

#### CASE STUDY: NEW COPPER PENNY NIGHTCLUB

"The New Copper Penny is serviced by Brownell Sound, a Portland-based audio, video, and lighting installer. The first order of business was to determine what was causing the unusual projector problems at the club. 'In one case, I had to replace a Viewsonic projector that I had just installed after it took out a bulb in only 175 hours,' says Kurt Bevers, owner of Brownell Sound. 'That is very unusual. So I brought the projector in for testing and found nothing wrong with it. But I knew something had to be going on, so I went back to the club for more testing.' Bevers tested the signal line and the AC voltage, both of which were fine. He just couldn't find the problem. When he was explaining this to the owner's son, John, he asked a critical question: 'Have you installed anything new recently?' With a big smile, John answered that yes, they had recently installed neon signs that displayed the club's logo. Bevers asked John to turn on the lights and tested the voltage again. This time, Bevers

discovered that the neon fixtures were releasing voltage onto the load neutral that was oscillating between 2 to 30VAC, eliminating the digital projectors' ground reference for bulb circuits and leaving them exposed to damaging transients.

With the proper power management in place, the service calls stopped and the bulb life (projector) was not only restored, it was significantly extended. The bulb life of all the projectors increased by a minimum of 40%. 'With the AC-215, the Viewsonic projectors that are supposed to last 2,000 hours have been going for 2,900 to 3,000 hours,' says Bevers. 'The NEC projectors that have a projected bulb life of 4,000 hours in economy mode have been lasting about 5,400 hours.' This translates to an extra six months of use for eight video projectors—each running for eight hours per day. It also translated to huge money savings for the New Copper Penny."

#### "When Good Projectors Go Bad"

Power Conditioning Saves The Day At An Oregon Club Source: Lighting&Sound America, June 2008 Reprinted with Permission



AC-215A mounted inside a guitar amplifier (left) and behind a flat-screen television (above). The slim, compact design is sleek and unobtrusive, allowing for ease of use and discreet mounting anywhere that clean, filtered power is needed.

### SPECIFICATIONS AC-215A

#### **AC Current Capacity**

Input: 10 Amp capacity required

Output: 10 Amp RMS (both outlets combined)

# AC Noise Attenuation, Transverse (Differential) Mode

>40dB @ 100kHz >50dB @ 500kHz

(linear attenuation curve from 0.05 to  $100\Omega$  line impedance)

## **Transient Voltage Surge Suppression**

120VAC - Series Multi-Stage Protection Non-Sacrificial with Zero Ground Contamination 188V peak clamping @ 6000V/3000A input

#### **Extreme Voltage Shutdown**

137 VAC (Auto-Reset)

**Dimensions & Weight** 1.75" (H) x 5" (W) x 8.5" (D)

Safety Agency Listing

cTUVus

3 lbs.

