

CK350-M

User's manual



Trademark Acknowledgments

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Read This First

Equipment features

Non-contact body temperature measurement

Intended use

Early diagnosis of breast tumors, diagnosis of vascular disease and skin lesions disease.

Warnings

Read on to learn about using IR camera properly.

Do not disassemble

Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide

Stop operating immediately if it emits smoke or noxious fumes

Failure to do so may result in fire or electrical shock. Immediately turn the IR camera's power off, remove the IR camera battery or unplug the power cord from the power outlet. Confirm that smoke and fume emissions have ceased.

Stop operating immediately if it is dropped or the casing is damaged

Failure to do so may result in fire or electrical shock. Immediately turn the IR camera's power off, remove the IR camera battery or unplug the power cord from the power outlet.

Do not use substances containing alcohol, benzene, thinners or other flammable substances to clean or maintain the IR camera

The use of these substances may lead to fire.

Remove the power cord on a regular periodic basis and wipe away the

dust and dirt that collects on the plug, the exterior of the power outlet and the surrounding area

In dust, humid or greasy environments, the dust that collects around the plug over long periods of time may become saturated with humidity and short-circuit, leading to fire.

Do not handle the power cord if your hands are wet

Handling it with wet hands may lead to electrical shock. When unplugging the cord, ensure that you hold the solid portion of the plug. Pulling on the flexible portion of the cord may damage or expose the wire and insulation, creating the potential for fires and electrical shocks.

Use only the recommended power accessories

Use of power sources not expressly recommended for this IR camera may lead to overheating, distortion of the IR camera, fire, electrical shock or other hazards.

Electromagnetic interference

This camera is encapsulated with all-aluminum shell, can significantly mask potential electromagnetic interference.

Environmental protection

Please comply with the local laws about handling relevant packaging materials, waste electronic products and accessories, and support recovery operations.

Prevent Malfunction

Read on to learn about preventing malfunction of IR camera

Avoid damaging the detector of the IR camera

Warning: Do not aim the IR camera directly into the sun or at other intense heat source which could damage the detector of the IR camera.

Avoid Condensation Related Problems

Moving the IR camera rapidly between hot and cold temperatures may cause condensation (water droplets) to form on its external and internal surfaces. You can avoid this by placing the IR camera in the plastic case (bundle) and letting it adjust to temperature changes slowly before removing it from the case.

If Condensation Forms Inside the IR Camera

Stop using the camera immediately if you detect condensation. Continued use may damage the IR camera. Remove the PC card, and battery or a household power source, from the IR camera and wait until moisture evaporates completely before resuming use.

Extended Storage

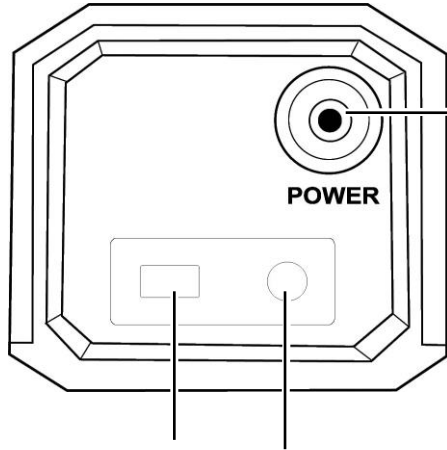
When not using the IR camera for extended periods of time, remove the battery from the IR camera or battery charger and store the IR camera in a safe place. Storing the IR camera for extended periods with battery installed will run down the battery.



Warranty and Technical Support

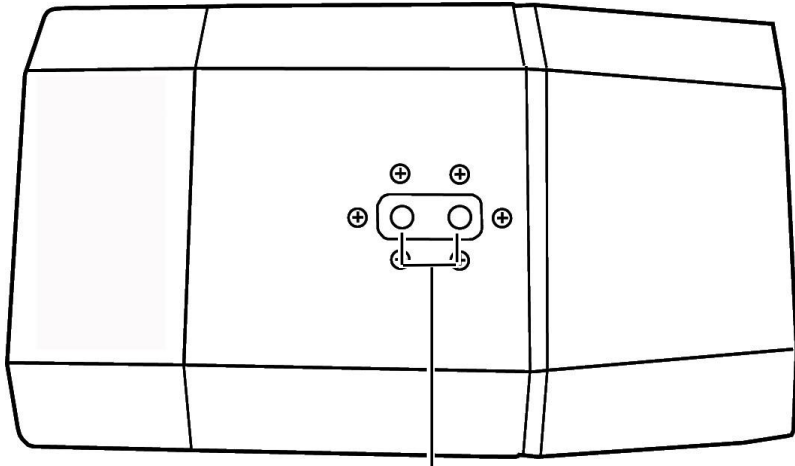
Warranty and other after-sales service, please refer to the warranty card supplied.

External Interface



When powered on, this light will be green.

USB interface Power interface





Screw

Nameplate

The logo for SATIR, featuring the letters 'S', 'A', 'T', 'I', and 'R' in a bold, blue, sans-serif font. The letter 'A' is stylized with a red swoosh that starts under the 'S' and curves under the 'A'.

Medical Thermal camera

Type : CK350-M  

SN:350000** Manufacture Date: YYYY.MM

Manufacturer: SATIR Europe (Ireland) Co. Ltd.

Specifications:


Detector Type: UFPA


Resolution: 384 X 288

Rated Voltage: 220V 50Hz

Rated Power: 12VA

Symbol Description:

: Class II equipment

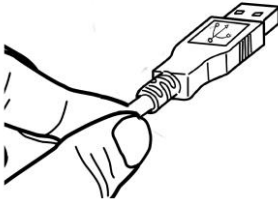
: Attention! Please refer to the file supplied.

Connection

Connecting to a computer

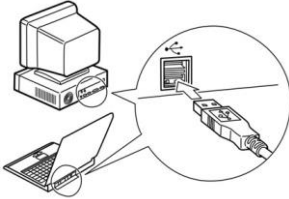
Connect the USB cable (supplied) to the computer's USB port and the camera's terminal.

1



Attach USB cable to the USB out on the IR camera.

2



Plug the other end of the USB cable to the USB in jack on the computer.



The supplied USB cables at both ends are standard USB interfaces.

Connection

Installing the driver

Attach the supplied USB cable (supplied) to the computer's USB port and the camera's USB terminal. Set the SAT solution disk (supplied) to the CD-ROM driver.



Users of Windows XP Professional / Windows 2000 must first log in as an Administrator (computer system administrator) to install programs.

1



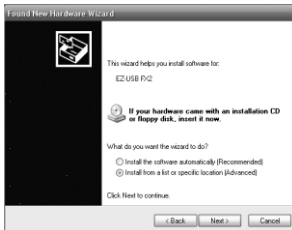
After a few moments, the following dialog will appear.

2



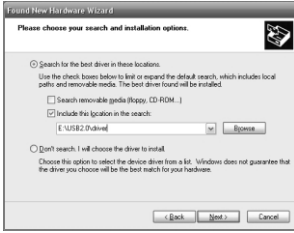
Select [**No, not this time**] then click [**Next >**].

3



Select [**Install from a list or location (Advanced)**] then click [**Next >**].

4



Select **[Include this location in the search:]** then click **[browse]**. Locate the directory of the driver, and click **[OK]** to return to the previous window. Then click **[Next >]**.

5



Click **[Continue Anyway]**.

6



Click **[Finish]** to finish the driver installation.

Troubleshooting

Problem	Cause	Solution
Camera can't be operated	Power is not turned on	• Turn on the camera.
	Power is not connected	• Connect the power to correct voltage socket
	Still can't be operated	• Connect the support department
Camera can't display	Computer is not connected	• connect the computer and camera with USB
	Camera can't be identified	• Re-install the driver • Make sure the camera is lighting

First, check the following

1. Does your computer comply with these requirements?
Ensure the system has a built-in USB port and it comes with Windows 98 (First or Second Edition), Windows Me, Windows 2000, or Windows XP preinstalled.
The USB interface is not supported for systems not complying with the above conditions.
2. Is the camera correctly connected to the computer?
See *Page 7* for connection instructions.
3. Is the battery charged sufficiently?
You should use a household power source to power the camera when it is connected to a computer.

• If the Problem Is Not Mentioned Above

If the USB Driver is not correctly installed, it is possible that Windows is not recognizing the USB Driver. Please contact your motherboard's manufacturer for more information about USB connection.

Attachment

Packing List	
Project	Quantity
Thermal camera	1
10V 2.5A power adapters	1
5m double-headed USB cable	1
Calibration report	1
Users' manual	1
CD-ROM for Software (With a dongle)	1
Warranty card	1
Certificate of approval	1

CD-ROM
SatlrReport software
Interface driver for USB2.0
Dataload.bin
Users' manual

Specification

Product Name	Medical infrared thermal camera
Product Model	CK350-M
Image performance	
Detector type	UFPA
Resolution	384×288
Spectral range	8~14 μm
Thermal sensitivity	≤50mK@30°C
FOV /Min. focus distance	24°×18°/0.3m
Spatial resolution	1.09mrad
Measurement range	0°C to 60°C
Accuracy	±0.5°C
Focus	Software control
Image display	
Image transformation	USB2.0 output
Refresh Rate	25Hz
Single image/Real-time recording	YES, software control
Work environment	
Power supply	12VDC
Consumption	≤5W
Operating temperature	0°C to 50°C
Storage temperature	-40°C to 70°C
Humidity	≤95%, non-condensing
Physical characteristic	
Size	200mm×110mm×100mm
Weight	1000g
Interface	
USB2.0	Video real-time outputting

Screw type	1/4" _20
Safety Features	
Classified by type of protection against electric shock	Class II with internal power supply.
Classified by type of protection against electric shock	No Application Part .
classified by level of protection from inner liquid	Ordinary equipment.
classified by security level of using when air or nitrous oxide mixed with flammable anesthetic gas	Not AP / APG type.
Classified by operating mode	Continuous operation

Manufacturer Information

SATIR Europe (Ireland) Co. Ltd

Marley's Business Park

Marley's Lane

Drogheda

Co. Louth

Ireland

TEL: +353 (0)41 9844371

URL: www.satir.com

E-Mail: service@satir.com