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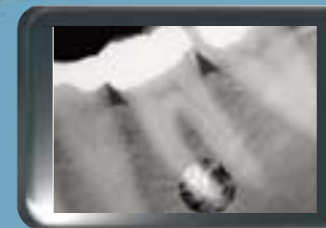
The Schick Digital Imaging System

the smarter choice
for all your imaging needs

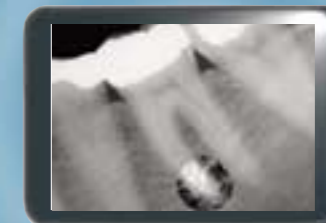




Schick CDR SDX
intraoral X-ray unit



Schick CDR®
cabled sensor



Schick CDR® Wireless
cable-free sensor



Schick CDRPan®
Digital retrofit kit



Schick CDRPanX®
Completely digital x-ray unit



All products integrate with practice management systems for a completely digital practice.



Schick USBCam™
Intraoral camera



INTRAORAL X-RAY SOURCE
INTRAORAL RADIOGRAPHY
PANORAMIC RADIOGRAPHY
THE INTEGRATED PRACTICE
INTRAORAL PHOTOGRAPHY

THE SMARTER CHOICE

THOUSANDS OF DENTISTS around the world move into the new age of digital imaging with Schick Technologies. Each of our totally integrated, high quality and state-of-the-art products, which together form 'The Schick Digital Imaging System', has many innovative features. The unique CMOS-Active Pixel Sensors, used in Schick CDR® to generate razor-sharp intraoral x-ray images, is just one of the reasons why The Schick Digital Imaging System is – the smarter choice.

The Schick Digital Imaging System

- For digital intraoral radiography there is the Schick CDR intraoral system, which can use either traditional cabled sensors or the unique cable-free Schick CDR Wireless sensors. There is also an intraoral X-ray source designed especially for use with the system called Schick CDR SDX.
- For digital panoramic radiography there is the Schick CDR panoramic system which consists of the Schick CDRPan™ that retrofits to existing film-based panoramic machines and the Schick CDRPanX, a totally digital panoramic machine.
- For digital intraoral photography there is the Schick USBCam™ camera.

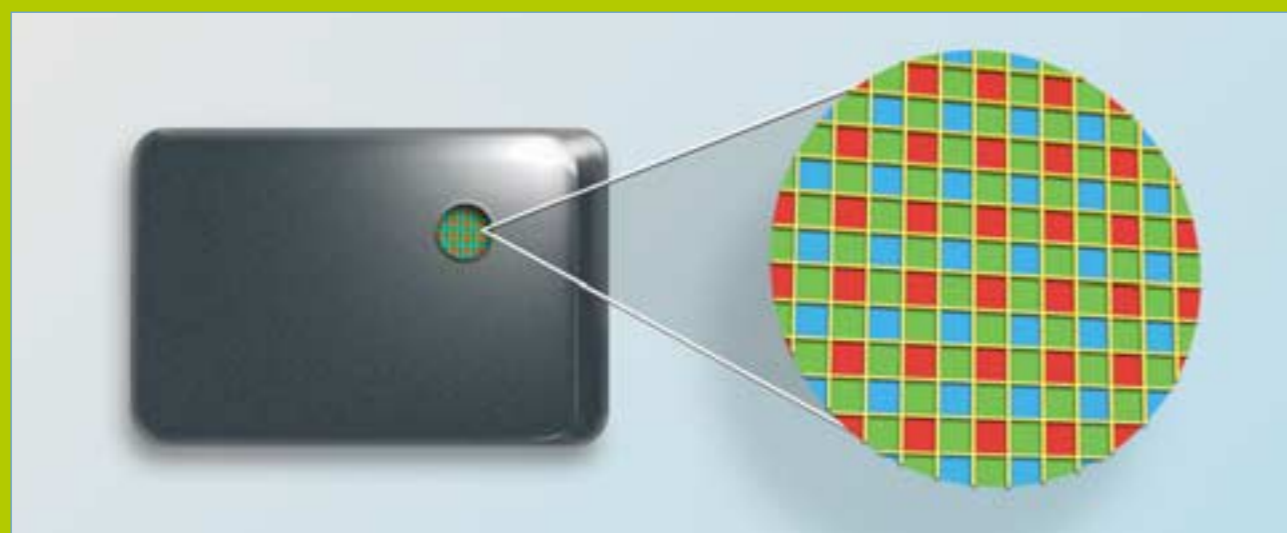
Whether you are looking at installing digital imaging in your practice for the first time, or already employ some of the new technology and wish to go further, Schick Technologies can provide all the imaging solutions you need, photographic or radiographic, intraoral or panoramic, now and into the future.



UNIQUE IMAGE CAPTURE

Critical to any digital X-ray system is the performance of the sensor used for image capture. Compared to other digital systems the Schick CDR intraoral sensor is unique and so it is worth looking at the technologies in order to help you make an informed decision.

Instead of using film to capture X-rays, digital sensors use tiny silicon chip-based pixels arranged in rows and columns called an array. Depending on the quantity of X-rays captured an electrical charge is produced which is processed and fed into a computer to produce the image. How the pixel charge is processed varies according to the type of sensor- there are two types in common use, those based on CCD technology and those based on CMOS technology.



CCD sensors

Invented in the 1960's, CCDs use circuitry surrounding the sensor to transport, row by row, the charge in each pixel to one corner of the array where it is processed. They produce high quality images but they can also have their problems. If just one pixel in a row is damaged by, for example, excessive radiation, all the charge in that row is lost causing 'fading' of the image. Charge can also leak from pixels causing abnormal 'blooming' of the image.

CMOS Passive-Pixel Sensors

CMOS sensors, also invented in the 1960's, have circuitry within each pixel which allows the charge to be read, pixel by pixel, rather than row by row. This technology has several advantages over CCDs and eliminates some of their problems, but the first generation produced, called CMOS Passive-Pixel Sensors, suffer from high noise which affects image quality.

CMOS Active-Pixel Sensors - unique to Schick

The next and latest generation of CMOS sensors, called CMOS Active-Pixel Sensors, employ circuitry at each pixel which cancels out the noise. This and other improvements mean that today CMOS-APS sensors give images of equal or better quality than CCDs and are recognised by many as the image capture technology of choice for numerous applications. For digital radiography in dentistry, Schick is the ONLY company licensed to use CMOS-APS. All other CMOS-based digital systems have to use CMOS Passive-Pixel Sensors.

PRACTICE AND PATIENT BENEFITS

Once our unique CMOS-APS intraoral sensors have captured the image, they are generated automatically by computer ready for diagnosis, where they can also be edited and used via our powerful, yet easy to learn and easy to use software. Sensor and software working together, give Schick CDR many benefits over film and/or other digital systems.

High quality, consistent images

Schick CDR produces high quality, high resolution images equal to or better than film or CCD-based systems. The quality is also more consistent than film as the sensors are rigid and there are no processing variations.

Greatly reduced radiation exposure

Pixels are far more efficient X-ray detectors than film, so our sensors require 80 to 90% less radiation compared to D Speed Film. For medico-legal reasons the kVp, mA and exposure time are automatically recorded upon each exposure. Virtually all X-ray tubes can act as the source for Schick CDR or you can choose the especially designed Schick CDR SDX.

Unique 'AutoTake' image capture

The image from each shot appears on screen within 3 seconds. The unique AutoTake feature allows you to take up to 21 images without having to go back to the PC. There is no time limit between shots, the system waits until you are ready. This enables you to take the time needed to position the sensor for different views without having to worry about the system 'timing-out'. AutoTake also automatically save the date and orientates the image correctly. Any underexposed images can be corrected easily using the software.

Faster, easier and cheaper than film

The time saved by not developing film can increase patient throughput. Treatment plans for example, can be finalised and agreed on the first visit. Staff time is also saved and there are no harsh chemicals to handle, it's better for the environment too. Film and chemical costs are eliminated and there is no need for a darkroom.

A more powerful diagnostic tool

Diagnostic accuracy with Schick CDR images is equal to or slightly better than a perfectly exposed and developed film. Images can also be enlarged, enhanced and colourised to further aid diagnosis. Uniquely with Schick CDR you can revert back to the original image at any time. It is also possible to take accurate calibrated measurements, useful for procedures such as implantology.



PRACTICE AND PATIENT BENEFITS

Software links to patient records

The Schick CDR software integrates with nearly all practice management systems. Radiographs are automatically linked to the patient's records, they can be annotated with clinical comments, saved onto the system and quickly accessed again. Other capabilities include incorporating the images into reports, e-mailing and archival storage.

Share images externally via DICOM

CDR DICOM software for Windows allows images to be shared externally with anyone even if they do not have the software. DICOM is an international interconnectivity standard which allows medical and dental images to be transferred between healthcare professionals and authorities, aiding diagnostic and treatment referrals and reimbursements.

Images can be viewed anywhere

To enable radiographs to be viewed in more than one room within a practice, Schick CDR works with server based networks such as Novell®, Windows NT® and Unix/Linux.

Can be used in multi-surgery practices

Schick CDR intraoral equipment comes as a single-user system on a cart for easy transport to other surgeries in the practice. If you wish to have a facility in every surgery, there is also a multi-user system. The single-user system can be upgraded to multi-user at any time.



A very reliable, long-lasting system

Compared to CCD-based sensors, CMOS-APS sensor technology is radiation 'hard' and more reliable, which may also improve their overall lifespan. Since digital radiography is such an integral part of everyday practice, the reliability of the system is an important consideration.

For intraoral and panoramic radiographic imagery

As well as the Schick CDR intraoral system and the Schick CDR SDX intraoral X-ray source, there is a Schick CDR system for panoramic imaging. For intraoral photography there is the Schick USBCam. Together they form 'The Schick Digital Imaging System' – let's consider each of the products in turn.



FOR INTRAORAL RADIOGRAPHY

With the Schick CDR intraoral solutions you can take the same types of intraoral radiographs as you can with film-based systems. Uniquely, you can choose from two sensor solutions:



Types of sensor

Size 0	31 x 22mm
Size 1	37 x 24mm
Size 2	43 x 30mm

Schick CDR® cabled sensors

- A cable attached to the sensor transfers data from the mouth to the computer.
- To give you plenty of flexibility in positioning the computer where required, the sensor has a 2m long cable which connects to a small remote module and it is this which connects via a 5m long USB cable to the computer.
- Any PC or laptop can be used which meets certain minimum requirements. If you wish to use the system in different rooms all you need is to have a PC in each room attached to a remote module and then you can simply take the sensor between rooms and plug into the PC's remote module.
- Three sizes of sensor are available, size 0, size 1 and size 2, all with a thickness of less than 5mm so they are comfortable in the mouth.



Schick CDR Wireless™ cable-free sensors

- The world's first and only intraoral sensor without a cable.
- Instead of a cable, radio waves transmit images from the mouth to the computer via a Base Station. It is the Base Station which is attached to the PC.
- No cable means greater freedom and flexibility at chairside, sensor placement is easier for you and more comfortable for the patient, and it's more convenient to take care of.
- There are two sizes of sensor, size 1 and size 2.
- There is no need to download, erase or reset the sensor between shots.
- Schick CDR Wireless is the ultimate intraoral digital X-ray system for the state-of-the-art practice.



FOR INTRAORAL RADIOGRAPHY

Schick CDR® sensor holder accessories

Proper positioning of the sensors within the mouth is key to obtaining quality images. For correct and comfortable placement there are a range of accessories available:

Single-use sheaths and sensor holders

- Two sizes of plastic sheath are available for size 1 and size 2 sensors, into which the appropriate sensor is placed.
- Depending on the type of radiograph desired, one of five sensor holders is selected and attached, via its 'peel and stick' adhesive, to the sheath containing the sensor.
- For fast identification of the different sensor holders, each of the five is colour-coded.
- Both sheaths and holders are single-use and disposable for improved infection control and quick clean up.

Positioning arms and rings

- The holder with its sensor and sheath attached is held in the mouth using a positioning arm and ring.
- Different arms and rings are available to suit the type of radiograph to be taken, these follow the same colour-coding as the sensor holders.

Schick CDR SDX intraoral X-ray source



- An X-ray unit designed especially as the X-ray source for use with Schick CDR intraoral sensors but it can also be used with existing film-based technology.
- Schick CDR cabled sensors plug directly into the unit. For use with Schick CDR Wireless sensors, the Schick CDR SDX has a built-in Antenna and Receiver.
- Uses constant voltage technology to generate continuous and steady exposures unlike traditional X-ray units where the electric current flows in only one way.
- Microprocessor-controlled circuitry ensures exposure times and emission parameters, kVp and mA, remain constant during the exposure.
- A remote keypad is used to operate the unit. At the touch of a button you can select a different tooth anatomy as well as the exposure time appropriate to the selected tooth and the patient.
- The X-ray head and arm is very easy to handle and position as the head is compact, measuring only 10.6 inches/27cm, and it weighs only 9.9lbs/4.5kg. The focal spot-to-skin distance is the standard 7.8 inches/20cm.

Types of sensor holder

- Anterior periapical holders
- Posterior periapical holders
- Bitewing holders
- Bite tab holders
- Endo tab holders



FOR PANORAMIC RADIOGRAPHY

With the Schick CDR panoramic solutions you can take the same types of panoramic radiographs as you can with film-based systems. There are two solutions to choose from:



Schick CDRPan™ digital retrofit kit

- Ideal if you want to go digital but don't want to replace your current film-based machine.
- Fits quickly and easily to virtually any manufacturer's machine without any permanent modifications.

Schick CDRPanX digital panoramic unit

- A completely digital machine and very compact in size for ease of location.
- Designed for optimal patient positioning and extremely accurate, distortion-free images.
 - x-ray head has unsurpassed vertical travel to suit patients of any height
 - three laser alignment beams assist easy and accurate patient positioning
 - unique 'Full Vu' mirror helps patients maintain the perfect position
- Eight different imaging modes allow you to select the best view.



FOR INTRAORAL PHOTOGRAPHY

To complete the total solution from Schick Technologies, an intraoral camera which can integrate seamlessly with our radiography solutions is part of 'The Schick Digital Imaging System':



Schick USBCam™ intraoral camera

- The first intraoral camera which plugs into any PC with a standard USB port and it's ready for use. The PC hardware has to meet certain minimum standards.
- Simply load the software provided onto the PC and then 'plug and play'.
- Full-motion video capabilities help you find the best images and angles.
- Focus-free optics and a special LED light source ensure perfect, high-quality pictures every time.
- The hand-piece is comfortable and ultra-lightweight so it's easy to use and carry around.
- Comes with a chair- or table-holder which automatically switches the camera on as it's removed from the holder and switches it off when returned.
- No other intraoral camera is quicker or easier to use.



EXPERT TRAINING AND SUPPORT

Products from Schick Technologies are available from Clark Dental, the sole UK importer, as well as its selected nationwide distributors. All companies have a great deal of expertise and many years of experience in digital imaging and will not only install and set-up the products, but also provide thorough training. As the equipment is easy to use and reliable, problems following installation are rare, but should they occur, fast and efficient support is readily available from your supplier, either via phone or personal visit as appropriate.

BETTER FOR BUSINESS

It is generally recognised that digital imaging has significant labour, time and cost saving benefits when compared to film-based systems, so the sooner you 'go-digital' the sooner your business can start realising those savings. Since digital radiography requires a fraction of the radiation needed by film, it's a lot safer too for both patients and staff.

Digital imaging can also make a significant contribution to building your business. Within a matter of seconds you can show the problem to a patient as well as explain it and your treatment plan more clearly, helping to improve case acceptance whilst reducing chair-side time. Patients also seem to associate advanced technology with quality care, so the Schick System can have a positive impact on the perception of you and your practice.

'GO DIGITAL' WITH SCHICK the smarter choice

To move into the new age of digital imaging you can choose any or all of the products that go to make up 'The Schick Digital Imaging System'. For further details or a demonstration in your practice:

Call: 01268 733146
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schick
creating the image

When everything you have is the best,
best buy Schick

