Low cost Hydrophone amplifier with high input impedance. Type A1001

Small amplifier intended for building in together with a small battery like a 9Volt PP3 or a 12Volt accu. Powersupply cable is delivered with the unit.

Highpass filter and Gain settings are to be preset internally with a screwdriver.



Description A1001

Hydrophone Voltage Amplifier

Very low noise. Extremely high input impedance.

Wide frequency bandwidth. Low current consumption.

Small and handy version.

Includes presets for High Pass filter and Gain controls.

BNC connectors In and Out.

Water splash proof.

Intended for use in the field or for building in together with a battery

Technical data, A1001

Gain Control : +10 +20 +30 +40dB Highpass Filters : 1 / 10 / 100 / 1kHz

Filter Responses: 1st.order Low Pass RC network.

Frequency Range: 1Hz to 1MHz

Relative Input Noise: <1uVolt rms @ 1kHz (bw=500Hz...8kHz)

Input for Piezo ceramic transducer with a capacitance of 100pF to 10nF Recommended type: RESON / TC4033

Input impedance: 1Gohm // 5pF

Relative input noise:

< 2.0 microVolt at 10dB gain < 1.5 microVolt at 20dB gain < 1.2 microVolt at 30dB gain < 1.0 microVolt at 40dB gain Noise bandwidth: 500Hz to 8kHz High Pass filter to filter off seawaves.

-6dB at 1Hz / 12dB pr.octave -3dB at 10Hz, 100Hz and 1kHz

6dB pr.octave at 10Hz, 100Hz and 1kHz

GAIN control in 10dB steps

High frequency limit depends on gain

setting:

1MHz at 10dB gain 800kHz at 20dB gain 600kHz at 30dB gain 300kHz at 40dB gain

Output level max.+10dBm at 12Vdc Output level max.+20dBm at 24Vdc

Output imp.: 10R+100uF Cable drive: 50meter max.