

# BRH440M BRH441M Broadcast Headset

The Shure broadcast headesets, BRH440M and BRH441M, user guide. Version: 2.1 (2022-I)

# Table of Contents

		Flip-Up Mute Function	6
BRH440M BRH441M Broadcast Headset	3		
		Specifications	6
LIMITED WARRANTY	3		
Service Centers	3	Accessories	8
		Replacement Parts	9
General Description	4		
		SAFETY PRECAUTIONS	11
Care and Maintenance	4	CAUTION	11
Detachable Cable	4	WARNING	12
Detachable Cable	4	WARNING WARNING	12 12
Detachable Cable Wearing the Headset	4 5		

### BRH440M BRH441M Broadcast Headset

# 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 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 DIS-CLAIMED 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 PROD-UCT, 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 LI-CENSE 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

#### IndonesiaService Center Resmi:

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

# General Description

The BRH441M Broadcast Headset and the BRH440M Broadcast Stereo Headset are developed especially for use in broadcast and media production. Circumaural ear cups block out background noise, and the dynamic, cardioid microphone delivers natural, highly intelligible vocal reproduction. Wearable on the left or right side, the flexible boom features a flip-up mute function that deactivates the microphone when raised vertically. A detachable cable with unterminated ends enables connection to a variety of devices, and is easily replaceable for a lifetime of use. The BRH440M features stereo monitoring, while the BRH441M leaves one ear open to the surrounding environment.

- · Closed-back, circumaural design provides excellent isolation from background noise
- Dynamic microphone delivers natural, highly intelligible vocal reproduction with cardioid polar pattern and frequency response optimized for communication in loud environments
- · Ergonomic, lightweight design with adjustable, padded headband for long wearing comfort
- · Flexible boom microphone pivots 250 degrees for left or right side wear
- · Flip-up mute function deactivates the microphone when boom is raised vertically
- · Single-side, detachable cable with unterminated ends (stripped and tinned) enables connection to a variety of devices
- · User-replaceable cable, earpads, and windscreen for a long product life
- · Legendary Shure durability to withstand the rigors of professional use

### 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.

### Detachable Cable



Attach the cable by aligning the arrows and pressing firmly into place until locked.



Pull on the knurled collar to disengage lock and remove cable.

# 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.

### Flip-Up Mute Function



Swivel the boom vertically to the indented position at the headband to mute the microphone.

# Specifications

### Net Weight

vithout cable	
BRH440M	343 g

BRH441M	240 g (8.5 oz.)
BRH440M	343 g (12.1 oz.)

#### Packaged Weight

BRH440M	0.8 kg (1.75 lbs)
BRH441M	0.69 kg (1.52 lbs)

#### Cable

Detachable cable (sold separately)

#### **Environmental Conditions**

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

#### Microphone

Туре

Dynamic, Neodymium magnet, 13 mm

Polar Pattern Cardioid

Frequency Response 50 to 15,000 Hz

Output Impedance 145 Ω

#### Sensitivity

at 1 kHz, open circuit voltage

-66.5 dBV/Pa\* (0.47 mV)

#### Polarity

Positive pressure on diaphragm produces positive voltage on pin 1 (red wire) with respect to pin 2 (black wire).

#### Headphone

Transducer Type Dynamic, Neodymium magnet

#### Driver Size 40 mm

Frequency Response 20 to 18,000 Hz

Sensitivity @ 1 kHz 101 dB SPL/mW

Impedance @ 1 kHz

300 Ω

Maximum Input Power 1000 mW



# Accessories Replacement Parts



**1** Pair of Replacement Earcup Pads



BCAWS1

Windscreen



BCATP1

**Temple Pad** 

#### BRH Broadcast Cable Accessories

The following tables describe wiring for BRH detachable cables. All BRH detachable cables contain six conductors with discrete termination at the Shure 6-pin connector that plugs into the headset. For pre-terminated cables, conductors (and signal) are tied to common contacts at the other end of the cable where shown.



#### **Connector Pin Diagram**

#### BCASCA-NXLR4 (male connector)

4-Pin XLR-M	Signal	Wire	6-Pin Headset Connector
1	Mic -	Black	2
2	Mic +	Red	1
2	Mic Ground	Shield (uncoated)	3
3	Headphone Audio Ground	White	6
	Headphone Audio 1	Orange	4
4	Headphone Audio 2 (boom side)	Green	5

### BCASCA-NXLR4-FEM (female connector)

4-Pin XLR-F	Signal	Wire	6-Pin Headset Connector
1	Mic -	Black	2
1	Mic Ground	Shield (uncoated)	3
2	Mic +	Red	1
3	Headphone Audio Ground	White	6
	Headphone Audio 1	Orange	4
4 (thru 47uF cap)	Headphone Audio 2 (boom side)	Green	5

### BCASCA-NXLR5 (male connector)

5-Pin XLR-M	Signal	Wire	6-Pin Headset Connector
1	Mic -	Black	2
2	Mic +	Red	1
2	Mic Ground	Shield (uncoated)	3
3	Headphone Audio Ground	White	6

5-Pin XLR-M	Signal	Wire	6-Pin Headset Connector
4	Headphone Audio 2 (boom side)	Green	5
5	Headphone Audio 1	Orange	4

#### BCASCA-NXLR3QI

Connector	Contact	Signal	Wire	6-Pin Headset Connec- tor
	1	Mic Ground	Shield (uncoated)	3
3-Pin XLR-M	2	Mic +	Red	1
	3	Mic -	Black	2
	Sleeve	Headphone Audio Ground	White	6
6.3 mm (1/4") TRS	Тір	Headphone Audio 2 (boom side)	Green	5
	Ring	Headphone Audio 1	Orange	4

### BCASCA1 (unterminated)

Signal	Wire	6-Pin Headset Connector
Mic +	Red	1
Mic –	Black	2
Mic Ground	Shield (uncoated)	3
Headphone Audio 1	Orange	4
Headphone Audio 2 (boom side)	Green	5
Headphone Audio Ground	White	6

# 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.

$\triangle$	WARNING: Ignoring these warnings may cause severe injury or death as a result of incorrect operation.
	CAUTION: Ignoring these cautions may cause moderate injury or property damage as a result of incor- rect 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 VOL-UME AS POSSIBLE. Over exposure to excessive sound levels can damage your ears resulting in permanent noise-induced hearing loss (NIHL). Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.

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

# 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

Authorized European representative: Shure Europe GmbH Global Compliance Jakob-Dieffenbacher-Str. 12 75031 Eppingen, Germany Phone: +49-7262-92 49 0 Email: info@shure.de www.shure.com