



# BRH31M

## Lightweight Single-Sided Broadcast Headset

The Shure broadcast headsets, BRH31M, user guide.  
Version: 5.0 (2023-C)

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# BRH31M

## Lightweight Single-Sided Broadcast Headset

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### LIMITED WARRANTY

Shure Incorporated ("Shure") hereby warrants to the original consumer purchaser only that, except as otherwise specified below, this product will be free in normal use of any defects in materials and workmanship for a period of two (2) years from the consumer's original date of purchase directly from Shure or from a Shure-authorized reseller.

Any rechargeable batteries contained in or packaged with this product are so warranted for a period of one (1) year from the consumer's original date of purchase. However, rechargeable batteries are consumable and their capacity will be reduced over time based on temperature, amount of time in storage, charging cycles, and other factors; hence reduction in battery capacity does not constitute a defect in material or workmanship.

At its sole option, Shure will repair or replace the defective product and promptly return it to you. In order for this warranty to be valid, the consumer must, at the time the product is returned, provide proof of purchase in the form of the original purchase receipt directly from Shure or from a Shure-authorized reseller. If Shure elects to replace the defective product, then Shure reserves the right to replace the defective product with another product of the same model or a model of at least comparable quality and features in Shure's sole determination.

If you believe this product is defective within the warranty period, carefully repack the unit, insure it and return it with proof of purchase, postage prepaid, to Shure Incorporated, Attention: Service Department, at the address below.

Outside of the United States, return the product to your dealer or Authorized Service Center. Addresses are listed on [www.Shure.com](http://www.Shure.com) or can be obtained by contacting Shure at the address listed below.

This warranty is not transferable. This warranty does not apply in cases of abuse or misuse of the product, use contrary to Shure's instruction, ordinary wear and tear, an act of God, negligent use, purchase from a party other than Shure or a Shure-authorized reseller, unauthorized repair, or modification of the product.

ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED TO THE EXTENT PERMITTED UNDER APPLICABLE LAWS AND, TO THE EXTENT NOT PERMITTED, ARE HEREBY LIMITED TO THE DURATION AND TERMS OF THIS WARRANTY. SHURE ALSO HEREBY DISCLAIMS ALL LIABILITY FOR INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES.

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

This warranty does not restrict the rights of the consumer mandated under applicable laws.

THIS WARRANTY SUPERSEDES ALL OTHER WARRANTIES THAT ARE ASSOCIATED OR INCLUDED WITH THIS PRODUCT, EXCEPT THAT ANY SOFTWARE CONTAINED IN OR PACKAGED WITH THIS PRODUCT IS EXCLUDED FROM THIS WARRANTY AND INSTEAD SHALL BE COVERED BY THE WARRANTY, IF ANY, PROVIDED IN SHURE'S END USER LICENSE AGREEMENT ACCOMPANYING SUCH SOFTWARE.

## Service Centers

### United States, Canada, Latin America, Caribbean

Shure Incorporated  
Attn: Service Department  
945 Chaddick Dr.  
Wheeling, IL 60090-6449 U.S.A.

**Europe, Middle East, and Africa**

Shure Europe GmbH  
 Attn: Service  
 Jakob-Dieffenbacher-Str. 12,  
 75031 Eppingen, Germany



**Indonesia Service Center Resmi:**

Jakarta Hotline (021) 612 6388  
 Medan (061) 6612550  
 Surabaya (031) 5032219  
 Jogjakarta (0274) 371710  
 Denpasar (0361) 766788  
 Makasar (0411) 324652

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## SAFETY PRECAUTIONS

The possible results of incorrect use are marked by one of the two symbols—"WARNING" and "CAUTION"—depending on the imminence of the danger and the severity of the damage.

	<b>WARNING:</b> Ignoring these warnings may cause severe injury or death as a result of incorrect operation.
	<b>CAUTION:</b> Ignoring these cautions may cause moderate injury or property damage as a result of incorrect operation.

## CAUTION

- Never disassemble or modify the device, as failures may result.
- Do not subject to extreme force and do not pull on the cable or failures may result.
- Keep the product dry and avoid exposure to extreme temperatures and humidity.

## WARNING

- If water or other foreign objects enter the inside of the device, fire or electric shock may result.
- Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.

This device is able to produce sound volume higher than 85 dB SPL. Please check your maximum allowed continuous noise exposure level based on your national employment protection requirements.

## WARNING

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

<b>90 dB SPL</b> at 8 hours	<b>95 dB SPL</b> at 4 hours	<b>100 dB SPL</b> at 2 hours	<b>105 dB SPL</b> at 1 hour
<b>110 dB SPL</b>	<b>115 dB SPL</b> at 15 minutes	<b>120 dB SPL</b> Avoid or damage may occur	

at ½ hour

## General Description

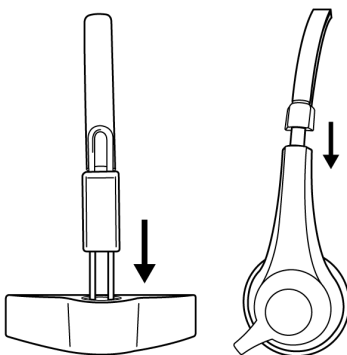
The BRH31M Broadcast Headset provides exceptional audio quality, comfort, and durability for broadcast and media production applications. A dynamic microphone delivers clear, natural vocal reproduction in an ultra-lightweight design. With user-replaceable parts and multiple connector options, the BRH31M is a versatile headset with a long product life.

- Supra-aural design with ultra-lightweight construction
- Dynamic microphone with cardioid polar pattern and frequency response optimized for communication in loud environments
- Adjustable headband with cushioned temple pad for comfortable, ergonomic fit
- Flexible boom microphone with 270-degree pivot range for left- or right-side wear and precise positioning
- Single-side, Kevlar<sup>®</sup>-reinforced cable for increased durability
- Robust design created under rigorous Shure quality standards to withstand the demands of everyday professional use
- User-replaceable earcup pad and windscreen for a long product life

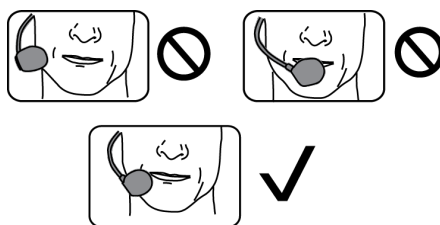
## Model Variations

Model	Connector
BRH31M	Unterminated
BRH31M-NXLR4F	Neutrik™ XLR 4-Pin Female
BRH31M-NXLR4M	Neutrik XLR 4-Pin Male
BRH31M-NXLR5M	Neutrik XLR 5-Pin Male

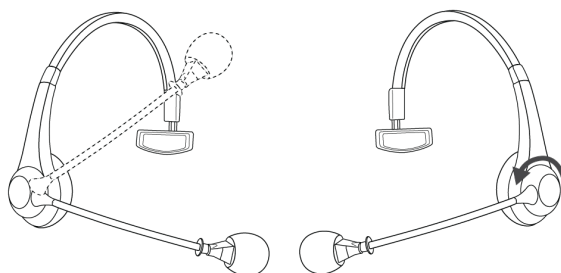
## Wearing the Headset



*Adjust the headband for a comfortable fit.*



Position the boom so the microphone is within 13 mm (1/2 inch) of the corner of your mouth. To avoid "popping" or other breath noise, do not place directly in front of mouth.



The boom swivel allows the headset to be worn on either side of your face.

## Specifications

### Weight, without cable

<b>Net</b>	81 g (2.9 oz.)
<b>Packaged</b>	0.4 kg (0.9 lbs)

### Weight, with connector

<b>Net</b>	125 g (4.4 oz.)
<b>Packaged</b>	0.45 kg (0.99 lbs)

### Cable

<b>BRH31M</b>	1.8 m, non-PVC, unterminated
<b>BRH31M-NXLR4F</b>	1.75 m, non-PVC, terminated at a 4-pin female XLR
<b>BRH31M-NXLR4M</b>	1.75 m, non-PVC, terminated at a 4-pin male XLR
<b>BRH31M-NXLR5M</b>	1.75 m, non-PVC, terminated at a 5-pin male XLR

### Environmental Conditions

<b>Operating Temperature</b>	18° to 60° C (0° to 140° F)
<b>Storage Temperature</b>	-29° to 74° C (-20° to 165° F)
<b>Relative Humidity</b>	0 to 95%

## Microphone

### Type

Dynamic, Neodymium magnet, 13 mm

### Polar Pattern

Cardioid

### Frequency Response

50 to 15,000 Hz

### Output Impedance

145  $\Omega$

### Sensitivity

*at 1 kHz, open circuit voltage*

-66.5 dBV/Pa\* (0.47 mV)

### Polarity

Positive pressure on diaphragm produces positive voltage on red wire with respect to black wire.

## Headphone

### Transducer Type

Dynamic, Neodymium magnet

### Driver Size

30 mm

### Frequency Response

150 to 12,000 Hz

### Sensitivity

*@ 1 kHz*

101 dB SPL/mW

### Impedance

*@ 1 kHz*

220  $\Omega$

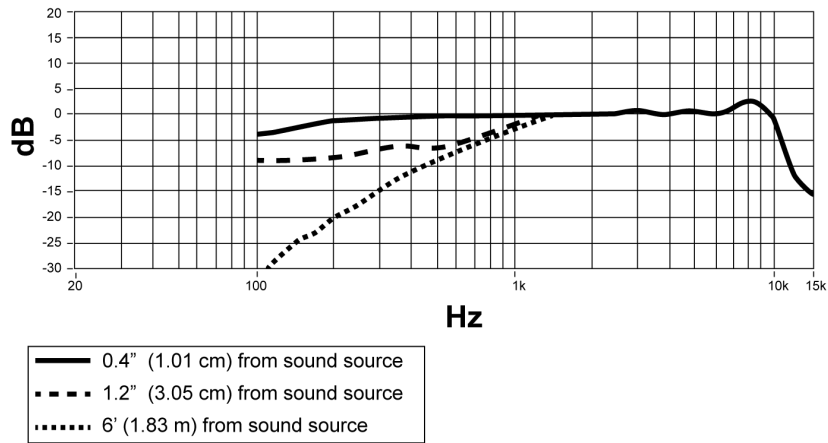
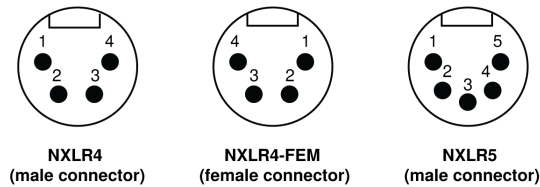
### Maximum Input Power

200 mW

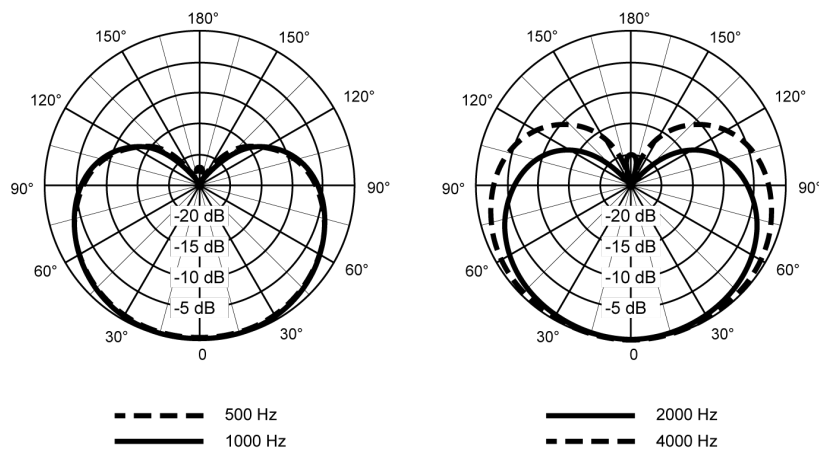
## Wiring Diagram

Signal	Wire	NXLR4	NXLR4-FEM	NXLR5
Microphone +	Red	2	2	2

Signal	Wire	NXLR4	NXLR4-FEM	NXLR5
Microphone –	Black	1	1	1
Microphone Ground	Shield (uncoated)	3	1	3
Audio	Green	4	4	4
Audio Ground	White	3	3	3



Frequency Response



Polar Pattern



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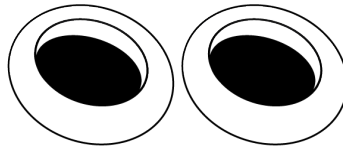
## Care and Maintenance

Clean using a soft, damp cloth.

**CAUTION:** Do not use cleansers that contain solvents. Keep liquid and foreign objects out of the driver openings.

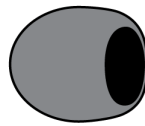
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## Furnished Accessories



**1 Pair of Replacement Earcup Pads**

*BCAEC31*



**Windscreen**

*BCAWS1*

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## Certifications

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

The CE Declaration of Conformity can be obtained from: [www.shure.com/europe/compliance](http://www.shure.com/europe/compliance)

Authorized European representative:

Shure Europe GmbH

Headquarters Europe, Middle East & Africa

Department: EMEA Approval

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# Trademarks

Neutrik is a registered trademark of Neutrik AG.