

Input filtering and attenuation is made up by the relationship between the attached Transducer Capacitance and the settings of the input Resistance and Capacitance. Loading of the transducer with the input Capacitance forms an attenuator. Loading of the transducer with the input Resistance forms a High Pass Filter

Output Gain dB
Linear amplifier 1Hz to 1MHz

Low Pass Filter
for anti-aliasing filtering
2nd order filter 12dB/oct. sharp filter
-3dB @ frequency

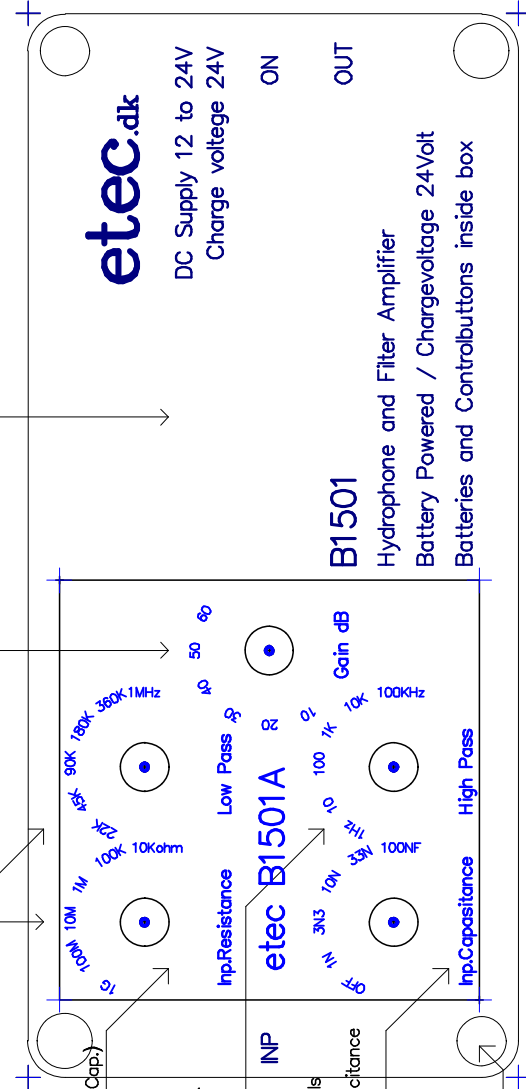
Input Resistance
Used to form a 1st order high-pass filter directly on the input terminals together with the Transducer capacitance
 $\text{cut-off freq.} = 1 / (2 \times \pi \times \text{Inp.Res.} \times \text{Tr.Cap.})$

High Pass Filter
for filtering off low-freq. seawaves.
2nd order filter 12dB/oct. slow roll off
-6dB @ frequency for lowest phase shift
Used in conjunction with Inp.Res. filter will result in a 3rd order high-pass filter.

Input Capacitance
Used to form an input attenuator in order to handle very heavy input signals
The attenuation is made up between the transducer capacitance and the input capacitance
 $\text{Atten.} = \text{inp.Cap.} / (\text{inp.Cap.} + \text{Tr.Cap.})$

Fingerscrews made of Bronze.
Resistant to seawater.
This box is splash proof only.
It will not withstand water-pressure

When run at external supply lower than the charge voltage 24 Volt DC the batteries should be taken out. Otherwise they will be worn out first. Batteries are 2 pcs. 9Volt NiMH type PP3 They contain 200mAh and will last 8 Hours on a complete recharge. A battery charger 24Volt will take about 5 Hours to charge the batteries. Keep batteries cool when not in use for longer periods. Do not overcharge. Recycle batteries when they are worn out. The amplifier may be operated on 2pcs 9Volt dry cell Alkaline batteries. Alkaline batteries contain 800mAh and will last 3 to 4 times longer. Remember to remove batteries when not in use for more than a week. Batteries may leak acid and will for sure spoil the amplifier .
DO NOT CHARGE dry cells batteries. ONLY rechargeables



Unscrew the top-cover to operate the controlbuttons / Press down the top cover to loosen and tighten the screws.

B1501A_Operators Quick Guide.PCB