

# The Power of 3 Seconds

## COVER STORY



We know that in your office, every second counts. And with the VALO curing light, all you need is three seconds to get a complete, uniform cure. VALO provides the same amount of power in a 3-second cure on Xtra Power mode as a conventional 10–20-second cure with other lights.<sup>1</sup>

The VALO has three modes: Standard Power, High Power, and Xtra Power. In standard power mode, a 10-second cure provides 1000mW/cm.<sup>2</sup> A 4-second cure in High Power provides 1400mW/cm<sup>2</sup> and should only be used for tacking. In Xtra Power mode, a 3-second cure gives you 3200mW/cm, which means more power in less time.<sup>2</sup> So how does the VALO give you so much power in so little time?



First, the VALO's low profile head allows for easy and direct access to any restoration site, even in smaller mouths. And direct access means that the light can reach all aspects of the preparation, so you know that you are getting a uniform cure with ample energy.

The optimally collimated beam ensures that VALO maintains its power density and cures uniformly over a range of surfaces and working distances. In fact, VALO delivers the energy needed to polymerize any resin up to 10mm from the restoration site.

Lastly, the VALO is designed to give a complete cure, no matter the proprietary material used in the composite. The custom, multiwavelength LEDs produce high-intensity light at 395–480nm, which is capable of polymerizing all light-cured dental materials. So you can count on a complete cure every time.

So, what does this mean for your office? Dr. Gordon Christensen has found that a typical dental practice can save over \$26,000 per year just by switching from a low-intensity light to a high-intensity light.<sup>2</sup> Who knew that three seconds could be worth so much?

<sup>1</sup> Depending on light irradiance. <sup>2</sup> Ask Dr. Christensen. Dental Economics. Retrieved Dec. 6, 2013. <http://www.dentaleconomics.com/articles/print/volume-99/issue-9/departments/ask-dr-christensen/ask-dr-christensen.html>

## INSIDE STORY

YOUR GLIMPSE INTO THE LATEST FROM ULTRADENT



## Bond Strength: It's About More Than the Monomer

**PEAK**  
UNIVERSAL ADHESIVE SYSTEM



Recent articles suggest that there is a certain monomer responsible for quality bonds, but the truth is that the strength of a bond lies squarely in the balance of the chemistry of the product, rather than just one "magical ingredient." Neil Jessop, Director of Research and Development for Ultradent Products, Inc. says, "It isn't one specific monomer that promotes such high-level bond strengths, but the balance of chemistry and a synergy of components working together that affords stability, repeatability, and reliable, long-term bonds."

In order to create a top-performing adhesive, Ultradent painstakingly fine-tuned formulations through testing literally tens of thousands of bonds over a period of years. What emerged was Peak® Universal Bond, formulated with a unique in-house synthesized monomer as well as the right balance of fillers, solvents, and complementary monomers, which has resulted in a product that can consistently and reliably produce bond values that approach the inherent strength of dentin when used properly.

Of course, chemistry isn't the only thing that creates good bonds. Bonding techniques play a vital role in whether or not a restoration will fail. Even the best chemistry is no match for a poor bonding technique. Here at Ultradent, we make a point of providing knowledge and hands-on courses so that clinicians can test materials and techniques to allow them to gain the most thorough and useful understanding of our bonding materials. As Neil Jessop says, "our objective is to reach levels of effectiveness that can allow the highest degree of clinical success whether using self-etch or total-etch techniques."



**GREAT  
DEALS  
INSIDE!**