



**VideoDental**  
CONCEPTS

PRESENTS



**QuickRay**  
Direct USB



# A Video Dental, Inc. Product Line Established in 1999



**CLINICAL RESEARCH ASSOCIATES NEWSLETTER®**  
23rd YEAR AS THE CLINICIAN'S GUIDE TO DENTAL PRODUCTS & TECHNIQUES

Volume 23, Issue 9

September 1999

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## DIGITAL RADIOGRAPHS, STATE-OF-ART

The move from silver halide film to digital images is a paradigm shift in radiographic information recording & storing. Clinicians realize shift to electronic technology is inevitable, but timing is important. Critical questions are:







- (1) What digital options are available & how do they differ?
- (2) How do digital x-ray images compare with conventional film?
- (3) Is digital technology now sufficiently developed to *replace* conventional film?
- (4) Is the industry able to provide support & service necessary for a smooth transition from film to digital technology?
- (5) How do current digital systems compare to each other?

This report characterizes 3 methods & 10 products that can be used to produce digital images.

**IN  
THIS  
ISSUE:**

**DIGITAL  
RADIOGRAPHS,**  
State-of-art  
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### 1. WHAT DIGITAL OPTIONS ARE AVAILABLE & HOW DO THEY DIFFER?

CCD / CMOS SENSOR		computer	
	<b>CDR</b> Schick Technologies 718-937-5765 1 station: \$7,995 ‡ (this cost includes 2 sensors) 3 stations: \$8,995 Per sensor: \$3,000-\$5,500		<b>QUICKRAY DSX 730</b> Video Dental Concepts 904-672-0450 1 station: \$7,495 ‡ 3 stations: \$11,195 Per sensor: \$3,995
	<b>DEXIS</b> Provision Dental Systems 650-858-1288 1 station: \$9,995 ‡ 3 stations: \$11,790 Per sensor: \$5,995		<b>RVGui</b> TRExtrophy 203-207-4545 1 station: \$8,995 ‡ (with #1 size sensor) 3 stations: \$11,585 Per sensor: \$5,995-\$6,995
	<b>GX-S</b> Dentsply / Gendex 847-640-4800 1 station: \$7,475 ‡ 3 stations: \$11,375 Per sensor: \$4,400		<b>SENS-A-RAY 2000</b> Dent-X 914-592-6665 1 station: \$4,600 ‡ 3 stations: \$8,290 Per sensor: \$2,900-\$3,200

1. Image instantly on screen to view or see if remake needed.
2. Instant image extremely useful for endo & implant surgery.
3. No darkroom or chemicals required.
4. No film.
5. Initial cost.
6. Rapidly changing technology.
7. Sensor is fragile & expensive.
8. Sensor absolutely unbendable.
9. Active area for image is smaller than sensor's overall dimensions.
10. Must learn new technique.
11. Without panoramic capability, it cannot completely replace conventional radiographs.
12. Computer manipulation required.
13. Requires computer in operatory.
14. Future image access requires current storage & retrieval systems.
15. Uses substantial computer memory & affects backup.

‡ 1 station cost includes all items in product photo. Three station cost does not include extra sensors, instead clinicians transport one sensor between operatories.

"CLINICAL SUCCESS IS THE FINAL TEST."

Today Video Dental Brings the

**NEW AND IMPROVED!!!**





## **QUICKRAY USB is a breakthrough in digital X-rays.**

The **embedded CMOS, Fiber Optics and electronics** are located in the sensor case so there is no controller box!

Simply connect the sensor cable via its USB connector to the computer and you are ready to take X-rays!



The **QUICKRAY** sensor *is easier to position.*

It has **rounded corners** and smooth edges for the patient's comfort.

Available in size 1 and 2, the QUICKRAY sensor gives you **high resolution** images and great clarity!



The **QUICKRAY** sensor *is easier to maintain.*

Its **cable is replaceable**, drastically cutting on maintaining costs.

Inside its **tough Housing**, built-in **Shock Absorbers** protect the sensor.



## Unique Features

- Direct USB Connection - No Conversion Boxes
- High Resolution with Great Image Quality
- CMOS Technology with Rounded Corners
- Replaceable Cables
- Internal Shock Absorbers
- Tough Housing





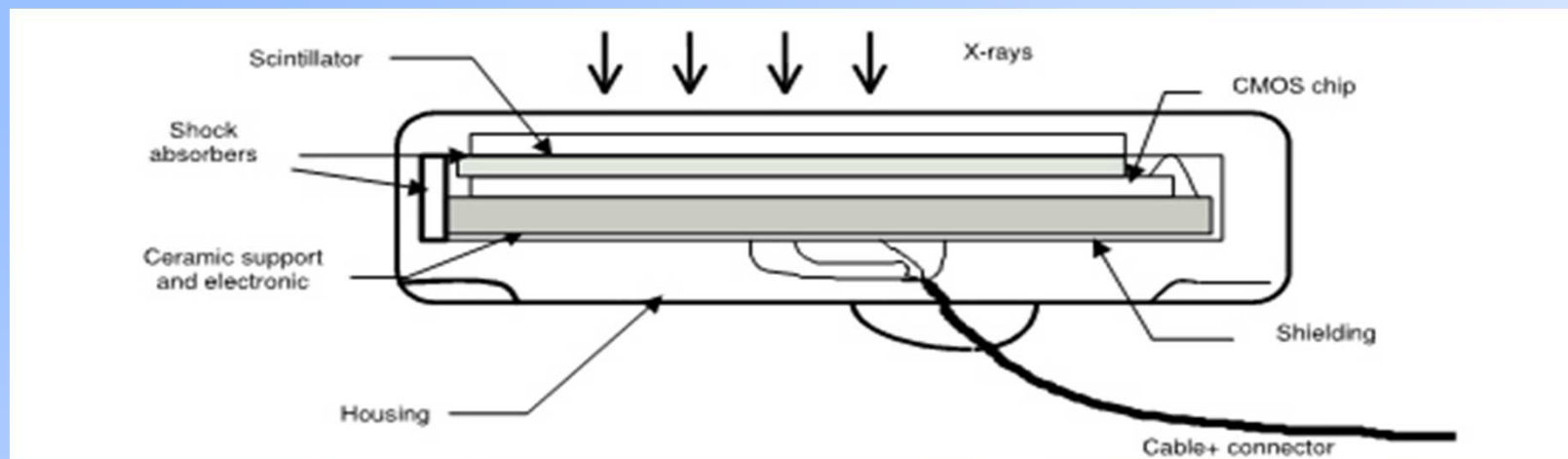
## SPECIFICATIONS

Parameters	Size 1 600 mm <sup>2</sup>	Size 2 900 mm <sup>2</sup>
Resolution	26.3 Line Pairs	
Pixel Size	19 $\mu\text{m}$ x 19 $\mu\text{m}$	
Pixel Pitch	19 $\mu\text{m}$ in both directions	
Area Array Size	19.95 mm x 30.02 mm	36.00 mm x 25.99 mm
Number of Lines	1580	1896
Number of Columns	1050	1368
Cut Corners (front side)	1030 pixels	235 pixels
Cut Corners (back side)	53 pixels	137 pixels



## Sensor Architecture:

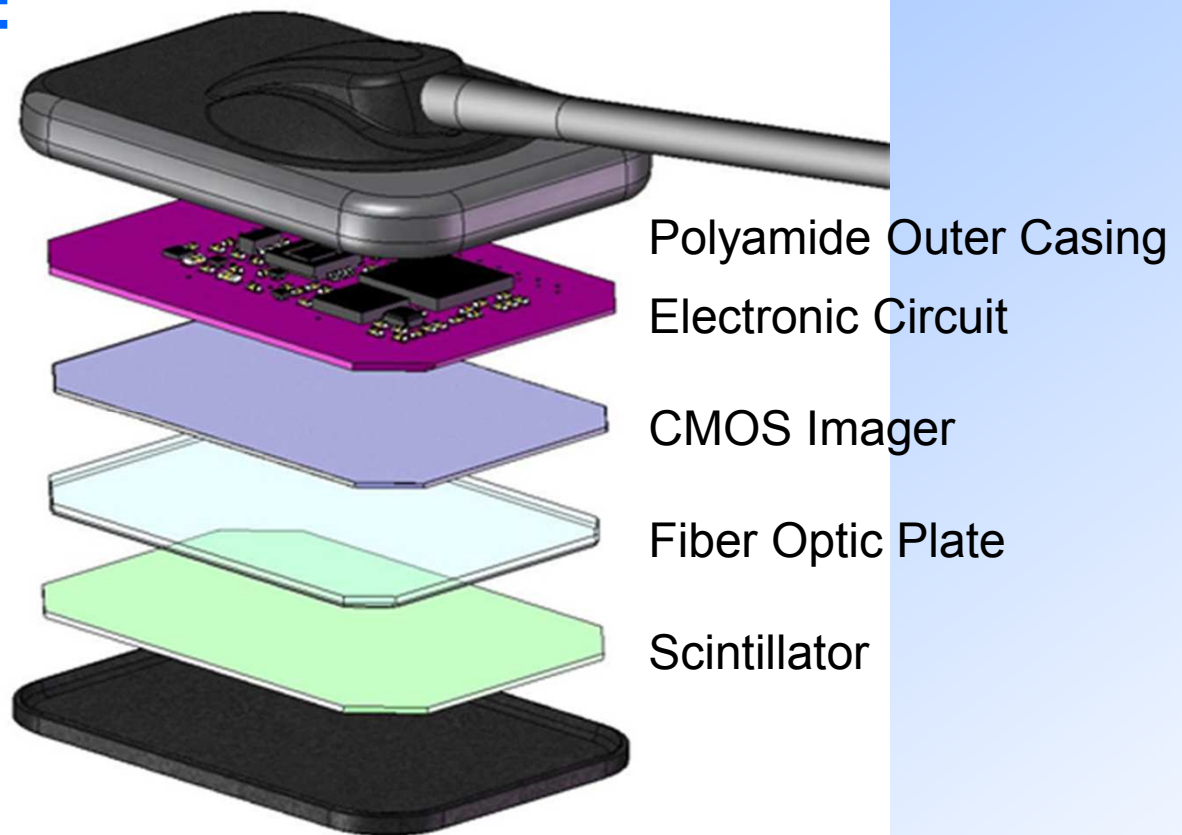
- The Intraoral sensor includes the following internal components:
- CMOS image sensor chip
- CsI Scintillator
- Electronic circuits
- Replaceable cable with ergonomically placed connector
- Shielding foils and shock absorbers



# QuickRay

Direct USB

## Sensor Architecture:





## Sensor Architecture:

- **CABLE**
  - Cable outer material is polyurethane
  - Cable diameter: 3.5 mm +/- 0.1 mm
  - Cable Length: 3m +0 / -6 cm
- **HOUSING**
  - Housing material is polyamide : PA 12-30 FV Grilamid LV3H Black
  - **The Cable and Housing are replaced each time the sensor is refurbished, resulting in a increased sensor life.**





## Sensor Connectivity:

- The sensor operates in USB 2.0 High Speed mode
- It is also able to operate in USB 2.0 Full Speed mode in case the USB port is not compliant with USB 2.0 High Speed mode.

## System Performance:

Time to view the x-ray is 3 seconds in USB 2.0 High Speed Mode, ***the fastest in the market!***





## Mechanical Dimensions for QuickRay Size 1 Sensor :



All measurements are in millimeters



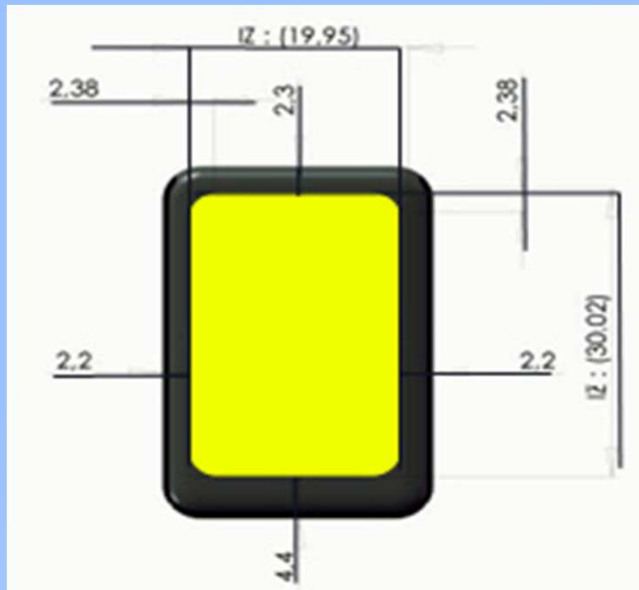
## Mechanical Dimensions for QuickRay Size 2 Sensor :



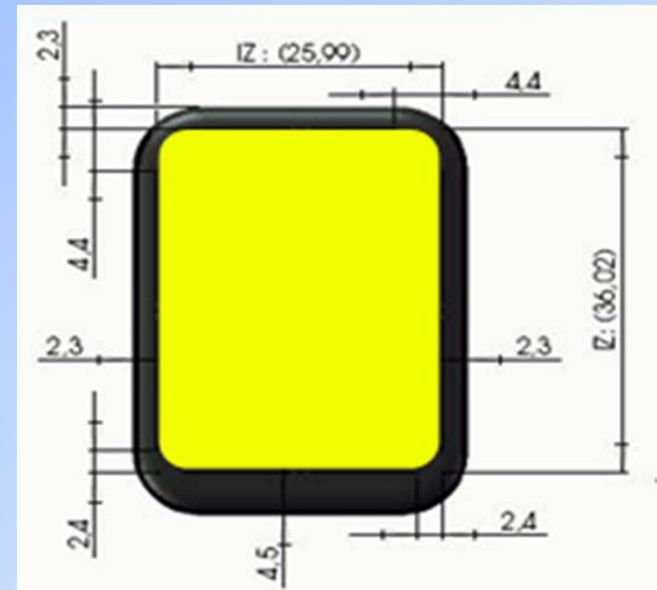
All measurements are in millimeters



## Image Sensing Area:



**Actual Image Area**  
**Sensor Size 1**



**Actual Image Area**  
**Sensor Size 2**

All measurements are in millimeters



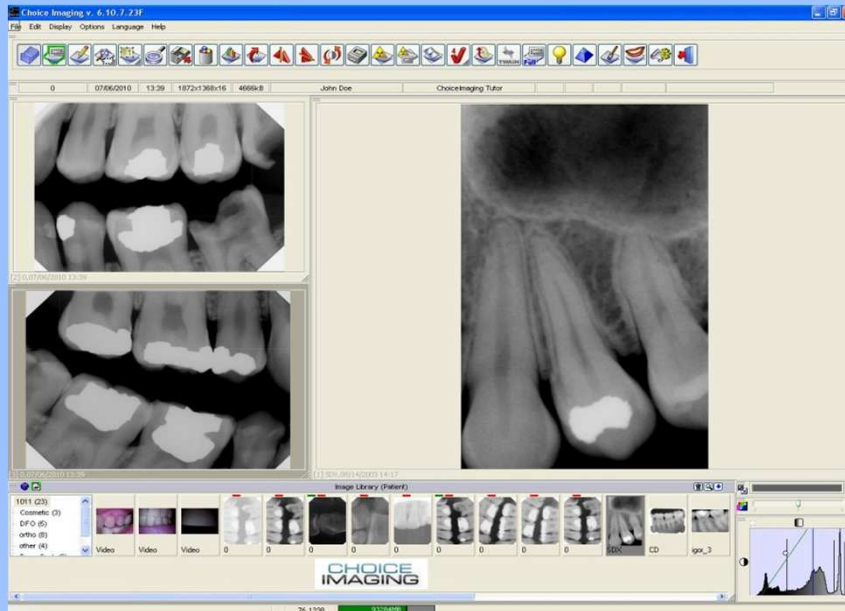
## Warranty:

- The QUICKRAY sensors come with a 24-month manufacturer's warranty
- Beyond the initial warranty period, VDC is offering a 5-year, sensor replacement warranty program.
- The Sensor cable can be replaced for a cost of \$1500, including new housing, ***regardless of the age of the sensor.***

# QuickRay

Direct USB

## Imaging Software:



**CHOICE  
IMAGING**

- Leading Dental Imaging Software, 11,000 licenses sold worldwide
- Compatible with all Dental Digital Sensors and all Practice Management Software
- Advanced Image Review and Image Processing features
- Fully customizable to suit user preferences
- QuickRay Direct USB is ALSO compatible with Apteryx software:

# QuickRay

Direct USB



Raw Images with the QuickRay Direct USB Sensor and Apteryx Software

# QuickRay

Direct USB

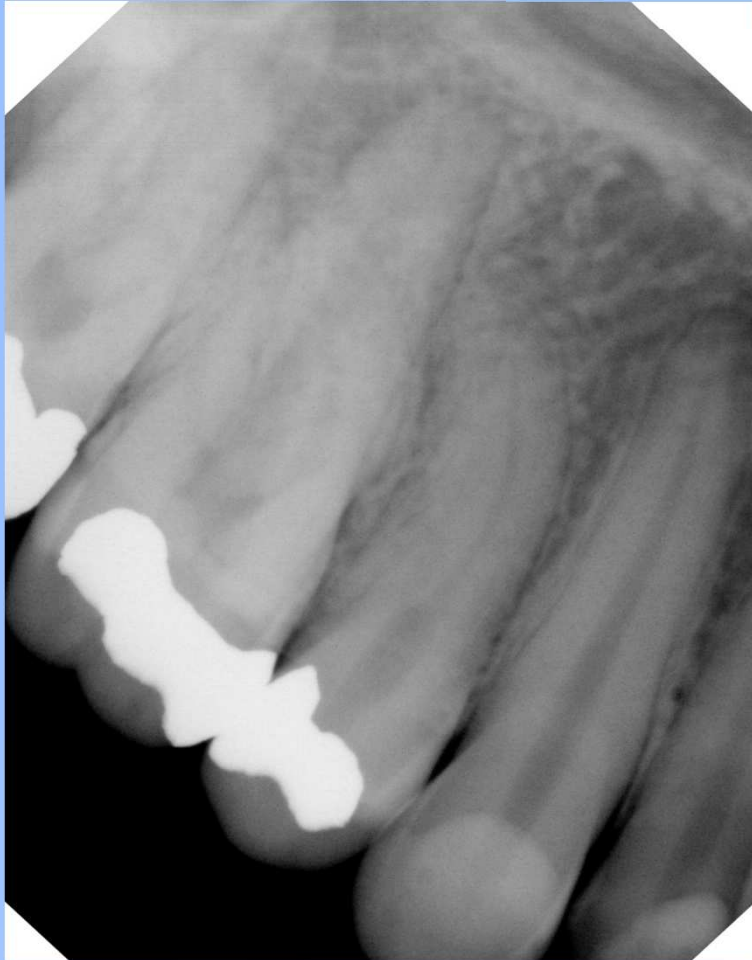


Raw Images with the QuickRay Direct USB Sensor and Apteryx Software

[www.videodental.com](http://www.videodental.com)

# QuickRay

Direct USB



Raw Images with the QuickRay Direct USB Sensor and Aptyx Software

# QuickRay

Direct USB



Raw Images with the QuickRay Direct USB Sensor and Apteryx Software



Purchase from a specialty company that has been in business, in the same location, for over 20 years.

For further information on these sensors and the rest of our imaging line:

Please call us at **1-800-323-2690** to speak with one of our imaging specialists, or

visit us at [www.videodental.com](http://www.videodental.com).