



**SOUNDGEAR**

# **EARMOLDS**

**USER MANUAL**

Solid Earplugs

Filtered Earplugs

High Frequency Noise Filter Earplugs

Racing Receivers

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## Your SoundGear Earplug

This noise-attenuating earplug has been crafted via digital replication from your original ear impression(s). Every effort has been made to preserve and ensure an effective and comfortable fit. The sleek and sculpted design using tear-resistant, high-strength silicone provides a cosmetically appealing look, and a flush fit to the ear.



**Solid earplug**

## Features and Identification

### Your device features include:

1. Custom Earmold
2. Removal Handle
3. Lanyard Anchor
4. Lanyard

### Earplug Insertion:

1. Hold the custom earmold with your thumb and forefinger on the outer side near the handle or cord.
2. Tilt your hand slightly forward and gently insert the canal tip of the custom earmold into your ear canal.



3. Rotate the custom earmold backwards.
4. Softly press the custom earmold into place with your fingertip.
5. Verify the earmold is securely inserted and test the fit and seal by clapping next to your ear. The clap should sound noticeably muffled.



### Earplug Removal

1. Grasp the removal handle of the custom earmold using your thumb and forefinger, and pull out of ear.
2. If there is no removal handle, grasp the top and bottom portion of the custom earmold using your finger or fingernail and lift out of ear.

**NOTE:** *Pulling lightly down on the ear lobe may help loosen the custom earmold as it is removed.*

### Your SoundGear Mini-Filter Noise Attenuating Earplug

This noise-attenuating earplug has been crafted via digital replication from your original ear impression(s). Every effort has been made to preserve and ensure an effective and comfortable fit. The sleek and sculpted design using tear-resistant, high-strength silicone provides a cosmetically appealing look.

#### Filter Insertion and Placement:

1. Holding a new or clean filter gently between your thumb and index finger, place it over the circular cavity with the color side down.
2. When aligned, use your thumb and gently push in place.

#### Filter Removal and Replacement:

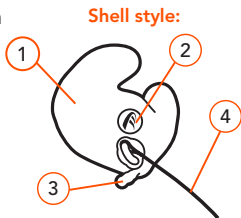
1. Gently fold or squeeze the earmold, elongating the filter cavity.
2. Using a finger or fingernail slowly pull the filter out of the cavity.

**Important:** If feedback occurs after the earmold has been inserted correctly, contact your hearing professional.








## Features, Controls and Identification

Your device controls include:

1. Custom Earmold
2. Filter
3. Lanyard Anchor
4. Lanyard



## Filter Sizes

- 10 dB (Music Ocean Filter)  
- 17 dB (Music Blue Filter)  
- 26 dB (Music Black Filter)  
- Impulse (Brown Filter)  
- Total Block  

## Helpful Hints

- Before inserting your custom filtered earmold, ensure the filter is correctly placed and completely inserted into the filter cavity.
- In order to achieve the specified level of attenuation, the custom earmold must be completely and properly inserted into the ear canal.

- Complete regular inspection of the earmold to ensure no tears or cracks as they can reduce the level of hearing protection.

## Your High-Frequency Noise Filter Earplug

This noise-attenuating earplug has been crafted via digital replication from your original ear impression(s). Every effort has been made to preserve and ensure an effective and comfortable fit. The sleek and sculpted design using tear-resistant, high-strength silicone provides a cosmetically appealing look.

### Filter Insertion and Placement:

1. Holding a new or clean filter gently between your thumb and index finger, place it over the circular cavity with the color side down.
2. When aligned, use your thumb and gently push in place.

### Filter Removal and Replacement:

1. Gently fold or squeeze the earmold, elongating the filter cavity.
2. Using a finger or fingernail slowly pull the filter out of the cavity.

## Features, Controls and Identification

Your device controls include:

1. Custom Earmold
2. Mini-Filter
3. Lanyard Anchor
4. Lanyard



High frequency

## Helpful Hints

- In order to achieve the specified level of attenuation, the custom earmold must be completely and properly inserted into the ear canal.
- Complete regular inspection of the earmold to ensure no tears or cracks as they can reduce the level of hearing protection.

## Your SoundGear Racing Receiver(s)

This earmold has been crafted via digital replication from your original ear impression(s). Every effort has been made to preserve and ensure an effective and comfortable fit. The sleek and sculpted design using tear-resistant, high-strength silicone provides a cosmetically appealing look, and a flush fit to the ear.



Racing receiver

## Earmold Removal:

1. Gently grip the earmold between your thumb and your forefinger.
2. Pull directly to the side of your head to remove.  
The earmold may require some wiggling to dislodge.

**NOTE:** Do not use the cord(s) to remove earmold(s). This is likely to damage the cords and/or electronics in your device(s). To ensure you are inserting the correct earmold in your ear, point the canal of the earmold toward your face.

## Features, Controls and Identification

### Your device controls include:

1. Custom Earmold with embedded receiver
2. Cord
3. Heat Wrap (this keeps the lower part of the cord together)
4. Jack
  - The specific jack on your Racing Receiver(s) is based on your selection at ordering. If the jack does not match your radio plug, please contact your point of purchase to coordinate a repair order within 90 days OR contact your radio distributor for an acceptable adapter.

## Earmold Care

### Instrument Cleaning

Your hearing professional can provide further information on additional maintenance procedures for your earmolds if needed.

- Use a soft, damp cloth or a cleaning brush to clean debris from the custom earmold.
- Wash the custom earmold with warm soapy water.
- Never use solvents.

## Helpful Hints

- Do not use harsh chemicals or alcohol to clean your mini-filters.

## Warnings

- Filters and filter housings can be damaged when coming into contact with sharp objects.
- The mini-filters can be adversely affected when coming into contact with chemicals or alcohol.
- Keep mini-filters out of the reach of young children.

## Service and Repair

If, for any reason, your earmold noise attenuator fails or fits poorly, contact your hearing care professional for advice and assistance or contact Starkey Customer Service at 800-328-8602.

## Storage and Care

Hearing protectors are designed for use in many different environments. Heat, moisture, debris and certain chemicals may deteriorate the function of the protectors. It is important that they are regularly maintained and always checked for damage prior to use. If there are any visible splits or they fit too loose/tight in the ear please contact your hearing professional.

This material is stable between -60° and 300° Fahrenheit. However, some stiffness and shrinkage may occur below 40°F, and swelling and softness may occur above 120°F. If this occurs, it is recommended that you hold the earmolds in your hands for 2-3 minutes to help them reach a temperature close to your body level temperature to make appropriate insertion easier and ensure a better seal.

## Earmold Replacement

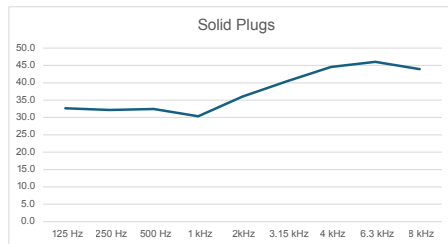
Even with the best care, the condition and fit of your earmold is likely to be affected by several factors:

- A rapid or significant change in body weight can affect the fit of your earmold.
- Children's earmolds may need replacement more frequently because of rapid growth.
- The ear tissue's physical adaptation to the earmold may require a new fitting to reestablish an adequate seal.
- Replacement may be necessary due to damage or deterioration over time.

Consult your hearing professional for information regarding your earmold's condition and performance.

## Acoustic Specifications

The NRR and attenuation figures used in the specifications have been drawn from third-party testing using ANSI-specified procedures and are certified by Michael & Associates, Inc., State College, PA, USA.



## Expected Solid Earplug Response

Total Frequency (Hz)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	3.15 kHz	4 kHz	6.3 kHz	8 kHz
Mean Attenuation (dB)	32.7	32.2	32.4	30.3	36.0	40.4	44.6	46.1	43.9
Standard Deviation (dB)	3.4	3.6	3.9	3.1	4.0	4.2	2.8	2.1	3.7

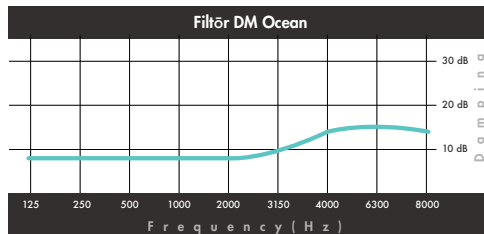
**NRR = 26 dB**

## Acoustic Specifications

The NRR and attenuation figures used in the specifications have been derived through in-house testing using ANSI-specified procedures but not certified.

### 10 dB

Minimum guaranteed damping level [dB]	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	NRR
Filtör DM Ocean	8	8	8	8	11	15	14	9



\*Graph reflects filter attenuation as measured by Dynamic Ear Company

### Expected Filtered Mold Response

Total Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation (dB)	8.4	8.9	9.4	9.2	10.3	10.7	9.8	9.1	8.6
Standard Deviation (dB)	3.2	3.5	4.2	2.8	3.1	2.9	2.2	2.6	4.2

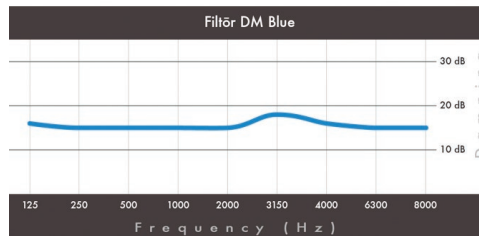
**NRR = 4 dB**

## Acoustic Specifications

The NRR and attenuation figures used in the specifications have been derived through in-house testing.

### 17 dB

Minimum guaranteed damping level [dB]	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	315 kHz	4 kHz	6.30 kHz	8 kHz	NRR
Filtör DM Blue	16	15	15	15	15	18	16	15	15	10



\*Graph reflects filter attenuation as measured by Dynamic Ear Company

### Expected Filtered Mold Response

Total Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation (dB)	13.5	11.9	13.4	13.8	18.7	19.7	17.5	16.6	16.9
Standard Deviation (dB)	4.7	4.1	3.6	2.9	3.2	3.0	2.7	3.3	4.6

**NRR = 7 dB**

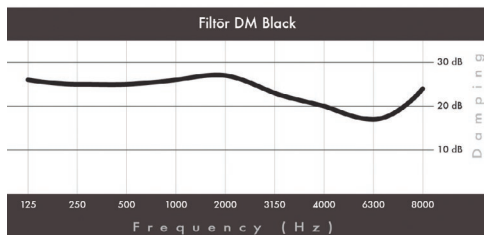


## Acoustic Specifications

The NRR and attenuation figures used in the specifications have been derived through in-house testing using ANSI-specified procedures but not certified.

### 26 dB

Minimum guaranteed damping level [dB]	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	315 kHz	4 kHz	6.30 kHz	8 kHz	NRR
Filter DM Black	26	25	25	26	27	23	20	17	24	18



\*Graph reflects filter attenuation as measured by Dynamic Ear Company

## Expected Filtered Mold Response

Total Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation (dB)	14.4	13.1	15.8	18.6	28.4	22.6	18.6	16	24.7
Standard Deviation (dB)	6.2	4.7	4.9	4.6	3.5	3.4	2.4	2.6	5.4

**NRR = 9 dB**

## Acoustic Specifications

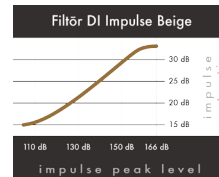
The NRR and attenuation figures used in the specifications have been derived through in-house testing using ANSI-specified procedures but not certified.

### Impulse Filter - IPIL 33.1

Minimum guaranteed damping level [dB]	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	315 kHz	4 kHz	6.3 kHz	8 kHz	NRR
Impulse Filter Beige	2	3	6	13	23	26	22	16	23	5

ANSI Impulse peak insertion loss (IPIL)	130 dB	150 dB	158 dB	166 dB
Filter DI Impulse Beige	21.3 dB	29.3 dB	32.3 dB	33.1 dB

130 dB	150 dB	158 dB	166 dB
21.3 dB	29.3 dB	32.3 dB	33.1 dB



## Required Information

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

- i. The environmental noise level as measured at the ear is 92 dB(A).
- ii. The NRR is 9 decibels (dB).
- iii. The level of noise entering the ear is approximately equal to [92 dB(A) – 9 dB] dB(A).

**⚠ CAUTION:** For noise environments dominated by frequencies below 500 Hertz (Hz) the C-weighted environmental noise level should be used.

Proper insertion of mold and filter is essential to noise attenuation performance. Improper fit of this device will reduce its effectiveness in attenuating noise. Consult the instructions section for proper fit.

Although hearing protectors can be recommended for protection against the harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noise such as gunfire.

### LIMITATION ON DURATION OF IMPLIED WARRANTIES:

IMPLIED WARRANTIES, IF ANY, ARISING BY WAY OF STATE LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. There is no warranty of any nature made by SoundGear beyond this Limited Warranty. No person has authority to enlarge, amend, or modify this Limited Warranty. SoundGear is not responsible for any undertaking, representation, or warranty (written, express, or implied) made by any SoundGear dealer or other person beyond those expressly set forth in this Limited Warranty.

Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

### WHAT THIS LIMITED WARRANTY COVERS:

This Limited Warranty covers only a "defect" in the workmanship performed and/or materials used to manufacture your Earmold. "Defect" means the failure of the workmanship performed and/or materials used to conform the product to SoundGear's design and manufacturing specifications and tolerances.

This Limited Warranty provided by SoundGear to you, the original purchaser of a SoundGear Earmold, covers your new Earmold when sold by an authorized SoundGear dealer. The duration of this Limited Warranty begins when you first take delivery of your Earmold from an authorized dealer and ends ninety (90) days later ("warranty period").

### LIMITATION ON DURATION OF IMPLIED WARRANTIES:

IMPLIED WARRANTIES, IF ANY, ARISING BY WAY OF STATE LAW, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. There is no warranty of any nature made by SoundGear beyond this Limited Warranty. No person has authority to enlarge, amend, or modify this Limited Warranty. SoundGear is not responsible for any undertaking, representation, or warranty (written, express, or implied) made by any SoundGear dealer or other person beyond those expressly set forth in this Limited Warranty.

Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

## WHAT THIS LIMITED WARRANTY COVERS:

This Limited Warranty covers only a “defect” in the workmanship performed and/or materials used to manufacture your Earmold. “Defect” means the failure of the workmanship performed and/or materials used to conform the product to SoundGear’s design and manufacturing specifications and tolerances.

Your authorized SoundGear dealer may have issued a warranty or service plan that goes beyond the provisions of this Limited Warranty. Please contact him or her for further information.

SoundGear will either replace the earmold or repair any covered defect in your product, provided that you deliver your product to one of SoundGear’s authorized dealers or directly to SoundGear in the manner described below.

In addition, you must notify the authorized dealer or SoundGear of the defect during the warranty period and within thirty (30) days of discovering the defect. There will be no cost to you for SoundGear’s repair or replacement of the product itself, but the dealer may charge a fee for services he or she provides.

Performance of warranty repairs on your Earmold shall not extend the duration of the warranty period. Any repairs performed on your product after the warranty period has expired shall be considered “good will” repairs, which shall not alter the terms of this Limited Warranty.

## HOW TO OBTAIN WARRANTY SERVICE:

Deliver your Earmold (at your expense) to the SoundGear authorized dealer from whom you purchased it, or to SoundGear, Repair Dept., 6700 Washington Ave. S., Eden Prairie, MN 55344.

## WHAT THIS LIMITED WARRANTY DOES NOT COVER:

Accessories; or damage to your Earmold caused by misuse or neglect, accident, unauthorized alteration, or failure to provide reasonable and necessary maintenance and cleaning.

### DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES:

THE PURCHASER SHALL NOT BE ENTITLED TO RECOVER FROM SOUNDGEAR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE EARMOLD, INCLUDING BY WAY OF EXAMPLE ONLY, EXPENSES TO DELIVER THE PRODUCT TO AN AUTHORIZED SOUNDGEAR DEALER OR TO SOUNDGEAR, HOTEL ROOMS, OR LOST WAGES. THIS EXCLUSION AND DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES SHALL BE DEEMED INDEPENDENT OF, AND SHALL SURVIVE, ANY FAILURE OF THE ESSENTIAL PURPOSE OF ANY REMEDY OF THIS LIMITED WARRANTY.

Some States do not allow the exclusion or limitation of consequential or incidental damages, so the above exclusions may not apply to you.

## YOUR LEGAL REMEDIES:

THIS LIMITED WARRANTY DOES NOT “EXTEND TO FUTURE PERFORMANCE. ANY ACTION TO ENFORCE THIS LIMITED WARRANTY OR ANY IMPLIED WARRANTIES MAY AND SHALL NOT BE COMMENCED MORE THAN 90 DAYS AFTER THE EXPIRATION OF THE WARRANTY PERIOD. THE PERFORMANCE OF REPAIRS SHALL NOT SUSPEND THIS LIMITATIONS PERIOD FROM EXPIRING. UNDER NO CIRCUMSTANCES SHALL SOUNDGEAR BE OBLIGATED TO REFUND ALL OR ANY PART OF THE PURCHASE PRICE OF THE EARMOLD. Some States do not allow the reduction in the limitation period, so the above reduction in the limitation period may not apply to you.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

This warranty is valid only in the United States.

## Regulatory Information

For service or repair, please contact your hearing care professional first. If necessary, you can send your earmolds to:



**Starkey Laboratories, Inc.**  
6700 Washington Ave. South  
Eden Prairie, MN 55344 USA  
[www.starkey.com](http://www.starkey.com)



Waste from electronic equipment must be handled according to local regulations





SoundGear  
6700 Washington Avenue S. • Eden Prairie, MN 55344  
[www.soundgear.com](http://www.soundgear.com)  
800.769.8605

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