable is laid correctly inside the helmet.
- Ensure that the hard hat adaptors are firmly mounted to the helmet.
- A firm seal should be established before entering a noisy environment.
- Do not store the helmet with the helmet attachment in stand-by position. This causes stress on the helmet attachment.
- When the helmet is not in use, ensure that the ear cups are left in parking position. This will decrease the stress on the helmet attachment.

FITTING INSTRUCTIONS

ADVANCE ProCOM Headband Type

- (G:1) Remove all hair under the earmuffs before putting them on.
- (G:2) Adjust the headband by extending the centre band equally on both sides.
- (G:3) Fit the earmuffs over your ears ensuring a tight fit around your ears.
- (G:4) Adjust the headband by sliding the headband up or down to obtain a snug, comfortable fit.

- (G:5) Ensure the earmuffs completely surround your ears. Position the microphone close to your mouth.
- (G:6) To remove the headset, ensure the earmuffs are in the usage position and pull the earmuffs on both side to remove the headset from your head.

ADVANCE ProCOM – with Adaptors for Function Universal, ADVANCE X-Climb or ADVANCE Vent/X-Vent

- (H:1) Remove all hair under the earmuffs before putting them on.
- (H:2) Place the helmet on your head with the earmuffs in the stand-by position. Ensure the helmet is tight and secure.
- (H:3) Ensure the earmuffs completely cover your ears while ensuring the helmet is on your head.
- (H:4) Adjust the height of the earmuffs to ensure the earmuffs completely surround your ears, giving a snug, comfortable fit.
- (H:5) Ensure that the earmuffs are firmly attached. Position the microphone close to your mouth.
- (H:6) To remove the helmet, ensure the earmuffs are in the parking position and remove the helmet from your head.

GETTING STARTED (See also Quick Start Guide)

Downloading Software

- ADVANCE ProCOM App
    - Android: Google Play Store > ADVANCE ProCOM
    - iOS: App Store > ADVANCE ProCOM
- STIHL Device Manager

  The STIHL Device Manager allows you to upgrade firmware and configure settings directly from your

  PC. Download the STIHL Device Manager from **support.stihl.com**.
- Firmware Upgrades

  The headset supports firmware upgrades. You can upgrade the firmware using the STIHL Device Manager.

  Please visit support.stihl.com to check for the latest software downloads.

Charging the Battery

WARNING
When charging the battery, only use a certified USB-C cable and power supply. Use of a non-approved charger may cause fire, explosion, leakage, and other hazards which may also reduce the life time or performance of the battery.
You can charge the headset by connecting the supplied USB power & data cable into a computer's USB port or USB wall charger. It takes about 2.5 hours to be completely charged.

NOTICE:

- Close the USB port after charging with a rubber cover properly.
- When charging the battery, the blinking yellow and green LED will alternate intermittently.
- When charging a fully charged battery, the blinking green LED will appear in two patterns.

Switching On and Off the Headset

To switch on the headset, press and hold the Multi-function Button for 2 seconds. You will hear ascending beeps and a voice notification, "Hello".

To switch off the headset, press and hold the Multi-function Button for 2 seconds. You will hear descending beeps and a voice notification, "Goodbye".

NOTICE: When switching on the headset, the Mesh Intercom is automatically activated.

Checking the Battery Level

You can check the battery level when switching the headset on or off. The battery condition is indicated by the LED in the left earmuff.

- Blinking in green = High, 70-100%. You will hear a voice notification, "Battery level is high".
- Blinking slowly in yellow = Medium, 30-70%. You will hear a voice notification, "Battery level is medium".
- Blinking fast in red = Low, 0-30%. You will hear a voice notification, "Battery level is low".

NOTICE:

- The battery performance may be reduced over time with usage.
- Battery life may vary depending on conditions, environmental factors, functions of the product in use, and devices used with it.

Adjusting the Volume

You can easily adjust the volume by tapping the (+) Button or the (-) Button. You will hear a beep when the volume reaches the maximum or minimum level. The volume is set and maintained independently at different levels for each audio source even when you reboot the headset.

For listening to streaming audio content from your smartphone and for phone calls, adjust the volume on your smartphone.

PAIRING THE HEADSET WITH BLUETOOTH® DEVICES

When using the headset with other Bluetooth® devices for the first time, they will need to be "paired." The pairing operation is required only once for each Bluetooth® device. This enables them to recognise and communicate with one another whenever they are within range. The headset can pair with multiple Bluetooth® devices, such as a mobile phone or Digital mobile radio (DMR) device via Mobile Phone Pairing and Second Mobile Phone Pairing.

Pairing with Mobile Phone

1. Press and hold the Multi-function Button for 7 seconds when the headset is switched off. You will hear a voice notification, "Phone pairing" and alternating blue and red flashing lights will indicate that the device is now discoverable.
2. With your mobile phone in Bluetooth®-pairing mode, select ADVANCE ProCOM in the list of devices detected.
3. If your mobile phone asks for a PIN, enter 0000.

Pairing with the Second Device

A second mobile phone or a DMR radio device can be connected.

1. Press and hold the Multi-function Button for 12 seconds when the headset is switched off. You will hear a voice

notification, "Second mobile phone pairing" and blinking blue LED will indicate device is now discoverable.

2. With your mobile phone or your DMR radio device in Bluetooth®-pairing mode, select ADVANCE ProCOM in the list of devices detected.

3. If your mobile phone asks for a PIN, enter 0000.

USING MOBILE PHONE FEATURES

Answering a Mobile Phone Call

When you have an incoming call, simply tap the S Button to answer the call. The phone call is not delivered to Mesh Intercom but you can still hear the Mesh Intercom users.

Ending a Mobile Phone Call

To end a call, tap the S Button, or wait for the called person to end the call.

Activating the Voice Assistant of Your Mobile Device like Google Assistant or Siri

Press and hold the S Button for 2 seconds in stand-by mode. For this, the voice assistant function must be available on the mobile phone. Refer to your mobile phone manual for further instruction.

LISTENING TO MUSIC WITH BLUETOOTH® DEVICES

First, start a music streaming service on your Bluetooth® device.

Playing or Pausing Music
Tap the Multi-function Button.

Tracking Forward
Tap the Multi-function Button twice.

LISTENING TO RADIO

NOTICE: You can set the stations through the ADVANCE ProCOM App.

Turning On and Off the FM Radio

Press and hold the (+) Button for 2 seconds. You will hear a voice notification, "FM on" or "FM off".

Seeking Stations Forward
Tap the Multi-function Button twice.

USING THE MESH INTERCOM

Mesh Intercom allows team members to connect and communicate with nearby users without the need to pair each headset together. The working distance between each ADVANCE ProCOM in Mesh Intercom can be up to 600 m (0.37 miles). Within the same channel in Open Mesh or the same private group in Group Mesh, it can connect with up to 16 users and 6 users can talk at the same time for comfortable conversation.
Each additional ADVANCE ProCOM extends the range of Mesh Intercom as a repeater.

Open Mesh (Please see Figure 1)

Open Mesh is an open group Intercom conversation. Users can freely communicate with each other in the same channel of Open Mesh. Entering the Open Mesh is possible anytime. You can select a channel to use (1-9) using the headset.

Group Mesh (Please see Figure 2)

You have the possibility to create groups with clearly defined users with the use of ADVANCE ProCOM App.

Starting the Mesh Intercom

When you switch on the headset, the Mesh Intercom is automatically enabled. When Mesh Intercom is enabled, the headset will automatically connect to nearby ADVANCE ProCOM users. You will hear a voice notification, "Mesh Intercom On", "Open Mesh", and "Channel 1".

NOTICE:

- The headset will be in Open Mesh (default: channel 1) initially.
- An LED blinking slowly in green indicates the device is now in Open Mesh.

Using the Mesh in Open Mesh

Channel Setting (Default: channel 1)
If the Open Mesh communication experiences interference because other groups are also using the channel 1 (default), change the channel. You can select one of 1 to 9 channels.
You can change the Channel Setting of the headset through the ADVANCE ProCOM App.

Using the Mesh in Group Mesh

Creating a Group Mesh
Creating a Group Mesh requires two or more Open Mesh users.

1. The users must be located nearby in range of Mesh Intercom.
2. With the help of the ADVANCE ProCOM App, Open Mesh users can create a Group Mesh.
3. The Open Mesh users will hear a voice notification,

   "Mesh Grouping".
4. When the headsets complete Mesh Grouping, users will hear a voice notification, "Group Mesh". Headset will

   automatically switch from Open Mesh to Group Mesh.

Joining an Existing Group Mesh
One of the members in an Existing Group Mesh can allow new members in Open Mesh to join the Existing Group Mesh.

1. The users must be located nearby in range of Mesh Intercom.
2. With the help of the ADVANCE ProCOM App, Open Mesh users can create a Group Mesh.
3. The current member and new members will hear a voice notification, "Mesh Grouping".
4. When the headsets complete Mesh Grouping, new members will hear a voice notification, "Group Mesh". The

new members' headsets automatically switch from Open Mesh to Group Mesh.

Toggling between Open Mesh and Group Mesh You have two options to toggle between Open Mesh and Group Mesh:

1. Pressing and holding the Mesh Button longer than 2 seconds
2. Using the App

   This allows you to keep the Mesh Network connection information while in Open Mesh. You can toggle to

   Group Mesh to communicate with participants from the stored Mesh Network connection information.

NOTICE: If you have never participated in Group Mesh, you cannot toggle between Open Mesh and Group Mesh. You will hear a voice notification, "No Group Available".

Muting the Microphone (default: unmute)

You can mute or unmute your microphone during an Intercom conversation by tapping the Mesh Button. You will hear a voice notification, "Mic on" or "Mic off".

NOTICE: Although you have muted the microphone, you can unmute it for Mesh Intercom communication by pressing the PTT Button if the DMR radio device is not connected.

Mesh Out of Range Signal

Whenever you leave the range of the current Open or Group Mesh, you will hear four beeps every minute. You can enable or disable Mesh out of range signal through the ADVANCE ProCOM App.

NOTICE: If you get this signal please ensure to come back in range of Mesh to communicate with the others.

Resetting the Mesh

You can reset the Mesh through the ADVANCE ProCOM App. You will hear a voice notification, "Reset Mesh". If a headset in an Open Mesh or Group Mesh resets the Mesh, it will automatically return to Open Mesh (default: channel 1).

NOTICE: When you reset the Mesh, the stored Mesh network information will be deleted.

AMBIENT LISTENING (DEFAULT: DISABLE)

With the help of ambient listening you are able to hear surround sounds even if you are wearing the earmuffs. Harmful noises are automatically reduced as soon as they appear. To enable or disable Ambient, tap the Mesh Button twice or use the ADVANCE ProCOM App.

USING THE DMR RADIO DEVICE

A Bluetooth® DMR radio device can be connected. Please refer to "6. PAIRING THE HEADSET WITH BLUETOOTH® DEVICES" for details on DMR radio device pairing.
To use the DMR Radio device, press and hold the PTT Button while you talk. Mesh Intercom is still working in addition.

FUNCTION PRIORITY

The headset output is prioritised in the following order:

- (highest) DMR radio device Mesh Intercom Phone call
- (lowest) Bluetooth® stereo music / FM radio

NOTICE: When a DMR Radio device is connected to second Bluetooth® pairing place,

- you cannot listening to Bluetooth® stereo music and FM radio.
- the DMR Radio device will be disconnected during a phone call and reconnected automatically after the phone call.

AUTOMATIC POWER OFF

If no button is pressed for about 4 hours, the power is automatically turned off.

CONFIGURING YOUR HEADSET

You can change the settings of the headset through the ADVANCE ProCOM App or the STIHL Device Manager.

Headset Language

You can select the headset language. The selected language is maintained even when the headset is rebooted.

Microphone Sensitivity (Default: 3)

You can adjust the sensitivity of the mic depending of your voice level or surround noise level. If your speech level or the surround noise level is very loud, please use level 1. If your speech level is low, please use a higher level.

Audio Overlay Volume Management (Default: Enable)

The volume of the music and radio is reduced when you communicate. This helps for better understanding the conversation.

Sidetone (Default: Enable)

Sidetone is audible feedback of your own voice. It helps you to naturally speak at the correct level according to varying headset noise conditions. If this feature is enabled, you can hear what you are speaking during an Intercom conversation or a phone call. If you do not hear a side tone, your mic is muted.
The previous sidetone settings will remain intact even after the headset is rebooted.

RDS AF Setting (Default: Disable)

Radio Data System (RDS) Alternative Frequency (AF) Setting allows a receiver to re-tune to the second frequency location when the first signal becomes too weak. With RDS AF enabled on the receiver, a radio station with more than one frequency can be used.

FM Station Guide (Default: Enable)

When FM Station Guide is enabled, FM station frequencies are given by voice notifications as you select preset

stations. When FM Station Guide is disabled, the voice notifications on FM station frequencies will not be given as you select preset stations.

Region Selection (Table P)

You can select the proper FM frequency range for your location from the ADVANCE ProCOM App or the STIHL Device Manager. Using the region setting, you can optimize the seek function to avoid unnecessary frequency ranges.

Factory Reset

If you want to restore the headset to factory default settings, use the Factory Reset menu on the ADVANCE ProCOM App. The headset automatically restores the default settings and turns off.

TROUBLESHOOTING

Reset (Please see Figure 3)

When the headset is not working properly, you can easily reset the unit:

1. Remove the ear cushion of the left earmuff by sliding your fingers under the inner edge of the ear cushion and firmly pulling it straight out.
2. Remove the sponge.
3. Locate the pinhole reset button inside the left ear cup.
4. Gently insert a paperclip into the hole and tap the pinhole reset button with light pressure.
5. The headset will shut down.
6. Switch on the headset again by pressing and holding the Multi-function Button for 2 seconds.

NOTICE: Reset will not restore the headset to factory default settings.

Factory Reset

Please see "15.8 Factory Reset"

CLEANING AND MAINTENANCE

1. Check the ear cushions before wearing and clean regularly with a damp cloth, special non-alcohol PPE wipes for ear cushions or water with mild soap.
   NOTICE: The product may be adversely affected or damaged by certain chemical substances (e.g. cleaning solvents, toxic chemicals, strong detergents, or STIHL Varioclean). Contact the manufacturer for further information. Make sure that the cleaning agent used is compatible with the skin.
   - Do not submerge the product in water.
   - Keep the product away from the water. Do not spill water or beverages on the product or let it fall into water.
   - Do not splash water on the product, wash it with a high pressure water hose, or soak the product in the water basin. Doing so may damage the product.
   - Do not clean the product with sharp or conductive objects, such as nails, screwdrivers, or wire brushes.

- Do not clean the product with compressed air. Doing so may damage the product.
2. Check the ear cushions regularly for wear and change the ear cushions if necessary. The hygiene set should be changed at least 2 times a year.
    - If the cushions become hard, damaged, or otherwise deteriorate, and the microphone becomes damaged or deteriorated, they should be replaced promptly (contact STIHL or your authorized dealer for exact replacement parts). The ear cup cushions on the ADVANCE ProCOM earmuffs can be replaced with new cushions from the Hygiene Kits listed below (see instructions in 18.1).

NOTICE: When reassembling the product after cleaning or maintenance, ensure that the product is firmly assembled.

ACCESSORIES/SPARE PARTS

Spare Part	Part Number
Hygiene Kit	0000-889-9047
Microphone	0000-889-9048

Removing and Replacing the Ear Cushions

- (Q:1) To remove the ear cushion, slide your fingers under the inside edge of the ear cushion and firmly pull straight out.
- (Q:2) Fit one side of the ear cushion into the groove of the ear cup and then press on the opposite side until the ear cushion snaps in place.

DISPOSAL

WEEE (Waste Electrical and Electronic Equipment)
The crossed-out wheel bin symbol on the product, literature, or packaging reminds you that all electrical and electronic products, batteries, and accumulators must be taken to separate collection at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please do not dispose of these products as unsorted municipal waste, but hand it in at an official collection point for recycling. Do not dispose of the product with household waste. Disposal of the product should be done via a STIHL dealer or public disposal centers.

TRANSPORTATION
Secure the product while transporting it. Otherwise, it may damage the product.

- Do not transport, use, or store the product in temperatures that are over the specified ambient temperature range to the extreme. Doing so may reduce the lifespan of the electronic device, damage the battery, and/or melt the plastic parts of the product.
- Do not transport or keep the DC power charging and firmware upgrade port or microphone port open. Cover the USB port with a rubber cover or connect the microphone.

- If you wear hearing protection while driving or walking in public, be sure to use the ambient listening function. Otherwise, you may not hear safety alarms or ambient sounds, which may lead to severe personal injury.

STORAGE

The product should be stored at room temperature.

- Do not expose the product to extremely high or low temperature as this may reduce the life span of electronic devices, damage the battery, and/or melt plastic parts of the product.
- Store the product indoors or in enclosed, dry areas with adequate temperature (refer to Table K).
- Store the product out of the reach of children.
- Do not store the product in dangerous areas, such as areas with high electricity, electrical or magnetic fields, projectiles, accelerated stones, or other flying debris.
- Do not store the product in environments that are corrosive, electrical, or containing acrid fumes.

LIFE TIME OF THE PRODUCT (Information required by EN 352)

The life period for ADVANCE ProCOM starts at the time the product is manufactured. You can check the manufacture date on the label attached to the packaging or product.
Hearing protection products are subject to a certain degree of aging. It depends primarily on the respective type of utilization and amount of use and wear, but also other criteria (for example, periodic maintenance, repair, and proper storage).
For professional use, the maximum lifetime is approximately 3 years. The product should be regularly examined to ensure it conforms to current technical requirements, and also for wear or changes, and replaced with a new product if necessary.

FCC AND IC INFORMATION

FCC Compliance 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.

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 on and off, 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 into 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.

FCC RF Exposure Statement
This product is compliance to FCC RF Exposure requirements and refers to FCC website

FCC CAUTION

Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

Industry Canada Statement

This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

Bluetooth® License

The Bluetooth® word mark and logos are owned by the Bluetooth® SIG, Inc. and any use of such marks by STIHL is under license. Other trademarks and trade names are those of their respective owners.

The product is compliant with and adopts the Bluetooth® Specification 4.1 and has successfully passed all interoperability tests that are specified in the Bluetooth® specification. However, interoperability between the device and other Bluetooth®-enabled products is not guaranteed.

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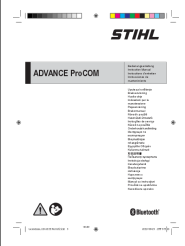STIHL Pty. Ltd.

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Documents / Resources

STIHL ADVANCE ProCOM Headband Ear Protector [pdf] Instruction Manual
ADVANCE ProCOM Headband Ear Protector, ADVANCE ProCOM, Headband Ear Protector, Ear Protector, Headphones

References

- 🔧 **Hilfe und Beratung zu E-Commerce und STIHL Produkten | STIHL Support**
- 🔧 **Country Routing Page: Welcome to STIHL | STIHL**
- 🔧 **STIHL declarations of conformity | STIHL**
- ◈ **System Maintenance | Federal Communications Commission**