THE DENTAL
SOLUTIONS
COMPANY™

Dentsply Sirona

Schick USB Interface and Sensors User Guide

Schick 33

REF 100003870

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PART NUMBER 100003870 REV. 10

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Safety Issues

Check Schick Sensor, USB Interface, and USB Cable before Using Them

Before each usage, check the outer surface of the Sensor and cable, the USB Interface, and the USB cable for any signs of physical damage or defect. Sensor and USB Interface surfaces should have a smooth finish, with no evidence of chipping or damage. If detected, contact your local distributor of Dentsply Sirona products for further instructions.

Operate Sensor and USB Interface *as Directed*

Always use the Sensor and USB Interface in accordance with the directions and recommendations contained in this User Guide. Do not attempt to modify the Sensor and USB Interface or use it in system configurations not specified in this document.

Do Not Touch Exposed Connectors on Non-Medical Equipment and the Patient at the Same Time

When the Sensor and USB Interface are in use, avoid touching exposed connectors on non-medical electrical equipment and the patient at the same time. The human body is capable of conducting electrical current and may cause a shock hazard to patients if appropriate safety practices are not observed.

RF Interference Considerations

Although the Sensor and USB Interface are designed to provide a reasonable degree of protection from electromagnetic interference, according to IEC International regulations, they must be installed at an adequate distance from electricity transformer rooms, static continuity units, two-way amateur radios and cellular phones. To ensure proper operation, the latter (meaning, electricity transformer rooms, static continuity units, two-way amateur radios and cellular phones) can be used only at a minimum distance of 5 feet (1.5m) from any part of the Sensor and USB Interface. Any instrumentation or equipment for professional use located near the Sensor and USB Interface must conform to

Electromagnetic Compatibility regulations, to which the EMC tables in this document's Appendix serve as guidance. Non-conforming equipment, with known poor immunity to electromagnetic fields, may not operate properly unless they are installed at a distance of at least 10 feet (3m) and supplied by a dedicated electrical line.

Apply Recommended Procedures for Cleaning

Safe and proper operation of the equipment requires following a regular schedule of preventive maintenance. To help ensure proper hygiene and to protect against infectious disease, refer to the Protective Measures section on page 28 of this document and observe all device cleaning and patient protection recommendations specified there.

Although water-resistant, **the Sensor should never be soaked or submerged in disinfecting solution during any cleaning procedure**. Failure to comply with this precaution may cause liquid to enter the Sensor and can prevent it from operating properly.

Do Not Connect Items that are Not Part of the System

Only items specified for use with the Sensor and USB Interface are to be connected to it. The device should not be used adjacent to other equipment that is not part of the system. If, however, use with adjacent equipment is necessary, normal operation should be observed and verified in that configuration.

Installers to Ensure that Sensor and USB Interface Operate Optimally

Installers must ensure that the Sensor and USB Interface provide the user with the optimal use of the equipment. This includes, but is not limited to, ensuring that the system operates as described in this document. To avoid unintentional contact with the USB Interface by the patient, place the USB Interface in a location where accidental contact is prevented. Similarly, connect the USB cable to the USB Interface before the patient enters the operatory.

Installers must also ensure that the system presents no physical obstacles or hazards during operation and when

not in use. To verify this requirement, installers shall confirm that the Sensor and USB Interface are installed as described in this User Guide and shall perform the appropriate procedures therein.

Ensure Proper System and PC Workstation Installation and Operation

The Sensor and USB Interface have been determined to be in accordance with international safety standards and are deemed suitable for use within the patient area, which extends from the patient for a distance of 5 ft (1.5m). To comply with these standards, do not operate non-medical equipment (such as a PC workstation) inside the patient area. Outside the patient area, the presence of approved non-medical grade equipment and Listed / Approved / IEC 60950-1 certified Information Technology Equipment (ITE) computer equipment is acceptable.

Also, to help ensure optimal performance, ensure that all software programs residing on the workstation are virus-free and have been adequately tested so they will not impact imaging applications after installation.

Only Dentists or Authorized Designees Are Permitted to Operate the System

To ensure the correct use of the Sensor and USB Interface in a clinical environment, for purposes that correspond to its intended design and application, only dentists, or their designees, are authorized to operate the system.

Protect Sensor from Potential ESD Damage

Like other electronic devices, your Sensor is susceptible to electrostatic discharge (ESD), particularly when the device is used in or around carpeted areas or low-humidity environments.

During cable replacement, when Sensor contacts are exposed, it is especially important to protect the device from potential ESD damage. Touching a metal surface prior to replacing the cable will reduce the risk of damaging Sensor components by accidental static discharge. Using anti-static floor mats or floor treatments (for example Staticide 2005/2002) will also help eliminate static build-up in your office.

Wait for Appropriate Prompts before Operating X-ray Source

To avoid exposing the patient to unnecessary X-rays, ensure that the exposure viewbox is flashing green (default color) before triggering the X-ray Source.

Always Use Sheaths with Sensors

Use Dentsply Sirona recommended sheaths every time the Sensor is used. **Never use the Sensor without a protective sheath. Never use a damaged sheath. Always dispose of the sheath after every patient.**

Protective sheaths are single-use items and must not be reused under any circumstance. Reuse of single-use items/instruments may cause them to become contaminated, compromise their intended function, and result in patient and user infection, injury and/or illness.

Take Appropriate Precautions during X-ray Operation

Always observe the safety guidelines and precautions supplied with your X-ray generator and by local regulatory authorities.

Follow All Instructions to Ensure Cable Replacement Procedures are Performed Correctly

Follow all instructions to ensure the successful replacement of your Sensor cables. When performing the cable replacement procedure, it is especially important to tighten the screws that attach the cable to the Sensor by turning them *at least one-quarter revolution clockwise after initial resistance or until they cannot be turned any further.* An improperly attached cable may cause an intermittent connection and prevent the Sensor from operating effectively.

Electromagnetic Compatibility and HF Devices

Portable HF equipment must not be placed within a 12 in (30 cm) radius of the Intraoral Sensor system. HF surgery units and Intraoral Sensor systems must not be operated at the same time.

Product Manuals from Dentsply Sirona

For the latest version of this user guide and other product information, please visit our website: www.dentsplysirona.com/IFU .

Explanation of Symbols

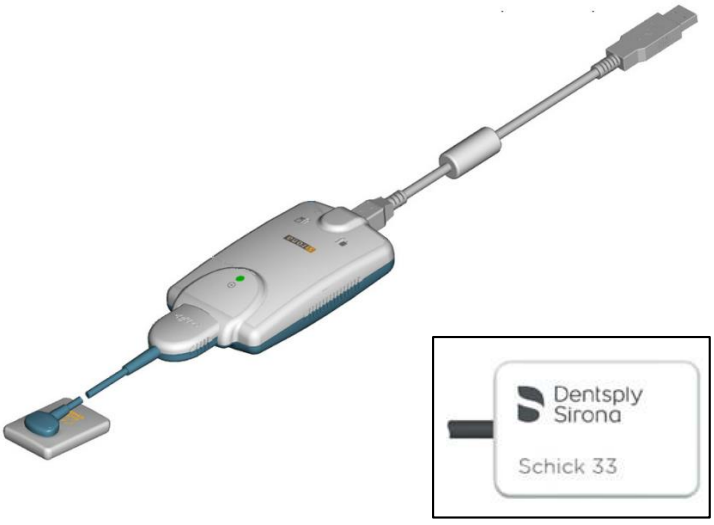
Dentsply Sirona products display markings to indicate compliance with regulatory requirements and applicable technical standards.

Symbols and Descriptions

SYMBOL	DESCRIPTION
	Indicates Type BF equipment in accordance with applicable medical device safety standards (IEC/EN/UL 60601-1)
	Indicates an attention to customers to consult accompanying documents for information needed for proper use of device
	Manufacturer's address
	Indicates the item is a medical device. ISO 15223-1.
	Indicates that caution is necessary when operating the device or control close to where the *symbol* is placed, or that the current situation needs operator awareness or operator action in order to avoid undesirable consequences. ISO 7000-0434A, ISO 15223-1.
	Indicates the equipment is suitable for direct current only and identifies relevant terminals. IEC 60601-1, IEC 60417-5031

Schick 33 System

Schick 33 Sensor with Schick USB 3.0 Interface and USB Cable



Schick 33 Sensor with Schick USB 2.0 Interface and USB Cable

1 System Overview

1.1 Indications for Use

The Computed Oral Radiography System is indicated for patients undergoing an intra-oral dental X-ray examination. It produces instant digital intra-oral X-ray images of a patient's mouth.

1.2 Description of Schick 33 System

The Schick 33 Sensor connects to the Schick USB Interface[1], which is a separate module and is connected to a compatible PC workstation via USB cable *(supplied separately)*. The workstation hosts a compatible Windows operating system and also provides the power source for the USB device.

Additional details can be found in the following sections:

- PC specifications may be found in Section PC Workstation Description on page 14.
- System specifications may be found in Section A-3 on page 58.

Support for the Sensor is provided by compatible software programs such as Sidexis.

[1] "Sensors" refer to Schick 33 Sensors. "USB Interface" refers to the Schick USB 3.0 resp. USB 2.0 Interface, which provides a physical and electronic connection between the Sensor and the imaging PC.

1.3 Replaceable Cable

The Sensor imaging system is designed to meet the practical, timely needs of dental professionals.

For this reason, all Sensor sizes (0, 1 and 2) of Schick 33 support a replaceable-cable design that enables customers to make immediate, in- office cable replacements. Manufactured for safe and reliable operation, the replaceable cable provides appropriate strain relief, molded protection from electronic contacts and components, and easy installation.

Type of protection against electric shock:  Applied part type BF

Details on replacing Sensor cables may be found in this document.

1.4 PC Workstation Description

The PC workstation connects to the USB Interface via USB cable (supplied separately) and serves as the host for Sidexis 4 or other compatible imaging software products. The workstation provides the capability to display, manipulate, store, and print images acquired from Schick Sensors.

Getting the best results begins with having a computer system suitable for capturing and displaying intraoral images. *For optimum performance*, we recommend the following:

- Windows 10 Pro (64-bit), Windows 10 Enterprise (64-bit), Windows 11 Pro (64-bit) and Windows 11 Enterprise (64- bit)
- Intel i7 or equivalent
- 8 GB RAM
- 4 GB video (non-shared memory)
- 500 GB hard drive
- Intel USB 3.0 port.

1.5 Software Available for Schick Sensors

To benefit from imaging features designed specifically for Schick 33 Sensors, customers should consider upgrading to the latest software version of Sidexis.

Schick 33 Sensors can be detected automatically by Sidexis software when connected via Schick USB Interface to a PC workstation.

Please note that the Schick USB 3.0 Interface enclosure is specifically designed for Schick AE and Schick 33 Sensors and will accommodate only those Sensor types.

1.6 Schick Sensor Product Platforms

In addition to the USB configurations described in this manual, Schick 33 Sensors can be used with other product technologies. This modular approach, designed into Schick Sensor products, means that they can operate effectively in multiple environments: in cable-connected USB systems and in wireless systems.

2 Installation

2.1 Installing Intraoral Sensor Software for USB and WiFi Devices

NOTE: The installation described here is for customers with Sidexis 4.4. Customers with previous version of Sidexis 4, or with other imaging software, should refer to the manuals appropriate for those programs.

1. Make sure that Sidexis 4.4 is installed.
2. Insert the "Intraoral Sensor Software" Installation DVD into your PC's DVD drive. If you have downloaded an ISO file instead, right click on it and select “Mount” from the menu. Double-click on Autorun.exe.
3. The setup normally starts automatically. If the setup routine doesn't start, double-click the Autorun.exe file in the root directory of the installation DVD.
4. The "Intraoral Sensor Software" 3.0 window appears.
5. Click on "Install Intraoral Sensor Software".
6. Follow the further instructions.

2.2 Installing the Configuration Utility for WiFi Devices

NOTE: Please make sure that Sidexis 4.4 or above and "Intraoral Sensor Software" 3.0 or above is installed.

1. Log onto your PC with an administrator account. As the utility is needed only to configure WiFi devices, it is not needed on all PCs.
2. Insert the "Intraoral Sensor Software" Installation DVD into your PC's DVD drive. If you have downloaded an ISO file instead, right click on it and select “Mount” from the menu. Double-click on Autorun.exe.
3. The setup normally starts automatically. If the setup routine doesn't start, double-click the Autorun.exe file in the root directory of the installation DVD.
4. The "Intraoral Sensor Software" 3.0 window appears.
5. Click on "Install WiFi Configuration Utility".
6. Follow the further instructions.
7. Restart the PC if you are required to do so.

NOTE: During installation, you may receive a message to install the .NET Framework 3.5, which is needed by the "WiFi Configuration Utility". If you receive this message, please type Turn Windows features on or off in the Windows search box and turn on .NET Framework 3.5. If the feature is not present, please download the framework directly from Microsoft's web page.
(https://dotnet.microsoft.com/en-us/download/dotnet-framework/net35-sp1).

2.2.1 Connecting the Schick USB 3.0 Interface

IMPORTANT! Do not connect the USB Interface and cable to your computer until after you have successfully run the setup program. Procedures for installing these files are supplied on the previous pages

The USB cable has a USB "A" connector on one side and a USB 3.0 "micro-B" USB connector on the other. The "A-type" plug connects to any available USB port on the computer. The "micro-B" plug connects to the USB Interface.

Cable part numbers and lengths can be found in Table 9 on page 56, as well as other orderable parts.

IMPORTANT! For normal operation and to ensure compliance with regulatory EMC and standards, use only the USB cables described and specified for your system.

An illustration of the Sensor and USB Interface and a description of cable connections to the device are shown below.

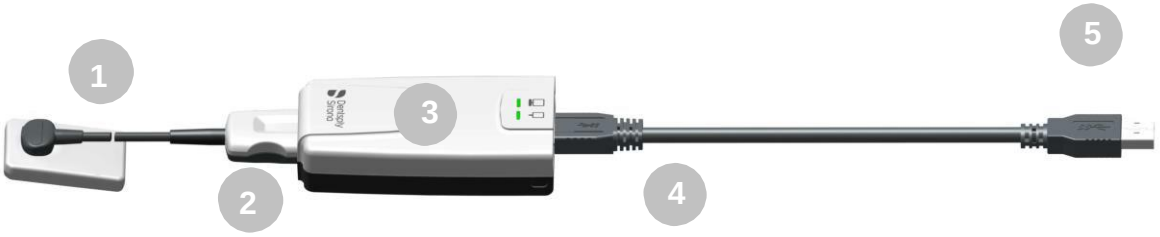


Figure 1. Schick USB 3.0 Interface Cable Connections

Table 1. Schick USB 3.0 Interface Cable Connections

NUMBER	DESCRIPTION
1	Sensor
2	Sensor cable connection
3	USB Interface
4	USB cable connection *("micro-B" end of USB cable connects here)*
5	USB cable connection *("A" end of USB cable connects to PC)*

2.2.2 Connecting the Schick USB 2.0 Interface

IMPORTANT! Do not connect the USB Interface and cable to your computer until after you have successfully run the setup program. Procedures for installing these files are supplied on the previous pages

The USB cable has a USB "A" connector on one side and a USB 2.0 type "B" USB connector on the other. The "A-type" plug connects to any available USB port on the computer. The "B-type" plug connects to the USB Interface.

Cable part numbers and lengths can be found in Table 10 on page 57, as well as other orderable parts.

IMPORTANT! For normal operation and to ensure compliance with regulatory EMC and standards, use only the USB cables described and specified for your system.

An illustration of the Sensor and USB Interface and a description of cable connections to the device are shown below.

Figure 2. Schick USB 2.0 Interface Cable Connections

Table 2. Schick USB 2.0 Interface Cable Connections

NUMBER	DESCRIPTION
1	Sensor
2	Sensor cable connection
3	USB Interface
4	USB cable connection *("B" end of USB cable connects here)*
5	USB cable connection *("A" end of USB cable connects to PC)*

3 LED Indicators

3.1 Schick USB Interface

Table 3. Schick USB Interface LED Indications (Connection Status)

 USB UNTERFACE	INDICATION	DESCRIPTION
Not connected	OFF	Cable is not connected. Check cable connection to PC.
Connected	AMBER	USB Interface is connected and powered but no connection to imaging software is detected.
Connected	GREEN	USB Interface is connected and powered and connection to imaging software is detected.
Connected	GREEN "breathing"	Ready for acquisition.

Table 4. Schick Interface LED Indications (Sensor Status)

 SENSOR	INDICATION	DESCRIPTION
Not Connected	OFF	Sensor is not connected. Connect sensor and start Sidexis 4 or other imaging program.
Connected	AMBER	Error condition, such as incompatible sensor.
Connected	GREEN	Schick 33 Sensor and USB Interface are connected. Sidexis 4 is configured properly and has detected the USB Interface. Start Sidexis 4 or other imaging program.
Connected	GREEN "flashing"	USB Interface is transferring image from sensor to PC. LED flashes for duration of the image transfer.

4 Operation

4.1 Operating the System

4.1.1 Power On

1. Turn on the PC workstation used with imaging applications.
2. Connect the "micro-B" resp. "B" end of the cable to the USB Interface *(if not connected already)*.
3. Connect the "A" end of the cable to the PC workstation *(if not connected already)*.
4. Connect the Sensor edge-card to the USB Interface.
5. The amber LED on the USB side of USB Interface illuminates and turns off after a few seconds.
6. The green LED on the Sensor side of the USB Interface illuminates and remains steady on, indicating proper current condition for the Sensor.

4.1.2. Power Off

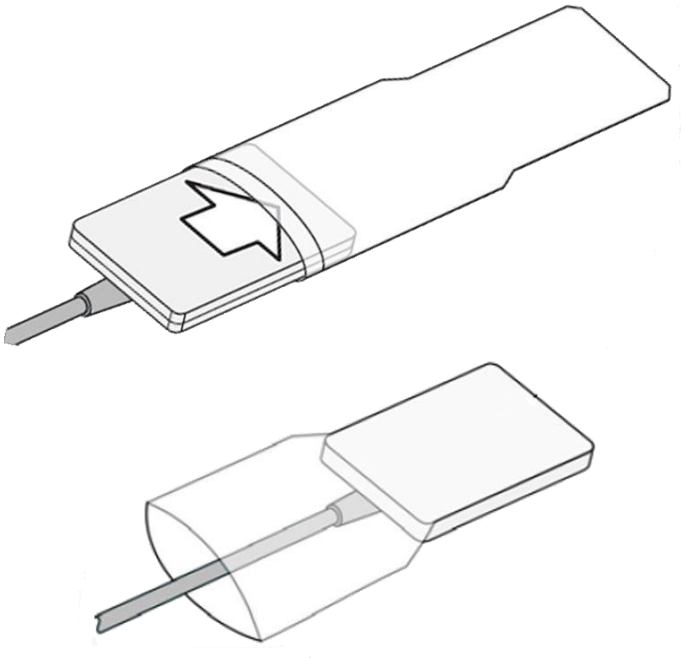
1. Disconnect the USB cable from the PC workstation.
2. Disconnect the USB cable from the USB Interface.
3. Power is removed from the Schick USB Interface and Sensor and the green LED on the Sensor side is turned off.

4.2 Using Your Sensor

4.2.1 Sensor Sheaths

Hygienic protective sleeves are required for Sensors. New sleeves are required for each new patient and must be disposed of properly after patient use. Sensor holders (if they are the disposable type) should follow the same procedure.

Before using a new sleeve, select one that is appropriate for the size of the Sensor. You may find that the sleeve seems slightly undersized, which is necessary to provide a secure barrier around the Sensor. Once you have selected the sleeve, slide the Sensor into it, as shown below.



To remove the Sensor from the sleeve, refer to the examples in Table 5 and Table 6 on pages 24 and 25.

4.2.2 Sensor Positioning

To achieve stable Sensor positioning during X-ray exams, use the appropriate tabs and holders available with the Schick Sensors.

Using an appropriate Sensor positioning system, adjusting the X-ray setting depending on intraoral position, and placing the X-ray source as close as possible to the imaging area of the Sensor: all of these contribute towards obtaining quality digital X-ray images.

For proper placement and usage of positioning systems, please refer to the documentation distributed with those kits and the information available on our website. Positioning examples with the AimRight Grip system can be found Table 7 on page 26 Examples of Sensor-to-image orientation can be found in Table 8 on page 28.

4.2.3 Sensor Cleaning and Disinfecting

Before using the Sensor the first time, and before every new patient, please perform the steps described in Section 7.1 on page 40.

Table 5. Proper Sensor Removal from Sheath (AimRight Autoclavable System)

EXAMPLES	ACTIONS
	1. Begin by pinching the distal end of the Sensor out of the sheath.
	2. As the Sensor is pushed into the wider area of the sheath, gently slide the sheath away from the Sensor.
	3. Be careful to prevent the Sensor from falling on the floor.

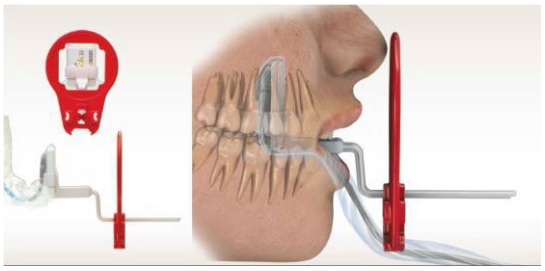
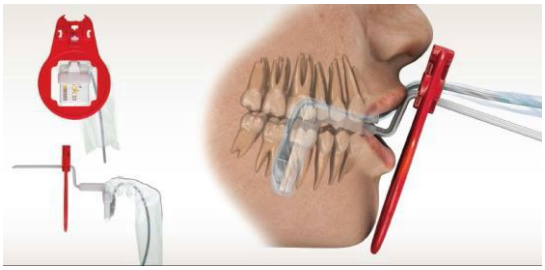
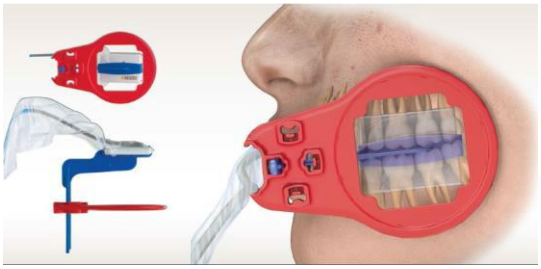
NOTE: Additional information regarding Sensor care and usage can be found in the Sensor Care Guide, available from the dentsplysirona.com website.

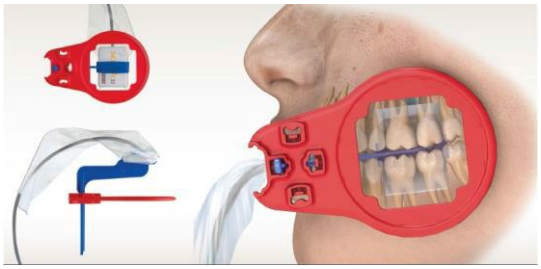
Table 6. Proper Sensor Removal from Sheath (AimRight Adhesive System)

EXAMPLES	ACTIONS
	1. Keeping the Sensor attached to the positioning tab, grasp the aiming bar where it joins the Sensor and begin pushing the distal end of the Sensor out of the sheath.
	2. As the Sensor is pushed into the wider area of the sheath, gently slide the sheath away from the Sensor.
	3. Be careful to prevent the Sensor from falling on the floor.

NOTE: Additional information regarding Sensor care and usage can be found in the Sensor Care Guide, available on the dentsplysirona.com website.

Table 7. Sensor Positioning (AimRight Grip System)

EXAMPLES	PLACEMENT INSTRUCTIONS
	**Maxillary Anterior** Place the distal end of the sensor against the roof of the mouth, with the incisal edge of the teeth against the front of the tab. Sensor should be parallel to the long axis of the maxillary anterior teeth. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the ring.
	**Mandibular Anterior** Place the Sensor into the lower anterior area, positioning it on top of the tongue, parallel to the first molar. Sensor should be centered on the mandibular anterior teeth when the patient is occluded. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the ring.
	**Horizontal Bitewing** Place the Sensor between the tongue and the teeth with the bite area resting on the premolar teeth. The patient should close on their back teeth to ensure centric occlusion and as they do so, the arm should be angled gently toward the midline of the mouth to ensure the Sensor is parallel with the teeth and to provide open contacts. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the ring.

EXAMPLES	PLACEMENT INSTRUCTIONS
	**Vertical Bitewing** The sensor should enter the mouth horizontally. Once past the incisors, "roll" it into a vertical position. Sensor should be placed with the cable pointing upwards toward the hard palate. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the
	**Mandibular Periapical** Retract the cheek with a finger and place the sensor between the tongue and the teeth, bringing the cheek around the bite block. Slide the sensor down and in gently until it is in position—the bite tab should be directly above the teeth to be imaged. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the ring.
	**Maxillary Posterior** The Sensor/aiming device is angled upward toward the midline with placement of the bite block under the teeth to be captured. The Sensor should be angled slightly past the midline of the palate as the patient closes for comfort and to ensure capture of the apices. Ensure the ring is as close to the patient's face as possible and place the x-ray head against the ring.

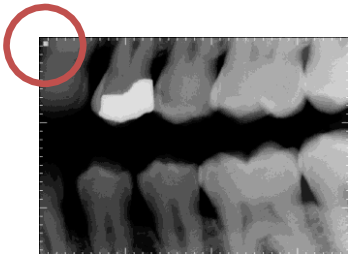
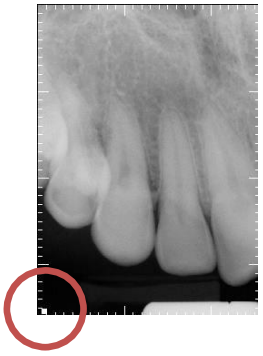
NOTES:

When using the Aim Right grip system, always insert the Sensor by aligning one end and then "snapping" the Sensor into place. Refrain from sliding the Sensor into the grip holder.

Additional information regarding Sensor positioning is available from the dentsplysirona.com website.

If a different positioning system is used, please refer to the appropriate manual.

Table 8. Examples of Sensor-to-Image Orientation

Sensor Location	Sensor Orientation	Inverse Pixels (Circled) and Image Orientation
Patient's left side		 Left Bitewing
Patient's upper jaw		 Anterior Periapical, Maxillary

4.2.4 Taking X-rays

NOTE: Additional information about Sidexis 4.4 and the Intraoral Sensor Software can be found on our Download Center at www.dentsplysirona.com.

STEP 1

Please be sure that Sidexis 4.4 is open and available.

Also confirm that the patient is registered in Sidexis and that the "Exposure" phase is open.

STEP 2

Select an intraoral sensor from the drop-down list.

STEP 3

Select an appropriate template from the drop-down list.

STEP 4

If you wish to add or edit information about the current exam, click Indications.

STEP 5

The first exposure window changes from red to green when the sensor is ready for an exposure.

STEP 6

Take the X-ray exposure. Following the exposure, the X-ray image is displayed in the preview window. The next anatomic region is selected (automatically) and the exposure cycle begins again.

IMPORTANT! Other actions are also available after each exposure. These include changing image orientation, referring to the Exposure meter, performing an image retake, and changing the tooth numbering. More information about these features can be found in the Intraoral Sensor Software manual.

When all the exposures have been taken, click "Finish" to close the exposure series. The individual exposures and the exposure series are displayed in the "Exposures" view and in the "Light Box".

4.2.5 Repeating an exposure in the series

Performing an image retake — a feature also available in the "Light Box" — is available for any image in the current exam at any time. Most commonly, this feature is used immediately after an image is acquired. Some typical reasons for retaking an image would be the result of unexpected patient or sensor movement, adjustment in X-ray settings, or improvement in image placement or quality.

1. To retake an image, please perform the following steps: Click on any image in the Acquisition view.
2. Locate the "Retake" button below the "Selected Image" window and click on it.
3. When the "Retake" image window is displayed, two exposure windows — "Current image" and "New image" — are shown.
4. New Image is like any empty exposure window selected for imaging. It flashes green when the sensor is ready.
5. Take the X-ray exposure to acquire the new image.
6. Compare and select the desired image and click on the "Accept" button. The rejected image is removed from the series, although it is still present in the "Timeline". The selected image is used in the series.
7. Perform other actions in Acquisition view, if any, then click the "Finish" button to continue to the "Light Box".

4.2.6 Closing an exposure series

An exposure series can be closed at any time, even if one or more exposure windows are not used and do not contain images.

1. Click on the "Finish" button to close the exposure series for the patient.
2. The exposure series has been closed.

4.2.7 Continuing an exposure series

An exposure series that has been closed can be continued later at any time.

1. Open a compilation (the collection of images in an exposure series) from the "Timeline."
2. Right-click on an empty exposure window to acquire an image and continue the series.
3. Click the "Resume viewset" button.
4. Take the X-ray exposure to continue with the exposure series.
5. The exposure series continues.

5 Intraoral Enhancements

5.1 Enhancing exposures

5.1.1 Types of Enhancements

The following enhancement features, specific for Schick 33 sensors, are available in the Sidexis "Light Box".

- Diagnostic tasks
- Dynamic sharpening

5.1.2 Applying enhancements

To apply an enhancement or to select a task, please perform the following steps:

1. Open a Schick 33 image in the "Light Box".
2. Click on the "Tools" docking window.
3. In the "Filter" tool kit, click on "Intraoral Enhancements" to expand it, then select a "Task" that provides the appropriate degree of enhancement.
4. For additional image adjustment, adjust the slider controller located below the "Task" menu.
5. Perform other actions in the "Light Box" as needed.

5.2 Accessing intraoral enhancements

Enhancements for images acquired Schick 33 sensors are available in Sidexis 4 from Global Tools, located near the phase bar, in the upper left side of the application.

Any changes made in Global Tools, such as changes in the type of image resolution, the diagnostic task, or the sharpness level will be applied to all workstations on the network. Intraoral enhancements can also be edited in the Sidexis Light box.

5.3 Image enhancements for Schick 33 sensors

5.3.1 Resolution

Any changes made in Global Tools, such as changes in the type of image resolution, the diagnostic task, or the sharpness level will be applied to all workstations on the network. Intraoral enhancements can also be edited in the Sidexis Light box. Resolution in this context refers to a level of image quality attainable by the sensor's performance. The resulting image, affected directly by the type of resolution selected, is the product of the pixel binning process in the sensor.

Maximum image quality is attained in the 1x1 binning mode (High Resolution), which is enabled by default and recommended for most practices. In the 2x2 binning mode (Standard Resolution), 4 pixels are combined to form a single pixel. The resolution of the exposure is lower, but less storage space is required.

The default setting for image resolution, if changed, is applied to all new images acquired with Schick 33 sensors. This change becomes effective with a new acquisition session.

5.3.1.1 Changing image resolution

To change the resolution of Schick 33 images, please perform the following steps:

1. Click on the Global Tools icon in Sidexis 4.
2. Under the Exposure section, click on Intraoral Enhancements.

NOTE: High resolution is the default and recommended setting for most practices with Schick 33 sensors. To change the resolution, click on the drop-down menu and change the selection to Standard.

3. Click Close to save the new selection and exit Global Tools.

5.3.2 Task

Schick 33 sensors and Sidexis software enable clinicians to optimize image presentation to a level appropriate for the diagnostic task being performed. These settings (General Dentistry, Endodontic, Periodontic, Restorative, and Hygiene) are applied at display time and do not affect the original image data.

Task selections can be changed for any image, from one task to another, and back at will. The different task selections optimize the contrast and brightness of the displayed image to improve visibility of the anatomical structures important for that diagnostic task. The default setting for diagnostic tasks, if changed, is applied to all new images acquired with Schick 33 sensors. This change

becomes effective with a new acquisition session.

5.3.2.1 Changing diagnostic tasks

To change a diagnostic task, please perform the following steps:

1. Click on the Global Tools icon in Sidexis 4.
2. Under the Exposure section, click on Intraoral Enhancements.
3. General Dentistry is the default and recommended setting for most general practices with Schick 33 sensors. To choose a different task, click on the drop-down menu and change the selection accordingly.
4. Choosing a different task causes the image preview window to update as well. Although the image is intended only as a sample, the effects of the different tasks can be visualized clearly.
5. Click Close to save the new selection and exit Global Tools.

5.3.2.2 Changing diagnostic tasks and saving a new Sharpness value

1. Click on the Global Tools icon in Sidexis 4.
2. Under the Exposure section, click on Intraoral Enhancements.
3. General Dentistry is the default and recommended setting for most general practices with Schick 33 sensors. To choose a different task, click on the drop-down menu and change the selection accordingly.
4. Choosing a different task causes the image preview window to update as well. Although the image is intended only as a sample, the effects of the different tasks can be visualized clearly.
5. Click on the pointer of the sharpness slider controller to further refine the selected task. Each diagnostic task includes a preset amount of sharpness, but this can be adjusted for personal preferences. Changing the sharpness for a particular task affects the sharpness for that task only.
6. Move the pointer in one direction to increase the sharpness of the image. Move the pointer in the other direction to increase the smoothness of the image.
7. To save a new default sharpness value for that task, click the Save as default button.
8. Click Close to save the new selection and exit Global Tools.

6 Cable Replacement

IMPORTANT! Always disconnect the Sensor from the USB interface before cable replacement to avoid potential damage to Sensor components. Close Sidexis4 or any other imaging application prior to starting cable replacement. When performing cable replacement, always work outside the patient area, using the tools and materials supplied and/ or recommended by Dentsply Sirona.

IMPORTANT! Like other electronic devices, your Sensor is susceptible to electrostatic discharge (ESD), particularly when the device is used in or around carpeted areas or low-humidity environments. During cable replacement, when sensor contacts are exposed, it is especially important to protect the device from potential ESD damage. Touching a metal surface prior to replacing the cable will reduce the risk of damaging Sensor components by accidental static discharge. The use of anti-static floor mats or floor treatments (for example Staticide 2005/2002) will also help eliminate static build-up in your office.

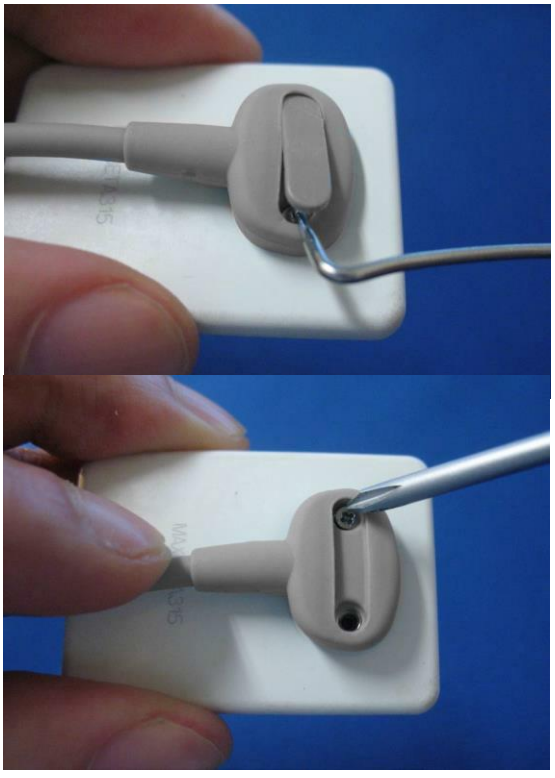
The following procedure illustrates cable replacement for a Schick size 2 Sensor. Procedures for other Schick Sensor sizes will be similar.

STEP 1

A. Please clean and dry your hands before performing this procedure. Do not wear gloves since the powder inside them could be deposited on sensor contacts while replacing the cable.

A. Make sure the Sensor is placed securely on a clean, moisture-free surface.

B. Using a dental instrument, carefully lift and remove the tab cover from the back of the Sensor cable. Dispose of the tab cover as a new one will be used when the new cable is attached.

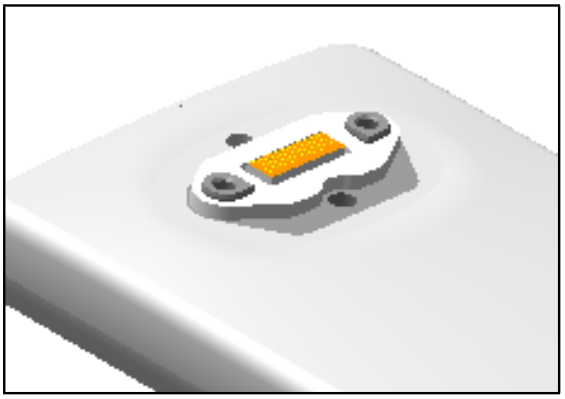


STEP 2

A. Using the screwdriver provided, loosen and remove the 2 screws that secure the cable to the Sensor. *If silicone gel is present, remove this material with the screws*. Dispose of the screws as new ones are supplied.

B. Remove the cable from the Sensor.

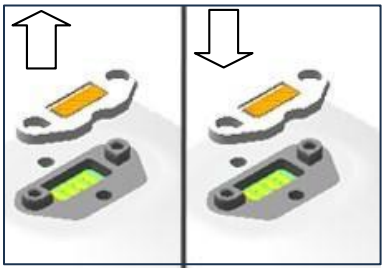
A. If there is a white frame similar to the picture shown here, please continue with step 4A on page 37.



B. If there is a red frame similar to the picture shown here, please continue with step 4B on page 37.

STEP 4

A. For WHITE frame with elastomer, perform the following steps:



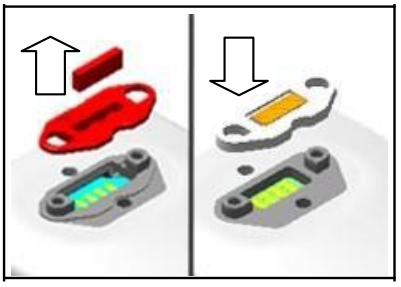
- Using fingers, remove the small frame with elastomeric strip from the Sensor. Dispose of part, as it will be replaced.

- Take a new frame / strip from the spare parts kit and carefully place it in position, **flat surface facing up and notched cutout facing the long side of the Sensor**. Avoid contact with the gold elastomeric in the center.

- After inserting the frame / strip, apply a small amount of finger pressure around the outer edges to ensure that it is seated squarely in the cutout area.

IMPORTANT! The frame / strip must be seated correctly for the Sensor to function.

B. For RED frame and elastomer, perform the following steps:



- Using your fingers, remove the red frame and the red elastomeric strip from the Sensor. Dispose of both items as they will be replaced.

- Take a new frame / strip from the spare parts kit and carefully place it into position, flat surface facing up and notched cutout facing the longer side of the Sensor. Avoid contact with the gold elastomeric strip in the center.

- After inserting the strip, apply a small amount of finger pressure to ensure the elastomer is seated squarely in the slot.

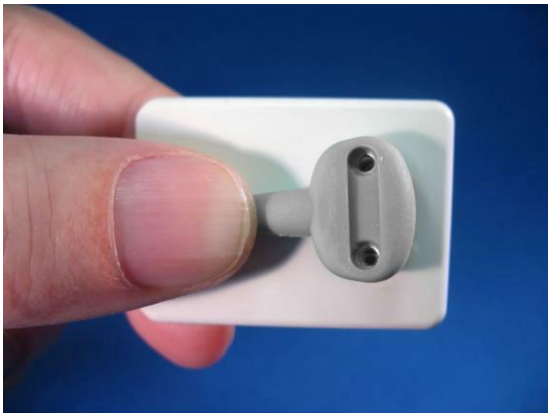
IMPORTANT! The frame / strip must be seated squarely in the slot for the Sensor to function.

STEP 5

A. Remove new cable from replacement kit.

B. Align the new cable to Sensor, making sure that the Sensor keying feature connects to the corresponding key in the cable assembly.

C. When properly aligned, the cable fits the back of the Sensor evenly and the metal area on the Sensor is completely covered by the cable.

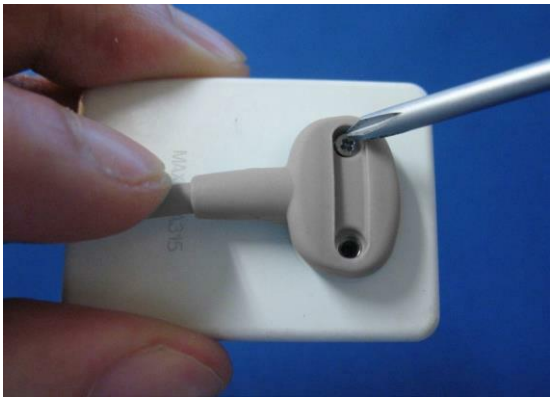


STEP 6

A. Holding the cable to the Sensor, insert one of the screws into its hole.

B. Using the screwdriver, tighten the first screw just until you feel some resistance. Repeat this action for the second screw.

C. Fully tighten both screws and make sure that they are securely tightened.



STEP 7

A. Using tweezers, remove a gel disk from its paper backing and place it over one of the screws you just tightened.

B. Make sure that the gel material completely covers the screw.

C. Remove another gel disk and repeat this action for the second screw.

STEP 8

A. Place the new tab cover over the screw slot and slide it across the slot while applying downward pressure, especially at the middle of the tab.

B. When the tab completely covers the slot, snap it into place.

C. Verify that the tab cover fits evenly in its slot. Cable replacement is complete.

7 Infection and dental cabinet hygiene

7.1 Requirements for Processing

7.1.1 Hygienic Requirements for Processing of Medical Devices

Reprocessing of medical devices

Medical devices contaminated with pathogens can be the source of infections in humans. The use of such medical devices therefore requires prior reprocessing, which is subject to defined requirements.

IMPORTANT! Clean, disinfect and/or sterilize the medical device and accessories before first use or after a long period of non-use

Wear safety clothing.

Suitable protective clothing must be worn and suitable protective equipment used at any point in time, if required.

Clean regularly

Remove dirt, grime and disinfectant residue regularly using mild, commercially available cleaning agents.

7.1.1.1 Approved care, cleaning, and disinfecting agents

Only the external surfaces may be disinfected with approved chemical disinfectants.

Use only disinfectants that have been tested according to applicable national authorities or whose bactericidal, fungicidal, and virucidal properties have been verifiably tested and approved accordingly.

NOTICE

Cleaning, disinfection and care agents may contain aggressive ingredients. Unsuitable cleaning, disinfection and care agents are harmful to health and attack the surface of the unit.

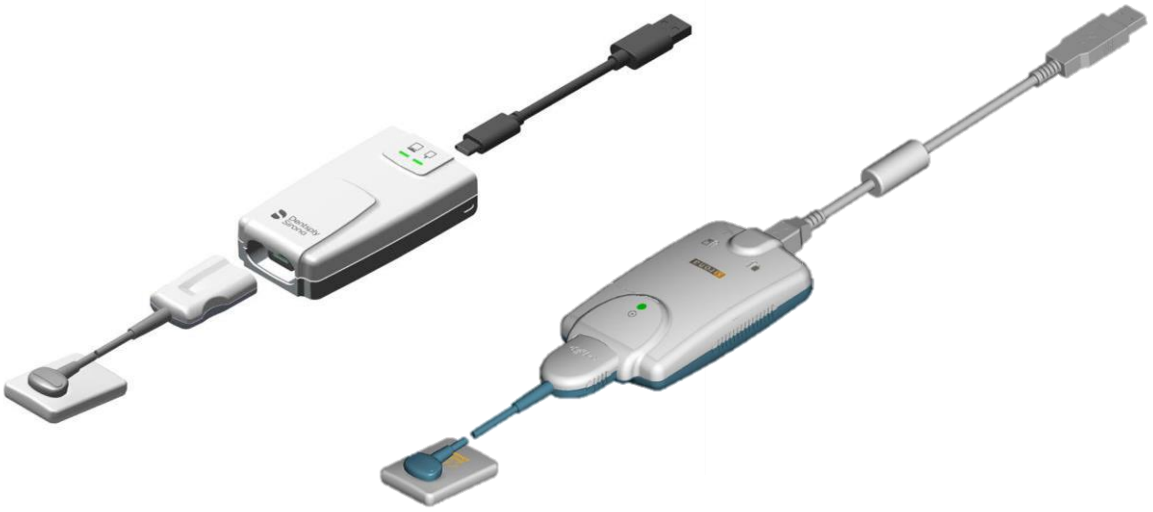
- ➢ Do NOT use: Substances containing phenol, peracetic acid, peroxide, or any other oxygen-splitting agents, sodium hypochlorite, or iodine-splitting agents.
- ➢ Use only care, cleaning and disinfection agents approved by Dentsply Sirona.

A continuously updated list of the approved agents can be found in the document "Care, cleaning and disinfection agents " (REF 5970905). You can download the document in the download center.

7.1.2 Cleaning and disinfecting of the USB module

Scope of validity

USB module with cable and sensor plug.



NOTICE

Parts can be damaged.

- ➢ Use only agents approved by Dentsply Sirona for disinfection as components may otherwise be damaged.
- ➢ Never spray plug connections with cleaning agents or disinfectants.
- ➢ Make sure that the plug contacts do not get wet. The USB module, sensor and PC can be damaged or destroyed by a short circuit.
- ➢ Before cleaning and disinfection, remove the USB plug from the PC or USB hub. The system must be disconnected from the mains. Also remove the sensor plug from the USB module.
- ➢ Never spray plug connections with disinfectants or cleaning agents. Make sure that the plug contacts do not get wet.

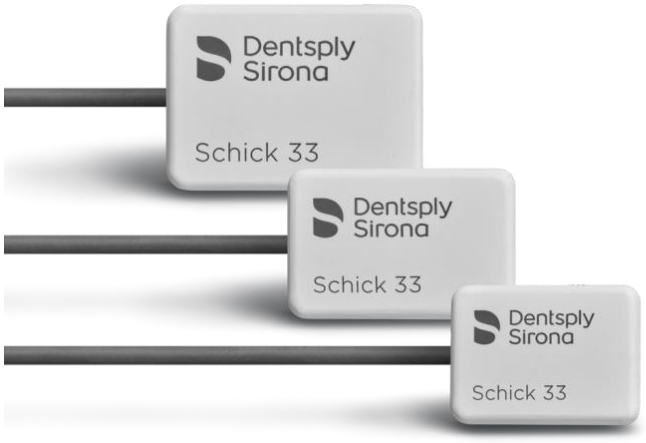
7.1.3 Processing of the X-ray sensor

Patients, users and third parties come into contact with the X-ray sensor. Contaminated surfaces are potential transmission paths here. The risk of cross-contamination of patients, users or third parties is reduced by reprocessing combined with using protective sleeves
(see chapter Sensor Sheaths [→22]).
When reprocessing the X-ray sensors, the instructions and provisions in the country-specific guidelines and standards must also be observed.

7.1.3.1 Manual cleaning and wipe disinfection of the X-ray sensors

Scope of validity

Intraoral X-ray sensors



NOTICE
Parts can be damaged. ➢ Use only 70% isopropyl alcohol. ➢ Never spray plug connections with cleaning agents or disinfectants. ➢ Make sure that the plug contacts do not get wet. The USB module, sensor and PC can be damaged or destroyed by a short circuit.

CAUTION
➢ Do not use sterilizer / washer. ➢ Do not immerse.

Instructions for reprocessing	
Initial treatment of the listed parts at the location of use	Remove the hygienic protective sleeve, see „Sensor Sheaths [→22]“. Make sure that the sensor is not additionally contaminated when removing the hygienic protective sleeve. Directly after use, remove gross contamination with a disposable cloth or paper towel (if necessary).
Preparation for decontamination:	Before cleaning and disinfection, remove the USB plug from the PC or USB hub. The system must be disconnected from the mains. Remove the sensor plug from the USB module.
Cleaning: manual	Sensors can be cleaned manually. To do this, wipe them thoroughly with a lint-free soft cloth soaked in 70% Isopropanol and clean them until there is no visible contamination. It is recommended to carry out this procedure twice.
Disinfection: manual	X-ray sensors can be wipe-disinfected manually. After cleaning, perform wipe disinfection using 70% Isopropanol with a contact time of ≥ 2 minutes. To do this use a soft cloth soaked in 70% isopropanol. Remove disinfectant residues after the exposure time by wiping with a water-soaked cloth (at least drinking water quality). It is recommended to carry out this procedure twice.
Drying: manual	Wipe dry with a lint-free cloth.
Automated cleaning and disinfection	ATTENTION X-ray sensors must not be reprocessed in a washer / disinfector.
Sterilization	ATTENTION X-ray sensors must not be sterilized!
Maintenance, inspection and testing	After every reprocessing operation, the parts must be checked for visible damage, cracks or discolorations before use.
Storage	Store reprocessed parts in a dry, dust-free environment (if applicable).

7.1.4 Reprocessing of the sensor holder system (AimRight) and the disposable sensor holder system Xios XG Starter Kit

Scope of validity

Always observe all country specific requirements for reprocessing medical devices.

Valid for the reusable sensor holder system AimRight and the reusable parts of the disposable sensor holder system Xios XG Starter Kits

7.1.4.1 Machine cleaning and disinfection in the cleaning and disinfection unit (RDG)

Valid for many countries worldwide (not USA)

Instructions for reprocessing	
Initial treatment of the listed parts at the location of use	Directly after use, remove gross contamination with a disposable cloth or paper towel (if necessary)
Preparation for decontamination:	Disassemble the components before reprocessing.
Cleaning: automatic	Cleaning in a cleaning and disinfecting device according to DIN EN ISO
Disinfection: automatic	Disinfection in a cleaning and disinfecting device according to DIN EN ISO 15883-1/-2 as per the device manufacturer's specifications. Thermal disinfection is carried out taking into account the A0 value (e.g. A0≥3000; 93 °C and 5 minutes reaction time) in accordance with ISO 15883-1 and AAMI TIR 30:2011. The owner is responsible for the A0 value to be reached.
Drying: automatic	Drying in a cleaning and disinfecting device according to DIN EN ISO
inspection and testing	15883-1/-2 as per the device manufacturer's specifications. Maintenance, inspection and testing After every reprocessing operation, the parts must be checked for visible damage, cracks or discolorations before use. Parts with visible cracking, damage or discoloration may no longer be used and must be replaced.
Storage	Store processed parts in a dry, dust-free and dark environment.
Additional information	Small parts (all silicone parts and bite blocks) are to be processed in a small parts sieve tray.

7.1.4.2 Manual cleaning and sterilization of the sensor holder systems

⚠ WARNING

Infections can be transmitted from patient to patient.
Accessories that are not sterilized correctly can cause illness in patients.

Always follow the steps below before initial commissioning and after each use.

<table>
<tr><th colspan="6">Instructions for reprocessing</th></tr>
<tr><td>Initial treatment of the listed parts at the location of use</td><td colspan="5">Directly after use, remove gross contamination with a disposable cloth or paper towel (if necessary)</td></tr>
<tr><td>Preparation for decontamination:</td><td colspan="5">Disassemble the components before reprocessing.
Separate all parts from each other.</td></tr>
<tr><td>Cleaning: manual</td><td colspan="5">The parts can be cleaned manually.
To do so, rinse the disassembled components with potable water while brushing with a soft-bristled brush to remove gross soil. Note: an enzymatic or neutral pH instrument cleaning solution can be used to support the process. If used, immerse the components per the manufacturer's instructions.
Rinse the components with potable water for at least 30 seconds and dry using a disposable lint-free cloth.</td></tr>
<tr><td>Drying after cleaning</td><td colspan="5">Dry the components with a lint- free disposable cloth.</td></tr>
<tr><td rowspan="4">Sterilization and drying: automatic</td><td colspan="5">Steam sterilizers that fulfill the requirements of EN 13060, class B are approved.
The following two sterilization procedures have been validated and can be used.</td></tr>
<tr><td>Method/process</td><td>Temper-ature</td><td>Minimum holding time</td><td>Drying time</td><td>Over-pressure</td></tr>
<tr><td>Steam sterilization (pre-vacuum)</td><td>≥132 °C (270 °F)</td><td>3 Min.</td><td>16 Min.</td><td>2.04 bar (29.59 psi)</td></tr>
<tr><td>Steam sterilization (gravitation)</td><td>≥132 °C (270 °F)</td><td>10 Min.</td><td>15 Min.</td><td>2.04 bar (29.59 psi)</td></tr>
<tr><td colspan="5">* The indicated times are minimum holding times.
The operating times are longer and can vary by device.
Notes: Excessively high sterilization temperatures can cause damage, particularly to the plastic components.
Do not exceed 134 °C (273 °F) even during the drying phase.
Caution: The medical device may still be hot after sterilization.
Do not try to accelerate the cool-down process by placing in cold water.</td></tr>
<tr><td>Maintenance, inspection and</td><td colspan="5">After every reprocessing operation, the parts must be checked for visible</td></tr>
</table>

testing	damage, cracks or discolorations before use. Parts with visible cracking, damage or discoloration may no longer be used and must be replaced
Storage	After sterilization, components in sterilization packaging must be stored in a dry, dust-free place. The storage life depends on the bacterial barrier in use, the type of storage and the storage environment, and must be defined by the user. Sterilize again once the storage period has elapsed.
Additional information	no

7.1.4.3 Information on limiting the service life of the sensor holder systems

The plastic parts of the sensor holder systems in particular have a limited service life. This is reduced with each reprocessing cycle. Dentsply Sirona does not define a maximum number of uses based on many years of experience with these reprocessable parts. Nevertheless, the basic principle applies that, when in doubt, the components should be replaced prematurely (see also information on maintenance, inspection and testing).

7.1.5 Disposal of single-use items

For improved hygiene, disposable parts such as hygienic protective sleeves and disposable bite block parts are used.
These parts are single use items and must be disposed of after use. No reprocessing is intended before or after use.

⚠ WARNING

The hygienic protective sleeves are single use devices. Contaminated hygienic protective sleeves can cause illness in patients.

➢ Replace the hygienic protective sleeves after each patient.

8 Maintenance

8.1 Visual Inspection

Like all electrical equipment, the Sensor and USB Interface require not only correct use, but also visual inspection prior to operation, and routine checks at regular intervals. These precautions will help ensure that the Sensor and USB Interface operate accurately, safely, and efficiently.

Before operating the system, users shall check it for any signs of physical damage or defect. If detected, contact your local distributor of Dentsply Sirona products for further instructions.

8.2 Damaged Sensor

In the event of obvious physical damage to the Sensor, customers shall discontinue use of that Sensor, substitute another Sensor (if available), and contact their local Schick distributor for further instructions.

8.3 Periodic Maintenance

Periodic maintenance is performed as needed, but at least once a month. It consists of various checks performed by the operator or by a qualified service technician.

- Check that the labels are intact, readable, and adhere well to the surfaces on which they are positioned.
- Check that all of the cables that connect to the USB Interface are undamaged.
- Check that there is no external damage to the USB Interface which could compromise its ability to operate safely.

8.4 Quality Procedure

8.4.1 Introduction

If you wish to perform an operational check of the system before using it on a patient, or if your local or state radiation agency requires you to perform a quality check periodically, then the following procedure may be used for this purpose. This is only a suggested method and other means of verifying proper operation may also be acceptable.

8.4.2 Items Required

The following quality procedure requires a small metal object (such as an alligator or paper clip) to be used with a Sensor and X-ray source.

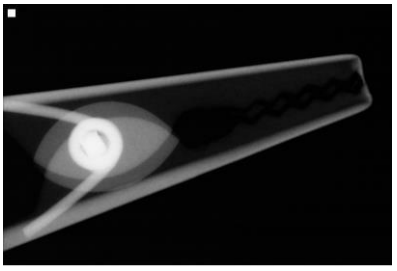
8.4.3 Procedure

1. Place the Sensor on a clean, moisture-free surface. The flat side of the Sensor is the active area; this side should be facing up. The side where the cable attaches to the Sensor will be facing down, towards the table surface.
2. Place a small metal object (an alligator clip in this procedure) on the Sensor and position the X-ray source above it by approximately 3 inches.
3. To avoid saturating the image with X-rays, set the technique factors to values that correspond to a typically used minimum dosage.
4. Within your imaging software, create or open an X-ray exam and click once on any selected target frame. Activate the X-ray source when the "Ready to acquire image . . . Activate X-ray unit now" message appears.

NOTE: If AutoTake is enabled, the target frame should NOT be flashing RED when ready to acquire an X-ray.

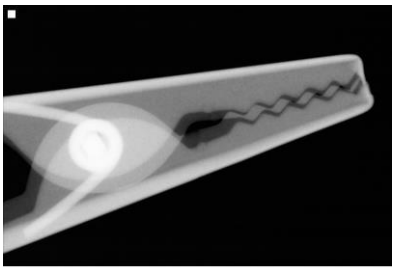
4. When the image is displayed, compare it with the samples shown in Figure 3 on page 50. An ideal image is one with sharp edges, clearly in focus, and having a distinct contrast between the object and the area around it. If necessary, adjust the technique factors and retake the image.
5. Record the results in last page of this document, or in a log book, and / or save the exam and its image(s) for future reference.

SATURATED



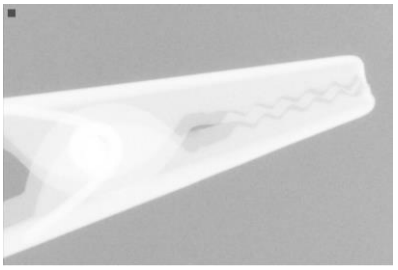
65 kVp 4mA 0.71s

ACCEPTABLE



65 kVp 4mA 0.32s

UNDEREXPOSED



65 kVp 4mA 0.07s

Figure 3. Comparing Quality Procedure Images

9 Accessories

9.1 Schick Sensor Holster

The Schick Sensor Holster is designed for easy access to, and storage of, Schick Sensors. Several mounting options are available: (1) Wall- mounted with fastening hardware, or (2) Attached to a wall or other acceptable bonding surface with adhesive pad (supplied). When installing your Sensor Holster choose a flat, stable surface that offers easy access. For convenience, we also recommend placing the Sensor with its logo side facing outward (as shown below).

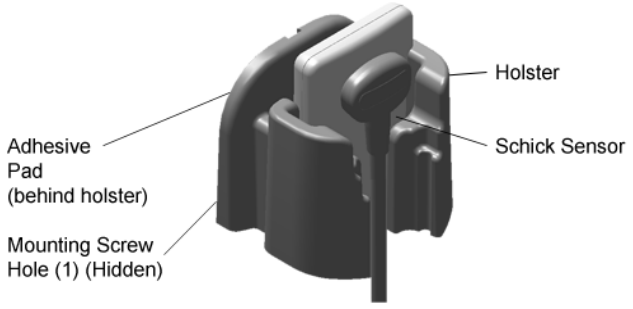


Figure 4. Schick Sensor Holster

9.2 USB Cable Clips

9.2.1 For USB 3.0 Interfaces on desktop surfaces

STEP 1

To attach a cable clip for an interface located on a desktop surface, we recommend disconnecting the USB cable from the USB Interface.

STEP 2

Select the appropriate cable clip and align it with the track on the bottom surface of the Interface. Viewed in this way, the open loop part of the clip will be facing away from you.

STEP 3

Slide the clip along the track and apply an appropriate amount of pressure to snap the clip into place. When positioned correctly, the small arms of the clip will be even with the edge of the Interface.

STEP 4

Connect the USB cable to the interface so it is positioned inside the loop of the cable clip.

Installation is complete.

9.2.2 For AE USB Interfaces with wall holders

STEP 1

To attach a cable clip for an interface attached to a wall holder, we recommend disconnecting the USB cable from the USB Interface

STEP 2

Select the appropriate cable clip and align it with the track on the bottom surface of the Interface. Viewed in this way, the open loop part of the clip will be facing away from you

STEP 3

Slide the clip along the track until it meets the screw hole where the holder and the wall are attached. When positioned correctly, the clip will touch the screw hole and will straddle the track of the interface.

STEP 4

Connect the USB cable to the interface so it is positioned inside the loop of the cable clip.

Installation is complete.

9.2.3 Wall-Mounting Option (with Fastener)

IMPORTANT! When following the wall-mounting option, choose a location for the holder where there are no electrical wires or connections that could be contacted accidentally when drilling.

Perform the following steps to install the holder by fastening it with the supplied hardware to a wall or other flat surface:

1. Remove the Schick Sensor from the holster.
2. Position the holster on a stable flat surface.
3. Using the hole on the back of the holder as a guide, fasten the holder securely to the wall using the one (#4) dry wall screw (supplied) or other hardware appropriate to the mounting surface.
4. Place the Sensor into the holster. Loosely coil the Sensor cable around the holster, using the slightly recessed area between the flat mounting surface and the retaining arms.

9.2.4 Wall-Mounting Option (with Adhesive)

IMPORTANT! When the protective layer is removed, the adhesive pad on the back of the holster will form a strong bond to most surfaces almost immediately. Be sure you have selected the best location for the holster before installing it.

Perform the following steps to install the holder by attaching it with the adhesive pad (on the back of the holster) to a wall or other flat surface:

1. Remove the Schick Sensor from the holster.
2. Locate a stable flat surface for the holster.
3. Remove the protective layer from the adhesive pad on the back of the holster.
4. Place the holder on the surface, pressing evenly to ensure complete contact.
5. Place the Sensor into the holster. Loosely coil the Sensor cable around the holster, using the slightly recessed channel between the flat mounting surface and the retaining arms.

Appendix A. Reference

A-1. Removal and Replacement

There are no user-serviceable parts inside the Schick USB interface and the service of Sensors is limited to cable replacement. Should you experience problems with the product, please contact the authorized dealer for Dentsply Sirona products in your country or region or Dentsply Sirona Technical Service at 800-659-5977 (U.S. customers).

A-2. Part Numbers USB 3.0 and USB 2.0

The following tables provide customer-orderable part number information for Schick 33 AE (USB 3.0) Interface.

Table 9. Schick 33 AE (USB 3.0) Interface Orderable Item Part Numbers

ITEM	SENSOR CABLE LENGTH	DESCRIPTION	FOR ORDERING
Size 0 Starter Kit	3 ft (0.9 meters)	Schick 33 S0 Starter Kit/ AE Interface 3 ft	100008641
Size 0 Starter Kit	6 ft (1.8 meters)	Schick 33 S0 Starter Kit/ AE Interface 6 ft	100008639
Size 0 Starter Kit	9 ft (2.7 meters)	Schick 33 S0 Starter Kit/ AE Interface 9 ft	100008640
Size 1 Starter Kit	3 ft (0.9 meters)	Schick 33 S1 Starter Kit/ AE Interface 3 ft	100008638
Size 1 Starter Kit	6 ft (1.8 meters)	Schick 33 S1 Starter Kit/ AE Interface 6 ft	100008636
Size 1 Starter Kit	9 ft (2.7 meters)	Schick 33 S1 Starter Kit/ AE Interface 9 ft	100008637
Size 2 Starter Kit	3 ft (0.9 meters)	Schick 33 S2 Starter Kit/ AE Interface 3 ft	100008635
Size 2 Starter Kit	6 ft (1.8 meters)	Schick 33 S2 Starter Kit/ AE Interface 6 ft	100008633
Size 2 Starter Kit	9 ft (2.7 meters)	Schick 33 S2 Starter Kit/ AE Interface 9 ft	100008634
Size 0 Sensor Kit	6 ft (1.8 meters)	Schick 33 S0 Sensor Ship Kit/ AE Cable 6 ft	100008630
Size 0 Sensor Kit	9 ft (2.7 meters)	Schick 33 S0 Sensor Ship Kit/ AE Cable 9 ft	100008631
Size 0 Sensor Kit	3 ft (0.9 meters)	Schick 33 S0 Sensor Ship Kit/ AE Cable 3 ft	100008632
Size 1 Sensor Kit	6 ft (1.8 meters)	Schick 33 S1 Sensor Ship Kit/ AE Cable 6 ft	100008627
Size 1 Sensor Kit	9 ft (2.7 meters)	Schick 33 S1 Sensor Ship Kit/ AE Cable 9 ft	100008628
Size 1 Sensor Kit	3 ft (0.9 meters)	Schick 33 S1 Sensor Ship Kit/ AE Cable 3 ft	100008629
Size 2 Sensor Kit	6 ft (1.8 meters)	Schick 33 S2 Sensor Ship Kit/ AE Cable 6 ft	100008624
Size 2 Sensor Kit	9 ft (2.7 meters)	Schick 33 S2 Sensor Ship Kit/ AE Cable 9 ft	100008625
Size 2 Sensor Kit	3 ft (1.8 meters)	Schick 33 S2 Sensor Ship Kit/ AE Cable 3 ft	100008626
USB Cable Clips	—	3.0 USB Cable Clips Kit	100008698
—	3 ft (0.9 meters)	AE Sensor Replaceable Cable Kit, 3 ft	100007221
—	6 ft (1.8 meters)	AE Sensor Replaceable Cable Kit, 6 ft	100007219
—	9 ft (2.7 meters)	AE Sensor Replaceable Cable Kit, 9 ft	100007220
—	—	Schick AE USB Interface	100008286

Table 10. Schick 33 USB 2.0 Interface Orderable Item Part Numbers

ITEM	SENSOR CABLE LENGTH	DESCRIPTION	FOR ORDERING
Size 0 Sensor Kit	6 ft (1.8 meters)	Schick 33 S0 Sensor Ship Kit 6 ft	B1318000
Size 0 Sensor Kit	9 ft (2.7 meters)	Schick 33 S0 Sensor Ship Kit 9 ft	B1318001
Size 1 Sensor Kit	6 ft (1.8 meters)	Schick 33 S1 Sensor Ship Kit 6 ft	B1118000
Size 1 Sensor Kit	9 ft (2.7 meters)	Schick 33 S1 Sensor Ship Kit 9 ft	B1118001
Size 1 Sensor Kit	3 ft (0.9 meters)	Schick 33 S1 Sensor Ship Kit 3 ft	B1118002
Size 2 Sensor Kit	6 ft (1.8 meters)	Schick 33 S2 Sensor Ship Kit 6 ft	B1218000
Size 2 Sensor Kit	9 ft (2.7 meters)	Schick 33 S2 Sensor Ship Kit 9 ft	B1218001
Spare Cable Kit	6 ft (1.8 meters)	Schick Replaceable Cable Kit 6 ft	B1209120
Spare Cable Kit	9 ft (2.7 meters)	Schick Replaceable Cable Kit 9 ft	B1209121
Spare Cable Kit	3 ft (0.9 meters)	Schick Replaceable Cable Kit 3 ft	B1209122
USB Cable Kit	16.5 ft (5 meters)	USB A/B 5M Cable with Ferrite	B2250150
USB Cable Kit	6.5 ft (2 meters)	USB A/B 2M Cable with Ferrite	B2250151
USB Cable Kit	1.6 ft (0.5 meters)	USB A/B 0.5M Cable with Ferrite	B2250152

A-3. Summary of Specifications

The system has passed North American Safety Certification and complies with international EMC, safety, and quality standards below.

Table 11. Specifications

ITEM		VALUE	
EMC/Safety		IEC60601-1 ed. 3.1	Medical Electrical Equipment – Part 1: General Requirements for basic safety and essential performance
		IEC60601-2 ed. 4	Medical Electrical Equipment – Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility Requirements and tests
		CAN/CSA C22.2 No. 60601.1:14	Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance
Quality		AAMI TIR12:2020	Designing, testing and labeling reusable medical devices for reprocessing in health care facilities: A guide for device manufacturers
Classification		Not Category AP Equipment Not Category APG Equipment	
Mode of Operation		Equipment is intended for continuous use	
Additional Notes		Equipment is not suitable for use in the presence of a Flammable Anesthetic Mixture with Air or with Oxygen or Nitrous Oxide.	
USB 2.0 Interface	USB Port:	2.0	
	Operating voltage	+5V DC Unit is supplied with power via the USB connection of the PC.	
	Supply Current	250 mA	
	Power Consumption	1.25W	
	Weight	Approx 1.8 oz. (50g)	
	Dimensions	4.22 x 2.44 x 1.10 in. (10.7 x 6.2 x 2.8 cm)	
	Cable Length	5 m	
USB 3.0 Interface	USB Port:	3.0	
	Operating voltage	+5V DC Unit is supplied with power via the USB connection of the PC.	
	Supply Current	250 mA	
	Power Consumption	1.25W	
	Weight	Approx 1.8 oz. (50g)	
	Dimensions	92 x 50 x 20.1 mm	
	Cable Length	2 m (maximum)	

Sensor	Technology	CMOS-APS (Active Pixel Sensor)	
	Pixel Size	15 μm, image acquisition in 15 μm	
	Line Pairs	28 lp (33.3 lp - Nyquist Limiting Frequency)	
	Active Sensor Area	Size 0	18 x 24 mm
		Size 1	20 x 30 mm
		Size 2	25.6 x 36 mm
	External Dimensions	Size 0	23.6 x 31.9 x 7.5 mm
		Size 1	25.4 x 38.3 x 7.5 mm
		Size 2	31.2 x 43.0 x 7.5 mm
	Cable Length	2.70 m (maximum)	
Transport and Storage Conditions		Ambient temperature range: -20° F (-29° C) to 140° F (+60° C) Relative humidity range: 30 to 85% Atmospheric pressure range: 700 hPa to 1060 hPa	
Operating Conditions		Ambient temperature range: 50° F (+10° C) to 104° F (+40° C) Relative humidity range: 20% to 85%	
Operating Altitude		≤ 2000 m	
Restricted service statement		Unless otherwise specified, this unit should be serviced only by the manufacturer. It contains no user-serviceable parts.	

A-4. Leakage Current Statement

The system complies with the leakage current requirements of IEC 60601-1 safety standard. Variations, however, may exist in the construction of computers to which the USB Interface is connected. Customers are advised to have a qualified electrician perform a leakage test on their equipment before using the USB Interface.

Type of protection against electric shock:

Applied part type BF

A-5. EMC Tables

The following tables provide system compliance information to electromagnetic compatibility (EMC) and electromagnetic immunity (EMI) standards. To ensure conformance, the customer or user must use the USB Interface in environments that are consistent with these standards.

The USB cable required with the USB Interface must also comply with the same standards. The operation of the USB Interface has been independently tested using USB cables identified in Table 10 on page 38. Compliance to EMC and EMI standards cannot be guaranteed by the use of alternate cables.

Table 12. Guidance and Manufacturer's Declaration - Electromagnetic Emissions

PLEASE NOTE: The USB Interface is intended for use in the electromagnetic environment specified below. The customer or user of the USB Interface must ensure that it is used in such an environment.

EMISSIONS TEST	COMPLIANCE	GUIDANCE
RF emissions CISPR 11	Group 1	The USB Interface uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic
RF emissions CISPR 11 Harmonic emissions IEC 61000-3-2 Voltage fluctuations/ flicker emissions IEC 61000-3-3	Class B Class A Complies	The USB Interface is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage supply network that supplies buildings used for domestic purposes.

Table 13. Guidance and Manufacturer's Declaration - Electromagnetic Immunity

PLEASE NOTE: The USB Interface is intended for use in the electromagnetic environment specified below. The customer or user of the USB Interface must ensure that it is used in such an environment.

IMMUNITY TEST	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	GUIDANCE
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 610004-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode ± 2kV common mode	± 1 kV differential mode ± 2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	Voltage dips: 0% U_T with 1/2 period at 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% U_T with 1 period and 70% U_T with 25 periods at 50 Hz and 30 periods at 60 Hz each at 0° Short interruptions: 0% U_T with 250 periods at 50 Hz and 300 periods at 60 Hz		Mains power quality should be that of a typical commercial or hospital environment. If the user of the USB Interface requires continued operation during mains interruptions, it is recommended that the PC workstation to which the USB Interface is connected be powered from an uninterruptible power supply or battery. NOTE: U_T is the AC mains voltage prior to application of the test level.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30A/m	30A/m	Mains power quality should be that of a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communication equipment should be used no closer to any part of the USB Interface, including its cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1.2\sqrt{P}$

IMMUNITY TEST	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	GUIDANCE
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.7 GHz	3 V/m	$d = 1.2\sqrt{P}$ for 80 MHz to 800 MHz $d = 2.3\sqrt{P}$ for 800 MHz to 2.7 GHz Where P is the maximum output rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, [a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol. 

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the USB Interface is used exceeds the applicable RF compliance above, the USB Interface should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the USB Interface.
[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m

Table 14. Recommended Separation Distance between Portable and Mobile RF Communications Equipment and the USB Interface

PLEASE NOTE: The USB Interface is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or user of the USB Interface can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the USB Interface as recommended below, according to the maximum output power of the communications equipment.

RATED MAXIMUM OUTPUT POWER OF THE TRANSMITTER (W)	SEPARATION DISTANCE ACCORDING TO THE FREQUENCY OF THE TRANSMITTER (M)	
	150 kHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.23
0.1	0.38	0.73
1	1.2	2.30
10	3.8	7.3
100	12.0	23.00

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Image Quality Inspection

The following table may be used to record the results of a quality check. For details on how to perform this procedure, please refer to Section 8.4.3 on page 49.

INSPECTION				IMAGE QUALITY	
Year	Date	Name	Signature	Acceptable	Not Acceptable
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *
				☐	☐ *

* In the event that image quality is unacceptable, please contact the authorized dealer for Dentsply Sirona products in your country or region or Dentsply Sirona Technical Service at 800-659-5977 (U.S. customers).