

What is a Long Range Acoustic Hailing Device?

It is movable and can transmit highly intelligible and clear sound to a long distant. Bluetooth and external USB memory are supported. MP3 file playback and microphone broadcasting are also available.



FEATURES

- Superior Voice Intelligibility and Highly clear communication up to 1km
- High output of 142 or 144dB, 1km broadcasting distance(82dB)
- Bluetooth 3.0 support (connected to smartphone)
- External USB memory available
- MP3 file playback, microphone broadcast
- Handheld dynamic microphone
- Maximum output limit available
- Embedded Amplifier and Audio Controller
- All-weather use

PROPA-250P SPECIFICATIONS

Max. SPL	250P / 250PE	143dBC 141dBA	(Peak) @1m Front
	250PEX	145dBA	
Directivity	±15° (2kHz Sine, -3dB)		
Frequency Response	500Hz - 5KHz		
Range	Ground	500m(88dB), 1km(82dB)	
	Ocean	500m(85dB), 1km(79dB)	
Dimensions	280 × 337 × 250mm(W × D × H)		
Weight	7kg(250P, Except Accessories)		
Power Input	100~230VAC or 11~28VDC		
Power Consumption	Max. 300W		
Audio Controller	Copy from USB memory MP3 file Playback Character LCD(Backlight) – Sunshine Readable Handheld dynamic microphone		
ETC	Can limit Max. SPL for hearing protection by user. Embedded Amplifier & Audio Controller		
Internal Battery	12VDC, 20Ah, charging time : 5hrs 8hrs@JEITA Battery Test Method		



❖ Components

➤ Basic Components

- Speaker Body with Audio Controller, Amp and Battery: 1ea
- Mic : 1ea
- Power Module : 1ea
- AC Power Cord and DC Power Cable : each 1ea
- Hearing Protection Form : 20ea
- OpenSource Sound Optimization SW
- Carry Case : 1ea

➤ Additional Components(optional)

- Cradle for PROPA-250P
- Tripod for 250P
- Magnetic Base



Magnetic Base
(Using magnets on the bottom, Can be attached to a vehicle)



Cradle
(for tripod)



Speaker Body

Power Module

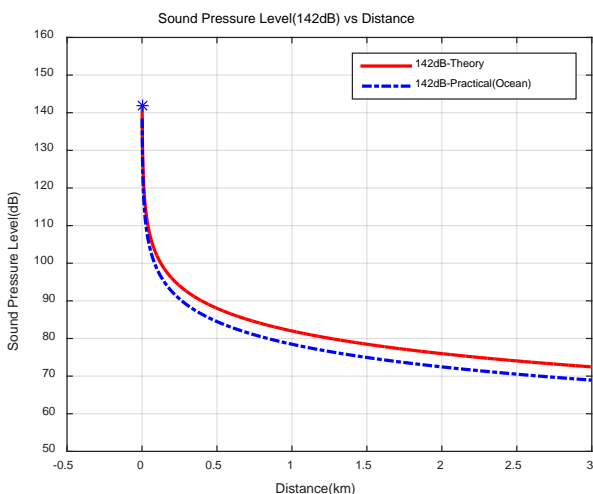
DC Power Cable

Mic

AC Power Cord

Tripod

❖ Sound Pressure Level vs Distance



- 30~50dB Quiet library, noise in the woods, bedroom
- 50~60dB General office noise
- 60~70dB Noise on large ship deck
- 70~90dB Small ship engine noise (above deck)
- 80~100dB Noisy construction site, road noise
- 120~130dB Jet noise (100m)
- 130dB Above, we started to feel pain
- 160dB Rocket firing noise

Theoretically, we can hear sound at 88dB at 500m, 82dB at 1km and 68dB at 5km.

Environment Certifications

- Random Vibration : MIL-STD 810F, Method 514.4
- Shipboard Vibration : MIL-STD-167-1A
- Shock : MIL-STD-810F
- High Temperature Operation : MIL-STD-810F, Method 501.4
- Low Temperature Operation : MIL-STD-810F, Method 502.4
- Operating Humidity : MIL-STD-810F, Method 507.4
- Salt Fog : MIL-STD-810F, Method 509.4
- Safety Standard : MIL-STD-1474D
- EMC Standard : FCC Part 15 Class A Radiated and Conducted Emissions
- Water and Dust Protection : IP66

Main Features of Acoustic Hailing Device

- Since it broadcasts with directivity and high power, it can transmit highly clear sounds to a long distant (1 km).
- With maximum output above 142dB, it can get over the noise of the surrounding areas and can provide highly intelligible and clear communication and warning signals to the inside of vehicles, ships or buildings, overcoming the limitation of the existing broadcasting system (P.A. System).
- It is possible to broadcast using sound sources and a microphone.



General Loudspeaker



Acoustic Hailing Device

Applications of Acoustic Hailing Devices



Control Room

Control Console

Optical communication(network)



Emergency Warning & Fire Rescue

Fire Evacuation Broadcast, Public Place Guide and Evacuation Broadcast, Valley Evacuation Broadcast due to heavy rain, and Coastal Accident Prevention & Evacuation Broadcast



Law Enforcement, Homeland & Border Security

Illegal Activity Warning, Beach Announcement, Access Control Broadcast, Crowd Control

Military, Maritime, Security & Protection

Military Training control, Anti-Piracy, Major Facility Intruder Warning, Preserving Wildlife & Protecting Assets



Traffic Accident Broadcasting, Traffic Control

Traffic Control, Prevention of Secondary Accident, Traffic Accidents and Foggy Broadcast, Emergency Evacuation Broadcast.

Installation in Ships, Vehicles and Drones

Mounting on Warships, Ships, Fire Trucks, Ambulances, Police Cars, Helicopters, Drones

