



A31 GOOSE MICROPHONE

Version:1.0

April, 2026

Data Sheet

RipaTech Pty Ltd

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PRODUCT SUMMARY

A professional-grade digital conference microphone system engineered for high-fidelity vocal capture, stable digital signal transmission, and comprehensive conference management. Features advanced DSP processing, robust anti-interference shielding, and seamless integration with HD camera tracking and AV control systems.



Figure 1 A31 Goose Microphone

FEATURE HIGHLIGHTS

Acoustic & Audio Processing

- **High-Fidelity Capsule:** Built-in 9.7mm gold-plated condenser microphone with cardioid polar pattern for enhanced vocal frequency response and pickup sensitivity.
- **Advanced DSP & AGC:** Integrated Automatic Gain Control with high-sensitivity design; effective pickup distance of 50–60 cm.
- **Hi-Res Audio Transmission:** 48 kHz audio sampling rate, 20 Hz–20 kHz frequency response, ensuring studio-grade clarity.
- **Stable Signal Architecture:** Utilizes advanced, stable EEPROM chip and digital conference technology for reliable signal transmission and processing.

Conference Management & Permissions

- **Multiple Conference Modes:** Supports Limited, FIFO, LIFO, Chairman-Approved (Speech Request), Voice-Activated, Timed, Queued, and Free Discussion modes.
- **Dynamic Permission Configuration:** Online assignment of 3 identity levels (Chairman, VIP, Delegate) with flexible reassignment during operation.
- **Active Speaker Control:** Adjustable from 1 to 20 simultaneous speakers; Chairman & VIP units are unlimited. Free Discussion mode enables all units to speak concurrently.
- **Chairman Authority:** Supports up to 150 Chairman units. Features meeting control, priority speech rights, delegate deactivation, and request approval/denial in Chairman-Only mode.
- **VIP Flexibility:** Any Chairman or Delegate unit can be elevated to VIP status with unrestricted speaking rights (up to 150 VIP units supported).



A31 Goose Microphone

- **Digital ID Addressing:** Customizable unique ID codes for precise unit identification and system routing.

Interference Protection & System Integration

- **EMI/RFI Shielding:** Robust anti-interference design effectively blocks mobile phone, radio, Bluetooth, Wi-Fi, and ambient RF signals.
- **HD Camera Integration:** Compatible with PTZ cameras for automatic speaker tracking, screen switching, freeze function, and multi-camera routing per unit.
- **★ Customizable Status Indicator:** CNC-machined aluminum alloy one-piece panel with a 5mm circular LED. Programmable colors display identity, unit number, and speaking status.

Mechanical Design & Connectivity

- **Premium Build Quality:** Gooseneck connector and threaded components crafted from pure copper for optimal acoustic coupling and sound reproduction accuracy.
- **Anti-Loosening Windscreen:** High-elasticity, breathable design with a built-in snap-fit bracket; resistant to detachment and deformation during frequent use.
- **Professional Cabling:** Includes 1.5m CAT5 cable with full aluminum foil and drain wire shielding to prevent electromagnetic interference.
- **User Controls:** 1× 3.5mm headphone jack for monitoring/recording, dedicated volume adjustment buttons, and 1× USB-C port for tool-free firmware upgrades & maintenance.

TECHNICAL SPECIFICATIONS

Parameter	Specification
Microphone Type	1 × 9.7mm High-Fidelity Gold-Plated Condenser Capsule
Polar Pattern	Cardioid (Electret)
Frequency Response	20 Hz – 20 kHz
Audio Sampling Rate	48 kHz
Sensitivity	-37 dB ± 2 dB
Output Impedance	< 200 Ω
Maximum SPL	125 dB (1% THD @ 1 kHz, 0 dB SPL = 2×10 ⁻⁵ Pa)
Signal-to-Noise Ratio	> 90 dB
Dynamic Range	> 96 dB
Equivalent Noise	18 dB (A-weighted)
Connection Interface	RJ45 with T-type Connector
Included Cable	1.5 m CAT5 (Full Aluminum Foil & Drain Wire Shielded)
Power Supply	DC 24 V (supplied by host/controller)
Gooseneck Length	390 mm (customizable lengths available)
Base Dimensions	140 × 105 × 55 mm (excluding gooseneck)
Finish / Color	Black-Gray (CNC Aluminum Alloy Panel)
System Capacity	Up to 150 units per bus (host-dependent)

ORDERING GUIDE

RipaTech product Model: RIPA A31 GOOSE MICROPHONE