

# Gauzy Controllers vs. Transformers

---

Gauzy's FLEX (on/off or dimming) and MultiPlex controllers ensure premium performance and preservation of LCG ®. The following highlights some key advantages of Gauzy controllers over standard transformers, which may be commonly used to power PDLC.

Gauzy's controller provides a host of functions unavailable by a transformer including film preservation, WIFI, smart home compatibility, and an array of protections (DC blocking, short circuit, overload, over voltage).

All controllers by Gauzy are CE&UL Certified, with a large drive capacity, and small footprint.

## Advantages

### 1. Soft Start

Gauzy's controllers ramp output voltage to provide a soft start, whereas standard transformers provide high transients of current every time power is applied to a film – which reduces the film's reliability.

### 2. Voltage Waveform

Gauzy's controllers employ a square wave output, which means that with lower voltage amplitude it can provide better transparency than a transformer with sinusoidal voltage, while consuming less power and maintaining a more reliable film.

### 3. Voltage Level

Gauzy's output voltage level is regulated, which means it remains stable regardless of any fluctuation or change in the input mains, and therefore, the glass transparency is unaffected. The output voltage of a Transformer will always reflect changes on the input mains, directly affecting transparency of the glass.

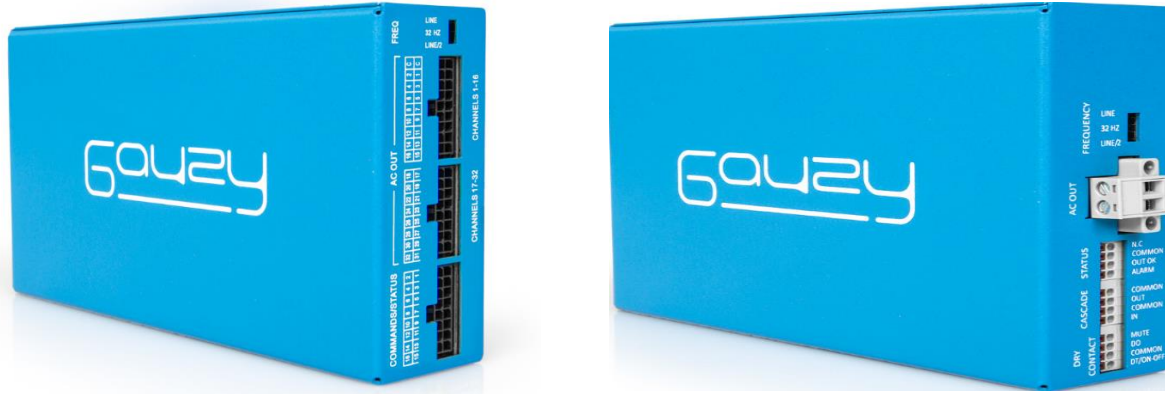
### 4. High Transients on the Mains

Gauzy provides a solution by absorbing high transients on the mains from the front end of the controller. Because of these transients, the film is not subjected to any stress.

With a transformer for 110/230V Mains, a protective device must be chosen with a reasonable margin in mind, i.e. for 140/250V.

Transients on Mains can cause the voltage on a varistor, (known as maximum clamping voltage) to reach up to 650V, which is double the original Mains peak voltage. As a result, the film will suffer twice the amount of nominal voltage during transients, causing the film to have a shorter lifecycle.

## Gauzy Controller



Products: Flex (on/off or dimming configuration) and MultiPlex (up to 32 outputs)

- Small footprint
- 40% less power consumption
- Protections for film preservation
- Powers up to 10 sqm
- Easy installation
- Custom programming
- Compatible with Gauzy LCG ® touch panel or off the shelf options

### Technical Specifications:

- Input Voltage: 110-240 VAC
- Adjustable output voltage: levels from 0 – 35/70VAC
- Output Frequency: 25-60 Hz (adjustable)
- Input power consumption 5w max (under no load)
- Operating temperature: -10° C - 70° C

Transformer



\*\* In many cases, film must be turned off for a minimum of 4 hours per day \*\*