Dental
Operating Microscope
RealMicro
VOMS-102D

RealMicro

'Cutting edge 3D Video operation ' leads global trend of surgery

3D HUD(Head-Up Display) method to
provide more comfortable,
safe and precise surgery.

SOMETECH
SINCE 1989

SOMETECH, A Leader In 3D Video Surgery
Leading Global Dental Surgery Trend!

Since 1989, Sometech has tirelessly invested in R&D to introduce world class dental and medical equipments. We firstly introduced oral camera followed by RF surgical devices, video endoscopy, 3D laparoscope, and 3D video microscopy system.

We invented the world's first a new concept 3D digital video microscope system. and released on medical market.

VOMS-102D with its unique patented technologies offers comfortable, safe, and precise dental operating environment.

We invite you the world of perfect full 3D image in high definition.

RealMicro VOMS-102D

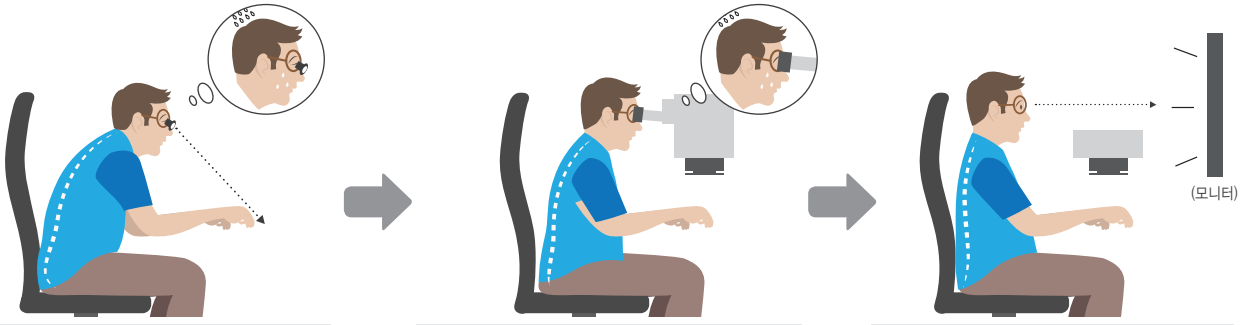
- Shorter and more precise surgery with 3D image in full HD, Distortion free 3D image / Deep depth perception
- Precise and easy operation by HUD(Head–Up Display)
- Remote from the patient's mouth (Avoid the risk of infection from various respiratory diseases)
- Excellent for clinical education by short learning curve

Applications Available to the all dental operations. (Implant / Dental Prosthetics / Endodontic / Oral Maxillofacial / Orthodontics.)

A New Trend In Global Dental Surgery
HUD (Head-Up Display) 3D Dental Video Surgery Microscope!

In the past, Loupe or surgical microscopy was used.

Currently, 3D surgery using high-resolution 3D video microscope is being developed to recognize the depth of the lesion through the monitor and to further refine and precise surgery



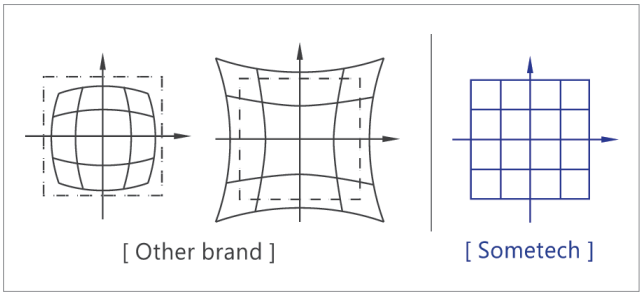
Loupe surgery posture
(Inconvenience to weight of loupe during long-time surgical.
There is a high possibility of neck and waist disc due to the posture to bend the waist.)

Eyepiece surgery microscope posture
(Prolonged surgery with lens and eye contact causes eye disease and headache.)

3D video surgical microscope posture
(Neck movement is free/
Free from neck, waist disc)

〈 Development of Dental Surgery Microscope and Improvement of Surgery 〉

Advantages



Distortion free

Sometech`s patented lens can minimize the chromatic aberration. Surgeons are relieved from eye strain, dizziness, and headache caused by distortion.

(* Actual image of Implantology)

[Eyepiece type]

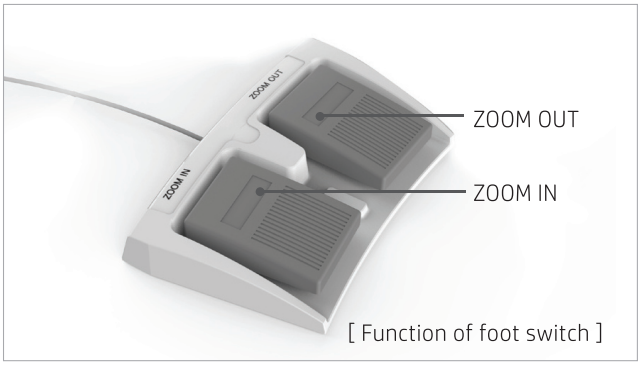
[Head-up type]

Unparalleled depth of focus and wider field of view

Sometech`s patented image processing tech nology provides crystal clear images not only for the immediate but also the surrounding area.

Easy and precise movement

Ergonomic design allows easy and precise movement. Dentists can place the camera to focus on surgical area easily.



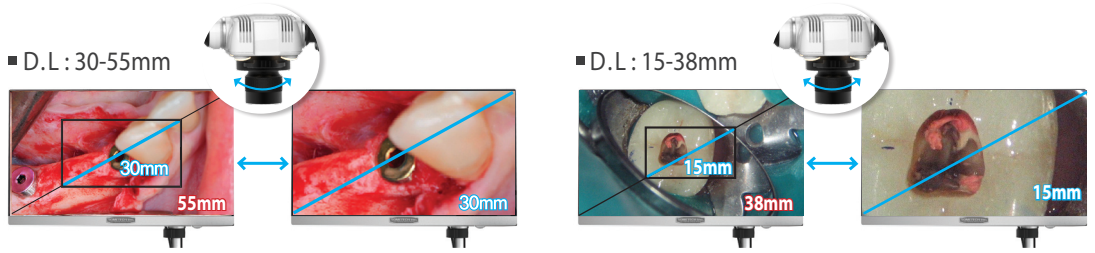
[Function of foot switch]

Convenient digital zoom by footswitch up to 3.0

Digital zoom can be operated either by GUI in main unit or footswitch for maximum conve nience during dental surgery and treatments.

Simple and easy 3D calibration

Adjustable optical zooming up two times by simple twist of turret



Lens magnification

Distance and monitor size	Lens magnification based on D.L (Diagonal length)					
Diagonal length	30-55mm		19-38mm (Option)		15-38mm (Option)	
Working Distance	W.D : 290mm		W.D : 220mm		W.D : 220mm	
27″Monitor	22x	12x	36x	18x	45x	18x
55″Monitor	46x	25x	73x	36x	93x	36x
	[Standard]					

* Magnification can very by monitor size

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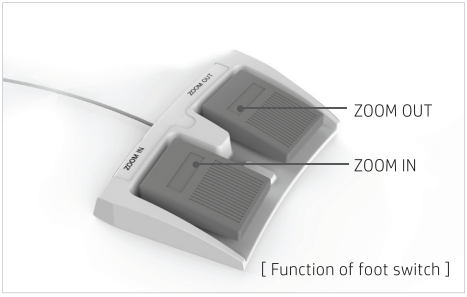
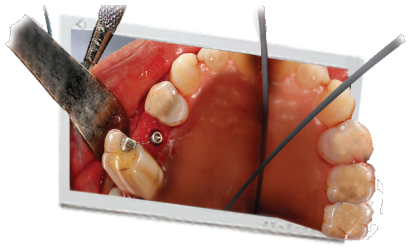
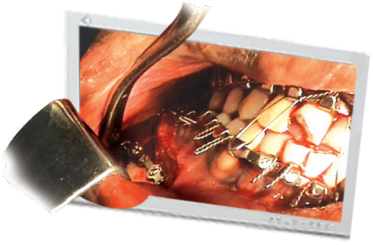


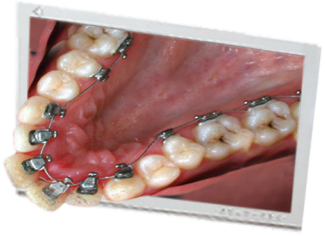
[Function of foot switch]

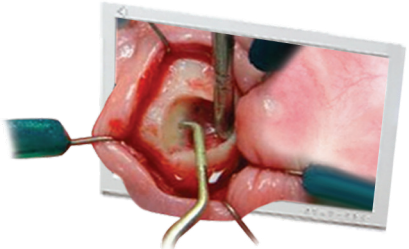
Simple and easy 3D calibration

Applications


Implant


Oral & Maxillofacial


Orthodontic


Endodontic

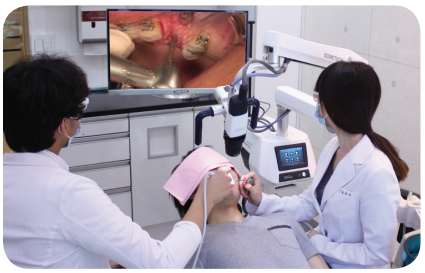
* Other than the above applications, Sometech`s RealMicro VOMS-101D is applicable for all other dental surgeries and treatments.

Operating Simulator System for Educational Purpose

Attached to an educational operating simulator system at dental schools!

This system allows for a more precise and safer clinical training, and educational and surgical equipment can be purchased at reasonable prices.

Attached to an educational operating simulator system



▲ Clinical training

Acquisition of clinical know-how through education on surgical simulator

▲ Safe operation

· 3D images are used to offer increased depth and broader view for ease of operation.

· Image recording function can provide non-distorted images. (Recording device option)

■ Short learning curve

3D images with broad view can easily identify depth, minimizing the learning curve and time required for operation.

■ Image recording function

Full – HD video recording is possible without distortion, and many trainees can learn an effective surgical skill by supporting the video for 3D surgery.

■ Reasonable price

SOMETECH' s unique patent technology enables video to be transmitted directly to the monitor from a com-pact, non-deformative 3D microscopic camera, eliminating the need for a separate optics.

■ Utilization at conferences and other education programs

▲ Small group case studies

▲ Conferences, seminars, live surgery watch

▲ Case presentation within groups (hospitals, departments)

3D SURGICAL ONLINE
www.3dsurgicalonline.com

Connecting surgeons worldwide in 3D

▲ Capture the 3D surgical contents using 3D microscope.

Client Center

▲ Edit VOD contents

▲ Lecture surgery commentary

▲ World-wide-on-line broadcasting through stable CDN network.

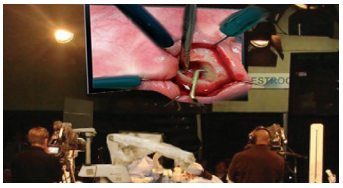
Joint business between hospital and 3DSurgicalonline

VOD

◆ **VOD contents**

VOD service to watch surgical contents in various applications.

LIVE

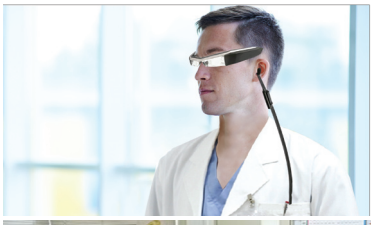


◆ **Live Surgery**

Online broadcasting platform allows streaming of real-time live surgery images to anywhere, anytime in the world.

User group service

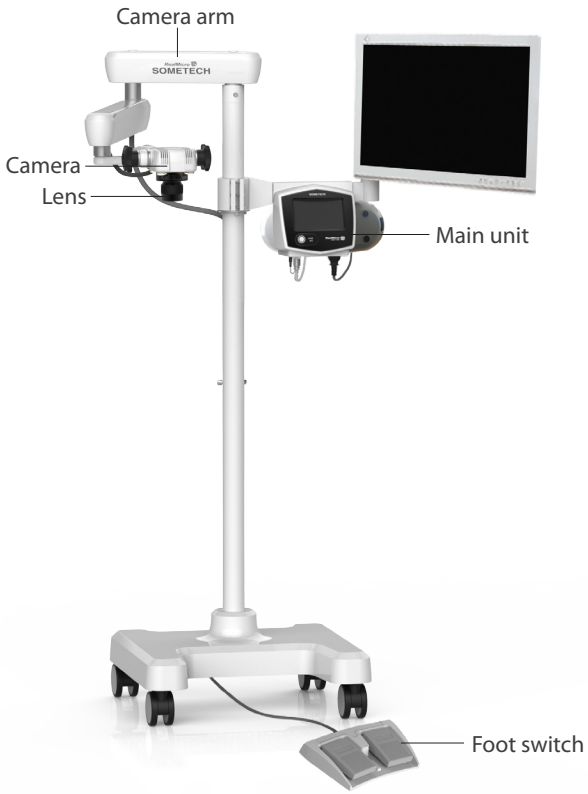
GROUP



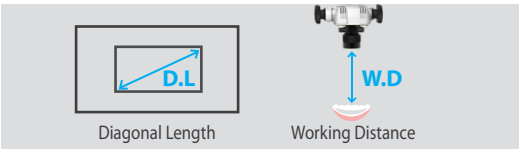
◆ **Group**

Hospitals, medical schools, surgical societies are supplied with online platform to share information among colleagues, students/faculties, and members for mentoring surgeries, surgical case studies, and online seminars.

Detail view



Specification

Main Unit	Dimension		180mm(W) x 160mm(D) x 80mm(H)
	CCU	Power	100-240VAC / 50-60Hz
		3D Muxing format	Side by side
		Binocular digital zoom control	1.0x~3.0x (Step 0.1x)
	Light source	LED	White LED with UV cut filter
		Color temperature	5000°K
		Intensity	0(off)~10(max), brighter than xenon 300W light source
		Life Time	60,000 hours
3D Camera	Resolution		Full-HD(1920x1080) 16 : 9 Ratio, HDMI connector type
	Digital zoom		1.0x~3.0x
Lens	 Diagonal Length Working Distance **[Standard]**  D.L=30-55mm (W.D:290mm) **[Option]**  D.L=19-38mm (W.D:220mm) **[Option]**  D.L=15-38mm (W.D:220mm)		
3D Monitor (option)	Resolution		Full-HD(1920x1080)

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SOMETECH inc.