# The 'Razor Blade' Side Of UV Sales

By Myron Lupal

Itraviolet (UV) disinfection products are one of the fastest growing segments of the water treatment market today. One of the advantages of selling UV systems is that every system a dealer sells should generate an annual UV lamp replacement sale for as long as the system is in service. The challenge is that the technology that has existed in the UV market to date has yet to fully capture this annuity, or "razor blade," UV lamp business.

New technologies help dealers benefit from UV lamp replacement business

In regard to the annuity aspect of lamp sales, during that same 10-year period, a total of 900 UV lamps should be sold, representing approximately \$90,000 in revenue. The more systems a dealer sells, the larger the replacement opportunity for UV lamps. A dealer who sells 100 UV systems per year can potentially realize \$450,000 in revenue over that same 10-year period.

Knowing the potential that the replacement UV lamp business can generate, the challenge for dealers is to realize this lucrative opportunity. Over the past few years, UV manufacturers have tried different ways of capturing this opportunity, from data collection to lights or digital readouts on the UV systems themselves.

#### **Routine Maintenance**

Today, most high-end UV systems incorporate some kind of audible and/ or visual lamp failure display, as well as end-of-lamp-life indicators. Depending on the type of UV lamp a system uses, lamp life ranges from 8,000 to 12,000 hours. After this time, the homeowner will likely hear an audible alarm from the UV system and may notice an LED indicating lamp change. On more advanced systems, the homeowner may see a numerical readout showing either remaining lamp life or total lamp hours.

The homeowner must decide what to do next. The likelihood is that he or she does not have a spare UV lamp standing by. The homeowner may know where to go to purchase a replacement lamp, but due to the somewhat specialized nature of UV sales, making a quick trip to the local hardware store or water treatment dealer to pick one up is unlikely.

The first thing the homeowner wants is to stop the alarm from sounding. On most systems, the alarm can be silenced for a short period by mechanical means, such as a button or switch on the controller.

It is up to the homeowner to find out not only what is needed to fix the system, but also where to purchase that product. The Internet is a fantastic tool for today's consumers, but it also can help dealers trying to capture the replacement parts business.

The homeowner is likely to find the model number of the UV system on its data plate. If the homeowner has the original owner's manual, he or she may be even able to find the part number of the lamp needed. A quick Web search is likely to provide a myriad of purchasing opportunities.

#### **New Connections**

Advances in lamp technology and, more specifically, in lamp connectors, also create potential issues and opportunities for both consumers and dealers. All UV lamps have connectors that typically mate with a corresponding connector attached to the system's ballast or controller. Some manufacturers incorporate standard "off-the-shelf" connectors, while others adopt proprietary models.

The rationale for manufacturers to use proprietary connections stems from the desire to ensure that UV systems function and perform per their original design. As more UV systems are sold, lamp manufacturers are realizing that there is a lucrative opportunity in manufacturing proprietary UV lamps.

UV manufacturers want to ensure that their OEM lamps are used in their systems as replacements, because their names and reputations reside with the UV systems. They perform testing, and the systems are not designed or tested with non-OEM aftermarket lamps.

Furthermore, the systems' certifications and warranties become null and void if an aftermarket lamp is used. Even though most UV manufacturers work hard to promote the benefits of using the original OEM lamps, in reality there are hundreds of thousands of aftermarket lamps sold as direct replacements.

The negative aspect for consumers is that their warranties and system

Table 1. Replacement UV Lamp Annuity Calculations	Table 1. Re	eplacement UV	Lamp Annuity	y Calculations
---	-------------	---------------	--------------	----------------

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Totals
System Sales	Units	20	20	20	20	20	20	20	20	20	20	200
	Revenue	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$140,000
Lamp Sales	Units	0	20	40	60	80	100	120	140	160	180	900
	Revenue	\$0	\$2,000	\$4,000	\$6,000	\$8,000	\$10,000	\$12,000	\$14,000	\$16,000	\$18,000	\$90,000
Assumptions: Average UV system cost of \$700 and average UV lamp cost of \$100												

#### Figure 1. Sample UV Control Screens Indicating Lamp Expiration



performance are compromised. The negative aspect for dealers is that they are likely missing out on this replacement lamp opportunity.

#### **Capturing Opportunity**

New advances in lamp connection technology are now available from certain UV manufacturers that eliminate these aftermarket "knockoffs" through strong, defendable intellectual property (patents). For dealers who sell systems with this new technology, the chances of losing out to aftermarket sales and of poorly performing systems or systems operating without electrical certification can be eliminated.

Some modern UV systems incorporate a user-friendly interface. This can include controllers that incorporate full-color, iPod-style screens that provide the homeowner with detailed information on both how and where to purchase replacement lamps.

Figure 1 is an example of technology that now exists in the UV industry. This screen would appear on the UV controller when a lamp is expired. The homeowner would not need to search for a manual or scour the Web to find out where to purchase a UV lamp. The technology shows exactly where to purchase a replacement lamp, helping consumers easily find the replacement parts they need. The level of customization can help the dealer who originally sold the system to capture the annual replacement lamp business from this customer.

Some UV systems incorporate quick response (QR) code technology inside their controllers. These codes work with camera-enabled phones to access a specific Web page. These too can be customized with a dealer's information and can even allow consumers to access videos on how to change a UV lamp or clean a quartz sleeve. QR codes provide modern technology and pertinent information to the homeowner while creating a direct link back to the dealer.

#### **Superior Service & Sales**

The result of these new technologies is that consumers can get accurate, real-time information on how to properly maintain and service their UV equipment. UV systems are typically protecting the homeowner's water source from potentially harmful microorganisms. These are not simple aesthetic issues like dirt in the water or the "off" taste associated with chlorination. Proper maintenance of a UV system is of critical importance to the safety of the water.

These new technologies provide

U.S. Patent No.

5,919,373

the homeowner with a direct link to a service professional who has the knowledge and replacement components to get the system back online as quickly as possible. It allows the modern dealer to fully capitalize on the annuity business that replacement UV lamps provide.

Not only is this virtually guaranteed repeat annual income, it is income that increases every year based on the dealer's cumulative UV system sales. It is easy, high-margin revenue for the dealer, allowing maintenance of direct contact with the homeowner, facilitating goodwill and possible additional sales opportunities.

As water treatment professionals, we are regularly called upon to provide our expertise and ethical advice to consumers about water treatment. As business individuals, we also are tasked with other issues, such as price, revenue, profitability and gross margins. In many cases, we are challenged with being able to cover all of this at once. With the advent of these new technologies, the "razor-blade" UV lamp issue is one area where dealers can truly cover all the bases. *wqp* 

Myron Lupal is president and general manager for Luminor Environmental Inc. Lupal can be reached at mlupal@ luminoruv.com or 519.837.3800.

For more information on this subject write in 1003 on this issue's reader service card.

## **Iron or H<sub>2</sub>S problems?** Charger has your natural solution.



www.chargerwater.com

The Charger IronBreaker<sup>III</sup> Iron and H<sub>2</sub>S filter system uses natural oxidation!

• No Chemicals • No Air-Pumps • No External Venturis •

### Simply...Clean. Clear. Water.

For more information about the IronBreaker<sup>III</sup>, call your local Charger warehouse.



#### Products • Training • Service • Expertise

Illinois: 800-642-4274 • Pennsylvania: 800-327-5572 •
Florida (East): 866-917-7638 • Florida (West): 800-936-7940 •
Fort Worth, Texas: 877-627-9976 • San Antonio, Texas: 877-553-3010 •
Bedford, NH: 866-201-7853 • Nevada: 888-210-8810 •

Write in 756