EP2050EE - High performance filter and SPD for your Home

An average home in the US has over \$20,000 worth of electrical appliances that are subjected to damaging effects of the surges and noise. The surges cause millions of dollars of damage to the electrical systems every year, with an average insurance claim of \$5,869 per surge incident in the year 2013 for the US residential market. Although the amount shown above only reflects in the instantaneously damaged electrical loads per incident, thousands of dollars of damage are "slowly causing" to the residential market.

The surges primarily come into your home in two ways, external and internal. External surge sources are the lighting and utility disturbances. Internal surges are the switching transients generated by your regular home appliances such as refrigerators, motors, LED lighting, printers, audio/video systems, etc. While the external surges are less than 10% of the surges in the facility, the rest 90% are from internal sources.





The majority of the home appliances in the home use a switching mechanism to operate efficiently, leaving out residual switching noise in the electrical system. The switching noise is inevitable, irrespective of how new or expensive is your appliance. The switching noise "rings" within the facility, causing further amplifying the noise. The amplification of such is the "internally" generated surge or switching transient, that causes the damaging effect to the other expensive appliances.

The damaging effects of the surges are:

- 1. Complete damage to the appliance, making it un-operable
- 2. Malfunction or erratic nature of the load, causing load tripping, noise from the audio systems
 - 3. Excessive heat generation, resulting in "hot to touch" appliance, or increased power bill
 - 4. Premature damage to the appliance, shortening the life of the appliances

Many homeowners believe that the surge strips used in the home are sufficient enough to protect their home appliances, but the reality is that the surge takes various paths to get into the home and it is impossible for a surge strip to divert all the surges to itself and protect your loads. In addition to the surges, the *noise on the power line* is another major issue for the audiophile industry.





Audiophiles spend thousands of dollars on their systems to get pristine audio quality without any noise. For them, the noise on the power line is directly related to the noise coming out of the audio system. A homeowner must need a "complete home protection with noise removal" to protect their sensitive electrical loads and to remove noise on the system.

EP2050EE - A Complete Protection with higher performance Filter

EP2050EE, an upgraded home protection + filtration system, UL listed type 2 SPD, CSA C22.2 EMI filter, that protects the home from both internal and external surges. In addition to removing the surges, EP2050EE can also act as a filter removing constantly generated ringing noise amongst the appliances. EP2050EE can be retrofitted to any manufacturer's electrical panel without any hassle, which is easily mountable with visible LED status indicators. The homeowner is constantly adding sophisticated electronics to their home such as smart systems, gaming machines, laptops, high-end home theatre systems; and it's critical to protect their hard-earned money from the surges and noise generated in the system. EP2050EE could protect your \$100,000 appliances increasing their lifetime. The ROI could be as low as 1 year for typical home installation.



EP2050EE features:

- 1- Can be installed up to 400A panels.
- 2- Faster and increased electrical noise dissipation
- 3- Complete home protection and noise filteration
- 4- Designed for larger homes, villas, and churches

Absorbs, Dissipates, and removes

- Transient voltage surges and spikes
- Frequency Noise Between 3kHz-1MHz
- Ring waves, Transient noise

