
Vtop

100A

Vtop100A

The Ear Impression
3D Scanner
Instruction Manual

Ver1.2

incorrect tampering or changes to the software or hardware can cause functional faults in the system. This may cause personal injury and/or damage to equipment. Opening or removing device cladding and installation of third party software is therefore not permitted. The problems caused by those activities are out of after-sales service scope.

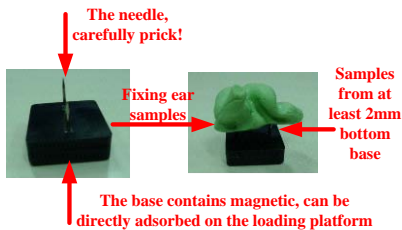
This instrument is used only for ear impression scanning purposes. The aim is to produce 3D data of 360 degrees on hard disk. While scanning, the impression scanner does not touch a person and is no harm to the body. Users should NOT stare at the light source.

Modifications or upgrades on the system must be done in compliance with all legally binding regulations by the manufacturer or by other authorized personnel.

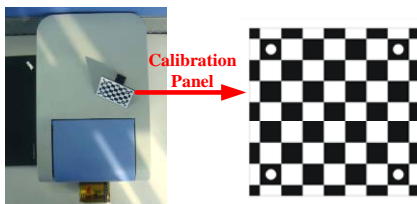
1.3 System Components

The Vtop100A System consists of:

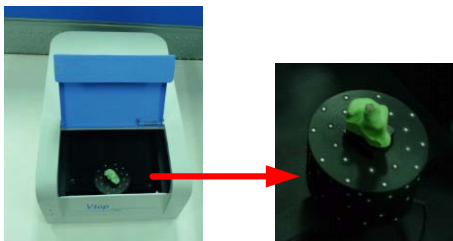
- 1 light source
- 2 cameras
- 1 ear impression holder



- 1 calibration board



- 1 scanning chamber with turntable



If you lift the opening cover of the Vtop100A, the scanning chamber is visible. It contains the powered turntable, that can rotate through 360 degrees. Additionally, it can also be tilted up and down in the direction of the camera so that the ear impression can be scanned completely.

There are 2 status LED at the front panel. If the Vtop100A is switched on, the red LED lights up that means power on. During scanning the green LED lights up that means the system is gathering the data.



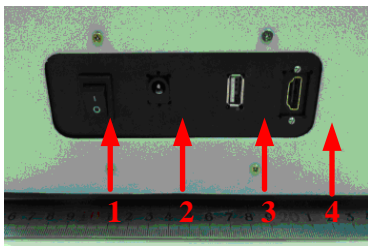
1.4 Hardware Installation

- System Requirements

	Minimum Requirement	Recommend Requirement
O.S.	Win2000, WinXp	WinXp, Win7
CPU	Intel Core series	Intel i3
Memory	2G	3G
Free Disk Space	100G	250G
Display	1024*768 32Bit	1024*768 32Bit
Interface	USB2.0	USB2.0
Display Interface	HDMI DVI	HDMI

- Cable Connection

On the back of the Vtop100A you will find the following connectors:



- 1.the power switch for turning the Vtop100A on or off
- 2.the connection for the power cable
- 3.USB 2.0 port for connecting to the computer
- 4.HDMI port for connecting to the computer

1.5 Tips for scanning

1.For a better calibration result,DO NOT TOUCH the calibration board with bare hand.Always keep the calibration board clean.

2.Before scanning,clean off the dust and dirt on the surface of ear impression to get more accurate data.

3.Make sure the ear impression holder placed on the turntable smooth and steady.

4.When putting the ear impression on the holder,leave 2mm margin up to the holder to get more comprehensive data.

2 Software Guide

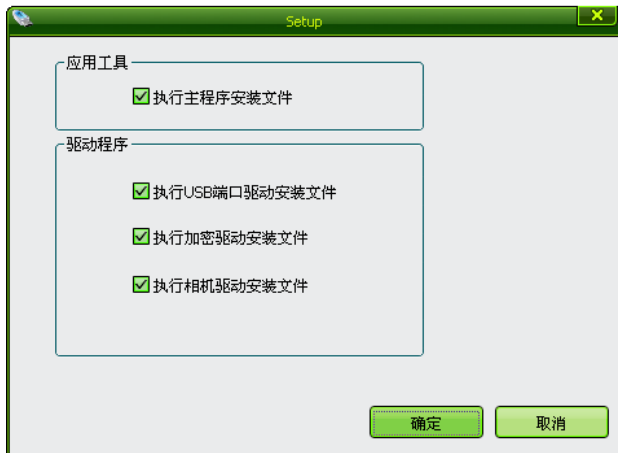
2.1 Software Installation

Follow these steps to install the scanner software, connect the data cable before installing, find the necessary software Setup.exe in the CD-ROM.

Installation, follow these steps:

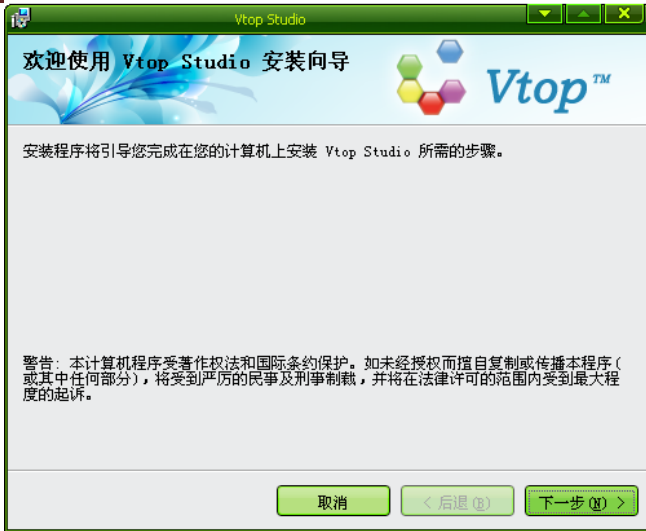
Install the main scanning system software packages

1、Click on the installation file “Setup.exe”. The following interface:



Select all the OK button to start the installation files (recommended to install the default location)

2, To confirm Vtop main program installation, select the next step



3. Confirm the installation agreement, choose the next step



4. Select the default installation folder. Do the next step,



5、Make sure to perform the installation, and complete the installation of the main scanning system software,





6、Complete the installation of Vtop studio.



To install the dongle driver software (Note: Vtop100A, the dongle must be put into your computer USB interface)

- 1、The dongle installer window will appear after installation of

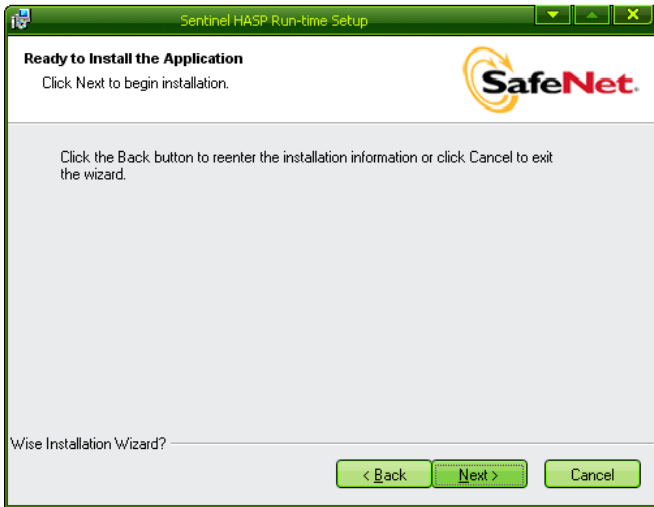
Vtop studio.



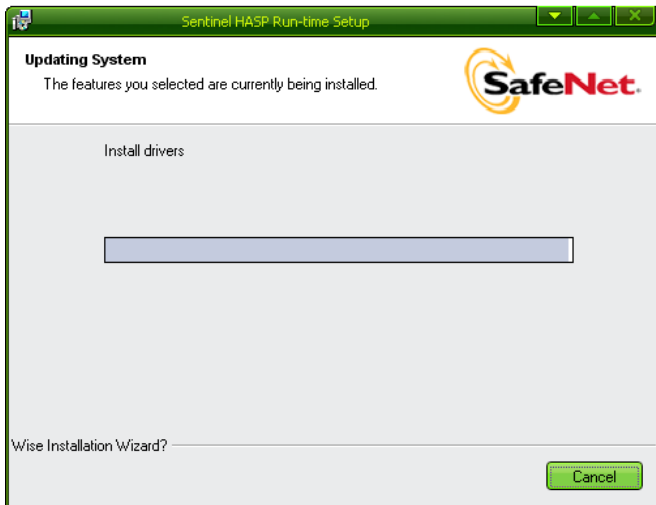
- 2、Accept the installation permit, and select Next installation,



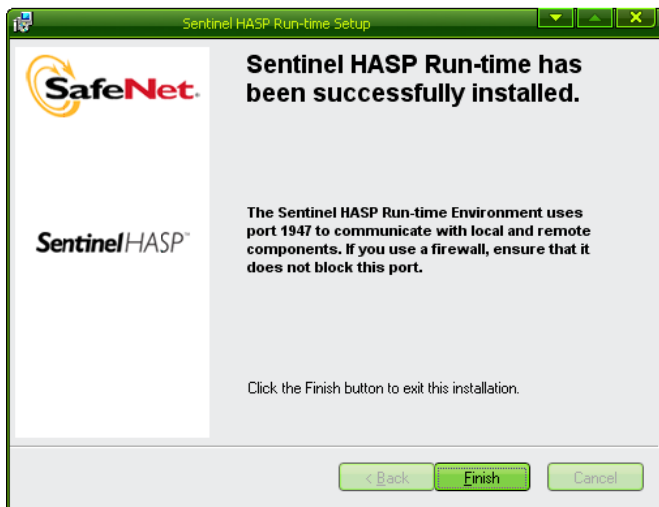
3、 Click the Next button to confirm the installation.



4、 Displays the installation progress



5、Two minutes later, the dongle driver installation will complete, then click Finish button,



6、Final confirmation that all the device's software are completed.



Video output expansion set

1、click right button on the operating system desktop, select the screen resolution menu;



2、Screen resolution adjustment process, as shown



Selected in the display, change the display of the currently selected, as shown,



In the multi-display drop-down menu, select the expansion of these, as shown



Selected, click on the Apply button of the bottom right of the window,

as



shown

Choose to retain change the settings, as shown

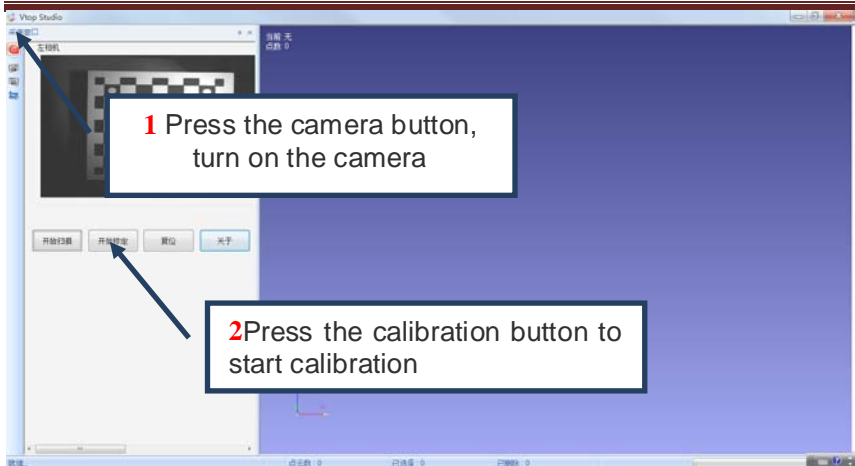


Monitor extended desktop setup is successful, complete the video output settings, as shown

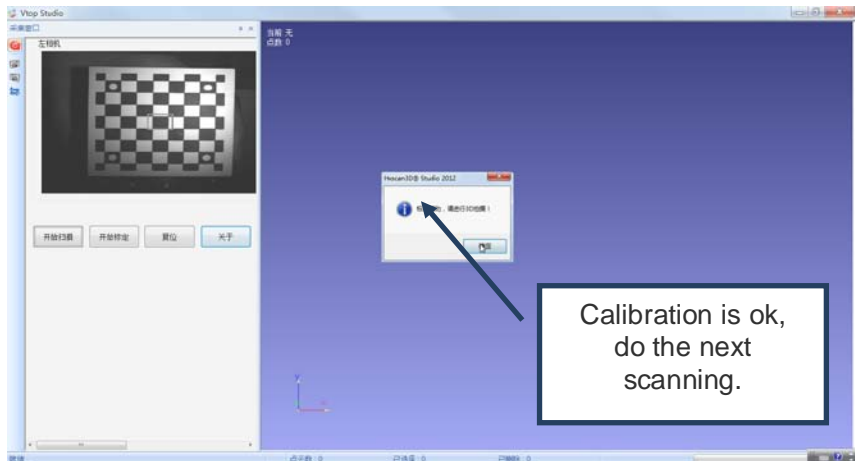


2.2 Software operation

1、The system accuracy calibration: Please put calibration plate into the working compartment. The checkerboard positive toward the scanning light source and camera, first press the camera switch button, open the acquisition camera and left the camera in the software display the following window styles, you can see the calibration board.and press the calibration button:



After the success Calibration, as follows:

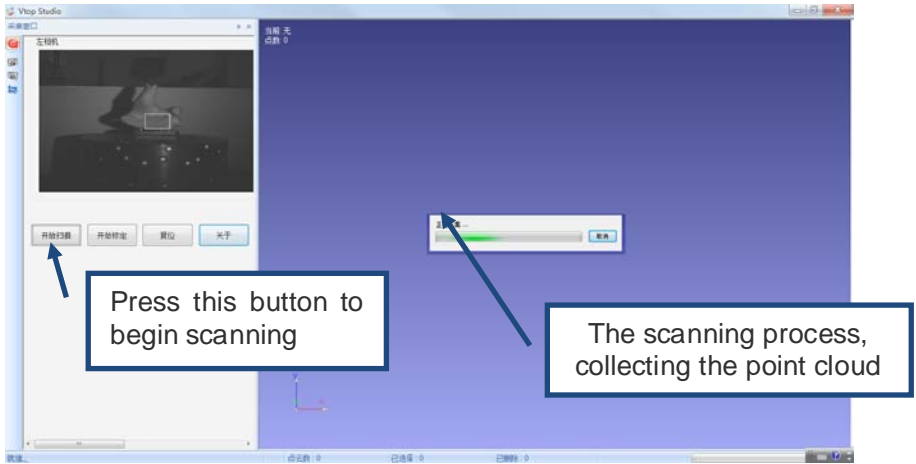


Note: If the calibration did not succeed, mainly due to calibration of the initial position is not placed properly, please re-adjust the position of the calibration board, re-calibration.

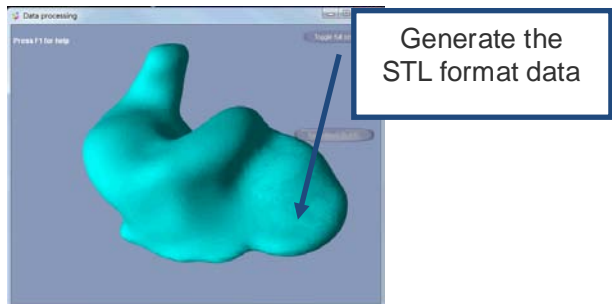
o

2、Ear molds scan: ear molds aer put into working positions,

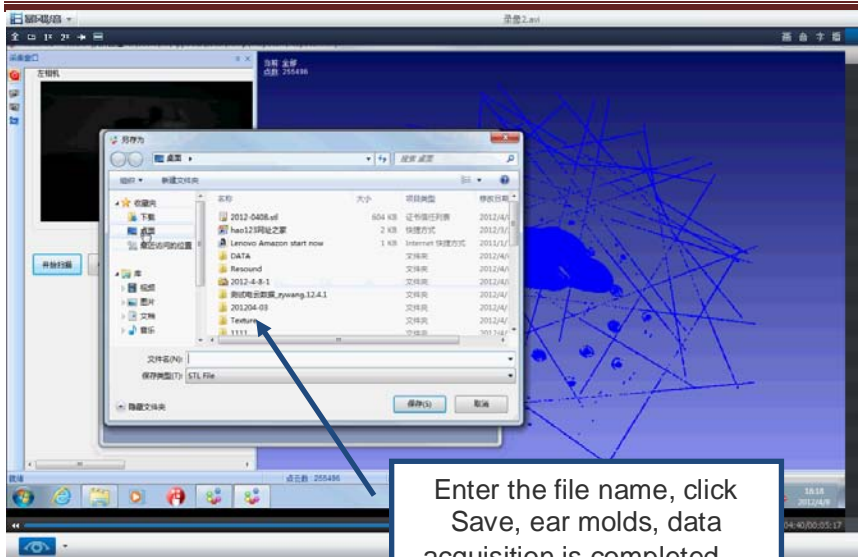
close the cover, click on the software scan button to scan:



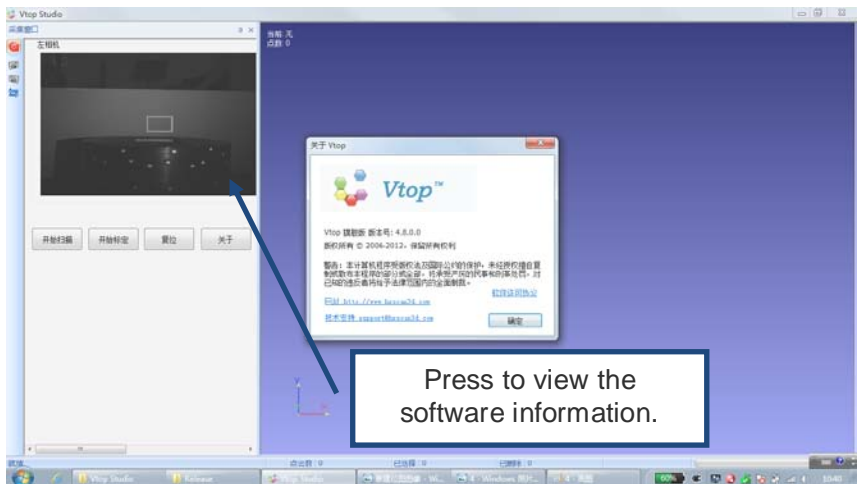
After three minutes, the scan is completed, the system automatically completes the point clouds, and produce ear molds STL surface model:



Click model to display the "Save As" window, custom file names in STL format files, an ear mold has been scanned over.



3、 Software help and copyright:



3 Service and Technical Data

3.1 Maintenance

Before service, cleaning, or disinfection, the Vtop100A system must be disconnected from the power supply and switched off.

Make sure the opening cover is closed whenever Vtop100A is not in use, to protect the turntable and the camera lens out of dust in order to prolong service life.

All parts that come into contact with objects under examination must be cleaned and disinfected regularly, especially for the scanning chamber, the turntable and the ear impression holder. DO NOT TOUCH the highly sensitive parts such as the camera and projector inside the scanning chamber.

3.2 Q&A

Q: How to deal with calibration failure?

A: The main reason for calibration failure is wrong initial position of the calibration board. If calibration failure occurred, please replace the calibration board and recalibrate.

Q:How to deal with joining failure?

A:When it comes to alignment failure,it's always related to wrong calibration.Recalibration and have another scan.

Q: After the software installation has finished,I can not run the software.

A: Please check the following items:

- a)Whether the hardware of your computer meet the min requirement of the system.
- b)Whether your O.S. of your computer meet the min requirement of the system.
- c)Whether the USB driver works correctly.

For further support,please contact your manufacturer.

3.3 Technical Data

Unit: mm

