DIGITAL VIDEO CAMERA MANUAL







Before use this instrument, be sure to read this manual

Digital Video Camera _-0541DC

- 1. Digital Image and Video Software
- 2. Fixation Knob for Beam Splitter
- 3. Front Camera Beam Splitter
- 4. Filter Switch
- 5. Camera Aperature Controller
- 6. Camera Focus Controller
- 7. Binocular Rings
- 8. Back Camera Beam Splitter
- 9. Cable Connection to PC





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Pixel Filer Filing software Der. 3.8

(Software Included)

1. System Requirements

Operating System	Windows 10(32bit / 64bit)
Memory(RAM)	4GB minimum
Monitor	XGA (1024×768pixels) minimum

System requirements for Pixel Filter 3.05 is as below.

2. Installation of software

(1) Turn on your Windows PC.

Log on as administrator group user of PC.

Do not connect camera to PC yet.

(2) Installation of FlyCapture SDK.

Open Flycapture2.7.3.11_x86.exe

When Installer is open, follow the directions on screen to install FlyCapture SDK.

(3) Installation of Pixel Filer

Open Setup.exe in Pixel Filer 3.0.5 holder.

When Installer is open, follow the directions on screen to install Pixel Filer 3.0.5.

(4) Connecting Camera

Connect camera and USB cable to PC. The driver is installed automatically.

* Uninstalling software

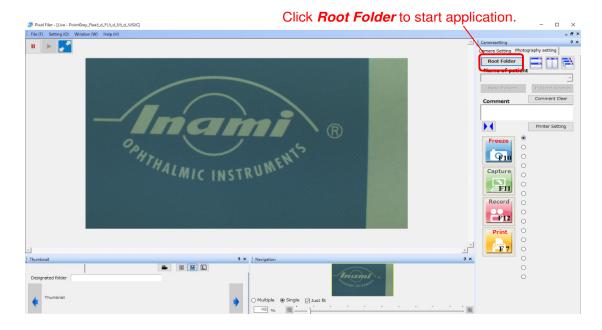
To uninstall the software from your PC, select *Pixel Filter* from setting menu *Apps & features*.

3. Getting Started

Double-click Pixel Filer icon from the desktop to start Pixel Filter application. The configuration of *Root Folder* is not set yet after installing the software. When the folder selection dialog is displayed, select *Root Folder* for your initial configuration.

*Root Folder is the foundation folder of Pixel Filer to save image files.

The images are saved in the hierarchy below this folder.



3.1 Software functions

Root Folder

By pressing *Root Folder* button, you can display a dialog to change the root folder.

New Patient

You can create folders for each patient and save the data in the hierarchy one level

below the *Root Folder*.

Press the button and dialogue

will be displayed.

Click OK after inputting text.

New Patient				×
Please enter new patient				
patientA				
	0	К	Cancel	

Name of patient	
patient A	-
	Detter to Growth

In this combo box, a list of folders (patient names) in the hierarchy one level below the Root Folder is registered. The displayed folders (patient names) will be the destination folder to save images. If you change the folder to save, click \checkmark icon on the right side of the box and select the name of patient from the dropdown list.

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With radio button, you can select the name for the file name when creating image or video files. Edit box will be appeared by double clicking the right side of each radio button, and you can add or edit the file names.

After adding or editing file names, press enter to finish the registration.



The live view from the camera is displayed.



You can display live view on full screen by clicking the blue mark with white arrows or by double clicking on the camera image. To clear, double click the screen again or press ESC.

Camera Setting	Photography setting
-Video Resoltion	
⊙ VGA(640×48	0) ○ XGA(1024×768)

Click *Camera Setting* tab and camera property setting screen appears. Select *Photography setting* when you do not use camera setting.

Video Resoltion	
● VGA(640×480) (XGA(1024×768)
	Auto ON/
Brightness	
Exposure	12.47 %
	2.41 EV 🗍 🔽
Gamma	
<u>'</u>	1.00 🗹
Shutter	
<u> </u>	16.65 ms 🗌
Gain	
)	24.00 dB 🗹
White Balance	
Red	
 	588
Blue	
	616
Color Processing Meth	od
Nearest Neighbor	•
LOAD	
F1 F2 F3	F4 F5 F6
SAVE TO F1 -	Save

In this sheet screen, set each property of the camera.

You can save and read six different types of camera property.

Set each property to save the data.

Then, select the number you want to save from combo box SAVE TO F1 - and click Save save button.

To read saved properties, click the button of **Preset** to select the data you want to read. F1 F2 F3 F4 F5 F6

You can also read the property without opening the dialog. Press F1 - F6 of the keyboard in the main window instead of button.

* With *Video Resolution* setting, you can adjust the resolution of video image to be saved.

S M L

The display size of saved thumbnail images is adjustable.

M : Medium

S : Small

L : Large

Patient Search

You can search the image storage folder created with *New patient*.

If you type any text in the **Search character** field, only the corresponding folder will be displayed.

By selecting folder, you can instantly change the destination folder to save images.

Search character			
123			
honda			
inami			
mazda			
operation micro	oscope		
slitlamp			
suzuki			
toyota			

Printer Setting

Press Printer Setting button and you can set print settings to print images from camera. The following dialog will be displayed, and adjust the settings accordingly. The screen below is an example because the display of the dialog might be different depending on the connected printer.

Print Setup		×
Printer		
<u>N</u> ame:	OKI C810	▼ Properties
Status:	Ready	
Type:	OKI C810	
Where:	IP_192.168.0.3	
Comment		
Paper		Orientation
Size:	A4 210 x 297mm 🔻	Portrait
<u>S</u> ource:	Automatically Select	A ⊚ L <u>a</u> ndscape
Net <u>w</u> ork.		OK Cancel

Comment	Comment Clear

In Comment edit box, you can enter the comment text and it is displayed at the bottom of the image or video file. Up to 30 characters can be entered in Comment box. The comment text entered in the comment box is not displayed in the preview image but it is displayed only in the file to be saved.

When you click Comment Clear Comment Clear button, comment text in **Comment** box is deleted.



Click Freeze to freeze the preview image. In the freeze state, the button becomes Live. If you click Live button the freeze state will be cleared. In the freeze state, the *RECORD* button is disabled.



Click *Capture* button to save the preview image as a jpeg file in the selected folder.



Click *Record* button to start video recording and the button will be displayed as *Stop*. To stop the video recording, click *Stop* button.



Click the *Print* button and the current camera image displayed in the preview is outputted to the printer.

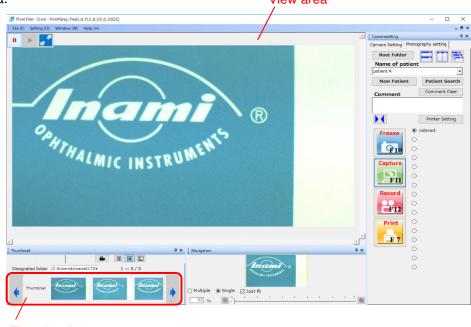


You can locate saved images and live view on one screen.

* For details, please see 3.2 Viewing saved images.

3.2 Viewing saved images

Double click saved images on thumbnail area, the images can be enlarged on view area. View area



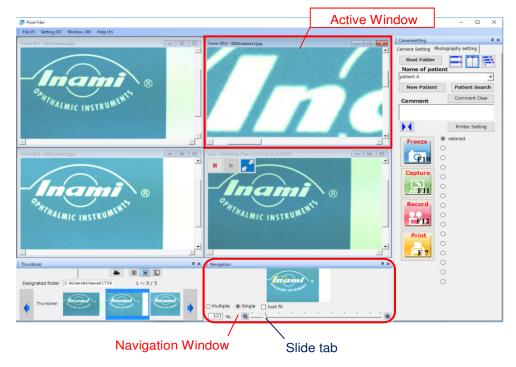
Thumbnail area

Double click several saved images on thumbnail area and click a location button to locate separated windows. The small window with is live view from camera.



You can enlarge the image by sliding *slide tab* on navigation window. The area to be enlarged is adjustable by moving yellow flame with mouse.

* To enlarge only active window, check radio button *Sinlge*. If you want to enlarge every image simultaneously, check radio button *Multiple*. To clear enlarging, check radio button *Just fit*.





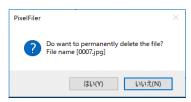
Multiple window screen (Check radio button *Multiple* setting)

3.3 Deleting the saved images

Cursor on the image you want to delete in the thumbnail area and right click "*Delete*" as shown.

SML C:¥U	isers¥R and D¥Desktop¥	180803¥inami-1			
•					Delete
0003	0004	0005	0006	0007	0008

If you click "Delete", following message appears. Press yes (Y) to delete it.



3.4 Controlling with external button

You can control *Freeze*, *Capture*, *Record* with external button of slit lamp etc. In that case, you do not need to operate by the mouse, so you can hide the buttons displayed on the screen.

Click ► to hide button and click ◆ to display the button.

Click		Click	
	Printer Setting		Printer Setting
Freeze	⊖ cataract	⊖ cataract	
Treeze	0	0	
F10	0	0	
	0	0	
Capture	0		
	0	•	
ÆF11	0	0	
Record	0	0	
	۲	۲	
F12	0	0	
Print	0	0	
- THE	0	0	
	0	0	
	0	0	