



USER GUIDE



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OrthoCAD.

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Chapter 1: Overview

iOC Optical Impression Device

The iOC Optical Impression Device is a mobile office unit that contains all of the necessary hardware and software components for performing case scanning. Once a case has been scanned and viewed, it may be uploaded to the Cadent Center for further processing.

The iOC is powered by the iTero Scanner and infrastructure.

Main Features

- ⇒ PC-based system
- ⇒ LCD monitor with built-in speakers
- ⇒ Optical scanner with flexible cable
- ⇒ Integrated keyboard
- ⇒ Wireless mouse
- ⇒ Wireless foot pedals
- ⇒ Four lockable wheels
- ⇒ Two ventilation fans (inside grids)
- ⇒ Wireless internet connection
- ⇒ Internal UPS

NOTE: For detailed hardware specifications, see the *Operation Manual*.

Booting the System

To turn the system on/off, press the blue “POWER” button above the keyboard. For further operation details, refer to the *Operation Manual*.



About This User Guide

This User Guide describes how to use the iOC Scanner application to scan cases, and how to use the Case Manager application to monitor case status. From within each application, you may press F1 to access context-sensitive help.

Refer to the *Operation Manual* for hardware specifications and for detailed descriptions regarding booting, shutdown, cart relocation, UPS usage, safety, disinfection, sleeve swapping and maintenance.

Moving the Cart

Since the system is equipped with an internal UPS, the system may be left running during short moves within the office. Before relocating the cart, unplug the power cable from the wall and properly secure all cords and cables on the cart.

NOTE: The system will not allow scanning while operating on UPS backup power.

When fully charged, the internal UPS provides about 5 minutes of power. As soon as the cart reaches its destination, it should be plugged in immediately. If the system is left unplugged, warning messages begin to appear on the screen and the status of the internal UPS battery will be displayed. When the internal UPS battery is nearly empty, the system will automatically shut down in a safe manner.

For further details regarding the UPS and moving of the cart, refer to the *Operation Manual*.

iOC Scanner Sleeves

The system uses disposable white plastic Scanner Sleeves (imaging shields) to ensure maximum infection control. A special red protective sleeve is used to protect the scanner head during shipping and between patient sessions.

- ⇒ At the start of each scanning session, remove the red protective sleeve and attach a new white sleeve.
- ⇒ At the end of each scanning session, discard the dirty sleeve according to standard procedures. Then use disinfectant wipes to clean the scanner wand, scanner cradle, keyboard and mouse. Finally, attach the red protective sleeve for protection.

WARNING: For a detailed description of changing scanner sleeves between patients, refer to the *Operation Manual*.



Mouse & Foot Pedal Batteries

The system notifies the user when batteries need to be replaced in the mouse or foot pedals. See the *Operation Manual* for battery specifications and for instructions on changing batteries.

Entering the iOC Desktop

To enter the iOC desktop, the password is “cadent” (all lowercase).



Desktop Icons

The following icons should appear on your desktop.

	<p>The iOC Scanner application provides an intuitive user interface for performing digital scanning. The doctor is guided through the scanning sequence by means of visual, text and voice assistance. The foot pedals and mouse are used to respond to screen instructions and perform scanning.</p>
	<p>The OrthoCAD application provides tools to view the OrthoCAD models as they are sent from the scanner.</p>
	<p>The Case Manager works interactively with iOC Scanner and handles file communications between the doctor's office, partnered labs, and the Cadent Center. The Case Manager allows doctors to view the current status of all cases.</p>
	<p>In general, the Cadent Support icon should not be used. If you contact Cadent Support for assistance, you may be requested to double-click this icon to enable the support engineer to view & control your system from a remote station.</p>

Opening the iOC Scanner Application

Double-click the iOC icon to open the iOC Scanner application.

You will be requested to Login:



The screenshot shows a login window titled "Login" with the following content:

New Login System

iTero, iOC & Case Manager are now authenticated by MyCadent.com.
A MyCadent account ensures enhanced security and authorized access to patient scans.
Scanners that are utilized by multiple doctors require a separate login for each doctor account.

MyCadent account owners:
Enter your existing login email and password in the provided fields.

User Name:

Email:

Password:

Remember Login

[Sign In](#)

[Forgot Your Password?](#)

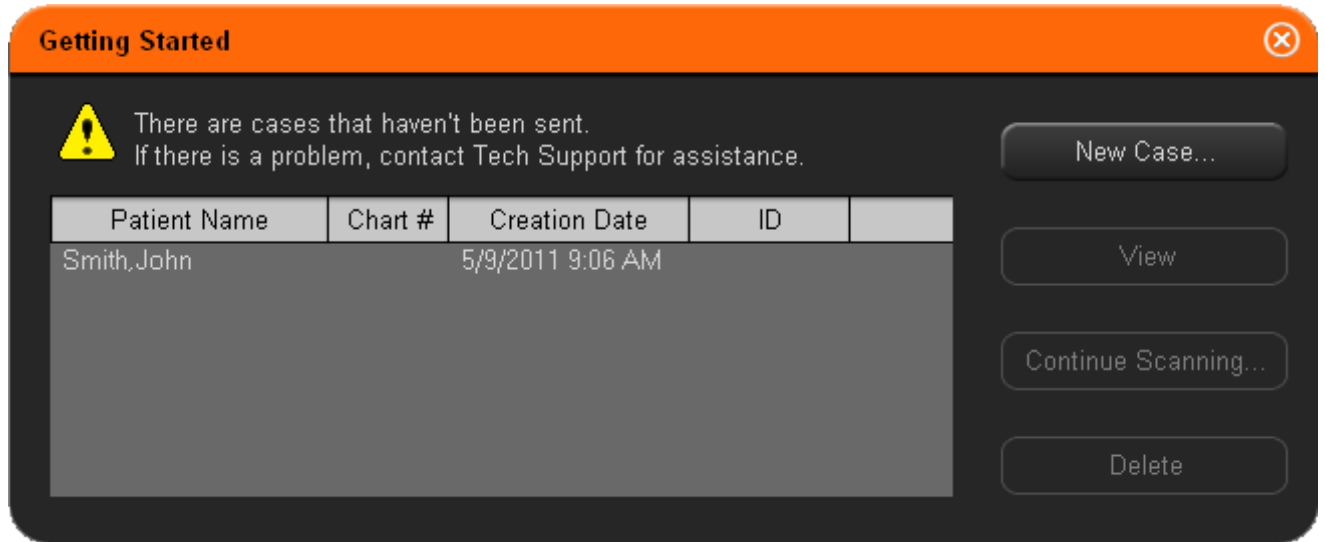
If you do not have a MyCadent account:
1. Click "Don't Have MyCadent Account"

[Don't Have MyCadent Account](#)

Chapter 2: User Interface

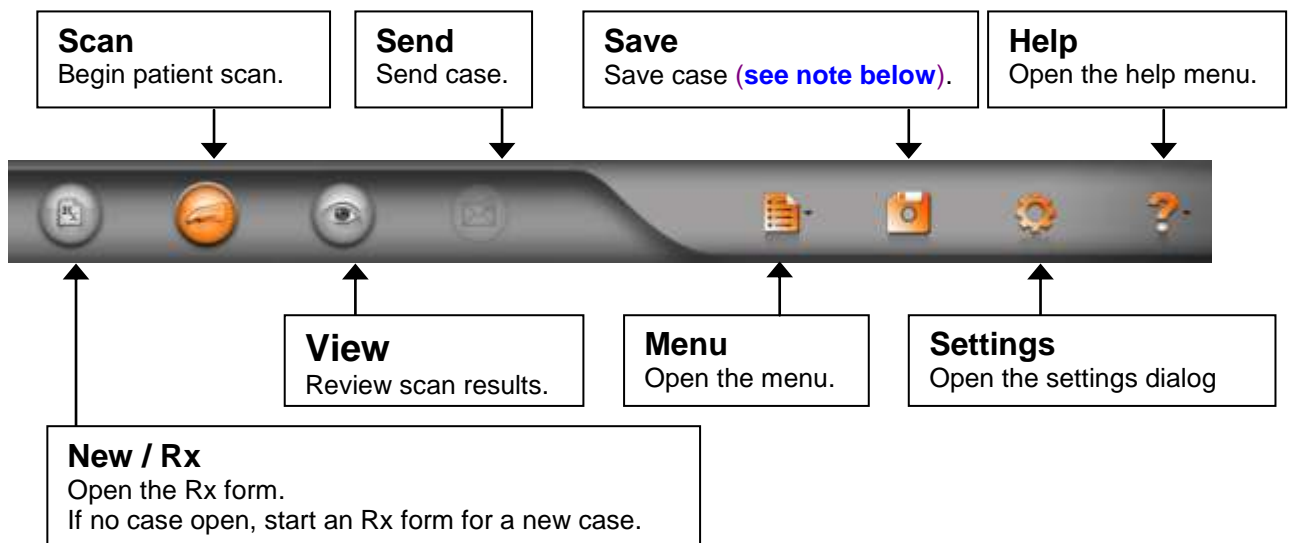
Getting Started Dialog

When the iOC Scanner application is opened, the system checks for “unsent” cases on your local system. If such cases exist, the Getting Started dialog appears with a list of unsent cases. (Cases which have already been sent, may be opened using the Case Manager.)



Main Toolbar

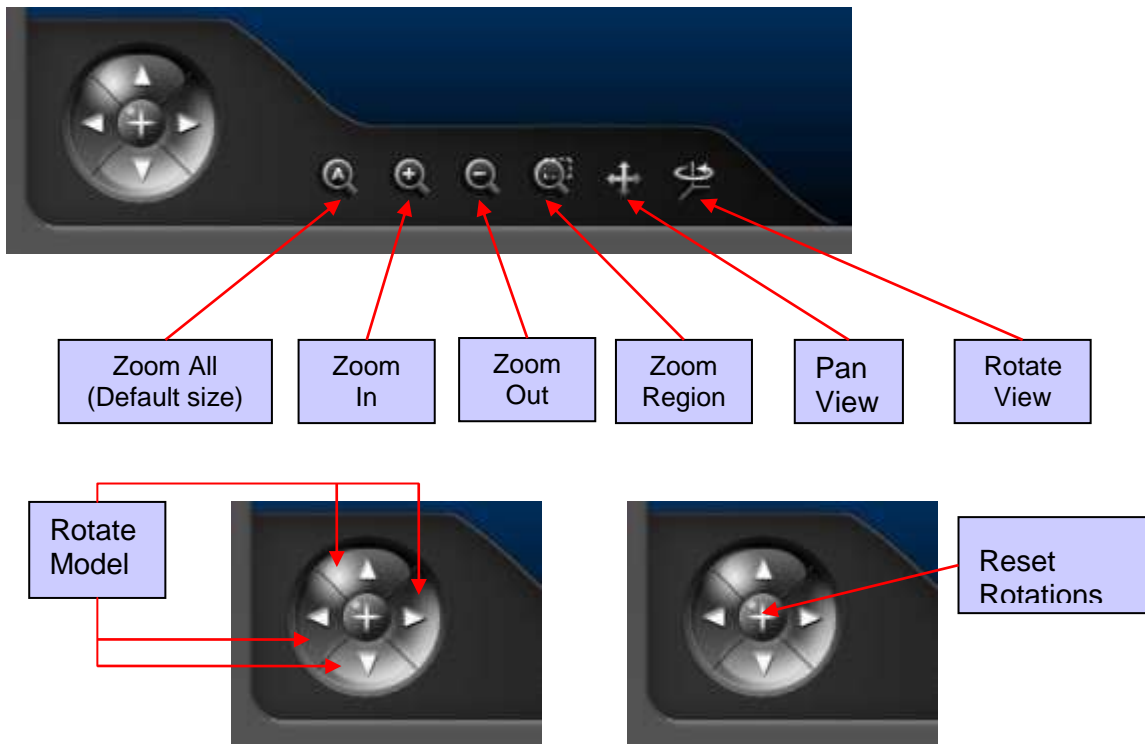
The main toolbar of the iOC Scanner application contains the following icons.



NOTE: The system saves the case automatically on a regular basis and saves the case before closing it. In addition, you may use the **Save** command manually whenever desired.

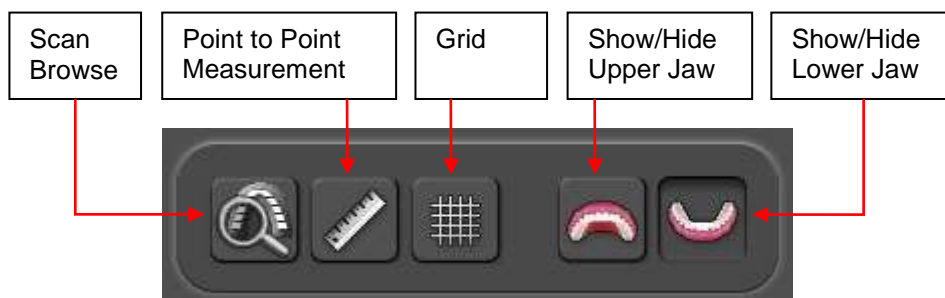
View Control

The View Control can be used to manipulate the 3D image in the graphic window.



Visibility Control

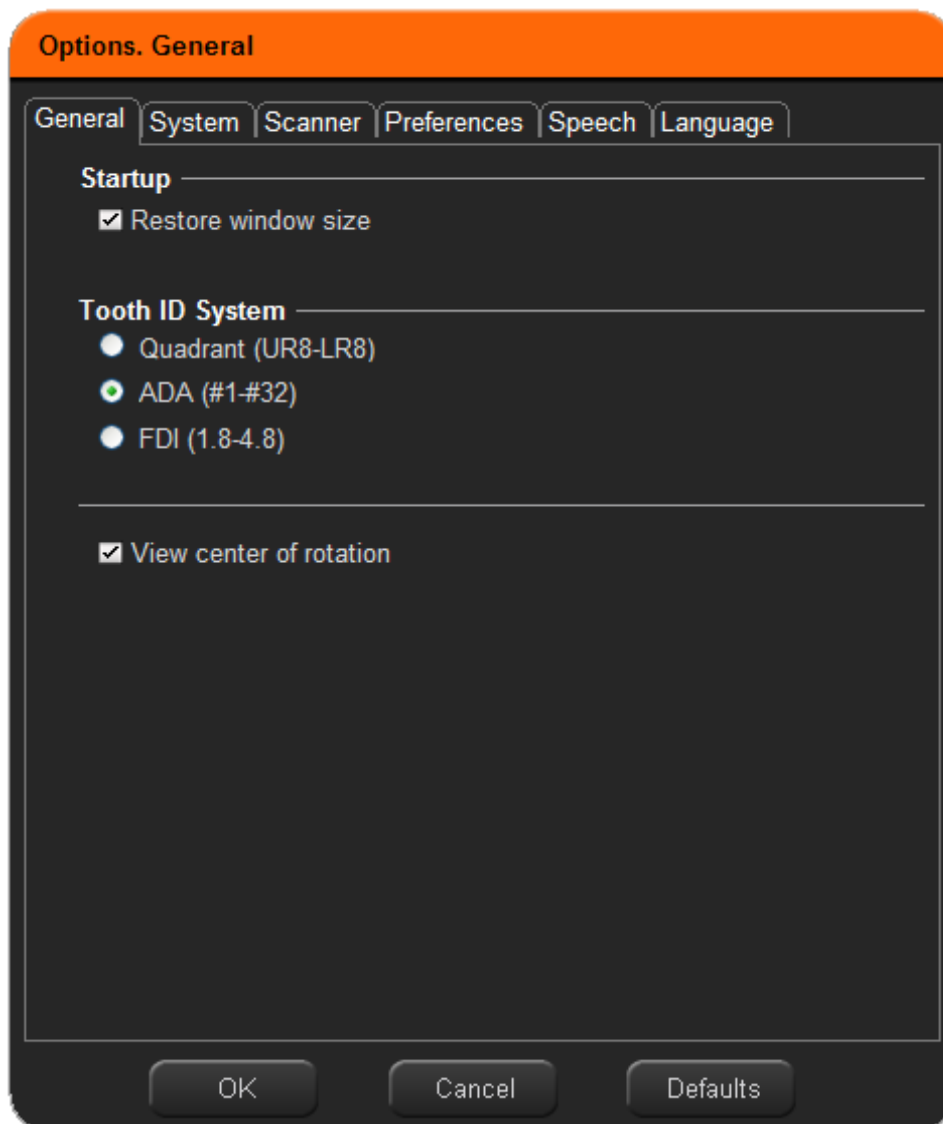
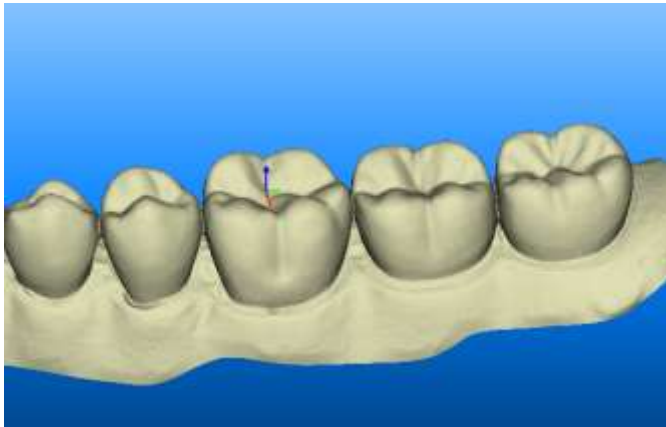
The Visibility Control can be used to Show/Hide elements in the 3D model and to activate measurement and analysis tools.



Center-of-Rotation

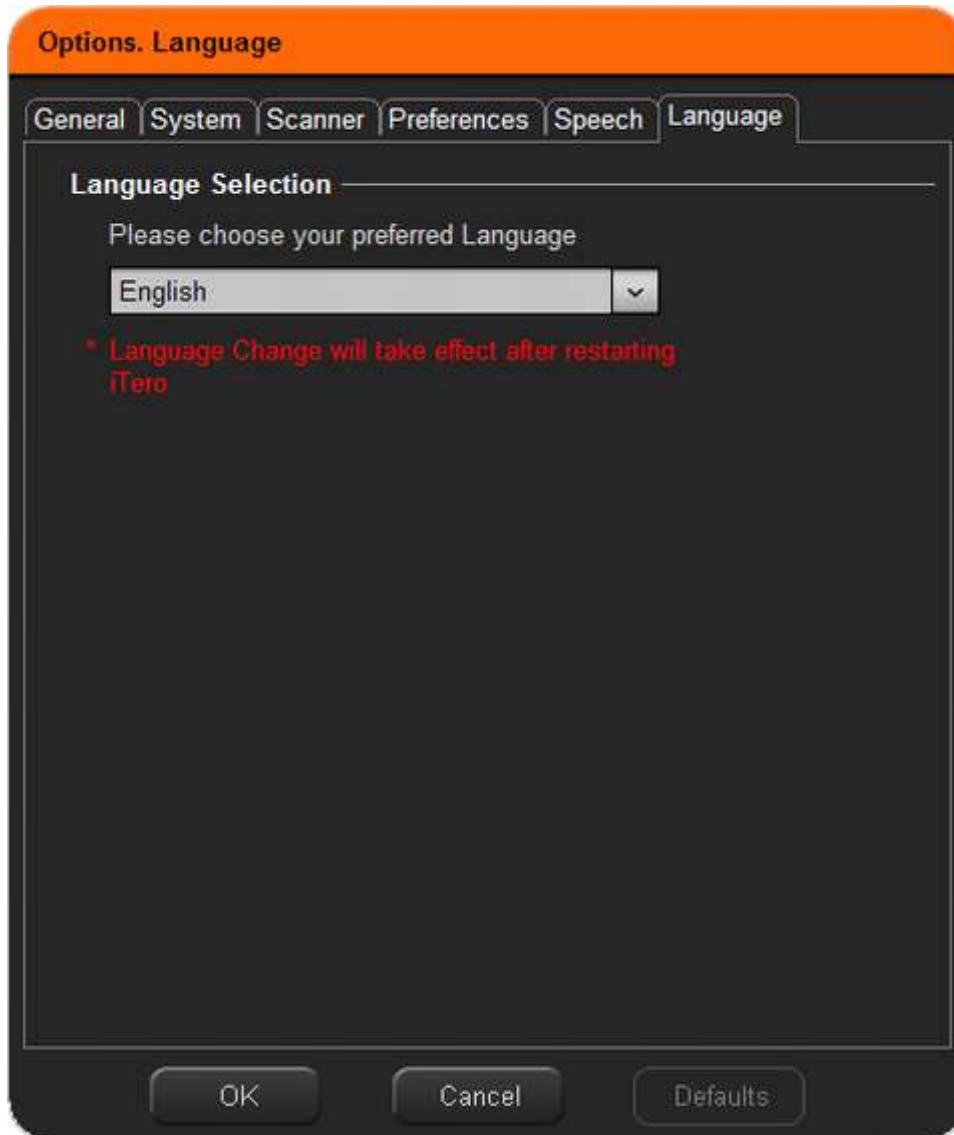
To move the center-of-rotation symbol to a different place on the 3D image, press Alt and then click somewhere on the image. The 3D image will then rotate around that point.

You can choose to hide or display the center-of-rotation symbol using the General options.








Multilingual Support

To change languages in the iOC Scanner application, use the Language Options.



Keyboard & Mouse Shortcuts

Functions	Cursor Icon	Sequence	Description
Zoom		Shift + left-mouse	Zoom an area of the 3D image.
Pan		Alt + Shift + left-mouse OR Mouse-wheel + right-mouse	Move 3D image within graphic window.
Rotate Freely		Alt + left-mouse OR Mouse-wheel	Rotate 3D image in any direction.
Swivel		Mouse-wheel (at edges)	Move cursor close to left or right edge of graphic window, press mouse wheel, and move mouse up/down .
Swivel		Ctrl + Mouse-wheel	Press Ctrl key and mouse-wheel and move mouse in circular motion.
Rotate with Arrows		↑ ↓ ← →	Click in graphic window and then press arrow keys. Press up/down arrows to rotate vertically. Press left/right arrows to rotate horizontally. Hold down arrow for continuous rotation.
Move the Center-of-Rotation		Alt + click left-mouse OR Click mouse-wheel	To move the center-of-rotation symbol to a different spot on the 3D image.
Scan Explorer		Ctrl + E	Hide/display the Scan Explorer dialog.
Context-sensitive help		F1	Click in any dialog or window and then press the F1 key to display context-sensitive help.

Chapter 3: Treatment Information

Opening a New Case

To register a new patient, click on the “Rx” icon in the main toolbar. Or click on “New Case” in the Getting Started dialog.

Treatment Information

The “Treatment Information” window is the digital order form used to define the patient details and the case type to be scanned – iRecord / iCast / VS / iQ / Invisalign.

⇒ Required fields are marked with an asterisk (*).

⇒ For more details, press F1 to open the help system.

Pre-Entering Patients

You may pre-enter patients in the system in order to save time during the actual patient sessions. To pre-enter a patient, fill in the Rx and then click **Scan Later**. The patient name will then appear in the Getting Started dialog each time you open the iOC Scanner application.

On-Screen Keyboard

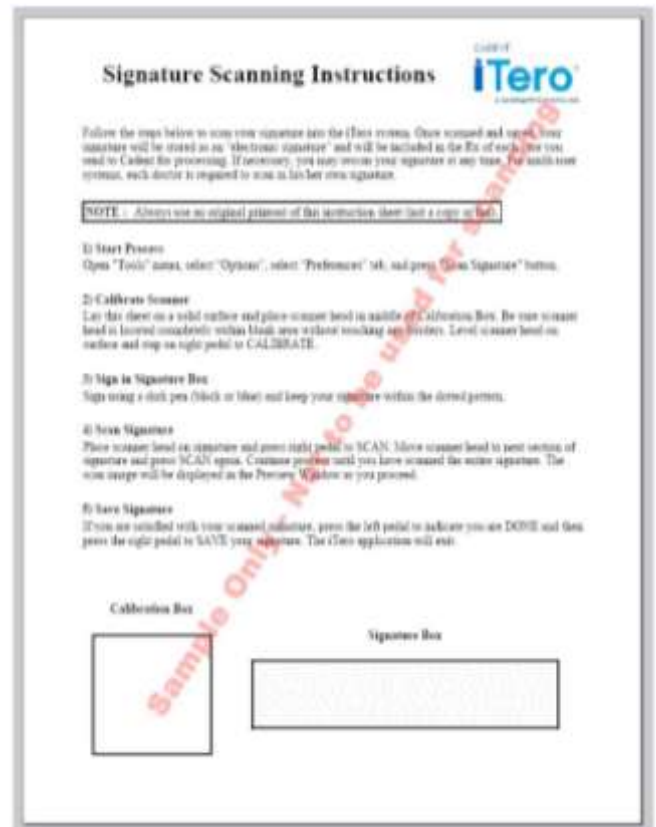
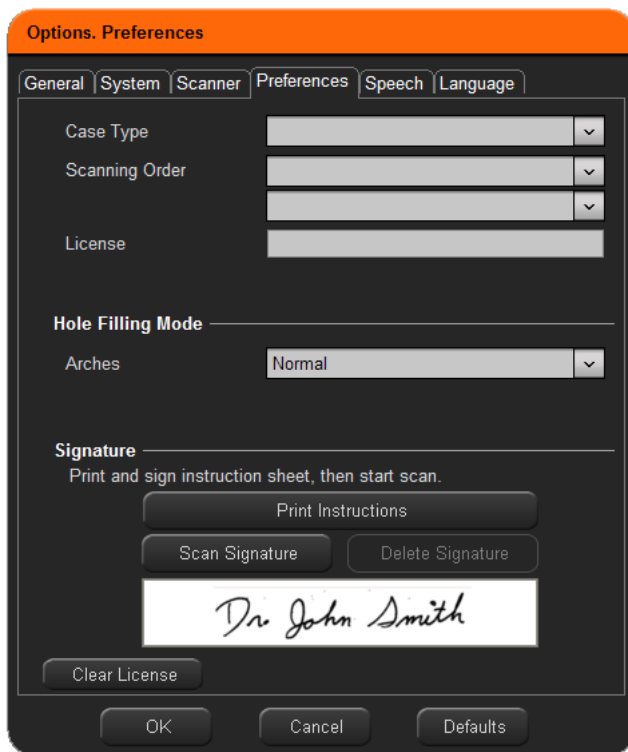
Information may be entered into the Rx form using the built-in keyboard on your workstation. Alternatively, you may type using the virtual **On-Screen Keyboard**.



Digital Signature

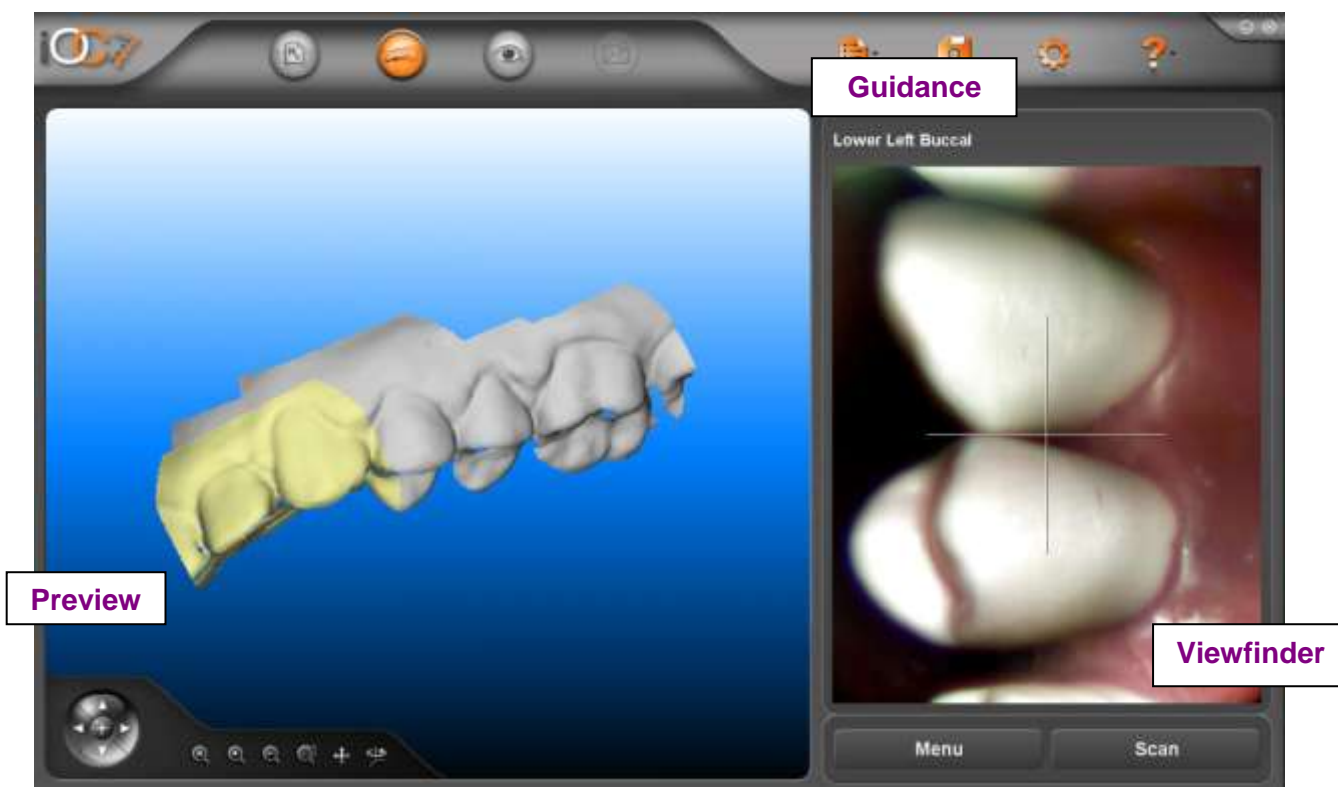
Each doctor may enter a digital signature in the system. Once entered, the digital signature will be displayed in the **Signature** field of the Rx form at the doctor’s office and at any partnered lab.

- ⇒ Signatures are stored in an encrypted format that cannot be used outside of the iOC software (protecting users from unauthorized use).
- ⇒ To create your digital signature, open the Preferences options and click “Print Instructions”. The instructions sheet includes a calibration box and a signature box.
- ⇒ It is essential to use an **ORIGINAL PRINTOUT** of the “Signature Scanning Instructions”. Do not use a copy or faxed version of the sheet.



Chapter 4: Scan Tool

The Scan Tool consists of the following elements:



Guide Window

For each individual scan, the system provides three types of instructions:

- ⇒ Text command (**Guidance**, above the **Viewfinder**)
- ⇒ Voice command (thru built-in speakers)

Viewfinder

The **Viewfinder** helps you to position the scanner head correctly.

- ⇒ The entire area displayed within the **Viewfinder** will be scanned.
- ⇒ The **Viewfinder** is for positioning purposes only. In some instances, the target area may appear slightly out of focus and you should attempt to improve the focus. Even if the focus remains poor in the **Viewfinder**, the actual scan resolution will be fine.

Preview

After performing a scan in the **Viewfinder**, the results are displayed in the **Preview** for immediate review. Press the **Menu** pedal and select **Undo** if you wish to retake the scan for any reason.

Performing a Scan

In general, the scanning process is controlled using the two foot pedals. You can also use the mouse to click commands on the Virtual Pedals.

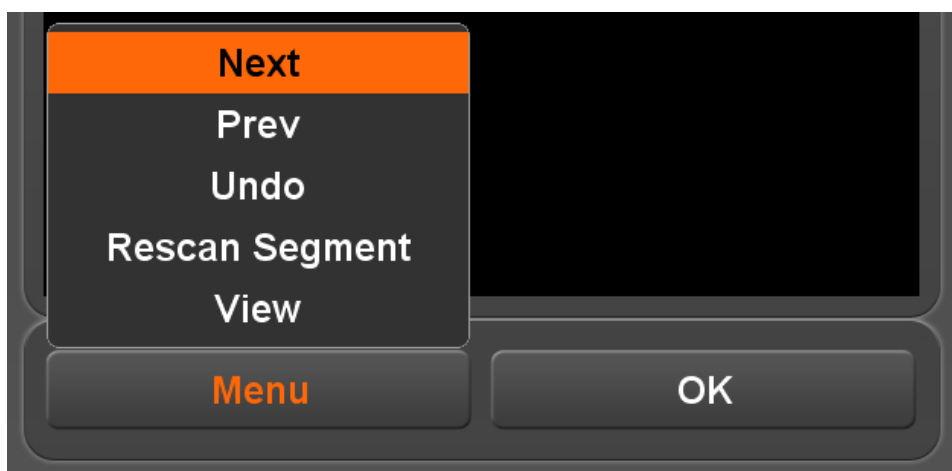
- ⇒ To take a scan, first stabilize the image. Then press and release the right foot pedal to **Scan**. The right pedal in the pedal dialog will become pressed to indicate that a scan has been initiated. Once the image becomes steady, an audible beep indicates that the scan is in progress.
- ⇒ If the patient or doctor moves during the scan, the system may request a rescan.
- ⇒ You may also decide on your own (for any reason) that you wish to redo the scan. Press the left pedal (**Menu**) to open the menu. Pressing the left pedal again moved the menu selection. After the menu selection is on **Undo**, press the right pedal (**OK**).



Pedals Dialog – ready to scan:



Pedals Dialog – menu open:



Scanning Tips & Techniques

Scanning Basics

- ⇒ Each scan should have crosshairs following the natural shape of the arch (tangential).
- ⇒ Buccal and lingual scans should include occlusal information (scan at 45 degree angle).
- ⇒ We recommend the use of cheek retractors to avoid excessive tissue from being scanned (especially for scanning anterior teeth).

Slow Scanner Response after Pressing Pedals

- ⇒ Ensure that an overhead light is not shining directly on the area being scanned.
- ⇒ Verify that patient and scanner are not moving during scan.
- ⇒ Check that saliva is not blocking the field of vision. Dry the area in question.
- ⇒ Ensure that interference is not occurring (tissue, lips, tongue, etc.)
- ⇒ Check that patient is holding tongue still.
- ⇒ If necessary, ask the patient to position tongue on the opposite side of the mouth.

Video Window Displays Blurred Image

- ⇒ Try cleaning the external scanner sleeve window with clean cotton or paper.
- ⇒ If cleaning does not help, try replacing the scanner sleeve with a new sleeve.
- ⇒ If the new sleeve doesn't help, contact Cadent support for assistance.

Jaw Relation Scans

- ⇒ Center reference line should follow the occlusal plane.
- ⇒ The jaw relation scan should contain teeth data from both jaws, for a better registration.

Scanning Samples

Buccal View



Lingual View



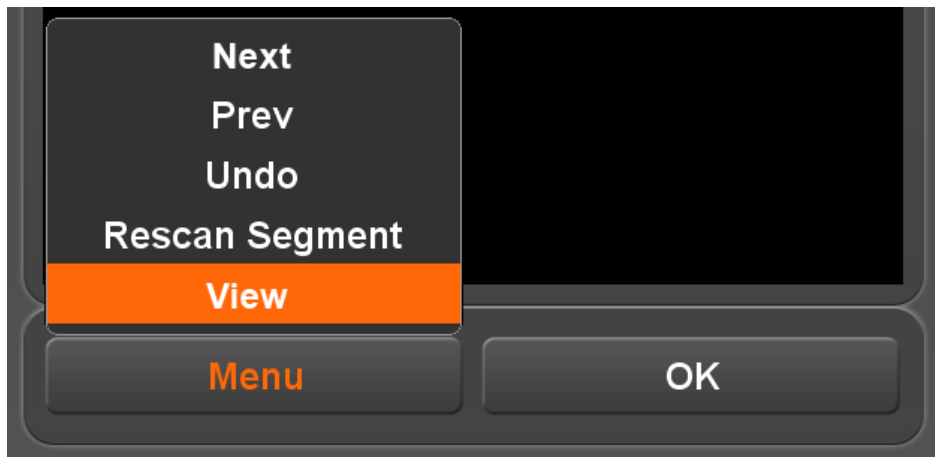
Bite Relation View



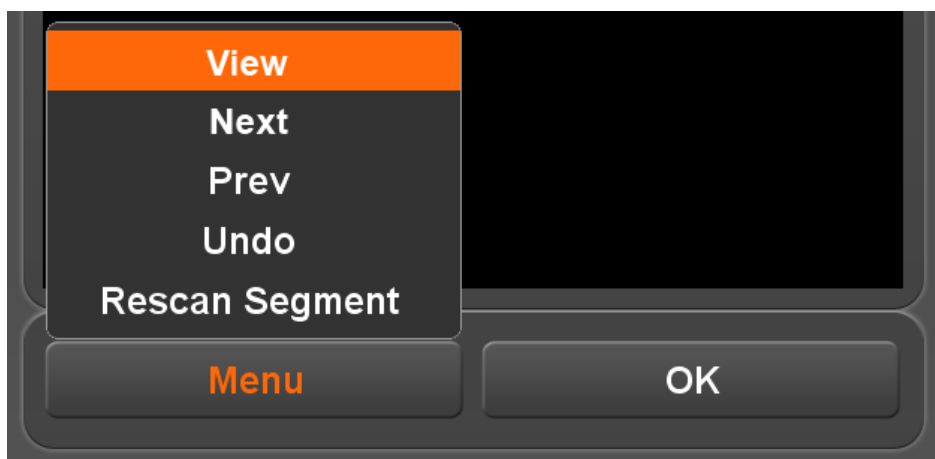
Scanning is Done – Moving to the View Tool

In any stage of the scanning, although preferably after all the required jaw geometry is acquired, including the relation between the jaws (bite), user can move to the View Tool.

This can be done by pressing on the left pedal several times – “Menu”, then scrolling in the opened menu until reaching “View” – and then pressing on the right pedal – “OK”.



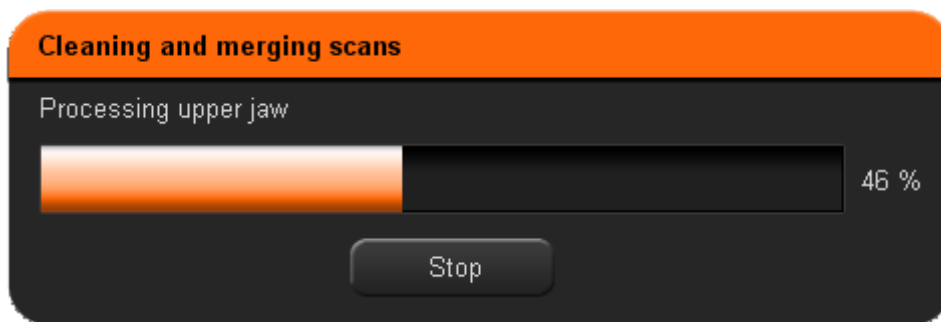
When in the last scanning segment, “View” is the first option in the pedals menu:



Chapter 5: View Tool (for Case Review)

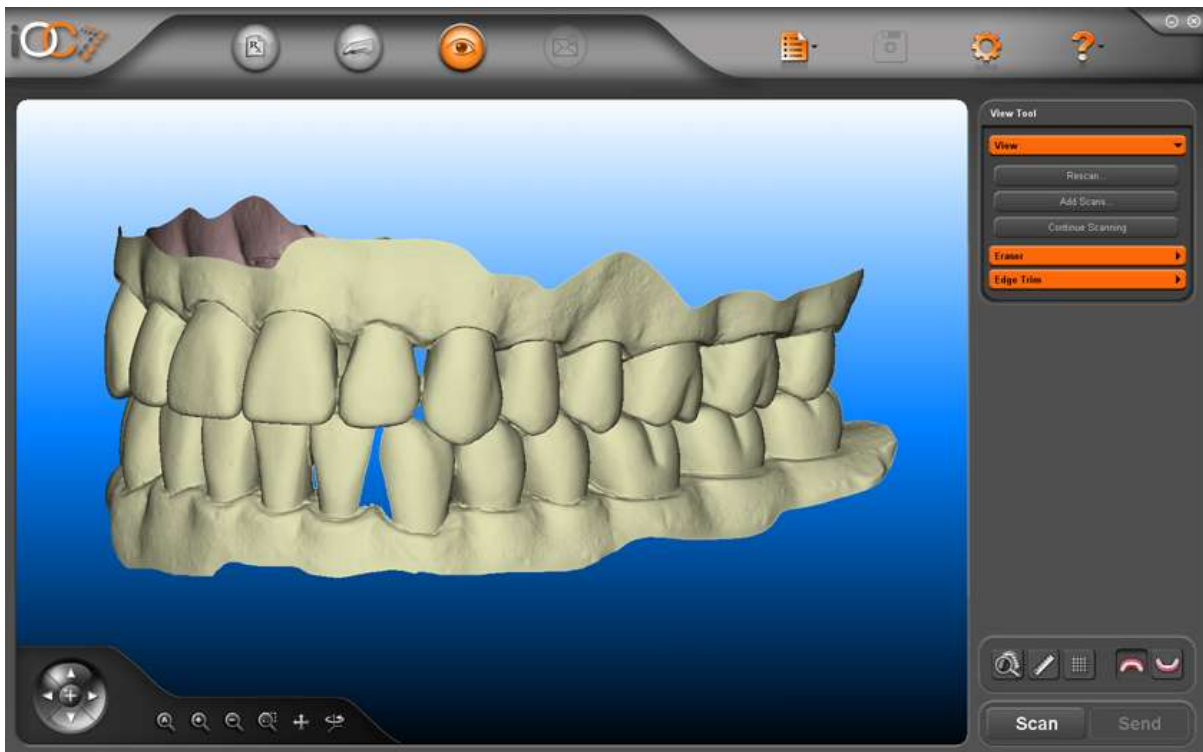
Merge of Scan Images

After the scanning is complete, the system merges all scans into a single graphic image and displays the resulting image for review. Progress bars are displayed during the merge process.



Case Review with Patient Present

It is important to review the case with the patient still present, since rescanning may be required. Be sure to check that the Bite Registration is correct, and that no data is missing.

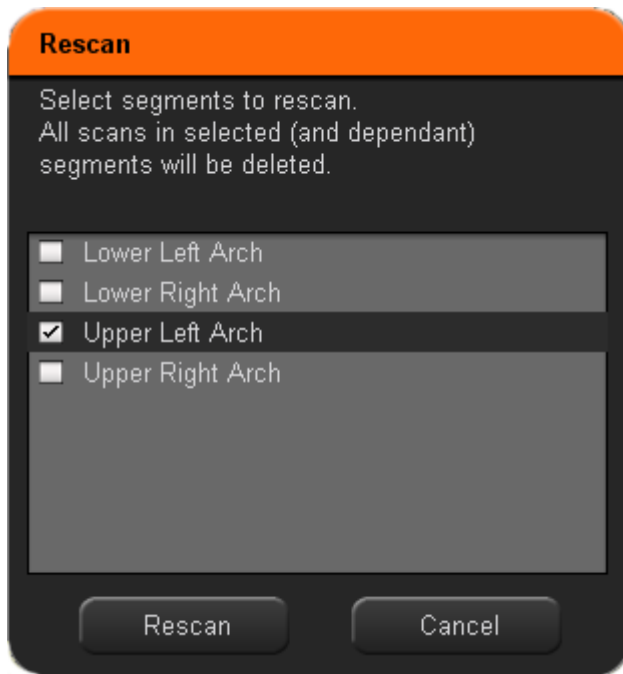


Rescanning

To perform rescanning, click the “Rescan...” command in the Scan tab.

Choose the desired rescan areas and press “Rescan”.

The system will automatically begin the rescanning sequence. When complete, the system indicates that the “Guided Scanning is Done” and the updated scans are remerged for final review in the View Tool.



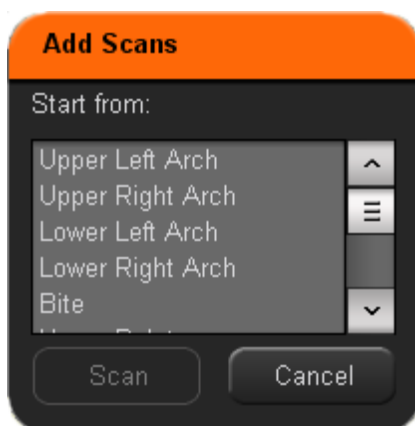
Adding Scans

After reviewing the case in the View Tool, user may want to add scans to the model – to capture missing areas or other additional data.

To add scans, click the “Add Scans...” command in the Scan tab.

Choose the area in which scans should be added and press “Add Scans”.

The system will automatically go to scanning mode and continue from a segment according to user selection. When complete, user should move back to the View Tool to review the new merged model.



Chapter 6: Sending Case

Once you have finished scanning and reviewing the case, click on the “Send” icon in the main toolbar to send the case to the Cadent Center.

The iOC Scanner application will automatically close, and the file transfer process will be handled by the Case Manager application. The case will be sent to the Cadent Center. To confirm that the file has been sent (or is queued for sending), open the Case Manager.

Chapter 7: Case Manager

Overview of Case Manager

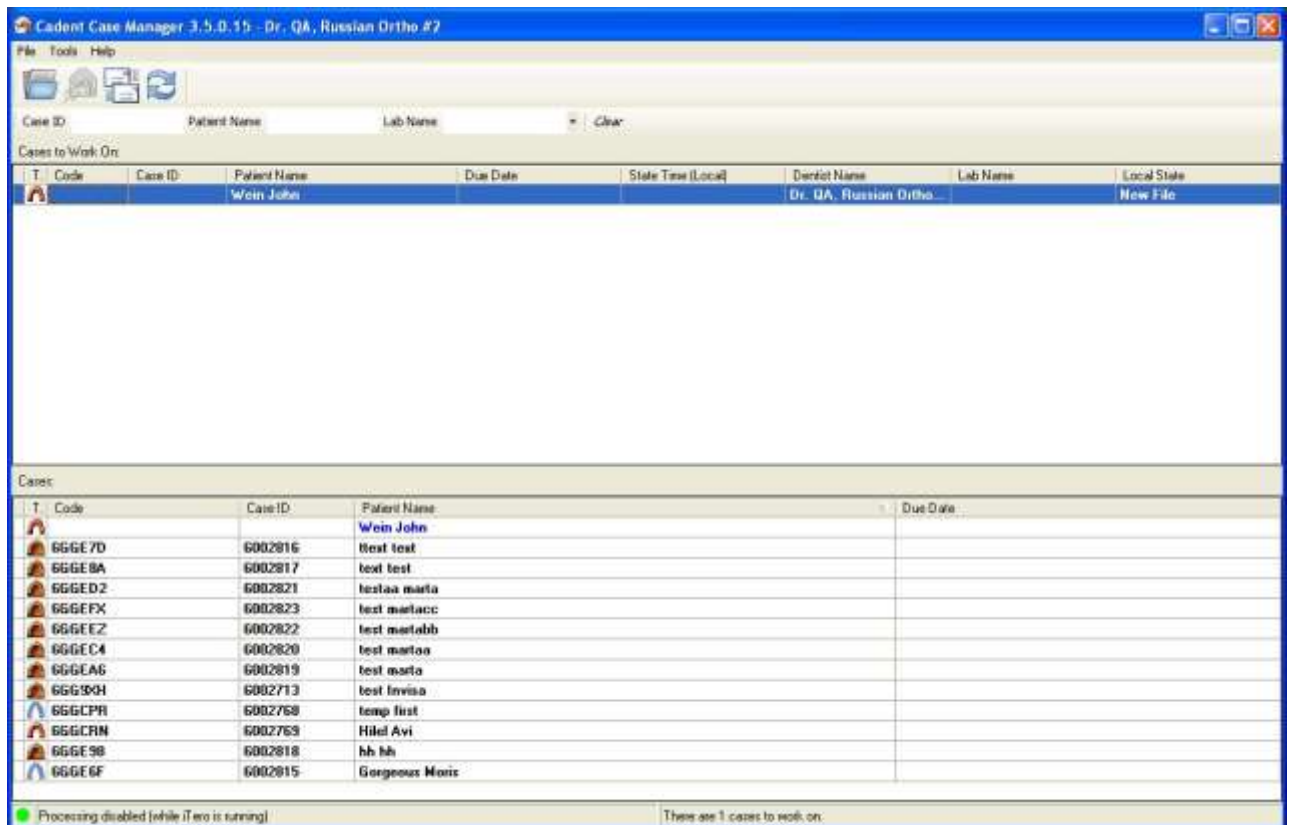
The Case Manager application works interactively with the main iOC Scanner application to provide the following capabilities.

- ⇒ Displays case essentials (case ID, patient, dentist, lab, etc.)
- ⇒ Shows current status of all cases.
- ⇒ Uploads new cases from your office to the Cadent Center.
- ⇒ Downloads the latest version of a case from the Cadent Center to your office for viewing purposes.
- ⇒ Opens cases in the OrthoCAD application (for viewing & editing).

Entering Case Manager

Double-click the Case Manager icon to start the application.

The Case Manager application contains two tables, as described below. Your selections in the top three fields (Case ID, Patient Name, Lab Name) serve as a filter for determining which cases are displayed in the two tables. Click **Clear** to empty the three fields and display all cases.



Cases to Work On (top table)

The top table lists cases that have not yet been sent to the Cadent Center. These cases are also displayed within the Getting Started dialog when opening the iOC Scanner application. Double-click a case to open it. Or right-click on a case and select the desired action. The case are color-coded as follows.

Blue Cases

New Case (not yet sent)

Case information has been entered but case has not yet been “sent” to the Cadent Center (the case may or may not be scanned.) **These cases require action by the user.**

Red Cases

Waiting for Send

Case has been scanned and sent. The case file is queued for upload transmission in the next communication session with the Cadent Center. **No action is required by the user.**

All Cases (bottom table)

The bottom table displays all cases from the past sixty days.

- ⇒ This list includes all cases that appear in the top table (colored **blue** and **red**).
- ⇒ This list also shows cases that have been sent (colored **black bold**). Viewing of these cases is not required. If you do wish to view a case, simply double-click the case and it will be opened for viewing. Once viewed, the case remains black (but not bold).

Refresh Case Manager Display (F5)

To refresh the table display, use the “Refresh” command in the Tools Menu (or press F5).

In general, the Case Manager tables are updated automatically and the Refresh command is not needed. However, there is one particular situation where the Refresh command can be of assistance. After sending out a number of cases, it may take a few minutes for the communication session to complete. During this time, the Case Manager will not update the display until all cases are processed. However, if you issue the Refresh command, the Case Manager tables will be updated immediately based on the current state of communications.

For example, if six cases were sent but only two were actually transferred at this point in time, pressing Refresh would update the tables accordingly.

Files Remain Red in Tables

If files remain red in the Case Manager tables for an extended period of time, there may be a problem.

- ⇒ Ensure that the Internet is operational in your office. If not, you may need to contact your Internet service provider or local technician
- ⇒ If the Internet is accessible in the office but not on the cart, contact Cadent Support.
- ⇒ If the Internet is accessible on the cart but cases still remain red, try pressing Send/Receive button in the Case Manager.

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TOLL FREE iTERO SUPPORT
800.577.8767

Monday - Friday
9am - 6pm EST