



# HAYWARD®

## Controls & 12V Lighting: *The Snubber Relationship*

*This document explains the relationship between ColorLogic low voltage lighting and a transformer snubber.*

**As of 2017 all Hayward transformers include a Snubber in the box.**

- a. Always install a snubber on all ColorLogic 12v lighting applications, regardless of the controller and/or existence of GFCI circuits.**
  - The diagram at the bottom of the page shows where the snubber should be installed (on the primary side of the transformer).
  
- b. What does a Snubber do?**
  - A snubber is a plastic-film, high voltage capacitor that will suppress or “snub” the voltage spikes in electrical systems, such as the inductive kick from a transformer attached to a switch.
  - The snubber will keep the ColorLogic Lights from falling out of sequence with each other.

#### d. Why install a Snubber?

- Without arc suppression, these inductive spikes, though not harmful to users, increase the likelihood of nuisance trips in GFCI circuits but can also result in hiccups during Smart Relay light toggling on VS Omni applications.
- The Snubber filters the high frequency noise that could otherwise throw the controller and lighting out-of-sync.

