



Soundsculpture Incorporated (Buffalo)

60 Industrial Parkway, #580
Cheektowaga NY
USA 14227

Soundsculpture Incorporated (Toronto)

88 St. George St.
Etobicoke ON
Canada M8Z 3Y7

FOR RELEASE OCTOBER/NOVEMBER 2005

Contact:

James David Smith, President and Product Designer
Office 416-259-8499 (daytime & evening)
Cellular 416-720-5802
Jsmith@theatrewireless.com

RC4 at LDI 2005: NiCad & NiMH Batteries, LEDs, and a Great New Dimmer

Toronto, Oct-2005 – As more designers discover the virtues of LED lighting, and battery technology improves, applications for wireless dimming continue to expand. “With great looking LED lamps that run cool and draw very little power, battery life is less and less of an issue,” says James David Smith, designer of the RC4 Wireless Dimming System. “When you don’t need a large and heavy battery, and you can put a super bright LED lamp very close to set materials or talent, fantastic new looks become possible.”

Several new features and components for RC4 Wireless Dimming are being introduced at LDI 2005 in Orlando. Most notably, all RC4 dimmers (there are 4 integrated with most RC4 receivers) now provide flicker-free LED dimming that appears exceptionally linear. This is achieved with an upgraded microprocessor that delivers variable-frequency pulse-width-modulation and on-the-fly inverse-square-law calculations. “It’s entirely done in firmware,” explains Mr. Smith, proudly. “It lets us vary the resolution and speed, while running tailored math in realtime. The result is a perfect look at any brightness and beautifully smooth fades.”

The RC4 is already a leader in battery management, letting users monitor voltage at any receiver, even during a running show. Now, new features have been added to support NiCad and NiMH batteries. “When you move away from 12V lead-acid batteries – the mainstay of wireless for decades – you need to accommodate a wider range of voltages, different decay curves, and so on,” says Smith. “For example, 9.6V, 14.4V and 18V packs are very common for portable tools and could be great except that most lamps and motors need 12V.”

RC4 Voltage Reference Dimming

Enter RC4 Voltage Reference Dimming. The dimmer monitors the incoming battery voltage and adjusts output to never exceed the equivalent of 12V. Mr. Smith explains: "Because of the nature of our new firmware-based dimmer, we can adjust output range in realtime while still delivering high resolution in the useable range. Even with an 18V battery, where the dimmer is limited to 70% for 12V output, we deliver hundreds of steps of resolution and a very smooth square-law or linear curve right down to zero."

RC4 radio and dimmer electronics work over a wide voltage range, from 8V to 18V, so they keep running when batteries are getting low. "Given the choice between a lamp that gets a little weak versus a lamp that goes off unexpectedly, most production people I know will choose the former," says Smith.

Of course, there are caveats. When using switch mode, an RC4 dimmer can only be on or off, so it delivers full battery voltage when on. And if the battery voltage is below 12V the dimmer can't push it up - if you're using a 9.6V NiCad pack the output will be 0 to 100% of 9.6V.

New RC4 receivers and dimmers will be demonstrated at LDI 2005 using Makita and DeWalt batteries and chargers, and Ledtronics LED lamps.

For more information, visit www.theatrewireless.com, call 1-866-258-4577, or contact:

James David Smith, President and Product Designer

Soundsculpture Incorporated (Buffalo)

60 Industrial Parkway, #580
Cheektowaga NY
USA 14227
1-866-258-4577
Jsmith@theatrewireless.com

Soundsculpture Incorporated (Toronto)

88 St. George St.
Etobicoke ON
Canada M8Z 3Y7
416-259-8499
Jsmith@theatrewireless.com

The Soundsculpture RC4 wireless dimmer system provides lighting designers with new freedom to put DMX-controlled lighting anywhere in a 100,000 square-foot area. High reliability and high power handling ensure robust performance show after show.

Soundsculpture has been producing radio-control equipment for theatrical and entertainment applications since 1991. Customers include Shaw Festival, Disney Theatrical, Hartford Stage, Cirque du Soleil and many others.

#