

User Guide of Vividia M256Pro Automatic Dual-Camera Thermal Screening System with Intelligent Face-Scan Software



Vividia M256Pro (i.e. FS256Pro) automatic dual-camera thermal body temperature screening system can do continuous capture of infrared temperature and visual image in densely populated places. M256Pro adopts advanced AI face recognition technology and reliable infrared temperature measurement algorithm and acquires the temperature through non-contact method at four meters at most. Once the camera detects over alarming level temperature target(s), the screen system will alarm automatically and store the photo.

Areas of application

This product is suitable for public places and densely populated places, like airports, stations, factories, schools, hospitals, office building, shopping centers etc.

Product specification

Vividia M256Pro Automatic Dual-Camera Human Body Temperature Thermal Screening System	
Product model	M256PRO (i.e. FS256Pro)
Infrared part	
Resolution	256*192
Pixel size	12μm
NTED	≤50mK
Frame rate	25hz
Focal length	3.2mm
Field angle	56°*42°
F#	1.1
Visible part	
Resolution	1280*720
Field angle	FOV 80°
Focal length	4.4mm
Accuracy of temperature measurement	
Measuring range	30~45°C
Accuracy of measuring temperature	±0.5°C (Environment temperature 10°C~40°C)
Temperature measurement range	≤4m
Machine interface	
Machine interface	HDMI
Power	
Power input	AC100-240V 50/60Hz 0.5A
Power output	DC5V 3A
Software function	
High temperature alarm	High-temperature alarm and image capture
File export	Support history inquiry, screening and export to local disk
Live preview	Live preview of visible and infrared image
Face recognition	Intelligent face recognition and tracking
Parameter setting	Pseudo-color selection, alarm, language and correction value setting
Environmental suitability	
Working temperature	10~50°C (Environment temperature 10~40°C accurate temperature measurement)
Storage temperature	-20~60°C
Packing specification	
Machine head size	190mm*110mm*100mm
Packing size	394*194*153mm
Net weight	1420g (the actual shipment shall prevail)

Gross weight	1784g (the actual shipment shall prevail)
Tripod size	Folding size: 540mm Unfold height: 1560mm

Table 1 product specification

* Technical parameters are for reference only. If small changes won't be further notified.

■ Assembly list

No.	Type	Parts name	Quantity	Position in picture
1	Dual-Camera Device	Double lens thermal camera	1	①
2	Power adapter	Power adapter (5V 3A)	1	②
3	Small PC box set	PC box	1	③
4		Remote control for PC box	1	③
5		HDMI cable	1	③
6	Assembly parts	Tripod screw	1	
7		L type wrench	1	
8	Tripod (optional)	Tripod	1	

Table 2 components list



Fig. 1 packaging

■ Installation and connection procedure method

Please assemble all parts according to the following.



Fig. 2 PC-box and interface



Fig. 3 dual-lens camera and cables

(1) Please install the dual-lens camera on an appropriate stand, for instance, on a tripod. Adjust the camera to face the monitoring crowd lane and be at the same level with people's height. Deviation between the camera and the people lane, as well as height deviation will impact the accuracy and effectiveness of the screening.

(2) Behind the camera, there are two USB cables, one is double-end visible device connecting cable (cable 1), and the other is single-end infrared thermal imaging device connecting cable (cable 2). Please insert the two cables into USB interfaces in the back and on the side of Android PC box (USB port, 1, USB port, 2).

- (3) Please connect one end of HDMI cable to Android PC box (HDMI interface, A), and the other to a television monitor with audio functions.
- (4) Insert the power supply cord to the Android PC box (round interface, B), wait for starting up and enter the main user interface.
- (5) To use the software normally, please connect the PC box to the Internet in the following process:
 - a) Open the back cover of the remote control of Android PC box, and put two triple-A batteries in
 - b) Click "homepage ", use the direction key to select "setting", select and click Wi-Fi button in the menu
 - c) Choose your Wi-Fi and enter password, and the Android PC box will get time information automatically after being connected to Wi-Fi.

■ Software use instructions

(1) Open the software

The software will run automatically after the Android PC box is powered on, and you can also choose to enter M256Pro app through remote control. When first using the Android PC box or re-installing app, the app needs to re-enter permission code. In such a situation, you cannot enter the app automatically, please select M256Pro manually or allow app to access permission.

(2) Software interface

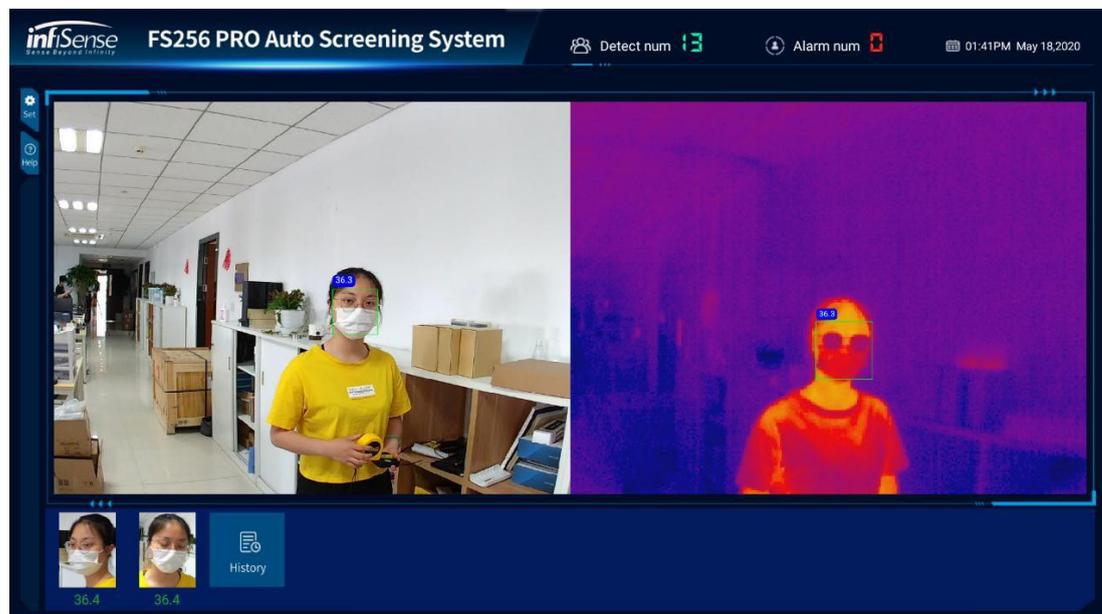


Fig. 4 software interface

Name of the software is displayed on the upper left, while the stream of people (including total number of people screened and alarm times) and time information are displayed on the right. Setting and help buttons are on the lower left of the interface, visible HD image is on the left of the middle of window, infrared real-time frame is on the right of the middle of window, recently examined people and temperature are displayed at the bottom of the screen.

Detailed image-text is as follows:

a) Visible HD image

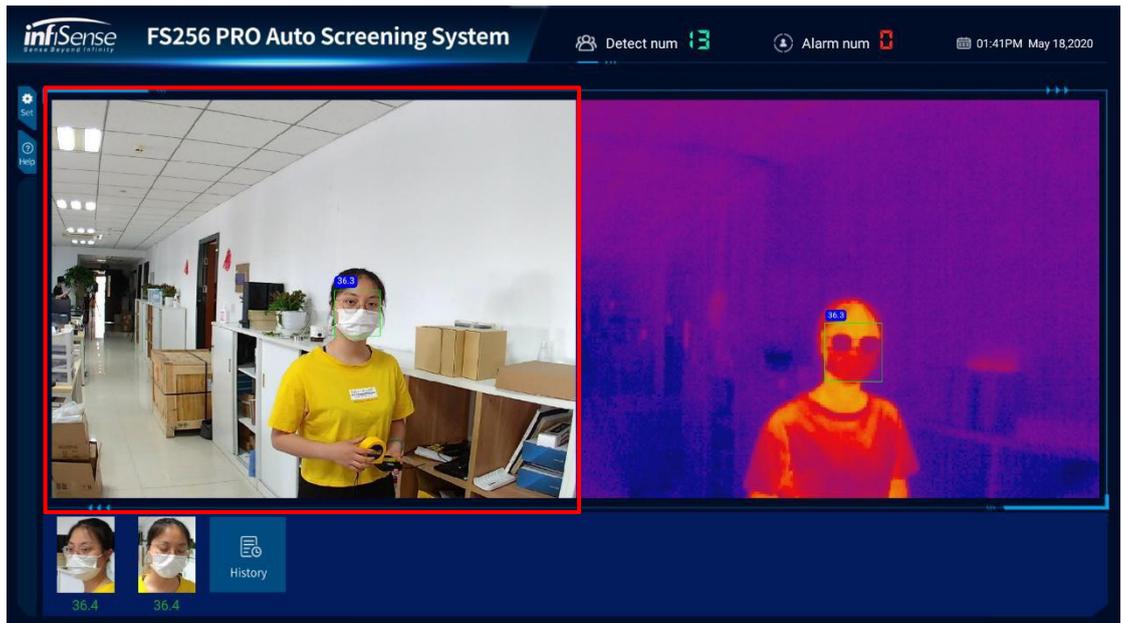


Fig. 5 main interface of the software - visible image area

On the left of the screen, it is the real-time visible image, and the software will distinguish and outline the human face. When the human face is within the infrared image observation range, real-time temperature measured will be displayed on the screen. The software supports multi-face recognition and display (10 faces at most).

b) Infrared image display

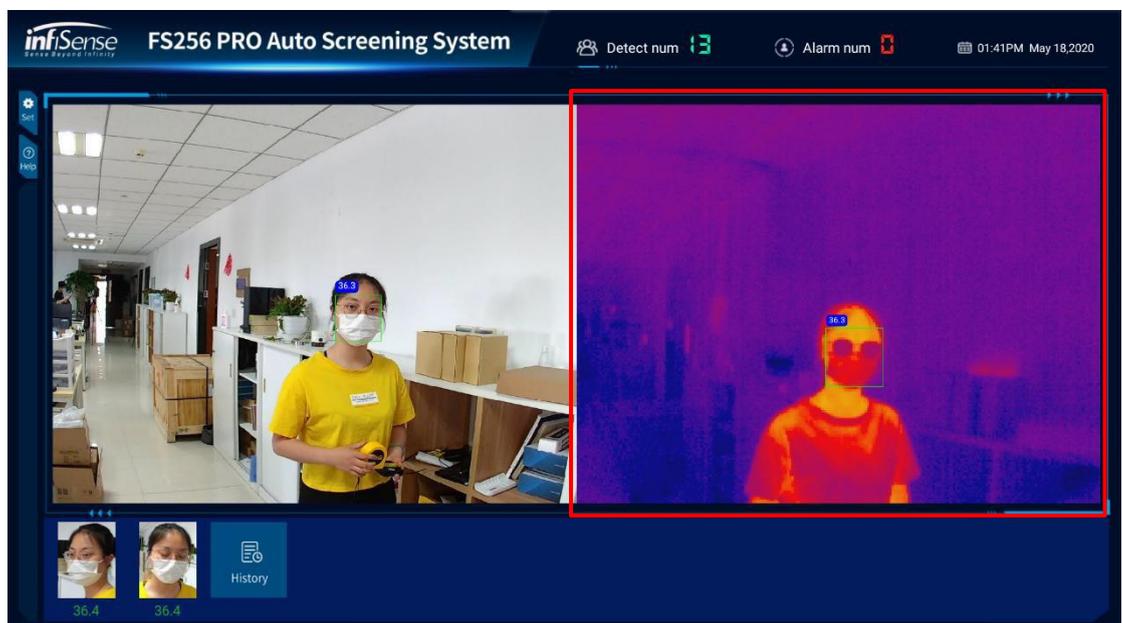


Fig. 6 main interface of the software - infrared image area

On the right of the screen, it is the real-time infrared image, displaying the

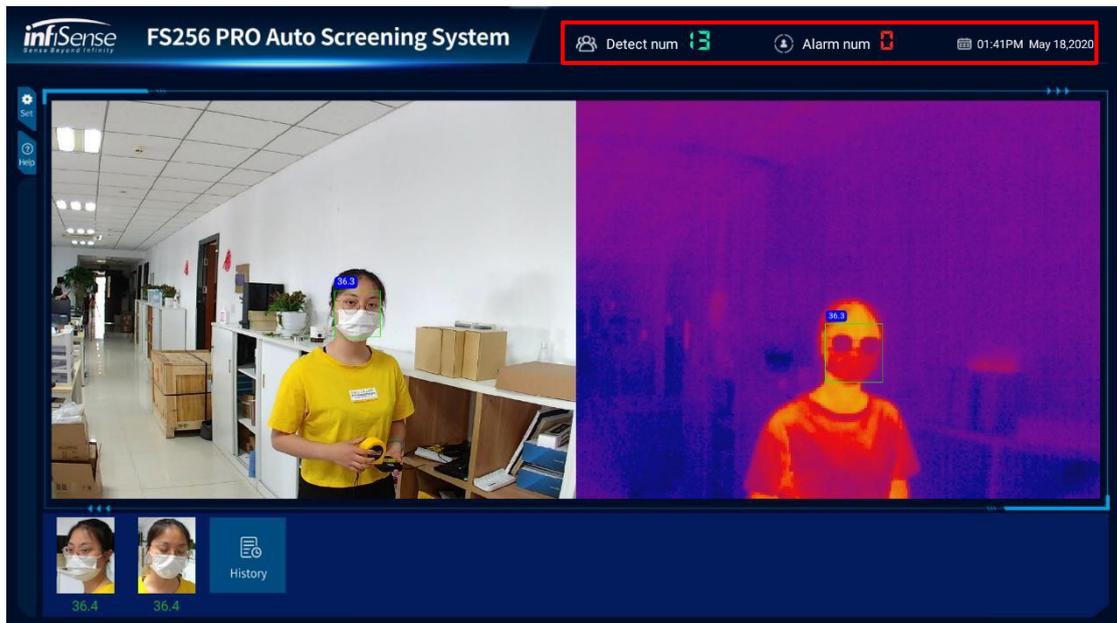


Fig. 7 main interface of the software - information of stream of people detected

infrared image and corresponding temperature reading of the detected human face.

Display of the information of stream of people detected

On the upper right of the interface, "Detect num" shows the total number of people detected by the software today, "Alarm num" means the number of people of abnormal temperature, and "keypad" icon button shows the current date and time (it can only be acquired at real time through the Internet).

c) History

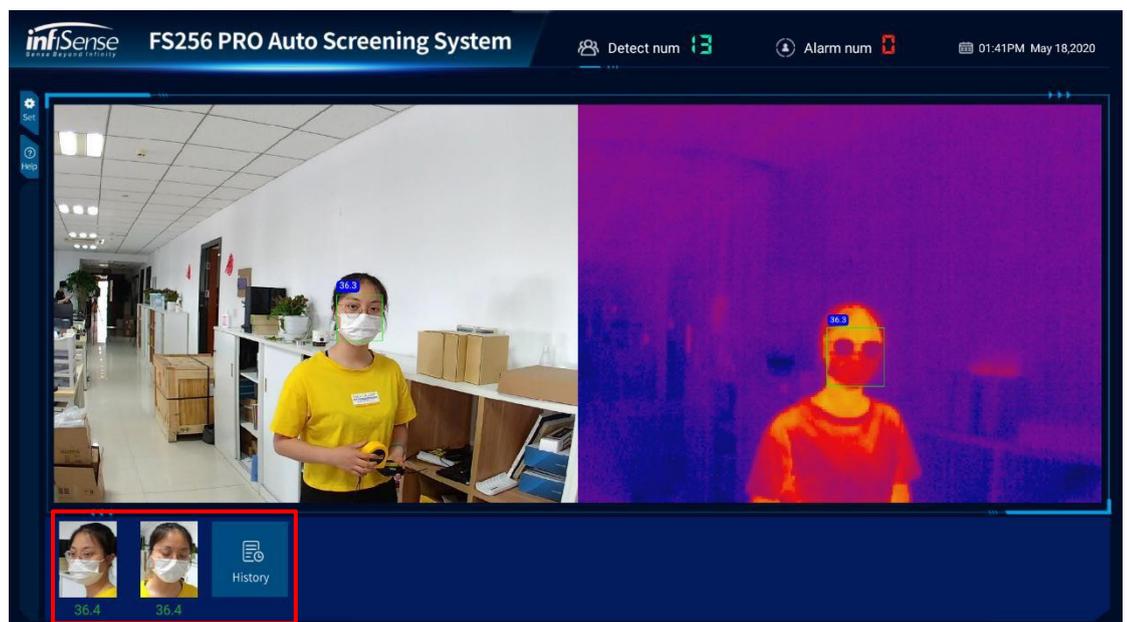


Fig. 8 main interface of the software - history area

Below the main interface, passery and recorded images and their highest temperature will be displayed. Click mouse button to enter the mouse mode, move the mouse to "history" and

press "OK" on the remote control to enter the history.interface, where all images recorded will be displayed. Those in green background box are with normal temperature, while those in red are with abnormal temperature.

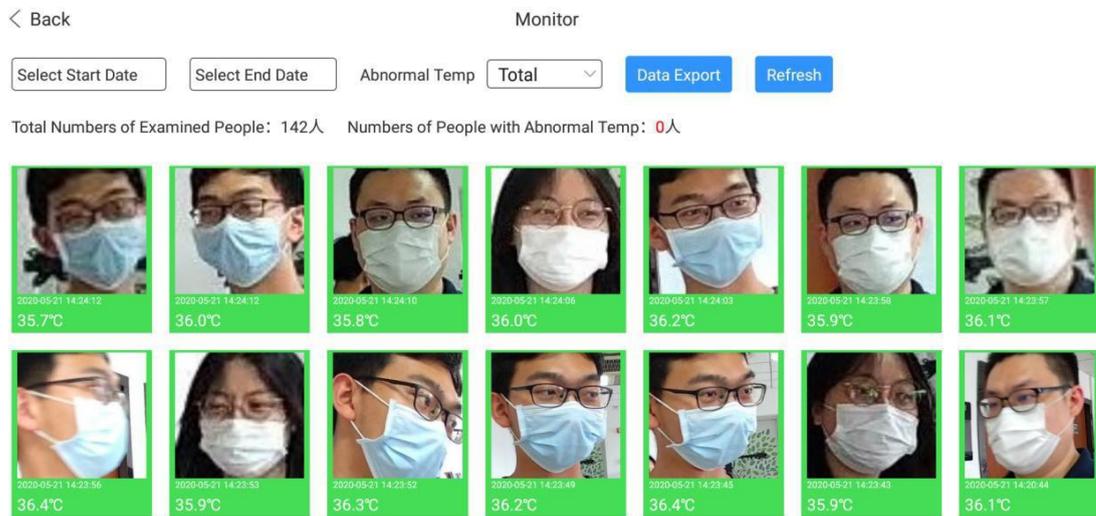


Fig. 9 history interface

Start date and end date for display can be selected through Select Start Date and Select End Date. In the drop-down menu of abnormal temp, three display modes can be selected: total, normal or abnormal. Click Data export to export all records, and export results are placed in FS256_export file folder.

d) Parameter setting

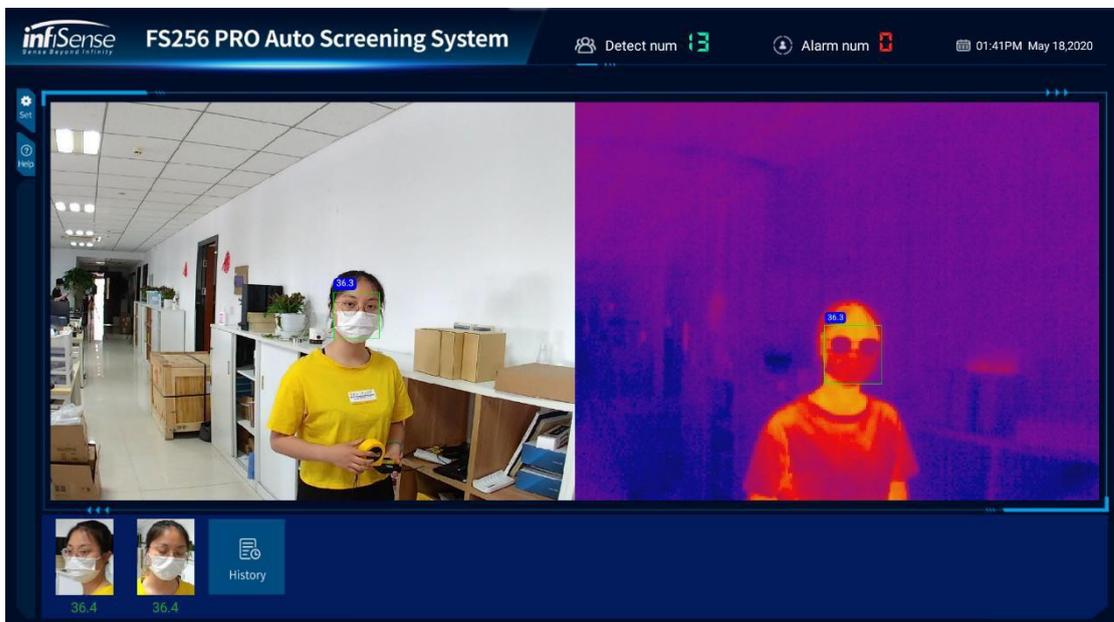


Fig. 10 main interface of the software - setting

Click "Set" button on the left, "setting interface" will pop up. The setting interface includes two parts, infrared image setting and system setting.

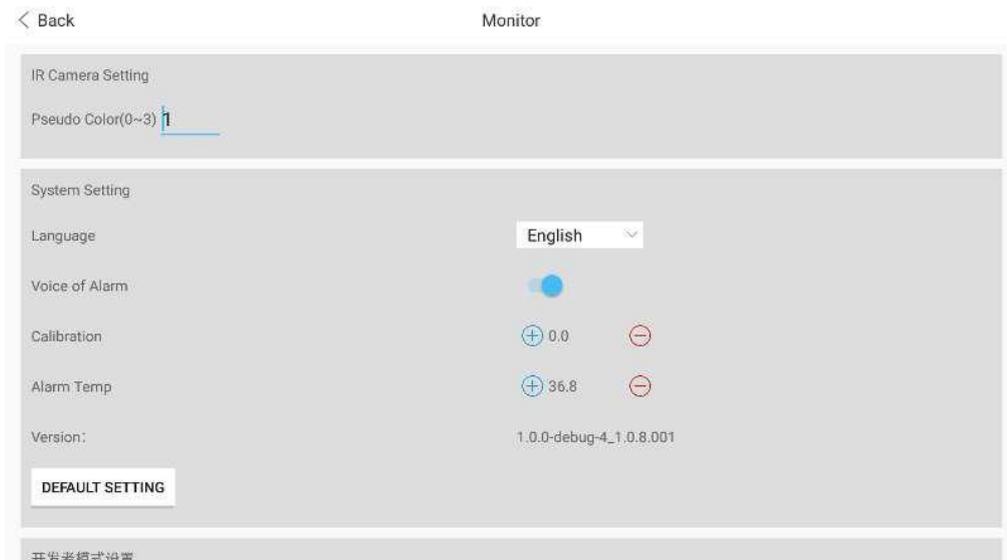


Fig. 11 software setting page

List of detailed functions is as below:

Category	No.	Setting	Description	Min	Max
IR Camera Setting	1	Pseudo Color	Customized as pseudo-color, it has four modes, the default is 1, infrared mode	0	3
System Setting	2	Language	Language setting, Chinese / English		
	3	Voice of Alarm	Open the alarm sound or not		
	4	Calibration	Calibration value, for compensating the great difference between the temperature measurement and actual conditions, unit: Celsius degree, taking 0.1 as the step length	-5.0	5.0
	5	Alarm Temp	Alarm value, set alarm threshold, and it will alarm once the temperature is over this value	36.0	38.0

Table 3 Setting description

e) Help button

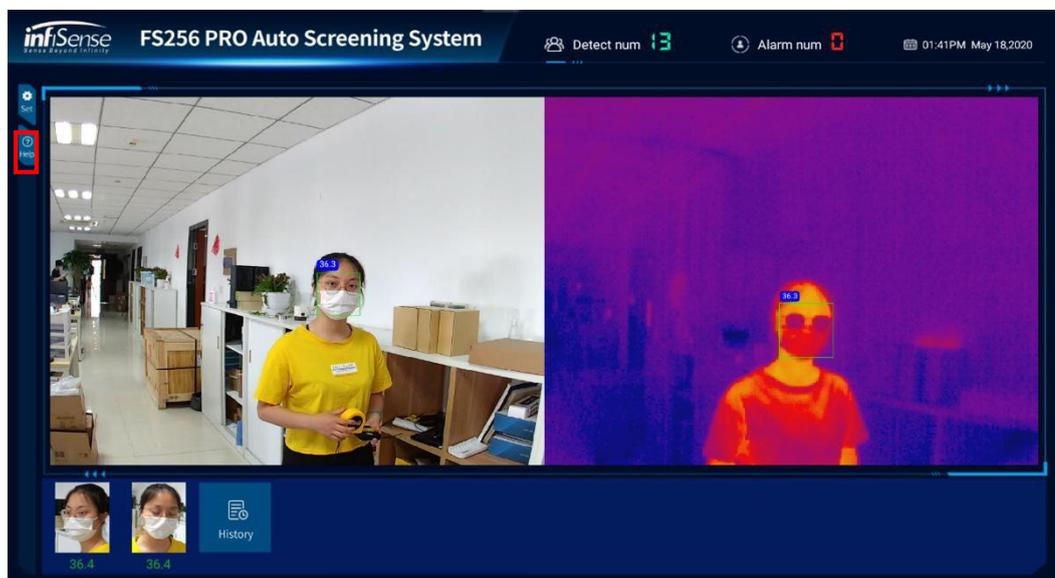


Fig. 12 main interface of the software - help area

Click the help button, and it will display the help page. Please debug the software by yourself according to the guideline.

■ Points for attention

- (1) Please do use the self-contained power adapter for power supply, to guarantee personal safety and product life.
- (2) Please do not put the product in a humid place or wash it, to avoid leakage of electricity or short circuit.
- (3) Please do not remove parts arbitrarily, which may result in equipment failure or safety accidents.
- (4) When the machine is not used for a long term, please put it away and keep it in a dry environment.

Vividia Technologies

3110 Wade Hampton Blvd. Suite #18
Taylors, SC 29687

Tel: 864-469-0919
info@oasisscientific.com