

# **SHURE**<sup>®</sup>

LEGENDARY  
PERFORMANCE<sup>™</sup>

WIRED MICROPHONE

# PGA 98H USER GUIDE



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# Clip-on Instrument Microphone

## PG Alta Microphones

Congratulations on the purchase of a new Shure PG Alta series microphone. The PG Alta series delivers professional quality audio at an affordable price, with solutions for capturing nearly any source, including voice, acoustic instruments, drums, and amplified electric instruments. Suitable for live and studio applications, PG Alta microphones are built to last, and meet the same rigorous quality testing standards that make all Shure products trustworthy and reliable.

### General Rules for Use

- Do not cover any part of the microphone grille with your hand, as this will adversely affect microphone performance.
- Aim the microphone toward the desired sound source (such as the talker, singer, or instrument) and away from unwanted sources.
- Place the microphone as close as practical to the desired sound source.
- Work close to the microphone for extra bass response.
- Use only one microphone to pick up a single sound source.
- For better gain before feedback, use fewer microphones.
- Keep the distance between microphones at least three times the distance from each microphone to its source ("three to one rule").
- Place microphones as far as possible from reflective surfaces.
- Add a windscreen when using the microphone outdoors.
- Avoid excessive handling to minimize pickup of mechanical noise and vibration.

### Model Variations

PGA98H-XLR: Standard 3-pin XLR output with integrated belt-clip preamplifier (requires phantom power)

PGA98H-TQG: 4-pin TQG output for use with wireless transmitters

## Phantom Power

All condenser microphones require phantom power to operate. This microphone performs best with a 48 V DC supply (IEC-61938), but it can operate with lower voltages.

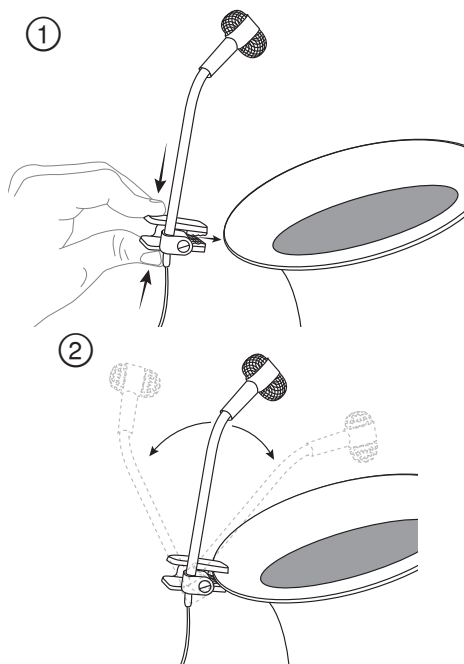
Phantom power is provided by the mixer or audio interface that the microphone is connected to, and requires the use of a balanced microphone cable: XLR-to-XLR or XLR-to-TRS. In most cases, there is a switch or button to activate the phantom power. See the user guide for the mixer or interface for additional information.

NOTE: This microphone is compatible with non-Shure bodypacks that have a TQG connector and supply 5V on pin 2.

## Mounting the Microphone

Use the integrated clamp to quickly and securely attach the microphone to horns or other instruments.

1. Squeeze the clamp to open it, and attach to an instrument or other object.
2. Aim the microphone by rotating the swivel base and bending the gooseneck.



## Aiming the Microphone

Position the microphone with the arrow pointed at the sound source.



Front

## Applications And Placement

The following table lists the most common applications and placement techniques. Keep in mind that microphone technique is largely a matter of personal taste; there is no one “correct” microphone position.

| Application       | Suggested Microphone Placement                                              | Tone Quality                            |
|-------------------|-----------------------------------------------------------------------------|-----------------------------------------|
| Reed Instruments  | Place microphone a few inches from and aiming into bell.                    | Bright, minimizes feedback and leakage. |
| Brass & Woodwinds | Brass: 30 to 90 cm (1 to 3 ft.) away, on-axis with bell of instrument.      | Bright, clear sound.                    |
|                   | Woodwinds: 2.5 to 15 cm (1 to 6 in.) away, on-axis with bell of instrument. | Bright, clear sound.                    |
|                   | Bell of instrument 90° off-axis from front of mic.                          | Softer, mellow sound.                   |

## Accessories

|                                                   |        |
|---------------------------------------------------|--------|
| Foam windscreen for PGA98H and PGA98D microphones | AP98WS |
|---------------------------------------------------|--------|

## Specifications

### Type

Electret Condenser

### Polar Pattern

Cardioid

### Frequency Response

60 to 20,000 Hz

### Output Impedance

at 1 kHz

|                   |       |
|-------------------|-------|
| <b>PGA98H-XLR</b> | 850 Ω |
| <b>PGA98H-TQG</b> | 600 Ω |

### Sensitivity

at 1 kHz, open circuit voltage

-52 dBV/Pa[1] (2.51 mV)

### Maximum SPL

1 kHz at 1% THD, 1 kΩ load, typical

130 dB SPL

### Self Noise

A-weighted, typical

27 dB SPL-A

### Polarity

|                   |                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------|
| <b>PGA98H-XLR</b> | Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3 |
| <b>PGA98H-TQG</b> | Positive pressure on diaphragm produces positive voltage on pin 3 with respect to pin 1 |

### Connector

|                   |                                          |
|-------------------|------------------------------------------|
| <b>PGA98H-XLR</b> | Three-pin professional audio (XLR), male |
| <b>PGA98H-TQG</b> | TA4F                                     |

### Weight

|                   |                 |
|-------------------|-----------------|
| <b>PGA98H-XLR</b> | 245 g (0.5 lbs) |
| <b>PGA98H-TQG</b> | 75 g (0.2 lbs)  |

### Housing

Cast Zinc

### Power Requirements

11 to 52 V DC phantom power (2 mA)

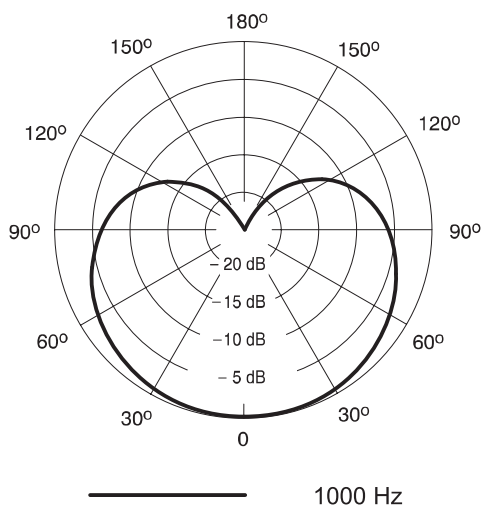
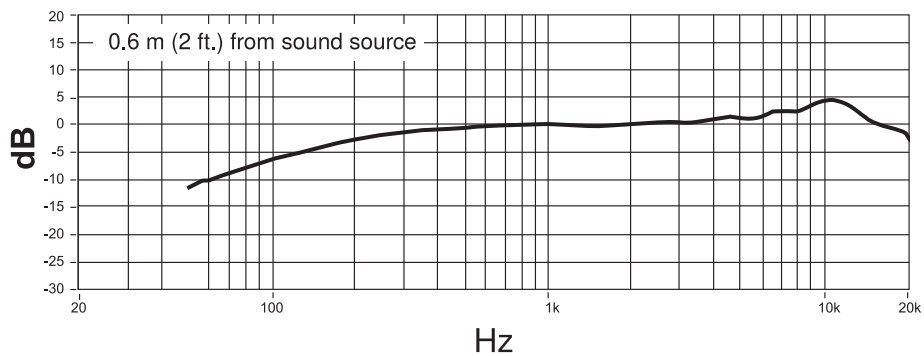
[1] 1 Pa=94 dB SPL

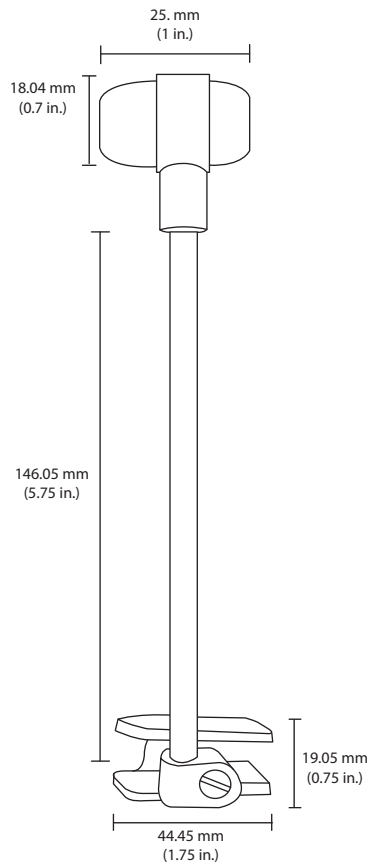
## Certifications

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)

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