

AV19i Electronic Stethoscope

Electronic Stethoscope AV19i for locating sound and vibration sources.

Uses

- Acoustic and Vibration Measurements
- Source Location
- Machine Diagnosis

AV19i Monitor Amplifier with octave - and third octave filter



Features

- IEPE Input channel (Microphone (MI10i) or acceleration sensor)
- Measuring output
- Adjustable Headphones output
- Input amplifier: 0 dB and +20 dB selectable
- Switchable octave filter, 10 frequencies
- Switchable third octave filter, 31 frequencies
- Display with backlight
- Overload indication
- Internal rechargeable accu for portability
- Robust aluminum cabinet

The 1-channel monitor amplifier AV19i is a handheld, accu driven instrument, which has been constructed mainly to monitor acoustic and vibration signals with headphones. AV19i offers you many possibilities to locate disturbance sources. It has an IEPE measuring input for microphone or piezoelectric accelerometer.

The measuring signal can be weighted with the switchable octave filter (10 frequencies) or third octave filter (31 frequencies). So you can detect the exact frequencies of the disturbance source.

At the output socket you get a voltage proportional to the acceleration or sound pressure independent of the amplification of the headphone amplifier. So the instrument can be used as a front end for analyzers or similar instruments.

The AV19i has been constructed for mobile uses. The AV19i is also suitable for robust environmental conditions.



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Technical Data AV19i

Analog IEPE Inputs

Number: 1

constant current (IEPE) input

IEPE power: 22V / 4mA

Connector: BNC

Impedance: > 100 k Ω

Analog Outputs

Number: 2

Measuring output

Connector: BNC

Output Impedance: .. 50 Ω in series with 10 μ F

Max. Impedance: > 10 k Ω , <10 nF

Headphones output

Connector: 3.5 mm jack

Amplifier

Input amplifier

Amplification: 0dB, +20 dB

Headphones amplifier

Max power: 1 W on 16 Ω

Distortion factor: .. < 1% at 1 kHz and 4 Vpp

Bandwidth (Lin., -3 dB): 20 Hz to 20 kHz

Filter

1/1 Octave filter, switchable - Frequencies:

32 Hz, 64 Hz, 125 Hz, 250 Hz, 500 Hz, 1kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz

1/3 Third octave filter, switchable - Frequencies:

20 Hz, 25 Hz, 32 Hz, 40 Hz, 50 Hz, 64 Hz, 80 Hz, 100 Hz, 125 Hz, 160 Hz, 200 Hz, 250 Hz, 320 Hz, 400 Hz, 500 Hz, 640 Hz, 800 Hz, 1 kHz, 1,25 kHz, 1,6 kHz, 2,0 kHz, 2,5 kHz, 3,2 kHz, 4 kHz, 5 kHz, 6,4 kHz, 8 kHz, 10 kHz, 12,5 kHz, 16 kHz, 20 kHz

Power supply

internal: 4,8 V rechargeable accu

external: 100-240 V / AC plug-in charger

Current consumption: 100 mA – 150 mA

Battery operating time: 6-8 h

Operating conditions

Operating temp. range: +/- 0°C to +50°C

Mechanical Data

Cabinet material: Aluminum

Dimensions (W x H x D): 55 x 24 x 210 mm

Weight with accu: approx. 350 g

Accessories included

100-240 V / AC plug-in charger