

Softswitch128™ | specification features



features

benefits

1,000,000 Cycle Relays	On average, Softswitch™ relay circuits will last at least 10 times longer than conventional relay/contactors systems, which makes it virtually maintenance-free. See page 4 for more details.
	16A continuous duty rated for any lighting load (20A breakers). No need to derate for special lighting loads or to specify special relays.
	Relays are mechanically held, not electrically held. Therefore, brief power dips will not cause the relay to open and turn the lights off.
Integral Breaker Bus	A full distribution bus (42 circuits) can be included within the switching panel. This saves space in the utility closet by combining two or more panels into one.
	The bus is installed and wired in the switching panel at the factory. Therefore, no wiring is required by the contractor between the breakers and the switching circuits. This significantly reduces the system installation time.
	Pre-wired panels are standard but rough-in options are available. Panels also offer a barrier option for projects where multiple feeds (e.g. normal and normal/emergency) are required in the same panel. This potentially reduces the total number of panels required.
Integral Time Clock/Processor	Each Softswitch128 and GRAFIK 7000™ system includes an astronomical and time-of-day time clock in the panel processor. Therefore, events can be scheduled by sunset/sunrise and/or by time-of-day. No additional components are required.
Relay Short Circuit Protection	Panels are shipped with circuit bypass jumpers in place to protect the relay circuit in case of miswire at start-up.
Power Failure Memory	Lutron switching systems have power failure memory – after power is lost to the panel and upon restoration of power, the lights return to the state they were at prior to the power loss.
	Upon the return of power (after a power interruption), Lutron switching systems are operational in less than 2 seconds. This ensures that there is light when power is available.

features

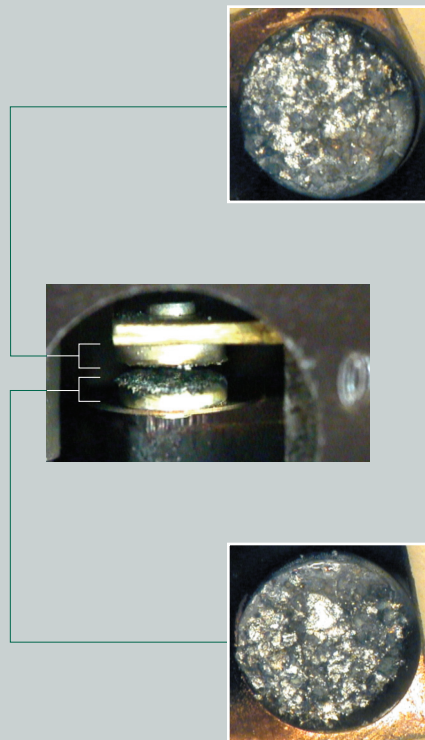
benefits

Low-Voltage Wallstations and System Wiring	Wiring runs to keypad controls are digital low voltage digital and can be daisy-chained, thereby reducing installation costs.
	Low-voltage wallstations can be easily replaced with different styles at a later date without the need for re-wiring. Wallstations can also be re-programmed to change its operation without re-wiring (on a button-by-button basis).
	Line-voltage control switches from Sentry Switch™ (by others) can be used to provide local override control.
System Integration	Lutron switching systems have the capability to connect to any type of system in the building. Integration protocols include BACnet, LonWorks, RS232, DMX-512, contact closure inputs and contact closure outputs.
UL/CSA listed 600 Volt Isolation Between Circuits	This allows for one panel to service multiple voltage loads (simple system design and space savings).
System Service/Support	Softswitch128 models are supported in Lutron's GRAFIK Eye® Designer 6.6 software.
	Lutron has factory-employed field service engineers throughout the world. Field commissioning of the switching systems is available, ensuring that the systems will be installed and programmed properly.
	Upon commissioning of the system, an 8-year warranty is available.

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Softswitch™ relays vs. conventional relays

Conventional relay

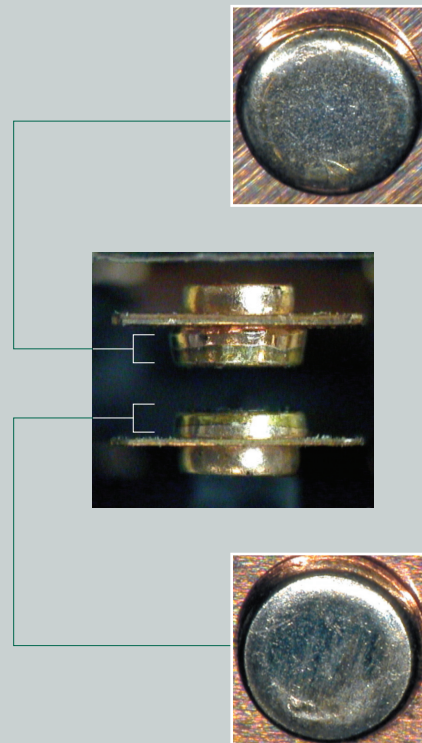


High inrush currents on conventional relays damage contact surfaces. This results in relay failure.

As shown above, 16A tungsten* cycling after 50,000 cycles using conventional relays. High temperature electric arcs cause relay contacts to erode and weld together.

Enlarged photographs.
Actual contact diameter is 4.05 mm.

Lutron Softswitch relay



Softswitch relays minimize the effects of high inrush on relay contact surfaces. Relay contact lifetime is only limited to mechanical wear-out.

As shown above, 16A tungsten* cycling after 50,000 cycles using Softswitch relays. The Softswitch relays use an additional electronic circuit design to completely eliminate arcing during the switching process.

* Electronic ballasts with high inrush currents would likely cause similar (or worse) electric arcs compared to tungsten loads in conventional relays. However, the Lutron Softswitch relays would perform similarly regardless of the lighting load.



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