RIPPLE CONTROL
Throughout Australia, but in particular Sydney and other parts of NSW and Queensland, electricity distributors use a remote control and switching system that is commonly called ripple control. Ripple control has existed for many years and is used for controlling demand and implementing different customer tariffs.

Our electricity supply is 240 Volts AC 50 Hertz. AC means alternating current, a type of electrical energy that flows in one direction for half a cycle, and then the opposite direction for the other half cycle. 50 Hertz means there are fifty cycles per second. For electrical and electronic products a cycle rate of 50 Hertz is very slow and therefore the wires carrying the power can also carry other signals. Ripple control systems superimpose signals on the 50 Hertz mains supply so they can be distributed throughout a local power grid. Ripple control signals are used to switch on and off high power consumption equipment such as water heaters and water supply pumps.

Electrical equipment such as televisions, toasters, fans, fluorescent and halogen lighting and some appliances may be sensitive to ripple control signals. This results in an audible buzz being generated whenever the signals are present. As different frequencies for these signals are used in different areas, products may respond is some areas and not others. Some areas have more than one ripple control system in operation and different signals may be present at different times and affect different products.

WILL I BE AFFECTED?
In areas that have ripple control installed for off-peak tariff switching (such as off-peak hot water systems) there is usually a dual tariff meter installed, or dual meters. A smaller control box marked “Zellweger” may also be present. The meter or Zellweger box will usually have the ripple control signal frequency marked on it (for example 1050 Hz). Even if you do not have off-peak equipment installed your power supply may still be affected by ripple control signals. Apart from looking for the control signal marking in your meter box there is no way of knowing in advance if you will be affected by ripple control signal noise.

WHAT CAN I DO IF I AM AFFECTED?
There are ripple control signal filters available for sale from experienced lighting and fan dealers. These filters have to be installed by a licensed electrician and each filter has to be matched to the particular signals in your area. Your dealer usually knows the signals used in their local area and can recommend the correct filter.

It is not possible to build an electric motor based product that rejects all the ripple control signals and the signals differ from location to location. If you are affected by ripple control noise in your fan or lighting product please contact your local dealer to purchase the appropriate filter. The cost of the filter and the cost of installation are not covered by the purchase price of the fan or light. Occasionally the ripple control signals are so strong they cannot be sufficiently filtered.

WARRANTY CLAIMS:
Ripple control signal noise is <u>not</u> covered by warranty. If you make a warranty based service call for ripple control noise, <u>you will be charged</u> for the call-out by the electrician if he does not find a genuine fault with the product.

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