

## Reduction of interference from a battery powered noise source.

If the noise source has several components, all of which may contribute interference, separate each potential source to observe its effect.

The battery is an effective trap for the electrical noise reaching the power connections to the noise source. To make effective use of that trap, connect the noise source directly to the battery with the shortest length of wire possible. No other device should be connected to this run of wire. Twisting the power leads will reduce the ability of the power leads to act as an antenna. The most effective way to reduce emissions from the power leads is to use shielded cable. All accessory and control leads at the noise source should be examined. Reduce lengths to the minimum. Twist and apply grounded shields as needed.

It can be helpful to ground the negative power lead to the frame of the noise source. Look for a screw, which can clamp a short copper strap from the negative power lead to the frame of the noise source.

A filter may be applied close to the noise source. The current rating of this filter should be about twice the maximum current rating of the noise source. If little noise is radiated, a filter at the power connections of the effected equipment may be less costly.