

PC Noise Filters

Models: PC-10, PC-25

GENERAL INFORMATION

The PC noise filter is designed to reduce electrical noise, which is generated by engines and electronic accessories, allowing receivers and audio equipment to operate properly. Functioning as a power conditioner, this model filters both the positive and negative leads in the system and can be applied at the noise source and/or at the affected equipment.

Sources of noise which the PC will effectively filter include: fluorescent lights, radars, fans, blowers, pumps, converters, inverters, autopilots or other electronic equipment which draws up to 10 or 25 amps (depending on model). By applying filters at the source, the noise can be silenced before it can contaminate the entire system.

When installed in the power line to electronics which are affected by interference, the PC suppresses residual noise which may be present in the system. This allows proper operation of VHF radios, depth sounders, loud hailers, AM/FM receivers and stereo systems.

A brief analysis of your system may be worthwhile to determine the best location for your filters. One method used to identify noise sources is to switch on accessories one at a time noting the effects upon your electronic gear. If noise is detected when a particular item is turned on, it is best to filter that device at the source. If one source cannot be identified, it may be best to install the filter(s) close to the affected unit(s).

INSTALLATION

After you have determined the best location in the system, locate a flat surface close to the power line that requires filtering. For best results, the filter should be within 24" of the device you are filtering. The case does not require grounding, so it is acceptable to mount the filter on either metallic or non-metallic surfaces. Securely attach the filter using the hardware provided, noting the input and output leads (see diagram).

Shut off power to the power leads at the battery or distribution panel. Identify the positive and negative power leads and cut at an appropriate point. Noting input and output and carefully observing correct polarity, use the wire splices provided to attach the filter leads to the power leads. (See diagram for typical installation.)

CAUTION: Correct polarity and input/output connection must be maintained. Failure to do so may result in damage to the filter and/or equipment being filtered.

RATINGS

MAXIMUM INPUT VOLTAGE (both models): 50 VDC

MAXIMUM INPUT/OUTPUT CURRENT:

PC-10: 15 AMPS INTERMITTENT, 5 MINUTES MAX, 20% DUTY
10 AMPS CONTINUOUS, 100% DUTY

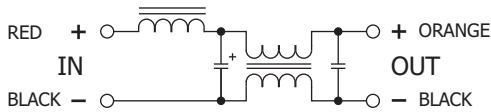
PC-25: 35 AMPS INTERMITTENT, 5 MINUTES MAX, 20% DUTY
25 AMPS CONTINUOUS, 100% DUTY

FILTERED FREQUENCY RANGE (both models): AUDIO - 200 MHz

M-PCINST-C
As of Jun. 2018

PC-10

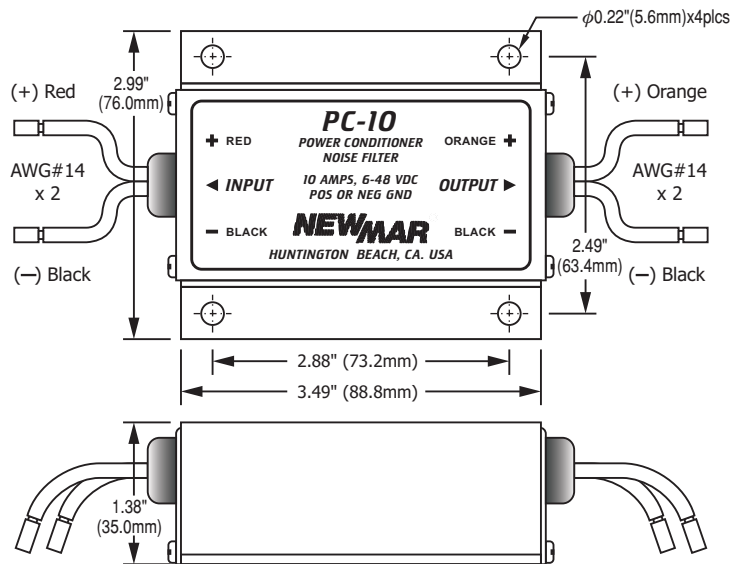
Schematic And Dimensions



WIRE SIZE TABLE

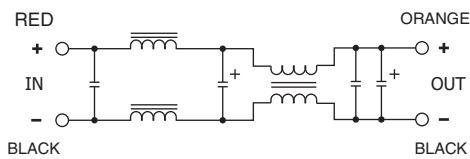
Note: WIRE LENGTH is the combined length of the wire run from the Input to the Output of the PC-10 unit

Wire Length	Size (AWG)	Size (mm)
Up to 10'	#14	φ1.6
11' - 25'	#12	φ2.1
26' - 40'	#10	φ2.6



PC-25

Schematic And Dimensions



WIRE SIZE TABLE

Note: WIRE LENGTH is the combined length of the wire run from the Input to the Output of the PC-25 unit

Wire Length	Size (AWG)	Size (mm)
Up to 10'	#12	φ2.1
11' - 25'	#10	φ2.6
26' - 40'	#8	φ3.3

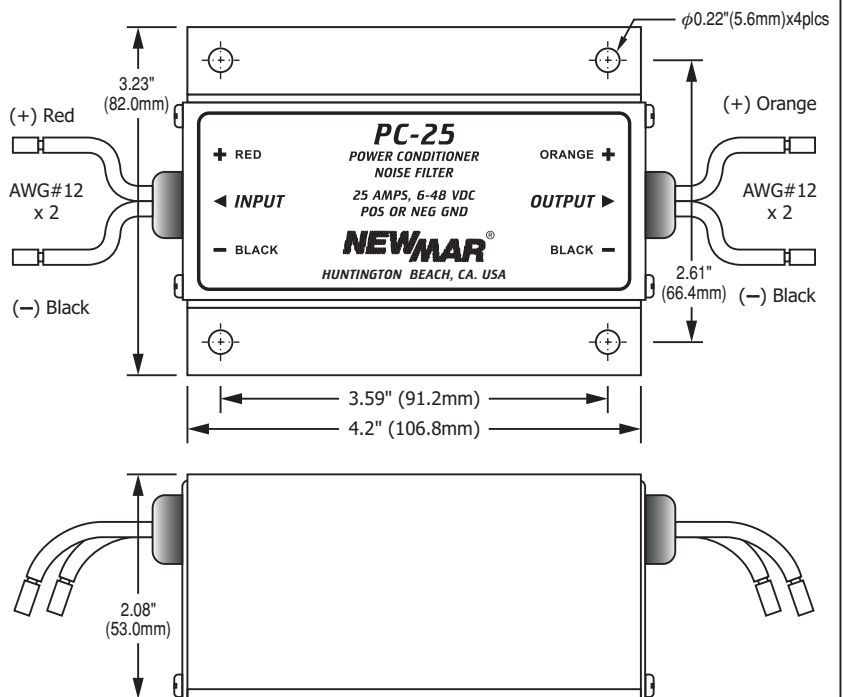


Fig. 1) Typical Installation When Filtering Affected Equipment

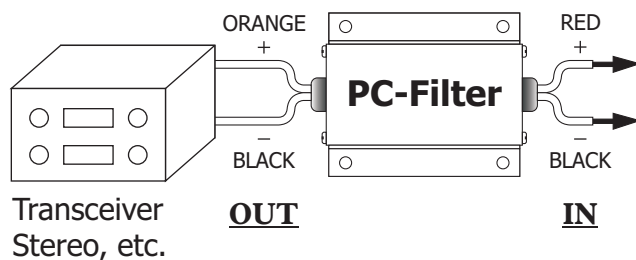
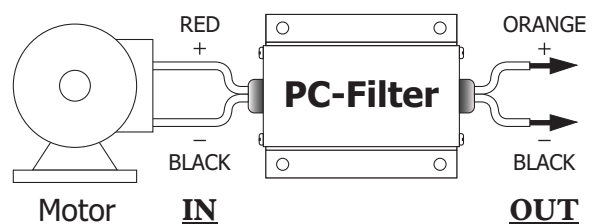


Fig. 2) Typical Installation When Filtering Noise Source



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