# **BOGEN MICROPHONES**

Models HDU250, HDU150, HDO100, MBS1000A, DDU250, GCU250, GDU150, MGN19, SCU250, WCU250

#### Introduction

Bogen's line of microphones come in a variety of types and styles (handheld, desktop, gooseneck, boundary, and overhead hanging) to meet any and all application needs ranging from paging systems to instrument and vocal reproduction. Each is ruggedly constructed to withstand the demands of sound installations.

Each microphone provides clear, natural, intelligible sound reproduction with accurate response and dependable performance. Bogen's microphone models are crafted with professional-grade features, including models with rubberized grips; quiet on/off glide switches; dent-proof screens; contemporary designs; and a variety of accessories including stands, mounting clips, windscreens, and cables.

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# **HDU250 - Professional Stage**

#### **Description**

The HDU250 is a dynamic microphone ideal for acoustically-demanding environments. It features a heavy zinc die cast case with a rigid, low noise cablemount system and a lockable silent reed switch. It has an extra low handling noise, floating, shock-mounted Neodymium capsule.



#### **Features**

- Cardioid pickup pattern
- · High sensitivity Neodymium capsule
- High output design with excellent gain before feedback characteristics
- High sound pressure capability without distortion and low sensitivity to breath/pop noise
- · Efficient shock-mount system reduces handling and cable noise
- · Rugged, reliable construction
- Integral multi-layer breath/wind filter
- Low-impedance operation
- · Lockable, silent on/off reed switch
- · Includes mic clip

#### Frequency Response Graph



### **Specifications**

MIC Type: Handheld

Element: Moving coil dynamic

Polar Pattern: Cardioid Impedance: 250-ohm

Frequency Response: 50 Hz to 18 kHz
Sensitivity\*: -72 dB +/- 3dB
S/N Ratio: >65 dB

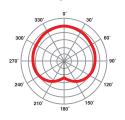
Connector: XLR Male

Switch: With sliding-type on/off switch

(lockable, silent reed switch)

Dimensions: 7" D x 2" Dia.
Product Weight: 13 oz.
Material: Zinc die cast

Finish: Rubberized black finish





<sup>\*</sup> (0dB=1V/MBAR 1,000 Hz indicated by open circuit)

# **HDU150 - Handheld Stage**

#### **Description**

The HDU150 is an attractive, dynamic, all-purpose microphone ideally suited for a wide variety of vocal and sound reinforcement applications.



#### **Features**

- · Cardioid pickup pattern
- · Crisp, clear sound
- Wide dynamic range with high-end sparkle and minimum feedback
- · Rigid, low noise cable-mount system
- · Low sensitivity to breath and popping sounds
- · Durable ball-shaped design
- Rubber shock-mount system for attenuation of handling and cable noise
- · Lockable, silent on/off reed switch
- · Includes mic clip

### **Specifications**

MIC Type: Handheld

Element: Moving coil dynamic

Polar Pattern: Cardioid Impedance: 500-ohm

Frequency Response: 70 Hz to 15 kHz
Sensitivity\*: -70 dB +/- 3dB
S/N Ratio: >65 dB

Connector: XLR Male

Switch: With sliding-type on/off switch

(lockable, silent reed switch)

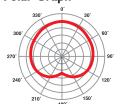
Dimensions:  $6^{-1}/_2$ " D x  $1^{-1}/_2$ " Dia.

Product Weight: 13 oz.

Material: Zinc die cast

Finish: Rubberized black finish

#### Polar Graph



### Frequency Response Graph



## **HDO100 - Public Address**

#### **Description**

The HDO100 is an attractive, dynamic microphone perfectly-suited for public address applications and instrument sound reproduction.



#### **Features**

- Omni-directional pickup pattern
- Uniform pickup of sound from all directions with no deterioration in frequency response
- · Clean, clear reproduction with minimal ambient sound
- · Low sensitivity to handling noise and stage vibrations
- Rugged, reliable construction
- · Internal rubber shock isolation system
- · Lockable, silent on/off reed switch
- · Includes mic clip

#### **Specifications**

Dimensions:

MIC Type: Handheld

Element: Moving coil dynamic Polar Pattern: Omni-directional

Impedance: 500-ohm

Frequency Response: 70 Hz to 15 kHz
Sensitivity\*: -72 dB +/- 3dB
S/N Ratio: >65 dB
Connector: XLR Male

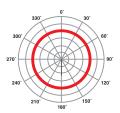
Switch: With silent on/off switch (lockable, silent reed switch)

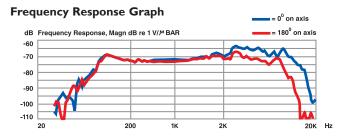
6-1/2" D x 1-1/2" Dia.

Product Weight: 13 oz.

Material: Zinc die cast

Finish: Rubberized black finish





<sup>\* (0</sup>dB=1V/MBAR 1,000 Hz indicated by open circuit)

 $<sup>^{*}</sup>$  (0dB=1V/MBAR 1,000 Hz indicated by open circuit)

# **MBS1000A - Desktop Paging**

#### Description

The MBS1000A is a dynamic, dual-impedance, desktop microphone designed for all industrial and commercial public address and paging applications.

#### **Features**

- Uni-directional pickup pattern
- Push-to-talk or lift-to-talk operation
- Locking mechanism with push-to-talk bar for long announcements
- · Rubberized black finish with die-cast base
- · Contact closure leads

#### **Specifications**

MIC Type: Desktop
Element: Dynamic
Polar Pattern: Cardioid

Impedance: Lo-Z, 500 ohms; Hi-Z, 50k ohms

(switch-selectable) 45 Hz to 15 kHz

Frequency Response: 45 Hz to 15 kHz Sensitivity\*: 45 Hz to 15 kHz Hi-Z: -52 dB +/- 3 dB

Lo-Z: -72 dB +/- 3 dB

Cable: 7' of 4-conductor, 2-shielded
Switch: Locking push-to-talk, lift-to-talk,

impedance selector

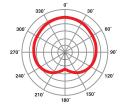
Dimensions:  $4-\frac{3}{8}$  W x  $9-\frac{3}{8}$  H x  $5-\frac{7}{8}$  D

Product Weight: 1-1/4 lb.

Material: ABS plastic

Finish: Rubberized black finish

#### Polar Graph



#### Frequency Response Graph



# **DDU250 - Dynamic Desktop**

### Description

The DDU250 is a high-quality, dynamic, gooseneck desktop microphone ideal for any podium or PA system. The gooseneck permits the user to adjust the microphone's angle and height to suit the user's needs.

#### **Features**

- · Cardioid pickup pattern
- 16" long, fully flexible gooseneck stalk that is shock-mounted to a heavy zinc die cast base
- Push-to-lock and push-to-talk switches
- 10-foot cable with external contact closure outputs for the talk switches
- · Excellent speech intelligibility with low ambient noise
- · Effective feedback control
- Low sensitivity to breath and popping sound
- · Slim, compact design to minimize distraction to the user

### **Specifications**

MIC Type: Desktop

Element: Moving coil dynamic

Polar Pattern: Cardioid Impedance: 500-ohm

Frequency Response: 100 Hz to 12 kHz Sensitivity\*: -76 dB +/- 3dB

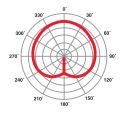
S/N Ratio: >65 dB

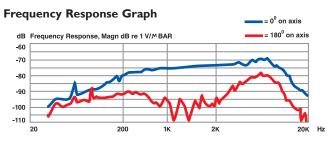
Cable: 10 ft., 4-conductor, 2-shielded Switches: Push-to-lock and push-to-talk Dimensions: 4-1/4" W x 18-1/4" H x 6-1/4" D

Product Weight: 3-½ lb.

Material: Zinc die cast
Finish: Matte black

\* (0dB=1V/MBAR 1,000 Hz indicated by open circuit)





<sup>\* (0</sup>dB=1V/MBAR 1,000 Hz indicated by open circuit)

## **GCU250 - Condenser Gooseneck**

#### Description

The GCU250 is a high performance, partially-rigid, adjustable gooseneck condenser microphone capable of meeting the stringent demand of today's conference and PA systems. It is an intelligent choice for sound reinforcement applications. It has an integral XLR male connector mounting base and requires a 9V - 52V DC phantom power source. Slim and compact, the GCU250 is designed to minimize intrusion between the user and the audience.



#### **Features**

- 15-1/4" Adjustable Neck
- Phantom power-operated
- Cardioid pickup pattern
- Clean, accurate vocal reproduction with low ambient noise
- Snap-on windscreen
- Wide frequency response with rich treble and bass
- Thin, unobtrusive construction for close-up use
- Breath/wind filter included
- Durable all-metal case with non-glare black finish

#### **Specifications**

MIC Type: Gooseneck

Element: Back electret condenser

Polar Pattern: Cardioid Impedance: 250-ohm

Frequency Response: 50 Hz to 18 kHz -65 dB +/- 3dB Sensitivity\*: Max SPL @ 1% THD: >130 dB S/N Ratio: >65 dB

Phantom Voltage Req: 9V - 52V DC Connector: XLR Male

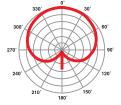
18-1/2" L (5-1/2" adjustable lower stalk, Dimensions:

with 9-1/2" rigid upper section)

Product Weight: 4 oz. Material: Copper

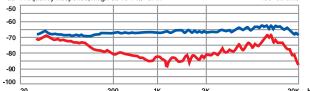
Non-glare black finish Finish:

### Polar Graph



Frequency Response Graph

### Frequency Response, Magn dB re 1 V/M BAR 180<sup>0</sup> on axis



## **GDU150 - Dynamic Gooseneck**

#### **Description**

The GDU150 is a dynamic, gooseneck microphone that features a durable allmetal case with a non-glare black finish. It has a 10" long, fully flexible neck with an integral XLR mounting base.

### **Features**

- Cardioid pickup pattern
- Outstanding speech intelligibility, feedback rejection, and user sound isolation
- High sound pressure capability and low sensitivity to breath/pop noise
- Superior shock-mount system to reject handling and cable noise
- Rugged, reliable construction
- Integral multi-layer breath/wind filter
- Durable all-metal case with non-glare black finish
- Silent push-on/push-off talk switch on base

#### **Specifications**

MIC Type: Gooseneck

Element: Moving coil dynamic

Polar Pattern: Cardioid 500-ohm Impedance:

100 Hz to 12 kHz Frequency: Sensitivity\*: -75 dB +/- 3dB S/N Ratio: >65 dB

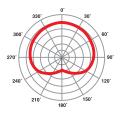
Connector: XLR Male

Switch: Push-on/push-off talk switch on base

Dimensions: 16-3/4" L Product Weight: 11 oz. Material: Zinc

Finish: Non-glare black finish

#### Polar Graph



### Frequency Response Graph



= 0<sup>0</sup> on axis

<sup>\* (0</sup>dB=1V/MBAR 1,000 Hz indicated by open circuit)

<sup>\* (0</sup>dB=1V/MBAR 1,000 Hz indicated by open circuit)

# **MGN19 - Dynamic Gooseneck**

### **Description**

The MGN19 is a push-button activated, dynamic microphone that is ideal for paging and commercial applications.

#### **Features**

- Omni-directional pickup pattern
- Push-to-talk switch on MIC housing
- Rugged, reliable design for quality, long-term use under the most strenuous handling conditions
- Chrome-plated screen and 19" L gooseneck with black plastic housing
- · Contact closure leads

#### **Specifications**

MIC Type: Gooseneck
Element: Dynamic
Polar Pattern: Omni-directional

Impedance: 400-ohm

Frequency Response: 50 Hz to 12 kHz with 2 kHz boost

Sensitivity\*: -76 dB +/- 3dB

Cable: 7' of 4-conductor, 2-shielded Switch: Push-to-talk on housing

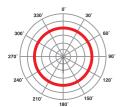
Dimensions:  $23-\frac{1}{2}$ " L Product Weight:  $1-\frac{1}{4}$  lb.

Material: Plastic (housing)

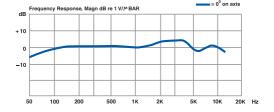
Finish: Black plastic cap and housing; chrome

gooseneck and mounting flange

### Polar Graph



#### Frequency Response Graph



<sup>\*</sup> (0dB=1V/MBAR 1,000 Hz indicated by open circuit)

## SCU250 - Boundary

#### Description

The SCU250 is an unobtrusive, surface-mount, boundary, condenser microphone ideal for meeting rooms, conferences, and stage productions where minimum visibility is ideal. It requires an external 9V - 52V DC phantom power supply.



#### **Features**

- Cardioid pickup pattern
- Full, rich reproduction of voice and music
- Well-suited in capturing the sound source and immediate surroundings
- Low sensitivity to stage vibration and thumping noise
- Mounting keyways for hanging or for secure attachment to the mounting surface
- Excellent user sound isolation with excellent feedback rejection
- Heavy-duty metal case
- Low-impedance balanced output

#### **Specifications**

MIC Type: Surface-mount

Element: Back electret condenser

Cardioid Polar Pattern: 250-ohm Impedance:

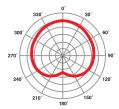
Frequency Response: 20 Hz to 18 kHz Sensitivity\*: -58 dB +/- 3dB

S/N Ratio: >65 dB Phantom Voltage Req: 9V - 52V DC 26 ft., quad cable Cable: Connector: XLR Male

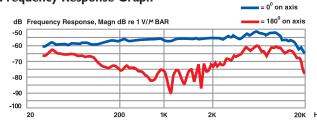
 $2-\frac{3}{4}$ " W x  $\frac{3}{4}$ " H x  $3-\frac{1}{4}$ " D Dimensions:

Product Weight: 11 oz. Material: Zinc die cast Finish: Matte black finish

### Polar Graph



#### Frequency Response Graph



## WCU250 - Overhead Hanging

#### Description

The WCU250 is an electret condenser, professional microphone perfectly-suited for picking up audio from large groups. Because it can hang from the ceiling and is compact in size, the WCU250 is very useful in minimizing visual distraction for the performers and the audience alike, and limits intrusion into the working space.



The WCU250 cable is terminated by a mini-XLR (female). A mini-XLR to standard XLR adapter (included) houses the pre-amplifier. It requires an external 9V - 52V DC phantom power supply.

#### **Features**

- Cardioid pickup pattern
- Utilizes a superior-quality, state-of-the-art transducer element and circuitry
- Transformerless, direct-coupled design to ensure clear, transparent reproduction of even the most delicate transients at the highest output levels
- Clear, crisp sound with outstanding ambient noise isolation
- Wide frequency response with excellent off-axis rejection
- Low profile, compact, hanging-type design
- Integrated metal hanger

#### **Specifications**

MIC Type: Overhead hanging Back electret condenser Element:

Polar Pattern: Cardioid 250-ohm Impedance:

50 Hz to 18 kHz -65 dB +/- 3dB Frequency Response: Sensitivitý\*:

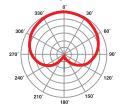
Max SPL @ 1% THD: >130 dB S/N Ratio: >65 dB Phantom Voltage Req: 9V - 52V DC Cable: 20 ft. quad cable

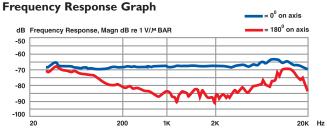
Connector: Mini-XLR Female with Mini-XLR to standard XLR (Male) adapter 1-1/4" D x  $^{1}\!\!/_{2}$ " Dia.

Dimensions:

Product Weight: 5 oz. Material: Copper

Finish: Matte black finish \* (0dB=1V/mBAR 1,000 Hz indicated by open circuit)





<sup>\* (0</sup>dB=1V/MBAR 1,000 Hz indicated by open circuit)

### Accessories

### **CABLES**

## **MAC - Microphone Cable Assembly**

- · For handheld models
- · Female XLR to stripped and tinned wires
- 25' cable
- 2-conductor plus shield
- 1 lb.

### **XLR25 - Microphone Cable**

- · For handheld models
- Male XLR to female XLR
- 25' cable
- · 2-conductor plus shield
- 12 oz.

## **CLIPS**

### MC27 - Handheld Clip

- · For handheld models
- · Black, flexible, impact-resistant plastic

### **WINDSCREENS**

### WSGCU250 - Windscreen for GCU250

• Foam windscreen for use with GCU250 microphone

### **MOUNTS**

### **MSM - Shock-Isolated Microphone Base**

- For GCU250 and GDU150
- · Provides superior mechanical noise and vibration isolation
- · Lightweight ABS material housing
- XLR (female) connector
- Thick shock-absorbing rubber cushion
- Ideal fixture for boardrooms, conference rooms, pulpits, podiums, and newsrooms
- 4-3/4" W x 1-3/4" H x 4" D, 6 ounces

### **STANDS**

#### **DS3 - Desk Stand**

- 3" chrome-finish tube, 4" high with base
- 6" diameter cast iron base, 3 lb.

#### SF4 Floor Stand

- 34" to 62" adjustable height
- Round 10" diameter die cast base, 9 lb.
- Grip-action clutch and chrome-plated tubing

### SB6 - Floor Boom Stand

- Telescopic floor stand
- Sliding 30" boom arm
- 34" to 62" adjustable height, 6 lb.
- · Chrome-plated tubing
- Tripod base



## **Architect and Engineer Specifications**

**HDU250** - The microphone shall be a Bogen Model HDU250. It shall be a cardioid, dynamic handheld microphone with a frequency response of 50 Hz to 18 kHz and a 250-ohm impedance. The sensitivity shall be -72 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a sliding-type on/off switch and a rubberized black finish. The HDU250 shall have an XLR Male connector. Dimensions shall be 7" D  $\times$  2" Dia. Weight shall be 13 oz.

**HDU150** - The microphone shall be a Bogen Model HDU150. It shall be a cardioid, dynamic handheld microphone with a frequency response of 70 Hz to 15 kHz and a 500-ohm impedance. The sensitivity shall be -70 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a sliding-type on/off switch and a rubberized black finish. The HDU150 shall have an XLR Male connector. Dimensions shall be  $6^{-1}/2^{n}$  D x  $1^{-1}/2^{n}$  Dia. Weight shall be 13 oz.

**HDO100** - The microphone shall be a Bogen Model HDO100. It shall be an omni-directional, dynamic handheld microphone with a frequency response of 70 Hz to 15 kHz and a 500-ohm impedance. The sensitivity shall be -72 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a silent on/off lockable reed switch and a rubberized black finish. The HDO100 shall have an XLR Male connector. Dimensions shall be  $6-\frac{1}{2}$ " D x  $1-\frac{1}{2}$ " Dia. Weight shall be 13 oz.

MBS1000A - The microphone shall be a Bogen Model MBS1000A. It shall be a dynamic-type, cardioid, dual-impedance desktop microphone. The frequency response shall be uniform from 45 Hz to 15 kHz. Impedance shall be selected via a switch on the underside of the microphone base. Impedances shall be 500 ohms (matching 125 ohms to 1,000 ohms) or 50,000 ohms (matching 50k ohms or greater). Voltage output shall be -72 dB at Lo-Z, and -52 dB at Hi-Z. The microphone shall provide push-to-talk and lift-to-talk operation. The push-to-talk bar shall include a locking mechanism. Provision shall be included to defeat lift-to-talk operation. The microphone and relay switching shall be accomplished with long life DPDT professional leaf switches. The microphone circuit shall be wired normally open. The microphone shall be in an ABS plastic case with a rubberized black finish and a die-cast base. It shall be supplied with 7 feet of 4-conductor cable, 2 conductors individually shielded, and shall be permanently wired into the microphone. Dimensions shall be 4-3/8" W x 9-3/8" H  $\times$  5- $\frac{7}{8}$ " D. Weight shall be 1- $\frac{1}{4}$  lb.

DDU250 - The microphone shall be a Bogen Model DDU250. It shall be a cardioid, dynamic desktop microphone with a frequency response of 100 Hz to 12 kHz and a 500-ohm impedance. The sensitivity shall be -76 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a push-to-lock/push-to-talk switch and a matte black finish. It shall have a 10', 4-conductor, 2-shielded cable. Dimensions shall be  $4-\frac{1}{4}$ " W x  $18-\frac{1}{4}$ " H x  $6-\frac{1}{4}$ " D. Weight shall be  $3-\frac{1}{2}$  lb.

GCU250 - The microphone shall be a Bogen Model GCU250. It shall be a cardioid, back electret condenser gooseneck microphone with a frequency response of 50 Hz to 18 kHz and a 250-ohm impedance. The sensitivity shall be -65 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. Max SPL @ 1% THD shall be greater than 130 dB. It shall have a non-glare black finish. The GCU250 shall have an XLR male type connector. It requires an external 9V - 52V DC phantom power source. Dimensions shall be 18-½" L. Weight shall be 4 ounces.

GDU150 - The microphone shall be a Bogen Model GDU150. It shall be a cardioid, dynamic gooseneck microphone with a frequency response of 100 Hz to 12 kHz and a 500-ohm impedance. The sensitivity shall be -75 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a push-on/push-off talk switch mounted on its base and a non-glare black finish. The GDU150 shall have an XLR Male type connector. Dimensions shall be 16-3/4" L. Weight shall be 11 oz.

MGN19 - The microphone shall be a Bogen Model MGN19 dynamic-type, omni-directional microphone. Frequency response shall be uniform from 50 Hz to 12 kHz, with a presence boost at 2 kHz for natural, intelligible sound. Impedance shall be 400 ohms. A sealed push-to-talk microswitch shall be mounted on the microphone housing. The sensitivity shall be -76 dB (+/- 3dB). The microphone shall be furnished with a 19" chrome-plated flexible gooseneck and mounting flange and seven feet of rugged synthetic-jacketed 4-conductor, 2-shielded cable. The microphone shall have a black plastic cap and housing with chrome-plated screen and shall measure 4-3/8" long with a maximum diameter of 1-3/8". Removable set screws shall secure the front cap to the microphone and the microphone to the gooseneck. Dimensions shall be 23-1/2" L. Weight shall be 1-1/4 lb.

SCU250 - The microphone shall be a Bogen Model SCU250. It shall be a cardioid, back electret condenser boundary microphone with a frequency response of 20 Hz to 18 kHz and a 250-ohm impedance. The sensitivity shall be -58 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a matte black finish and will require an external 9V - 52V DC phantom power source. It shall have a male XLR connector. Dimensions shall be  $2^{-3}/4^{"}$  W x  $^{3}/4^{"}$  H x  $3^{-1}/4^{"}$  D. Weight shall be 11 oz.

WCU250 - The microphone shall be a Bogen Model WCU250 hanging microphone. It shall be a cardioid, back electret condenser microphone with a frequency response of 50 Hz to 18 kHz and a 250-ohm impedance. The sensitivity shall be -65 dB (+/- 3dB) and the signal-to-noise ratio greater than 65 dB. It shall have a matte black finish and will require an external 9V - 52V DC phantom power source with a connecting cable of 20'. It shall have a female mini-XLR connector with a mini-XLR to standard XLR (male) adapter. Dimensions shall be 1-1/4" D x 1/2" dia. Weight shall be 5 ounces.