(I) Simple Installation Guide

Installation steps are as follows:

1. Install the digital camera hardware

- 1) Open the package, connect the digital camera with camera lens, and then insert it into the microscope eyepiece;
- 2) Insert the video camera's USB cable into the computer's USB2.0 interface, and the hardware installed.

2. Install the driver

Double-click the driver file in the CD-ROM to install. During the installation process can choose the next step. Driver installed.

Note: Non-drive video camera can omit this step.

3. Install the software

1) install the codec, ffdshow_rev3452_20100524.exe;

2) Install the S-Viewer software, S-Viewer setup.exe.



Default, during the installation process you can select Next to install the above software can be correctly.

4. Use the software

Open the desktop shortcut



, Into the interface operation. S-Viewer concrete

how to use the S-Viewer, please see the instructions.





(II) User Manual of S-Viewer



Part 1. Overview

S-Viewer is a kind of professional software specially exploited for the application of digital microscope, belonging to the S-VIEW Digital Micro-software series. It satisfies the demand for visualization of operating morphology on PC in the field of medical, education, scientific research, industrial production, material, chemical engineering, metallurgy & mining, etc., playing an important role in the interaction between human beings and digital microscope of every kind. After a long period of use by experts in the fields mentioned above, it improves gradually in the aspects of functionality, easy operability, stability, etc.. In the meanwhile, the micro-digital camera and microscope which go with it also develop to a higher level, thus promoting the development of digital microscope to a large extent.

Characteristics (real-time processing, real-time measurement, several RGB alternatives)

• Applicable for all kinds of USB 2 .0 interfaces, supportive of cam of DIRECTSHOW

• With the functions of real-time video processing, including Flip horizontal, flip vertical, grayscale, emboss, sharpen, binary, negative image, all of which adopt effective algorithm—hardly affect video's frame rate.

• Supportive of measurement of dynamic video, and it lessens measuring steps and shortens the time for measurement .

•With memorable RGB adjustment, it makes color rendition to be lifelike to the largest extent; it's available to set several RGB alternatives and brings great convenience to users as well as the perfect solution of color rendition.

• Easy to handle, able to inosculate measured data, file headlines, dates and rulers into the images, and it's supportive of fast preservation.

•Feasible for writing in detailed information about file while maintaining the image, strengthening the description of imaging files.

Functions

• Video selection, video previewing setting

- Video previewing, photograph, continuously shoots, video
- Adjustment of video parameter (luminance, contrast, saturation, chroma, gamma, clarity)
- Automatic white balance (AWB), automatic exposure
- Real-time video processing: flip horizontal, flip vertical, grayscale, emboss, sharpen, binary,

negative image

- RGB tricolor real-time match, memorable, controllable
- Full-screen displaying
- · Measurement calibration, measurement setting
- Dynamic real-time measurement (straight line, angle, circle, three-point circle, rectangle)
- Static image measurement (straight line, angle, circle, three-point circle, rectangle)
- Document loading, preservation

Part 2. Operating Instructions

Chapter 1. Basic Operation of Capturing Video Previewing

File View Video Measure Option Window

1. Use this software for the first time

After you have downloaded the software and start it up for the first time, you will see a device for video capturing for video previewing, the image is as follows:

2. Select the target video device

When more than one video device appears on computer, this software allows you to select the target video device. Select *menu*—>*options*—>*select video device*. When the dialog box "*select video device*" pops up, you can select the target video device in the list of devices. Click OK to preview.

Help

Option Window Help	Select Device
Video Capture <u>D</u> evice	Device
Video Capture <u>P</u> in	SXY-I30 USB2.0 Camera
Video Capture <u>F</u> ilter	
Save Option	OK Cancel

3. Set video previewing size

Select *menu*—>*options*—>*set video previewing*, and when the dialog box "*attribute*" pops up, you can change the video previewing size by choosing from the options in the list of output size.

4. Set video attribute

Select *menu*—>options—>set video attribute to adjust the basic parameter of video.

5. Capture the video

Save: select *menu*—*file*—*save*, it will save automatically according to the information in "*set to be saved*".

Set to be saved: select *menu*—>*options*—>*set to be saved*, then the dialog box of "set to be saved" will pop up.

	SaveAs 🔀
Save Ontion	File File Name Video File Path D:1
File Name Prefix	Image Type
Start Suffix	Save with Title Date/Time
C:\Documents and Settings\Admini	Save with(still measurement) Measure Ruler
Bitmap O JPeg	Description Title
Save with	Author bb
Save with(still measurement) Measure Ruler Description Reserved	Subject cc Comment
Title Author	dd
OK Cancel	OK Cancel

Save as: select *menu*—/*file*-/*save as*, then the dialog box of "Save As" pops up.

chapter 2 Detailed Operating Instructions

File ∐iew V<u>i</u>deo <u>M</u>easure <u>O</u>ption <u>W</u>indow Help 2.1 Menu Bar • File:

	<u>V</u> iew V <u>i</u> deo	<u>M</u> easure <u>O</u>
Ī	New Preview	Ctrl+N
Ż	Dpen	Ctrl+O
Q	<u>C</u> lose	
	Save	Ctrl+S
2	Save <u>A</u> s	
H	E <u>x</u> it	
S	aveAs	
	File File Name	
	Video	
	D:)	
	Image Type —	
	💿 Bitmap	OJPeg
	Save with	
	🗹 Title	🗹 Date/Tir
	Save with(still)	measurement) -
	🗌 Measure	🗹 Ruler
	- Description	
	Title	
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	• View	7		
	∐iew	V <u>i</u> deo	Measure	
	 	<u>S</u> tatus 1	Bar	
	~]	<u>[</u> ool Ba	r	
	✓ I	Process	Bar	
	✓ 1	leasure	Bar	
	II I	Gull Sc:	reen	
1	, 🔽	<u>S</u> tat	us Bar	: Display or conceal the status bar;
2		<u>T</u> ool	Bar	: Display or conceal the consequently-used tool bar;
3)	Meas	ure Bar	: Display or conceal the measuring tool bar;
4)	<u>F</u> ull	Screen	: Display video in full screen.





: Adjust video parameter (Luminance, contrast, saturation, clarity,

gamma, chroma, etc.);

usting Video	
Brightness	Auto
0	
Contrast	
U	
Saturation	
0	-
Sharpness	
0	
Gamma	
0	
WhiteBalance	
Diacklight Compensation	
Gain	
0	-
OK Defau	цt

<u>E</u>nable 2)

Start using or closing real-time processing or real-time :

measurement;

3) All of the effects of processing are as follows:



Negative Image

Sharpen



4) Einary : If you want binaryzation on video, you can adjust the threshold value of

binaryzation (1 to 255) to display dynamically. Start using check box to use or close the binaryzation real-time processing effect.

Binary		
Enable		
0	128	255

5) 🚺 <u>R</u> gb	: Start or close RGB real-time alternation	ative video;
RGB Adjusting		
Enable Red Green Blue	OK Cancel Advanced?	Enable : Start or close RGB adjustment; Advanced? indextrement : Display high-level panel; :
		Advancedki : Conceal
RGB Adjusting	×	high-level panel
Creen	OK O Cancel O Advancedii Red Green Blue O O O O	Pitch on check box, adjust the red-green-blue sliding road for video tricolor match; Apply: Select options from list box and then apply them to the current video;
	-	Add: Click "add", input option names, add the adjusted red-green-blue value to the database, and it will display in
info@ysctech.com	www.ysctech.com	510.226.0889
Apply	Add Delete	

the list;

Delete: Select options from list box, then delete options from the list or database;

RGE	i Adju	sting				×
	Enabl	e				
Re	d 📮				0	
Gr	een 🔉				0	Cancel
Bl	ue 🔉				0	Advancedki
1	lo.	Name		Red	G	reen Blue
0	r	gb1		0	0	0
	Na	Apply me rgb2		Add		Delete Confirm
• M	easure	e:				
Meas	sure	<u>O</u> ption	<u>₩</u> ind			
4	Mo <u>v</u> e	в				
/	<u>L</u> ine	е				
2	<u>A</u> ng:	le				
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\odot	<u>C</u> ir(cle				
O	<u>T</u> ri(Circle				
×	Dele	ete				
X	Dele	ete <u>A</u> ll				
T						
	Cal:	ibratio <u>n</u>				

Operation Type	Operation Instruction	Displaying Value
🕀 Mo <u>v</u> e	First, select the image to be moved, now the image displays in dotted line, then mark the accumulation of	
Movement	movable points, movable points or the whole.	
/ Line	Select the starting point, click the left button of the mouse	Display the length
Line-measurement	and keep it, then move it till the end; finally, release the mouse.	of the line
Angle	Click three points in different positions with the mouse to form an angle.	Display the angle
Angle-measurement		
Peat	Select the top left corner of a rectangle, click the left button	Display the area
TT Vect	of the mouse and keep it, then move it till the lower right	of the rectangle
Rectangle-measurement	corner of the rectangle; finally, release the mouse.	
Gircle	Select the centre of a circle, click the left button of the mouse and keep it, then move it till the point on the arc:	Display the radius
Circle-measurement	finally, release the mouse.	
O TriCircle	Click three points in different positions with the mouse to form a circle.	Display the radius
Three-point		
Circle-measurement		
X Delete	Click the image to be deleted.	
Delete		
Delete <u>A</u> ll	Delete all the images.	
Eliminate		

Calibratio<u>n</u> :

Ruler Setting
 Real Results OK X-Ruler 0.20 um/pixel Y-Ruler 0.20 um/pixel Y-Ruler 0.20 um/pixel SaveTo SaveTo Physical Ruler LoadFrom Ruler Unit um Cancel X-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um X-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um Y-Ruler Unit 10.00 um X-Start 50 Y-Start 50 X-End 100 Y-End 100 X-Lenth 50 Y-Lenth 50

Unit: um/mm/cm/inch

X Direction: the length in the direction of X in scaleplate

Y Direction: the length in the direction of Y in scaleplate

Demarcation Adjustment: Move the movable points (in the blue circle) of demarcating ruler on the Image, the value of trim size (unit length per pixel) will change.

Save: Save the currently demarcated parameter to hardware;

Load: Load the demarcated-parameter file from the hardware.

6 Colo <u>r</u>

: Set the colors of measuring lines, movable points and words.

Leasure Col	or Setting	×
Measure Colo Measurement Point Text		OK Cancel



• Options:

Video Capture Device Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Select Device Name	Video Capture Device Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Video Capture Device	Video Capture Device Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Video Capture Device Select Device Name SXY-I30 USB2.0 Camera OK Cancel	Video Capture Device Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera OK Cancel	<u>O</u> pt:	ion	<u>₩</u> indow	<u>H</u> elp	
Video Capture <u>P</u> in Video Capture <u>F</u> ilter Save <u>O</u> ption 1) Video Capture <u>D</u> evice : Select Device Name	Video Capture <u>Pin</u> Video Capture <u>Filter</u> Save <u>Option</u> 1) Video Capture <u>Device</u> : Select Device Name SXY-I30 USB2.0 Camera	Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera OK Cancel	Video Capture Pin Video Capture Filter Save Option 1) Video Capture Device 1) Video Capture Device Select Device Name SXY-I30 USB2.0 Camera OK Cancel		Vid	leo Captu	re <u>D</u> evice	
Video Capture <u>F</u> ilter Save <u>O</u> ption 1) Video Capture <u>D</u> evice : Select Device X Name	Video Capture Filter Save Option 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera	Video Capture Filter Save Option 1) Video Capture Device 1) Select Device X Device X Name SXY-I30 USB2.0 Camera X	Video Capture Filter Save Option 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera OK Cancel		Vid	leo Capti	re <u>P</u> in	
Save Option 1) Video Capture Device Select Device Name	Save Option 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera	Save Option 1) Video Capture Device Select Device Image: Capture Device in the second	Save Option 1) Video Capture Device : Select Device Name SXY-I30 USB2.0 Camera OK Cancel		Vid	leo Captu	re <u>F</u> ilter	
1) Video Capture <u>Device</u> Select Device X Device Name	1) Video Capture Device : Select Device X Device Name SXY-I30 USB2.0 Camera	1) Video Capture Device : Select Device X Device Name SXY-130 USB2.0 Camera V OK Cancel	1) Video Capture Device Select Device Name SXY-I30 USB2.0 Camera OK Cancel		Sav	ve <u>O</u> ption	1	
Select Device Device Name	Select Device Device Name SXY-I30 USB2.0 Camera	Select Device Device Name SXY-I30 USB2.0 Camera OK	Select Device Device Name SXY-I30 USB2.0 Camera OK Cancel	1)		Video C:	apture <u>D</u> evi	
Device Name	Device Name SXY-I30 USB2.0 Camera	Device Name SXY-I30 USB2.0 Camera	Device Name SXY-I30 USB2.0 Camera	Sele	ect De	vice		
Name	Name SXY-130 USB2.0 Camera	Name SXY-I30 USB2.0 Camera	Name SXY-I30 USB2.0 Camera	C D	Device			
	SXY-130 USB2.0 Camera 💙	SXY-I30 USB2.0 Camera V	OK Cancel	N	Name			
OK Cancel 2) Video Capture Pin : Set the si	 Video Capture Pin : Set the st 	2) Video Capture Pin : Set the size		3)		Video Ca	pture <u>F</u> ilte	r : Ad
OK Cancel 2) Video Capture Pin 3) Video Capture Filter : Adjust	 2) Video Capture Pin : Set the s 3) Video Capture Filter : Adjust 	 2) Video Capture Pin : Set the size 3) Video Capture Filter : Adjust 	3) Video Capture <u>F</u> ilter : Adjust	S	satura	tion, clari	zy, gamma, wł	nite balance
OK Cancel 2) Video Capture Pin 3) Video Capture Filter 3) Video Capture Filter 3) Video Capture Filter 4 Adjust 5 Cancel	 2) Video Capture Pin : Set the s 3) Video Capture Filter : Adjust saturation, clarity, gamma, white balance, a 	 Video Capture Pin : Set the six Video Capture Filter : Adjust saturation, clarity, gamma, white balance, au 	 3) Video Capture Filter : Adjust saturation, clarity, gamma, white balance, and saturation. 	4)		Save <u>O</u> p	tion	: S
OK Cancel 2) Video Capture Pin 3) Video Capture Filter 3) Video Capture Filter 4) Save Option	 2) Video Capture Pin : Set the state 3) Video Capture Filter : Adjust saturation, clarity, gamma, white balance, a 4) Save Option : Set sate 	 2) Video Capture Pin : Set the site 3) Video Capture Filter : Adjust saturation, clarity, gamma, white balance, aut 4) Save Option : Set saturation 	 3) Video Capture Filter : Adjust saturation, clarity, gamma, white balance, at 4) Save Option : Set sa 	S	summ	ary inform	nation, etc.	

Save Option 🛛 🔀					
-File Name					
Prefix					
Image					
Start Suffix					
0					
Folder					
C:\Documents and Settings\Admini					
- Incorp Trino					
Image Type					
O Bitmap 💿 JPeg					
Save with					
□ Title					
Save with(still measurement)					
Measure Ruler					
Description					
Title					
Author					
OK Cancel					

File Name: Prefix +postfix +file format, e.g., Image1.bmp, Image2.jpg Folder: Select the place to save files Image Type: Bitmap files or Jpeg files Save with Title: Put the title under description into images Save with Date/ Time: Put the date/ time into images Save with Measurement: Put the measured data into images Save with Demarcation: Put the measured demarcation into images Description: Put contents about title and the author into the summary information about the file

• Window:



4	谢 Video	Image2.bmp	
In	age2. bmp		
	Video		





• Help:

Hel	P		
	Help <u>C</u> ontent		
	<u>A</u> bout S-Viewer		
1)	Help <u>C</u> ontent : Dis	play document of software-op	eration-help;
2)	About S-Viewer	Display information and instru	ctions about software versions;
Abo	ut S-Viewer	\mathbf{X}	
Ľ	S-Viewer Version 1.10.11 Copyright (C) S-VIEW 2008	}-2015 OK	
	NARNING: This program is protecta nternational treaties. Unauthorized re his program, or any portion of it, ma riminal penalties, and vill be prosecuted to the maximum e:		

2.2. Tool Bar

Constantly Used Tool Bar

Standard	
	گ 🚷 🔁
 i) is the file submenu in me 	nu 2.1;
2) Come back to the video previewing	
3) Pause the video previewing	
4) (i) : Video captured, capture video images	Interval Capture
to display in the newly-opened window;	Wait (sec)
5) Einterval Capture	0
Wait(sec): Several seconds later, this	Interval (sec) Images
function is set to work	1 🗘 5 🗘
Interval: Several seconds later,	
another photo is available to be taken	Current
Images: The amount of photos that	Wait
have been taken	File Name
	No.
	Start Stop Cancel

×

6) Execord	
Record	×
Path Start Pause Stop	
File: C:\	
Status: Ready	

Select path: Select the address for saving video files and file names Start: Start videoing

Pause: Pause the video

Stop: Stop videoing

- 7) Video attribute adjustment, see "video adjustment" in video submenu in menu 2.1
- 8) Bisplay the video in full screen

Processing Tool Bar



See the video submenu in menu 2.1

Measuring Tool Bar



See the measurement submenu in menu 2.1

part 3 Problem shooting

- 1. Previewing fails, blank screen
- 1) Check whether there is source of light or not, and whether the exposure value of video attribute is normal;
- 2) Check whether video device is connected, and video device driver is installed in Device Manager;
- Check the dialog box of "select video device" to make sure the correct target video device is selected;
- 4) Close the software and restart it;
- 5) Close the software, pull the cam out and plug it in again, then restart the software;
- 6) Close the software, restart computer and the software;

Please operate in line with the steps above, till you can preview normally. But if it still cannot work after you have followed all of the six steps, please contact Customer Service.