



QImaging FireWire Camera

Installation Guide

This document will guide you through the steps required for the installation of your QImaging MicroPublisher and QICam camera(s) in order to make it work with the Clemex application software for version 7.0.

Prerequisite:

- 1) Your computer must be running on Windows 7 32-bit or 64-bit.
- 2) The <u>Clemex software must be installed</u> before installing the camera.
- 3) Your computer must have FireWire (IEEE 1394) ports on your computer. If your computer does not have FireWire ports, you will need to buy and install an IEEE 1394 PCI card with an internal power connector. The internal power connector is highly recommended for high-powered FireWire camera devices.
- 4) For more information on 12V powered FireWire, refer to Annex A. The user installing the camera must have administrative privileges on the machine.

1. Determination of Windows 7 system type

- **1.1** Before installing the drivers, you need to know if your computer is using a 32-bit or 64-bit version of Windows 7.
- **1.2** Open the Start menu. Locate the item called *Computer*. Right-click on this item and select *Properties*.





The System information window will appear. In the *System* section, under *System Type*, note if the system is 32-bit or 64-bit. Close the window once you have the information.

Control Panel +	All Control Panel Items + Syste	:m ♥ 4:	Search Control Panel	٩
Control Panel Home © Device Manager © Remote settings © System protection © Advanced system settings	View basic informatio Windows edition Windows 7 Professional Copyright © 2009 Micro: Service Pack 1 Get more features with a	n about your computer oft Corporation. All rights reserved. new edition of Windows 7		• •
	System			
	Rating:	1.0 Windows Experience Index		
	Processon	Intel(R) Pentium(R) 4 CPU 3.00GHz 2.9	9 GHz	
	Installed memory (RAM)	200 GB		
	Pen and Touch:	No Pen or Touch Input is available for th	his Display	
	Computer name, domain, ar	d workgroup settings		
	Computer name:	Testing-02-Win7		Change settings
	Full computer name:	Testing-02-Win7		
	Computer description:	Testing Machine #2 - Windows7-32		
	Workgroup:	WORKGROUP		
	Windows activation			
	Windows is activated	50782 95500 Channe and at here		genuine
See also	Product 10: 005/1-221-00	Change product key		Microsoft' software
Action Center			L	earn more online
Windows Update				
Performance Information and Tools				

2. Camera Driver Installation

(Note: The screen grabs below refer to the 64-bit version of the drivers. If you are using a 32-bit system, the windows will refer to *QCam32* instead of *QCam64*; otherwise the process is identical.)

2.1 If the camera is connected to the computer, disconnect it now.

From the Clemex software installation disk, go to the **Drivers\QImaging** folder. If you are using a 32-bit version of Windows 7, double-click on the application called **QCamInstaller-2-0-12-5-32bit**. If you are using a 64-bit version of Windows 7, double-click on the application called **QCamInstaller-2-0-12-5-64bit**.

rganize 🔹 📑 Open	Burn New folder				111	• 0	1 (
Favorites	Name	Date modified	Type	Size			
Desktop	00.000 - 1 - 00 - 00 - 00 - 00 - 00 - 00	03/12/2012 3:27 PM	Аррисания	44,612,818			
🗼 Downloads 🛛 🧲	Caminstaller-2-0-12-5-64bit	03/12/2012 3:28 PM	Application	47,122 KB			
Recent Places	St deamagenet	25/05/2005 1:05 PM	Logication	2,004 835			
	QCamSDK2005	11/02/2008 3:57 PM	Application	6,864 KB			
Libraries							
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Computer							
🗳 OS (C.)							
🕞 Win7-32 (D:)							
B DVD RW Drive (E) 95							
READYBOOST (F:)							
Removable Disk (G:)							
Donnees (It)							
Network							

2.2 The **InstallShield Wizard** window will appear. Click **Next** to begin.

🛃 QCam64 - InstallShield Wizard				
	Welcome to the InstallShield Wizard for QCam64			
	The InstallShield(R) Wizard will install QCam64 on your computer. To continue, click Next.			
2	WARNING: This program is protected by copyright law and international treaties.			
< Back Next > Cancel				

2.3 Enter your name and the name of your organization, then click **Next**.

🖟 QCam64 - InstallShield Wizard	
Customer Information Please enter your information.	と
⊍ser Name: Arnold Farnsworth	
<u>Organization:</u> Big Company inc.	
InstallShield	< Back Next > Cancel

2.4 When asked to select a setup type, select **Custom**. Then click on **Next**.



2.5 The Custom Setup window will appear. Click on the down-arrow next to the first feature (*QImaging Program Files Contents*). A pop-up menu will appear. Select This feature will not be available and click Next.

🔁 QCam64 - InstallShield Wizard	📕 QCam32 - InstallShield Wizard
Custom Setup Select the program features you want installed. Click on an icon in the list below to change how a feature is installed. Imaging Program Files Contents Imaging System Contents Imaging Device Drivers This feature requires 16MB on your hard drive.	Custom Setup Select the program features you want installed. Click on an icon in the list below to change how a feature is installed. Imaging Program Files Contents Feature Description This feature will be installed on local hard drive. This feature, and all subfeatures, will be installed on local hard drive. This feature will be installed when required. X This feature will not be available.
Change Change	Install to: C: \Program Files\QImaging\ Change
InstallShield Help Space <back next=""> Cancel</back>	InstallShield

2.6 The InstallShield Wizard is now ready to begin installation. Click on **Install.**



2.7 You will see a few Windows Security confirmation windows appear; click Install in each one.



2.8 Once all drivers have been installed, a message will state that cameras can be plugged in after driver installation. Click **OK**. Another message will confirm that the installation process is finished. Click on **Finish** to close the installer.





You may connect the camera to the computer at this point, and turn it on if it has a power switch.

Windows will install the driver silently and will not display any information about the new device. If you want to confirm that Windows has recognized the camera, you can open the Windows Device Manager. The camera should appear under *Imaging Devices*. The camera icon should not have any warning or error indicator.

a bevice manager	
File Action View Help	
⊨ → 🗊 📴 📷 🕺 😭 🙀 🖏	
⊿ - 🚔 Oscar5-64	
> 📲 Computer	
🗦 👝 Disk drives	
🕞 📲 Display adapters	
DVD/CD-ROM drives	
Image: Barrier Barr	
IDE ATA/ATAPI controllers	
IEEE 1394 Bus host controllers	
 Imaging devices 	
QImaging FireWire Camera	
b and Reyboards	
Mice and other pointing devices	
⊳-New Monitors	
Network adapters	
Other devices	
Portable Devices	
Ports (COM & LPT)	
Processors	
Sound, video and game controllers	
System devices	
Universal Serial Bus controllers	
eHome Infrared Receiver (USBCIR)	
Generic USD Hub	
Generic USB Hub	
Generic USB Hub HSP Enhanced Mark Controller 2020	

3. Open the **Video Input Setup** program which can be found in the **Clemex Image Analysis** folder on your desktop.

The **Video Input Setup** utility lets you install your camera so that is it recognized by your Clemex image analysis software application. The camera can be automatically (steps described in section 4) or manually (steps described in section 5) installed. The automatic installation is the recommended way to install the camera, but the manual installation is there if you encounter problems when installing it automatically.



4. Automatic Camera Installation

4.1 In the Video Input Setup window, click on the Auto Install Cameras button.



4.2 The **Video Input Setup** utility will automatically detect your QImaging camera. The detected QImaging camera will either be a MicroPublisher model (as displayed here) or a QICam model. Click the **Close** button to accept the installation and quit the utility. Ignore the following section and jump directly to step 6.

🕼 Video Input Setup	×
Default Camera Qimaging QiCam-Color 12-bit on FIREWIRE1 (QiCam #996600000E30600) Installed Cameras: Gimaging QiCam-Color 12-bit on FIREWIRE1 (QiCam #996600000E30600)	Close Auto Install Cameras Connect Setup Remove Add >>

5. Manual Camera Installation

5.1. In the Video Input Setup window, click on the Add button.



5.2 From the list box of available cameras, select the QImaging camera model that you have. Click on the **Install** button.

🏇 Video Input Setup	
Default Camera No Default Camera	Close
Installed Cameras:	Cameras
	Connect
	Setup
	Remove
	Add >>
	Acquisition Mode
Available Cameras: 69	
Lumenera INFINITY 2.248 BAW (1608).212] Lumenera INFINITY 2.3C Color (2072).1532] Lumenera LINSIN BAW (1934).1036 Lumenera LINSIN BAW (1934).1036 Linsing McorPubliker 5.3 (2048).1336] Climaging McorPubliker 5.3 (2048).1336] Climaging Clam-Color 12-bit (1352).1036] Climaging Clam-Color 12-bit (1352).1036] Climaging Clam-Mono 12-bit (1352).1036] Sertech STC-MC152USB RGB (1360).1024] Sertech STC-MC152USB RGB (1360).1024]	ind all

5.3 Click on the **Connect** button. The **Connect** window will appear.

a video input setup		
Default Camera Qimaging QiCam-Mono 12-bit on None Installed Camerae:		Close Auto Install Cameras
QImaging QICam-Mono 12-bit on None		Connect
		Setup
		Remove
		Add >>
Available Cameras: 69		
Lumenera INFINITY 2-2M B&W (1608x1212) Lumenera INFINITY 2-3C Color (2072x1532) Lumenera LM135M B&W (1384x1036) Lumenera LU155M B&W 1172x10201	*	Install

5.4 In the **Connect** window, click **Pick**. The **Pick QImaging Camera Device** window will appear.

Connect 💌	1
QImaging QICam-Mono 12-bit	
Ports:	
FIREWIRE1	
FIREWIRE2 FIREWIRE3	
FIREWIRE4	
FIREWIRE5	
FIREWIRED T	
FireWire Device ID:	
9966000000E30600 Pick)
Port Description:	
Any port of the computer's IEEE-1394 (FireWire) compliant board(s).	
Alias:	
QICam-Mono	
OK Cancel	

5.5 Choose the QImaging camera (MicroPub model is displayed here) from the list of cameras and click **OK**.

Pi	ck QImaging Camera Device				×
	Model	Specifications Monochrome 1392x1040 12bit +	Serial # Q26265	Device ID 9966000000E 30600	OK Cancel
	Filter Show only compatible came	ras Camera Lege	nd ed and compatib disconnected ed but incompati	le ble	Update





5.7 In the Video Input Setup window, click Close.

🎲 Video Input Setup	×
Default Camera Qlmaging QlCam-Mono 12-bit on FIREWIRE1 (QlCam-Mono)	Close Auto install Camerae
	Cameras
QImaging QICam-Mono 12-bit on FIREWIRET (QICam-Mono)	Connect
	Setup
	Remove
	Add >>
Available Cameras: 69	
Lumenera INFINITY 2-2M B&W [1608x1212] Lumenera INFINITY 2-3C Color [2072x1532] Lumenera LM135M B&W [1384x1036] Lumenera LU165M B&W [1972x1020] Lumenera Lv25M B&W [1912x1076] QImaging MicroPublisher 3.3 [2048;1536] QImaging QICam-Color 10-bit [1360x1036] QImaging QICam-Color 12-bit [1350x1040] QImaging QICam-Mono 12-bit [1360x1036] QImaging QICam-Mono 12-bit [1360x1036] QImaging QICam-Mono 12-bit [1360x1036] QImaging QICam-Mono 12-bit [1360x1024] Sentech STC-MI52USB B&W [1360x1024] Sentech STC-MI512USB R&B [1360x1024] Sentech STC-MI512USB R&B [1360x1024] Sentech STC-MI512USB R&B [1360x1024]	Install

6. Run the Clemex software by double-clicking on the appropriate icon (Clemex Captiva, Clemex Vision Lite, Clemex Vision PE, Clemex CMT.HD, or Clemex CIR) in the Clemex Image Analysis folder on your desktop.





Annex A -FireWire Power Injection

When using high-powered FireWire devices, like a digital camera, it is highly recommended that your FireWire hubs be alimented from an external power source. Newer computers that are energy efficient are sometime not giving enough power to the FireWire ports resulting in camera that cannot be connected or that receive no or bad signal.

To circumvent this problem, you have two choices. If you have a free power connector on your computer power supply or motherboard, you can use a computer PCI or PCI Express card with an internal 12V power connector. An example of such a card is displayed below:



PCI card internal power connector that you need to connect to the 12V connector of the computer power supply

If your computer does not have a free 12V power connector, the other alternative is to use a FireWire powered cable and external power adaptor. This FireWire power injection cable will allow you to power a 6pin device from a non-powered 6pin port. An example of such a cable is displayed below.







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