

ET-NF

Pool & Spa Electronic Noise Filter



Problem: Issues with electronic noise in the pool/spa industry

Because the pool industry is now using more advanced microprocessor controls inside equipment, such as pool automation circuits, variable speed pumps and LED lighting, the potential for electronic noise is becoming more prevalent. Some electronic noise causes breakers to trip or causes control systems to have intermittent responses.

What is electronic noise?

Electronic noise is a by-product of electronic controls. For the past several decades, old mechanical technology has been replaced with high efficiency, electronic equipment, such as:

- LED drivers, instead of line voltage or low voltage tungsten/arc tube lighting
- Variable speed motors or drives, instead of single speed loads
- High frequency electronic ballasts in lieu of mechanical magnetic ballasts for fluorescent and HID lighting

All of this new equipment contains microprocessors or “electronics” that produce inaudible, high frequency, electronic noise, or very simply put, *interference*. This can cause nuisance tripping of breakers and scrambled or blocked signaling between equipment.



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Solution: ET-NF Electronic Noise Filter by Intermatic

Intermatic’s solution for electronic noise, regardless of application, is a noise filter, product number ET-NF. The ET-NF is an AC filter network that provides relay contact protection, noise circuit reduction and EMI/RFI reduction. It can be used on any AC circuit from 24 to 277 Volts, 50/60 Hz. It is a simple solution to a very common problem.

Common Wiring Diagrams

The ET-NF should be placed across the source of the noise, such as across the coil of a relay or contactor. It can also be placed across the line connections to the device being protected, such as a low-voltage safety transformer.

120 Volts



240 Volts

