

QuickVision Userguide

Table of contents

| | |
|--|-----------|
| INTRODUCTION | 6 |
| INTENDED USE | 6 |
| SECURITY INFORMATION | 6 |
| OPERATORS AND RESPONSIBILITY | 7 |
| CLASSIFICATION | 7 |
| MINIMUM COMPUTER CONFIGURATION..... | 7 |
| INSTALLATION OF QUICKVISION | 8 |
| PROGRAM INSTALLATION FOR SINGLE USER SOFTWARE..... | 8 |
| CHANGING THE INSTALLATION OPTIONS | 12 |
| REINSTALL QUICKVISION | 12 |
| REMOVE QUICKVISION | 12 |
| STARTING - QUICKVISION | 13 |
| RUNNING THE PROGRAM | 13 |
| <i>Password</i> | 13 |
| OPTIONS | 13 |
| <i>Effects of opening windows</i> | 13 |
| <i>Tool Tips</i> | 13 |
| <i>Time display</i> | 14 |
| 'PATIENT CARD' TAB..... | 14 |
| <i>Next or previous patient</i> | 14 |
| <i>Patient search by default</i> | 14 |
| 'X-RAY' TAB | 15 |
| <i>Automatic rotation of X-rays</i> | 15 |
| <i>Audible Beep</i> | 15 |
| <i>Deletion of X-rays</i> | 15 |
| <i>Viewing of large X-rays</i> | 15 |
| PROGRAM PASSWORD | 16 |
| CONFIGURATION INFORMATION | 17 |
| RE-INDEXING FILES | 17 |
| PATIENT FILES..... | 18 |
| CONTENTS OF A FILE | 18 |
| CREATING A PATIENT FILE | 18 |
| MODIFYING A PATIENT'S FILE | 19 |
| FINDING A PATIENT'S FILE | 19 |
| <i>Search by name</i> | 19 |
| <i>Search by file number</i> | 19 |
| NEXT OR PREVIOUS FILE | 19 |
| CLINICAL COMMENTS ON PATIENTS. | 20 |
| <i>Entering a comment</i> | 20 |
| <i>Entering the date</i> | 20 |
| <i>Cancelling a typing error</i> | 20 |
| COPY/CUT/PASTE A SELECTION | 20 |
| MODEL PHRASES | 20 |
| <i>Adding a phrase to the list</i> | 20 |
| <i>Inserting a phrase in the clinical comments</i> | 21 |
| <i>Deleting a phrase from the list</i> | 21 |
| <i>Modifying a phrase</i> | 21 |
| <i>Copying a comment onto a patient's file</i> | 21 |
| <i>Closing clinical comments</i> | 21 |
| DELETING A PATIENT'S FILE | 22 |
| SHUTTING DOWN | 22 |
| X-RAY MANAGEMENT | 23 |
| DIFFERENT X-RAY FORMATS | 23 |
| CAPTURE OF X-RAYS | 23 |

| | |
|--|-----------|
| <i>Direct capture</i> | 23 |
| <i>Scanned X-ray</i> | 23 |
| <i>Features of different X-ray models</i> | 23 |
| ACCESS TO X-RAY MANAGEMENT | 24 |
| X-RAY HISTORY OF A TOOTH | 24 |
| VIEWING ALL A PATIENT'S X-RAYS | 24 |
| VIEWING X-RAYS WITHOUT TOOTH NUMBER | 25 |
| X-RAY PRESENTATION FORMAT | 26 |
| FREE STATUS | 27 |
| ASSIGN A STATUS TO A PATIENT. | 28 |
| PROCESSING AN X-RAY..... | 28 |
| <i>Single view – Horizontal display</i> | 28 |
| <i>Side-by-side display – comparison of 2 X-rays</i> | 28 |
| <i>Bitewing Mode</i> | 28 |
| TOOLBAR | 29 |
| TREATMENT OF AN X-RAY | 29 |
| <i>Adjusting brightness and contrast</i> | 29 |
| <i>Gamma adjustment</i> | 29 |
| <i>Pseudo color image</i> | 29 |
| <i>Inversion positive/negative</i> | 29 |
| <i>Equalization</i> | 29 |
| <i>Magnifying effect</i> | 30 |
| Magnifier 1 | 30 |
| Magnifier 2 | 30 |
| <i>Turning the X-ray around</i> | 30 |
| <i>Measurement tool</i> | 30 |
| <i>Enhancement of details</i> | 31 |
| <i>Image in relief</i> | 32 |
| <i>Drawing on the X-ray image</i> | 32 |
| If you make a mistake | 33 |
| Hide drawings | 33 |
| <i>Number of the X-ray to capture</i> | 33 |
| <i>X-ray information</i> | 33 |
| <i>Printing</i> | 33 |
| <i>Returning to the dental plan</i> | 34 |
| DELETING X-RAYS..... | 34 |
| ARCHIVING X-RAYS..... | 35 |
| <i>Immediate archiving</i> | 36 |
| <i>Archiving by batch</i> | 36 |
| UNARCHIVING X-RAYS | 37 |
| <i>If you have deleted the reference images</i> | 37 |
| MOVING OF X-RAYS | 38 |
| I-MAX TOUCH PANORAMIC | 39 |
| INTRODUCTION | 39 |
| I-MAX TOUCH IN CONNECTED MODE..... | 40 |
| I-MAX TOUCH IN STAND-ALONE MODE | 41 |
| <i>Preparation of the USB memory stick</i> | 41 |
| <i>Formatting the USB memory stick</i> | 41 |
| <i>How to read the USB memory stick</i> | 41 |
| <i>Delete the USB memory stick content</i> | 42 |
| I-MAX TOUCH 3D | 42 |
| I-MAX PLUS PANORAMIC | 43 |
| INTRODUCTION | 43 |
| I-MAX PLUS IN CONNECTED MODE..... | 44 |
| I-MAX PLUS IN STAND-ALONE MODE | 44 |
| <i>Preparation of the Compact Flash card</i> | 45 |
| <i>Formatting the Compact Flash card</i> | 45 |
| <i>How to read the Compact Flash card</i> | 46 |
| <i>Delete the Compact Flash content</i> | 46 |

| | |
|---|-----------|
| I-MAX EASY PANORAMIC..... | 47 |
| INTRODUCTION | 47 |
| I-MAX EASY IN CONNECTED MODE | 48 |
| I-MAX EASY IN STAND-ALONE MODE..... | 48 |
| <i>Preparation of the Compact Flash card.....</i> | 48 |
| <i>Formatting the Compact Flash card</i> | 49 |
| <i>How to read the Compact Flash card.....</i> | 49 |
| <i>Delete the Compact Flash content.....</i> | 50 |
| IMAGE MANAGEMENT | 51 |
| ACCESS TO IMAGE MANAGEMENT | 51 |
| IMAGE LIBRARY | 52 |
| CAPTURING IMAGES..... | 52 |
| <i>With a video camera.....</i> | 52 |
| <i>Importing an image</i> | 53 |
| <i>Saving the image.....</i> | 53 |
| INFORMATION ABOUT THE IMAGE | 54 |
| IMAGE PROCESSING..... | 54 |
| PRINTING AN IMAGE..... | 58 |
| COMPARISON BETWEEN X-RAY & PHOTO | 59 |
| ERASE/ARCHIVE IMAGES..... | 59 |
| <i>Erasing images</i> | 59 |
| <i>Archiving images.....</i> | 60 |
| Archiving current patient | 60 |
| Batch archiving | 60 |
| RESTORING IMAGES FROM THE ARCHIVE | 61 |
| <i>If you have erased the thumbnail images.....</i> | 62 |
| SCANNING..... | 63 |
| SCANNING IMAGES..... | 63 |
| CONFIGURATION..... | 63 |
| <i>Scanner window visible</i> | 63 |
| SCANNING..... | 64 |

The manufacturer OWANDY RADIOLOGY reserves the right to make modifications to its products or to their specifications in order to improve the performance, quality, or ease of production. Specifications of products or accessories may be modified without prior notice.

No part of this publication can be reproduced, transmitted, transcribed or translated without the approval of OWANDY RADIOLOGY.

This manual is the English translation of the original French manual version.

OWANDY RADIOLOGY
2 rue des Vieilles Vignes
77183 Croissy-Beaubourg, FRANCE
Tel. (+33) 1 64 11 18 18
Fax (+33) 1 64 11 18 10

Introduction

The present manual is updated for the product it is sold with, in order to guarantee an adequate reference to use the product properly and safely. The manual may not reflect changes to the product that do not affect operating modes or safety. The aim of this publication is to instruct the user on the safe and effective use of the software. This manual is limited to the description of the software. The instructions for the radiological equipment are provided in the manuals supplied with the unit.

Please read this manual thoroughly before starting to use the unit; it is advisable to keep the manual near the computer workstation for reference while operating.

Intended use

The **QuickVision** imaging software is aimed at dental practices, as a hub centralizing the acquired or imported images. It is intended to be used with standard digital dental X-ray systems for image capture, enhancement and storage operations, such as digital intra-oral sensors, digital panoramic and cephalometric units, 3D CBCT units, digital intra-oral cameras and digital photographic cameras.

QuickVision is installed on standard computer workstations running the Windows operating system and can be manipulated with the computer keyboard and mouse. These workstations can be connected in a network to share the patient data and images between all the **QuickVision** users connected to the network, using the standard TCP/IP protocol and standard network cables.

Security information

Owandy Radiology develops its hardware devices and software in compliance with the safety requirements; furthermore **Owandy Radiology** supplies all information necessary for the correct use.

Owandy Radiology cannot be held responsible for:

- The use of **QuickVision** different from the intended use of the device.
- Injury to the patients, caused by installation and maintenance procedures different from those described in this manual, and by wrong operations.
- Software modifications performed during and after the installation, different from those described in this manual.

In compliance with the IEC 60601-1 standard, any modification of the equipment or its parts is strictly prohibited. It is not allowed to reverse-engineer or modify the code; in that case the conformity of the software is rendered void as **Owandy Radiology** cannot be held liable or responsible for any modifications implemented by a third party. Any bug or malfunction should be reported to **Owandy Radiology** for resolution or to create a bug-fix to be applied by installing a new version of the software.

Operators and responsibility

The installation of the software should be made by a qualified engineer certified by **Owandy Radiology** and/or a computer specialist with software and network installation skills.

The use of the **QuickVision** software is under the responsibility of an expert dentist, dental surgeon, orthodontist, stomatologist or dental assistant trained in the use of the software. Diagnostics should be made by an expert dentist, dental surgeon, orthodontist or stomatologist trained in the viewing and interpretation of radiologic images. In no case can the software be used directly by the patient. It will therefore be used exclusively in a specifically medical environment. The operator must be familiar in the use of a personal computer and related programs, in order to use the functions on the computer easily.

Classification

QuickVision is a medical device referenced as 40876 according to the GMDN classification.

With regards to directive 93/42/EEC amended by directive 2007/47/EC, annex IX, the **QuickVision** medical device is defined as a Class IIa Medical Device.

The user is liable with regards to the legal fulfillment related to the installation and the operation of the device.

Minimum computer configuration

The computer workstation specifications for the software are:

- Operating system: Windows 7, 8, 10 / 32 or 64 bits
- Processor: CPU: Core i3 3 GHz or higher
- Memory: 2 Go
- Graphic board: video board 1 Go
- Backup system (CD-ROM, external hard drive, Internet storage, ...)

The proper functioning of the software on workstations that do not comply with the minimum compatible computer specifications cannot be guaranteed by **Owandy Radiology**.

Installation of QuickVision

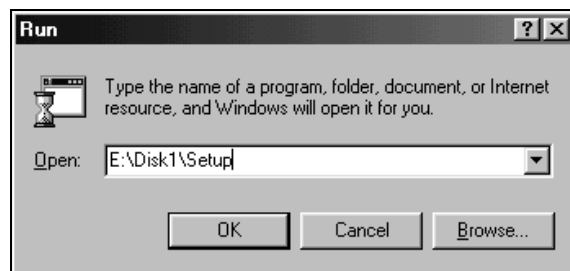
Program installation for single user software

QuickVision requires that Windows 7, 8 or 10 is already installed on your computer and correctly configured.

Close all applications.

Insert the CD-ROM into the CD-ROM drive.

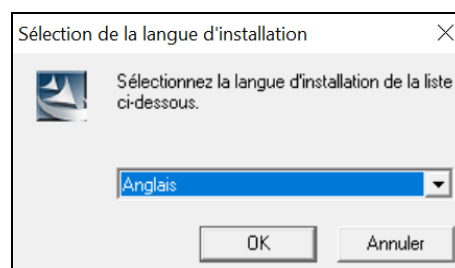
The CD starts automatically (if this does not happen click on the Start menu, select Run and enter the following command: E:\disk1\setup (in this example the letter E represents the CD-ROM drive).



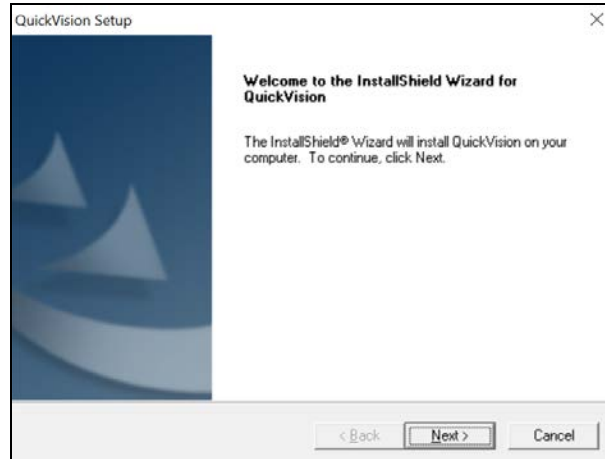
To start the installation, double-click on the Autorun file. The window below opens. Then click on the tab **QuickVision**.



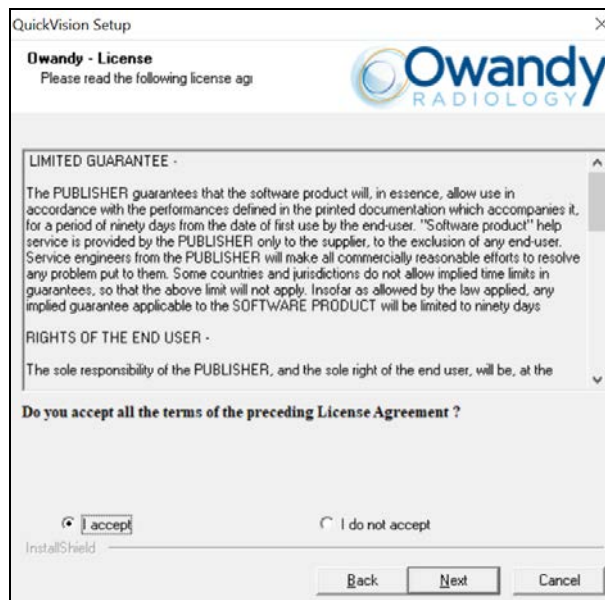
The installation program starts automatically in the language defined in the Windows Regional Settings. You can, however, change the language by selecting it in the drop-down list and clicking on “OK”.



Click on “Next” to begin the QuickVision installation procedure.



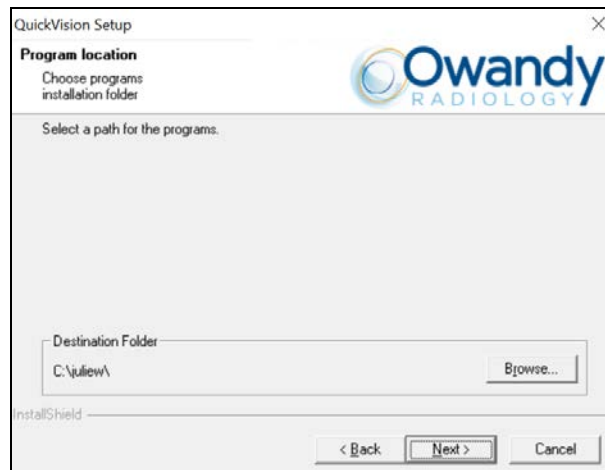
Click on “Next” to continue the QuickVision installation procedure.



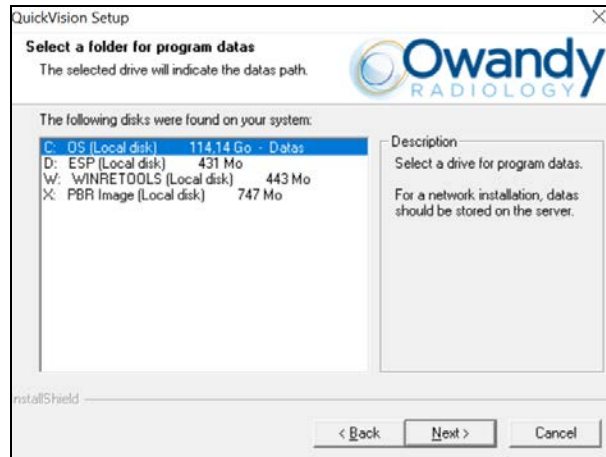
The default path for installation of the program is c:\juliew.

If you are installing the program on another disk click on the “Browse” button and select the drive and directory for installation

Click on “Next” to continue.



Select the disk where the data will be installed then click on “Next”.

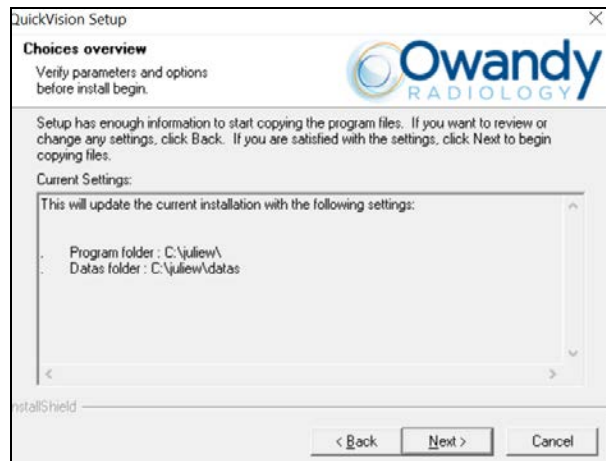


Indicate in which folder of the “Start – Programs” menu the shortcuts to run the QuickVision program will be installed, then click on “Next”.



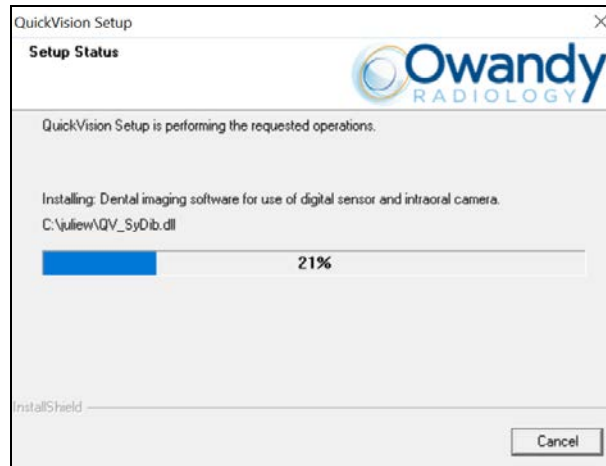
Summary of the installation.

Click on “Previous” if you wish to change the installation, otherwise click on “Next” to run the copying of the program.



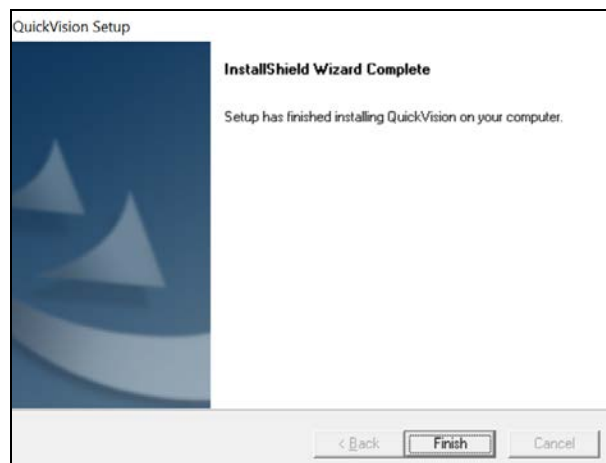
Installation of the program in progress.

Please wait ...



Installation of QuickVision is now complete.

Click on “Finish” to exit the installation program.



Once installation of QuickVision is complete you may:

- Change the installation options
- Rerun the installation of the program
- Remove the QuickVision program

by starting the installation software again.

Changing the installation options

Click on this button to select the components to be installed or uninstalled.

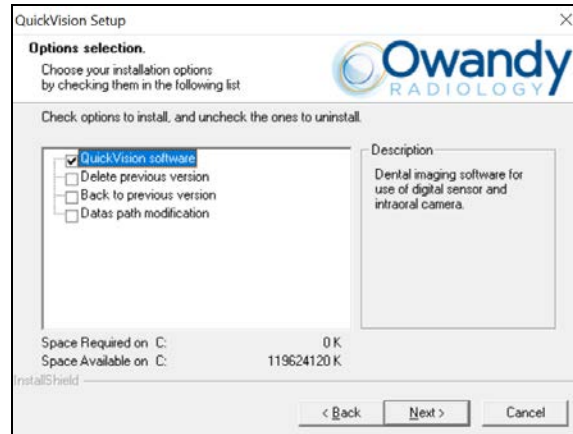
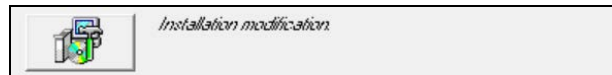
In this window you can display the options installed (☒) and those which are not (☐)

For example:

If you uncheck “Key server” the key server will be uninstalled.

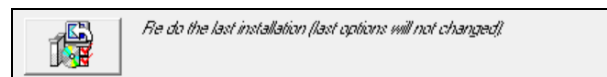
If you check “Change data path” you can tell the program the new location of the data.

Click on “Next” to begin the installation or un-installation of the components.



Reinstall QuickVision

If you wish to reinstall the program without changing any of the options previously selected click on this button. Reinstallation of QuickVision will begin immediately.



Remove QuickVision



: This operation is not reversible. It removes the QuickVision program. It does not under any circumstances remove data from the disk.

Click on this button.



Starting - QuickVision

Running the program



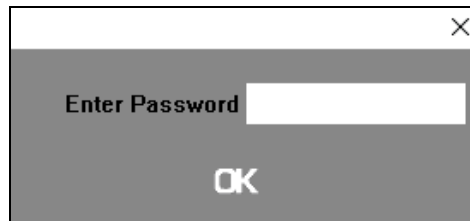
From the Program Manager, double-click on the **QuickVision** icon.

When you enter the password, it is represented by a series of « X », in order to protect its secrecy.

Password

A confidential password enables you to limit access to the program. The program is provided with a blank password. It is up to you to define your own password (see chapter [Password in the program]).

If a password has been defined, a window will appear on the screen in which to enter it.

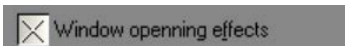


After entering the password, press <Enter> or click on the button. A blank form will appear on the screen.

Options

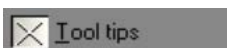
QuickVision includes certain options.

To define these options click on this button.



Effects of opening windows

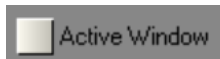
By default, when a window is opened or closed, it is displayed with a “trail” simulating a zoom.



Tool Tips

Most buttons consist of an icon and a legend.

When you tick the <Tool Tips> box, a bubble will appear next to the cursor clearly indicating its function. Re-click on the box to make it disappear.



Time display

You can extend this display to all windows in by ticking the <Active Window> box.

By default, the time is displayed on the right of the header bar.

To display the time on the left, select this option.

'Patient Card' Tab



To input the patient's Social Security number in standard format, check this box. Otherwise uncheck this box.

To hide the patient card information, uncheck the corresponding boxes.

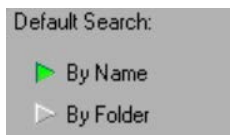
NB: This information is still accessible when modifying the card.

Next or previous patient

In the patient card you will find two buttons to the right of the "Find" button, which enable you to move to the next or previous card.

By default QuickVision displays the (next or previous) card in alphabetical order by patient surname.

To sort the cards by file number, select "By folder".



Patient search by default

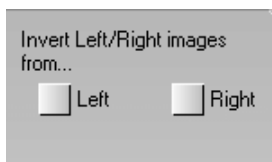
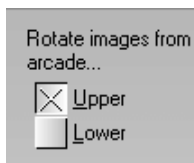
It is possible to search for a patient's file by name or folder number. By default QuickVision positions the input cursor on the name heading.

'X-ray' tab

Click on the "X-ray" tab to indicate your preferences for the entry of X-rays.

Automatic rotation of X-rays

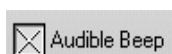
By default, the program displays X-rays according to the position of the sensor in the mouth. In order to rotate the X-rays from the upper or lower arcade tick the corresponding box.



To automatically change sides of the X-rays taken, tick one or other of these boxes.

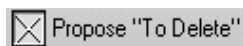
Audible Beep

To activate an audible beep during the acquisition of an X-ray, tick the <Audible Beep> box.



Deletion of X-rays

QuickVision proposes to keep all the X-rays that you have taken. In order to delete certain of them, click on the <Delete> button. To delete all X-rays taken, tick the <Propose to Delete> box. In this case, select the X-rays to keep and click on the <Save> button.

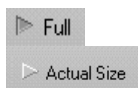


Viewing of large X-rays

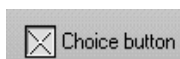
If you are using a high definition X-ray system, where the X-ray size is greater than that of QuickVision's window, you can select the appropriate type of visualization.

If you select <Full>, the X-rays will be slightly "compressed" to fit into the viewing window.

If you wish to see the X-rays in their original form, select <Actual Size>.



If you tick this box, when you view an X-ray, a button <Actual Size> or <Full Size> will appear on the top left of the screen to switch from one mode to another. If this box is unchecked, the button will be invisible and you will not be able to occasionally modify the visualization mode.



NB: This only concerns X-rays of very high definition, which are larger than the maximum window size of the program.

Click on the <Save> button.



Program password



To access the password configuration click on this button.

Enter a personal password.

In subsequent operations, the cursor will put itself under the heading <Old password> and you must enter the current code before trying to modify it.

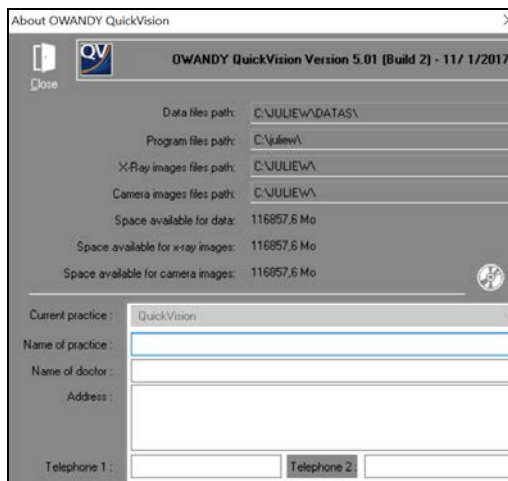
The cursor moves to the next heading <New password>. Enter the desired password (maximum 10 characters), and press <Enter> to confirm.

To avoid any typo, QuickVision asks you to confirm the code by typing it again. If the second input corresponds to the first, the code is stored; otherwise the change is not taken into account.

Configuration information



This icon gives you access to information concerning your installation.



If you only have one disk, the values under the headings space available for data, space available for X-ray images, space available for color images will be identical.

If you use several disks, these values will be different and will give you the available space on each disk.

To close this window, click on this button or press on the <Esc> key.



Re-indexing files

This operation enables the restoration of one or more corrupt files on the disk.

Click on this button or press the R key. The window that opens will carry the list of files in QuickVision.



: It is recommended to make a backup of your data before re-indexing the files.

Here is the list of files that you are likely to have to re-index.

- CLIENTS.DAT Patients file
- OBSERVS.DAT Clinical comments on patients
- VILLES.DAT Postal codes and towns adjacent to the surgery.

To select a file to re-index, click on it. You can select several files in the same way.

Once you have selected the file(s) to re-index, click on the <Reindex> button to run the re-indexing.



VERY IMPORTANT: If error messages occur while using QuickVision, do not save the files on the cassettes that you use daily. You will risk saving corrupt data. When an error message appears, you should repair the corrupt file as quickly as possible either by re-indexing it, or by bringing back the last backup.

Patient Files

Contents of a file

The patient's file contains the patient's administrative information

- Civil details abbreviated
- Patient's surname
- Patient's first name,
- File number
- Date of birth
- Social security number
- A line of important information (see chapter Clinical observations)
- The address of the patient
- The personal telephone number
- The professional telephone number
- Picture of the patient

Creating a patient file

Click on this button or press the <Insert> key.



The file contains the following headings in the following order:

- Civil details: You can key in the civic details or select them from the list by clicking on the button situated on the right of the field.
- Patient's surname and first name: Only the surname is obligatory in order to store the card. As long as this information remains undefined, the <Save> button remains inactive.
- File: QuickVision gives you, by default, a folder number that corresponds to one number above that of the previous file created.

The other headings are optional, and can be left empty if desired.

- Date of birth
- Social Security N°
- Full address
- Personal tel. N°
- Place of work tel. N°

NB: In case of error, you can delete a town from this list by moving the cursor with the scroll arrows onto the line to delete to select it, then pressing on the <Delete> key. Do not use the mouse to select the line as in this case QuickVision will think you have selected this city to affect it to the patient, and will close the selection list.

To save, click on the <Save> button or press on Alt-E.





Modifying a patient's file

To modify a patient's file (Telephone N°, etc....), click on this button or press on the F7 key.

The modification window is identical to that of file creation. For information, see chapter [Creation of patient file].



Finding a patient's file

If the patient already has a file, click on the <Find> button. Key in the patient's name or file N°.

By default, if you did not change the basic parameters, the cursor will blink in the field of the name which is the search mode usually used.

Search by name

Key in the surname on the left and the first name on the right. It frequently happens that multiple patients have the same name. To avoid having a list that is too long, you can before pressing the <Enter> key move the cursor to the cursor to the field to the right of the name and enter part or the complete first name. This will reduce a lot the list of files matching your request.

Search by file number

File: 827

Key in the file number and press <Enter>.



: Please always verify, before making any new image acquisitions, that the patient file currently open in QuickVision is indeed the file of the patient currently being treated.



Allows you to export the patient data in .txt format.



Next or previous file

These two buttons enable you to access the previous or next file to that which is on the screen. Click on these buttons or press on the keys <Page up> or <Page down>



The cursor will not go beyond the size of the existing text.



Copy

Cut

Paste

Clinical comments on patients.

Click on this button or press the key F3 on the keyboard to record particular comments.

The window that opens is a mini word processor in which you can select, delete, insert, and shift one or more lines.

The scroll boxes on the right and at the bottom enable you to move about within the text.

Entering a comment

To insert a comment, position the cursor either by clicking on the desired place or by moving it with the arrow keys, then type the text.

When the patient comments window is empty, the cursor will not move from its place (top left). To add lines, use the <Enter> key that will bring down the cursor one line at a time.

Entering the date

Click on the <Date> button so that the day's date appears on the cursor slot.

Cancelling a typing error

Click on the <Undo> button in order to delete what you have typed.

Copy/Cut/Paste a selection

The commands are those used in Windows.

Ctrl-C to copy the selection onto the clipboard

Ctrl-X to cut the selection. This will disappear from the comments, but will remain saved on the clipboard. You can then in the same way as before, recopy it in another place.

Ctrl-V to paste the selection.

Model phrases

You can save certain model phrases. The list situated above the input box enables you to save these model phrases.

Adding a phrase to the list



Type the text in the comments input box, then with the cursor still positioned on the line to save, click on this button. The line will enter itself automatically in the list.

Inserting a phrase in the clinical comments

Put the cursor in the desired place where you want the line to appear, click on the button to the right of the list to open it. Click on the phrase of your choice to select it. The phrase will appear at the top of the list at the same time as the list closes.



To complete the operation, click on this button. The line will be inserted in the comments at the location of the cursor.

Deleting a phrase from the list

When the phrase is visible in the closed list click on the <Remove>. The line will be removed from the list.



Modifying a phrase

Select the line to be modified and insert it into the comments box.



Once the line is installed in the comments, delete the same line from the model phrase list (see above). Modify the line in the comments box and then add this new line back to the list.

Copying a comment onto a patient's file

You can copy an essential observation in the patient file. To 'copy' a comment onto a patient's file, position the cursor at the point of insertion and click on the <Patient> button. The line is automatically inserted in red.



NB: You can replace this line by another. You can also delete it by clicking on the empty line and copying it onto the patient's card.

Closing clinical comments

To save the comments or modifications, click on the <Save> button.



To exit the comments, click on the <Close> button.

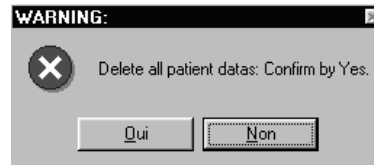


Deleting a patient's file



To delete the file which is on the screen, click on this button.

To confirm your decision, click on the <Yes> button or press “O”.



The patient's file will be permanently deleted

Shutting down



To shut down QuickVision, click on this button. In case of error, QuickVision will ask you to confirm your decision before closing.

Never switch off the computer before shutting down Windows and therefore QuickVision. Data can remain in memory and may not be saved on the disk if you switch off the computer while being in Windows.

Always make daily savings of your files.

X-ray management

Different X-ray formats

There are several formats of X-ray, depending on the system used:

- Very high definition
- High definition
- Low definition
- Control 4 KB (for the X-rays archived).

A small color box indicates the format of the X-ray:



- Yellow, for very high definition X-rays.
- Mauve, for high definition X-rays.
- White, for low definition X-rays.
- Black, for archived X-rays.

Capture of X-rays



Before capturing an X-ray you must specify to which tooth it relates. To do this, you can type the number of the tooth directly in the box to the left of the button representing a molar (in the <ACQ> toolbar), or click this button.

A small dental chart appears. Click on the desired tooth; the window closes and the number of the selected tooth appears in the box on the left. If you capture another X-ray afterwards concerning another tooth, repeat the procedure. If you do not specify a number, the X-ray will not be assigned to any tooth.

The capture mode of the X-ray depends on the sensor model in service.

Direct capture

If you have an X-ray system directly driven by QuickVision, the acquisition is automatic as soon as you push the trigger and the X-ray taken will be displayed automatically on the screen.

If you take several X-rays in succession, they are all saved in memory. The last X-ray taken is displayed at large size and those previously taken will automatically be stored in the X-ray list of the patient.

Scanned X-ray



To scan an image, click on this button.

Please refer to the [Scanner] chapter for the procedure.

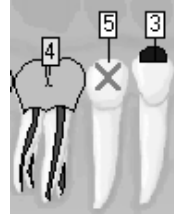
Features of different X-ray models

Depending on which X-ray system is used, certain specific icons can appear in the <RAD> tool bar.

Access to X-ray management



To access X-ray management click on this button or press function key F4. The patient's dentition diagram appears, showing the number of X-rays taken against each tooth.



The two toolbars "RADIOS" and "ACQ" contain the buttons for acquisition and management of X-rays and photographs (see section [Managing images])

The "ACQ" toolbar has a basic minimum of the three buttons shown, but depending on the model of digital X-ray equipment installed other buttons may appear on this bar.



If you have defined a digital panoramic view this button will also appear in the toolbar. To input a panoramic view click on this button

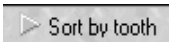
X-ray history of a tooth

If you check this box above the dental chart, you will see a window containing a list of all the X-rays of the selected tooth.



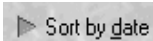
This window is scalable and allows you to see at a glance the different X-rays. If the number of X-rays exceeds the size of the window, a horizontal scrollbar located below at the bottom you to scroll through them.

The <All> button, if checked, allows you to see all X-rays of the patient.



Together with the selection button <Sort by tooth> you can in that way get all X-rays grouped by tooth number. X-rays that were not assigned to a specific tooth being placed first.

You can also sort all X-rays by date of acquisition by selecting this button.



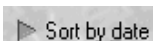
To view an X-ray at large size, double-click on it to go directly to the processing window.

To close this window and go back to the dental chart, click on this button or press on <Esc>.

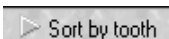


Viewing all a patient's X-rays

To view all the X-rays taken of a patient, click on this button of the <RAD> tool bar.



To obtain the list sorted by capture date, click on this button.



To return to X-rays sorted by tooth number, click on this button.



To view an X-ray at large size, double-click on it to go straight to the processing window..

To close the visualization of all the X-rays and return to the dental chart, click on the <close> button or press on <Esc>.

Viewing X-rays without tooth number

You may have entered an X-ray without defining the tooth number either by oversight or intentionally. As the program is based on this number to display the X-rays when you click on a tooth, this X-ray cannot be accessed directly.



This button, located in the <RAD> toolbar, enables you to access these X-rays by clicking on them. Double-click on one of these X-rays to go to the processing window..

X-ray presentation format



To select the presentation format of the patient's X-rays click on this button in the "X-rays" toolbar. The window that opens contains a selection frame and a number of cases in which you can insert the X-rays of the patient.

Depending on the sensor select the appropriate display mode by checking one of the two buttons, H = 12 image frames or V = 20 image frames.

The program memorizes this lay-out and displays it each time you access this option.

By default, the first time you access this window QuickVision will place the X-rays in the frames according to the tooth number that has been allocated to them.

When you click on a box containing an X-ray QuickVision automatically displays it the selection box with optional comments. You may proceed in either of two ways to place an X-ray in a box. :

- Click on the box where you wish to place the X-ray. The frame will show a green border to indicate that that it is selected. Then choose the X-ray you require in the selection window using the scroll bar(*). When the required X-ray appears in the selection box click on it; It will then appear in the selected box. (*)
- Use the scroll bar to select the X-ray you require in the selection window. When the required X-ray is displayed click on it and hold the mouse button down. Drag the mouse to the box where you want where you want to put the X-ray. When the X-ray is over the required box release the mouse button ("Drag and Drop").

(*) **Caution!** When you click on the X-ray displayed in the selection window QuickVision automatically places it in the selection box, even if there is already an X-ray there. If you accidentally click on the central X-ray and you lose the required X-ray do not panic! Find the missing X-ray in the list of previously displayed ones and click on it to bring everything back to normal.



If you make a mistake click on the corresponding frame (green frame) then click on the "Remove" button

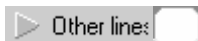
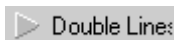
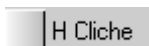
For best display quality check this box.

For a large view of any X-ray in the status just double-click on it to go straight to the processing window.

To close click on "Close" or press <Esc>.



Free status



You can create status modules by clicking on this button.

The window which appears lists previously-defined statuses, or displays an empty list if you have not created any.

To define a new status click on the “New” button.

In the window which opens type the name of the status.

Then give the number of shots to be included in the status.

If you wish, give a description defining the status template you wish to create.

Once the properties of the status are defined the program moves to the status creation mode.

You may place the shots in whatever way you wish.

Begin by choosing whether the first shot you are going to place is to be horizontal or vertical, by checking one or other of these boxes.

Then move the cursor to the approximate position where you wish to place the shot.

It is very important to preselect the orientation of the shot before placing it, as it cannot be changed once placed.

If you wish to delete a shot select it then click on this button.

Choose the cliché mode (horizontal or vertical) and place it. 5 clichés waited, 1 placed

This line at the top of the screen gives the number of shots awaited and the number of shots placed.

Until you have placed all the shots defined in the status properties you cannot save it.

When you make a patient status shot 1 will be positioned in the 1st shot defined in the status, etc.

It is not necessary to position the shots very precisely when creating a status as the program will automatically do this.

Once the shots are in place define the number of lines to contain X-ray images in order to improve the presentation of the status.

To exit click the “Save” button to save the new status.

Click on the “OK” button to display the definition of a status.

To delete a status, select it in the status list then click on the “Delete” button.

To change the name or the description of a status click on the “Change” button.

Assign a status to a patient.

Begin by clicking on the “Status du patient (Patient status)” tab.



Next, click on the “Model” button in order to select the status template to use for the patient.

In the list select the status to assign to the patient and click on the “OK” button.

The blank status selected appears on the screen.

You now have the option of creating a status from existing X-ray images or from X-ray images you are about to take.

To place existing X-ray images in the status you simply select the X-ray image in the top right corner of the window and slide it into the appropriate place.



You may also add notes to a patient status by clicking on the “Comments” button.



When the status is complete click on the “OK” button.

You are not limited to one status per patient.

Processing an X-ray

Single view – Horizontal display



By default when you display an X-ray for the first time it will be displayed in "VERTICAL" mode.

Side-by-side display – comparison of 2 X-rays



Click on this icon to activate this display mode.

Click on the right or left to select the place where the X-ray to be compared is to appear. The green frame will move to the side where you have clicked.

Using the scroll bar move up or down the list in the X-ray history window to choose the required X-ray then double-click on it to select it. You may also use "Drag and Drop" (see the section [X-ray status]).

To apply individual image processing to each of the two X-rays displayed brightness, color, zoom etc, click on the X-ray to be processed and apply the processing desired (see below).

Bitewing Mode



To activate Bitewing mode, click on this icon.

Click on one of the three free locations and proceed as above to place in them the X-rays of your choice.

Toolbar

To activate the functions contained in a toolbar click on the corresponding button. To quit the function, click once more on the same button.

Functions may be used simultaneously.

Here also you can apply a particular image treatment to each of the 4 X-rays displayed.

Treatment of an X-ray

There are multiple X-ray formats possible, see [Different X-ray formats].

On the right you can see the list of all the patient's X-rays. Double click on one of these X-rays for an enlarged display of the central part.

On the left are a number of "tools" for processing the X-ray. To activate one of these functions, click on the corresponding button. To exit the function, re-click on the same button.

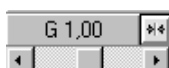
Adjusting brightness and contrast

To adjust the brightness and contrast of the X-ray move the two vertical sliders. The left-hand one adjusts the contrast and the right-hand one the brightness. If you click on the downward arrow you lessen the value; if you click on the upward arrow you increase it.

Above these arrows a box indicates the adjusted value, from -100 to +100. To return to the initial values place the slider on 0, or, more simply, click on the button above the sliders.

To increase the contrast click on this button then adjust the level using the slider on the left. To return to normal contrast click again on the same button.

C-40
L-81



Gamma adjustment

There is a second horizontal scroll box to adjust the Gamma value. The Gamma correction enables you to compensate for the possible differences between the reproduction of your screen and the digital X-ray sensor. To increase or reduce the Gamma correction, move the scroll arrows to the right or left. To return to a Gamma correction nil (1.00) click on the button on the right.

Pseudo color image

Click on this button. To return to a normal image in shades of grey, re-click on this button.



Inversion positive/negative

To view the X-ray in "negative", click on this button. To return to the normal image, re-click on it.



Equalization

To improve the definition of the image, apply an equalizing filter to the X-ray by clicking on this icon.



Magnifying effect

Magnifier 1



To enlarge a part of the X-ray, click on this button. A superimposed red rectangle appears indicating the position of the enlarged image. To move the red frame to another part of the X-ray, place the cursor inside the frame and when the cursor changes to a hand, click on the left button of the mouse. The original image appears again on the screen to enable you to locate the part to enlarge. Click and hold down the left button of the mouse, drag the frame to the desired place and release the button. The selected part is displayed enlarged. To return to the normal image, re-click on the same button.

Magnifier 2



With this magnifier the X-ray does not change. It is the area around the glass which is magnified. To move the glass to the area to be magnified, bring the mouse cursor inside the glass. The cursor will change to a hand. Click on the left mouse button and hold it down. Move the mouse. When the glass is in the right position release the mouse button.



Magnifier 2 has a sliding cursor which allows the degree of magnification to be selected. When the cursor is at the far left magnification is zero. When it is at the far right magnification is 32 (in this case the image is extremely pixelated). A magnification of 2 to 4 will give good results.



You can apply the equalization filter to the enlarged area by checking the box above the magnifier. To equalize the whole X-ray uncheck this box.



To close the magnifier click on the magnifier's escape button.

Turning the X-ray around



These three buttons allow you to rotate the X-ray by clicking on it:

180° vertically

90° counter-clockwise

180° horizontally

To return to the normal image visualization, re-click on the same button.

Measurement tool



Click on this button, the cursor changes to a ruler. To measure the distance between two points on an X-ray, click and hold the left mouse button on your starting point, drag the ruler to the finishing point then release the button. A green line joins the two points and at the same time the measurement in millimeters is displayed in red. You can continue in the same way and take several measurements one after the other.

If you re-click on the mouse button to take a new measurement without moving the cursor (the starting point of the new measurement is the same as the end point of the previous one), the program will display, as well as the measurement between the two new points, the total of measurements 1 and 2. You can repeat this procedure as many times as necessary.

To return to a normal image, re-click on this button.



: A radiological image is a two dimensional representation of an object in three dimensions; measurements made on this representation may be incorrect due to the way the sensor is positioned in the mouth (intra-oral X-rays) or due to the difference between the anatomical shape of the patient's jaw and the predetermined curve, based on a statistical average, of the Owandy Radiology panoramic unit (panoramic X-rays). Parallel positioning is recommended to minimize positioning errors of intra-oral images. Measures are merely provided for indicative purposes only. This tool should be used with caution.

Enhancement of details

You can increase the "grain" of the X-ray image to bring out details that might otherwise be submerged in the whole. To do this click on one of these two buttons.

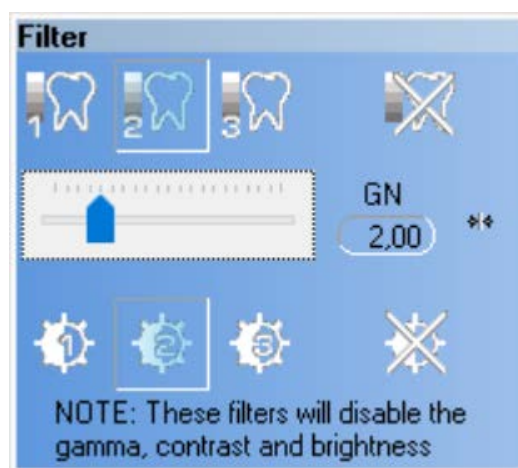


The first gives a medium enhancement. The second gives a powerful enhancement. You can also adjust the sharpness by right-clicking with the mouse on this button. To return to normal view click on the same button again.

The button below and representing a tooth, allow for a third type of enhancement which is intermediate between the relief view and the enhancement itself. To return to normal playback, click this button again.

NB: The configurable enhancement is only available for panoramic images acquired with an I-MAX TOUCH 3D.

By right-clicking on the button, the user can configure the level of enhancement with the buttons at the top (3 types that can be individually adjusted with the gain slider) and the level of contrast with the buttons at the bottom (3 types). The buttons at the right allow for the deactivation of the enhancement or the contrast. In the middle at the right is a button to reset all the settings.



The configuration made in this way by the user will be applied to the panoramic image coming from the I-MAX TOUCH 3D by left-clicking on the icon with the mouse. By clicking a second time the filter is removed.

NB: when the configurable filter is used, the gamma, contrast and brightness sliders will not function.



Image in relief

If you want to see the X-ray in relief (pseudo 3D), click on this button. A view of the X-ray in three dimensions appears on the screen.



Drawing on the X-ray image

You can draw on the X-ray image with some easy-to-use tools made available to you by QuickVision.

To access these tools click on this button. A secondary window containing a number of tools appears on the screen.



At the bottom of this window the 16 basic colors are displayed.

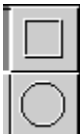
Just click on the color you want to use in order to select it. You may use any of the tools with the selected color.



Above the color selection frame are three line thicknesses. Click on the one you want to use. The selected thickness will be used to draw with any of the tools, except the “Text” tool, which will use the selected color but always with the same thickness.



The pencil enables you to use your mouse as if it were a pencil. Click on it to select it, place the cursor where you wish to begin drawing and left-click with the mouse. Keep it depressed and move the mouse. A line of the color and thickness selected will appear and follow the movements of the mouse. To lift the pencil and stop drawing release the mouse button.



This tool enables you to draw straight lines. Click on it to select it, then place the cursor where you wish to begin the line and click on the left button of the mouse. Keeping it depressed, move the mouse. A straight line of the color and thickness you selected will appear, following the movements of the mouse. To fix the line release the mouse button.



These two tools enable you to draw rectangles and ovals. After clicking on one to select it, place the mouse where you wish to begin the rectangle or the circle and click on the left button of the mouse. Keeping it depressed, move the mouse. When the rectangle or the oval are the size you wish release the mouse button.



You may also type on the X-ray image. Click on the button to select it, place the cursor where you wish to begin the text and click on the left button of the mouse. A small window will open in which you may type the text of your choice. To finish and save the text click anywhere outside this window. The text you have just typed will appear in the color selected.



In addition to the classic drawing tools, QuickVision offers you a number of arrows of different designs and orientations. The color selected will be applied to this arrow, which will allow you to vary the color and thus bring new information to the X-ray image.

To scroll the list of arrows click on the button on the right. Select the arrow you prefer by simply clicking on it. The cursor will instantly change to the shape of the arrow selected. Move the arrow to the point you wish on the X-ray image, then click with the left mouse button to “drop” the arrow at this point.



If you make a mistake

As soon as you have drawn something on the X-ray image the “Delete all” button, which until now had been grayed out, will be activated.

If you do not like what you have drawn you may erase everything you have drawn by clicking on this button.

If you only want to erase part of the drawing, click on this button. Then click on the item (rectangle, oval, arrow, text) to be erased.



This will be surrounded by a rectangle, indicating that it has been selected, and the “Delete selection” button is activated. Click on this button to erase the selection.



When you have finished adding drawing to the dental chart click on the “Save” button to save the changes.



To close the tools window, click on this button or press the “Esc” button.



Hide drawings

Back in the patient chart, once the tool window is closed, this button on the right of the artist’s palette enables you to hide drawings you have made. This may be useful in order to see the X-ray image better. Click on this button to activate or deactivate the drawings on the X-ray image.



Number of the X-ray to capture

If you access the processing window with an X-ray already saved (by double-clicking on the mini picture of it in the dental plan), the tooth number stays in memory and is displayed in the box situated next to the <Info> button.

All the X-rays that you take will be automatically assigned to the tooth number in the box. If you do not specify a number the X-ray will not be assigned to any tooth.

This number will be automatically assigned to the next X-ray that you take. You can change it if the X-ray concerns a different tooth. To do this you can enter the tooth number directly into the box, or alternatively select the tooth in the dental plan by clicking on the button to the right. On the dental plan that appears, click on the required tooth. The plan closes automatically and the tooth number appears in the box.



X-ray information

To change or add to the information on a selected X-ray, click on this button. The window that opens contains the date of capture, the tooth number, and two lines in which you can add comments.



Modify this data if necessary, then click on the <Save> button to keep the information.

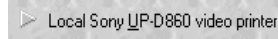


Printing

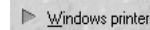
Click on this button to print out an X-ray.

You can print the X-ray which is on the screen either on a SONY UP-D860, thermal printer, or on a printer controlled by Windows which has a minimum resolution of 600 dpi (dots per inch).

The window that opens will enable you to choose the printer.



If your computer is connected to a thermal printer, select this option then click on the <Print> button.



If you have several printers you can choose which you wish to use from the list below. By default the printer defined in Windows is always proposed.

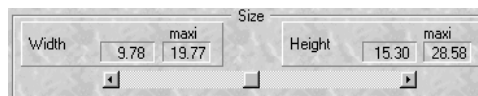


Configure...

Printing at large size takes much more time and consumes more ink.

Before printing, you can access directly the printer's configuration panel by clicking on this button, in order to change the position of the paper or the quality of print. (Check the user's manual for your printer or for Windows).

You can define the X-ray size at which you wish to print. The ratio Width/Height is always maintained whatever size is selected. To change the size, move the cursor located under the values. Towards the left the image will be reduced, towards the right it will be enlarged.



Finally, in the lower part of the window, there are two scroll bars to position the X-ray on the paper. The white rectangle represents the paper; the dark rectangle represents the X-ray. If you move one of these two bars the image follows the movements. By default the image will be in the centre of the paper.

To print, click on this button.



Returning to the dental plan

To close the processing window and return to the patient's file, click on the <Cancel> button or press on <Esc>.



Deleting X-rays

To delete one or more X-rays click on this button.



Sort by tooth

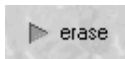
Sort by date

The window that opens displays a list of the patient's X-rays on the right and the selection buttons on the left.

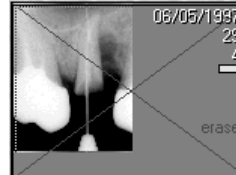
To sort the X-rays by tooth number, click on this button.

To sort them by date of capture, click on this button.

To select an X-ray from the list, simply click on it. It will appear in dark grey to distinguish it from the others.



If you do not want to keep the selected image, mark it to delete by pressing this button. It will be automatically crossed out with a red cross, and the message <erase> will appear in red next to the image. In case of error, click on the <keep> button to delete the cross.



Select in the same way all the X-rays that you want to delete. The choices made for each image will be saved while you stay in this window.



In case of error, to keep a selected X-ray marked with a red cross (to delete), click on this button to indicate that you want to keep it. The cross will disappear.



To archive a selected X-ray, click on this button. The procedure is explained in detail in the chapter [Archiving X-rays].



In case of error, you can cancel the different selections that you have made by clicking on this button. All the X-rays will be marked <keep>.



If when consulting the X-rays in this list you find you have made a mistake in the assignment of a tooth number to an X-ray, or if an X-ray has been captured without tooth number, you can enter the tooth number in this box (after selecting the X-ray by clicking on it).



You can export X-rays with or without adjustments (gamma, contrast, brightness, enhancement filter): The name of the exported file is by default nnnnnxxx.###

- nnn: file number
- Xxx: original filename
- ###: tif or jpg

You can also click on the molar button on the right to open a small window containing the dental plan of the tooth concerned.



Once the selections are made, click on the <Execute> button for to carry out the deletions.



To close this window again without taking into account the selections made, click on the <Cancel> button or press on <Esc>.

Archiving X-rays

A double click on a control image surrounded by yellow does not give access to the treatment window.

It is not possible to archive onto floppy disk, you should therefore, to use this function, have an external hard disk installed in the computer, or alternatively an external hard disk (removable or not), an opto-digital disk (O.D.D.), or any other system comparable to a hard disk (Iomega Jaz or Zip, etc.). Each X-ray archived enables you to liberate 26 to 116 KB!

When an X-ray is archived and the reference image has not been deleted, this image appears outlined in yellow to show that it is not directly accessible.

You can archive X-rays in two different ways:

Immediate archiving

When you are in the processing window of the X-rays, you can see at the top left a button representing a filing cabinet drawer. To archive immediately the selected patient's X-rays, click on this button.



▶ Sort by tooth

▶ Sort by date

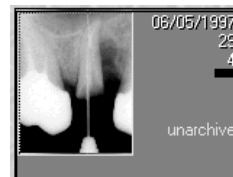
▶ archive

To sort the X-rays by tooth number, click on this button.

To sort them by date of capture, click on this button.

To select an X-ray from the list, simply click on it. It will appear in dark grey to show up from the others.

Click on the <archive> button, then if necessary select another X-ray and proceed in the same way. The choices made for each X-ray will be saved while you stay in this window.



Once your selections are made, click on the <Execute> button for QuickVision to proceed with the archiving of the selected X-rays.



▶ X-ray files

Starting at: 00/00/0000
Until: 01/01/1999

☒ Archive
☐ Erase

Archiving by batch

To access this operation click on this button or press on Alt-V.

The window that opens enables you to archive both X-rays and images. Check that the <X-ray> option is selected, if not click on this button.

Start by defining the period to process. If you want to archive the X-rays which are more than a year old, leave the <Starting at> box empty, and enter the day's date minus one year in the <Until> box.

The two boxes to tick situated top right enable you to archive and, if you want to, delete the small reference images. Given the small amount of place taken up by the reference X-rays; it is strongly advised to tick the <Archive> box and to leave the <Erase> box not ticked.

Warning! If you choose <Erase> the small reference images will no longer be visible on the dental plan.

☐ Pause between each patient

If you tick this option, the program will stop between each patient and display in the window underneath, the list of X-rays to be archived.



To start the archiving, click on this button.



If you do not want to archive the X-rays of the patient who is displayed, click on the «Next patient » button.

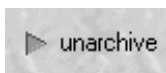


To exit the archiving at any time, click on this button or press « Esc ».

Unarchiving X-rays

An archived X-ray is represented by its reference image outlined in yellow, unless you have deleted this (see chapter [Archiving by batch]).

In the treatment window of the X-rays there is at the top left a button representing a filing cabinet drawer. To unarchive an X-ray, click on this button.



The window that opens enables you to choose the X-rays to unarchive. On the right is the list of all the X-rays of a patient, and on the left the selection buttons.

To unarchive an X-ray, click on its reference image (in yellow). Automatically the « archive » button changes into « Unarchive ». Click on this button.



Once the selections are made, click on the <Execute> button to proceed with the unarchiving of the selected X-rays.

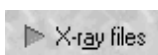
If you have deleted the reference images

If, when checking the batch archival you have asked to erase the reference pictures (which is recommended), there is no trace of these X-rays when you look at the dental chart.

Click on this button to amend.



The window that appears resembles the “archiving by batch” window except that this option only allows to take back the X-rays of the patient on-screen.



This window enables you to archive both X-rays and images. Check that the <X-ray option> is selected. If not, click on this button.

The archived X-rays of the patient appear in the list.

You can choose to bring back the X-rays to replace the possible X-rays stored on the disk which have the same number and concern the same tooth (by default).

Otherwise keep them (if they exist) and bring back the archives by renumbering them.

In this case, and provided of course a copy of the X-ray is already on the hard disk, you will have two copies of the image (not advisable).

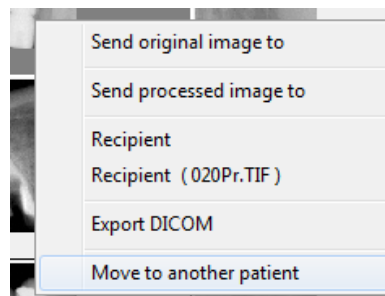
After selection of the desired X-rays, click on this button to start the unarchiving.



Moving of X-rays

If by accident X-rays have been acquired in the file of the wrong patient, it is possible to move these X-rays to the file of the correct patient.

In the image library click with the right mouse button on the image to move and select “Move to another patient”.



The search window will open. Find the correct patient in the list and click “OK”. The image will be moved to the patient file that has been selected.



STOP: A backup of the data and images of the patients stored on the hard disk in folder C:\Juliew (or in the folder selected by the user at installation) must be made at regular intervals in order to possess a safety copy in case the data on the computer server is lost or damaged. Please consult your IT manager to install a backup system suited to your computer and network configuration.

I-MAX TOUCH panoramic

Introduction

The I-MAX TOUCH (2D) panoramic can be used in 2 modes:

- Connected mode with an Ethernet cable to your computer, in this case, the I-MAX will be first, directly assigned to the selected patient.
- Stand alone mode, in this case a USB memory stick will enable to integrate the panoramic image in the patient file

In both modes, it is compulsory to activate the virtual keyboard.

To do this, in the patient file, click on the “Mouth” icon.

Then click on the icon

The virtual keyboard will appear on the screen.



Caution: If the following message appears on the screen of the panoramic I-MAX « Digital Board not ready » when you want to take a shot, it means that the virtual keyboard is not opened in QuickVision or that the USB memory stick is not inserted in the drive. You have to activate it by clicking on this icon.

If your panoramic is connected to a computer, the functionalities of the virtual keyboard in QuickVision are interactive with the keyboard of the I-MAX, except the following commands:

- Up or down column
- Reset, test mode
- Beam of light setting

The setting of these above mentioned functionalities will be done on the panoramic keyboard.

Caution: Regarding the panoramic I-MAX TOUCH setting, please refer to the I-MAX TOUCH user manual.

I-MAX TOUCH in connected mode



In connected mode, you have to specify in the program that you are using a panoramic I-MAX TOUCH.

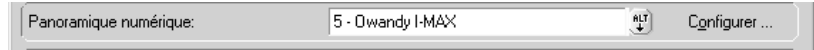
Click on this icon

The next window will appear on the screen.

By default, QuickVision admits that you have no digital panoramic radio connected to the computer



Click on the button "Alt" and select OWANDY I-MAX in the list.



Then click on "Configure" and select "I-MAX TOUCH" or "I-MAX TOUCH 3D" in the control panel.

Once you have selected the panoramic, click on the "Save" icon.

You panoramic I-MAX is ready to be used.

Select your patient.

Go to the module « Imaging ».



Activate the virtual keyboard by clicking on this icon.

Take the shot.

The panoramic image is immediately available, automatically archived in the patient file.



NB: the image appears at once on the I-MAX TOUCH 3D.

All the panoramic I-MAX TOUCH or I-MAX TOUCH 3D functionalities are explained in the I-MAX TOUCH or I-MAX TOUCH 3D user manual.

I-MAX TOUCH in stand-alone mode

In stand-alone mode, the USB memory stick will link the panoramic I-MAX to the computer. It is necessary to prepare the USB memory stick to enable it to read the panoramic files.

NB: this option is available only for the I-MAX TOUCH (2D), the I-MAX TOUCH 3D always works in connected mode.

Preparation of the USB memory stick

The preparation of the USB memory stick has to be done during the 1st use of the stick. To prepare the stick, format it in FAT 32 by using the Windows file explorer.

Formatting the USB memory stick

The USB memory sticks bought in the shops, are usually formatted in mode FAT or FAT32.

To check in which mode your USB memory stick has been formatted, open the Windows file explorer. Then click right on the USB stick and select "Properties", the properties window will display the file system used for the formatting of the USB stick. The USB memory stick must be formatted in FAT or FAT32, not in NTFS.

If the USB stick must be formatted or reformatted in FAT or FAT32, do a right-click on the USB stick and select "Format", the formatting window will display the file systems that can be used to format the USB stick; select FAT32 (or FAT) and click on the start button. Close the window once the formatting is finalized.

We recommend using the USB memory stick provided with the unit, this stick is already formatted.

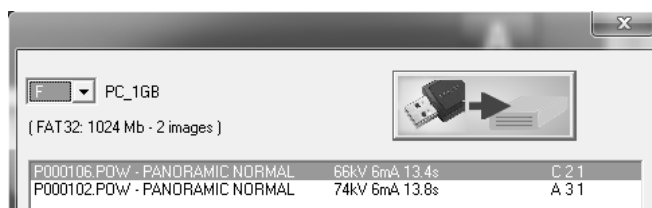
Caution: do not use USB memory sticks that contain software that start when the stick is plugged in. Not all memory sticks on the market will therefore be compatible with the unit; always test the USB memory sticks bought in store by verifying that it is correctly formatted.

How to read the USB memory stick

In order to insert the panoramic images in QuickVision software, go to the Imaging module. Then activate the virtual keyboard by clicking on this icon.



Then click on this icon. In the next window a list of panoramic images already saved on the USB memory stick will appear. The first panoramic image in the list shows the last panoramic image saved on the stick.





To insert the panoramic image in the patient file, select in the list the image and click on this icon.



The panoramic image appears in the patient file

We advise, to delete the blurred images when reading the soft tissues, to apply the “High resolution” filter by clicking on the icon

Delete the USB memory stick content

Open the Windows file explorer and select the memory stick; you can now delete the images on the stick.

I-MAX TOUCH 3D

The panoramic images acquired with the I-MAX TOUCH 3D behave like the panoramic images acquired with an I-MAX TOUCH (2D) - see above.

The 3D volumes are acquired through the same virtual control panel and are saved in the patient library. You can then send them to the external software SimPlant Pro (provided with the 3D unit) so you can visualize and manipulate them.

I-MAX PLUS panoramic

Introduction

The I-MAX PLUS panoramic can be used in 2 modes:

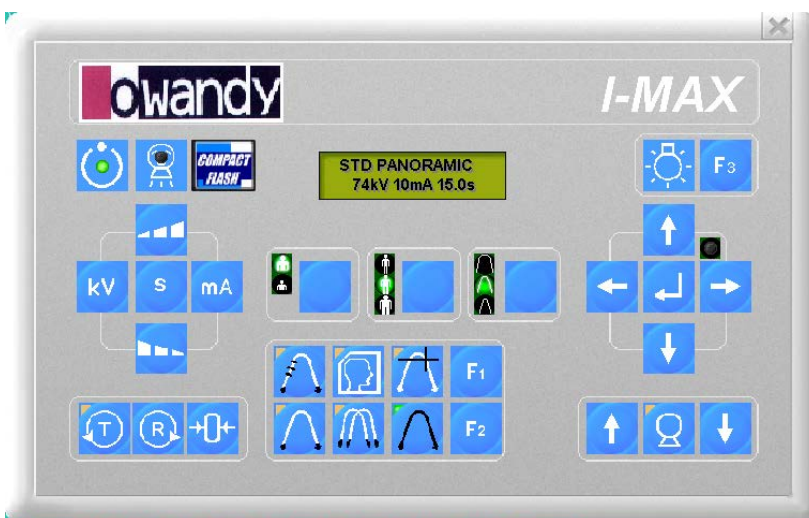
- Mode connected with a USB cable to your computer, in this case, the I-MAX will be first, directly assigned to the selected patient.
- Mode stand alone, in this case, a Compact Flash card will enable to integrate the panoramic image in the patient file

In both cases, it is compulsory to activate the virtual keyboard.

In the patient file, click on the icon.

Then click on the icon

The virtual keyboard will appear on the screen.



Caution: If the following message appears on the screen of the panoramic I-MAX « Digital Board not ready » when you want to take a shot, it means that the virtual keyboard is not opened in QuickVision or that the Compact Flash card is not inserted in the drive. You have to activate it by clicking on this icon

If your panoramic is connected to a computer, the functionalities of the virtual keyboard in QuickVision are interactive with the keyboard of the I-MAX, except the following commands:

- Up or down column
- Reset, test mode
- Canine plane setting,
- Beam of light setting

The setting of these above mentioned functionalities will be done on the panoramic keyboard.

Caution: Regarding the panoramic I-MAX PLUS setting, please refer to the I-MAX PLUS user manual.



I-MAX PLUS in connected mode

In connected mode, you have to specify in the program that you are using a panoramic I-MAX PLUS.

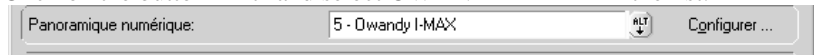
Click on this icon

The next window will appear on the screen.

By default, QuickVision admits that you have no digital panoramic radio connected to the computer



Click on the button "Alt" and select OWANDY I-MAX in the list.



Then click on "Configure" and select "I-MAX PLUS" in the control panel.

Once you have selected the panoramic, click on the "Save" icon.

Your panoramic I-MAX is ready to be used.

Select your patient.

Go to the module « Imaging »

Activate the virtual keyboard by clicking on this icon.

Take the shot.

The panoramic image is immediately available, automatically archived in the patient file.



All the panoramic I-MAX PLUS functionalities are explained in the I-MAX PLUS user manual.

I-MAX PLUS in stand-alone mode

In stand-alone mode, the Compact Flash card will link the panoramic I-MAX to the computer. How to prepare the Compact Flash to enable it to read the panoramic files.

Preparation of the Compact Flash card

The preparation of the Compact Flash card has to be done during the 1st use of the card. To prepare the card, go to the Imaging module.

Then activate the virtual keyboard by clicking on this icon.

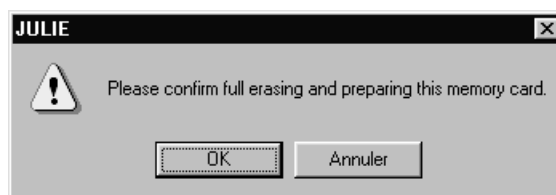


Then click on this icon,



Then click on this icon.

The following message will appear on the screen, click on the button “OK” to prepare the card to read the file type “Pan”



Formatting the Compact Flash card

The Compact Flash card bought in the shops, are usually formatted in mode FAT. To check in which mode your Compact Flash card has been formatted and to prepare it go to the module “Imaging”.

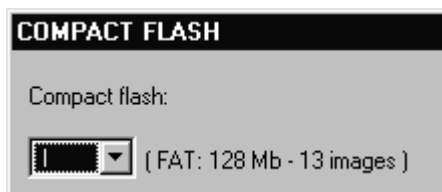
Then activate the virtual keyboard by clicking to this icon.



Then click on this icon.

The window will show you the following information:

- Compact Flash card formatting mode (FAT)
- Card capacity (128 Mb)
- The number of panoramic images that can be saved on the card (13 images).



Caution: it is compulsory to have your Compact Flash card formatted in FAT mode. If not, you have to format it on a computer equipped with OS Windows 98 and not Windows XP or Windows 2000.

If the formatting window proposes to format in FAT 32, it is necessary to select the FAT format that is the only format recognized by the I-MAX PLUS panoramic unit.

We do recommend using the Compact Flash card delivered with the card reader, already formatted.

How to read the Compact Flash card

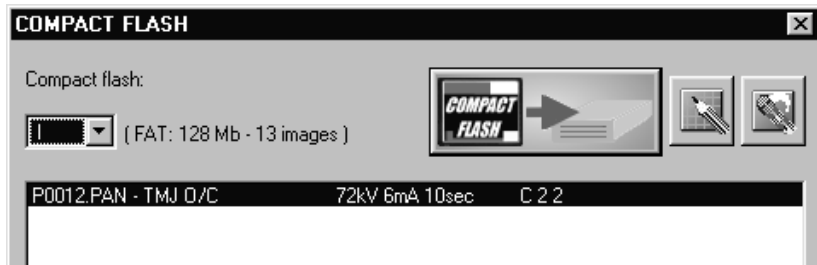
In order to insert the panoramic images in QuickVision software, go to the Imaging module.



Then activate the virtual keyboard by clicking on this icon.

Then click on this icon.

On the next window will appear a list of panoramic images already saved on the Compact Flash card. The first panoramic image in the list shows the last panoramic image saved on the card.



To insert the panoramic image in the patient file, select in the list the image and click on this icon.



The panoramic image appears in the patient file

We advise to delete the blurred images when reading the soft tissues, to apply the filter "High resolution" by clicking on the icon

Delete the Compact Flash content

Go to the module Imaging module.

Then activate the virtual keyboard by clicking on this icon.

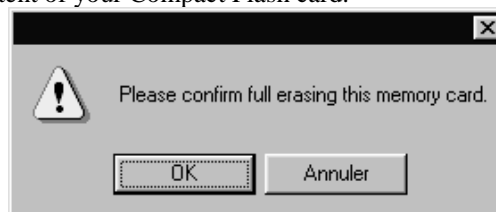


Then click on this icon.



Then click on this icon.

The following message appears on the screen, click on the button "Ok", to delete the content of your Compact Flash card.



I-MAX EASY panoramic

Introduction

The I-MAX EASY panoramic can be used in 2 modes:

- Mode connected with a USB cable to your computer, in this case, the I-MAX will be first, directly assigned to the selected patient.
- Mode stand alone, in this case, a Compact Flash card will enable to integrate the panoramic image in the patient file

In both cases, it is compulsory to activate the virtual keyboard.

To do this, in the patient file, click on the “Mouth” icon.

Then click on the icon

The virtual keyboard will appear on the screen.



Caution: If the following message appears on the screen of the panoramic I-MAX « Digital Board not ready » when you want to take a shot, it means that the virtual keyboard is not opened in QuickVision or that the Compact Flash card is not inserted in the drive. You have to activate it by clicking on this icon

If your panoramic is connected to a computer, the functionalities of the virtual keyboard in QuickVision are interactive with the keyboard of the I-MAX, except the following commands:

- Reset, test mode
- Beam of light setting

The setting of these above mentioned functionalities will be done on the panoramic keyboard.

Caution: Regarding the panoramic I-MAX EASY setting, please refer to the I-MAX EASY user manual.

I-MAX EASY in connected mode



In connected mode, you have to specify in the program that you are using a panoramic I-MAX EASY.

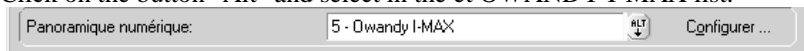
Click on this icon

The next window will appear on the screen.

By default, QuickVision admits that you have no digital panoramic radio connected to the computer



Click on the button "Alt" and select in the OWANDY I-MAX list.



Then click on "Configure" and select "I-MAX EASY" in the control panel.

Once you have selected the panoramic, click on the "Save" icon.



Your I-MAX panoramic unit is ready to be used.

Select your patient.

Go to the module "Imaging"

Activate the virtual keyboard by clicking on this icon.



Take the shot.

The panoramic image is immediately available, automatically archived in the patient file.



All the panoramic I-MAX EASY functionalities are explained in the I-MAX EASY user manual.

I-MAX EASY in stand-alone mode

In stand-alone mode, the Compact Flash card will link the panoramic I-MAX to the computer. It is necessary to prepare the Compact Flash to enable it to read the panoramic files.

Preparation of the Compact Flash card

The preparation of the Compact Flash card has to be done during the 1st use of the card. To prepare the card, go to the module "Imaging"

Then activate the virtual keyboard by clicking on this icon.

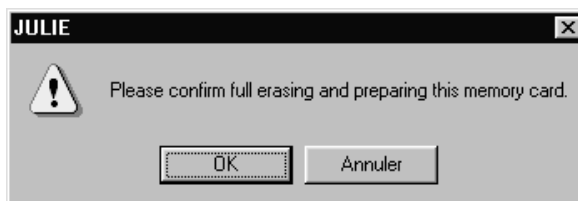


Then click on this icon.



Then click on this icon.

The following message will appear on the screen, click on the button « OK » to prepare the card to read the file type “Pan”.



Formatting the Compact Flash card

The Compact Flash card bought in the shops, are usually formatted in mode FAT. To check in which mode your Compact Flash card has been formatted and to prepare it go to the module “Imaging”.

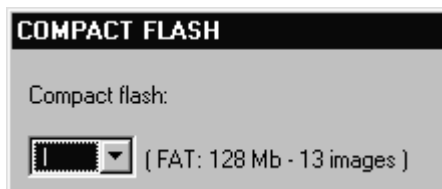
Then activate the virtual keyboard by clicking to this icon.



Then click on this icon.

The window will show you the following information:

- Compact Flash card formatting mode (FAT)
- Card capacity (128 Mb)
- The number of panoramic images that can be saved on the card (13 images)



Caution: it is compulsory to have your Compact Flash card formatted in FAT mode. If not, you have to format it on a computer equipped with OS Windows 98 and not Windows XP or Windows 2000.

If the formatting window proposes to format in FAT 32, it is necessary to select the FAT format that is the only format recognized by the I-MAX PLUS panoramic unit.

We do recommend using the Compact Flash card delivered with the card reader, already formatted.

How to read the Compact Flash card

In order to insert the panoramic images in QuickVision software

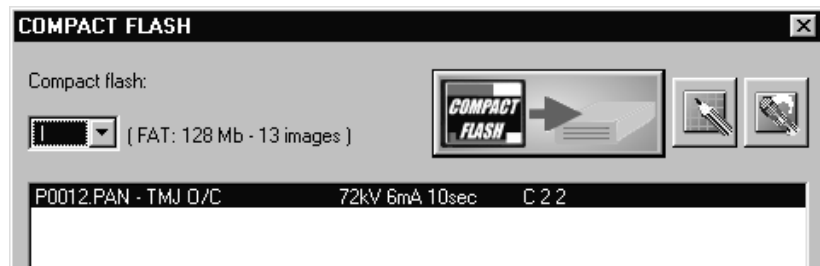
Go to the module “Imaging”

Then activate the virtual keyboard by clicking on this icon.



Then click on this icon.

On the next window will appear a list of panoramic images already saved on the Compact Flash card. The first panoramic image in the list shows the last panoramic image saved on the card.



To insert the panoramic image in the patient file, select in the list the image and click on this icon



The panoramic image appears in the patient file

We advise, to delete the blurred images when reading the soft tissues, to apply the filter "High resolution" by clicking on the icon

Delete the Compact Flash content

Go to the module "Imaging"

Then activate the virtual keyboard by clicking on this icon.



Then click on this icon.



Then click on this icon.

The following message appears on the screen, click on the button "Ok", to delete the content of your Compact Flash card.

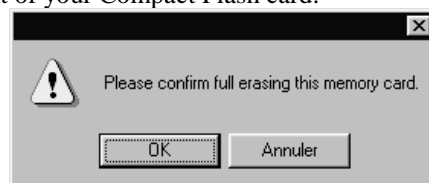


Image management

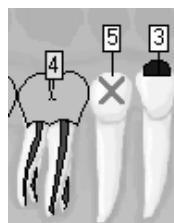
Access to image management

Image management requires that the computer be connected to a camera or camcorder via a Memory III digitizing card.



To access image management click on this button or press F4. The patient's dentition diagram is displayed instantly.

Against each tooth the number of X-rays stored is displayed in a white rectangle and the number of photographs in a yellow rectangle.



At the same time two small windows open containing buttons linked to X-rays (see section [X-ray management]), and others linked to photographs.

NB! The left mouse button is reserved for X-rays.



If you click with the right mouse button on a tooth against which a yellow number appears the first photograph of that tooth is displayed.

If several pictures of the same tooth are stored, a slider control below the picture enables you to scroll them past until you find the one you require.

Above the photograph are:

- a closure button containing the number of the tooth
- to the right of this the beginning of any comments
- the date the photograph was taken
- the number in the sequence on the disk

To view a picture at normal size double click on it.

NB: To display more than one thumbnail simultaneously, press the <Ctrl> key on the keyboard, hold it down and click with the right mouse button on the teeth containing these pictures. Each click on a tooth will bring up a window displaying the first picture of that tooth.

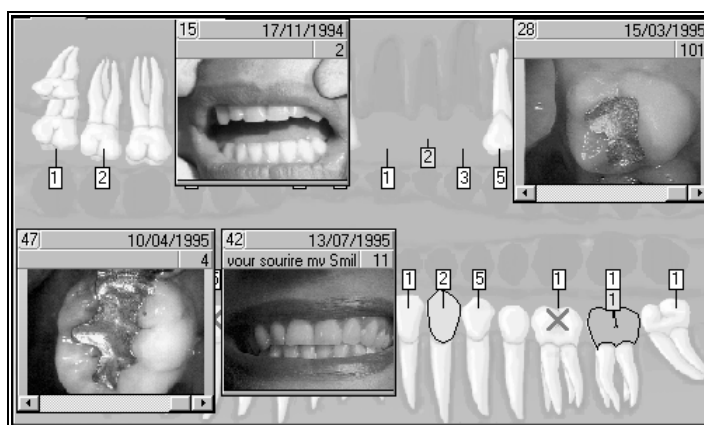
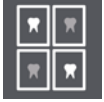
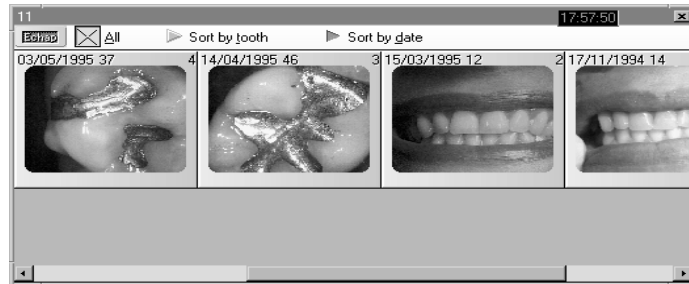


Image library



Click on this button to display a list of all the shots of the tooth selected.

This window can be re-dimensioned and enables you to see in a single view the different shots taken of a tooth. If the number of pictures is too great for the size of the window a horizontal scroll bar enables you to scroll them by.



To sort pictures by date of acquisition click on this button.

To see all a patient's pictures without regard to date, click on "all". This enables you to view photographs that may not be associated with a particular tooth.

To obtain all the photographs grouped by tooth number click on the "by tooth" selection button. Photographs that are not assigned to a particular tooth are displayed first.

Capturing images

You can capture pictures with a video camera or camcorder, using a scanner (see chapter [Scan images]) or by importing an existing photograph.

With a video camera

If your camera is connected to the computer using a Memory III digitizing card this button will be invisible.

To access Image Input click here.

A window appears containing the video picture.

To freeze the image, click on this button, it is only accessible (and visible) if a camera is connected to the computer.

To flip the image horizontally, click on this button.

To save the image to the hard disk click on this button.

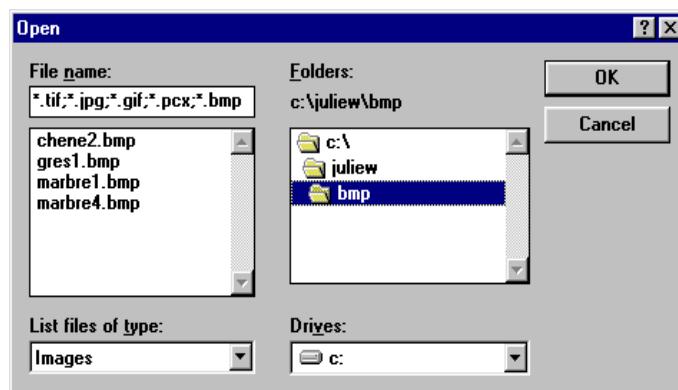


Importing an image

You can also import an image from the hard disk in order to view it from the patient's dental record.



To do this click on this button in the "ACQ" toolbar. The standard selection window appears, enabling you to select the required image.



NB: The image you import is a copy which will remain in the patient's record. The original image remains intact.

Saving the image

Whether you click on the "Save" button after inputting an image, or on the "OK" button after selecting an image to import, the same window opens. It will enable you to fill in information about the image before saving it to the disk.

Date: 15/08/1999

tooth number: 9

The current date is selected by default.

You may indicate which tooth the image relates to. If you do not specify the number of the tooth, you will not be able to access the image directly via the patient's dental record. You may access it via the image History.

You have two lines available below for brief comments on the image.

The two buttons at the bottom of the window enable you to choose the format of the image: TIFF or JPEG.



The TIFF format compresses with no degradation. When you view the image later there will be no loss of information.

The JPEG format compresses much more (thus taking less space on the disk), but "destructively", i.e. some minor information in the image will be lost. This loss of information is usually invisible to the naked eye.

By default the TIFF format is proposed.

To save the image click on this button.



Information about the image

Each image may carry the date of input, the number of the tooth and two lines of comments.

To access information about the tooth, click on this button.



tooth number:

9



The window which opens will enable you to consult or change this information.

NB: If you do not specify the number of the tooth you will not be able to access the image directly via the patient's dental record. You may access it via the image History.

The image format, TIFF or JPEG, appears at the bottom of the window.

Click on this button to save changes in this window (tooth number or comments).



Click on this button in the toolbar to display directly information about the viewing window. To cancel click again on this button.

Image processing

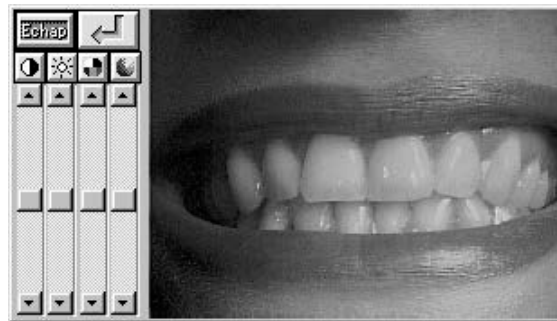
You may retouch the still picture on the screen by clicking on this button.



The palette tool enables you to make cosmetic retouches.



To control brightness, contrast, color saturation and hue move the appropriate one of the four slider controls.



To cancel changes click on these buttons above the slider controls (value 0).



To confirm click on this button, otherwise press <Esc> to keep the original version of the image.



To control the intensity of effect of the adjustment, use the horizontal slider control.



Above the intensity slider control these settings enable you to change the shape and size of the tool to be used. To select the shape (round or rectangular) click on the appropriate button.



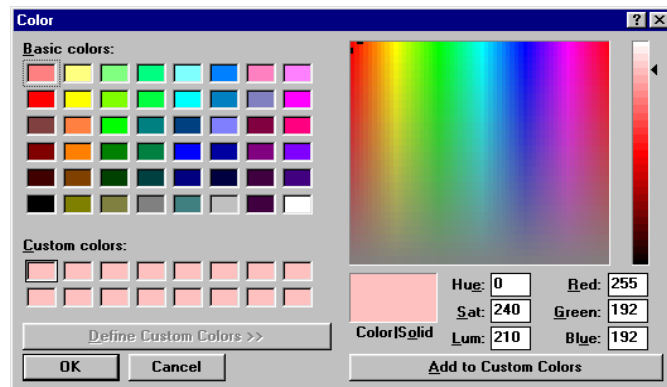
To define the size of the tool, move the slider controls.

To preserve the aspect ratio (width/height) check the small box top left. Otherwise uncheck this box.



To select a color contained in the image, click on the pipette, then move the cursor over the image and click on the color to be selected.

To select a color in the Windows palette, click twice on the pipette.

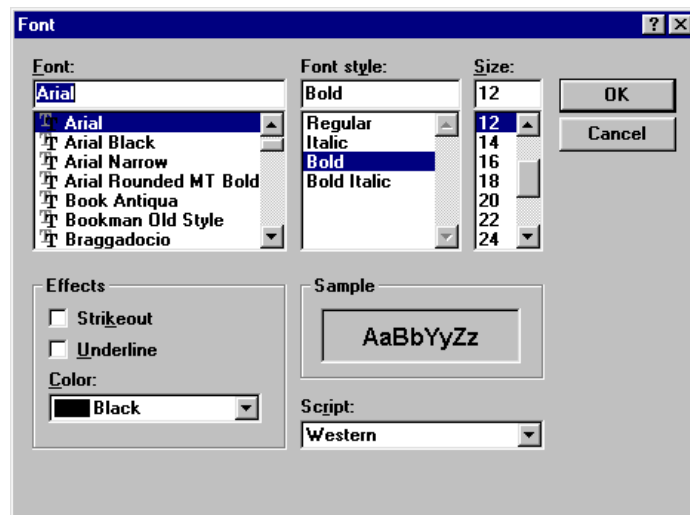


Choose one of the basic colors or personalized colors, or choose directly from the palette by clicking on the color, and refine your choice with the help of the slider control to the right. To confirm, click on OK.



To add text to the image, click on this icon.

Select the font, style, size and color of the text then click on OK to close the window.



Move the cursor to the place where you wish to begin typing and type the text. To confirm, press <Enter>.

If necessary the eraser enables you to erase text later.

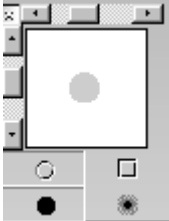
As long as you have not pressed <Enter>, you may go back and correct a typing error by pressing <Backspace>. Once you have pressed <Enter> the text can no longer be changed.



The stamp enables you to duplicate part of the image.

To copy part of the image and paste it elsewhere, click on the stamp icon.

Select the size and shape of the stamp and move the cursor to the area to be copied. The stamp now contains an exact replica of the area of the image where you clicked. Move the cursor to the area where you wish to copy the partial image and click on it to fix it there.



To spread color click on this icon.

Before starting choose the shape and size of the spatula by clicking on the icon representing a circle or a square.

Uncheck the box (top left) to choose the smallest width, horizontal or vertical.

Select a horizontal spatula to spread paint upwards or downwards, and a vertical spatula to spread paint to the right or the left. This tool takes no account of the color selected. Take the cursor to the required point, click, and, holding the mouse button down, move the cursor in the required direction.



To smooth the colors, click on the softener button. Place the mouse in the required spot, click the mouse button and, holding it down move the mouse in order to soften the transition.

The result of this will vary according to the intensity of the colors.



To erase, use the eraser.

Choose the size of the eraser, and optionally the degree of erasure, then move the mouse to the required point. Click on the button and, holding it down, move the mouse.



To change part of the picture, use the brush or the airbrush.

Begin by selecting the pipette and move the cursor to a tooth in order to copy its color.

Select the brush, choosing a round shape and small size, and put the intensity cursor near the middle of its slider. Move the cursor to the tooth, click, and move the mouse in the desired direction. To soften use the softener.

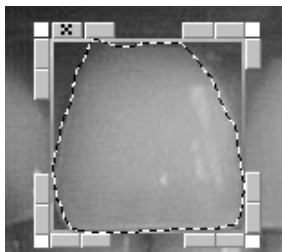


You may use the airbrush in the same way to lighten or darken a part of the image.



To cut, use the knife button.

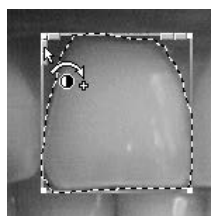
When you click on this button the cursor takes the form of a knife. Move the cursor to the required point, then click and hold the button down. Move the mouse as accurately as possible to surround the part of the image you are interested in then release the mouse button.



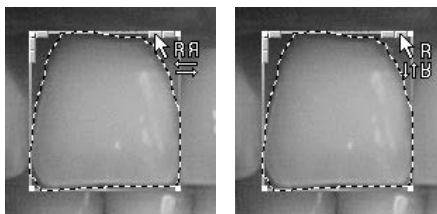
A frame appears around the selected area. Do not click outside this area or the selection will disappear.

To change the area selected use the small buttons on the upper sides.

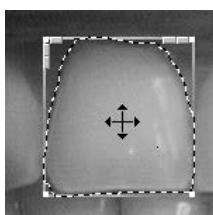
Increase or reduce the brightness: When the cursor appears as follows you may reduce the brightness of the selected area. Click to slightly darken the enclosed area. Conversely when the cursor appears as below you may increase the brightness of the selected area by clicking as many times as required.



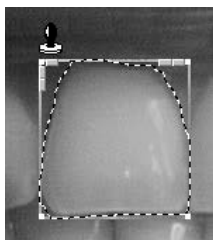
To flip the selected area horizontally or vertically, use these two other buttons.



To enlarge or shrink the selected area, place the cursor on the edge of the frame. The cursor changes shape. Click and, holding the button down, move the mouse in the required direction. To resize the image place the cursor on a corner.



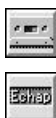
To move the image: When, inside the frame, the cursor takes the form of four arrows you are in move mode. Click on the button of the mouse and move the frame to another part of the image. Suppose the patient has a missing or damaged canine, you can take a copy of the other canine, flip it horizontally and place it over the missing tooth.



To freeze the selected area at the desired spot move the mouse to the top right of the selected area until the cursor changes to a stamp, then click.

To erase the tooth click on the eraser icon.

NB: The changes you have made are not yet saved. You may at any time use the eraser and return to the original image.



To save the changes click in this button.

To cancel your changes press <Esc>.

Printing an image

You may print the image either on a SONY UP-D860 thermal printer, or on a Windows-driven printer. The thermal printer prints in black and white. The colors are changed to levels of gray before printing. The quality of a Windows-generated print-out will depend on the printer. It is not recommended that a dot-matrix printer be used as the quality will be very poor. A laser or ink-jet printer with a minimum definition of 600 dpi will give good to very good quality printouts.



To print the image on the screen, click this button.

Select the printer.

▶ Local Sony UP-D860 video printer

If your computer is connected to a thermal printer select <Print>.

▶ Windows printer

The default is <Windows printer>.

If you have more than one printer (!), you may choose which to use from the list below.

Epson Stylus COLOR 500 LPT1:

Configure

Large size printouts will take much longer to print, and will use more ink.

Before printing run printer set-up by clicking this button (select paper orientation and print quality). See your printer manual or Windows manual.

Adjust printout size: To change the size of the printout, move the cursor below the values. Left to reduce, and right to enlarge the image.

| Width | | Size | Height | |
|-------|--|------|--------|--|
| 12.60 | | | 16.38 | |
| maxi | | | maxi | |
| 19.77 | | | 28.69 | |

To position the image on the page, move the two slider controls in the lower part of the window. The white rectangle represents the page. The dark rectangle represents the image. If you move one of these two slider controls you will see the image follow the movement. By default it is centered on the page.



To print, press this button.

NB: Printing on the thermal printer takes a few seconds. Printing on a laser or inkjet printer may take several minutes.



: The settings and quality of the printer, the quality of the ink, the type of paper can impact not only the quality of the print-out but can also modify the size of the print-out. This needs to be taken into account when measurements are being made on the paper print-out. Measurements on the paper print-out are merely indicative; to obtain more correct measures they should be made in the software with the appropriate tools.

Comparison between X-ray & photo

If you have a digital X-ray and a video camera you can display an X-ray and a picture simultaneously



To access this function click this button in the toolbar.

In the upper part of the window which then opens you will see a list of X-rays on the left, and photographs on the right.

To select an X-ray and display it in large format, simply double-click on it. The X-ray will appear in large format in the left-hand part of the window. In the same way, to select a photograph and display it in large format, double-click on it. The photograph will appear in large format in the right-hand part of the window.



Once the X-ray and photograph have been selected, start the printing by clicking on this button.



To close this window and return to the viewing window click on this button.

Erase/archive images

As images take quite a lot of space on the disk it is sometimes necessary to do a little housekeeping, and to erase or archive images which are no longer important. If you think you may need to consult an image again it is better to archive it than to erase it.



▶ Sort by tooth

▶ Sort by date

To erase or archive an image (or more than one), click on this button in the toolbar. The window that opens displays on the right a list of all the current patient's images, and on the left the selection buttons.

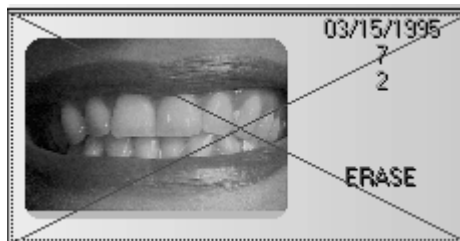
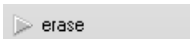
To sort the images by tooth number click on this button.

To sort by date of input click on this button.

To select an image in the list, just click on it.

Erasing images

If you do not want to keep the image selected click on this button. It will automatically be marked with a red cross and the message 'To be deleted' will appear in red opposite the image.



Repeat this operation for all images you wish to erase. The choices you make will be stored in memory until you exit the window.

Archiving images

This requires a second hard disk on the computer, or an external hard disk (removable or not), a rewriteable CD-ROM, or any kind of system similar to a hard disk (Jaz or Zip drive from Iomega etc).

On archiving, the program moves the image (several hundred kilobytes depending on the definition of the image) to the archive disk, but leaves behind a small thumbnail (the one you see when you right-click on a tooth in the dental record), which only takes up a few Kb.

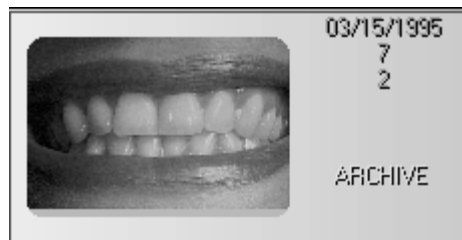
When an image is archived and the thumbnail is not erased, the thumbnail appears with a yellow border (indicating that the image is not directly accessible).

A double click on the thumbnail image with a yellow border does not give access to the viewing window. You must restore the image from the archive first.



Archiving current patient

To select the image to be archived click on the image, then click on the <to be archived> button

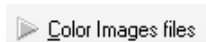


To confirm the choice click on the <Apply>button.



Batch archiving

This method of archiving frees up a maximum amount of space on the hard disk. To access it click on this button or press Alt-V.



Starting at:

Until:

☒ Archive

☐ Erase

☐ Pause between each patient

Ensure the option <Color images> is selected. If it is not then click on this button.

Enter the dates of the required period.

If you wish to archive all images more than a year old leave the "From" field blank and type the current date minus one year in the "Until" field.

To simultaneously archive and remove the small icons check the options chosen. We strongly recommend checking "Archive" and unchecking "Erase".

NB: If you check "Erase" the thumbnails will no longer be visible on the dentition diagram.

If you check this option the program will stop between patients and display, in the window below, the list of images to be archived.



To begin archiving click on this button.

If the option has not been checked all images included within the dates specified will be archived automatically.

If you have checked the option "Pause before each card" the program will pause before the first patient found with images to be archived (according to the dates entered) and will await your decision.

By default all images are selected. If you wish to keep one or more of the images selected press <Ctrl> on the keyboard and click on the images to be archived.

If you do not wish to archive the images of the patient displayed click on the "Next patient" button to exclude this card from the archiving operation.



To exit archiving click on this button or press the <Esc> key.

Restoring images from the archive

An archived image is represented by its thumbnail with a yellow border.

To restore an image from the archive click on this button.

Find the image in the list on the right and click on it to select it.



Unarchive

The "Archive" button automatically changes to "Unarchive" Click on this button. The message "Unarchive" will be displayed to the right of the image.



NB: You may select more than one image in the same way, and restore them from the archive in one operation.

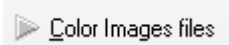
When the selection is complete click on the <OK> button.



If you have erased the thumbnail images

If, when carrying out a batch archive operation, you have erased the thumbnails (this is not recommended) there will be no sign of these images when you consult the dentition diagram.

To restore the thumbnails click on this button.



The window which appears is similar to the one which enables batch archiving except that this option only allows you to restore images of the patient whose card is on the screen.

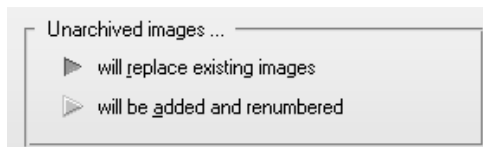
Check that "Color images" is selected.

The archived images of the patient will appear in the list.

By default all images are selected for restoring.

To manually select the images to be restored, just click on their names (for a batch selection first press and hold down the <Ctrl> key, then click on the images to be selected.).

To replace images with the same number and relating to the same tooth already on the disk (which is selected by default):



or to keep them (if they exist) and renumber the images restored from the archive, click on the option you wish to select.

To confirm, click on this button to restore from the archive.



Scanning

Scanning images

You may, if you connect a Twain compliant scanner to your computer, scan photographs, single X-rays and panoramic views.

This button, in the <ACQ> toolbar will enable you to do this.



If the scanned image is in color the program will classify it as a picture, if it is in shades of gray it will be considered to be an X-ray. The size of the scanned X-ray will enable it to be recognized as a panoramic or a retro-alveolar view.

To scan, place a photo or an X-ray in the scanner, position the frame (see below) and begin scanning. The scanned document will be displayed automatically in the dentition diagram.

Configuration

Before scanning you must indicate the model of scanner being used. To do this, click this button with the right mouse button.

A window opens. If you have more than one scanner select the scanner (or driver) to be used from this list. If you have only one scanner this is selected by default.

Scanner window visible

In the lower part of the window the checkbox



enables you to change the settings of the scanning process.

Leave this box unchecked if the X-rays or photos are of identical format. Once you have set up the first image all the others will be scanned with the same frame and settings.

Check this box if you are scanning photographs or X-rays of different formats. When scanning, the scanner window will be displayed, and you will be able to change the frame or the settings for each document.

[Image model...]

Click on this button to define the parameters to be used when scanning.

Which window opens will depend on which program you are using to control your scanner. If necessary consult your scanner manual. Place the photo or X-ray in the scanner, set the frame to enclose only the image to be scanned, select levels of gray for an X-ray or colors for a photograph, and start scanning.

The program memorizes the settings (frame, sharpness etc) and applies them automatically to future operations. To change them click the scanner button with the right button of the mouse.

Scanning

**15** 

Click on this button with the left mouse button to begin scanning.

NB: Before starting to scan, check that the number in the box opposite corresponds to the tooth where you wish to place the X-ray or photo. If not, click on the button to the right (molar) and in the small dentition diagram window which opens click on the appropriate tooth.

If the box "Scanner window visible during scanning" (see section [Configuration]) is not checked QuickVision will scan the document automatically with the previously defined frame and settings. After a few moments the image or X-ray will be added to the dental chart.

If the box is checked the scanner control window will be displayed and you can make individual adjustments (frame, size, definition etc) to the document. Once this is done, click on the button to start the scan.