# **BP896 & BP896-TH**

# **(A)** audio-technica

MicroPoint™ Omnidirectional Condenser Lavalier Microphones

broadcast & production microphones



#### **Features**

- Subminiature clip-on lavalier microphone designed for broadcast production and theater settings
- Microphone diameter of just 2.6 mm for the ultimate in lowprofile, high-performance audio
- · Extremely intelligible, natural audio
- Handles high sound pressure levels with ease
- Locking 4-pin microphone output connector compatible with included power module and all Audio-Technica UniPak® bodypack wireless transmitters
- · Rugged design and construction for reliable performance
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- · Offered in black and beige (-TH) models
- RoHS-compliant—free from all substances specified in the EU directive on the reduction of hazardous substances (RoHS)
- Also available in wireless models (without power module) terminated for use with all Audio-Technica UniPak® wireless systems and many other manufacturers' wireless systems

#### **BP896 Description**

The BP896 is a subminiature clip-on/lavalier condenser microphone with an omnidirectional polar pattern. It is designed to provide intelligible, natural audio for stage/television talent, lecturers and houses of worship.

The microphone is intended to be worn on the clothing or hidden in props for excellent yet unobtrusive sound pickup. The wide-range capability of the microphone ensures clean, accurate reproduction with high intelligibility for speakers, presenters and other performers. Its small size makes it ideal for use in applications where minimum visibility is required.

The microphone requires 11V to 52V phantom power for operation.

The microphone includes a 1.4 m (55") permanently attached miniature cable. Its free end connects to the provided AT8539 power module via a locking 4-pin connector. The connector is also compatible with all Audio-Technica UniPak® body-pack wireless transmitters. The output of the power module is a 3-pin XLRM-type connector.

A recessed switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass UniSteep® filter) to help control undesired ambient noise.

The microphone comes equipped with a power module, a clothing clip base, a viper clip base, three single mic holders, two double mic holders, two windscreens and six element covers (two each in black, white and beige) for blending in with users' attire. A belt clip and a protective carrying case is also included. The microphone is available in black and beige.

## Wireless MicroPoint™ Description

The microphone is also available in a variety of wireless models, including the BP896cW. The BP896cW includes a 1.4 m (55") permanently attached miniature cable terminated with a locking 4-pin connector for use with Audio-Technica UniPak® body-pack transmitters. Models are also available in a variety of terminations for use with many other manufacturers' wireless systems. No power module or belt clip is included (or required) with the wireless models. The wireless models' dimensions, polar pattern and included accessories are otherwise identical to those of the BP896.

The BP896cW is also available unterminated as the BP896c.

CableTerminations	
BP896cW, BP896cW-TH	Terminated with locking 4-pin connector for use with
	Audio-Technica® UniPak
	body-pack transmitters BP896c
BP896cL4, BP896cL4-TH	Terminated for Sennheiser®
	wireless systems using Lemo
	connector
BP896cLM3, BP896cLM3-TH	Terminated for Sennheiser®
	wireless systems using locking
	3.5 mm connector
BP896cT4, BP896cT4-TH	Terminated for Shure® wireless
	systems using TA4F-type
	connector
BP896cT5, BP896cT5-TH	Terminated for Lectrosonics®
	wireless systems using
	TA5F-type connector
BP896c, BP896c-TH	Unterminated

Model numbers ending in "TH" are beige.
Audio-Technica" is a registered trademark of Audio-Technica. Other product and company names
mentioned herein may be trademarks and/or service marks of their respective owners.

# **Operation and Maintenance**

The BP896 requires 11V to 52V phantom power for operation.

Output is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot"—positive acoustic pressure produces positive voltage at Pin 2.

An integral 80 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the UniSteep® filter, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the "bent" line.

For use as a lavalier, attach the microphone about six inches below the chin. Anticipate movements that may cause the microphone to rub against or be covered by clothing, and position the microphone to avoid it.

The included single and double mic holders are interchangeable with the included bases. To change the holders, simply remove original holder and snap in the desired one. When using the microphone in extremely close situations, slip the included open-pore foam windscreen over the mic to reduce wind noise or popping. Use the included element cover to protect the microphone element from contaminants.

The four small sleeves on the cable are used for securely mounting the microphone in the included holders. To attach the microphone in a holder, slide the sleeve(s) to the required position on the cable, and snap the holder onto the sleeve(s). Note: If a sleeve becomes difficult to slide,

# BP896 & BP896-TH

apply a drop of rubbing alcohol to the cable/sleeve area.

CAUTION! To avoid possible injury, use caution when affixing the microphone viper clip to clothing. The pins are sharp and may puncture skin. For best results, ensure that pin ends rest on outside of clothing.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

### **Architect's and Engineer's Specifications**

The microphone shall be a fixed charge condenser. It shall have an omnidirectional polar pattern and a frequency response of 20 Hz to 20,000 Hz. The microphone shall operate from an external 11V to 52V DC phantom power source. It shall be capable of handling sound input levels up to 135 dB with a dynamic range of 104 dB. Nominal opencircuit output voltage shall be 3.5 mV at 1V, 1 Pascal. Output shall be low impedance balanced (250 ohms). The microphone shall be RoHS compliant.

The microphone shall have a 1.4 m (55") permanently attached miniature cable terminating in a locking 4-pin output connector. The output connector shall connect to a jack on the included power module. The output connector shall also connect to any Audio-Technica UniPak® bodypack wireless transmitter. The power module shall contain a recessed switch to permit choice of flat response or 80 Hz low-frequency roll-off. The output of the power module shall be a 3-pin XLRM-type connector.

The microphone shall be 10.8 mm (0.43") long and have a diameter of 2.6 mm (0.10"). Weight shall be 0.14 grams (0.005 oz). The microphone shall include a power module, two windscreens, six element covers (two each in black, white and beige), a viper clip base, a clothing clip base, three single mic holders, two double mic holders, a belt clip and a protective carrying case. Finish shall be low-reflectance black [beige].

Wireless models of the microphone shall also be available, terminated for use with Audio-Technica UniPak® body-pack transmitters and a variety of other manufacturers' wireless systems. The wireless models' dimensions, polar pattern, finish, and included accessories (excluding power module and belt clip) shall be identical to those of the wired model. The microphone shall also be available unterminated.

The Audio-Technica BP896 [BP896-TH] is specified.

The Audio-Technica [BP896cW]; [BP896cW-TH]; [BP896cL4]; [BP896cL4-TH]; [BP896cLM3]; [BP896cLM3-TH]; [BP896cT4]; [BP896cT4-TH]; [BP896cT5]; [BP896cT5-TH] (wireless version) is specified.

The Audio-Technica [BP896c]; [BP896c-TH] (unterminated) is specified.



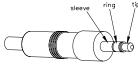




cT4, cT4-TH



	Function	Wire Color
Pin 1	Ground/Shield	Green
Pin 2	Bias + In	Red
Pin 3	Mic Audio	Copper Color
Pin 4	Source Load	Jumper to Pin 1
Pin 5	Line In	Open



cLM3, cLM3-TH						
	Function	Wire Color				
Sleeve	Ground/Shield	Green				
Ring	Mic Audio	Copper Color				
Tip	Bias + In	Red				



	Function	Wire Color		
Pin 1	N/C	Open		
Pin 2	N/C	Open		
Pin 3	Bias + In, Mic Audio	Red		
Shell/Case	Ground/Shield	Green		

# **Specifications**

Polar pattern Frequency response Low frequency roll-off Open circuit sensitivity Impedance Maximum input sound level Dynamic range (typical) Signal-to-noise ratio1 Phantom power requirements **Current Consumption** 

Voltage Range Switch Weight

Dimensions

BP896-TH

Output connector (power module) Cable

> Audio-Technica case style Accessories furnished

In the interest of standards development, A.T.U.S offers full details on its test methods to other industry

1 Pascal = 10 dynes/cm2 = 10 microbars = 94 dB SPL ¹ Typical, A-weighted, using Audio Precision System One. Specifications are subject to change without notice.

Element

Fixed-charge back plate, permanently polarized condenser Omnidirectional 20-20,000 Hz

80 Hz, 18 dB/octave (wired only) -49 dB (3.5 mV) re 1V at 1 Pa 250 ohms (wired only)

135 dB SPL, 1 kHz at 3% T.H.D. 104 dB, 1 kHz at Max SPL (wired only) 63 dB, 1 kHz at 1 Pa

11-52V DC, 2 mA typical (wired only) 0.1 mA typical at 5V (wireless only)

2.5-11V (wireless only) Flat, roll-off (wired only)

Microphone (less cable): 0.14 g (0.005 oz) Power module (wired only): 85 g (3.0 oz)

Microphone: 10.8 mm (0.43") long, 2.6 mm (0.10") diameter Power module (wired only): 97.6 mm

(3.84") long, 18.9 mm (0.74") diameter Integral 3-pin XLRM-type

1.4 m (55") long (permanently attached

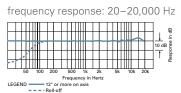
to microphone), 1.6 mm (0.06") diameter, 2-conductor shielded cable with locking 4-pin connector (wired only)

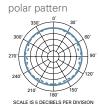
M39

AT8539 power module (wired only); two AT8157 windscreens; six element covers (2 white, 2 beige, 2 black); viper clip base; clothing clip base; 3 black single mic holders; 2 black double mic holders; belt clip (wired only); carrying case AT8539 power module (wired only); two AT8157-TH windscreens; six element covers (2 white, 2 beige, 2 black); viper clip base; clothing clip base; 3 beige single mic

holders; 2 beige double mic holders; belt

clip (wired only); carrying case







# audio-techi

Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224 Audio-Technica Limited, Old Lane, Leeds LS11 8AG England ©2009 Audio-Technica U.S., Inc. audio-technica.com