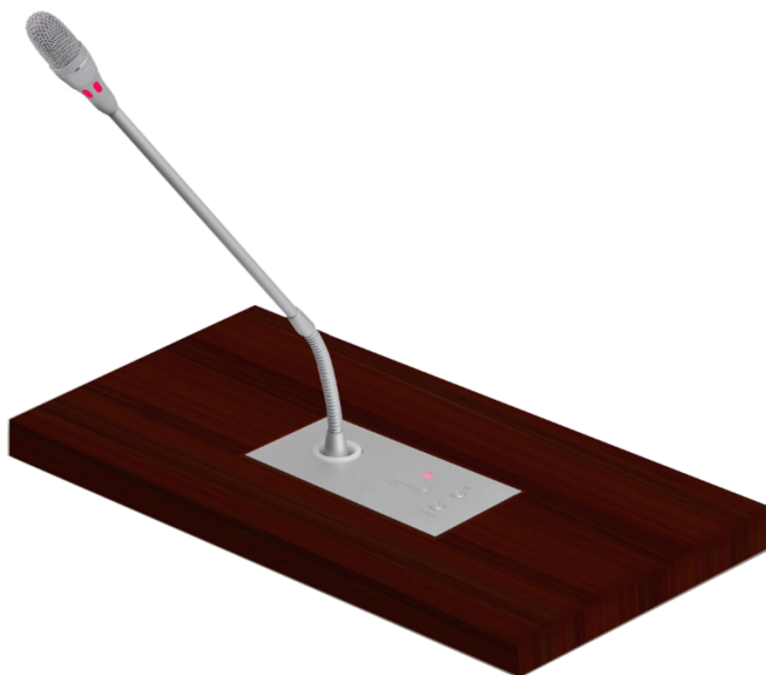**DataLux**®

DL-GNEL02 Electrically Retractable Motorized Gooseneck Microphone

Product Overview

The Datalux DL-GNEL02 is a top-end, motorized conference microphone system, designed for modern meeting rooms, council chambers, and high-level discussion environments. It combines high fidelity digital audio, automatic lifting & retraction, intelligent control modes, and strong anti-interference features. Built with premium materials and engineered for durability and precision, it delivers clear voice pickup, flexible control, and smooth integration.

Features

- **Advanced Digital Technology**: Utilizes IRIN chip with DSP/DDOV processing for stable digital signal transmission.
- **Motorized Lift System**: Multi-point balanced lifting with high-precision guide rails for smooth, uniform operation.
- **Auto Raise/Lower**: Microphone automatically lifts when powered on and retracts when powered off.
- **Protection Mechanism**: Intelligent force-sensing stops motor during abnormal resistance to prevent damage.
- **LED Display**: Dual 15×14 mm red LED tubes display ID address and group numbers.
- **Low Noise & Power Efficiency**: Silent 24V motor ensures <30 dB operation with low power consumption.
- **Flexible Connectivity**: Dual RJ45 ports and dual 8-Pin DIN interfaces; supports daisy-chain, T-type, and ring connections.
- **Clear & Natural Audio**: High-fidelity lossless transmission, 48 kHz sampling, 30 Hz–20 kHz frequency response.
- **Color Indications**: Red for speech, green for VIP, yellow for status.
- **Conference Modes**: Supports 8 modes including FIFO, LIFO, chairman control, timed speech, queue, and free discussion.
- **Expandable System**: Supports up to 240 units, with up to 150 assignable VIPs.
- **Chairman & VIP Privileges**: Priority speaking rights, ability to override other units, and approve/reject requests.
- **Smart Detection**: Auto detection of active units, hot-plugging, and real-time fault repair.
- **Camera Tracking**: Built-in integration for automatic video tracking and screen switching.
- **Strong Anti-Interference**: Shielded wiring eliminates noise from mobile, Wi-Fi, and RF signals.

Technical Parameter

Specification	Details
Build & Design	Aviation-grade aluminum-magnesium alloy panel, polished through 18 processes; embedded motorized lifting design
Lifting Mechanism	Motorized gooseneck microphone with automatic retraction; multi-point balanced lifting system with high-precision guide rails for smooth, uniform motion
Motor	24V silent motor; operating noise < 30 dB; low power consumption; high durability
Automatic Operation	Auto-raise on power-on, auto-lower on shutdown; automatic alignment correction during lowering
Protection System	Intelligent force-sensing with auto-stop under abnormal resistance; prevents mechanical or electrical damage
Microphone Type	Pre-polarized condenser microphone with cardioid polar pattern
Frequency Response	50 Hz – 20 kHz (microphone), 30 Hz – 20 kHz (system audio transmission)
Sound Pressure Level (SPL)	≥120 dB
Voice Pickup Range	≥80 cm with clear, natural pickup
Microphone Power	Operates on 12–48 V phantom power
Display	Dual 15×14 mm high-brightness red common-anode LED digital tubes for ID and group number
Status Indication	Red: active speech; Green: VIP unit; Yellow: number/status display
Audio Technology	High-fidelity, lossless digital audio transmission; 48 kHz sampling frequency
Microphone Build	Pure copper rod joints and studs to preserve sound quality and ensure stability
Feedback Control	Intelligent detection with auto-attenuation when adjacent units are active to prevent howling
Control & Interfaces	Supports manual lift buttons, RS-232, RS-485, remote, central, and group control
Connectivity	2× RJ45 ports, 2× 8-Pin DIN shielded ports; supports Daisy Chain, T-type, and ring topology; mixed RJ45 & 8-Pin supported
System Capacity	~30 units per channel; up to 240 units per host; up to 150 VIP units supported
Conference Modes	8 modes: quantity limit, FIFO, LIFO, chairman permission, voice-activated start, time-limited speech, queued speech, free discussion
Speaker Limit	Configurable: 1–20 simultaneous speakers (unlimited in free discussion mode)
Chairman Functions	Priority control for speech; ability to mute/unmute delegate units; approve/reject requests; control meeting order
Identity Permissions	Assignable roles: Chairman, VIP, Representative; online modification supported
Camera Integration	Auto speaker tracking; automatic screen switching; screen freeze; multi-camera tracking supported
Digital Addressing	Custom ID addressing with digital identification code; signal output compatible with third-party speech-to-text systems
Diagnostics & Reliability	Auto-detection of online units; hot-plugging supported; automatic fault repair & rapid fault positioning
Interference Protection	Full shielding (CAT5/6 or 8-core cable with aluminum foil & waterline shielding); advanced anti-interference against mobile, radio, Bluetooth, and Wi-Fi signals
Safety	Double insulation, anti-leakage protection, no induced current during operation
Power Supply	Built-in AC 100–240 V international universal power supply with voltage stabilization