

QuantorDent Vet User Manual

Acquisition and Diagnosis Software

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The logo for Digiray Corp, featuring the word "DIGIRAY" in a bold, sans-serif font. A stylized orange and grey graphic element is positioned above the "Y", resembling a checkmark or a stylized letter 'D'.

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Please read the respective manuals of the connected devices, such as of the X-ray generator, sensor, or reader, before starting to use the system.

The following symbols will be used throughout this manual:



DANGER

General prohibition indication.

The functionality of the system can be destroyed in the case of incorrect use.

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DANGER

General mandatory action manual.

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WARNING

The functionality of the system can be limited in the case of incorrect use. Hints that require special attention.



NOTE

Notes represent information that is important to know but which do not affect the functionality of the system.

Medical Device Security

Users must take steps to secure their networks and protect their Medical Information Systems which includes a risk assessment strategy, network defense in depth strategy, business continuity planning, etc.

- ✓ **User Authentication**
Only authorized users should log on to computers on which medical information systems are installed.
- ✓ **Password Security**
In today's world, passwords can be compromised in literally seconds by using a wide variety of tools and techniques. To lower the possibility of a compromised password, it is vital to adhere to a set of protocols.
 - Choose a password between 7 ~ 10 characters using both alpha and numeric characters.
 - Do not share the password.
 - Do not base the password on a pet's name, a relative's name or any dictionary word.
 - Do not write down the password.
 - Do not leave the account logged on.
- ✓ **User Access Control**
Configure the workstation to prompt for logon after coming out of stand-by mode.
- ✓ **Internet Usage**
Accessing to the Internet exposes the computer to a plethora of vulnerabilities such as:
 - Viruses
 - Spyware
 - Trojans
 - Hostile CodesIt is not recommended to install any unauthorized software on the computer. Peer-to-peer software can expose your entire hard drive to any individual running the same type of software.
- ✓ **Antivirus Products**
Use of antivirus software can increase CPU and memory usage, which can cause a slight degradation in the performance of the system. However, functionality should not be affected.
- ✓ **Physical Security**
It is recommended that the user employs some method of physical security when dealing with the system to ensure that only authorized personnel have access to the product.

There are several vulnerabilities a malicious user could exploit locally. Some examples are:

- Theft of equipment
- Local password cracking
- Installation of hardware key loggers

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1. Introduction

QuantorDentVet is an acquisition and diagnosis software for intraoral X-ray imaging. **QuantorDentVet** is used to scan and review intraoral X-ray images. When scanning an IP radiated with X-ray, **FireCR Dental** shows the preview image on the LCD screen and the image is saved in the built-in memory storage. Shortly after the end of scanning, the IP is deleted and it can be used for the next imaging.

Images stored in the scanner are transferred to **QuantorDentVet** in the image workstation via network or USB. The images are post-processed through **QuantorDentVet** and saved in the database that allows searching in the future.

QuantorDentVet can transport the acquired images to the hospital image storage system using DICOM Send.

The scanner can be connected to the in-hospital network or directly to the image workstation.

The system has following components:

- **FireCR Dental**
- **Fire ID**
- **QuantorDent**

Safety Instruction

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1.1. *Major Features*

Image Acquisition and Management

QuantorDent supports various image acquisition methods that meet the needs of dental hospital. It can be used in a simple structure where one workstation is connected to a scanner for basic use as well as in a multi-structure where multiple image workstations are connected to multiple scanners. When multiple systems are used, it supports **Fire ID**, which enables automatic image classification to designated patient and test information regardless of the scanning location.

Image Processing

To create an optimal image, you can apply different functions, including cropping, enhancing edges, and increasing contrast. You can also add or delete images and modify the image sequence at your discretion.

Built-in Viewer

QuantorDentVet not just simple image acquisition software, but can also be used as a diagnostic viewer. Like other viewers, it can manage patient and test information and contains all basic viewer functions.

2. *Installation*

2.1. *Installation Environment*

2.1.1. *Recommended Computer Environment*

Operating system	Microsoft Window 7 and 8
CPU	Intel CORE i5
Memory	4G or higher
Hard disk	500GB or higher
Network	1Gbps Ethernet
Video output	32-bit color display
Screen resolution	1920 x 1080, 1440 x 900

2.1.2. *Minimum Computer Requirements*

Operating system	Microsoft Window 7
CPU	Intel Processor
Memory	2GB
Hard disk	80GB
Network	1Gbps Ethernet
Video output	32 bit-color display
Screen resolution	1366 x 768, 1280 x 800, 1600 x 900, 1280 x 1024

2.2. Installation

2.2.1. Software Installation

- Log on to a PC with an administrator account.
- Connect the USB dongle to a USB port.
- Insert Installation CD. Install program will automatically launch.
- If the install program is not launched automatically, find and execute the “**QuantorDent 2.x.x. Setup.exe**” file on the CD.
- Click the “Next” button as shown in Figure 2.1.



Figure 2.1 Welcome Dialog Box

- Choose all components and click the "Next" button as shown in 오류! 참조 원본을 찾을 수 없습니다.

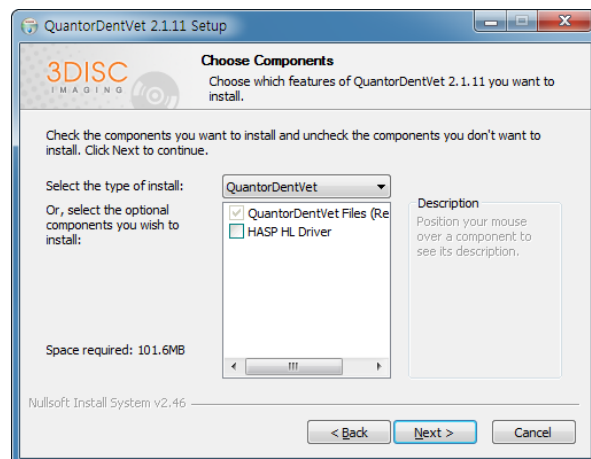


Figure 2.2 Components Dialog Box

- Choose your language and click the “Next” button as shown in Figure 2.3.

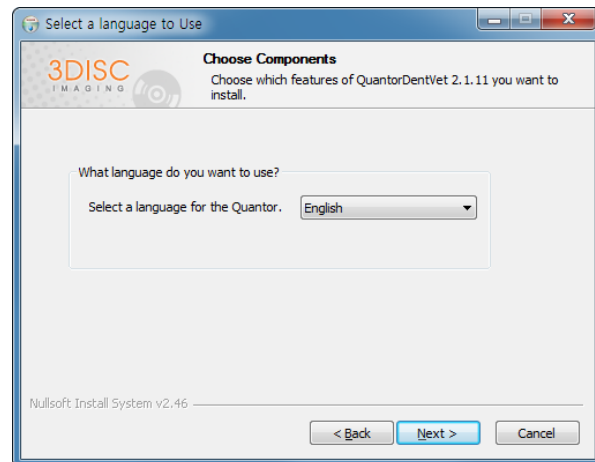


Figure 2.3 Components Dialog Box

- Choose the destination folder and click the “Install” button as shown in Figure 2.4.

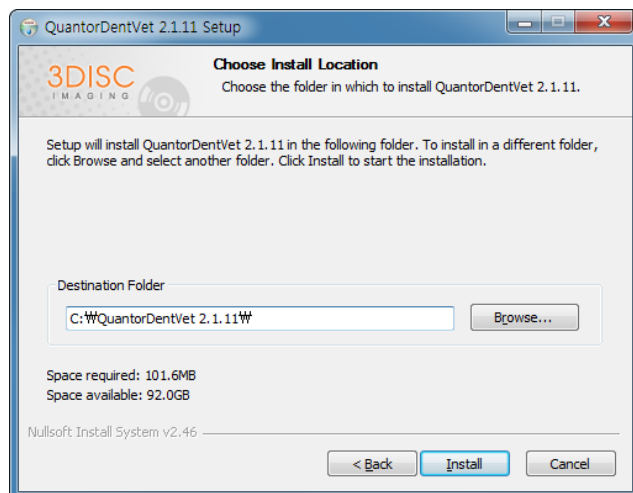


Figure 2.4 Installation Location Dialog Box

- Installation status will be displayed as shown in Figure 2.5.

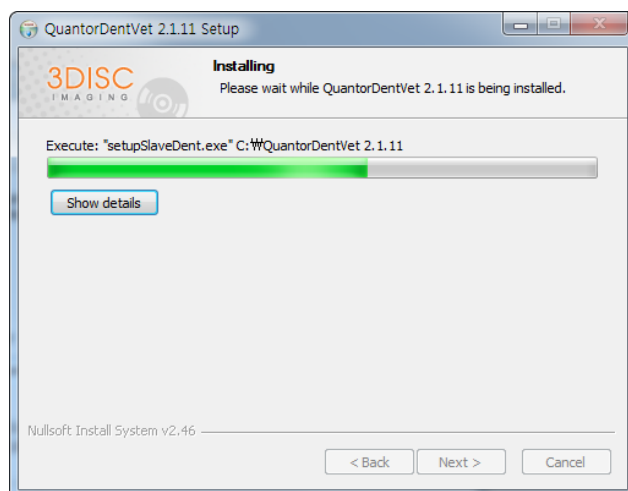


Figure 2.5 Installation Status Dialog Box

- Installation status of the dongle driver will be displayed as shown in Figure 2.6.

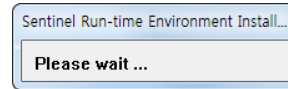


Figure 2.6 Installation of dongle Driver

- Installation status of the **FireCR** USB driver will be displayed as shown in Figure 2.7.

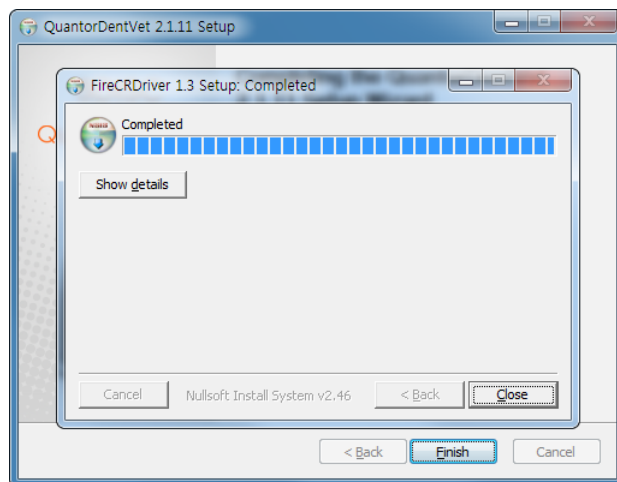


Figure 2.7 Installation of **FireCR** USB Driver

- If installation is successful, Figure 2.8 will show up.
- Click "Finish" to finish the installation.

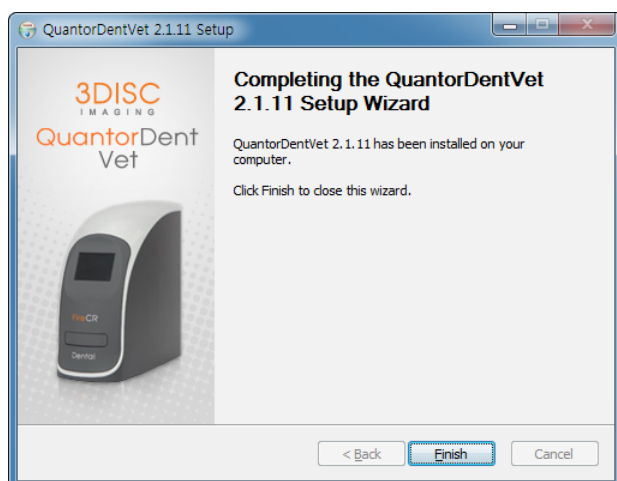


Figure 2.8 Installation Finish Dialog Box

- If the Windows Security Dialog Box pops up after installation, click [Allow access].

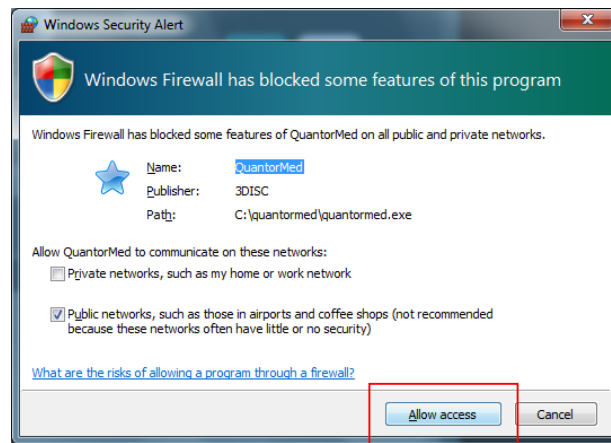


Figure 2.9 Windows Security Dialog Box

2.3. Start and Exit

2.3.1. Start system

1. Turn on the Fire CR device.
2. Turn on the PC and monitor.



CAUTION

Do not run any application software other than **QuantorDentVet** during operation of the scanner. This may slow the scanner response.

2.3.2. Start program

After successfully booting Windows, double-click the **QuantorDentVet** icon on the desktop screen as shown in Figure 2.10 to start the **QuantorDentVet** program.

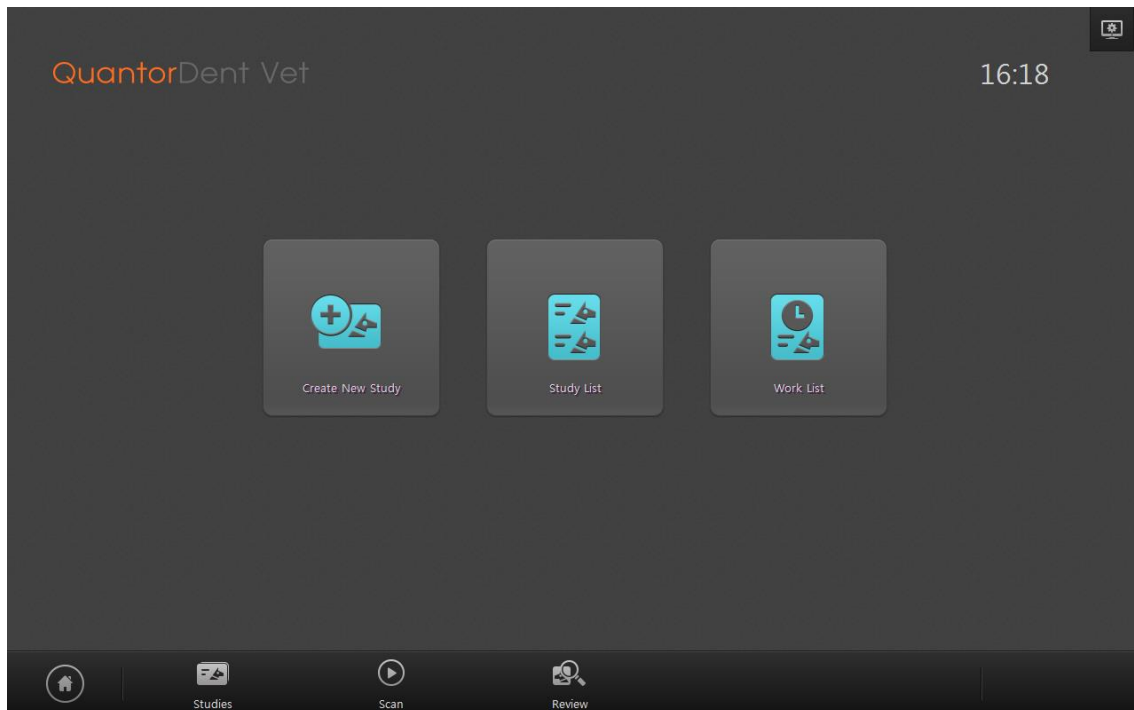


Figure 2.6 Home Screen



QuantorDentVet

Figure 2.7 Desktop Icon

2.3.3. *Exit program*

Select the system button that looks like Figure 2.12 on the Home screen.

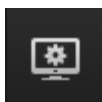


Figure 2.8 System button

You can select "Exit" in the system menu to close the program.

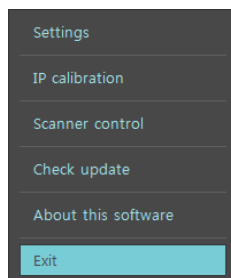



Figure 2.9 System menu

2.4. FireCR Dental Calibration

In the system menu, select IP Calibration to open a window as shown in Figure 2.14. Process calibration as instructed in the window.





CAUTION
Calibrate the scanner before use. The “Please calibrate system” message pops up if the scanner is not calibrated or calibration data does not exist.
It is recommended to calibrate the reader after moving it and as a part of regular maintenance.

Device Calibration

The X-ray beam should cover the entire IP area.

needs SIZE4C IP










<input type="button" value="ScanBlank"/>	<input type="button" value="ScanLowDose"/>	<input type="button" value="ScanMidDose"/>	<input type="button" value="ScanHighDose"/>
			
224	3529	9055	34136
(50~500) 0.00kVp 0.00mAs SID 280 mm	(1500~5000) 70.00kVp 0.49mAs SID 280 mm	(8000~16000) 70.00kVp 1.40mAs SID 280 mm	(30000~45000) 70.00kVp 3.50mAs SID 280 mm

Figure 2.10 Calibration



CAUTION
SIZE 4c IP must be used for calibration.

2.4.1. *Step 1: Erase*

At first, you can see the Erase button flickering. Place the IP on the tray and insert it. When the erase is completed, the Scan Blank part starts flickering.

2.4.2. *Step 2: Scan Blank*

Place an IP that has not been radiated with X-Rays on the tray and insert it. At the scan completion, the Scan Low Dose part starts flickering.

2.4.3. *Step 3: Scan Low Dose*

Adjust the X-Ray imaging settings to 70kVp, 0.49mAs and scan the IP from the recommended X-Ray imaging distance.

Place the IP on the tray and insert it. Once the scan is completed, the measurement is displayed below the button. It should be between 1500 and 5000. If so, click Accept to process the next step. If not, click Reject to repeat Step 3.

2.4.4. *Step 4: Scan Mid Dose*

Adjust the X-Ray imaging settings to 70kVp, 1.4mAs and scan the IP from the recommended X-Ray imaging distance. Place the IP on the tray and insert it. Once the scan is completed, the measurement is displayed below the button. It should be between 8000 and 16000. If so, click Accept to process the next step. If not, click Reject to repeat Step 3.

2.4.5. *Step 2: Scan High Dose*

Adjust the X-Ray imaging settings to 70kVp, 3.5mAs and scan the IP from the recommended X-Ray imaging distance. Place the IP on the tray and insert it. Once the scan is completed, the measurement is displayed below the button. It should be between 30000 and 45000. If so, click Accept to process the next step. If not, click Reject to repeat Step 3.

2.4.6. *Calibration*

This creates a Calibration data file.

2.4.7. *Upload*

If you click the Upload button, the calibration data is transferred to the scanner for storage.

2.4.8. *Download*

If you click the Download button, stored calibration data in the scanner is downloaded to the PC.

3. Software Overview

3.1. Supported Resolutions

Landscape resolutions with 16:9, 4:3 and 5:4 ratios are supported. Portrait ratios are not supported. The horizontal resolution of the monitor must be at least 1280 pixels, and the vertical resolution of the monitor must be at least 768 pixels. Recommended resolutions are listed in [오류! 참조 원본을 찾을 수 없습니다..](#)

Table 3.1. Supported Resolutions

Screen ratio	Screen resolution
16:9	1366 x 768 1280 x 800 1400 x 900 1600 x 900 1920 x 1080
4:3, 5:4	1280 x 1024

If you have multiple monitors you can select **QuantorDentVet** display monitor at Setting's [System – System Option – Display Monitor]. If you select Review Monitor differently from Display Monitor at Setting's [System – System Option – Review Monitor], Review Screen will be displayed with full screen mode at assigned monitor. Full screen review monitor supports all screen resolution types, and both landscape and portrait monitor orientation.

3.2. Home

The Home screen is the first screen that appears when the program is run. From the Home screen, you can create a new study or view existing studies.

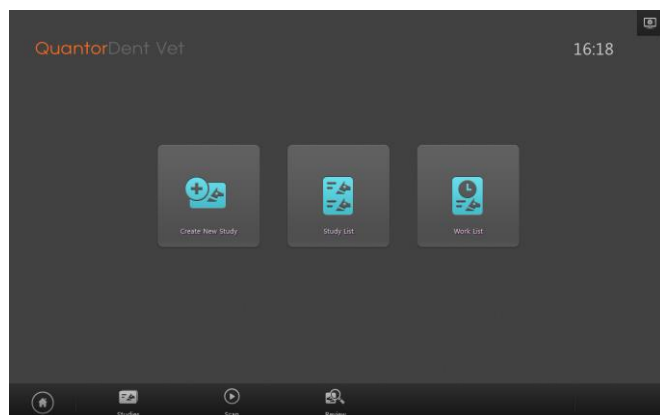


Figure 3.1 Home Screen

3.3. Navigation Bar

The Navigation Bar is located at the bottom of the screen. The Navigation Bar is always displayed while the program is running, allowing the user to easily switch screens during a task.

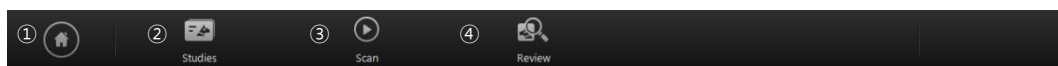


Figure 3.1 Navigation Bar

- ① Home
- ② Studies
- ③ Scan
- ④ Review

3.4. Study list

The Studies screen shows a collection of windows that are related to the studies. You can enter the Studies screen by clicking the Studies button in the Navigation Bar. The Sub-Navigation Bar is located on the left of the screen. In the Sub-Navigation Bar, you can select a Study List, Work List or Transport windows that are related to the study.

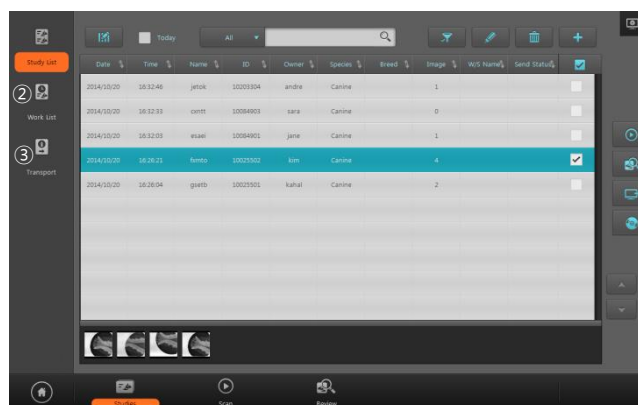


Figure 3.2 Studies Screen

- ① Study List: You can perform various tasks by searching existing studies and selecting a study.
- ② Work List: You can query the work list from the PACS work list server, select the desired study and immediately begin image acquisition.
- ③ Transport: You can confirm the transmission results of the acquired images.

3.5. Create New Study

The New Study screen is the first page to start a scan. After entering the necessary patient information and study information, and adding a new study, you can begin a scan.

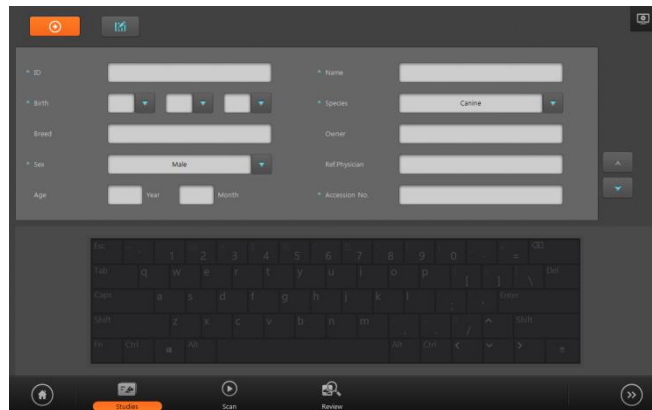


Figure 3.2 Create New Study

3.6. Patient Information

The Patient Information Bar is displayed at the top of all the screens, with the exception of the Home screen and the New Study screen. The Patient Information Bar displays patient information and other related information.



Figure 3.3 Patient Information

- ① Patient Name
- ② Patient ID
- ③ Patient's Date of Birth
- ④ Patient's Age
- ⑤ Patient's Sex (M: Male, F: Female, N/A: Other)
- ⑥ Current Time
- ⑦ Model Name
- ⑧ System

3.7. Scan

In the Scan screen, you can insert an IP into the **FireCR Dental** and process image acquisition.

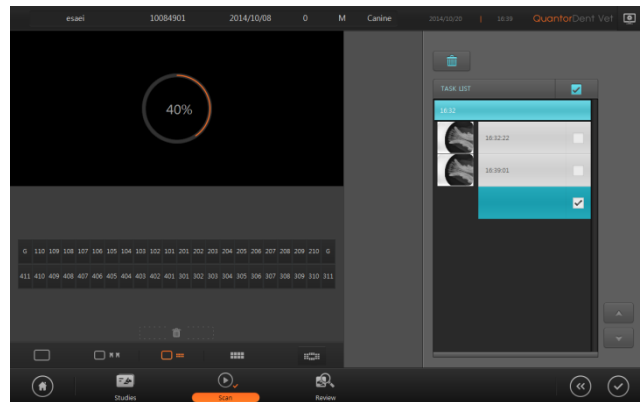


Figure 3.3 Scan Screen

3.8. Review

In the Review screen, you can query scanned images. The Review screen is very useful for conducting diagnosis after acquiring the images.



Figure 3.4 Review Screen

4. Home Screen

4.1. Screen Layout

The Home screen is the first screen that appears when the program is run. From the Home screen, you can create a new study or view existing studies. You can go back to the Home screen by using one of the actions below.

- Clicking the Home button in the Navigation Bar
- Clicking the End Study button in the Scan screen
- Clicking the End Study button in the Review screen

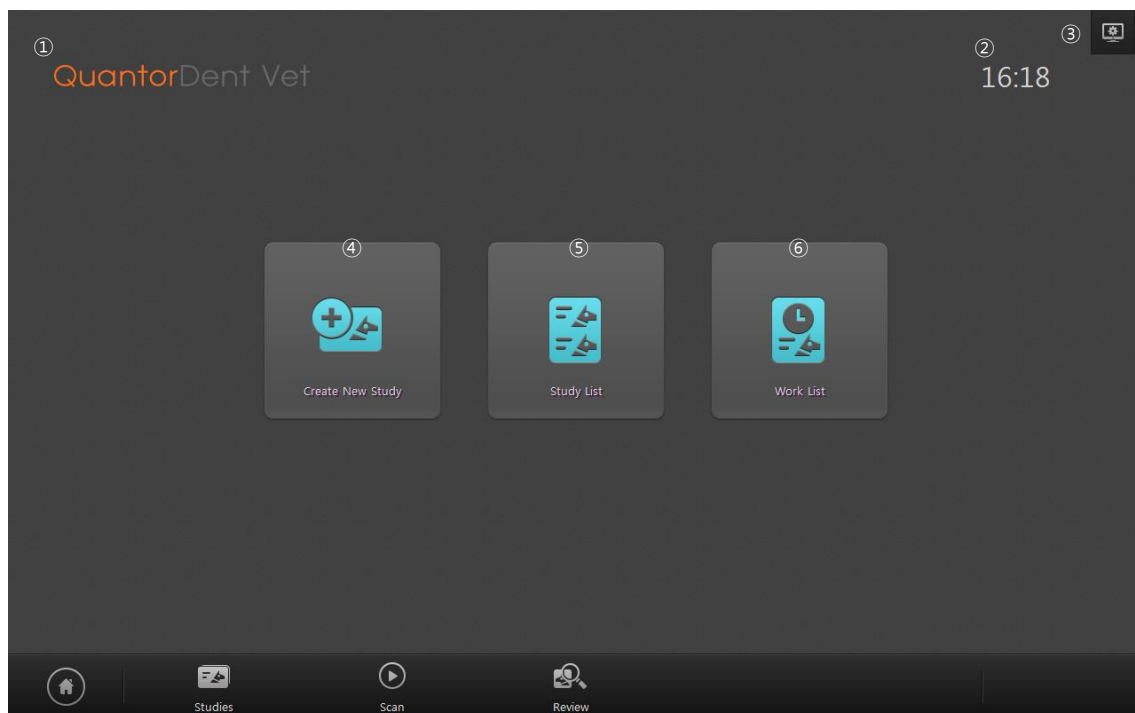


Figure 4.1 Home Screen

- ① Model Name: Displays the model name of **QuantorDentVet**
- ② Current Time: Current time is displayed in hours and minutes.
- ③ System: Displays the System menu.
- ④ Create New Study: Go to New Study screen.
- ⑤ Study List: Go to Study List screen.
- ⑥ Work List: Go to Work List screen.

4.2. *System menu*

The System button is always displayed in the upper-right corner of the program. When the button is clicked, the following menu appears on the screen.

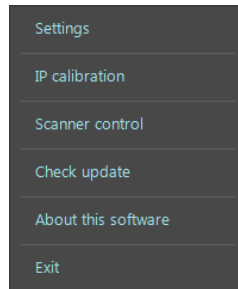


Figure 4.2 System menu

- Settings: Displays the Settings window.
- IP Calibration: Runs IP Calibration program.
- Scanner Control: Runs Scanner Control program.
- Check Update: Checks for a new version. If a new version is available, it is automatically downloaded and installed.
- About this software: Displays software version information
- Exit: Exits the program.

5. Create New Study

5.1. Screen Layout

The New Study screen is the first page when performing a scan. Enter the necessary patient and study information. You can easily switch to the next input field by using the Tab key. Fields marked by * are mandatory DICOM fields that must be filled in.

Figure 5.1 Create New Study

- ① Emergency: Mandatory fields are filled in automatically. This function is used in emergencies where patient information has not been identified to perform a scan first and fill in the patient data later.
- ② Edit Input Field: Bring up Input Field Edit dialog. In the Input Field Edit dialog, you can change the order of the input fields, and add or remove input fields.
- ③ System Menu: Display the System menu.
- ④ Input Field: Details about each input field are described in Table 5.1.

Table 5.1 Input Field

Title	Description	Mandatory
Name	Enter patient name.	O
ID	Enter patient ID.	O
Birth	Enter patient's date of birth. You can select a date from the drop-down box or manually enter numbers. When only the date of birth is entered and not the age, age is calculated automatically.	O
Sex	Select patient's sex. M stands for male. F stands for Female. N/A stands for other.	O
Age	Enter patient's age. Leave the Year field blank if the patient is less than 1 year old. When only the age is entered and not the date of birth, date of birth is calculated automatically. When it does, month and date are automatically entered as January 1.	X
Ref. Physician	Enter the name of the referring physician.	X
Description	Enter study description.	X
Accession No.	Enter accession number. Entering an accession number is mandatory. If not entered, a new number will be generated automatically.	O

- ⑤ Page Up/Down: Go to another page.
- ⑥ Next: Go to the Region Selection screen, which is the next step.



WARNING

Warning message pops up if any of mandatory item is missing, and can't proceed to the next step.

5.2. Edit Column Dialog Box

In the Input Field Edit dialog box, you can change the order of the input fields, and add or remove input fields. The input fields can be edited according to the user's environment. However, mandatory input fields cannot be removed.

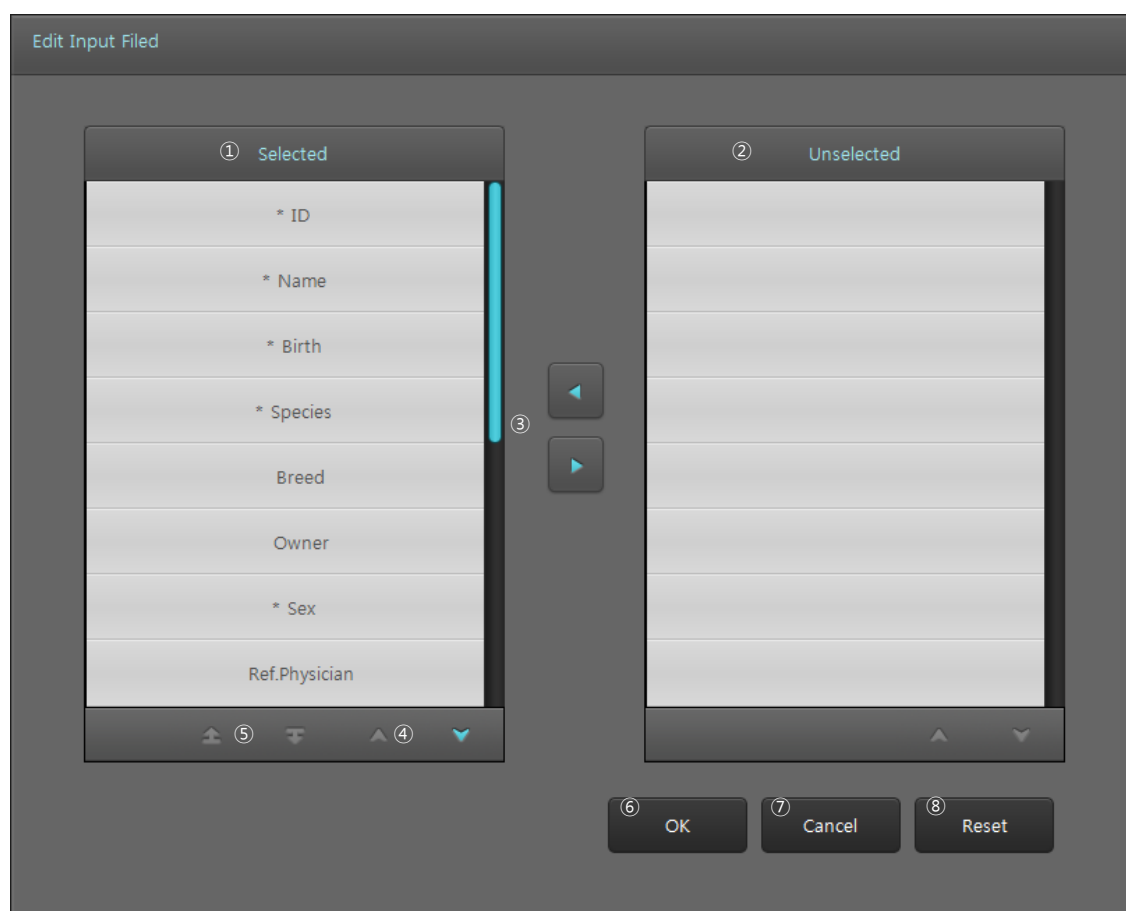


Figure 5.2 Edit Input Fields

- ① Input field items to be displayed on the screen.
- ② Input field items not to be displayed on the screen.
- ③ Move selected items to left and right. Items on the left are displayed on the screen and the items on the right are not displayed on the screen.
- ④ Button for switching pages.
- ⑤ Move the selected items up or down on the list to change order.
- ⑥ Save changes and close the dialog box.
- ⑦ Cancel changes and close the dialog box.
- ⑧ Reset the fields to default settings.

6. Scan

In the Scan screen, you can insert the IP into the **FireCR Dental** and acquire images.

6.1. Screen Layout

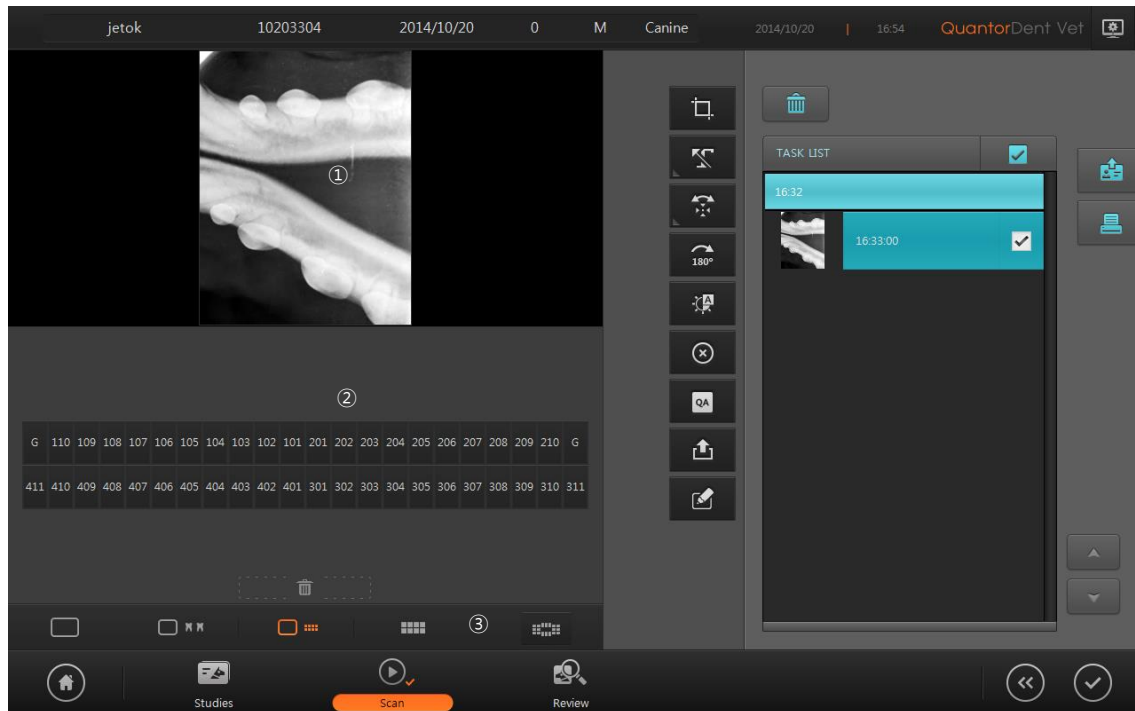


Figure 6.1 Scan Screen

- ① Image window: Displays an image selected in the Task List.
- ② Support window: Displays various forms of information related to teeth.
- ③ Tool box: You can change contents shown in the image view window and support window.

6.2. Tool Box



Figure 6.2 Scan Screen

- ① Image window: Displays images only.
- ② Image window + Dentition: Displays images and dentition.
- ③ Image window + chart: Displays images and charts.
- ④ Chart: Displays chart only.
- ⑤ Template: Displays a template instead of chart.

6.2.1. Image

When you click the Image button in the tool box, the image window only displays an image.

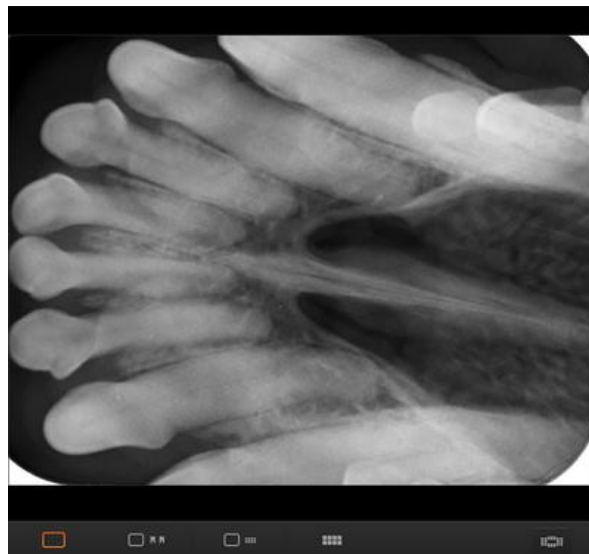


Figure 6.3 Image only

6.2.2. *Image+ Dentition*

When you click the "Image + Dentition" button in the tool box, it displays an image on the top and dentition on the bottom. Using dentition, you can record which teeth have been scanned after scanning completion.

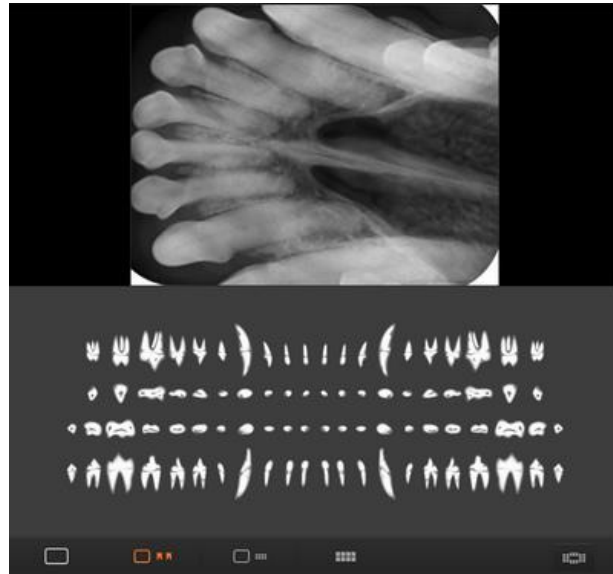


Figure 6.4 Image+ Dentition

6.2.3. *Image + Chart*

When you click the "Image + Chart" button in the tool box, it displays an image on the top and the chart on the bottom. The chart provides the international standard teeth number in the center. You can drag an image from the image window or task bar and align them on the chart.



Figure 6.5 Image + Chart

6.2.4. *Chart*

When you click the "Chart" button in the tool box, the chart is provided in full screen.



Figure 6.6 Chart

6.2.5. *Template*

When you click the Template button in the tool box, templates are provided that can scan the Full Mouth Series. Drag images from the image field or task bar and align them on the template.

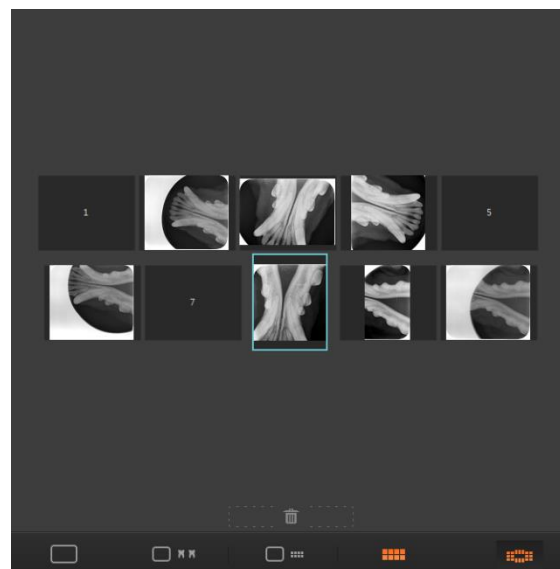


Figure 6.7 Template

6.3. Image Scan

1. Enter study information in the New Study screen and click “Next”. Or select a study in the Study List screen and click “Scan”.
2. Place an IP on the scanner tray and push it into the scanner.
3. The screen displays the scanning progression.

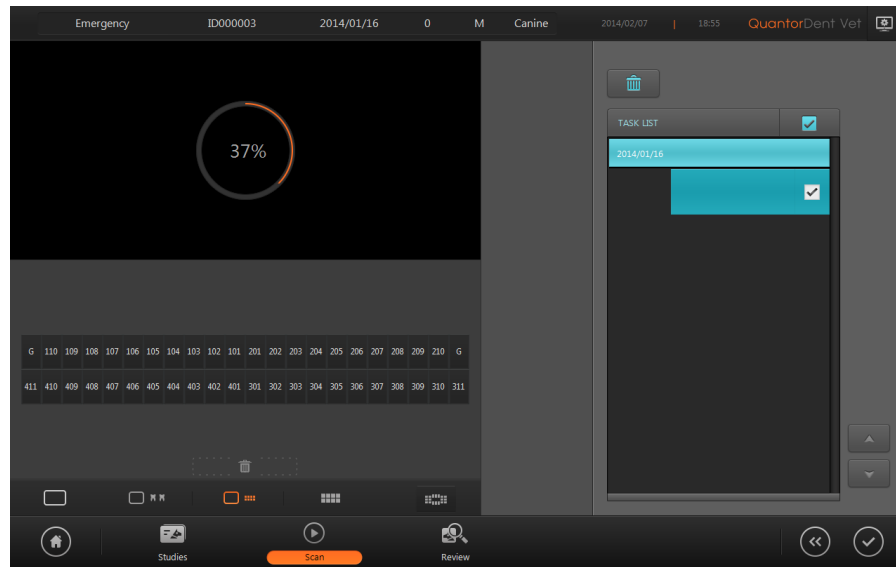


Figure 6.8 Scan in Standalone version

4. When the scan is completed, the image is provided on the screen.

Note: When you insert the tray into a scanner without opening the study, the scanner conducts scanning but does not transport the image to **QuantorDent**.



NOTE

When you insert the tray into a scanner without opening the study, the scanner conducts scanning but does not transport the image to **QuantorDentVet**.

7. Image

7.1. Screen Layout

When an IP scan has been completed, the acquired image is displayed on the Scan window as shown in Figure 7.1.

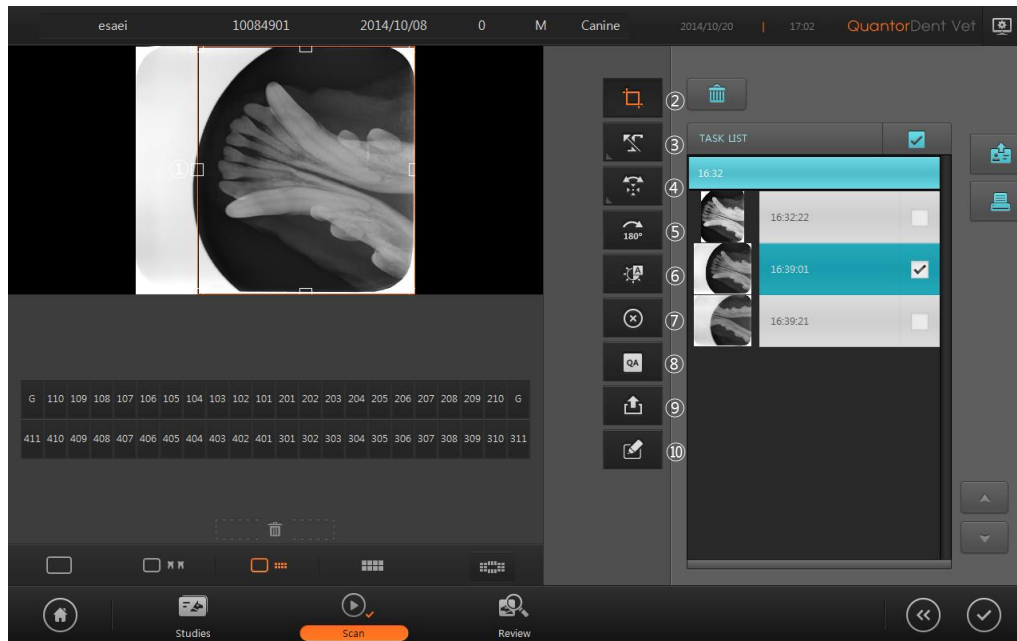


Figure 7.1 Image output

- ① ROI Box: A tool for cropping the valid region of the scanned image.
- ② ROI: ROI-related tools
- ③ Marking: Add markings on the image.
- ④ Rotate Flip: Rotate/flip the image.
- ⑤ 180 degree rotation: Rotate the image 180 degrees.
- ⑥ Auto window: Automatically adjust the image brightness and contrast.
- ⑦ Reject: Add Rejects marking the image.
- ⑧ QA: Bring up tools for adjusting image details.
- ⑨ Transport: Transport the image.
- ⑩ Memo: Use to enter image-related contents.

7.2. ROI

When a scan is completed, the image is displayed and the ROI Box is automatically displayed as shown in 오류! 참조 원본을 찾을 수 없습니다.. When you drag the ROI Box to the desired location and double-click the ROI Box or click on the ROI button, the ROI is cropped and fitted to the screen as shown in. To adjust the size of the ROI Box, drag the small rectangles at each corner of the ROI. When transmitting or printing the image, only the ROI are used.

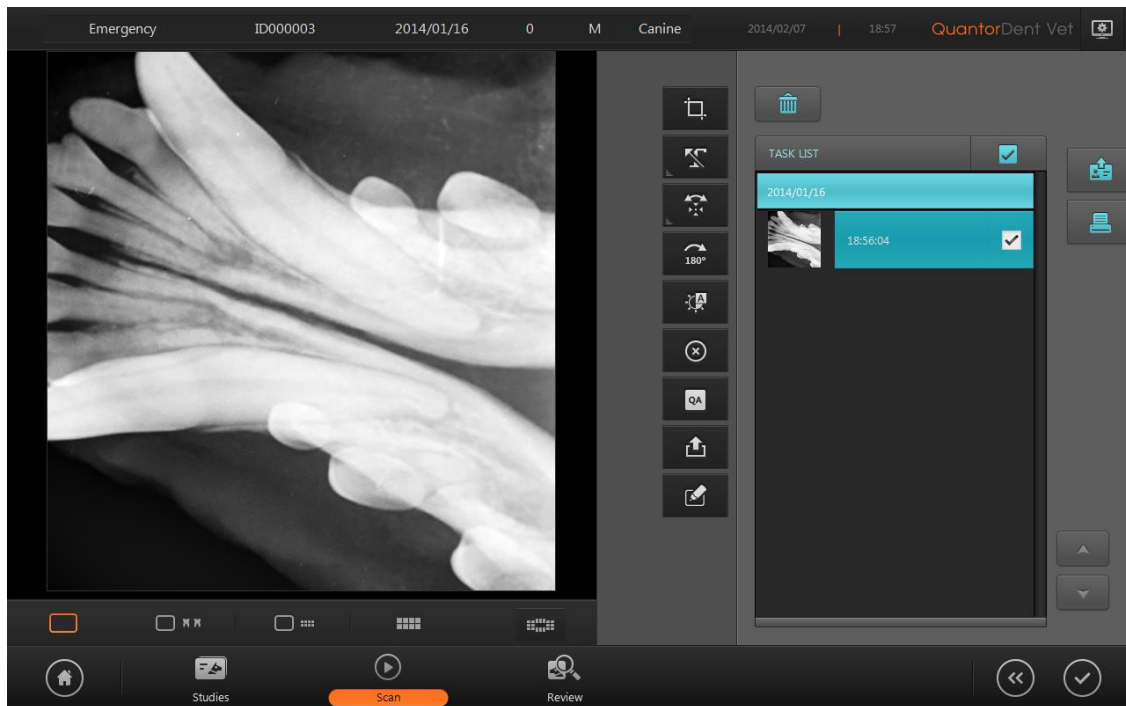


Figure 7.2 Image with cropped ROI region

7.3. Marking

This adds markings on the image. You can add markings to the image by selecting a predefined marking or manually typing text.

Add predefined marking

- ① Click on the Marking button.
- ② Select a marking.
- ③ Click a point on the image.

You can edit predefined markings in the [Overlay - Marking] under Settings.

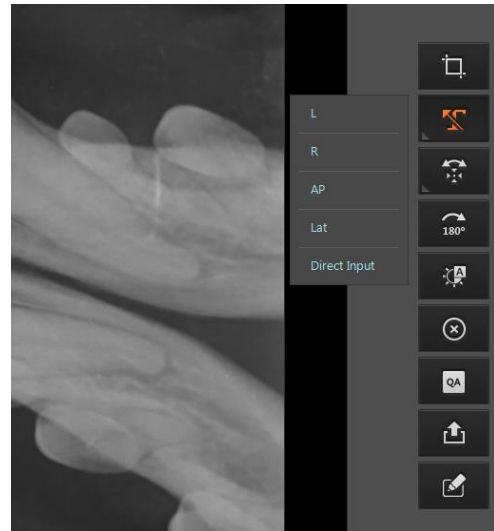


Figure 7.3 Add Predefined Markings

Direct input marking

- ① Click on the Marking button.
- ② Select Direct Input.
- ③ Click on a position where you want to add the marking and a text box appears. Enter your text. Click outside the text box when you are done.

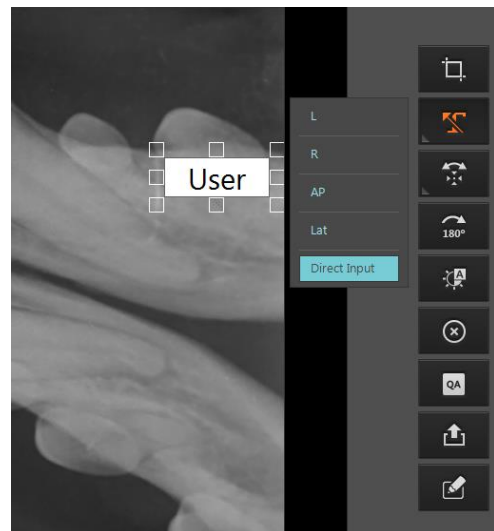






Figure 7.4 Manually Enter Markings

7.4. *Rotation/Flip*

You can rotate or flip the image.

Icon	Action
	Rotate Left
	Rotate Right
	Flip Horizontally
	Flip Vertically

7.5. *180-degree rotation*

Rotate the image 180 degrees.

7.6. *Auto Window*

Automatically adjust the image brightness and contrast.

7.7. Reject

When the quality of the scanned image is insufficient, Reject preserves the current image with a “Reject” marking without rescanning. When the Reject button is clicked, a “Reject” marking is added on the upper left corner of the image as shown below, and a “Reason” input field appears on the screen. Type in the reason for rejection, and click outside the input box when you are done. You can cancel a rejection by clicking the Reject button again.

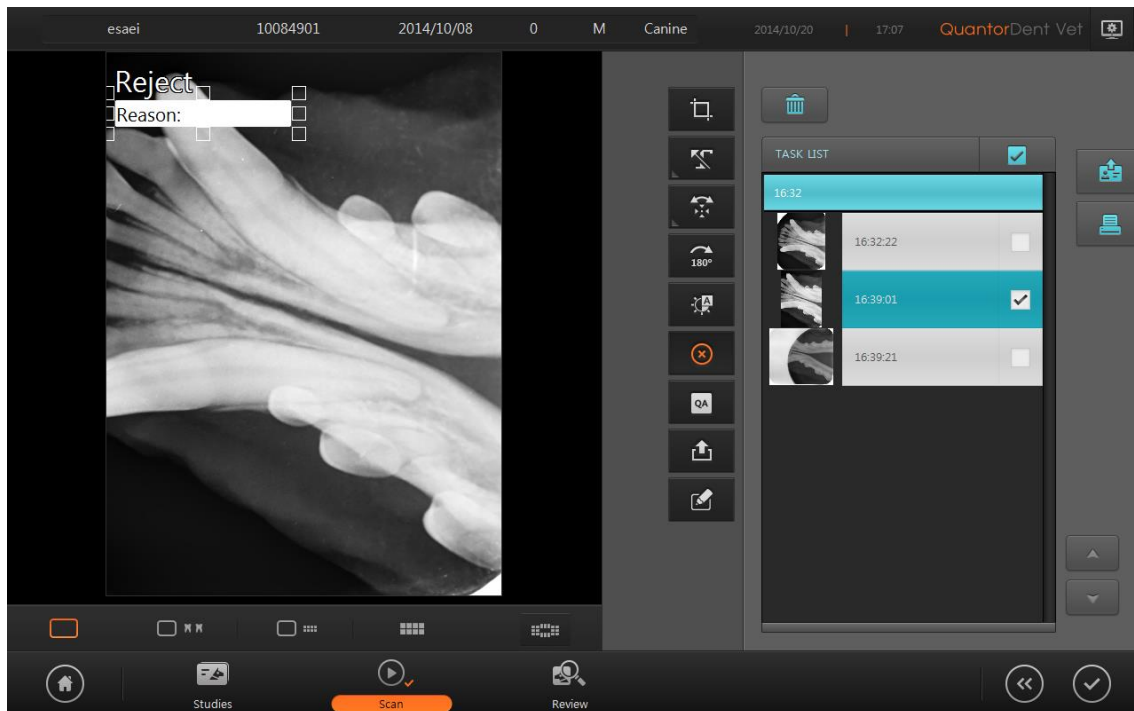


Figure 7.5 Reject

7.8. QA – Image Adjustment

Used to adjust the LUT Curve of the image. Adjusting the image requires expert knowledge about images. Adjusting the image without proper knowledge may result in lower image quality.

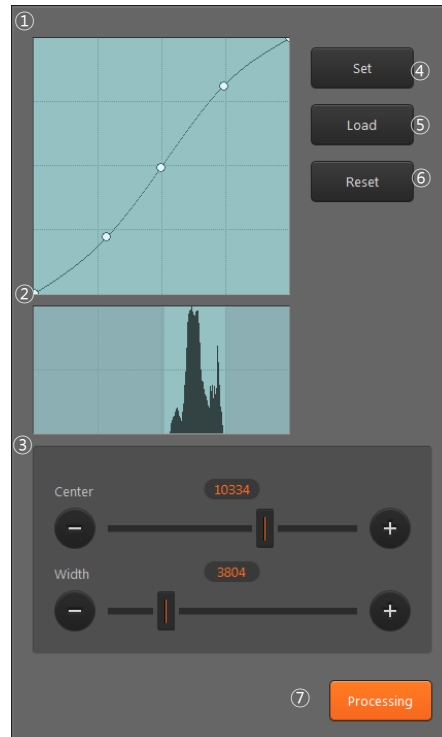
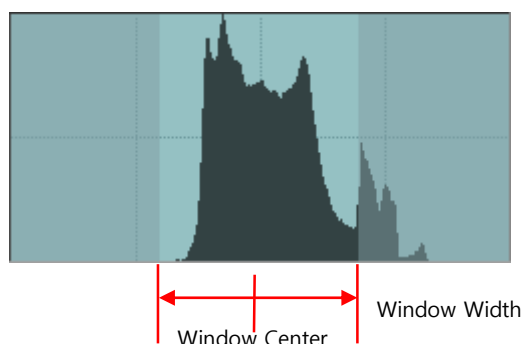


Figure 7.5 LUT Curve

- ① LUT Curve: LUT curve applied to the image. A default curve for each region is provided. The user can adjust the curve to their preference. To adjust the curve, set a control point and drag the curve using the mouse. To add a new control point, click on the line using the mouse. A control point can be removed by dragging it outside the box.
- ② Histogram: Shows the histogram of the image. The bright region at the center is the region currently displayed on the screen. The left part of the histogram indicates the frequency where X-ray penetration level is low and image is bright. The right part of the histogram indicates the frequency where X-ray penetration level is high and image is dark. Images have low pixel values in bright regions and high pixel values in dark regions.
- ③ Window Center / Width: Used to adjust the window center and width of the image. The window center is adjusted when you drag the image up or down, and window width is adjusted when you drag the image left or right. Dragging the sliders have the same effect as dragging the image.



- ④ Set: Set the curve and window value adjusted by the user as the default value for images of the current region.
- ⑤ Load: Load and apply default curves and window values of the current region.
- ⑥ Reset: Reset curve.
- ⑦ Processing: Go to Image Processing Filters screen.

7.9. QA – Image Processing

Used to adjust image processing filters. Adjusting the image requires expert knowledge about images. Adjusting the image without proper knowledge may result in lower image quality.

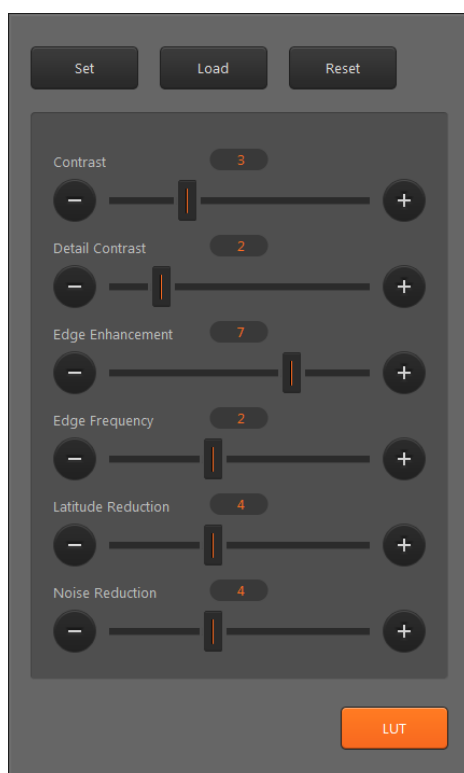


Figure 7.6 Image processing filter

- ① Contrast: Increases the image's contrast. The level can be adjusted from 0 to 10. Higher levels increase the intensity. Filter is not applied when 0 is selected.
- ② Detail Contrast: Increases the contrast in regions of the image with low contrast. The level can be adjusted from 0 to 10. Higher levels increase the intensity. Filter is not applied when 0 is selected.
- ③ Edge Enhancement: Enhances edges. It is used to increase visibility of blood vessels or small calcifications. The level can be adjusted from 0 to 5. Higher levels increase the intensity. Filter is not applied when 0 is selected.
- ④ Edge Frequency: Designates the range of the edges to emphasize. The level can be adjusted from 0 to 5. Lower level emphasizes the smaller edges. Higher levels emphasize the bigger edges.
- ⑤ Latitude Reduction: Compresses the low frequency regions to improve the overall visibility of the image. The level can be adjusted from 0 to 10. Higher levels increase the intensity. Filter is not applied when 0 is selected.
- ⑥ Noise Reduction: Reduces the noise in the image. The level can be adjusted from 0 to 10. Higher levels increase the intensity. Filter is not applied when 0 is selected.
- ⑦ Set: Set the filter values adjusted by the user as the default value for images of the current region.
- ⑧ Load: Load and apply filter values of the current region.
- ⑨ Reset: Reset filters.
- ⑩ LUT: Go to LUT Curve adjustment screen.

7.10. *Send Image*

Immediately transmits the current image to the image server designated in Settings.

7.11. *Image Comment*

Add a memo about image-related findings and extra information.

8. Task List

8.1. Screen Layout

The Task List is a list of scans to be performed. Tasks are group by studies, and arranged in chronological order. The user can select the desired region and perform a scan. The Task List consists of a list of studies, and each study consists of a list of tasks. The check boxes located to the right of the task bar is used to select tasks.

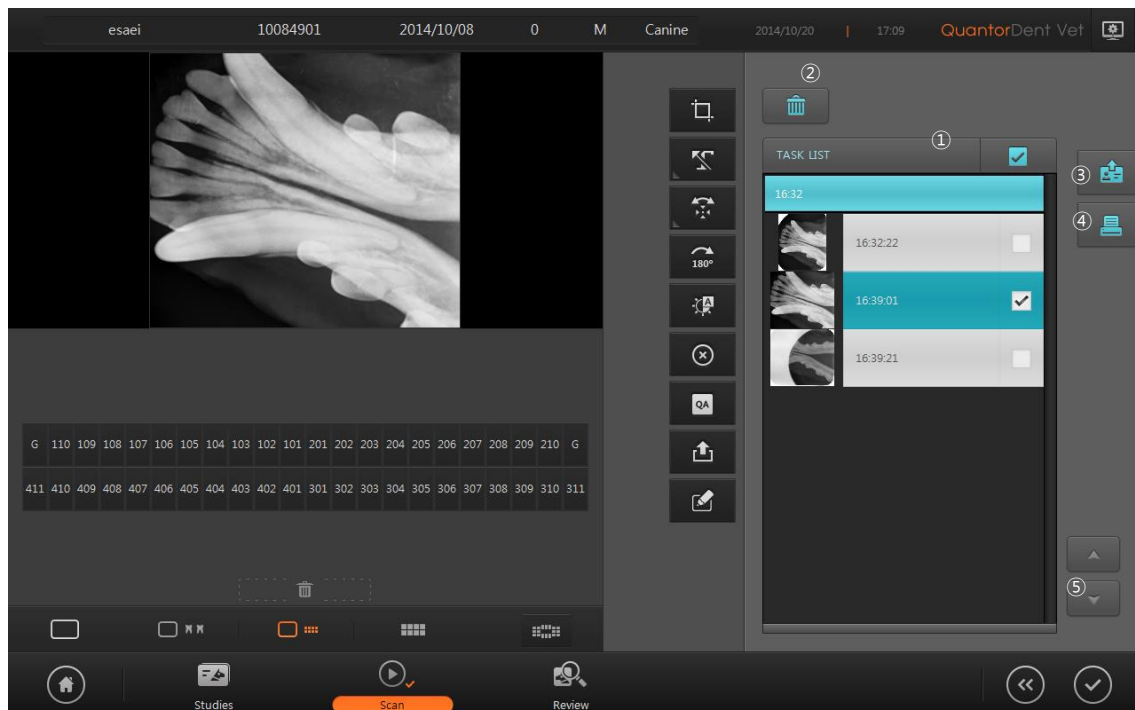


Figure 8.1 Task List

- ① Task bar
- ② Delete
- ③ Send Study
- ④ Print
- ⑤ Page UP/Down

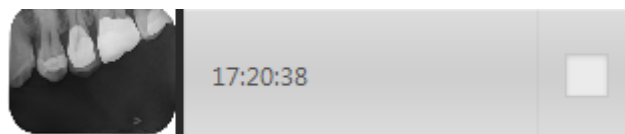
8.2. Task List

Task List consists of Study-Task tree structure. Study Bar is shown below, and it shows Study Date and Study Description.



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Task Bars are shown under the Study Bar. Task Bar is shown below, and it shows Thumbnail Image, View Position and check box.



All Task Bars can be selected or deselected by checking the box in Task List.



8.3. Tool Button

Icon	Title	Action
	Delete	Delete selected tasks
	Send Study	Transmit the selected study. Destination of the transmission can be added in Settings
	Print	Print the selected images using a DICOM printer or a Windows printer.

8.4. *Print*

Windows printers and DICOM printers are supported. The printed page can be previewed on the left part of the screen.

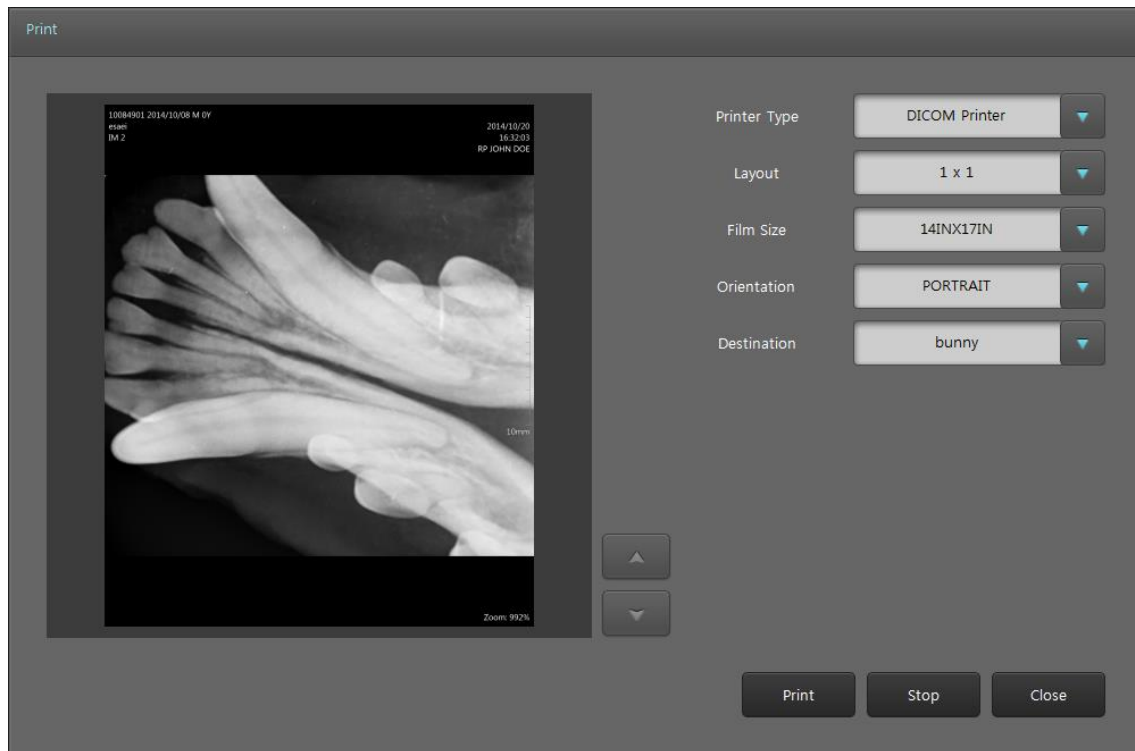


Figure 8.2 DICOM Print

- Printer Type: Select printer type.
 - DICOM Printer
 - Windows Printer
- Layout: Select the layout of the image to be printed on film or paper.
 - 1x1 ~ 3x3 formats
- Film Size: Select standard DICOM film size.
 - 8INx10IN
 - 10INx12IN
 - 10INx14IN
 - 8INx10IN
 - 11INx14IN

- 14INx14IN
- 14INx17IN
- 24CMx30CM
- 24CMx24CM
- Orientation: Select film orientation.
 - Portrait: Uses portrait orientation.
 - Landscape: Uses landscape orientation.
- Destination: Select DICOM printer.
- Real Size: Print in real size.
- Print: Start printing.
- Stop: Stop printing.
- Cancel: Close dialog box.

When a Window printer is selected, the screen changes as shown in 오류! 참조 원본을 찾을 수 없습니다.3.

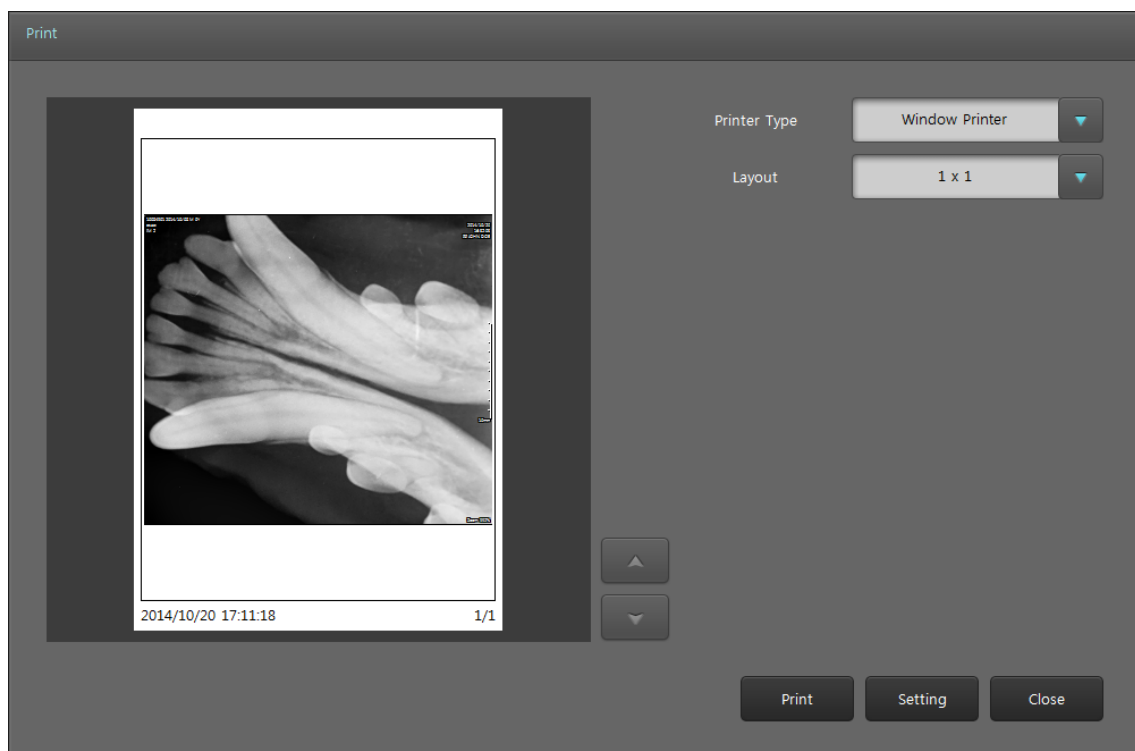


Figure 8.3 Window Printer

- Setting: Display the Print Setting screen.

9. Review

Review screen offers the identical functions as a PACS Viewer. It supports various image comparison, processing and measurement tools for performing a diagnosis.

9.1. Screen Layout

Screen layout of the Review is as 오류! 참조 원본을 찾을 수 없습니다..

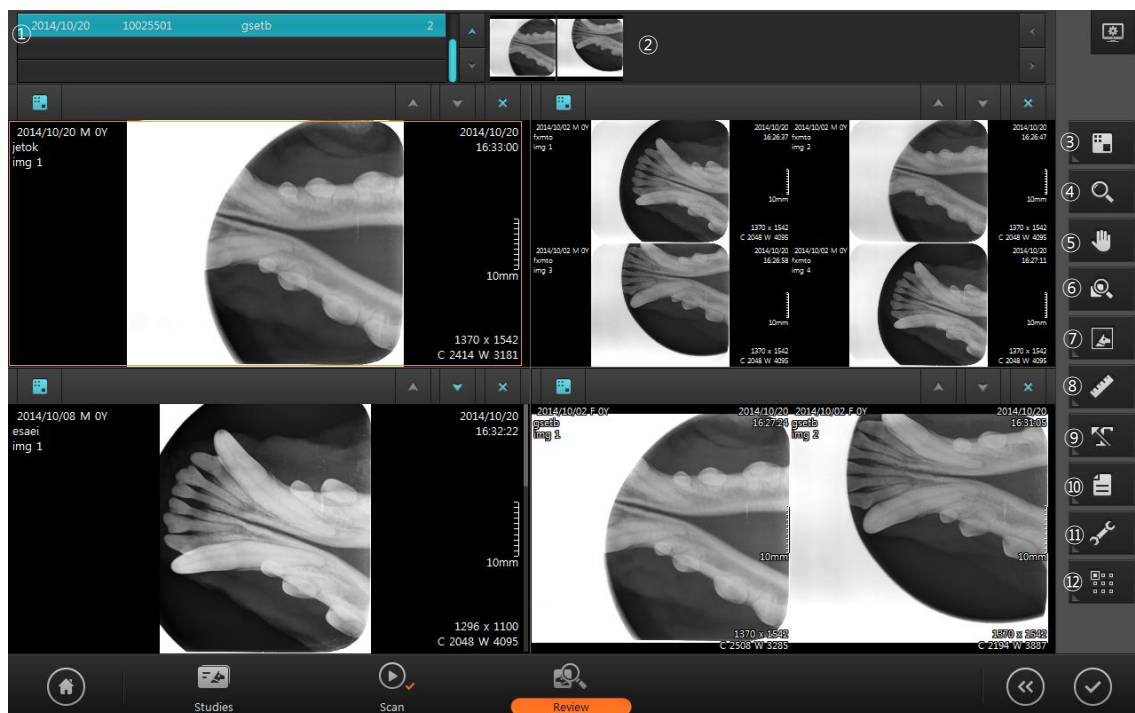


Figure 9.1 Review screen

- ① Study list: Opened study list
- ② Thumbnail bar: Display thumbnail images of selected studies in study list.
- ③ Image display area
- ④ Toolbar

9.2. Open Study

In order to use Review window, select study and open it in Review window.

Open in Study List window

- Select studies in study list.
- Click review button in right side of study list.
- Then, selected studies are listed in study list in Review window, and the first image is displayed.

Open in Scan window

- Click Review button in navigation bar in Scan window.
- Then, the image displaying in Scan window is displayed in Review window.

9.3. View

The screen displaying the image consists of multiple views. Each view consists of multiple images. The user can customize the view layout and image layout according to their needs.

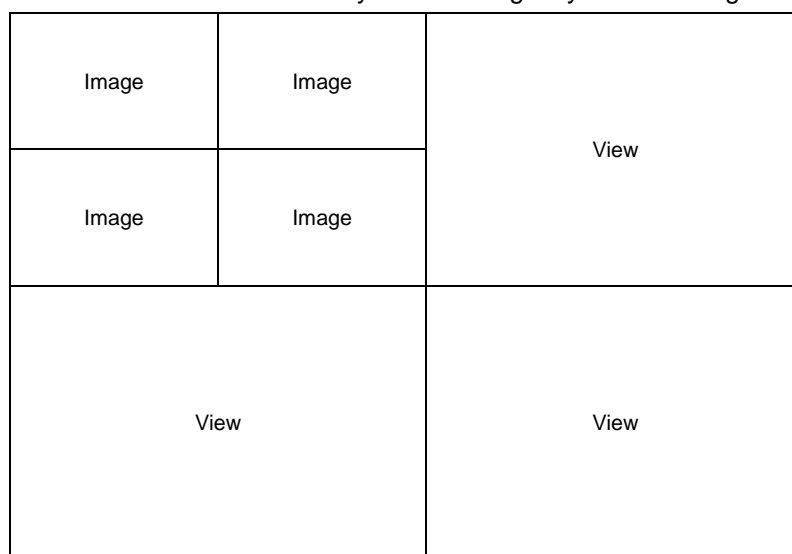


Figure 9.1 View – Image Layout

To display an image in the view, all you have to do is simply drag the image from the Task Bar. When an image is dragged from the Task Bar, only the image is displayed in the view. When a Study Bar is dragged, all the images included the study are displayed in the view.

Caption bar is located at top of the View.



Figure 9.2 View Caption Bar

- ① Image Layout: Change image layout. When you click on the Image Layout button, a 3x3 grid shown in Figure 10.4 will appear on the screen. Select your desired layout. The largest image layout available 3x3.

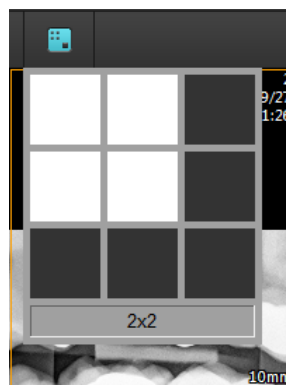






Figure 9.3 Image Layout










- ① Page Up: Go back to the previous page.
② Page Down: Go to the next page.
③ Close: Close all images.

9.4. Tool Bar


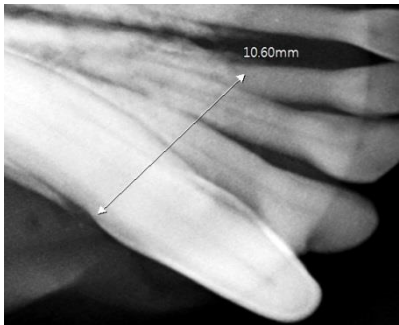





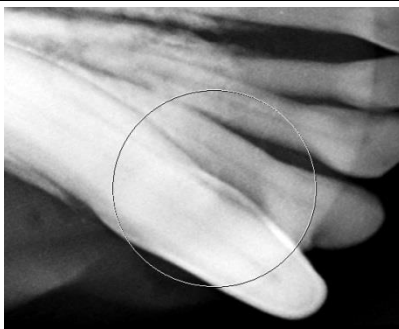
Icon	Title	Action
	View Layout	Change the layout of the view
	Zoom	Used to zoom in and out of the image. Drag the image left, right, up, or down using the mouse.
	Pan	Pan the image. Drag the image left, right, up, or down using the mouse.
	Magnifier	Mouse is changed to Magnifier mode. Use Ctrl key to change the zoom ratio and use Shift key to change the magnifier size
	Image	Open image manipulation tools for rotating, flipping and inverting images
	Measure	Provides various measurement tools for measuring distance and angle


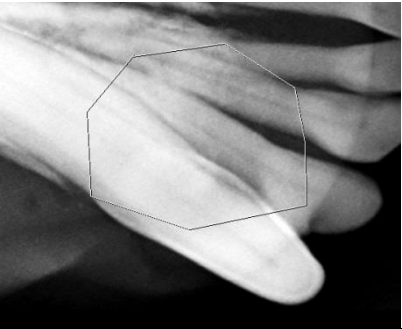






	Marking	Provides marking tools
	File	Provides file tools
	Tools	Provides other tools
	Apply	Designate the range in which image adjustments will apply.


9.5. Image Processing Tool Box

Icon	Title	Action
	Rotate Left	Rotate the selected image to counterclockwise by 90 degree.
	Rotate Right	Rotate the selected image to clockwise by 90 degree.
	Flip Horizontally	Flip the selected image horizontally.
	Flip Vertically	Flip the selected image vertically.
	Reset image to initial state	Reset the image to initial state.
	Negative image	Inverse the image
	Fit to page size	Scaling the image fit to the page size.
	Original Size	Display the image without scaling. Pixel size of the image and monitor matches 1 to 1.
	Real size	Scaling the image to real size. Monitor calibration is required to use this function.



9.6. Measurement Tool Box

Icon/Title	Description
 Distance	<p>Measures distance. Click the start and end point of the measurement. A straight line is displayed between the two points and the measurement value is displayed at the end of the straight line. You can move the measuring line by dragging it. You can move either one of the two control points by dragging them with your mouse. You can also move the position of the measurement values by dragging it with your mouse.</p> 
 Angle	<p>Measures angle. Click on the center point of the angle you wish to measure, and then click on two control points. You can move both lines at once by dragging. You can also move either one of the two control points. You can also move the position of the measurement values by dragging them with your mouse.</p> 
 Rectangle	<p>Draws a rectangle. Click the mouse at the desired position of the upper left corner of the rectangle, and then drag the mouse to the desired position of the lower right corner of the rectangle and release the mouse button. Click on an area within the rectangle to move it. Drag the control points to resize the rectangle.</p> 
 Ellipse	<p>Draws an ellipse. Click the mouse at the desired position where the top and left-most point of the ellipse would intersect, drag the mouse toward the bottom right and release the mouse after reaching a desired size and shape. Click on an area within the ellipse to move it. Drag the control points to resize the ellipse.</p> 




<div>  <div>Polygon</div> </div>	<p>A control point is added every time you click the mouse. Double-click when you are done drawing the polygon. Click on an area within the polygon to move it. Drag the control points to change the corners of the polygon.</p> <div>  </div>
<div>  <div>Free Draw</div> </div>	<p>Creates a free draw selection. Click and drag the mouse to the desired shape. Release the mouse when you are done drawing. You can click inside the selection to move the free draw selection</p> <div>  </div>
<div>  <div>Pixel Value</div> </div>	<p>Measures pixel value. Click and drag the mouse and the coordinates (x, y) and pixel values (p) of the pixel at the cursor position will be displayed on the screen.</p> <div>  </div>
<div>  <div>Profile</div> </div>	<p>Profile: Draw a straight line in the same manner as measuring a distance, and a profile dialog box will be displayed automatically.</p> <ol style="list-style-type: none"> Distance: Distance between two points Start Point: Start point information End Point: End point information Min: Minimum value Max: Maximum value Mean: Average value <div>  </div>

	7. Current Value: Pixel value of the current position when the mouse was clicked over the graph
 Line Color	Changes the color of the line.



9.7. Marking

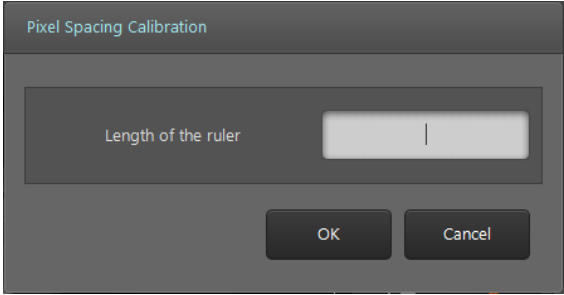

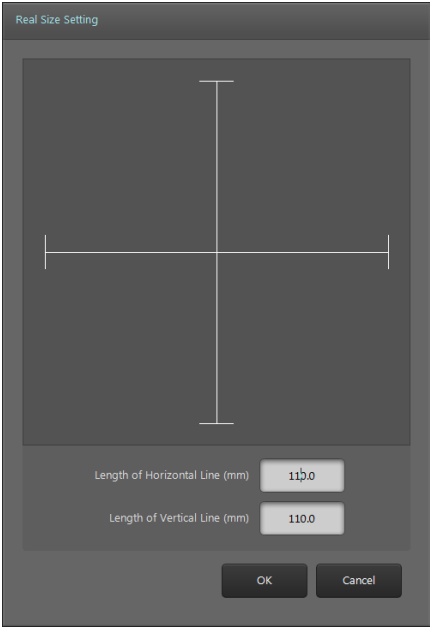
Icon	Title	Action
	Arrow	Click two point in the image, then the line is generated with the arrow mark in each end. You can move the line by dragging the line or arrow by dragging the arrow.
	Text	Text edit box is generated by clicking the image where you wish to add the text. Add the text in the box and click outside of the box. You can move the text by dragging it or edit it by double clicking it.



9.8. File Tool Box

Icon	Title	Action
	Open DICOM File	Open DICOM files.
	Open Image File	Open images files other than DICOM.
	Export	Save the image (File format : DICOM, jpg, tiff, bmp)

9.9. Other Tool Box

Icon	Title	Action
	Copy to clipboard	Copies the active image to the Windows clipboard.
	Pixel Calibration	Sets pixel size. 1. Scan a measuring tool with a determined length. 2. Select the scanned image and click on the Pixel





		<p>Calibration button.</p> <p>3. The following dialog box will be displayed on the screen. Enter the actual length of the measuring tool.</p> <div data-bbox="748 430 1313 723">A dialog box titled "Pixel Spacing Calibration". It contains a label "Length of the ruler" followed by a text input field with a vertical cursor. At the bottom are "OK" and "Cancel" buttons.</div> <p>4. Click on the start point of the measuring tool over the image and start dragging.</p> <p>5. Release the mouse at the end point of the measuring tool to complete the calibration.</p>
<div data-bbox="280 1435 362 1489"></div>	<p>Monitor Calibration</p>	<p>It is required to know the pixel size of the monitor to display the image in real size on the monitor. Following window pops up when Monitor Calibration button is clicked.</p> <div data-bbox="788 1126 1219 1751">A dialog box titled "Real Size Setting". It features a large central area with a crosshair. Below this are two input fields: "Length of Horizontal Line (mm)" with the value "110.0" and "Length of Vertical Line (mm)" with the value "110.0". At the bottom are "OK" and "Cancel" buttons.</div> <p>Measure lengths of horizontal and vertical lines using the ruler and input in the window. You can use the real size function after calibration of the monitor.</p>

	Region Auto Window	This function shows small box on the image if you click mouse left button. Auto window is applied to this small box area. You can change box size if you move mouse with “Shift” key down.
	Print	Print selected images.

9.10. *Apply Range*

Sets the range in which image processing will be applied. When comparing two images, you can apply the same filters to both windows for easier comparison. Image filters that can be used with Apply Range are as follows.

- Zoom, Pan, Rotate, Flip, Window

Icon	Title	Action
	Active	Active: The image that was clicked last is the active image. The active image is marked by an orange border.
	Select	Select: You can select multiple images by clicking on images while holding down the Ctrl key. The selected images are marked by a blue border.
	Study	Study: Applies image filters to all images in the study that contain the active image.
	All	Active: The image that was clicked last is the active image. The active image is marked by an orange border.

10. Study list

10.1. Screen Layout

You can manage scanned images in Study List.

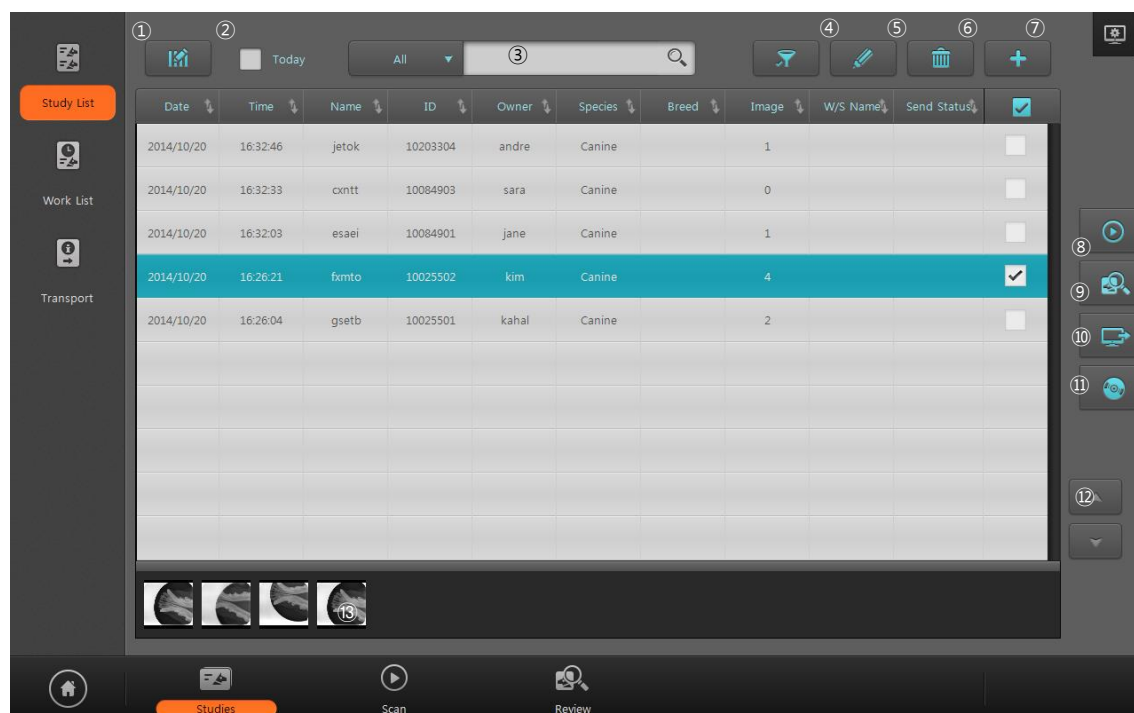
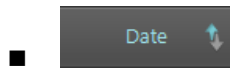


Figure 10.1 Study List

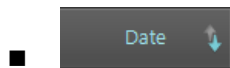
- ① Edit Column
- ② Today
- ③ Search
- ④ Filter
- ⑤ Edit
- ⑥ Delete
- ⑦ New Study
- ⑧ Scan
- ⑨ Review
- ⑩ Send Study
- ⑪ Export
- ⑫ Page Up/Down
- ⑬ Thumbnail

10.2. List

- **Sorting:** When you click on the header of each column, the list is sorted by the information in the selected column. The sorting order changes every time the header of the column is clicked.



Sort in ascending order



Sort in descending order

- **Multiple selections:** You can use the check boxes to select multiple studies on the list. Use the check box in the column header to select the entire list.
- **Switching Pages:** You can switch pages by using the scroll wheel on the mouse or by pressing the Page Up/Down buttons.
- **Change column width:** To change column width, drag and move the separating line between the column headers.

The columns in the Study List are described in Table 10.1.

Table 10.1. Study List Column

Column Title	Description
Date	Study date
Time	Study time
Name	Patient name
ID	Patient ID
Sex	Patient sex
Birth	Patient birth date
Age	Patient age
Desc	Study description
Ref. Phy	Referring physician's name
Acc. No.	Accession number
Image	Number of acquired images
Finish Status	Image transportation result
W/S Name	Workstation name (when run in Client mode)

10.3. *Edit Column*

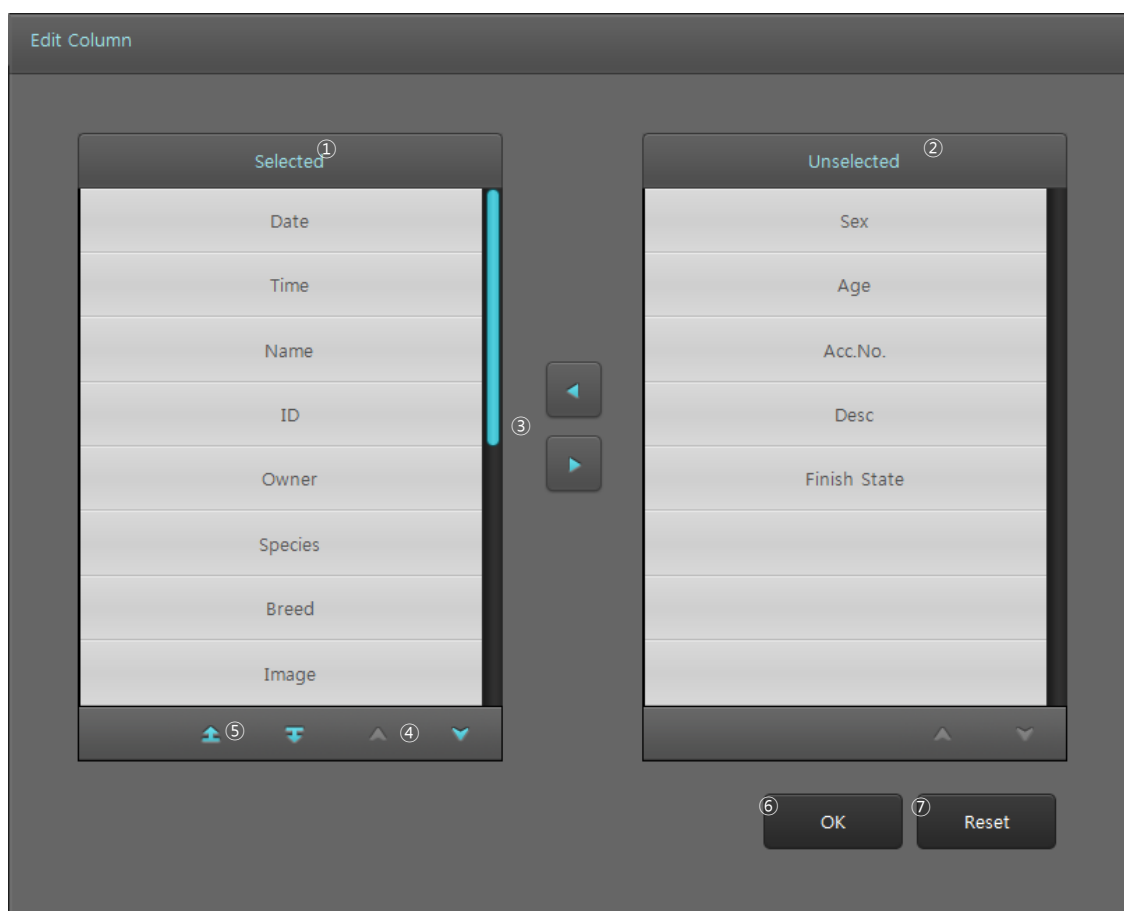


Figure 10.2 Edit Column











- ① Columns to be used in the Study List.
- ② Columns to be hidden in the Study List.
- ③ Move selected items left and right.
- ④ Button for switching pages.
- ⑤ Move the selected items up or down on the list to change order.
- ⑥ Save changes and close the dialog box.
- ⑦ Reset the program to default settings.

10.4. *Search*



- ① Filter: Select the column to search. When a filter has not been set and All is selected, all the columns will be searched.
 - ② Keyword: Enter the keyword to search.
 - ③ Search: Begin search.
- Search in all columns when “**All**” filter is selected.
 - Search studies after set **Date and Time** when it is selected.
 - Search studies on set **Date** when it is selected.

10.5. Tool Buttons

Icon	Title	Action
	Edit Column	Display a dialog box for editing the columns of the list
	Patient Filter	Search same patient's study with the selected study's patient.
	Edit	Edit the selected studies.
	Delete	Delete the selected studies.
	New Study	Add a new study
	Region	Open the selected study and go to the Region Selection screen.
	Scan	Open the selected study and go to the Scan screen
	Review	Open the selected study and go to the Review screen.
	Send Study	Send selected study to registered PACS server or DICOM Printer.
	CD Burn	Export the selected studies to a CD, DVD or a local drive.

10.6. CD Burn

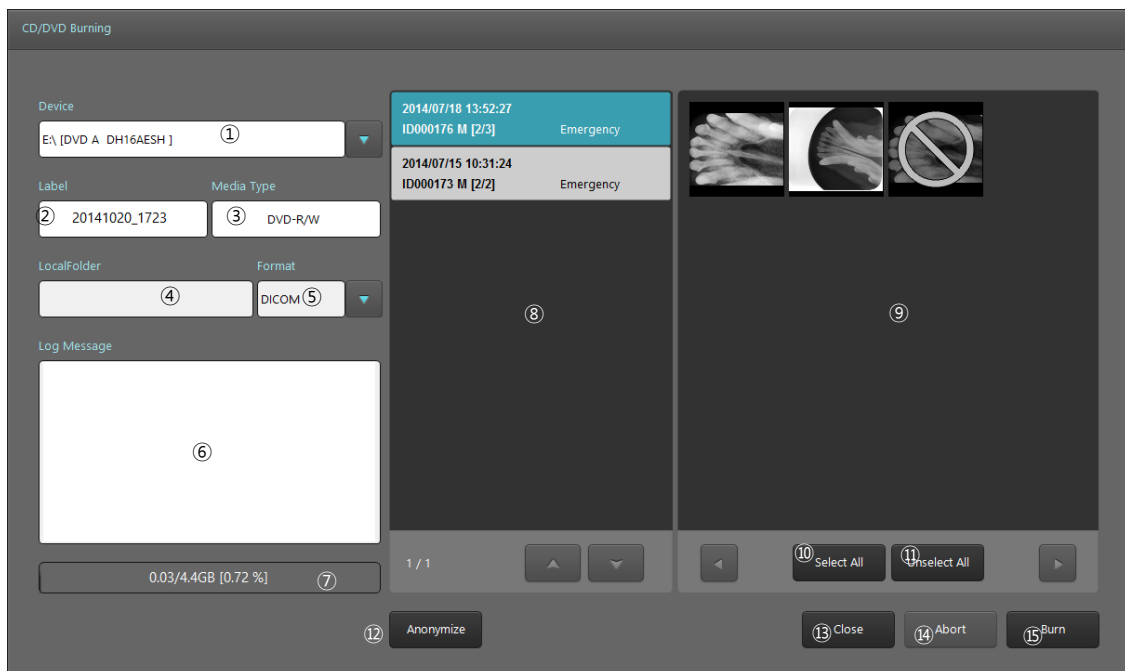


Figure 100.3 CD Burn

- ① Device: Select the storage device to export the images to. Optical disc drives connected to the PC will be listed. If you select Local, you can use other storage devices connected to the PC.
- ② Label: Label to be displayed on disc.
- ③ Media Type: Displays the type of the media inserted in the drive.
- ④ Local Folder: Activated only when Local is selected in the Device field. Select a destination folder to save images.
- ⑤ Format: Select format to save images. Supported formats are as follows.
 - A. DICOM
 - B. Bitmap: Windows Bitmap file
 - C. Raw: RAW file
 - D. Jpg: JPEG
 - E. Tiff: TIFF
- ⑥ Log Message: Shows the progress when recording to an optical disc.
- ⑦ Progress Bar: Shows the image export progress.
- ⑧ Study List: Shows the list of selected studies.
- ⑨ Image List: Shows images selected in the Study List. To not export a certain image, click and unselect the image.

- ⑩ Select All: Select all images.
- ⑪ Unselect All: Unselect all images.
- ⑫ Anonymize: Delete patient name and ID when saving as DICOM images.
- ⑬ Close: Close the dialog box.
- ⑭ Abort: Stop recording.
- ⑮ Burn: Start recording.

11. Work List

In the Work List screen, you can connect to Work List Servers of PACS or HIS systems and query the list of the studies to conduct. To use the Work List, register the Work List Server information in setting, [Network – Work List]. The way of using list, editing column and searching are identical to those of Study List.

11.1. Screen Layout

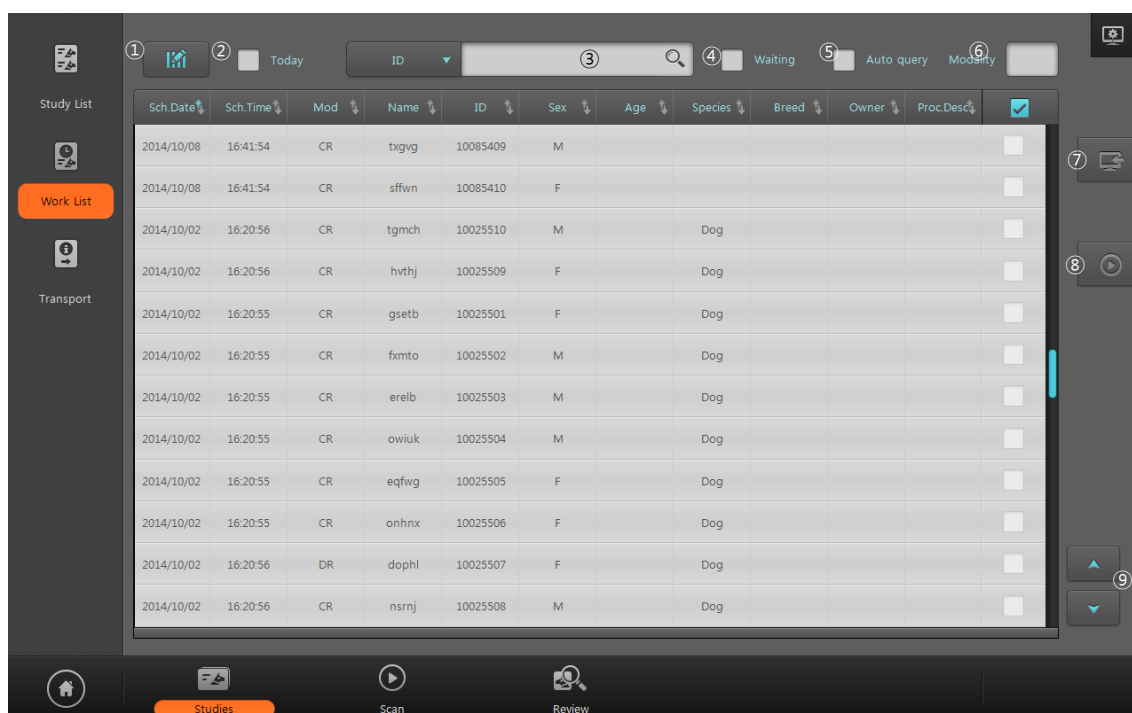


Figure 111.1 Work List

- ① Edit Column
- ② Today
- ③ Search

- ④ Waiting
- ⑤ Auto Query
- ⑥ Modality
- ⑦ Import
- ⑧ Scan
- ⑨ Page Up/Down




11.2. List

Columns in Work List are described in Table 111.1.

Table 111.1 Work List Columns

Column Title	Description
Sch. Date	Scheduled date
Sch. Time	Scheduled time
Mod	Modality
Name	Patient name
ID	Patient ID
Sex	Patient sex
Birth	Patient birth date
Age	Patient age
Station AE	Station AE title
Station	Station
Species	Patient species
Breed	Patient breed
Owner	Patient owner
Proc. Desc	Scheduled procedure description
Proc.ID	Scheduled procedure ID
Study UID	Study instance UID
Ref. Phy	Referring physician's name
Acc. No.	Accession number

11.3. *Tool Buttons*

Icon	Title	Action
	Edit Column	Display a dialog box for editing the columns of the list. Using the Work List is identical to using the Study List.
	Waiting	Display the list of studies that have not been scanned yet.
	Auto Query	Perform an auto query at a preset time.
	Modality	Set Modality filter for query.
	Import	Import: Import selected items to the Study List.
	Scan	Open the selected study and go to the Scan screen.

12. Transport

In the Transport screen, you can check the transmission results of images sent to an image server or a DICOM printer. The way of using list, editing column and searching are identical to those of Study List.

12.1. Screen Layout

Date	Time	Lap	AE Title	Host	Port	Name	ID	Status	
2014/10/20	17:32:16	1	bunny	127.0.0.1	3000	esaei	10084901	Sent	<input type="checkbox"/>
2014/10/20	17:32:16		bunny	127.0.0.1	3000	gsetb	10025501	Waiting	<input type="checkbox"/>
2014/10/20	17:32:15	1	bunny	127.0.0.1	3000	jetok	10203304	Sent	<input type="checkbox"/>
2014/10/20	17:32:17	0	bunny	127.0.0.1	3000	esaei	10084901	Sent	<input type="checkbox"/>
2014/10/20	17:32:17	1	bunny	127.0.0.1	3000	esaei	10084901	Sent	<input type="checkbox"/>
2014/10/20	17:32:19	1	bunny	127.0.0.1	3000	fxmto	10025502	Sent	<input type="checkbox"/>
2014/10/20	17:32:20	1	bunny	127.0.0.1	3000	fxmto	10025502	Sent	<input type="checkbox"/>
2014/10/20	17:32:21		bunny	127.0.0.1	3000	fxmto	10025502	Sending	<input type="checkbox"/>
2014/10/20	17:32:15		bunny	127.0.0.1	3000	fxmto	10025502	Waiting	<input type="checkbox"/>
2014/10/20	17:32:15		bunny	127.0.0.1	3000	gsetb	10025501	Waiting	<input type="checkbox"/>
2014/05/21	16:27:23	1	bunny	127.0.0.1	3000	Emergency	ID000090	Sent	<input type="checkbox"/>
2014/05/21	16:27:22	1	bunny	127.0.0.1	3000	Emergency	ID000090	Sent	<input type="checkbox"/>

Figure 122.1 Transport

- ① Today: Search only the studies from today.
- ② Search: Search various criteria. Search method is identical to Study List.
- ③ Delete: Delete selected items.
- ④ Page Up/Down: Go to another page.

12.2. *List*

Column Title	Description
Date	Send date
Time	Send time
Lap	Duration in seconds
AE Title	Destination AE title
Host	Destination IP address
Port	Destination port
Name	Patient name
ID	Patient ID
Status	Send status

13. Settings

13.1. Screen Layout

The Settings screen consists of a main category, sub-category, and specific item. Clicking on the main category item changes the sub-category items. Clicking on the sub-category item changes the specific item in the selected sub-category. Setting values can be changed in the specific item.

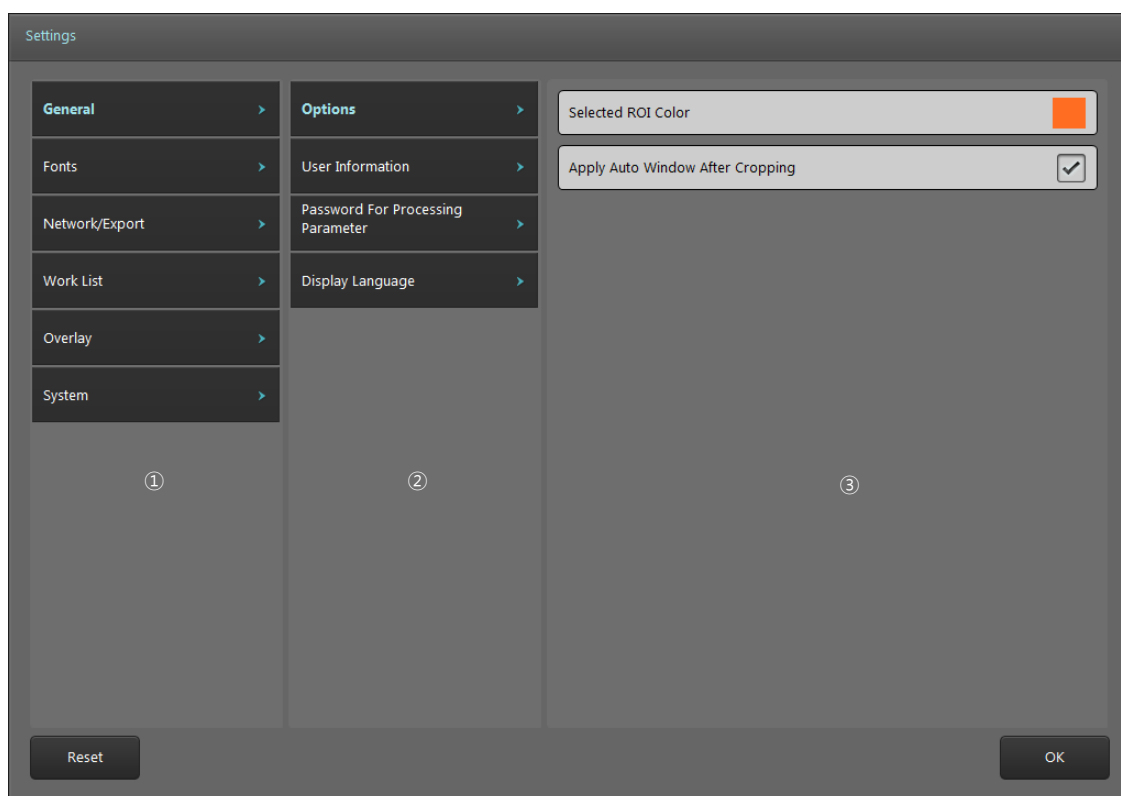


Figure 13.1 Settings

- ① Main category item list
- ② Sub-category item list
- ③ Specific item list

13.2. General

13.2.1. Options

Items	Description	Default value
Color of ROI	Set the color of the ROI Box. Click on the item to change the color in the Color Picker.	Orange
Apply Auto Window After Cropping	Set whether to automatically apply Auto Window after cropping ROI Box.	FALSE

13.2.2. User Information

Items	Description
Institution Name	Set hospital name. The entered value will be included in DICOM information.
Dept. Name	Set the department name where the system is installed. The entered values will be included in the DICOM information.

13.2.3. Password for Processing Parameter

Items	Description	Default value
New Password	Set password.	
Confirm Password	Confirm password.	
Use password to access LUT & PROC	Activate password for accessing LUT and processing.	TRUE
Use password to save default value	Activate password for saving default values in the LUT and processing windows.	TRUE

13.2.4. Display Language

Items	Description	Default value
Language	Select language.	Language selected upon product installation

13.3. *Fonts*

13.3.1. *General*

Items	Description	Default value
Font name	Name of font displayed on the screen.	Segoe UI
Font size	Size of font displayed on the screen. Adjustable from 8 to 12 points.	10

13.3.2. *Marking*

Items	Description	Default value
Font name	Name of marking font.	ARIAL
Font size	Size of marking font. Adjustable from 16 to 30 points.	22

13.3.3. *DICOM Printer*

Items	Description	Default value
Font name	Name of font used to print.	ARIAL
Font size	Size of font used to print. Adjustable from 8 to 12 points.	10

13.4. Network / Export

13.4.1. Image Server

Manages list of DICOM servers for transmitting images to.

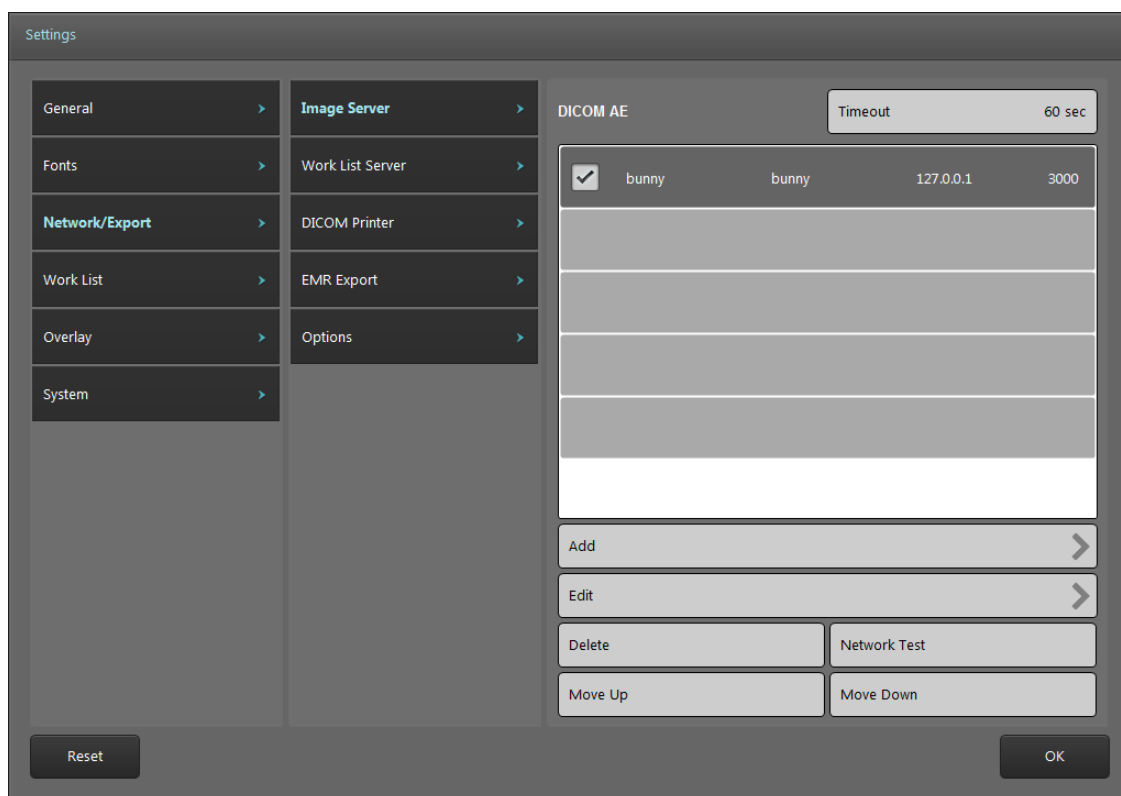


Figure 13.2 Network / Export

- ① Add: Add an image server.

Name	Description
Calling AE Title	Set AE title of Quantor .
Called AE Title	Set AE title of image server.
IP Address	Image server IP address
Port	Image server port
Description	Image server description

- ② Edit: Edit selected server. An identical screen as adding an image server will be displayed.
- ③ Delete: Delete the selected server.
- ④ Network Test: Check the connection by sending DICOM Echo to the selected server.

- ⑤ Move Up: Move the selected server up.
- ⑥ Move Down: Move the selected server down.
- ⑦ Timeout: Drop the connection when responses are not received within the set amount of time.

Check boxes for each item will automatically be activated once a server is added. **Quantor** sends images to all checked image servers according to the order on the list.

13.4.2. *Work List Server*

Manages Work List servers. Management method is identical to that for image servers. Multiple Work List servers can be added, but only one can be checked.

13.4.3. *DICOM Printer*

Manages DICOM Printers List. Management method is identical to that for image servers. Unlike adding image servers, the following additional settings are required when adding DICOM printers.

Group	Name	Description	Default Value
Film Session	Print Priority	HIGH MID LOW	MID
	Film Destination	MAGAZINE PROCESSOR	PROCESSOR
	Medium Type	PAPER CLEAR FILM BLUE FILM	CLEAR FILM
	Label	Label	
Film Box	Orientation	PORTRAIT LANDSCAPE	PORTRAIT
	Trim	YES NO	NO
	Size	8INX10IN 10INX12IN 10INX14IN 11INX14IN 14INX14IN	14INX17IN

		14INX17IN 24CMX30CM 24CMX24CM	
	Polarity	NORMAL INVERTED	NORMAL
	Magnification	REPLICATE BILINEAR CUBIC NONE	BILINEAR
	Border	BLACK WHITE	FALSE
	Empty	BLACK WHITE	FALSE
	Min		FALSE
	Max		FALSE
Image Box	Bits Used	8 12	8

Check boxes for each item will be automatically activated once a server is added. **Quantor** sends images to all checked servers according to the order on the list.

13.4.4. EMR Export

EMR (Electric Medical Record) export function enables to export the image in JPG file format to designated folder in EMR. Image is exported and saved when study is finished if this function is enabled. File naming rule is as below.

A_B_C_D.jpg (A: Prefix, B: Patient ID or Accession No., C: View Position, D: Image Serial No)

Name	Description	Default Value
Use EMR	Enable to use EMR function.	FALSE
path	Image save path.	
Filename Prefix	Prefix of the file name.	
Filename	Select the item to be used in file name. <ul style="list-style-type: none"> ● Patient ID ● Accession No, 	Patient ID

13.4.5. Options

Name	Description	Default Value
Auto Send Study	Send the study automatically when the study is finished.	FALSE
Export To	Define the action to take when the Send Study button is clicked. You can choose from Send or Print.	Send
Show Destination	A Destination list is shown if the Send button is clicked in the Scan screen.	FALSE
Encoding Series	Set DICOM Encoding method. <ul style="list-style-type: none"> ● Single Series has Single Image ● Single Series has Multi Image 	Single Series has Single Image
DICOM Character Set	Select Character Set used in DICOM. <ul style="list-style-type: none"> ● ISO_IR100 ● ISO_IR192(UTF-8) 	ISO_IR100

13.5. Work List

13.5.1. Work List

Name	Description	Default Value
Auto Query Interval	Set the execution interval of Auto Query when using the Auto Query function on the Work List screen.	1 min
S. Proc. Match with	The Work List Server records scan codes and descriptions used in the hospital to Scheduled Procedure Step ID and Scheduled Procedure Step Description, respectively, and transmits them. By using the QuantorOrganizer program, this information can be automatically synced to presets. Define base information to match with when syncing with presets.	S. Proc. ID
Keep a column sorted	Always show by the sorts when displaying query results to the screen.	TRUE
Use (*) for query conditions	Use * in query string. Some Work List Servers must not use * when searching.	FALSE

13.6. *Overlay*

13.6.1. *Marking*

This section can be used to edit pre-defined markings when adding markings to images in the Scan screen. After entering text in the input field, you can perform the following actions:

- Add: Add a new marking.
- Modify: Modify an existing marking.
- Delete: Delete the selected marking.
- Move Upper: Move the selected marking up by one slot.
- Move Lower: Move the selected marking down by one slot.

13.6.2. *Auto Mark Margin*

Set the margins when markings are automatically added to an image. Each setting value shows margins by % compared to the width and height of the image.

Name	Description	Default Value
Left	Left margin.	10
Top	Top margin.	10
Right	Right margin.	10
Bottom	Bottom margin.	10

13.6.3. *Print Overlay Contents*

Select items to be shown in the image when printing.

13.6.4. *Export Overlay Contents*

Select items to be shown in the image when exporting.

13.7. System

13.7.1. File Management

Name	Description	Default Value
Data Path	Set the destination folder for images to be stored.	Installation Folder/Database
Data Space	Allocates disk space for saving images. Auto deletion is activated when the allocated disk space is full.	29.30GB
Use Auto Deletion after idle time	Set whether to use Auto Deletion and Auto Deletion intervals.	TRUE 60 second
Delete Study not Sent	Define the action to take when deleting an image that has not been transmitted. <ul style="list-style-type: none"> ● Never: Never can be deleted. ● Confirm: Delete after confirmation. ● Always: Always delete without asking. 	Confirm

13.7.2. System Options

Set other system settings.

Name	Description	Default Value
Temporary Path	Set the folder for saving temporary files used in the program.	Installation Folder/Temp
Use On Screen Keyboard	Decide whether to use the Windows On Screen Keyboard when entering data on the screen.	FALSE
Display Monitor	Select the displaying monitor when more than 2 monitors are connected.	1
Review Monitor	Select the monitor for review window to be displayed.	1
Auto Scan	Reader starts scanning automatically when the cassette is inserted.	FALSE

13.7.3. *Date*

Name	Description	Default Value
Date Format	Set the date display format. Choose from one of the three formats below. <ul style="list-style-type: none"> ● YYYY/MM/DD ● DD/MM/YYYY ● MM/DD/YYYY 	YYYY/MM/DD
Separator	Set the separator between year, month and day. Choose from one of the three separators below. <ul style="list-style-type: none"> ● / ● - ● . 	/

13.7.4. *Dental*

Item	Description	Default value
Numbering System	This selects one from following two dental numbering systems. <ul style="list-style-type: none"> ● European ● American 	European
Workstation name	This sets the workstation name.	
Default template	This selects a type of Full Mouth Series template. <ul style="list-style-type: none"> ● FMX18 ● FMX20 	FMX20

13.8. *Reset*

Reset restores all settings to default settings.

Appendix A: Canine Dental Chart

G	110	109	108	107	106	105	104	103	102	101	201	202	203	204	205	206	207	208	209	210	G
411	410	409	408	407	406	405	404	403	402	401	301	302	303	304	305	306	307	308	309	310	311

Appendix B: Feline Dental Chart

109	108	107	106		104	103	102	101	201	202	203	204		206	207	208	209
409	408	407			404	403	402	401	301	302	303	304			307	308	309

Appendix C: Template

1	2	3	4	5
6	7	8	9	10