

# LEADING & TRAILING EDGE DIMMING EXPLAINED

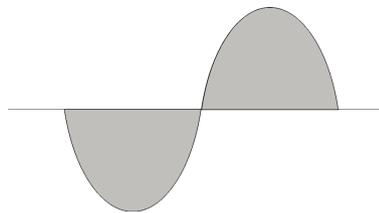
\* The majority of dimmers sold in the UK use leading edge technology and have done so for years. As a result many manufacturers claim 'suitable for leading edge' when they produce a dimmable lamp. In our experience this does not mean, however, that they perform best with leading edge, and in fact the reverse is usually true. Most mains dimming LED lamps give best results when used with a trailing edge dimmer, with less flicker and audible noise.

Rako's trailing edge dimmer range includes the RMT500, RMT1200, RAK4-T, RMT-Pill and WMT-400. All are suitable for a range of loads including mains dimming LEDs (the RMT-Pill requires a neutral connection for LED control), halogen lamps, either mains or fed from electronic transformers and halogen GU10 lamps. All Rako's trailing edge dimmers have in-built short circuit protection and are therefore the recommended dimming method for halogen GU10s which can damage other dimmer types when lamps fail.

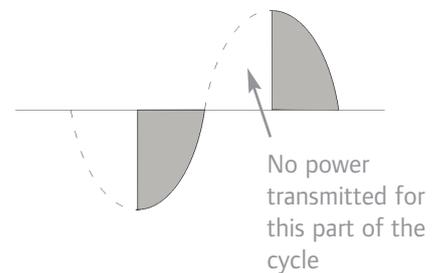
Trailing edge dimming is not suitable for wire-wound transformers (usually distinguishable by their large size and weight) and other inductive loads such as motors and pumps. Loads of this type require a leading edge dimmer, or switch module.

## DIFFERENCES BETWEEN LEADING & TRAILING EDGE DIMMING

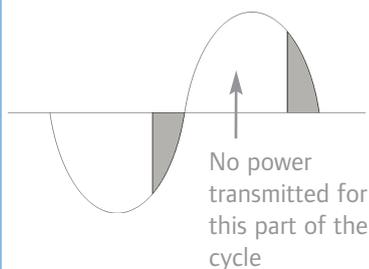
Normal mains - power is conducted for the whole cycle



A leading edge dimmer 'chops' the waveform and only transmits power for the second part of the cycle



Leading edge dimmer at low dimmed level



A trailing edge dimmer 'chops' the waveform and only transmits power for the first part of the cycle

