

## **AGC Touch Control Light Switch with Soft-Off and Continuous Dimming**

Up until now, lighting control manufacturers offered 3-step or 4-step AGC touch dimmers as the only alternative to the 3-Way bulb to control lamp intensity. The **LS7540** CMOS IC is an elegant, cost-effective, solution to this limitation. It provides the user with the same complete control for choosing lamp intensity for mood or functionality as is available with wall dimmers while maintaining the same ease of use provided by the step AGC touch dimmers. The **LS7540** is a new addition to the selection of Lighting Control ICs offered by LSI/CSI.

If Off, a 'touch' causes the **LS7540** to produce maximum intensity (On). If On, a 'touch' initiates Intensity ramp-down (Soft-Off). The Soft-Off feature provides light for the User to exit the area. The ramp-down time is controlled by an external RC (**Note:** Ramp-down time = 0 if no RC is connected). If no additional 'touch' is applied, the ramp-down continues until the lamp is Off. If a 'touch' is applied during the ramp-down, the ramp-down stops. A new 'touch' causes the ramp-down to restart. Stopping and restarting the ramp-down can be repeated as often as desired giving the User full control in setting the lamp intensity.

The **LS7540** is the main component for built-in or screw-in touch-adapter lamp modules that convert any metallic part of a lamp to a touch pad for control of lighting intensity. The AGC (Automatic Gain Control) feature of the **LS7540** allows the modules to convert any size lamp to touch control, independent of line plug polarity. The touch-adapter modules provide lamp owners with ease of use and energy savings while eliminating the need for costly multi-filament bulbs. Touch-adapter modules compatible with 50Hz/60Hz AC Line frequencies and any AC Line voltage can be produced using the **LS7540**.

The **LS7540** is offered in probed wafer form as well as RoHS compliant 8-Pin DIP and SOIC packages.