



AS-10

Professional Microphone for Acoustical Quality Assurance

AS-10

The AS-10 is a compact professional microphone which is used to hear and to evaluate airborne noise. It has a length of 30cm and is equipped with a goose neck with a length of 30 cm. To the output receptacle at the back a headphone can be connected. The power supply is realized with a 9V block battery, which is located on the backside of the device. The battery can be changed by unscrewing the rear tube. After unscrewing the battery can be accessed and changed.

After the device is switched on, the green operation LED is lit. The unit offers two amplification ranges with 30dB and 60dB.

The volume fine adjustment for the headphone is performed with the latching potentiometer (11 positions) on the user panel.

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The brightness of the LED decreases if the battery voltage drops below 8V. At 7V the LED is weak. At this time the battery should be changed immediately. Up to this supply value all specifications are kept operative. The only exception is the maximum output voltage.

PROPERTIES:

- Flexible goose neck microphone
- Headphone amplifier
- Operated with an integrated battery
- Single-handed operation

APPLICATIONS:

- Measurement of airborne noise
- Engine diagnostics
- Locating noise sources
- Detection of acoustical disturbance sources

SPECIFICATIONS

| General | |
|--|------------------------------|
| Acoustical operating principle | pressure-gradient transducer |
| Directional pattern | cardioide |
| Front to back ratio | 20 dB |
| Frequency response | see diagram |
| Pressure sensitivity @ 1000Hz | approx. 50mV/Pa |
| Source impedance | 1000 Ohm +/- 40% |
| Total harmonic distortion @ 28Pa (123dB) SPL | < 3% |
| Range of supply voltage | 0,8...15 V |
| Current consumption | < 0,2 mA |

SPECIFICATIONS

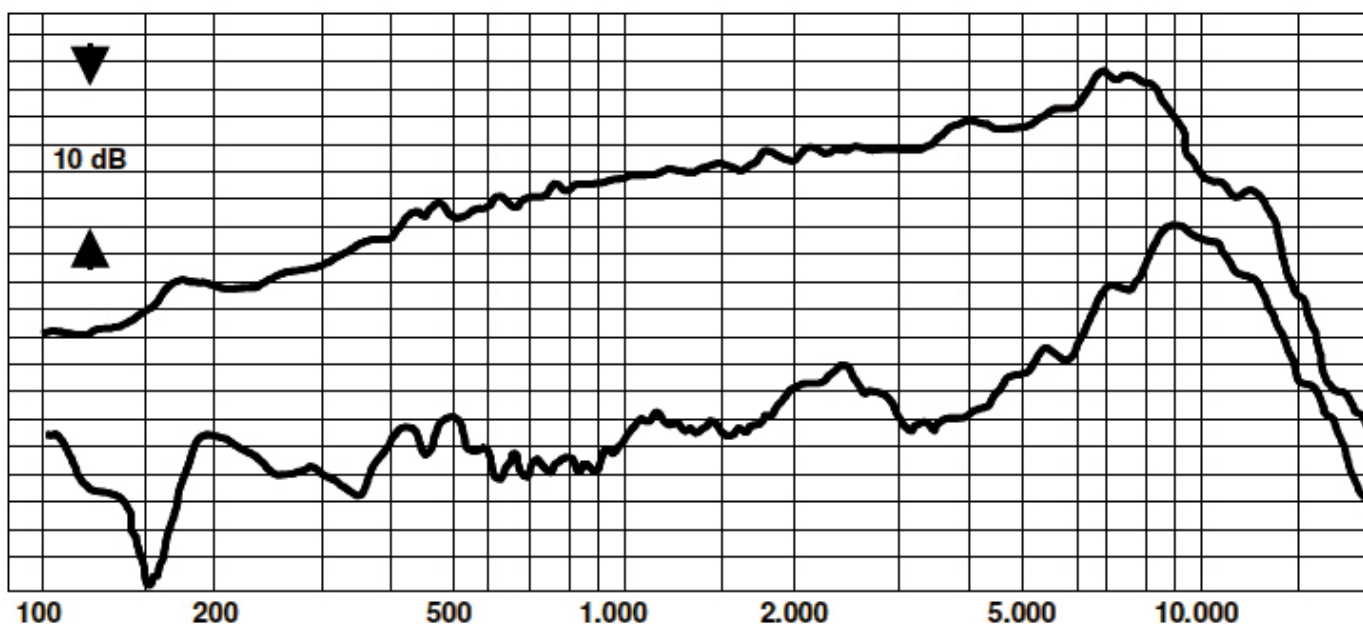
| Operating Conditions | |
|-----------------------|------------------------|
| Temperature storage | min. -25°C, max. +60°C |
| Temperature operation | min. -20°C, max. +55°C |
| Relative humidity | 20°C/99%, 60°C/95% |

Dimensions

| | |
|----------------------|--------------|
| Diameter x Length | 350 x 490 mm |
| Weight incl. battery | 350 g |

FREQUENCY RESPONSES

- @ 0° and 180° angle of incidence



ROGA RECOMMENDATION

For professional applications of the AS-10 the use of a professional headphone is recommended. Roga Instruments offers the Beyer DT 770 Pro headphone with the necessary Lemos connector (0B-2-pin).



HEADPHONE AMPLIFIER: SPECIFICATIONS

| General | |
|--------------------------------|---|
| Frequency response (-3dB): | 30 Hz - 18 kHz |
| Output voltage max. | 4 Vpp |
| Total harmonic distortion: | <1% @ 1kHz and 4Vpp |
| Output impedance: | 50 Ohm in line with 10µF |
| Power supply: | 9V battery |
| Current consumption: | approx. 7mA with closed headphone amplifier input; approx. 15mA max. |
| Duration of battery operation: | approx. 12h - 15h, depending on the adjusted loudness and on the type of battery |