





Multipurpose Intraoral Disease Detector

Autofocus Dental Camera with Mouse

# Inspire





## Features of Inspire

3in1

Camera provides more than 1 way to detect intraoral diseases 3 in 1 feature: Dental camera, Transillumination, and Flourescent technology all in one device.

Multi function







Image quality



Macro to infinity



**Auto-focus** 



FHD image support



Black&White function
Capture and save X-ray film image to PC



Dental handpiece design

Most familiar design for dentists.



Metal body case

Metal body case increases product durability.



Slim head size

Slim head design makes it easier to approach the oral cavity with camera.



Retraction head design

Retract patient's tongue and cheek to get better image.



**Dual capture buttons** 

Capture buttons are placed on the top and bottom side of camera to make for an easy capture in any position



**LED indicators** 

LED indicators show the device status and mode.



**Mouse function** 

Built-in mouse function for user convenience.



**Zoom function** 

Ability to enlarge the image with zoom feature to support user convenience.



Support twain driver

Support twain driver allows for use in almost any dental imaging software.



Software compatibility

Able to be used with almost any dental imaging software in the market.



**Detachable USB cable** 

Detachable USB cable makes it easy to move the camera to other dental chairs.







### **Macro to Infinity**

Camera is able to focus from macro mode (close) to infinity that includes a full arch and face shot.





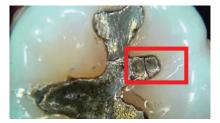




### **FHD** image support

The device shows FHD (1080p) in live image supported by a 5M sensor.







Full HD

Original image HD



#### **Color impressions**

Adjust the color impression on camera to fit different monitors or screen.







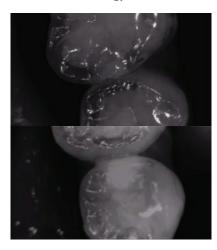
Same color chart image with \*xrite

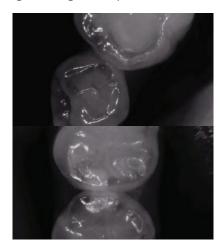


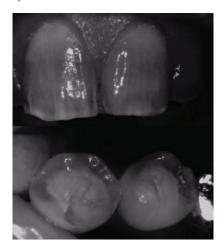




- · This camera mode provides the ability to examine the inside of enamel by use of a high bio-transparency light source.
- · Useful for detecting proximal caries and micro cracks.
- · Advanced technology that allows for an image showing enamel penetration without x-ray radiation.



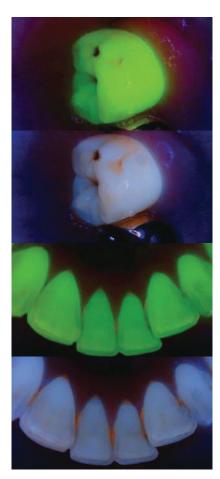


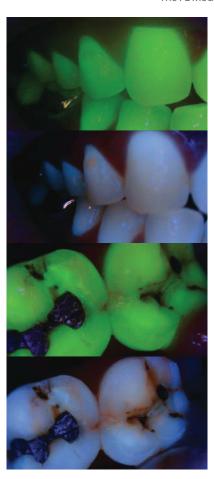


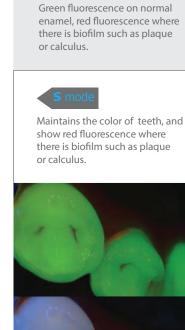


- · Disease detection technology using natural fluorescence that occurs under specific illumination.
- The FL mode provides simple ways to detect disease: User will see green fluorescence on normal enamel and red fluorescence where there is bio-film such as plaque or calculus.
- $\cdot$  Florescence loss where there is early caries (white spot).
- · The FL mode provides the ability to detect early caries, tooth crack, and secondary caries.
- $\cdot$  The FL mode is able to detect residual composite resin.

· The FL Mode supports 2 mode types: F mode and S mode.











#### Limits on each detection mode

Each disease detection method has advantages as well as has limits.

MI mode

Macro to Infinity
Dental Camera mode

Hard to detect early stage caries.

TR mode
Transillumination mode

No quantitative measurement is produced

Subjective interpretation of whether a dark area on the gray-scale images is caries or a dental abnomaly leads to many false positives

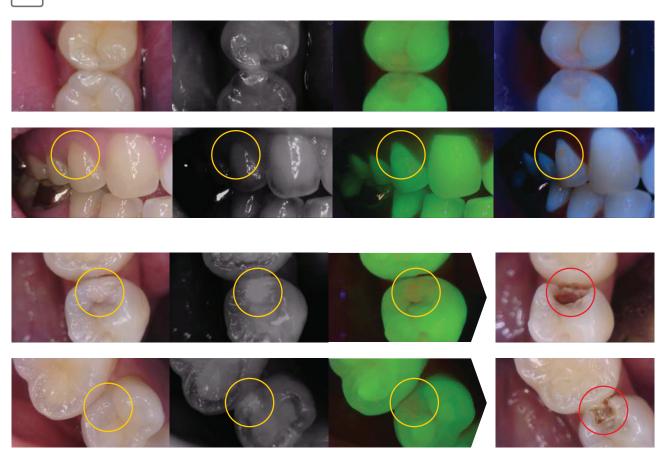
**FL mode** Fluorescence mode

Bacterial porphyrins, stains, tartar, food debris, and prophylaxis paste all fluoresce under the wavelengths used in these device, whether or not caries is presents, they can lead to false positive readings and unnecessary treatment. In addition,

Streptococcus mutans and lactobacilli, the key bacterial initiators of caries, do not have porphyrins that fluoresce when exposed to the light emitted by the device.

**Inspire** takes advantages of each disease detection mode (MI, TR, FL), and to overcome limits of each detection mode it provide 3 in 1 shooting for comparative analysis.

### **3in1** 3in1 shooting example.

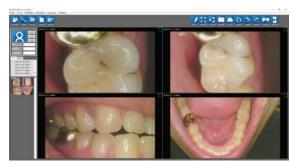


-IC-WHW01 -IC-DCAM70 -IC-DCAU71 -IC-EZAM80 -IC-EZAU81 -IC-WHCD100 -CL-DLT30 -CL-DL10 -CL-DC20 -CL-AT24 -AL-DF10 -AL-DFA20



### **Zoom function**

Ability to enlarge the image with zoom feature to support user convenience.





 $<sup>^{\</sup>ast}$  Need to install "Zoom function" program on the PC.



### **Software compatibility**

Able to be used with almost any dental imaging software in the market.





### 1 Specification

Model	IC-WHCD100	
Camera	Power source	5V (USB power)
	Size	Approx. 129 x 21.5 x 32 mm
	Weight	Approx. 61g (2.2oz)
	Sensor type	5M CMOS sensor
	Lighting	LED
	Focusing	Macro to infinity
	Focus range	
USB cable	cable length	Approx. 3 M (9.8ft)



### 2 Recommended PC system

PC system:	3.3GHz CPU, 4GB RAM	
os:	Windows7, 10	
USB port:	USB 2.0	