

TR-IPS02

Image Plate Scanner

User Manual

CONTENTS

CHAPTER I	Safety Guidelines.....	12
CHAPTER II	Product Introduction.....	25
CHAPTER III	Product Installation.....	31
CHAPTER V	Operation Guidelines of Device.....	49
CHAPTER VI	Operation Guidelines of Software.....	60
CHAPTER VI	Cleaning and Maintenance.....	85
CHAPTER VII	Accessories List.....	91
CHAPTER VIII	Environmental Protection.....	93

CHAPTER | Safety Guidelines

This chapter provides important safety information for the use TR-IPS02

1.1 Intended Use

Cooperate with diagnostic X-ray equipment to realize the display, storage and transmission of digital images, etc.

1.2 Contraindication

Use with caution in children and pregnant women.

1.3 Structure

The product is composed of image plate scanner, power adapter, image plate, protective bag of image plate, software of dental image plate scanner control system .

1.4 Warnings and Notes

In order to use the product safely and effectively, and avoid the possibility of system invalidation, you must firstly be familiar with the operating methods of Windows, and read the manual carefully, and ensure that you are familiar with the correct operating methods of PC. The following warnings and precautions is required special attention during operation.

Notes:

- 1.This product is not suitable for the family.

2.The pictures and windows in the manual are for reference only.

1.4.1 Safety Warnings

Warnings:

1. It' s not following the safety instructions to operate device and system that may endanger patient safety.The manufacturer is not liable for damages caused by improper use.
- 2.The product should be installed by a qualified service engineer. Do not turn on the power supply until all cables are installed and confirmed correctly.
- 3.Before using the system, users should obtain professional training and carefully read the manual.
- 4.The device is not used for treatment.
- 5.The device is not used for family..
- 6.The device's diagnosis and inspection functions should be combined with the patient's

clinical research, and the diagnosis results are only for doctors' reference.

7.Expllosion hazard–equipment cannot be used in flammable anesthesia gas environment and gas environment mixed with air or Oxygen or Nitrous Oxide.

8.The device does not have any waterproof device, do not use the system where water may enter the equipment.

9.Do not spill any liquid on the system or let it flow into the system, otherwise there is a danger of electric shock.

10.Do not spray cleaning agents on the device to prevent the cleaning agents from entering the device and damaging electronic components. At the same time, avoid organic solvents from forming combustible gases or damaging internal components.

11.Once the device breaks down, please turn off the device immediately and contact URIT or authorized representative.

12.When more than one type of medical device is connected to the patient, the sum of the leakage currents of all devices should be considered. Please use carefully.

13. Electric shock hazard—do not plug or unplug the power supply with wet hands. Make sure that the hands touching the power line are clean and dry.
14. Do not touch the accessible parts of non-medical electrical equipment and patient at the same time.
15. Any non-medical equipment (such as external printer) is not allowed to be used within 1.5m/6ft. from the patient.
16. Do not move the main parts or image plate during working.
17. Only accessories provided and recommended by the manufacturer can be connected to the system.
18. Pay attention to and prevent electrostatic discharge (ESD) and electromagnetic interference (EMI) with other instruments.
19. Using the device under strong electromagnetic interference sources, such as electrosurgical equipment, MRI equipment, etc., may have negative effects.

1.4.2 Cautions

Cautions:

1. Before use, the user must check that the host and accessories have no obvious performance damage that may affect the patient safety. The recommended inspection cycle is once a week or less. If obvious damage is found, it is recommended to replace the damaged parts before use.
2. If the power line is missing, damaged or not provided, please select a power line that meets the original specifications and local regulations.
3. Equipment and accessories should be disposed of in accordance with local regulations, or returned to the manufacturer or distributor for recycling or proper disposal.
4. Please choose a power line which has standard power as the adapter of network power input to reduce risks.
5. There is no part of the system that can be repaired by the user. All repairs must be

completed by the maintenance person of URIT.





1.4.3 Notes






Notes:




In order to avoid damage to the device, please do not use in the following environments:





- 1.Location in direct sunlight;
- 2.Environment with drastic temperature changes;
- 3.Environment with more dust;
- 4.Near the heat source;
- 5.Environment with higher humidity.





1.5 Symbol Description





Symbol	Description
	Caution
	Warning, electricity
	Refer to instruction manual/ booklet
	“ON” (power)

Symbol	Description
	“OFF” (power)
	Alternating current
	Power Input
	Manufacturer
	This symbol indicates that the waste of electrical and electronic equipment must not be disposed as unsorted municipal

Symbol	Description
	waste and must be collected separately. Please contact an authorized representative of the manufacturer for information concerning the decommissioning of your equipment.
	Date of manufacture
	Use by date
	Environment–friendly use period

Symbol	Description
 A black icon of a thermometer with a bulb at the bottom and a vertical scale with a horizontal line at the top, representing temperature.	Temperature Limit
 A black icon of a circle with a central dot and two horizontal arrows pointing outwards from the dot, representing atmospheric pressure.	Atmospheric pressure limitation
 A black icon of a circle with a percentage sign inside and a wavy line below it, representing humidity.	Humidity limitation
 The letters "SN" in a bold, sans-serif font, enclosed in a rectangular border.	Serial number

Symbol	Description
 A black icon of a sun with rays emanating from a small house-like shape at the bottom.	Keep away from sunlight
 A black icon consisting of two vertical arrows pointing upwards, positioned above a horizontal line.	This way up
 A black icon of a wine glass, representing a fragile object.	Fragile, handle with care
 A black icon of an umbrella with raindrops falling from it.	Keep away from rain

Symbol	Description
	Stacking limit by number
	Do not roll
	CLASS II equipment
	USB

CHAPTER II Product Introduction

2.1 Operational Principle

The TR-IPS02 Image Plate Scanner (hereinafter referred to as the device) is used to read and process the latent image information stored in the image plate. It consists of laser, optical scanner, photomultipliers, amplifiers, A/D converters and image processing part. It is composed of unit and output interface. After the image plate is installed in the entrance of the image plate scanner, the scanning program is started, and the image plate that need to be interpreted latent image information is scanned line by line, and moving forward at the same time, the image plate can be completely scanned by the laser beam within a predetermined time. The blue fluorescence is excited at the place where the laser is irradiated, and the intensity of the fluorescence brightness has a linear relationship with the density of latent image information at that point. The fluorescence is collected by a high-efficiency photocon arranged

along the laser scanning line and introduced into a photomultiplier, thereby converting it into a relative electrical signal. After undergoing A/D (analog/digital) signal conversion by the circuit system, it can be used for digital image processing and output to the image display, storage or transmission communication system.

2.2 Technical Parameter

Display: external PC and displayed by the upper computer software.

Operation Method: controlled by the upper computer software.

Threshold Contrast: it should be able to differentiate all four holes with diameters of 1.0mm, 1.5mm, 2.0mm and 2.5mm.

Image Uniformity: no greater than 2%

Effective Scan Image Area: 0#: 22*35mm, 1#: 23*39mm, 2#: 30*40mm, 3#: 26*53mm

Input Voltage: 100 V – 240 V ~ , 50/60Hz

Maximum Input Power: 145 VA

Supply Voltage: DC 15V 4A

Working Environment: temperature: 10 °C ~ 40 °C; relative humidity: ≤ 80%; atmospheric pressure: 70 kPa ~ 106 kPa

Storage and Transport Environment: -20 °C ~ 55 °C; relative humidity: ≤ 93%; atmospheric pressure: 70 kPa ~ 106 kPa

Dimension: 305 mm × 220 mm × 180 mm

Net Weight: 6 kg

Gross Weight: 7 kg

2.3 Components

2.3.1 Front View

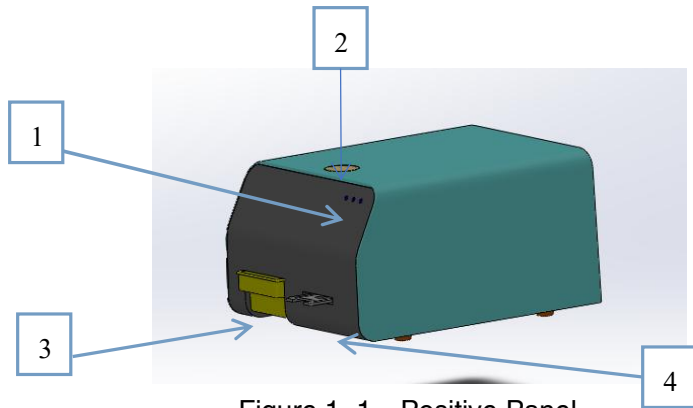


Figure 1-1 Positive Panel

- 1.Indicator Light: after the device is powered on, the indicator light is on, the yellow light indicates the scanning and reading state, and the green light indicates the standby state.
- 2.Touch Key: control the operation of device.
- 3.Storage Boxes: place the image plates.
- 4.Image Plate Tray: place the image plates to be scanned.

2.3.2 Back View

The structure diagram of the rear panel is shown in Figure 1-2.

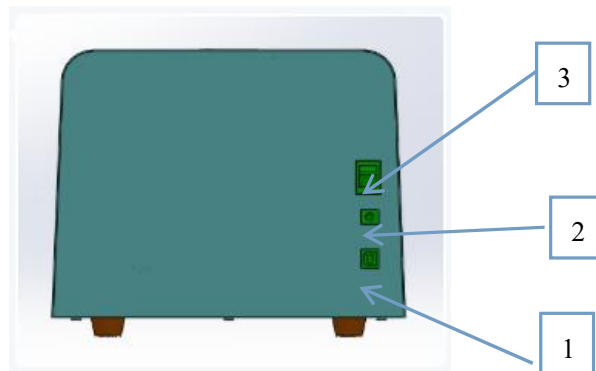


Figure 1-2 The structure diagram of the rear panel

- 1.USB: communication port, connect to the USB port of PC.
- 2.Power Socket: connect external power supply.

3.Power Switch: control the device power on and power off.

2.3.3 Image Plate

1.The photosensitive surface of the image plate is white, as shown in the figure:



2.The opposite is black,as shown in the figure:



CHAPTER III Product Installation

In order to ensure the performance of the device and achieve satisfactory clinical results, the first installation must be installed and debugged by an engineer sent by URIT or an engineer authorized by URIT and if device has be moved ,the installation and use should be in accordance with the installation procedure.

Notes:

Any unauthorized or non-professionally-trained person to install the device may cause damage to the device, which is not covered by company' s free warranty. Any person who is not authorized by company shall not install or use the device which has be moved.

3.1 Working Conditions

Normal Working Conditions:

- a) Input Voltage: 100 V–240 V ~ 50/60 Hz
- b) Maximum Input Power: 145 VA
- c) Working Environment: temperature: 10 °C ~ 40 °C ; relative humidity: ≤ 80%; atmospheric pressure: 70 kPa ~ 106 kPa

The computer system (including the monitor) is the user's self-contained accessory, and its configuration requirements are as follows:

Table 1–1 Computer Configuration

Computer system	Standard Configuration	Minimum Configuration
Computer Hardware	CPU: Intel Pentium(R) 4 2.6G	CPU : Intel Pentium(R) 4 1.6G
	Memory:2G DDR high-speed	Memory:1G DDR high-speed

	memory	memory
	Hard Disk:500 G high-speed hard disk	Hard Disk:160 G high-speed hard disk
	Monitor:1280 × 1024 liquid crystals	Monitor:1280 × 1024 liquid crystals
	Graphics Card: 64M or above	Graphics Card:32M or above
	Network Card: Network Card	Network Card: Network Card
Other Hardware	USB2.0 port	
Computer Operating System	Windows7, Windows8, Windows10	

3.2 Open-package Check

- a) Carefully take out the device and accessories from the package, save the packing

materials for future transportation or storage.

- b) Check the accessories following the packing list.
- c) Check if the water leaks in to the device or immersion by water.
- d) Check if the device has any mechanical damage.
- e) Check all exposed wires, inserted parts and accessories

If you have any questions, please contact our company's customer service department or agent immediately

3.3 Power Supply Check

Before installing the device, you must check whether the power supply at the installation site meets the requirements of the device. The specific requirements for the power supply are as follows:

Input Voltage: 100 V-240 V~ Frequency: 50/60 Hz

 **Notes:**

Before connecting the device to the power supply, check to ensure that the electrical plugs are connected correctly and reliably.

 **Notes:**

Frequent voltage fluctuations will cause serious degradation of the performance and reliability of the device. The user should solve this problem before using, such as installing an AC voltage stabilizer (prepare by users).

 **Notes:**

Frequent power outages will cause serious degradation of the performance and reliability of the device. Users should solve this problem before using, such as installing an uninterruptible power supply (UPS) (prepare by users).

 **Notes:**

Please keep the air circulating in the room.

3.4 Power-line Connection

Make sure that the power switch on the rear panel of the device is turned off, the power-line should be plugged into the adapter, and the plug of the adapter should be plugged into the power socket of the host.

Notes:

The power-line should be connected to a specified socket.

3.5 Connect the device to the computer

- a) Turn off the device power.
- b) Connect the USB cable to the device and the computer

c) Turn on the device, and then run the application on the computer

3.6 Shutdown

- a) Exit the software after using it that day.
- b) Turn off the device power.

Notes:

If you use the device again, you should turn on the power of the device firstly, and then run the control software on the computer, otherwise the self-check of the device unsuccessfully.

Notes:

Shutdown mistakenly will easily cause system data loss and cause system operation failure.

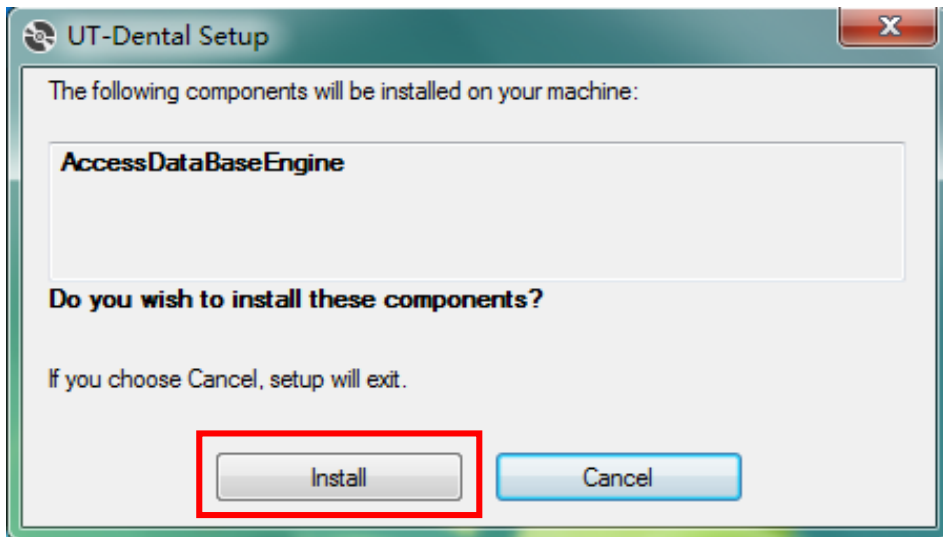
3.7 System installation

1.Extract the contents of the zip file, open the folder, and click setup.exe, as shown in the figure:



名称	修改日期	类型	大小
AccessDataBaseEngine	2021.1.14 16:16	文件夹	
DotNetFX461	2021.1.14 16:16	文件夹	
setup.exe	2021.1.14 16:15	应用程序	813 KB
UT-Dental.msi	2021.1.14 16:15	Windows Installer ...	62,721 KB

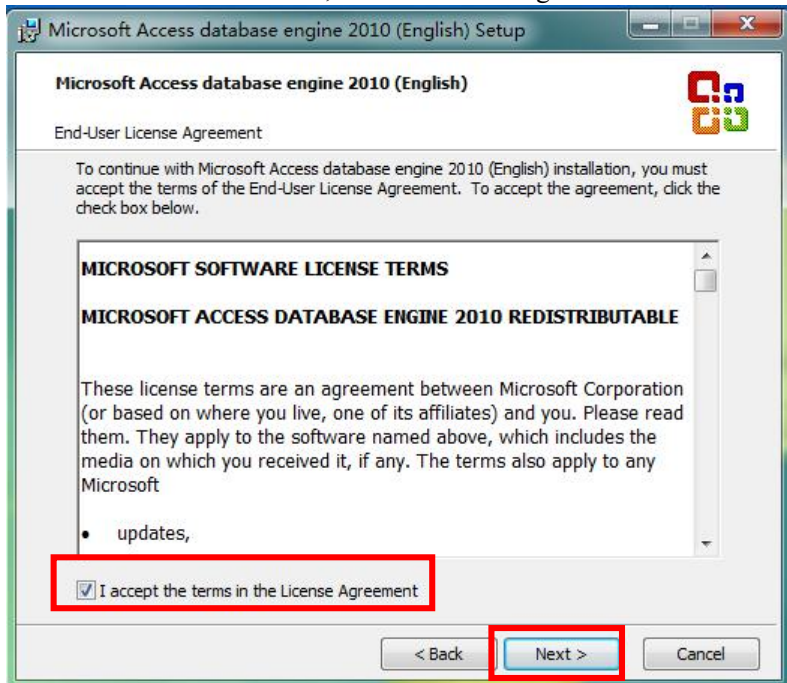
2.Click Install



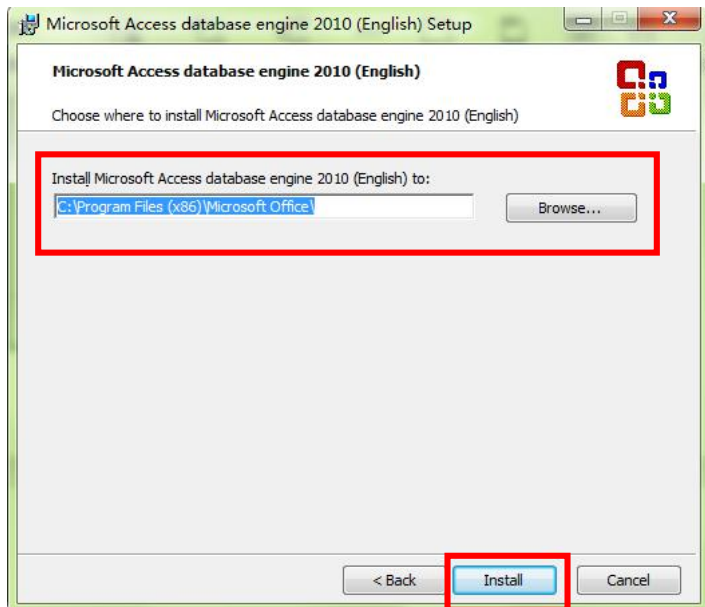
3. Automatically install the database, click Next, as shown in the figure:



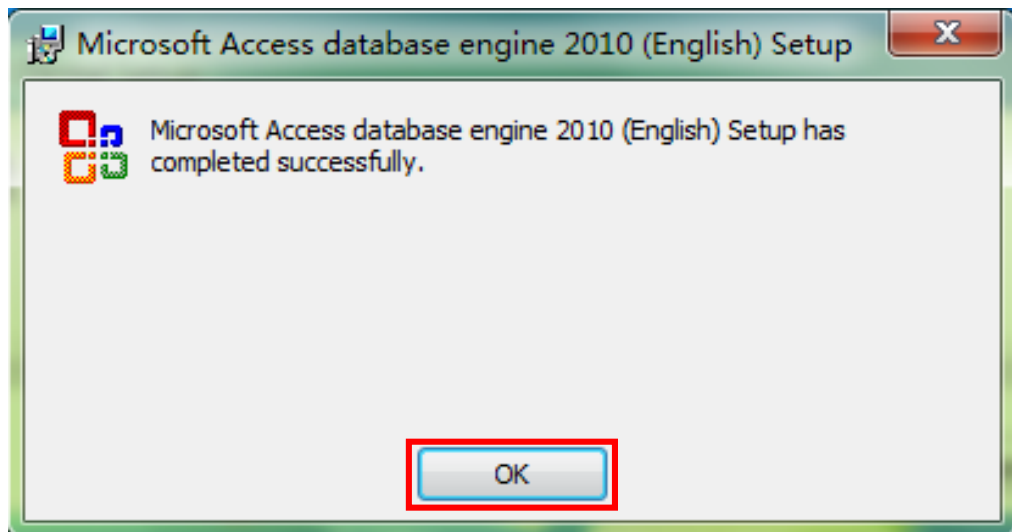
4. Select Receive and click Next, as shown in the figure:



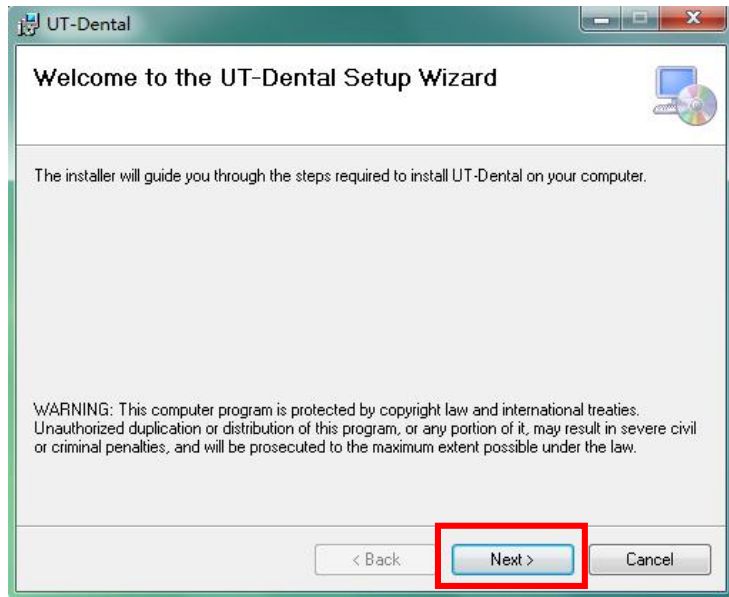
5. Select the installation location and click Install.



6. Click OK to next



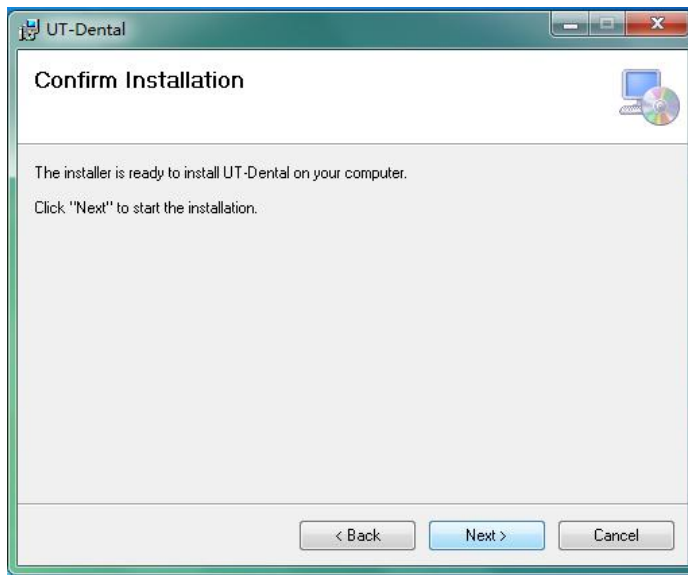
7.Wait for loading, install the software and click Next, as shown in the figure:



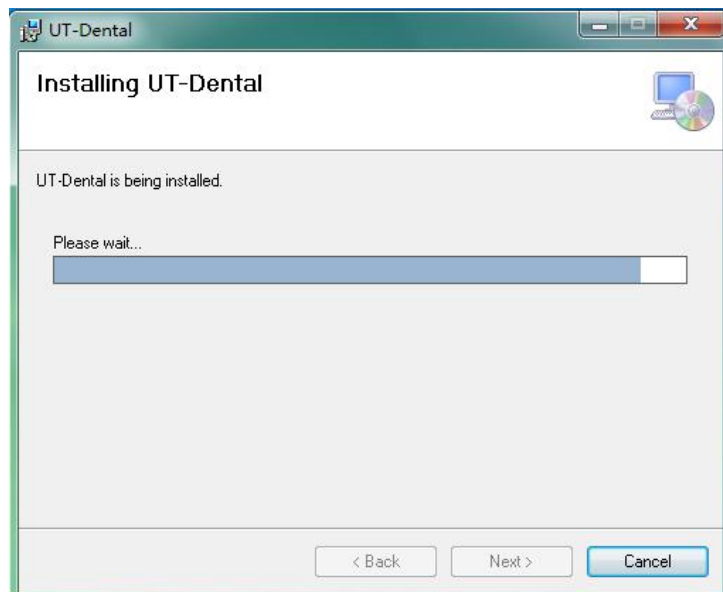
8. Select the installation path and click Next



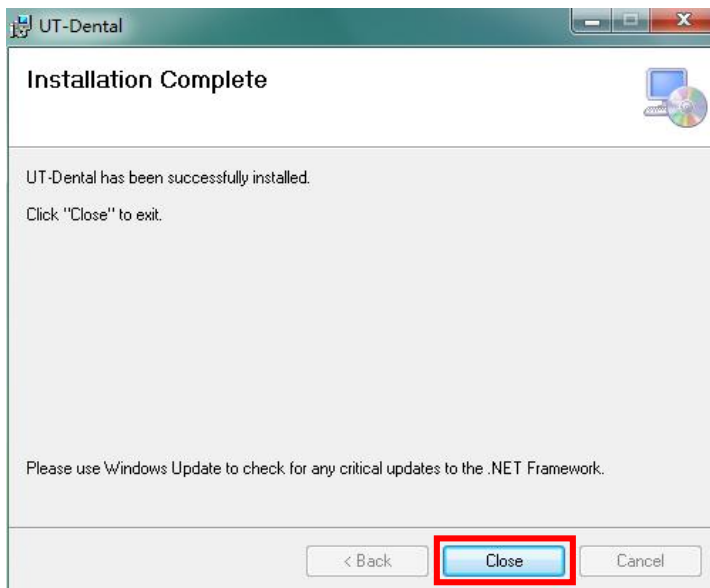
9. Make sure that the UT-Dental software is installed on your computer, click "Next" , otherwise click "Cancel".



10.The waiting interface of installation process is shown in the figure:



11. The completed interface is shown in the figure, Click "Close" to exit.



CHAPTER V Operation Guidelines of Device

4.1 Image Plate Scanner

4.1.1 User's Quick Guidance

Refer to Section 5.4.5, the device is in the status of reading film, the yellow light is flashing, and the tray is in the push-off status. Place the image plate on the tray with the white side facing up, as shown in the figure below. After placing it, press the touch button on the device panel, and the device will turn the status of scanning images. Wait for a moment for the software to display the image, and the tray will be automatically pushed off. After that and it stabilizes, put the image plate in the storage place, and press the touch button to retract the tray into the device.



4.1.2 Read Image

1. After the device is powered on, click the button **[Start]** in the window, and the image plate slot will move out.
2. Put the image plate to the tray, and touch the black button to read the image.



4.1.3 Standby

Touch the black button, the tray back, and the device turn the standby status.

Notes:

1. The device is used to read and erase the image in the image plate. It is connected to the computer USB.

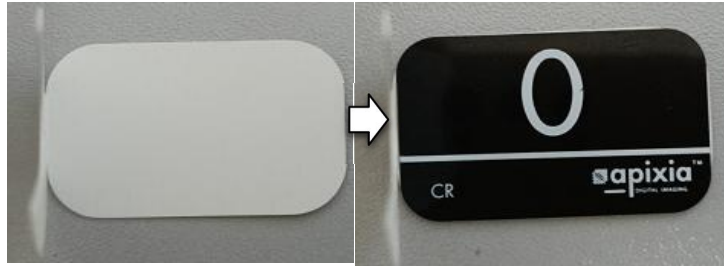
2. After the device is connected to the computer and powered on, you need to read the image according to the supporting software.
3. Do not pull out the image plate when reading images or when the tray is moving, otherwise the device may be damaged. Please place or remove the image plate when the tray is static.

4.2 Intraoral Image Plate

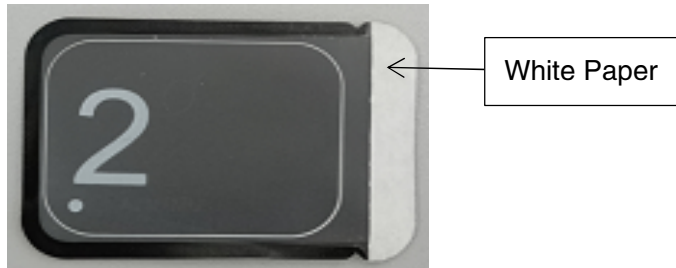
In order to ensure patient' s health, the image plate must be packed in the protecting bag when filming.

Operation Method:

1. Unfold the image plate card, and put the image plate into the card,as shown in the figure.



2. Put the image plate into the protecting bag, and the white side of the image plate faces the black side of the protecting bag.
3. Tear out the white paper on the edge of the protecting bag, and seal the protecting bag. As shown below:



4. When using, the black side of the image plate protecting bag is attached to the teeth and aligned with the X-ray machine light outlet.
5. After using, tear out the protecting bag from the cut, and when the host is ready, take the image plate out and place it on the host tray to read the image.

⚠ Notes:

After the image plate is placed in the tray, it need to press the touch button

immediately to start scanning the image.

The image plate is not compatible with lower specification generators.

Generally, the image plate is compatible with all generators that meet the relevant standards. Either high-frequency or generator within 55 kV –100 kV.

Since the image plate needs to be used multiple times, the photosensitive surface needs to be protected. During the filming process, hands should avoid direct contact with the image plate surface, and avoid hard objects rubbing the photosensitive surface.

4.3 Computer and Monitor

Place the computer and monitor in or near the operating area to ensure that the doctor is within his sight when sitting in the chair. Arranging patients within a visually accessible range is beneficial to enhance communication. This way the system can always be available without

reducing the ergonomics of operating on the chair.

For the visualization of images, a display with current technology display characteristics is selected. Select and set up the monitor according to the process described in the image plate installation guide. Avoid placing the monitor in direct or reflective locations, otherwise it may hinder to reading clinical information.

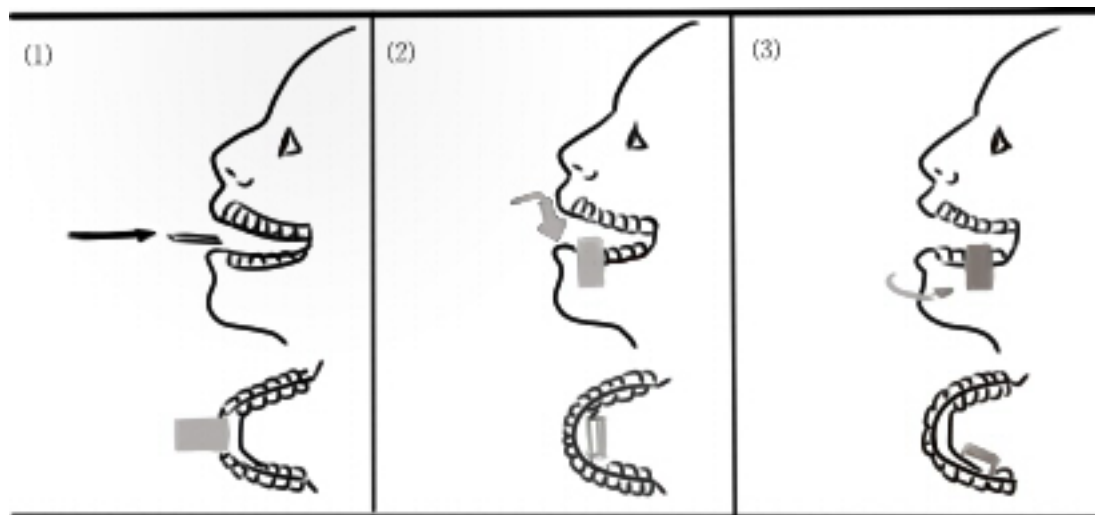
 **Notes:**

Adjusted irrelevantly or poor-quality monitor will cause diagnostic errors because the device is not capable of displaying images correctly.

4.4 location

In order to ensure health, the image plate must be packed in an image plate protecting bag when filming.

Put the image plate in the mouth, as shown in the figure:



4.4.1 Underjaw Image Plate

Position the imaging plate and capture underjaw images, please follow the steps as follow:

1. Let the patient to retract the tongue to the back of the mouth, insert the imaging plate and keep it level.
2. Then the image plate will be rotated downward and placed in a vertical position.
3. Slide the image plate in the distal direction so that its center corresponds to the teeth to be irradiated, and let the patient to press the tongue against the back of the image plate. In order to properly enclose the apical area, do not hesitate to compress the oral mucosa. The patient can relax the tongue at this time, and the tongue will naturally fit the image plate.

For premolars and incisors, it is suggested to move the image plate toward the middle of the oral cavity by compressing the tongue when the oral cavity is close to relaxing the muscles.

4.4.2 Upperjaw Image Plate



Position the imaging plate and capture upperjaw images, please follow the steps as follow:

1. Let the patient to retract the tongue to the back of the mouth, insert the imaging plate and keep it level.
2. Then the image plate will be rotated upward so that it is vertical or parallel to the long axis of the target tooth.
3. Slide the image plate in the distal direction so that its center corresponds to the teeth to be irradiated. Don't worry about using the arc of the palatal arch and placing the image plate in the middle of the oral cavity.

CHAPTER VI Operation Guidelines of Software

5.1 Login

5.1.1 User Login

After the software starts successfully, enter the login interface, as shown in Figure 3-1, enter the user name and password, and click  **[Login]** to enter the software. If you want to exit the software in the current interface, click the  **[Cancel]** (default user name : admin password: 123).

UT-Dental V1.01 Login

UserName | _____

Password _____

Select Language English ▾

Login Cancel

Figure 3–1 User Login

5.1.2 System Interface

After the user logging in, then enter the interface where various functions can be executed. The interface is shown in Figure 3–2.

The screenshot displays the URIT software interface. At the top, a status bar shows 'UT-Dental V1.01', 'Device Status : Not ready', 'Excess Capacity : 80 GB', 'Current User : admin', and 'Status : Not Connected'. Below this is a navigation menu with 'Appointment' selected. The main area features a table with the following data:

Patient ID	Patient Name	Gender	Exam Type	Age	Submission Time	Submitted by
HZ20210226082951	022601	Man	CR	25	2021-02-26 08:37	lisi

At the bottom of the interface, there are buttons for 'Add', 'Edit', 'Delete', 'Exam', and 'Sync'. The date and time '2021-02-26 08:41:42' are displayed in the bottom left corner.

Figure 3-2 Mian Interface

There is a menu on the main interface, corresponding to the Appointment interface, Patient interface and Statistics interface. Click can be switched quickly-

5.2 Appointment interface

Click the button on the menu  **【Appointment】** to enter the appointment interface, as shown in Figure 4–1.

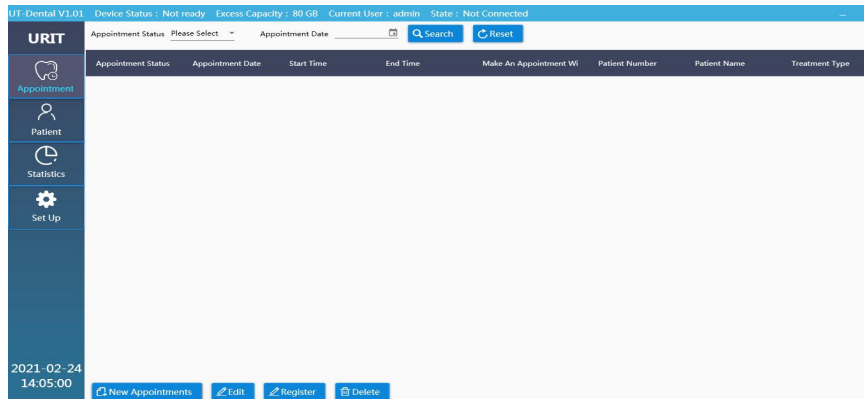




Figure 4–1 Setup

This interface can register the patient's appointment information. The settings mainly include finding appointment information, adding new patient, changing patient information and appointment status.

5.2.1 Appointment Information Search

Click the appointment status or the appointment time and then click  **【 Search 】**, it can quickly select the desired patient. Click  **【 Reset 】**, it can quickly recover to search status.

5.2.2 Add Appointment

Click  **【 Add Appointment 】**, it can quickly enter the appointment interface, as shown in Figure 4–2, Where you can register a new appointment.

The screenshot shows a window titled "ADD APPOINTMENT" with a close button (X) in the top right corner. The form contains the following fields and values:

- Patient ID*: HZ20210226084554
- Patient Name*: (empty)
- Tel: (empty)
- Date of Birth: 2021-02-26 (with a calendar icon)
- Gender: Man (dropdown menu)
- Appointment Date*: 2021-02-26 (with a calendar icon)
- Appointment Time*: 06 Hour 00 Minute (dropdowns)
- End Time*: 06 Hour 30 Minute (dropdowns)
- Scheduled Physician*: lisi (dropdown menu)
- Treatment Type: Initial Diagnosis (dropdown menu)
- Remarks: (empty text area)

At the bottom right, there are two buttons: "Save" (with a checkmark icon) and "Cancel" (with an X icon).

Figure 4-2 Registration of Appointment Information

In this interface, the number is automatically accumulated, or you can manually modify it yourself, and then fill in the patient's basic information, you can set up the appointment time

and communicate with the referring physician, and determine the type of treatment, you can choose to remark.

5.2.3 Edit


Select the patient and then click the  **【 Edit 】** , it can modify patient information,and change the wrong information and click Save to update the patient information.

5.3 Register

Register temporary patients information,and click  **【 Register 】** ,then quickly go to the registration interface, and the specific functions are described in the subsequent chapters.

5.3.1 Status Change

Double-click the patient information can directly change the patient's arrival situation, as

shown in Figure 4–3. In the patient interface, you can search about the reached patients, and reasonably arrange the work time and progress, and you can also check the appointment information and notify the referring physician to arrange the time in advance. And then click  【confirm】, it can automatically go to the patient interface for examination.

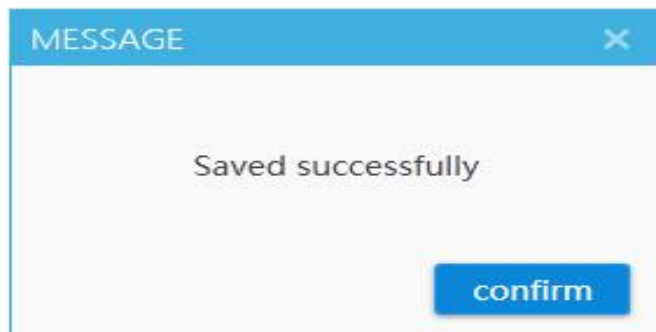


Figure 4–3 Patient status change

5.3.2 Delete

After clicking  **【Delete】** , the selected patient information can be deleted. .

5.4 Patient Interface

On the menu under the main interface, click the patient, and the center window of the main interface will display the contents of the patient information interface. As shown in Figure 5–1.

UT-Dental V1.01 Device Status : Not ready Excess Capacity : 80 GB Current User : admin Status : Not Connected

URIT Wait to Exam Register Examined

Patient Name Exam Type Please Select Exam Time To Search Reset

Patient ID	Patient Name	Gender	Exam Type	Age	Submission Time	Submitted by
HZ20210226082951	022601	Man	CR	25	2021-02-26 08:37	lisi
HZ20210226084912	12	Man	CR	22	2021-02-26 08:49	lisi

Appointment
Patient
Statistics
Set Up

2021-02-26 08:51:05




Add Edit Delete Exam Sync


Figure 5-1 Patient Interface

In this interface, it is mainly to operate on the patients who have already reached, and quickly


carry out the inspection process, so that the examination time is shortened, the operation process is reduced, and it is more suitable for the user's usage habits. There are three small interface switches on the patient, which is convenient for quick examination of patients in three different situations.


5.4.1 Wait to Exam

In the examination interface, click  **【 Edit 】** or double-click the patient information to enter the registration interface. Click  **【 Add 】** can enter the registration interface directly. Click  **【 Delete 】** can delete patient information who is waiting to exam.

Click  **【 Exam 】** can enter the CliniView of the registered patient ,and check the dental film.

5.4.2 Register

It is mainly used to record basic patient information, as shown in Figure 5–2. Basic patient information and selection of teeth position detection. There are two skip methods to the registration interface. One is to double-click the arrived patient , and the information of the patient's appointment will be automatically filled, just select the teeth position and click 

【 Exam 】, it can quickly examination , and then click  **【 Confirm 】** to save the modified information.

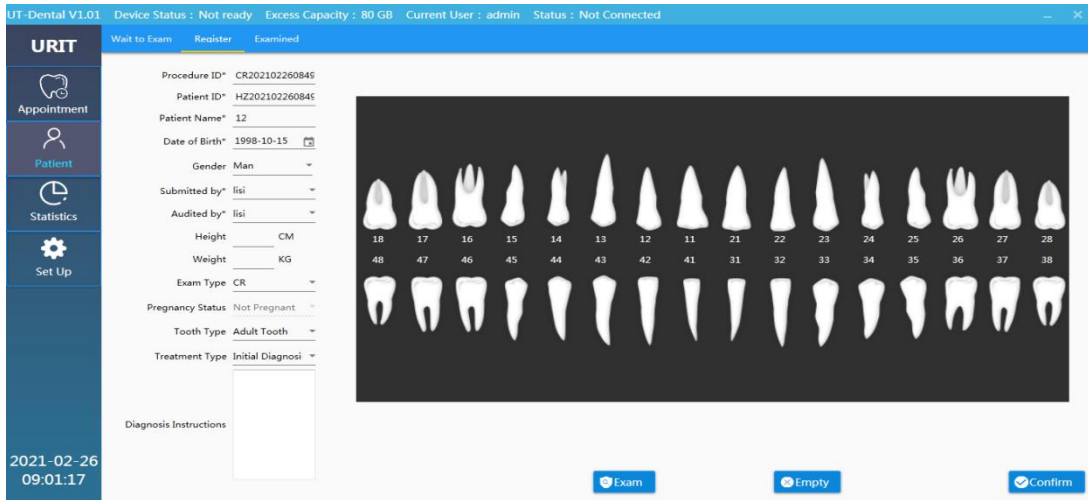


Figure 5-2 Registration Interface

5.4.3 Examined

The examined interface is mainly used for customers' return visits and printing after examination. Its function is mainly to view the history, the second examination, and the result processing three functions. View the history record, you can quickly find the patient information by the filter at the top. After clicking the patient information, the patient examination record information on the right. If the patient has multiple examinations, you can select the record here. Double-click the record to skip to the examination interface, you can view the selected record easily. The function of the second exam is very convenient. Select the current patient and click New Exam to create a new record. The result processing can be edited, uploaded, imported CD, printed and other basic functions of the patient's information to meet the needs of users and patients. The overall interface is shown in Figure 5-3.

UT-Dental V1.01 Device Status : Ready Excess Capacity : 80 GB Current User : admin Status : Not Connected

Wait to Exam Register **Examined**

Patient Name

Patient ID	Patient Name	Date of Birth	Procedure ID	Submission Time	Exam Time	Exam Type	Exam Site	Image ID
HZ202102260E	12	1998-10-15	CR20210226	2021-02-26 09:15	1899-12-30	CR	18	1

2021-02-26 09:25:57

Figure 5–3 Examined Interface

5.4.4 Exam Interface

The interface mainly used for reading and editing dental film.

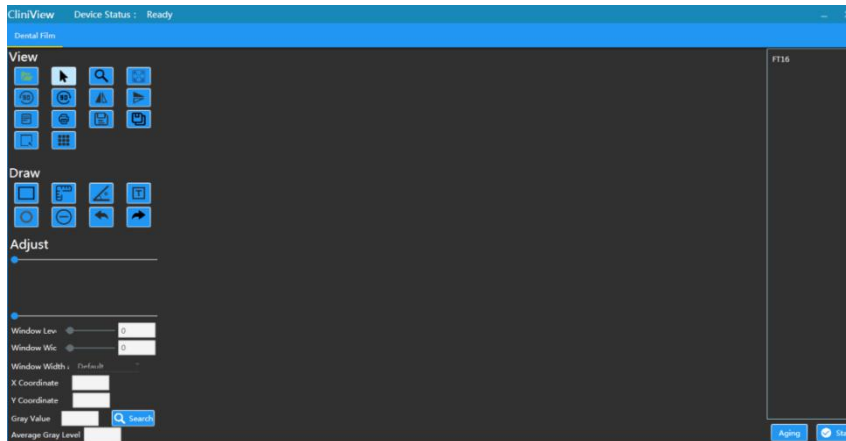



Figure 6-1 Exam Interface

5.4.5 Dental Film Check

After the exam, tear out the protecting bag of the image plate from the cut, and when the system is ready, click  **Start** ,and then take out the image plate and place it on the tray to read the image. Please pay attention to the white side of the image plate facing up. At this time, the interface shows that it is reading, as shown in Figure 6–2.

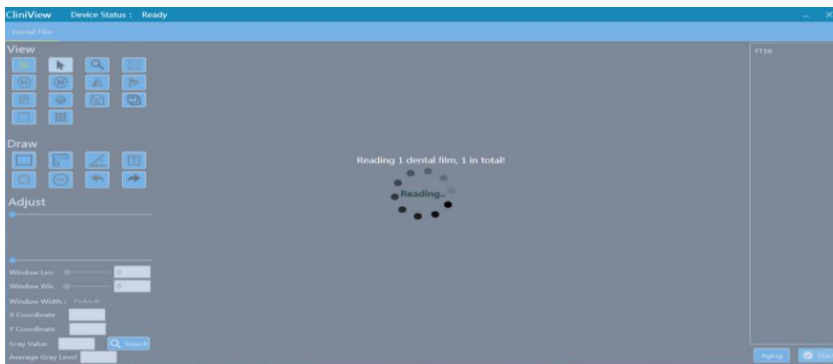


Figure 6-2 Reading Interface

After reading completely, the image is displayed, as shown in Figure 6–3.

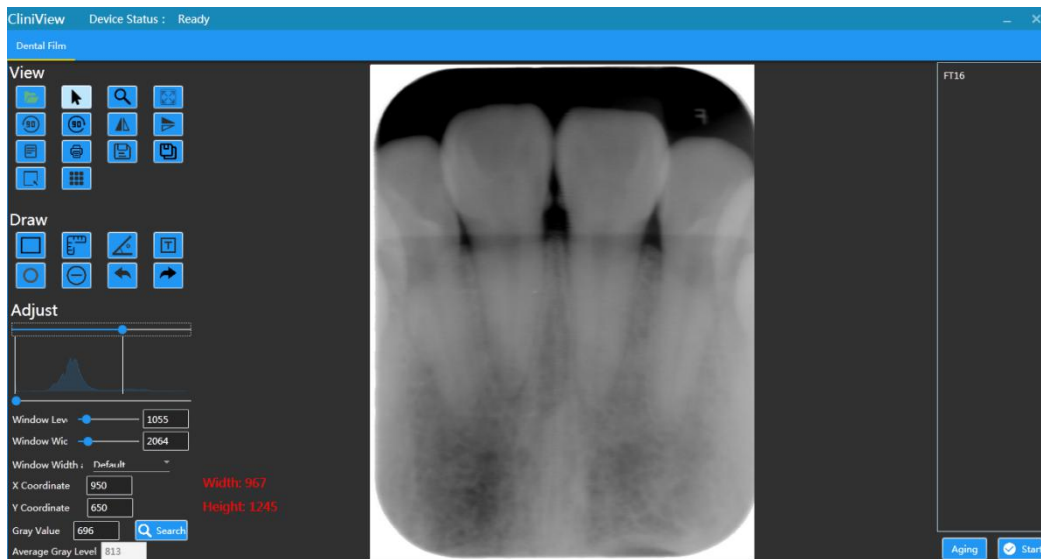


Figure 6-3 Dental Image

5.4.6 Image Edit

There is a menu on the left side of the image, corresponding to open DCM, move, enlarge, adaptive size, and measure distance respectively. On the right, there are rotating images, histograms, gray values, window level and window height processing, and image information. Among them, adjusting the window level and window height can make the image clearer. The toolbar functions are as follows:



Open DCM.



Mouse.



Zoom in or zoom out the image, press **【 Ctrl 】** on the keyboard and wheel mouse at the same time.



Restore.(restore the original size of the image)



Rotate image to the left.(click this key to rotate the image to the left)



Rotate image to the right.(click this key to rotate the image to the right)



Flip image to the left or right.(click this key to flip image to the left or right)



Flip image up or down.(click this key to flip image up or down)



Image information.



Print.



Save.



Save as.



Display average gray area.



Layout(click this menu to pop up the layout box, move the mouse to the lower right corner, after the selected layout box is highlighted, click the left button of mouse to complete the layout)



Draw rectangular frames.



Measure distance between two points.



Measure angle.



Add text.



Circle.



Cancel.



Recover.



Search.

5.5 Statistics Interface

The statistics interface will automatically count the contents of the database and graphically analyse the contents. To view information conveniently and intuitively, click the statistics in the menu to switch to the statistics interface, as shown in Figure 7–1.

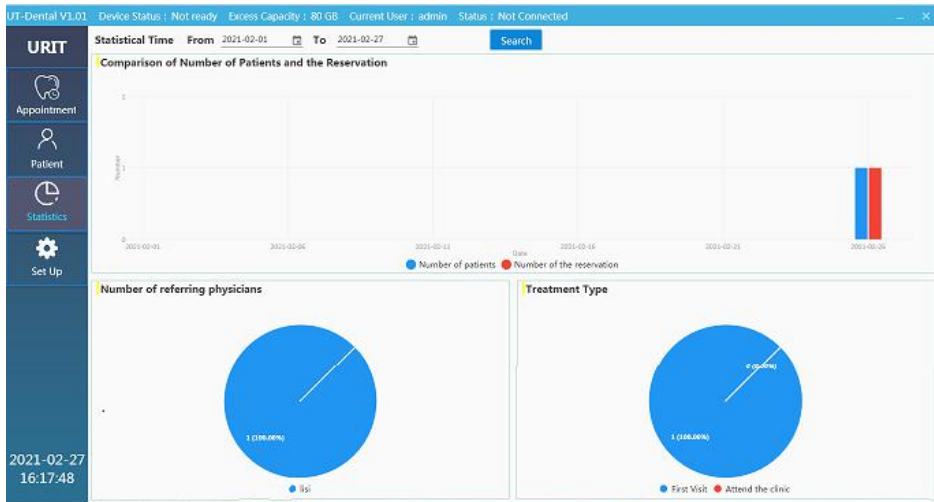


Figure 7–1 Statistics Interface

The default statistical data is the data of the most recent month, which can be modified by the statistical time at the top. At the same time, you can check the recent development by viewing

the number of appointments for each month, and also statistics on the referring physicians and the type of consultation, which is convenient to the department management.

CHAPTER VI Cleaning and Maintenance

6.1 Cleaning

The device does not need to be specially cleaned, just simply wipe the housing of the device with clean water or absolute alcohol, please pay attention to the following:

Warnings:

1. Please comply with applicable safety precaution regulations.
2. Please carefully read the material safety data sheet of each cleaners.
3. Please carefully read the operation and maintenance instructions of all sterilizing equipment.
4. Avoid spilling liquid on the device when cleaning.

5. Do not put the image plate in the autoclave, otherwise the image plate will be damaged.
6. Do not expose the image plate to liquid and strong light sources.
7. The image plate is not allowed to be wiped and sterilized with alcohol or corrosive chemicals.

 **Notes:**

1. The device is cleaned as needed before first use. Please refer to this chapter for cleaning methods.
2. In order to prevent device damage, if there is any problem with the cleaners, please refer to the data provided by the manufacturer.
3. Do not use organic, halogenated or petroleum-based solvents, glass cleaners, acetone or other harsh cleaners.
4. Do not use abrasive cleaners (such as steel wool, silver polish or cleaners).

5. All liquids should be placed away from electronic components.
6. Do not let liquid into the shell of the device.
7. The cleaners pH must be between 7.0 and 10.5.
8. Please turn off the power before cleaning.

6.2 Maintenance

The user should be familiar with all the operating methods, please read the manual carefully, and do not use the device before understanding the entire operating process.

The device only requires simple maintenance during operation, but only correct operation can ensure the long-term stable operation. So you must fully comply with the notes and maintenance items provided by the manufacturer.

6.2.1 Maintenance

The device should be placed in a dry and well-ventilated environment, and avoid dust and

moisture. The air–duct cooling system should be well ventilated.

6.2.2 Hygiene

In order to ensure hygiene, the image plate must be packed in an protecting bag when filming. After filming, tear out the protecting bag from the cut, and after the host is ready, take out the image plate and insert it into the host to read the image.

Notes:

- 1. The image plates and protecting bags we provide are not sterilized**
- 2. Sterilize the image plate and keep proper hygienic, please refer to the following guidelines:**
 - The image plate is recommended to use the dental digital image plate that has been registered or filed with the National Medical Product Administration.**
 - You must always use the protecting bag when using the image plate. It is**

recommended to use the dental digital image plate protecting bag that has been registered or filed with the National Medical Product Administration. The biological evaluation of the image plate protecting bag meets the requirements of GB/T 16886.1–2011, and replace each patient with a new protecting bag.

- To protect the environment, please recycle or dispose of the used image plate protecting bag in accordance with the requirements of relevant laws and regulations.

6.2.3 Storage

After daily use, ensure that put the image plate in the protecting bag and storage box to avoid contact with strong light sources and liquids.

6.2.4 Maintenance of Image Plate

Warnings:

1. Refer to the following guidelines to prevent damage to the image plate:
2. To maintain the service life of the image plate, please follow the instructions

below :

- Do not put the image plate in a sterilizer or autoclave
- Do not ask the patients to bite the image plate.
- Do not apply force, bend, or pull on the image plate.
- Do not expose the image plate to liquid.
- Do not expose the image plate to highlight.

 **Notes:**

Please refer to the manual of the image plate for the usage frequency ,other usage and precautions of the image plate.

CHAPTER VII Accessories List

Warnings:

1. Please use the accessories provided by the manufacturer, otherwise the performance will not be guaranteed
2. If use accessories that are not approved by the manufacturer, the company will not be responsible for serious consequences.

Table 1 Accessories List

Accessories	Pcs
USB cable	1
USB flash drive(software of installation)	1
Intraoral image plate(2#)	1

Power adaptor	1
Power-line	1
Protecting bag(2#)	200

The device and its accessories for can be purchased from the manufacturer or local distributor.

Note:The accessories list is subject to the random packing list.

CHAPTER VIII Environmental Protection

Name	Toxic and harmful substances or elements					
	Pb	Hg	Cd	Cr (VI)	PBB	PBDE
Valve Assembly	O	O	O	O	O	O
Optical Circuit Assembly	O	O	O	O	O	O
Cabinet	O	O	O	O	O	O
Circuit Board	O	O	O	O	O	O
Sheet Metal	O	O	O	X	O	O
Switch	O	O	O	O	O	O
Wires	O	O	O	O	O	O
Motor	O	O	O	O	O	O

Name	Toxic and harmful substances or elements					
	Pb	Hg	Cd	Cr (VI)	PBB	PBDE
<p>The table is compiled in accordance with the provisions of SJ/T 11364.</p> <p>O: It means that the content of this toxic and hazardous substance in all homogeneous materials of this part is below the limit requirement of GB/T 26572.</p> <p>X: It means that the content of the toxic and hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement of GB/T 26572.</p> <p>(This product complies with the requirements of EU RoHS environmental protection: currently there is no mature technology in the world that can replace or reduce the lead content in electronic ceramics, optical glass, steel and copper alloys)</p> <p>In accordance with <i>Administrative Measures on the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products, Regulations on the Management of the Recycling and Disposal of Waste Electrical and Electronic Products</i> and related standards, please observe the safety and use precautions of the product, and recycling or disposal of this product please apply appropriate measures in accordance with local laws and regulations after the product is used.</p> <p>Method of</p>						