



New

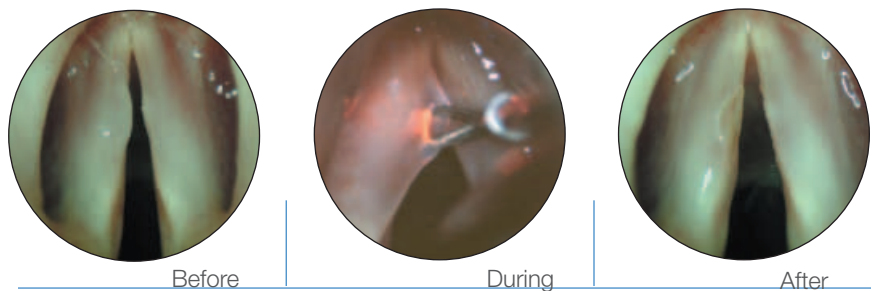
# Digital AcuBlade™

Robotic Laser Microsurgery System

## Precise Capabilities | Simplified Procedures

- Automation yields a 30% reduction in operating time compared to conventional CO<sub>2</sub> microsurgery
- Dramatic simplification of procedures and minimal bleeding lead to a stress-free environment for physicians
- Precision control enables uniform incision or ablation in a single laser scan
- User-defined parameters provide accurate control over incision length, ablation area and penetration depth
- Shaped cutting and enhanced surgical control avoids injury to vocal ligaments
- Reduced thermal damage to surrounding tissue promotes quicker healing

The new Digital AcuBlade™ from Lumenis® represents a leap forward in otolaryngology. This next generation laser delivery system adds robotic capabilities to CO<sub>2</sub> laser microsurgery. AcuBlade combines the SurgiTouch™ computerized laser scanning system with an operating microscope, permitting highly uniform, user-defined control over incision length, ablation area and penetration depth during procedures. With the new Digital AcuBlade system for robotic laser microsurgery, Lumenis continues its commitment to developing innovative products for ENT specialists.



*Microdissection of a vocal cord lesion using AcuBlade*

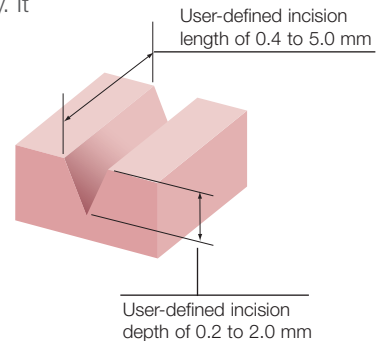
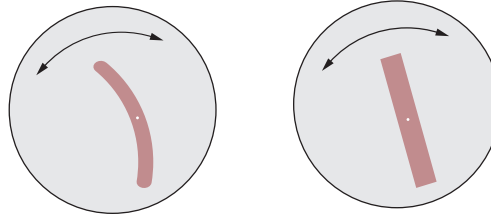
Photos courtesy of Marc Remacle, M.D., PhD.

# Two Operating Modes

## Linear

The Digital AcuBlade's precise linear incision and shaped cutting capabilities enable successful treatment of vocal cord diseases, including nodules, polyps, cysts, and vocal cord paralysis. These procedures can be executed without injuring vocal ligaments, which could result in major changes in a patient's voice. The control available with AcuBlade reduces operating time and ensures patient safety. It can also be used in other specialized otolaryngology procedures, such as Zenker's Diverticulum.

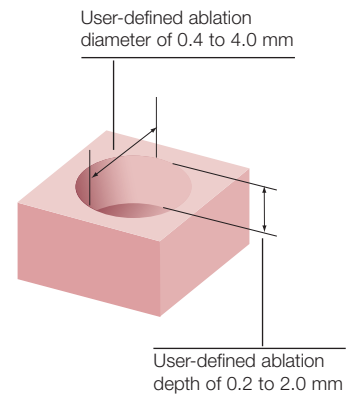
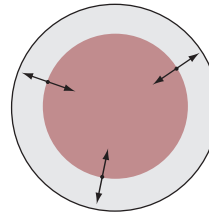
*Linear incision changes length, depth and orientation to match each situation. Incision parameters can be preprogrammed.*



## Circular

With its circular ablation pattern, the Digital AcuBlade treats recurrent respiratory papillomatosis (RRP) and can further debulk other tissues (neoplasia). The superficial ablation removes papillomas with minimal thermal damage in the glottic larynx. Using the AcuBlade for vocal surgery accelerates healing time and diminishes the occurrence of complications.

*Ablation area changes size and depth to match each situation. Ablation parameters can be preprogrammed.*



## Lumenis Global Sales Offices

### Lumenis Inc.

2400 Condensa Street  
Santa Clara, CA 95051 USA  
Tel 408 764 3000  
877 586 3647  
Fax 408 764 3999  
800 505 1133

### Lumenis (GERMANY) GmbH

Dreieich-Dreieichenhain,  
Germany  
Tel + 49 6103 8335 0  
Fax + 49 6103 8335 300

### Lumenis (JAPAN) Co. Ltd.

Tokyo, Japan  
Tel + 81 3 5789 8300  
Fax + 81 3 5789 8310

### Lumenis (CHINA) Ltd.

Beijing, China  
Tel + 86 10 6510 2620  
Fax + 86 10 6510 2621

[www.lumenis.com](http://www.lumenis.com)  
[information@lumenis.com](mailto:information@lumenis.com)

## Digital AcuBlade | specifications

Laser Type:	Carbon Dioxide, 10.6 $\mu\text{m}$ , infrared
Beam Scan Shape:	Linear and Curved incision: 0.4 - 5.0 mm in length (user-defined) Circular: 0.4 to 4.0 mm
Penetration Depth:	0.2 to 2.0 mm (user-defined)
Incision Width:	at 350 mm: 0.24 mm to 4.1 mm at 400 mm: 0.27 mm to 4.6 mm
Thermal Effect:	Less than 50 $\mu\text{m}$ on tissue
Aiming Beam:	Red, 0.65 $\mu\text{m}$ diode laser, parfocal with treatment beam
Micromanipulator:	Digital scanner angular movement
Optical Design:	Mirror-based, achromatic confocal. Fully coaxial with microscope optical axis.
Working Distance:	350 mm and 400 mm
Defocus:	Continuously variable with user-adjustable limiter
Weight:	490 grs.

Digital AcuBlade is only compatible with UltraPulse® Encore™ with SurgiTouch™ laser system.

©2005, the Lumenis group of Companies. All rights reserved. Lumenis, its logo, AcuBlade and SurgiTouch are trademarks or registered trademarks of the Lumenis group of companies.

Caution: U.S. law restricts this device to sale by or on the order of a physician. Product specifications are subject to change without notice.

