15 inch dental monitor and intraoral camera system

**user manual**

MD-1500A series

Dentalzone



To reach better result, please read this instruction before use.

**www.dentalzone.nl**

Dentalzone

## TABLE OF CONTENTS


1. Attention ..... 1
2. Product features ..... 2
3. Product Parts ..... 2
4. Functions ..... 3
    1. Monitor ..... 3
    2. Oral camera ..... 6
    3. Wireless launcher/Receiver (option) ..... 7
    4. Remote control ..... 8
5. Installation instructions ..... 9
6. Take picture of the face ..... 12
7. Power off the light of oral camera ..... 12
8. How to determine the U disk available ..... 13
9. Video recording ..... 13
10. How to zoom the picture ..... 14
11. How to play the multimedia file of the U disk ..... 15
12. How to change the language of the monitor ..... 17
13. How to connect Wifi to computer ..... 18
14. How to install the software ..... 19
15. How to use the software ..... 22
16. How to rename the WIFI name ..... 24
17. Simple troubleshooting ..... 25
18. Monitor arm install (option) ..... 26

## Attention

Please read carefully attention before you use the product, and should stow for later query

### ⚠ Camera Blur

1. Please use the sheath for every time of use. This will protect the camera lens, and avoid of foggy, and it can extend the lifetime of the device. There is only 50 pieces sheath in every package, please buy more from the original seller if you have used up of the sheath.
2. Please do not use sharp, metal or liquid insert or touch signal port, in order to avoid short circuit and product damage.

### ⚠ Connection

1. Please power off the machine before connection the cables.
2. Please don't let sharp thing, metal or liquid into or touch the cable connector, in order to circuit and product damage

### ⚠ Power

1. Please use the power supply with the package.
2. Please cut off the power supply if you don’t use it for a long time.
3. Please don’t use the machine if the power supply damaged.
4. please don’t compress line of power supply or signal connection line expose in gangway.
5. Please don’t put the power supply line pass the walkway.
6. Please don’t put the power supply in damp place

### ⚠ Working environment

1. Please put the product in dry and ventilated place.
2. Don’t put the product in super-cooling, super-hot, super-damp, direct-irradiation, dusty place.

### ⚠ Disassemble

1. Please don't disassemble any part of the product by yourself, or it will out of warranty.



## Monitor arm install (option)

### Necessary parts:

Gasket

Bracket

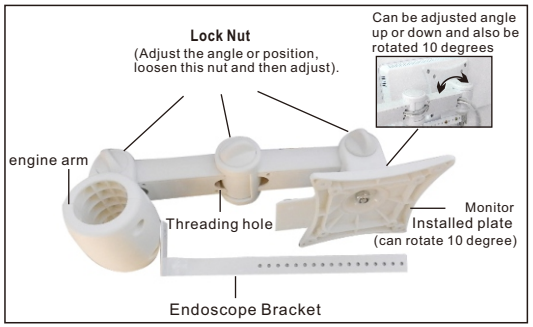
Installed plate

Handpiece Holder

No.1,No.2,No.3,No.4,No5. bolts

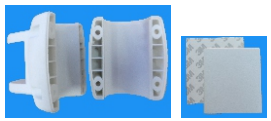
Inter-hexagon spanner

### Arm Structure



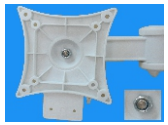

### Installation Instruction:

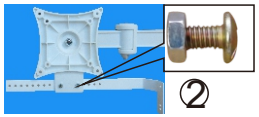
1.Install the braket onto holder with the gasket, use No.1 bolts install bracket.
(The gasket is to avoid the slip of the bracket from the holder).



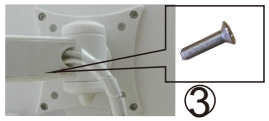


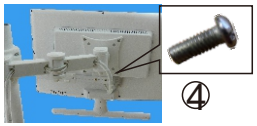

2.Connect the bracket and installed plate with No.2 bolts, the bolts could adjust tightness.
Use No.2 bolts install handpiece bar.(Note:Handpiece holder is adjustable according to the size of display.



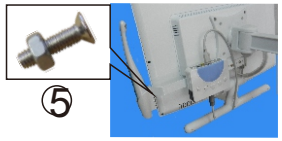


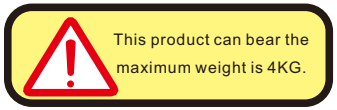

3.Connect the plate to LCD use No.4 bolts and accessory, line go through the plate from rear covet. fix with No.3 bolts.




4.Install handpiece and docking sation holder with No.5 bolts, connect the plug and turn on power.



## Simple troubleshooting

Please try to solve problems as the below ways. Please contact the seller or factory if can't solve the problems after do these ways.

| Items | Problems | Solutions |
|---|---|---|
| 1 | The host no responding after power on | 1. Check the power adapter socket connection ok or not.<br>2. Check the power adapter damaged or not.<br>3. Contact the seller or factory. |
| 2 | Can't save the pictures | 1. Check the U disk plug into U disk storage jack.<br>2. Format the U disk, and check again.<br>3. Contact the seller or factory. |
| 3 | No image or blue screen of the monitor or computer | 1. Check the cable connected ok between monitor and oral camera.<br>2. Check the monitor under the right mode.<br>3. Check the WIFI connect OK, and the software installed right.<br>4. Restart power on.<br>5. Please contact the seller or factory. |
| 4 | The image is blur or dirty on screen | 1. Check the screen dirty or not.<br>2. Check the lens dirty or not, and wipe it with cotton swab lightly.<br>3. Please contact the seller or factory if can't clean as above ways. |



## Product features

Dear users,
Thanks for choosing our company's product. The 15 inch monitor with oral camera system could freeze/capture images and save into U disk. It is good for doctors physician analysis, communication with Patients, so as patients have a better understanding of their condition, and improve work efficiency.
This unit support multimedia U disk player and video input, and wifi connect to computer (windows system only).
The monitor can take picturer for patient face with build-in face camera. Face camera and Intraoral camera can make video with remote control. (But cannot record sound).

## Product Parts

### 1. Standard accessories

Wired unit:

| | |
|---|---|
| 1. 15 inch LED monitor | 1 PC |
| 2. Oral camera Handpiece | 1 PC |
| 3. 8GB U disk (with software) | 1 PC |
| 4. Oral camera sheath | 50 PCS |
| 5. Oral camera holder | 1 PC |
| 6. 12V power supply | 1 PC |
| 7. Remote control | 1 PC |
| 8. Handpiece cable | 1 PC |
| 9. Monitor adjusting handle | 1 PC |
| 10. Monitor arm for dental unit(Option) | |

Wireless unit(Option):

| | |
|---|---|
| 1. Wireless launcher | 1 PC |
| 2. Wireless receiver | 1 PC |
| 3. Charging base | 1 PC |
| 4. Power adapter | 1 PC |

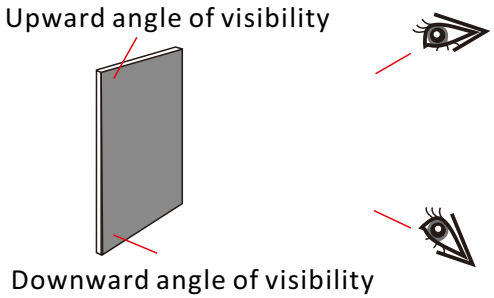
## Functions

### 1. Monitor

Specifications:

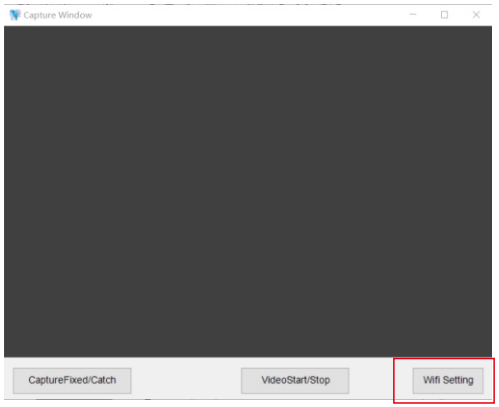
| | |
|---|---|
| Model | MD-1500A |
| Size | 15 inch |
| Resolution | 1024*768 |
| Contrast | 500:1 |
| Brightness | 400(CD/M2) |
| Response time | 5ms |

Display view :



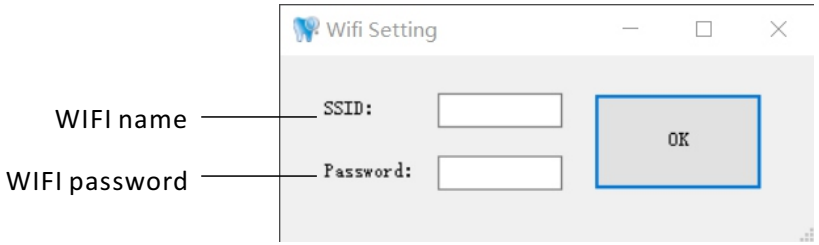

* We can adjust the brightness to brighter at “Menu”, When the monitor is in the downward angle of visibility.
* We can adjust the brightness to darker at “Menu”, When the monitor is in the upward angle of visibility.

## How to rename the WIFI name

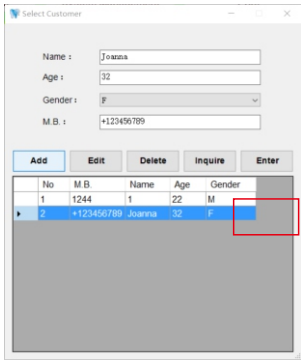



We need use difference WIFI name when we use several units intraoral camera.

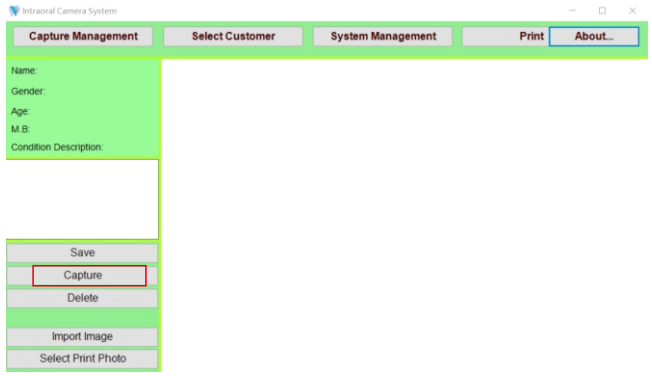
Please click the “WIFI setting” to rename the name and password.

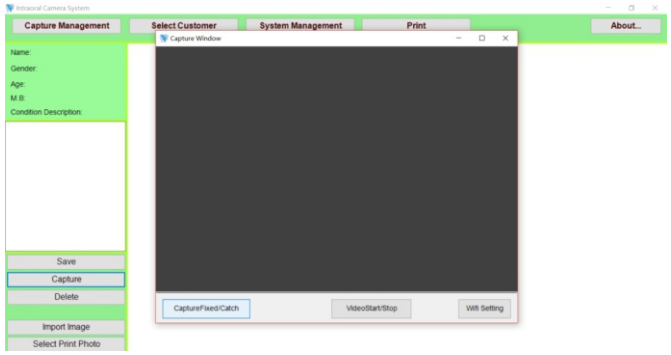


4. Click "Enter" or double click the serial number to enter the patients management




5. Click the "Capture" button at the buttom left to capture or video recording




6. The pictures will be save to “DentalWIFI” folder of D disk.

Front




1. PC VGA input button
2. Multimedia U disk player button
3. Video input button
4. Face camera button
5. Oral camera button
6. IR Receiver
7. Power indicator
8. Pause button(work under Multimedia U disk player mode) Capture (Work under face camera and oral camera mode)
9. Mute button (work under Multimedia U disk player/PC/Video mode) Quad picture(work under oral camera mode)
10. Volume down (work under Multimedia U disk player/PC/Video mode) Page down(work under oral camera mode)
11. Volume up (work under Multimedia U disk player/PC/Video mode) Page up(work under oral camera mode)
12. Power on/off
13. Monitor adjusting handle
14. Oral camera holder (the light will off when the camera put in the holder)
15. Face camera (Adjustable focus, and Can be adjusted up and down 75 degrees

Back




1. The plugs of the monitor




A: Pedal in
B: Multimedia U disk player
C: Video voice R-CH input
D: Video voice L-CH input
E: Video input
F: Voice output
G: PC voice input
H: VGA input
I: DC12V power adapter input
J: Oral camera input

2. U disk for saving pictures plug



The U disk have to plug into the monitor when we saving the pictures.

3. Wireless Receiver plug(Don't insert U disk)

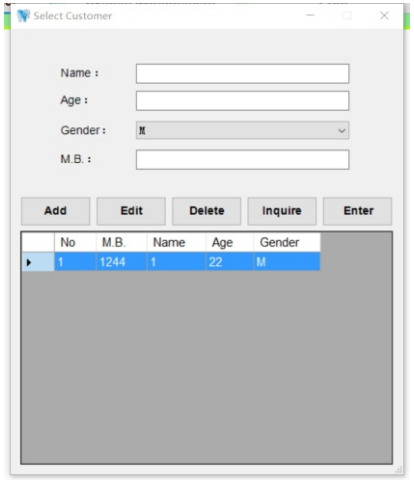


## How to use the software

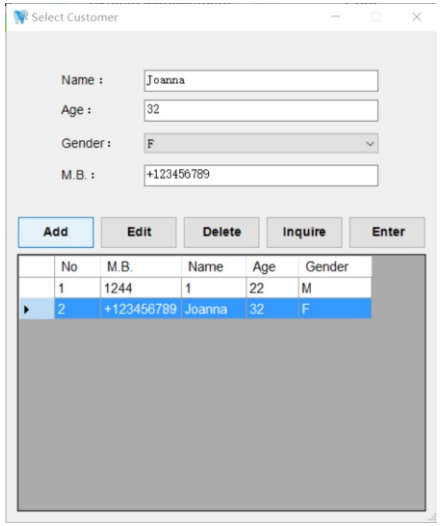
1. A icon will be established on the desktop, double click the icon.

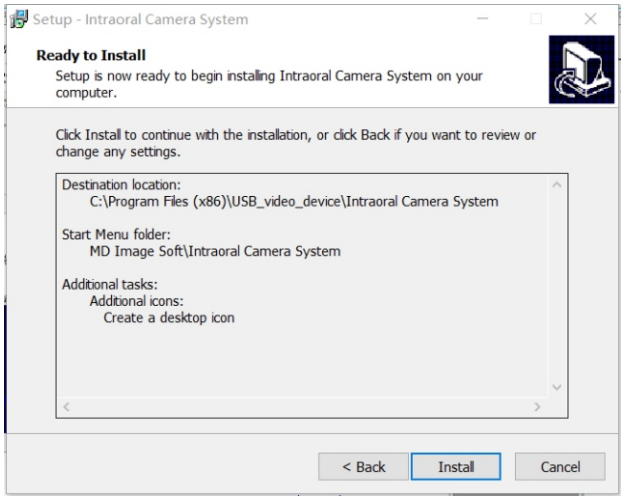



2. Open the software, a window will prompt to enter patients information

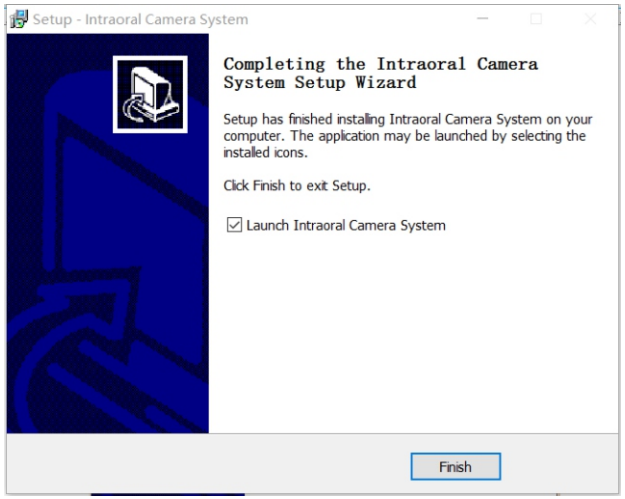



3. Click the “Add” after entered patients information.






6. Click "Finish".

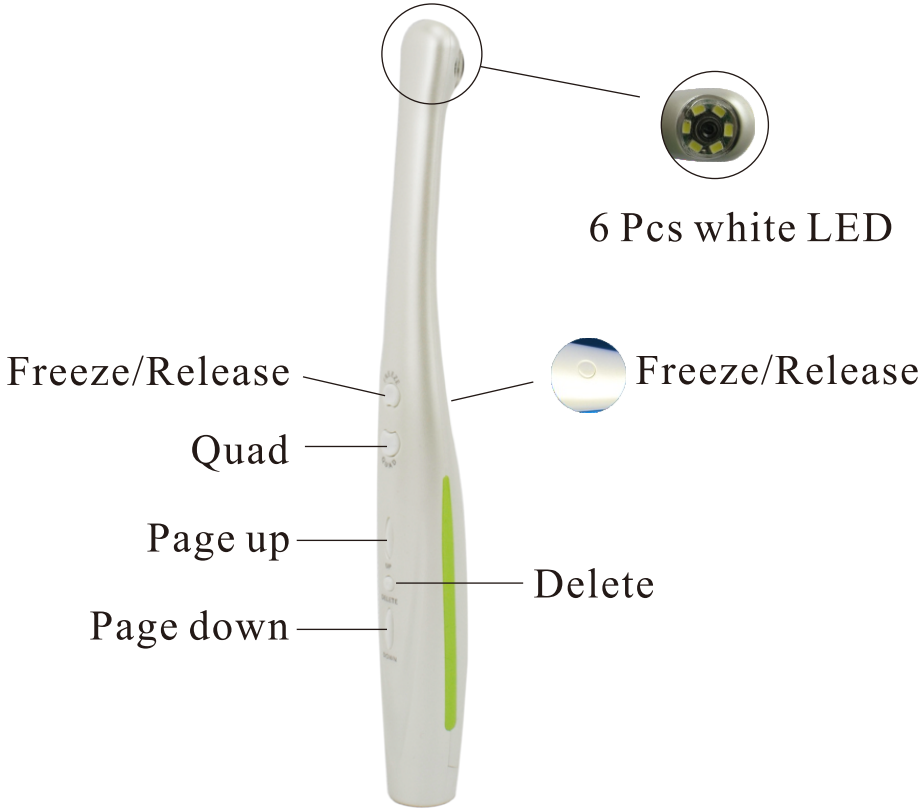



## 2. Oral camera

Specifications:

| | |
|---|---|
| Model | MD-910 |
| Sensor | 1/4 " Sony CCD |
| TV standard | PAL |
| Pixels | 2.0 mega pixels |
| Light | 6 white LEDs |
| Focus distance | 3~50mm |
| Angle of view | 105° |
| Cable length | 2m |
| Cable port | 6 pins |

Oral camera functions:

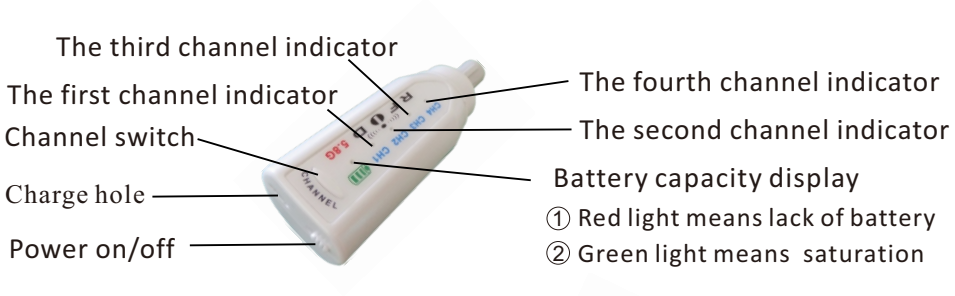


## 3. Wireless launcher/Receiver (option)

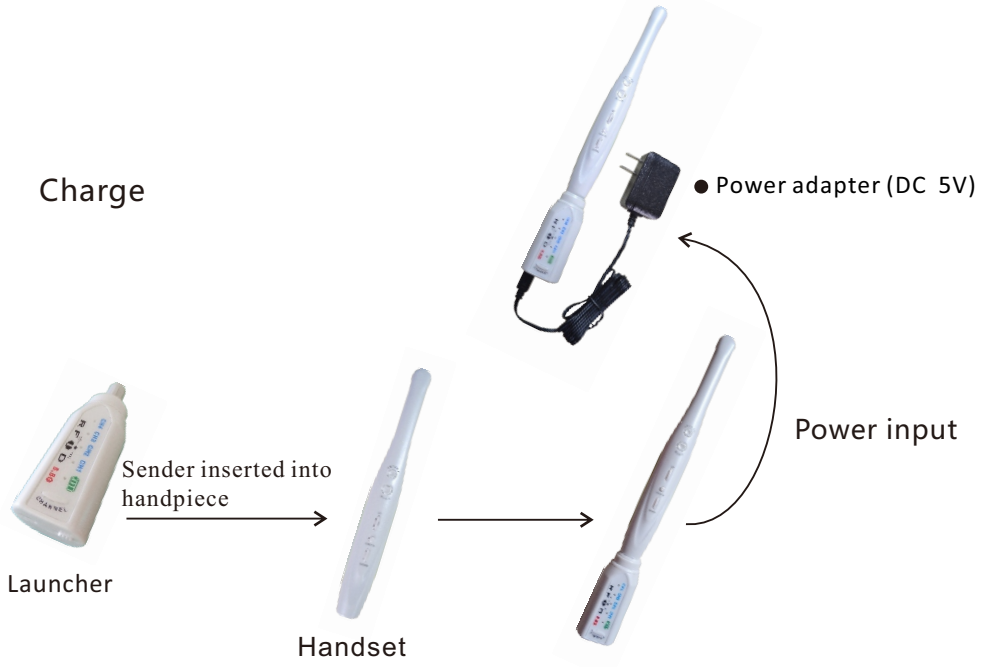
Specifications:

| | |
|---|---|
| Battery | 350mA rechargeable Lithium battery |
| Channel | 4 Channels |
| Frequency | 5.8GHz |
| Wireless distance | Within 8m |

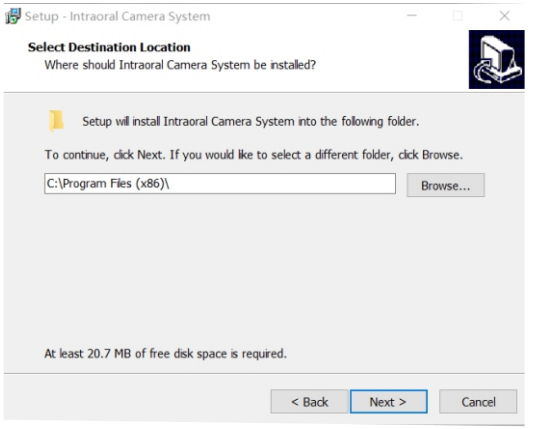
Wireless launcher:



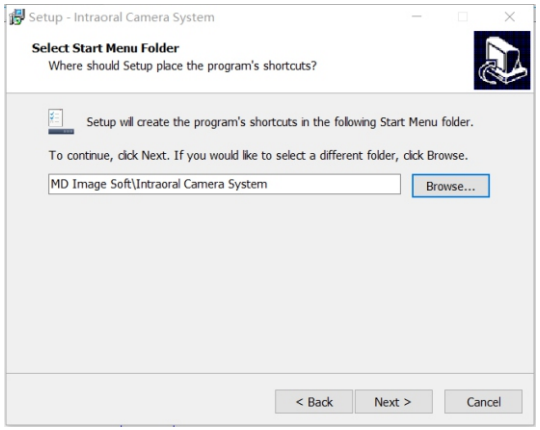

Charge

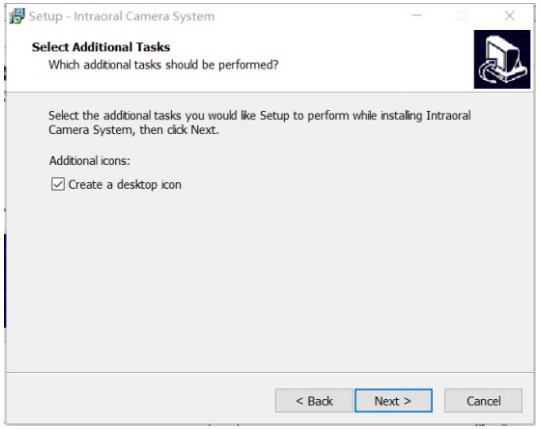



3. Choose the folder which install.




4. Click “Next”.



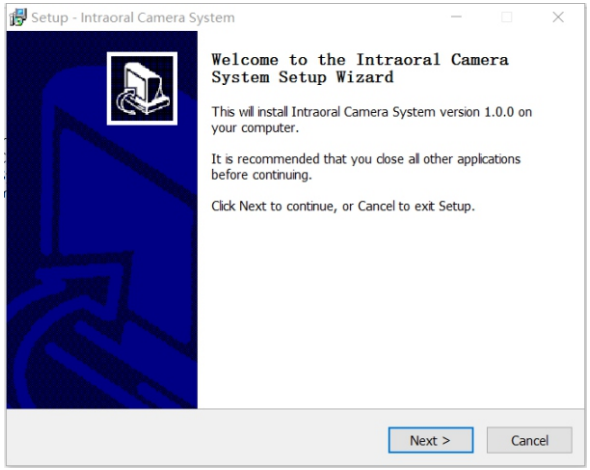



## How to install the software

1. Please plug in the u disk which come with the package, and find the software “Intraoral Camera System”, And double click it to install.




2. Click “Next”.




Wireless receiver:




⚠ The channel of launcher and receiver have to be same

## 4. Remote control




1.Power on/off
2. Video recording (work on face camera and oral camera)
3. Mute
4. Oral camera
5. Face camera
6. Zoom picture(zoom 1x to 4x)
7. Page up
8. Delete picturer
9. Page down
10. Freeze/capture
11. Menu up
12. Full/quad picture
13. Volume down Menu up left
14. Enter
15. Volume up Menu down
16. Menu
17. Menu down
18. Return
19. Multimedia U disk
20. Video input
21. PC VGA input

## Installation instructions

1. Install the handle to the monitor



2. Plug the U disk to the U disk saving plug



3. Put the monitor arm to 4 screws of the monitor (See the details as arm installation instructions)




## How to connect Wifi to computer

1. Your computer must be used with wireless WIFI card or use a wireless-enabled laptops. If not please buy a wireless WIFI receiver. If you need the internet, you need buy one more Wifi receiver.

2. Connect well the monitor and oral camera, and power on.
Plug in the wifi receiver and confirm it install well.

3. Find the Wifi name “Dental”.




4. Click “Dental” and enter the password “12345678" to connect. And check it connect successfully.



## How to change the language of the monitor

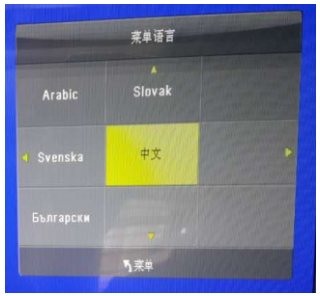
1. Press the button"[Menu]" of remote control to enter the menu.



2. Press the "◀" "▶" button of the remote control to choose "⊞" icon.



3.Choose the first "language" and press "OK" button to enter.
Press the "◀" "▶" button of the remote control to change the language.
Press menu button "[Menu]" to confirm and back











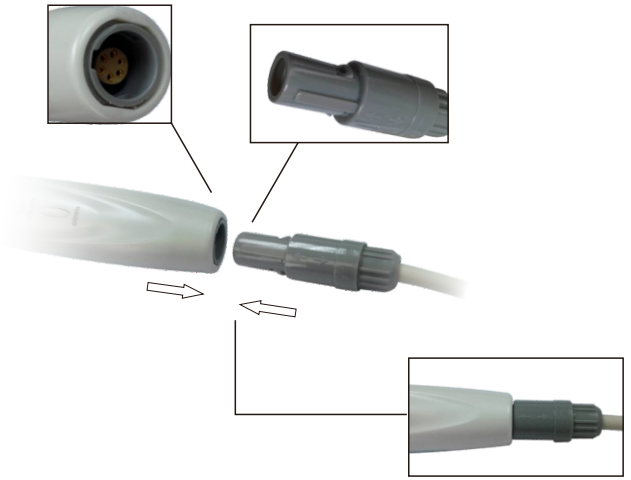

4. Plug in the power adapter, connect the oral camera to moitor (for wired unit)




## Handpiece combination to split schemes

### 1.Combination

Camera cable"⇦"marked direction is front, connecting with camera and align with the front of the camera cable, the camera inserted front hole.



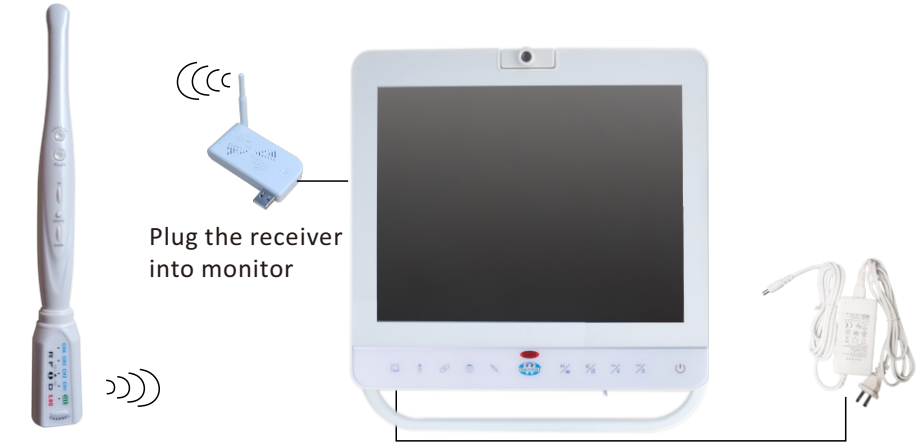
### 2.Split

When splitting camera and camera cable, please hold the non slip down and off.



5. Plug in the power adapter, connect the wireless oral camera

(for wireless unit)



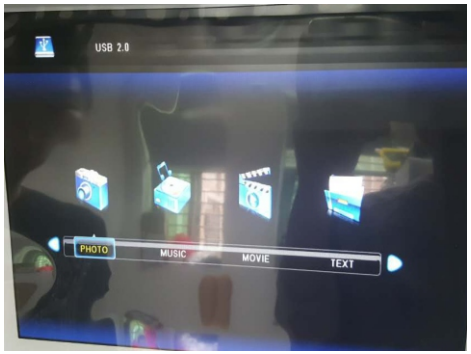

⚠ The channel of launcher and receiver have to be same

**The formats are supported**

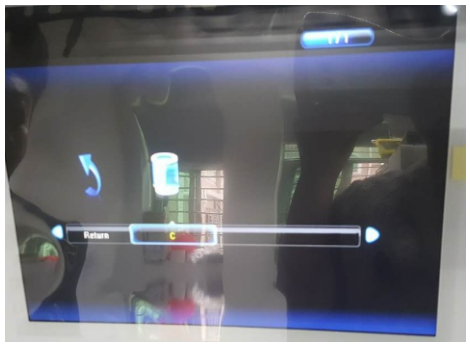
| Formats | | | Size | Number of plays per second |
|---|---|---|---|---|
| Dat,mpg. mpeg | MPG,MPEG | Mpeg 1.2 | 1920x1080@30P | 20Mbit/sec |
| Ts,trp,tp | MPEG2-TS H264-S | MPEG2.H.264 | 1920x1080@30P | 20Mbit/sec |
| Vob | MPEG2-PS | MPEG2 | 1920x1080@30P | 20Mbit/sec |
| Mp4 | AVI,MP4 | MPEG4 Divx 3.11,Divx 4.12. Divx 5.x,Divx 6. Xvid 1.00. Xvid 1.01,Xvid 1.02. Xvid 1.03,Xvid 1.10-beta 1/2 H.264 | 1920x1080@30P | 20Mbit/sec |
| Rm,rmvb | RMVB,RM | Rm code RV8.RV9. Rv10 | 1280x720@30P | 10Mbit/sec |
| Mkv | MKV | H.264,MPEG1.2.4 | 1920x1080@30P | 20Mbit/sec |
| Divx,avi | AVI(1.0,2.0) DMF0.1.2 | MPEG2.MPEG4 Divx 3.11,Divx 4.Divx 5,Divx 6,Xvid 1.00 Xvid 1.01.Xvid 1.02. Xvid 1.03,Xvid 1.10-beta1/2 H.264 | 1920x1080@30P | 20Mbit/sec |
| Asf | ASF (Revision 01.20.03) | VC1 | 1920x1080@30P | 20Mbit/sec |

## How to play the multimedia file of the U disk

1. Please plug in the U disk with videos, music or texts to Multimedia U disk player plug .
2. Press the " " of the monitor or the " " of the remote control to multimedia u disk player mode.
3. The windows as below will be display.




4. Choose photo, music, movie or text with "◀" "▶" button of the remote control. Choose "C ", press "OK" to enter.




5. Choose the file press "OK" to play.




## Take picture of the face



Monitor




Remote control

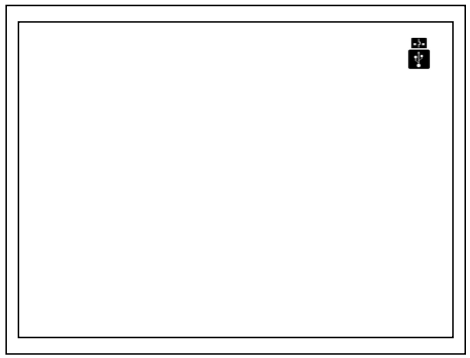
1. Press the " " button of the monitor or remote control to face camera.
2. Adjust the camera to suitable focal distance.
3. Press the " " button of the monitor or " " of remote control to capture.

## Power off the light of oral camera

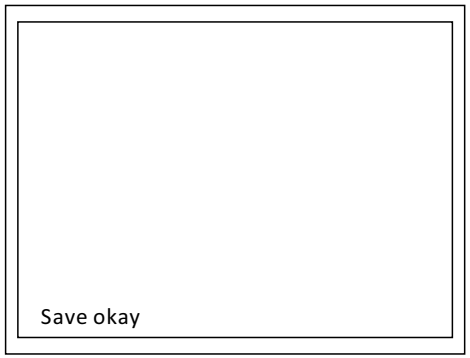


1. Put the oral camera into holder, The button toward the outside as the picture. The camera light will off.
2. Put the oral camera 10 minutes. The camera light will off.

## How to determine the U disk available



There is a USB icon at the top right of screen after plug in the U disk.
It means the U disk was recognized and works




There is a word “Save okay”flash at the bottom left of screen, when the picture save into U disk.

⚠ The picture can’t save if the U disk don’t plug in.

## Video recording

Video recording button




1. Adjust the monitor to oral camera or face camera mode.
2. Press the video recording button "□◁" to start.
3. There is a word "REC" at the top right of screen.
It means is recording.
4. Press the video recording button "□◁" again to end of the recording
5. There is a word “Save okay”flash at the bottom left of screen, when the video save into U disk.
6. The video recording will save into U disk automatically.

⚠ (The sound can’t be recorded)

### Playback

1. Adjust the monitor to oral camera mode.
2. Press the Page up or Page down button of the oral camera or the remote control button " ⬆ " " ⬇ ", find out the file which with “REC” word at the top right of screen.
Press the video recording button of the remote control to play.

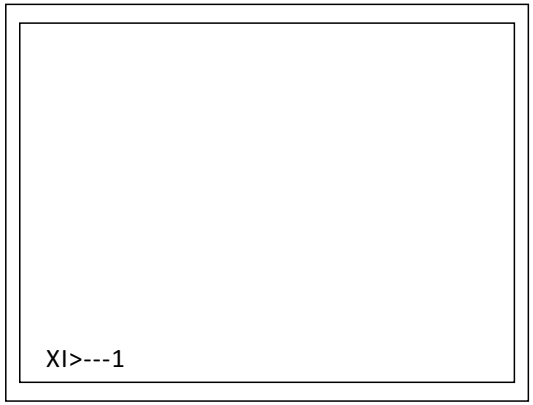
## How to zoom the picture

The picture can be zoom 1x to 4x before freeze or after capture




Zoom button

1. Adjust the monitor to oral camera mode.




2. Press the zoom button, the icons as below will be flash at the bottom left of screen.

XI>---1: Magnify 1 time.

XI>>--2: Magnify 2 times.

XI>>>-3: Magnify 3times.

XI>>>>4: Magnify 4 times.

Back to x1: Back to the original picture.