

BOUNDARY MICROPHONE SYSTEM

Boundary Microphone & Interface Box

Two-product technical reference — the BR-DCU-BLM flush pop-out boundary microphone, and the BR-DCU-CUIB microphone interface box that brings boundary or gooseneck microphones into the BRONX networked dialogue system.

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01 · BOUNDARY MICROPHONE

Boundary Microphone
with Network
Integration

Flush pop-out condenser boundary microphone that hides when not in use — push the top until it clicks.

A low-profile all-metal boundary microphone for desks and conference surfaces. A reed switch turns it on when raised and off when retracted, a built-in preamp removes the need for an external supply, and it pairs with the BR-DCU-CUIB to join the BRONX networked dialogue system.



PATTERN	MAX SPL	PHANTOM	WEIGHT
Cardioid	142 dB	11–52 V DC	65 g

HEADLINE CAPABILITIES

- Flush pop-out — hides when not in use
- Cardioid all-metal boundary capsule
- 11–52 V phantom · built-in RF filter
- Reed switch auto ON/OFF per session
- Built-in preamp — no external PSU
- Ring LED status · shock-proof isolators

01.1 Features

MECHANICAL · ELECTRICAL

- Low profile — mounts on any desktop or surface.
- Reed switch closes (ON) when the mic is up and opens (OFF) when retracted, at the start and end of each session.
- Optional capacitive touch button to set the microphone on or off for pickup.
- Cardioid polar pattern.
- Built-in microphone preamp power-supply module — no external PSU required.
- Sturdy all-metal structure with two layers of steel-mesh cover protection.
- Works from DC 11 V to 52 V phantom power.
- Output via 3-pin XLR or 3.5 Phoenix (add BR-DCU-CUIB for network configuration).
- Built-in ring-shaped LED status indicator.
- Built-in RF filter.
- Shock-proof isolators reduce vibration noise from the mounting surface.

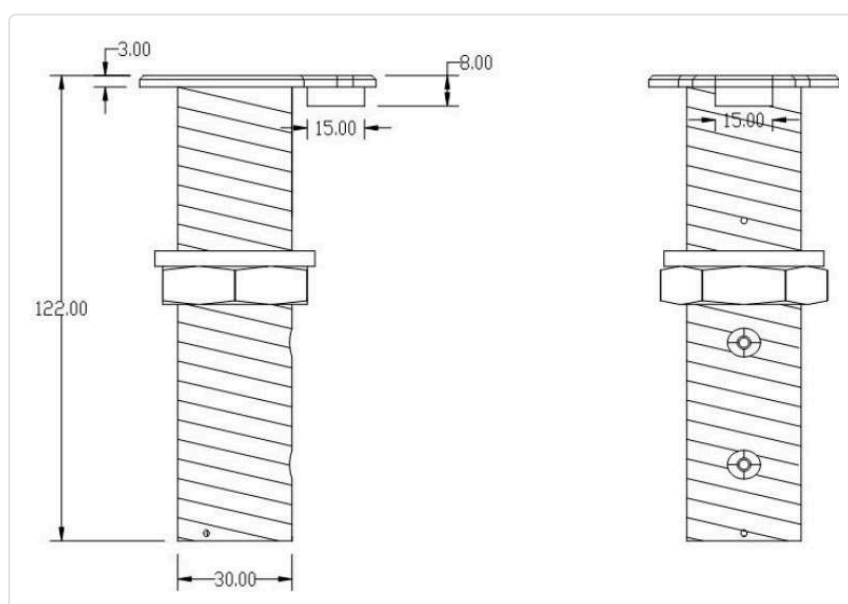
01.2 Technical Parameters

CAPSULE · ACOUSTIC · MECHANICAL

Mic capsule	Electrostatic capacitive
Directivity pattern	Cardioid
Frequency response	40 – 19,000 Hz
Turn-on sensitivity	-40 dB (10 mV) at 1 V, 1 Pa
Impedance	200 Ω
Maximum SPL	142 dB SPL, 1 kHz at 3% THD
Dynamic range	113 dB (typical), 1 kHz
S / N	65 dB, 1 kHz at 1 Pa
Phantom power	DC 11 – 52 V, 5.7 mA typical
Switch touch control	On / Mute
Weight	65 g
Overall	Length 84.8 mm · $\varnothing$ 38.0 mm · max width 48.0 mm
Output terminal	Built-in 3-pin XLR
Standard configuration	1 pair of shock-proof isolators

01.3 Dimensions

MOUNTING DETAIL



BR-DCU-BLM mounting and dimension detail (mm).

02 · INTERFACE BOX

Microphone Interface Box

Under-table interface box that brings boundary or gooseneck microphones into the BRONX networked dialogue system.

A compact metal box for customised installations. Two independent inputs accept condenser or dynamic microphones with or without phantom power, button and LED Phoenix headers drive custom control panels, and an RJ45 port joins the BRONX network — with headphone and speaker outputs on board.



MIC INPUTS

2 channels

NETWORK

RJ45 ×2

NOISE (S/N)

>80 dB

WEIGHT

0.5 kg

02.1 Features

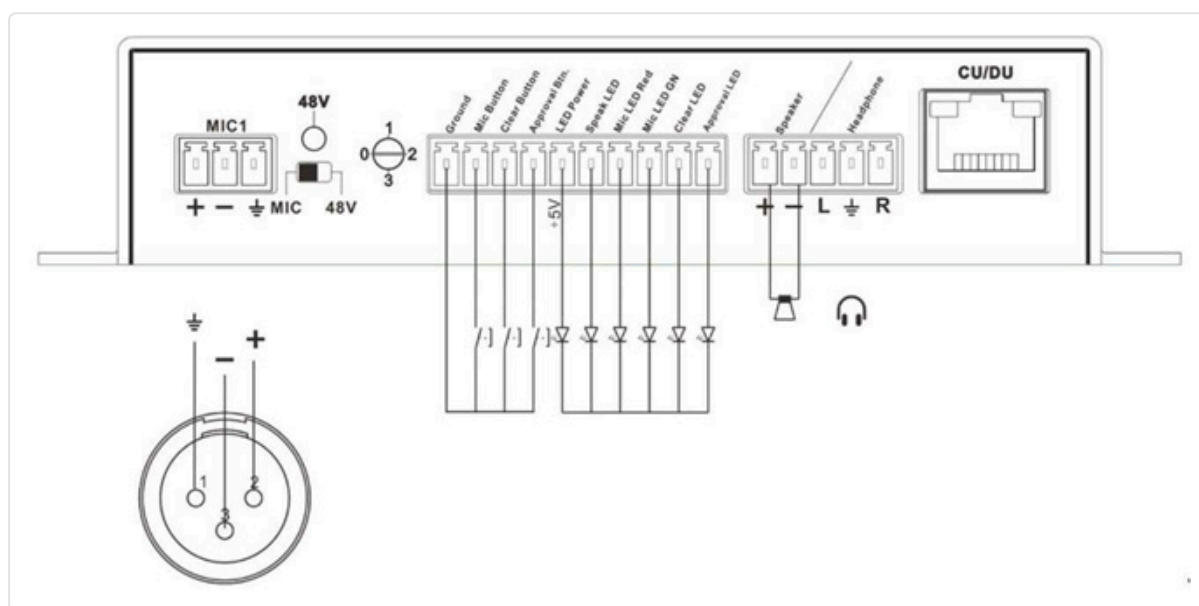
INSTALLATION · CONNECTIVITY

- Compact metal cover to mount under a table or chair armrest.
- Interface box for customised installation solutions.
- Two separate audio inputs, each with or without phantom power — capacitor or dynamic microphones.
- Microphone switch, priority and approval buttons with matching LED Phoenix interface to build custom button panels for gooseneck mics.
- Adjustable sensitivity; RJ45 port connects seamlessly into the BRONX networked system.
- Two Phoenix stereo jacks for headphones and two speaker outputs for Bronx Dialogue speaker panels or custom speakers.

02.2 Interfaces

REAR PANEL

- 2× RJ45 port (CU / DU network)
- 2× boundary-condenser-mic Phoenix connector
- 2× MIC / 48 V option switch
- 2× gain-adjust knob
- 2× group Phoenix connector (button & LED control)
- 2× 5-pin Phoenix (speaker & headphone)



BR-DCU-CUIB rear-panel connector layout.

02.3 Group Phoenix Connector

BUTTON & LED CONTROL

Ground	Common ground
Mic Button	Microphone ON / OFF
Clear Button	Chairman priority operation
Approval Button	Chairman priority operation
LED Power	+5 V, max 40 mA
Speak LED	Gooseneck light colour
Mic LED Red	Microphone is ON
Mic LED Green	Request-to-speak mode
Clear LED	Chairman muting / closing a delegate
Approval LED	Chairman approving request to speak

02.4 Technical Parameters

ELECTRICAL · PHYSICAL

Voltage supply	48 V DC
Static power consumption	1 W
Frequency response	20 Hz – 20 kHz
Noise ratio (S/N)	> 80 dB
Total harmonic distortion	< 0.05%
Channel crosstalk	> 80 dB
Dimensions	120 (L) × 100 (W) × 30 (H) mm, with two ears for screw fixing
Color	Black
Weight	0.5 kg

02.5 Speaker & Headphone Output

5-PIN PHOENIX

Connector	2× 5-pin Phoenix (speaker + headphone)
Headphone output impedance	16 Ω
Speaker output impedance	8 Ω
Frequency response	20 – 15,000 Hz

Disclaimer: due to continuous product development and upgradation, the specifications and image of the product may change without prior intimation.

BRONX

Engineered for Indian boardrooms, ministries, courtrooms and broadcast halls – the BRONX networked dialogue microphone range.

ABOUT BRONX SYSTEMS

An Indian Original Equipment Manufacturer. ISO certified · MSME · Make in India · NSIC. Bronx Systems supplies professional audio-visual, conference, control-room and signage solutions to government, defence, broadcast and enterprise customers across India.

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DOCUMENT

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REVISION

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