Digital Microscope AD206S Users Manual
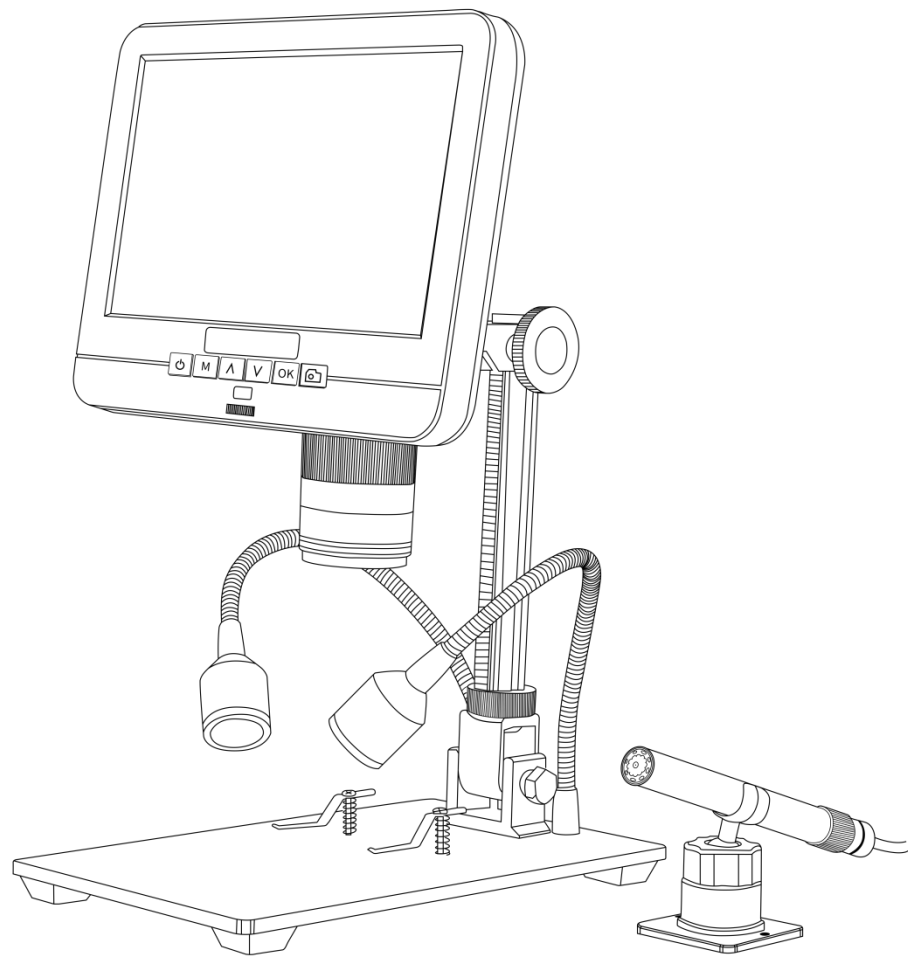
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Safety and Maintenance

1. Please read the manual before use to avoid damage to the device or other problems caused by non-compliance with the manual.
2. The product contains tiny parts and is not edible, please operate under the guidance of guardians or teachers to avoid accidental ingestion.
3. It is not recommended to use this product in outdoor operation. This product is not waterproof and cannot be exposed to extreme environments. Please store and operate in a scientific and safe environment, and refer to the preservation and care methods of general electronic equipment, such as laptop computers.
4. When the image quality is found to be degraded, the protective lens under the main body lens should be cleaned. Wipe carefully with a soft clean cotton cloth (such as glasses cloth) dampened with an appropriate amount of alcohol.
5. Keep the equipment in a clean and dry environment. Keep away from oil, water, gas and other materials that may cause corrosion.
6. The handicapped, sick or allergic people are not suitable to use this product.
7. If you need to wipe the microscope with a damp cotton cloth, please cut off the power first, and only gently wipe the insulated part of the microscope housing with a damp cloth. Please check whether the microscope has returned to dryness before turning on the power again.
8. This microscope is not intended to medical use.

Basic Parameters

Image sensor	2 Mega Pixels HD Sensor（Digital microscope)
	0.3 Mega Pixels HD Sensor(Endoscope)
Video output	FHD1920X1080 30FPS; 1080P 1440X1080 30FPS
	720P 1280X720 30FPS,
Video format	AVI
Magnification Ratio	Up to 50times
Photo resolution	Max 12M（4032x3024)
Photo format	JPG
Focus distance	2CM-17CM
Frame Rate	Max 30f/s
Storage	Micro-SD card, up to 32G(not included)
PC support	No
Power source	5V DC
Stand size	20cm*12cm*19cm
Screen size	7 inch
Packing data	32*22*10cm/1.5kg

What's in the box

BASE

OPTICAL BLACKET

REMOTE

ADAPTER

OPTICAL STACK

SWITCH CABLE

SCREWS &SCREWDRIVER
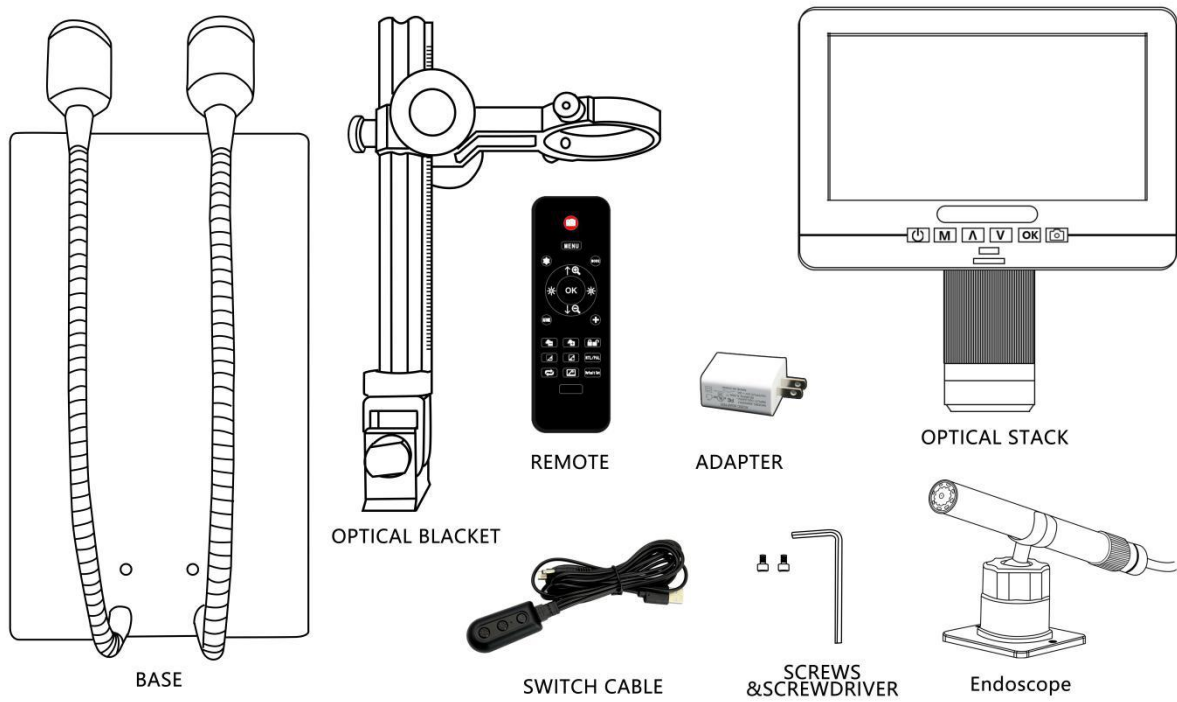
Endoscope

*(Figure1 What's in the box）*

① ② ③ ④ ⑤
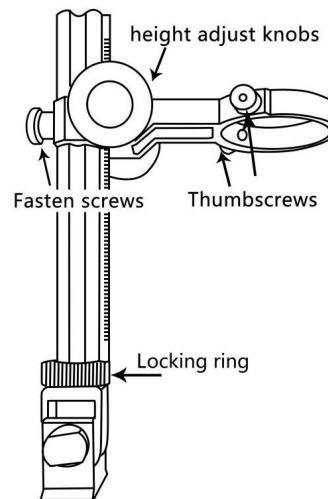
(Figure2 Endoscope accessories）

Note:

1. The UV filter and lens cover have been installed on the bottom of the focusing controller;
2. The clips should be installed on the metal base to fix the observed object(optional);
3. Instructions for use of endoscope accessories are as follows:

①White sleeve: It protects the endoscope when detecting the bottom of the slit, the depth of the pipe, and the scene where the endoscope needs to be placed in other objects. (This accessory is not waterproof and cannot be placed directly in the water).

②Black speculum: used to inspect holes with a diameter smaller than the endoscope diameter (12mm). Black material, the sensor will increase the image gain, can block external stray light, make the center of the picture brighter.

③Side-view mirror: used to observe the back or side of an object. For example, the inner wall of the pipe.

④Transparent sleeve: Used to fix the object distance when observing large area flat objects. For example: Observing circuit boards, coins, reading magnification, etc..

⑤White speculum: used to inspect holes with a diameter smaller than the endoscope diameter (12mm).

Installation tutorial

* Mounting bracket: Screw the optical bracket on to the base, referring figure3.
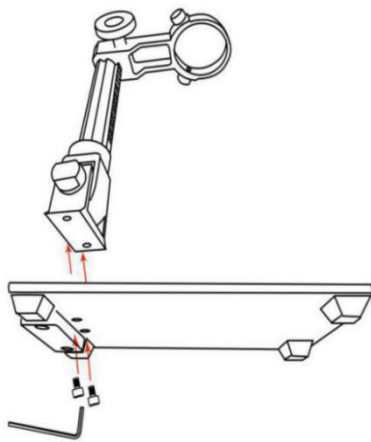
(Figure3 Mounting bracket)   *(Figure4   Bracket instructions)*

*Installation clips (optional)

1. Make sure that the direction of the clips correct before installation, as shown in the figure below,


(Figure5 Schematic diagram of clips installation)

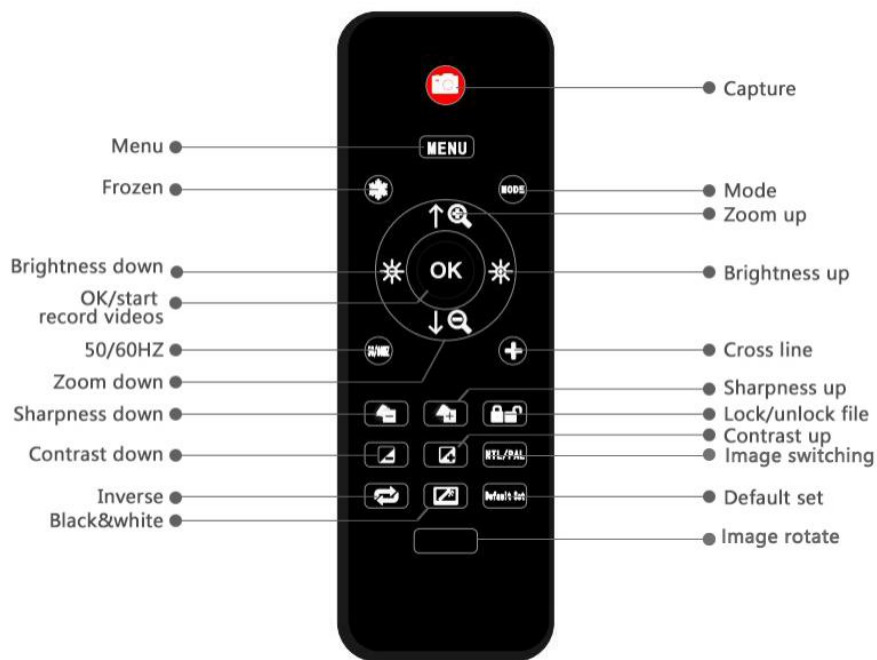2. Use a screwdriver to install it on the base.

3. The another clip is installed in the same way.

*Install main device: Loosen the small thumbscrews on the optical bracket. Then slide the optical stack in to the ring of the optical bracket.   Finally tighten the thumbscrews to hold the optical stack in place. If done correctly,   you should be able to not just turn the focus controller of the optical stack freely, but also freely adjust the monitor,   the angle between the base and the optical bracket,   while the rest of microscope remains in place.   If you have any question or problem for assembly,   please contact us as soon as possible,   so you won't damage the device during assembly.

*Connect the power supply: connect the microscope and the power supply with the switch cable. (See Figure 6)
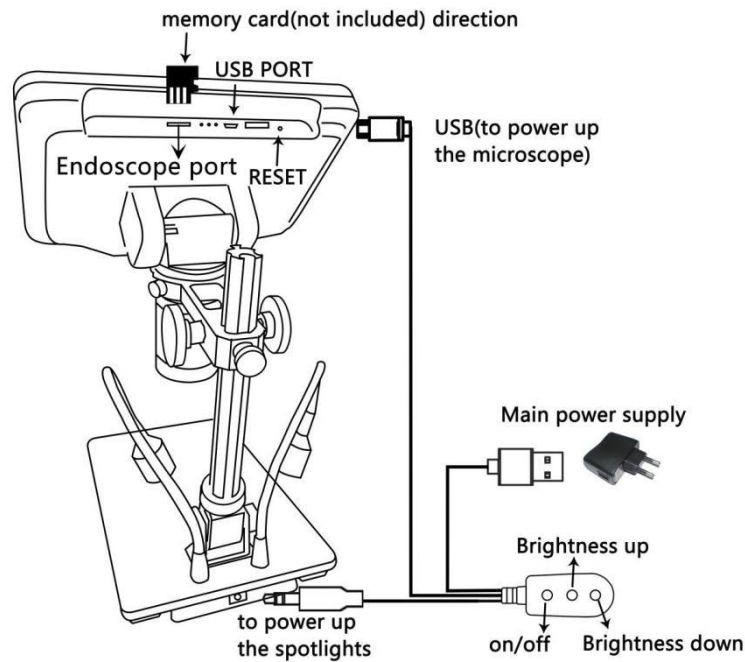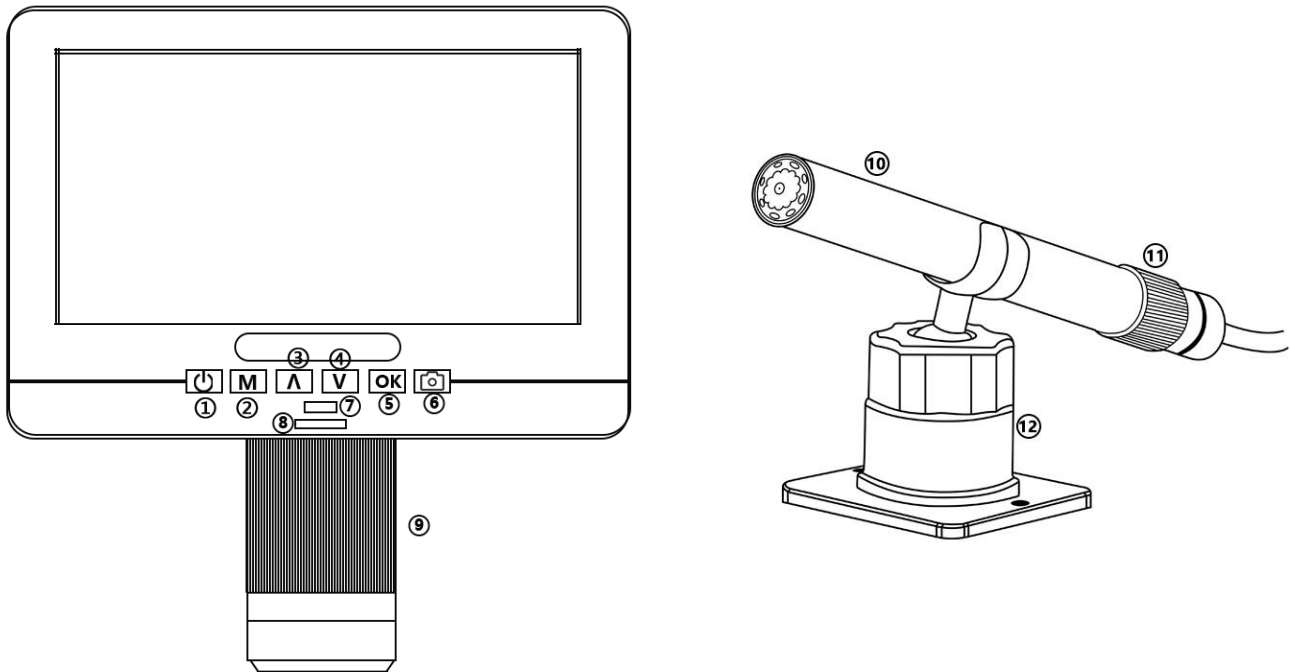

(Figure 6 Connect）

(Figure7 Remote buttons）

Buttons

(Figure 8 Buttons)

①Power on/off
②Mode/Menu
③Up
④Down（image switching）
⑤OK/Start video record
⑥Picture capture
⑦Infrared sensor (when you are using the

remote, please point the remote to this so the device would response)
⑧Light controller
⑨Focus controller
⑩Endoscope
⑪Focusing pulley
⑫Endoscope bracket

Quick start

Lightly press and hold the Power button (Figure 8/① or power button of the switch cable) underneath the display until the display turns on. (It may turn on automatically while connecting cables at the first time, and it's totally normal.)

*Troubleshooting

1. If the device is turned on and off repeatedly after starting up, please check if you press and hold the power button.

2. If the display freezes, locate the "reset " hole on the back of the monitor. Use a narrow object such as an unfolded paperclip to depress the button located inside. This resets all settings to their factory values and restarts the display. It does not erase saved images or video.

Image switching

When connecting the endoscope to the microscope, pay attention to the direction of the plug. Refer to the schematic diagram in Figure9:

Note: 1.After the endoscope is connected to the main device, please do not swing left or right to avoid poor contact of the endoscope; 2. The endoscope does not support functions such as remote control, capture, and video recording.

(Figure9 Schematic diagram of endoscope interface)

After the endoscope is connected, its image does not appear on the screen immediately. You need to press the "V" key (image switching key, Figure 8/④), the remote control "NTL/PAL" key has the same function).

The process of image switching is shown in Figure 10. Through the "V" key, the endoscope image can be switched: from small to full screen. If you don't need the endoscope image, you can continue to press the "V" key to switch to the microscope image or not connect to the endoscope.

Press the "V" key for the first time to achieve dual-screen display; press the "V" key for the second time to display the endoscope image; press "V" for the third time to switch to the microscope image.

(Figure10 Schematic diagram of the screen switching process)

Obtain the clear image

Use the object distance adjustment knob of the column to lift the microscope to the desired height. The shorter the object distance, the greater the magnification. Be careful not to let the bottom of the lens touch the observed object. (When adjusting the height of the microscope, you can properly adjust the positions of the two light sources on the base to achieve better results.) Then gently turn the focusing tube (Figure 8/⑨) to focus and obtain a clear picture.
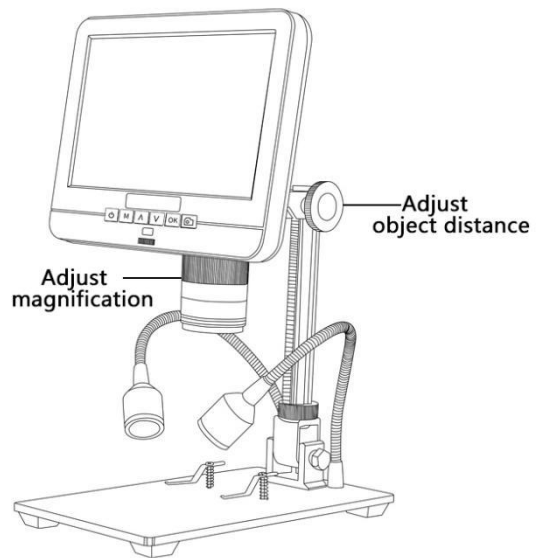
(Figure11 Schematic diagram of focusing)

Take pictures and videos recording

By using a Micro SD card (not provided), you can save images and videos to review later or export to a computer or other device .

Insert the Micro SD card in to the TF slot on top back of the monitor. (be careful with the direction. The side which has metal exposed should face down, refer to the figure 6) Push it in until you hear a click. (If you don't push it in far enough, it will be ejected.)

The Mode button(number ② from the figure "Buttons", marked with an "M") can be used to cycle between three modes: video standby (□◎), still image (◎), and review (▯▯). In video standby mode, there shows 'time' & '1080FHD'(white color font)at the top right of the display. The 'time' means how many time the rest storage of the card would allow you to record video. The'1080FHD' means the video resolution is 1080FHD in this mode.

To record videos

Press the OK button(Figure 8/⑤) briefly to begin recording. The elapsed time(red color font) in the recording will appear at the top right. To stop recording, hit the OK button again. The OK button on the remote has the same function.

To Capture pictures

There are two ways to capture pictures. In the recording video mode, press the Picture Capture button(Figure 8/⑥)(Marked with a camera) briefly to capture an image. In the still image mode, press 'OK' button to capture an image. The picture capture button and 'OK' button on the remote has the same function.

Note: You can't take pictures or videos in Preview mode

Reviewing and Managing Images

To review and manage images on the display, use the Mode button to select review mode. Use the Up and Down buttons to cycle through the pictures and videos.

To play a video, press the OK button to start play. Press the OK button again to pause. Press Mode button to stop playing the current video.

Hit the Mode button again to exit playback mode.

While reviewing a still image or video, the Menu button can be used to provide additional options. Press the Menu button and hold for a while till options show up.

Date and language settings

In any mode, press the M button and hold it for a while until the Video/Still/Playback Menu shows up on the display(Or you can press MENU button on the remote). Hit M button again, get into the general Setup Menu.

For example, if you are in Video standby mode, and you press MENU, this is the first menu would show, the "Video menu":

(Figure12 Video menu)

Then, press MENU button (or M on the monitor) again, you get into the Setup menu, like this:
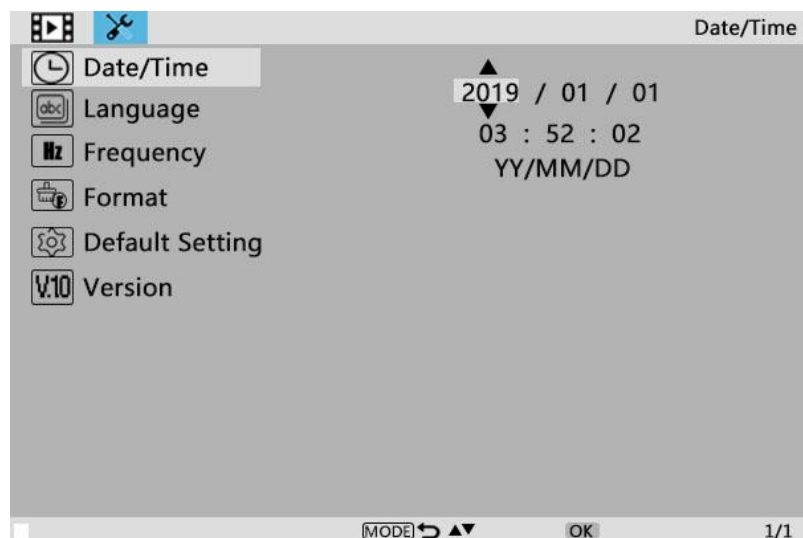
(Figure13 Settings menu)

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Date/time setting

Date/Time

Press "OK" into Date/time setting.　 Use "Up" and "Down" to select the correct number for year/month/day.　 Once you finish setting a number,　 press "OK" on the monitor to the next number. Or,　 you can use "Left" and "Right" on the remote to get to the one that you want.

Press "MENU" button **on the remote** to exit date/time setting directly.　 If you don't have the remote, you have to go through all over these settings one by one and then press OK again to exit.

Langue settings

English,　 Japanese,　 French ,　 Korean,　 Spanish,　 Portuguese are available to be set.

To save settings

After you set everything right,　 you should turn off the device by pressing ON/OFF button **on the monitor** and hold it until the device switching off.

If you turn off the device by pressing the button on the switch cable,　 or just simply cut off the power supply,　 the setting would not be saved.

Warranty Card

Warranty Card		
User's name：	Address：	
Phone number：	Post code：	email：
Model name：	Purchase date：	
Fault feedback：		
Date：	Fault：	
Notice：		
Our warranty doesn't cover:		
1　If users can not provide the purchase proof or the Warranty.		
2　If users use it in an improper environment,　 such as incompatible power supply, high temperature environment etc.		
3　If the fault caused by accident,　 oversight,　 misoperation or natural disasters etc.		
4　If the fault caused by people who are not belong to authorized organizations of our company during repacking,　 repair,　 dismantle,　 Or if users repack,　 repair or dismantle the device not following our advice.		
5　Out of warranty period.		