



## Quick Manual of DTS-280 Imaging System





## The Preparation Before Use:

### Install the bracket and rotating arm



Step 1: Insert the bracket into the metal column

Step 2: Install the screen bracket recommended to install it at the connection point of the metal column under the instrument tray, and two semi-circular pieces need to be padded at the bracket interface to fix the screen bracket so that it will not slip.

Step 3-4: Screw the screen brackets



## Install the X-ray machine



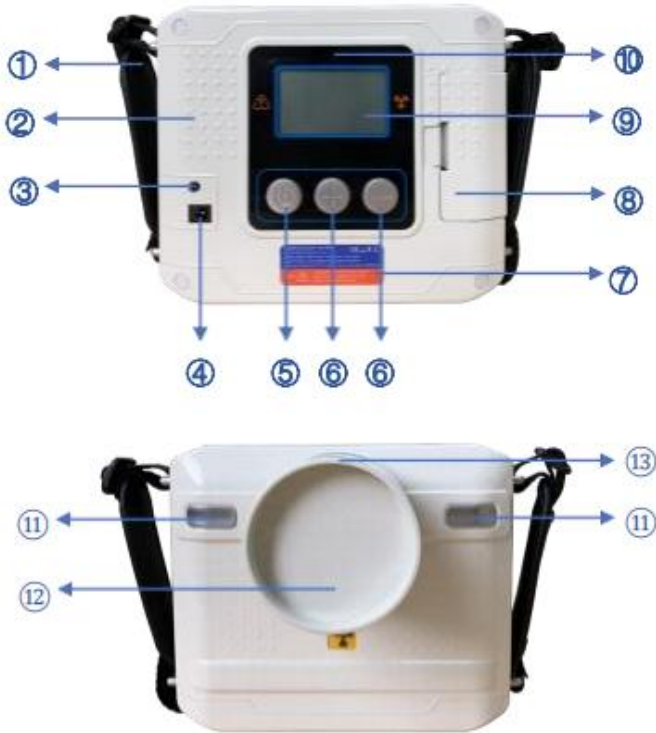
Slide the bracket into the slot of the X-ray machine and tighten it with the screws. Test the flexibility of the arm after installation.

**NOTE: Before and during the installation or disassembly, the X-ray machine must be supported by hand to prevent falling down!**



## OPERATION INSTRUCTION

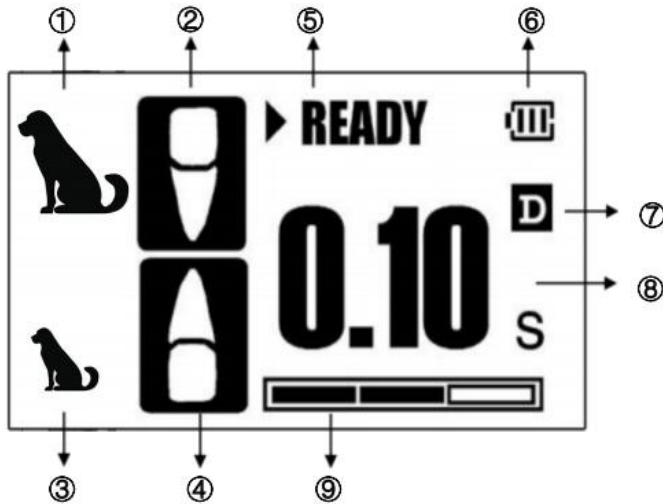
### X-ray Machine Structure



- ① Handle
- ② Skid-proof grip
- ③ Remote control connector
- ④ Charging socket
- ⑤ Power button & lamp
- ⑥ Time (Mode) control button
- ⑦ Label
- ⑧ Battery pack cover
- ⑨ LCD window
- ⑩ EXPOSURE lamp
- ⑪ EXPOSURE button
- ⑫ X-ray Field
- ⑬ Cone



## LCD Functions



- ① Large Animal indicates
- ② Teeth part of large animal
- ③ Small Animal indicates
- ④ Teeth part of small animal
- ⑤ Indication of status : Indication of the present operation of the unit
- ⑥ Status of battery : Indicate the remaining of battery by 3-steps
- ⑦ Digital mode icon : Indicates digital sensor is setup and disappears when film mode is setup.  
(default is film mode)
- ⑧ Exposure time display : Indicates irradiation time at each part of teeth mode
- ⑨ 3-step time increase level by part of teeth

## Buttons Function

Front side button



Power button

Time (mode) control button

Behind side button



EXP button



Power button : Turn on/off the x-ray machine



Time (Mode) control button : Time setup by each teeth mode  
(24 steps in each mode)



Switch button : Exposing of X-ray with buzzer sound only while the button is being pressed and irradiation will stop when button is released. (DMS method-Dead Man Switch)

### **Battery- pack charge**

Note: Please keep the following rules whenever charging the battery pack.

Use only appointed charger and battery pack.

Keep apart the battery pack in the special storage case after charging completed.

Avoid the recharge for charge completed pack.

No contact to the metal goods of coin, key, clip etc., on the battery terminal plate.

### **Operation the System**

- Press the power button in 1 sec then logo will appear and become initial stage.
- Press the power button in 1 sec in active state, power turns off.



**X-ray generating time table(reference only)**

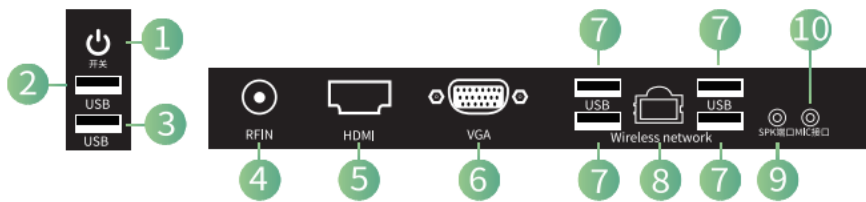
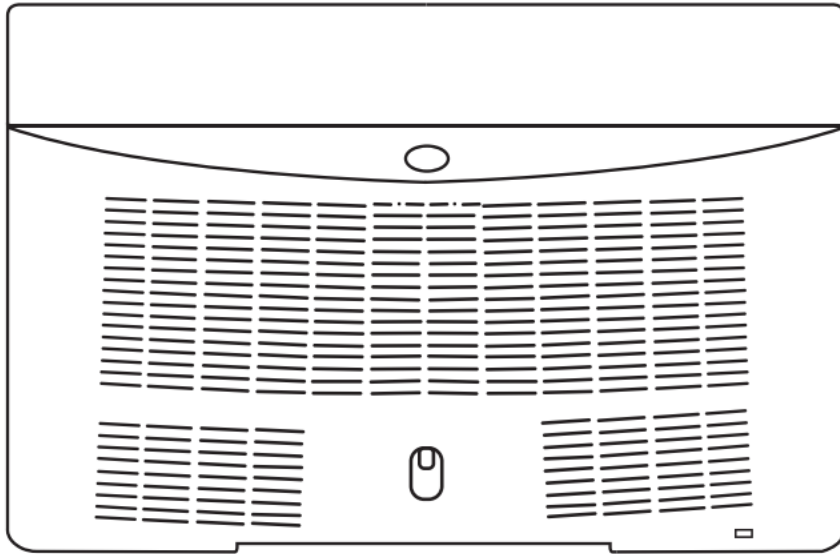
Classification		Radiography area and expose time							
Classification by age	Large animal								
	Small animal							-	-
Distance between product and skin : 0cm	Sensor	0.10 ~ 0.15	0.15 ~ 0.20	0.20 ~ 0.25	0.25 ~ 0.30	.30 ~ 0.35	0.35 ~ 0.40	0.40 ~ 0.50	0.50 ~
	Film	0.20 ~ 0.30	0.35 ~ 0.45	0.50 ~ 0.60	0.65 ~ 0.75	0.80 ~ 0.90	0.95 ~ 1.05	1.10 ~ 1.20	1.25 ~ 1.35
Distance between product and skin : 5cm	Sensor	0.15 ~ 0.20	0.25 ~ 0.30	0.30 ~ 0.35	0.40 ~ 0.45	0.45 ~ 0.50	0.55 ~ 0.60	0.75 ~ 0.80	0.90 ~
	Film	0.25 ~ 0.30	0.30 ~ 0.35	0.40 ~ 0.45	0.45 ~ 0.50	0.55 ~ 0.60	0.60 ~ 0.65	0.85 ~ 0.90	1.0 ~



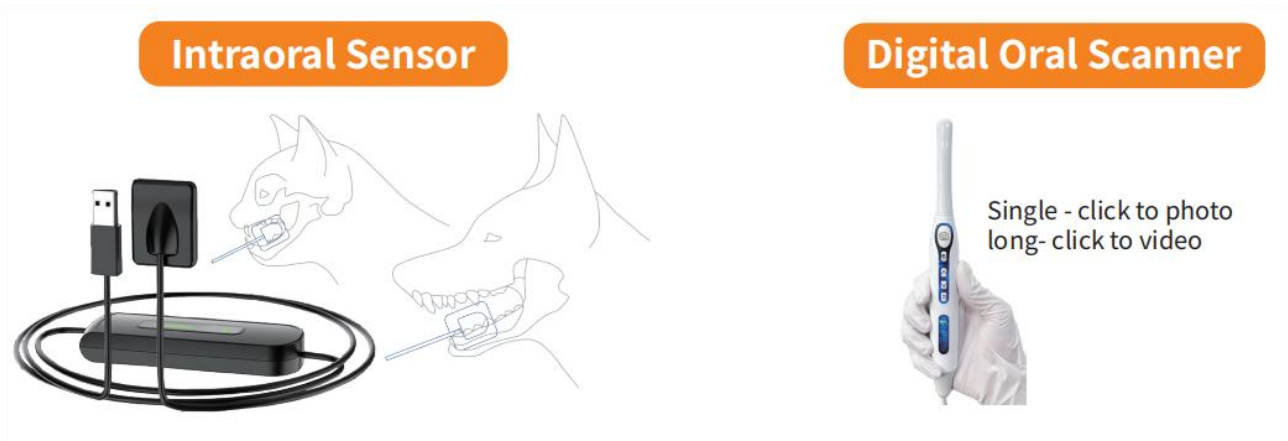
**CAUTION:**

During the installation or disassembly, the X-ray machine must be supported by hand to prevent falling down!

ALL-IN ONE Computer System with 23.8inch Touch Screen



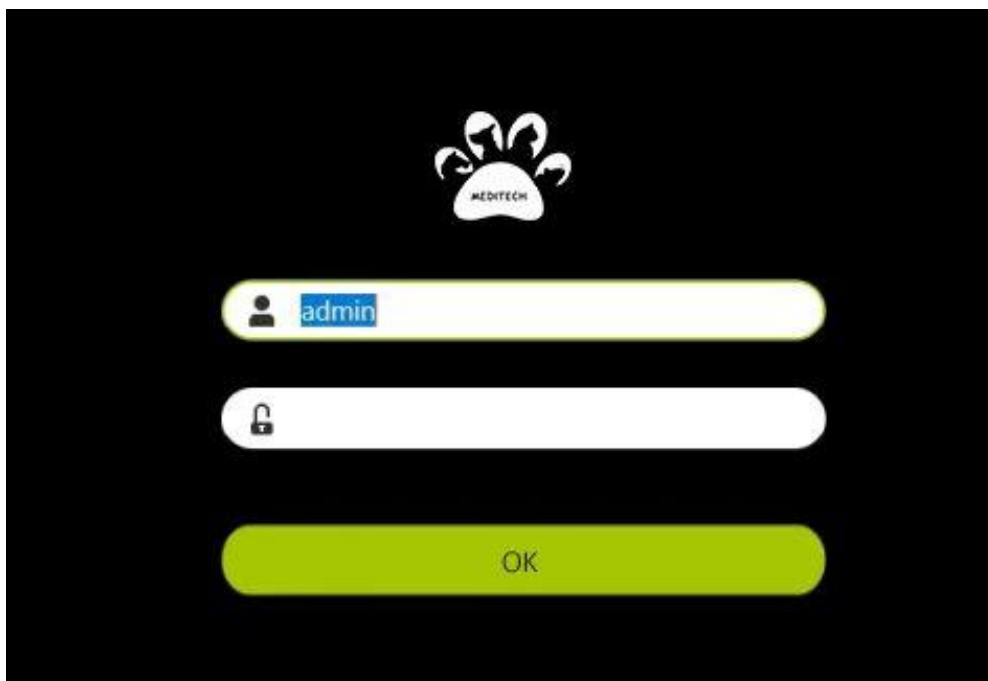
- ① Power button
- ② USB port
- ③ USB port
- ④ RFIN port
- ⑤ HDMI port
- ⑥ VGA port
- ⑦ USB port
- ⑧ Wireless network port
- ⑨ SPKport
- ⑩ MIC port



1. Insert the USB interface of dental sensor and digital oral scanner to the computer USB ports(#7).



2. Double-click the desktop icon to start up the software of intraoral sensor.
3. Click "OK" button.





Add new case



Search existing records



Delete case

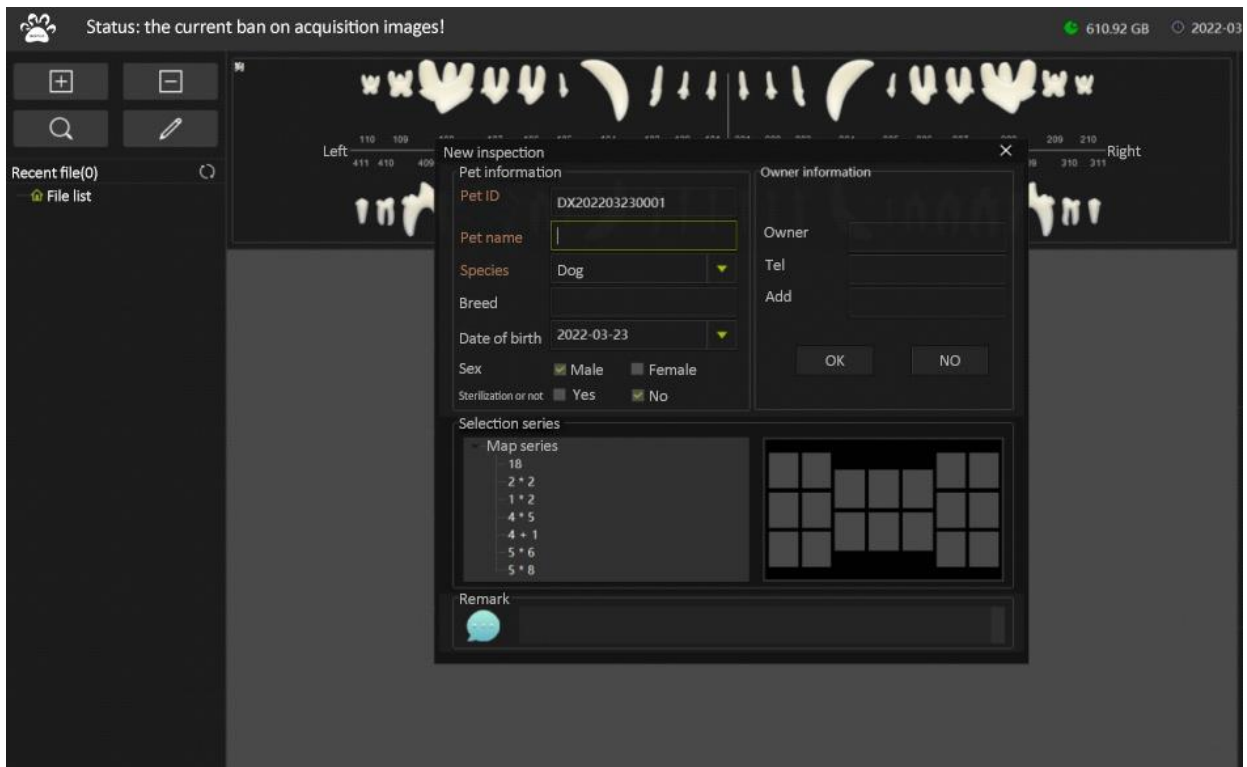


Modify info

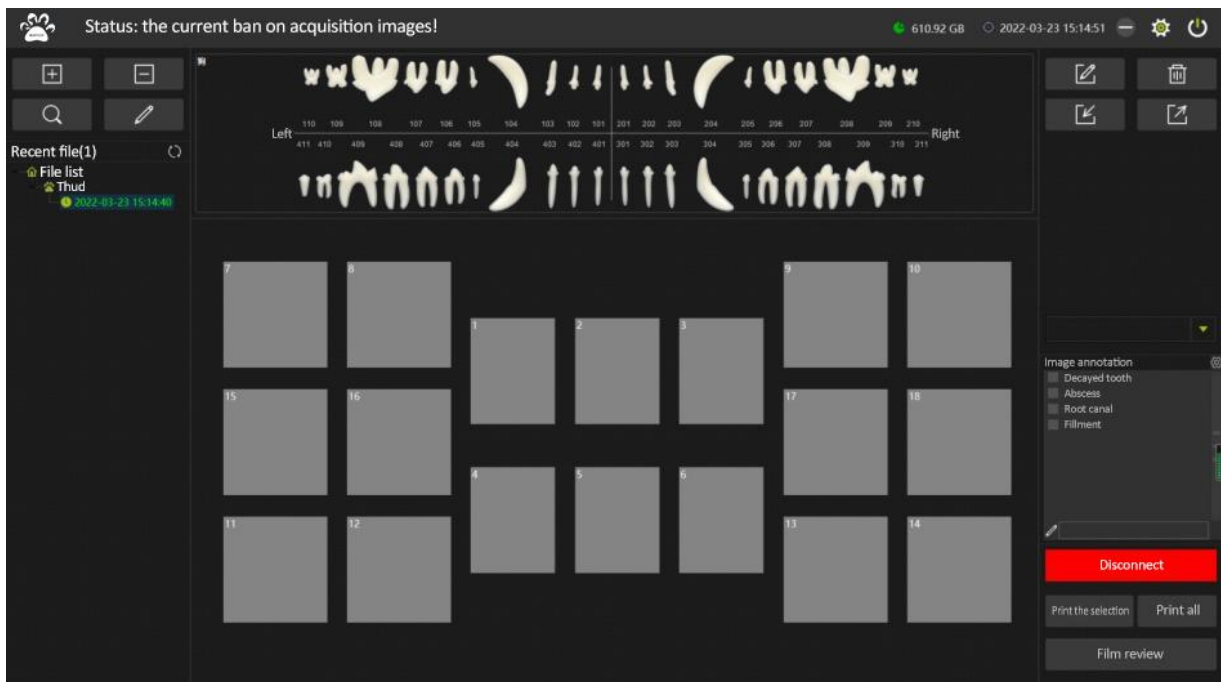
Press button



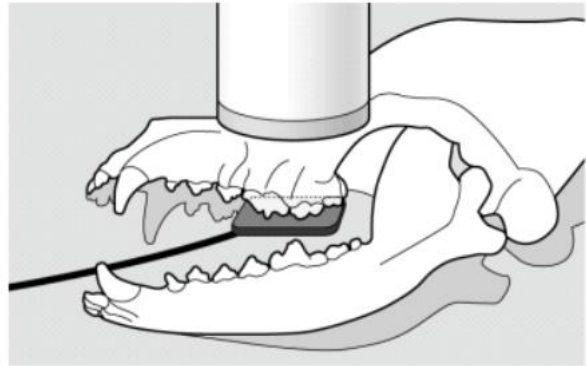
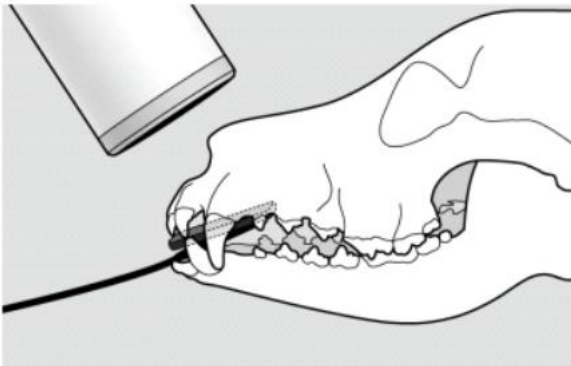
to add new case







Adjust the dental sensor to the appropriate location and press the exposure button until hearing beeps, loosen the button and wait for images.



### 5. Read and check the image

After shooting, double-click the image window, or click on the image (display select box), then click on the top right corner of the "read" button into the interface of image reading .



Read image



Delete image



Import image



Export image



The commonly used image adjustment tools are on the right side of the viewing interface. Moving the mouse over the corresponding tool will prompt the function of the tool. Click the "Save" and "Return" buttons to return to the main interface after reading the image.



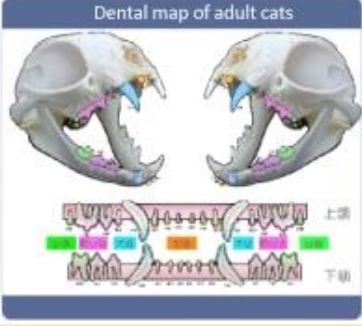
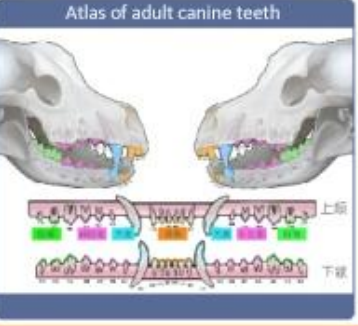
### 6. quick comments and diagnosis report writing:

Single tooth slice: can carry out quick note: choose the image, select the content to start quick comments. Also can input diagnosis content at the same time. if you need to print, can then click PRINT or PRIT ALL to print the report, also can export e-report.




**Hospital**

Pet name: Thud      Sex: Male      Date of birth:2022-03-23

Dental map of adult cats	Atlas of adult canine teeth
	

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Image acquisition: Animal Dental Unit DTS-280  
Get time:2022-03-23 15:47:31  
Image bit:  
104 103 102

Image caption:  
Decayed tooth

More tooth slices: Hold down the Ctrl key to choose ALL (display ALL) images, touch screen to bring up the soft keyboard function to choose more pictures, then click PRINT or PRIT ALL to print the report, also can export e-report.

Fill or modify the name of the hospital: click icon of Setting on the top right corner (gear shaped icon),to complete the name entry and modification.

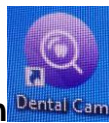
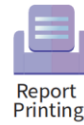
## 7. Finish checking

After checking, click POWER button on the upper right corner to quit the software. Turn off the power of the X-ray machine. Clean and tidy up dental sensor and save into the packaging.



## Software of Digital Oral Scanner

### Digital oral endoscopic system



Double-click the desktop icon  to start up the software of digital oral scanner.

### Add a new case

The screenshot shows the 'Dental Cam' software interface. At the top, there are three tabs: 'Add', 'Query', and 'Current'. The 'Add' tab is active. On the left side, there is a vertical sidebar with icons for 'Patients', 'Diagnosis', 'Comparison', 'Edit', 'Report', and 'Settings'. The main area contains a form for adding a new case. It features a large empty box on the left for a profile picture. To the right of this box are several input fields: 'Name', 'Age', 'Phone', 'Address', and 'Remark'. There are also 'Gender' options (Male and Female) and an 'ID card' field. A 'Save' button is located on the right side of the form. At the bottom of the interface, there are two sections labeled 'Image' and 'Video', each with a left and right arrow for navigation.



## Four split screens for comparison



1. **Patient:** help doctors systematize the management of patient files, key words can query patient information.
2. **Diagnosis:** The main function is "photo" and "video", the other auxiliary functions are zoom/zoom/actual size/spread /vertical image/horizontal image/ full-screen/video settings, photos and videos taken are automatically saved to a list of images in the lower left corner for comparison and editing.
3. **Comparison:** support real-time shooting in comparison interface, four pictures for comparison, and images can be saved directly to the computer or click on the QR code for transmission.
4. **Edit:** The image can be annotated to facilitate doctors to explain the patient analysis
5. **Report:** Edit case book, add patient information and real time examination picture, fill in examination result and doctor's suggestion, print or transfer.
6. **Settings:** support to choose Chinese or English and set the name of the hospital and title of report or to modify them.



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