## Start the software and get the camera recognized, but the preview is all black.

A: Check whether the anti-dust cap on the camera C-mount is removed. If already removed and attach the camera to the microscope, check whether the lighting path toggle switch to the camera. Then try to extend exposure time and Gain to get brighter images.

#### The imaging scene from the eyepiece is in focus but the live images from the camera are still out of focus.

A: This is because the camera and the eyepiece are in different focal planes. Can consider to use adjustable adapter to connect camera to the microscope trinocular, the adjust the adapter to make the live image in focus.

# There are some shadows on the image and the shadows always stay in the same position even the sample is moved.

A: Possible reasons:

1. The anti-dust film on the camera C-mount is not removed. -- Remove the anti-dust film.

2. Check whether any dirt on the objective. -- Clean the objective.

3. Some dust on the surface of the camera IR filter. -- Clean the camera optical port.

#### Camera frame rate is extremely slow

A: Possible reasons:

1. Preview resolution is too high. -- Try lower resolution and check the change of the frame rate.

2. Exposure time is too long. -- If need exposure time longer than 200ms, try to use higher gain to get brighter images.

3. Computer issue. -- Computer is very old or the motherboard chipset is Intel 8 Series \ C220 series.

#### Start the software and get the error message: can not recognize the camera or No camera.

A: Possible reasons:

1. Preview resolution is too high. -- Try lower resolution and check the change of the frame rate.

2. Exposure time is too long. -- If need exposure time longer than 200ms, try to use higher gain to get brighter images.

3. Computer issue. -- Computer is very old or the motherboard chipset is Intel 8 Series \ C220 series.

#### When installing the software, the system displays the shield logo.

A: If you install third-party antivirus software and firewall software, antivirus software and firewall software will delete DLL Dynamic link library file automatically and result in software file is missing. In this case, if the system prompted you to isolate or delete, you should need to choose to ignore this operation or open the anti-virus software to trust it.

# When measuring in the preview picture, there is no measured data in the picture which is taken by software.

A: When you want to save the dynamic measuring data, click 'File save>combined measure', then the data will be saved in the picture. When you want to save the static measuring data, you only need to save after measurement.

#### What is the TCapture?

A: TCapture is the professional imaging application developed by Tucsen for full control of Tucsen cameras. It fully demonstrates the power of Tucsen cameras. The user-friendly interface, complete camera parameter control, advanced image processing functions, live and still image measurements provide for highly efficient workflow. Moreover, the TCapture is completely free of charge. To satisfy the user's application needs, Tucsen continually

upgrades TCapture. Users can enjoy the latest version without any extra charge.

#### How to do quick White Balance?

A: White Balance while attach camera to stereomicroscope: Use a white paper to replace the sample --> Click on 'White Balance' to correct the image color --> Remove the white paper and put back the sample. White Balance while attach the camera to the biological microscope: Move the sample slide to the blank area --> Click on 'White Balance' --> move back the sample.

# After installing TCapture software, the system displays error when you start to open software.

A: It is because that the system does not have the Visual C++ 32bit Runtime library which included some Visual C++ library function, the software can not call the library file, it lead to fail to start software.

## Whether calibration table can be Shared between different computer?

A: 1.If the software version is V4.0 or below, you can open the system disk and find 'Application Data\TCapture CalibrationTable.ini', then copy the file to another computer under the same path. 2. If the software version is V4.0 or above, you can click 'Parameter>Backup' to save the calibration table in the software. What you do is only to copy the file to other computers, then use TCapture V4.0 to load parameter.

# Whether there is another way to take a picture and record except manual?

A: When the software is update to V3.6.6 ISCapture or above versions, press F9 key is to take pictures, press F10 is to record. If it is on manual recording mode, press F11 to end the video.

#### In the preview image, the screen appears a lot of interference fringes.

A: It is because that the frequency between outside of a light source and the sensor is not consistent. You can improve it by increasing the exposure time, reducing the gain, or close the light source such as incandescent lamp, fluorescent lamp.

# After installing the software, the software can not be started and the system displays 'libusb0.dll is missing'.

A: When this happened, please connect with our after-sales technical support to solve this problem.

#### When starting the software, the system displays 'TCapture.exe –Application Error'.

A: When you system is win xp, you can delete the document which the file path is 'C:\Documents and Settings\Administrator\Application Data\TCapture'

When you system is win 7/8, you can delete the document which the file path is

'C:\Users\Default\AppData\Roaming\ISCapture'.

Technical service hotline: 400-075-8880

## When starting the software, the system displays 'TCapture.exe - Could not find components'.

A: Completely remove the TCapture, reboot the PC and then right-click on TCapture installer (TCapture Setup.exe) and select 'Run as Administrator' to install the TCapture. When firstly start the software, please also right-click on the TC icon and select 'Run as Administrator' to start it.

# When you use the file name to save picture after taken, the name of the thumbnail of saved picture turn into messy code.

A: Firstly, please confirm regional language of system. If it is right, the problem still exists, please connect with our customer service technical support.

A: The main features of the TCapture software: 1. Advanced Camera Control; 2. Unique Low Light Imaging Settings; 3. Still image acquisition and Video Recording functions; 4.Convenient Image Management; 5. Image Processing and Measurement functions.

#### What are the advantages of TCapture software?

A:The intuitive software interface, full camera parameter control, unique low light imaging settings, still image acquisition and video recording functions, live and still image measurements enable very high productivity. And it is totally free of charge

## The versions of Tcapture

A: To satisfy the user's application needs, Tucsen keeps upgrading TCapture. The latest version, 4.1, will be released in September 2015.

# How to identify the version of the TCapture software used by the camera?

A: To find the TCapture installation package, click the right key - Property - version to see the specific version information.

## How to update the TCapture version?

A: Contact technical support to get the latest version of the software

#### Newer version software can not recognize the old cameras.

A: Currently, all the newer versions of TCapture are compatible with the previous version cameras EXCEPT TCA Series.

## What are the operating systems that are compatible with the TCapture software?

A: TCapture software is compatible with Windows operating systems.

## How to install TCapture?

A: Find the TCapture installation package and double-click the "TCapture Setup.exe" to start the installation.

# Security shield on TCapture shortcut.

A: "Some anti-virus or firewall software installed in the PCs will identify the DLL files from TCapture as viruses and automatically isolate or delete the ISCapture software files. If have a warning message to delete or isolate the DLL files during the TCapture installation, please ignore the warning message or set the TCapture as trusted software. Otherwise, the TCapture can not be used normally."

# After installing TCapture and each time the software is run, an error message :"OPM abortInitializing..." appears

A: This is because some program in the user's PC is using the library file 'libiomp5md.dll' which will conflict with TCapture. So far as we know, the software GoPro Studio will conflict with TCapture. To solve this issue, please try to remove the libiomp5md.dll from the C:\Windows\System32 folder while using the TCapture.

# After installing TCapture and starting the software, but get an error MDB: what error ?

A: This is because the operating system lacks some of the Visual C++ 32bit library files which TCapture needs to call. Without these files, the software can not be started normally. Install the patch VCredist\_x86.exe (can be found on the CD that comes with the camera) or go to the Microsoft website to download it: http://www.microsoft.com/en-us/download/details.aspx?id=5555

#### After installing the software, the software can not be started and the system displays 'libusb0.dll is missing'

A: If this happens, please connect with our after-sales technical support to solve this problem.

#### The software is started and recognizes the camera, but the preview is black

A: Check whether the dust cap on the camera C-mount is removed. If already removed and the camera is attached to the microscope, check whether the light path toggle switch to the camera. Then try to extend exposure time and Gain to get brighter images.

#### The software is started and reports the error message: \\\'can not recognize the camera or No camera.\\\'

#### A: "Possible reasons:

1. The camera USB cable is not adequately connected. -- Reconnect the camera again.

2. Check whether the camera is connected to the USB port on the front of the mainframe. If so, then connect it to the USB port on the back of the mainframe. -- The USB ports on the front of the mainframe are extended ports from the motherboard which can not provide stable voltage and current for cameras.

3. The camera itself needs extra power supply but does not switch on the power. -- The TrueChrome has a power switch which needs to be on. The TCC-6.1ICE requires an external power supply in order to be recognized by the PC.

4. The camera driver is not installed or failed to install. -- Go to the 'Device Manager'--> 'Imaging Devices' and check whether the camera is listed WITH YELLOW FLAG. Then re-install the driver again. If still fail to install driver, please contact camera technical support for help."

# Start TCapture but get an error "Unable to execute file..."

A: Completely remove the TCapture application, reboot the PC and then right-click on TCapture installer (TCapture Setup.exe) and select 'Run as Administrator' to reinstall TCapture. When starting the software, right-click on the TC icon and select 'Run as Administrator'.

#### When starting TCapture, the error "Cannot find the USB Key!" appears

A:Some specific versions of TCapture are encrypted. A dongle is required in order to run these versions.

#### Shortcut keys for TCapture to capture still images and videos:

A: With TCapture V3.6.6 or later, press the F9 key on the keyboard to capture images. Press F10 to start the video recording. If in manual recording mode, press F11 to stop the recording.

# After capturing several images, it takes more and more time to save an image, sometimes up to 30 seconds, and then finally the software hangs or crashes.

A: If the image save directory is on a network drive, while uploading the files to network drive, the CPU usage will increase significantly. When the CPU usage reaches 100%, the software will hang or crash. It is recommended to save the images to a local hard disk.

#### Can calibration files be shared on different PCs?

A:1. If using ISCapture versions earlier than V4.0: Go to the folder 'Application Data\ISCapture' in the system disk, find the file 'CalibrationTable.ini' and copy it to another PC under same directory. (The 'Application Data' folder is a hidden folder, you might need to make the system invisible folder visible first).

2. If it is ISCapture V4.0 or later, go to the Parameter tab and click 'Backup' to backup the parameter settings and copy them to another PC to restore them.

#### When starting the software, the system displays 'TCapture.exe –Application Error'.

A: If your system is win xp, delete the document 'C:\Documents and Settings\Administrator\Application

Data\TCapture'. If your system is win 7/8, delete the document 'C:\Users\Default\AppData\Roaming\TCapture'.

#### When starting the software, the system displays 'TCapture.exe - Could not find components'

A: Completely remove the TCapture application, reboot the PC and then right-click on TCapture installer (TCapture Setup.exe) and select 'Run as Administrator' to reinstall TCapture. When starting the software, right-click on the TC icon and select 'Run as Administrator'.

#### The image seen in the eyepiece is in focus but the live images from the camera are out of focus.

A: This is because the camera and the eyepiece are on different focal planes. Consider using an adjustable adapter to connect camera to the microscope trinocular, then adjust the adapter to focus the live image.

# There are some shadows on the image and the shadows always stay in the same position even when the sample is moved.

A: " Possible reasons:

1. The anti-dust film on the camera C-mount is not removed. -- Remove the anti-dust film.

2. Check whether there is any dirt on the objective. -- Clean the objective.

3. There is some dust on the surface of the camera IR filter. -- Clean the camera optical port. "

#### Camera frame rate is extremely slow.

A: Possible reasons:

1. Preview resolution is too high. -- Try a lower resolution and check the frame rate.

2. Exposure time is too long. -- If an exposure time longer than 200ms is required, try using a higher gain to get brighter images.

3. Computer issue. -- Computer is very old or the motherboard chipset is Intel 8 Series \ C220 series.

#### Image Field of View (FOV) is much smaller than the scene as viewed through the eyepieces.

A: Possible reasons:

1. Preview resolution is too high. -- Try a lower resolution and check the frame rate.

2. Exposure time is too long. -- If an exposure time longer than 200ms is required, try using a higher gain to get brighter images.

3. Computer issue. -- Computer is very old or the motherboard chipset is Intel 8 Series \ C220 series.

#### When capturing images, sometimes the saved images are quite blurred:

A: It could be because some slight vibration occurs on the camera during the image capture .

#### After doing measurements on the live images, the captured image does not have any measurement data.

A: "To save the live measurement on captured images, check the 'Combined Measurements' checkbox in File Save tab and then capture images. While doing the still image measurements, only click the 'Save' or ' Save as ' on the right-hand side shortcut to save the data on the images."

#### The live images and the captured images' color is quite different from the one seen from the eyepieces.

A: Because of the different lighting source, White Balance is needed to correct the image color.

#### How to do quick White Balance?

A: White Balance when camera is fitted to a stereomicroscope. Use white paper to replace the sample --> Click on 'White Balance' to correct the image color --> Remove the white paper and replace the sample. White Balance while the camera is fitted to a biological microscope: Move the sample slide to the blank area --> Click on 'White Balance' --> move back the sample.

#### Unable to change the resolution when using third-party software to control Tucsen cameras via Twain

A: a. Minimize the preview window (Note: do NOT close the preview window)

b. Go to the software main interface and select the twain source name and click "Cancel".

c. Restore the preview window. Now the resolution can be set.

d. Go to the software main interface and select the twain source name again and click "OK".

#### On preview images, lots of horizontal lines appear.

A: This is because of the ambient lighting frequency. Extend exposure time or turn any local filament lamps or fluorescent lamps.

#### When using the file name to save a picture, the name of the thumbnail of saved picture becomes corrupted.

A: Firstly, confirm regional language of system. If it is correct and the problem still persists, please connect with our customer service technical support.

#### The use note of TCapture software

A: It is recommended to check the camera installation status before using the TCapture. Go to Device Manager-->Imaging Device to check whether there is any yellow flag with the camera. If there is a flag, then the driver is not installed properly. Please try to re-install the camera driver.

#### What are the main differences between TrueChrome Metrics and TrueChrome II?

A: The TrueChrome Metrics is based on the TrueChrome II, but with the additional professional digital image measurement functions. The various measuring tools and micron measurement accuracy have led to creative breakthroughs in the field of micro metrology.

#### How many measurement functions TrueChrome Metrics has?

A: The TrueChrome Metrics provides extremely powerful measurement functionality including: freehand lines, rectangles, polygons, circles, bicircles, angles, point-line distance and much more.

#### What's the minimum measurement unit TrueChrome Metrics provides?

A: The TrueChrome Metrics is capable of delivering measurements with the precision to 10 nanometers which provides an incredible metrology capability in the most demanding situations.

#### What is the practical measurement applications of TrueChrome Metrics:

A: It is able to measure point-line distance, angles, the length of curves and lines. The camera can measure the perimeter & area of enclosed features such as: rectangles, polygons, and circles whether the specimen is a tiny cell or common industrial part.

#### What data outputs does the TrueChrome Metrics provide?

A: TrueChrome Metrics currently supports three kinds of data outputs: USB2.0, HDMI and SD card.

# Can TrueChrome Metrics can be used for fluorescence imaging?

A: Taking advantage of the ultra high signal to noise ratio sensor, TrueChrome Metrics is suitable to be used for strong fluorescence imaging. But we recommend to choose Tucsen Dhyana series if used for weak fluorescence imaging.

#### How about the stability of TrueChrome Metrics?

A: TrueChrome Metrics is the latest member of the unique TrueChrome series. With the strong technology of

Tucsen, the company has all of the authoritative certifications such as: ISO9001; EMC; EMVA1288; RoHS; CE; FCC; HDMI and so on.

# Does the camera could support SDK/Twain/Direct show?

A: Yes.

# What is included?

A: One TrueChrome Metrics camera, HDMI cable, USB 2.0 cable, power adaptor with 12V 2A output, high speed SD card, USB mouse and a CD with the application software TCapture.

### Where can I find support for TCapture?

A: Visit the TCapture column at Accessories on our website to get detailed information.

# How long is the TrueChrome Metrics camera and the accessories guaranteed?

A: Excluding damage from misuse, the camera has a 2-year warranty period, and other accessories a 1-year warranty period.

### How to connect the TrueChrome Metrics to the microscope?

A: Please download the document "Tucsen camera manual" and follow the appropriate steps.

### Which operating systems are supported by TrueChrome Metrics?

A: TrueChrome Metrics currently supports Windows XP or later.

# How do I get support for issues with the camera or software?

A: You can contact us in the following ways: 1. Leave a message on-line, 2. Call the official hot-line 0086-591-88194580 or 3. E-mail to support@tucsen.com.

#### What is the shipment lead-time for the TrueChrome Metrics?

A: The camera will be shipped within two working days after payment has been received.

#### How about the shipping options, products logistics transport time and cost?

A: You can choose FedEx, UPS, TNT, DHL, S.F. Express, Yun Da and other domestic and international express delivery, available for air or sea transportation. The shipping cost will be based on the requested shipping method.

# How should the camera be stored?

A: Please store the products in a dry environment at temperature between -20 to 70  $^\circ\!\mathrm{C}$  .

If you have any problems in use, and need to contact technical support, please have the following information prepared:

- · Camera model and S/N (product serial number);
- · Software version number and system information;
- $\cdot$  Description of the problem and any images related to the problem.

# Contact us:

- · TEL: 400-075-8880 +86-591-88194580-811
- · Email: service@tucsen.com
- · Or landing the official website to leave a message: http://www.tucsen.net.