# USB Server Gigabit – Quick Start Guide

# Power supply





24 V power supply

<u>or</u>

#### System-LED (green/ orange)

GREEN ON GREEN flashing ORANGE flashing
ORANGE ON

Power supply and system OK System start Current firmware update or reset to factory settings Reset to factory settings finished; Restart required



# Power over Ethernet [Part-No.: ACPIPOE]

#### State-LEDs (green/ red)

GREEN ON RED ON USB port in use The USB server has been disconnected the power supply of the port e.g. due to overload or temporary disconnecting of the USB device

# **Software**

Install the software programs from the Software-CD (folder: USB-Server):

- WuTility
- USB Redirector

# Scope of Supply

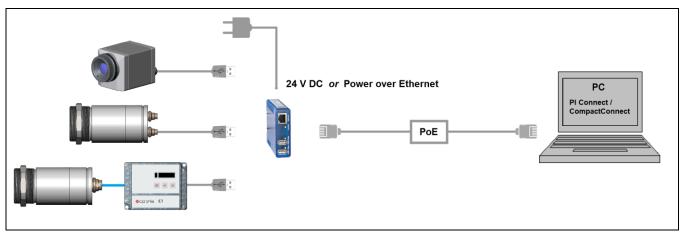
- USB Server Gigabit
- 24 V power supply
- Ethernet cable, 1m
- Quick Start Guide

# **Connection variants USB server**

Model	Channel	max. speed	max. number of units on one USB server
PI 160	IR	120 Hz	2
PI 2xx	IR+VIS	128 Hz	1
	IR	128 Hz	2
PI 4xx	IR	80 Hz	1
		27 Hz	2
PI 6xx	IR	32 Hz	1
PI 1M/ 05M	IR	27 Hz	2
		32 Hz	1
		80 Hz	1
		1 kHz	1
Pyrometer	IR	-	2
PI + Pyrometer	IR	-	2

# 1. Direct Connection USB Server Gigabit [ACPIUSBSGB] (Point-to-Point-Network)

**Installation** 

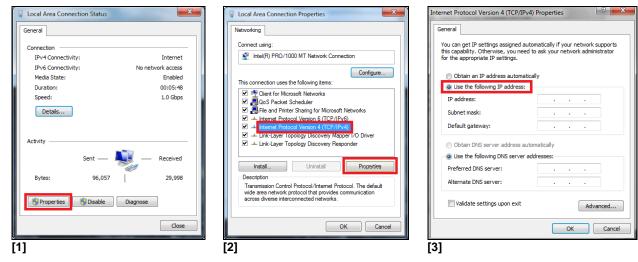


On a direct connection to a PC both, the USB server as well as the PC must use a fixed IP address. There is no DHCP server available. Accomplish the following settings on your PC once (depending on the operating system the procedure can differ from the here shown – the following description refers to a Windows 7 system).

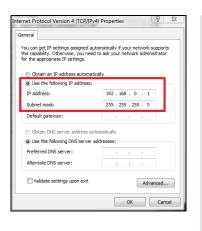
1. Go to Control Panel; open Network and Sharing Center.



- 2. Enter Local Area Connection status screen [1] is shown and subsequently Properties.
- 3. Mark Internet protocol Version 4 (TCP/IPv4) [2] and go to Properties again.



- 4. In the register card General enable the checkbox Use the following IP address [3]
- 5. Now enter a user defined IP address for your PC, for example **192.168.0.1**.



If you want to switch between a user-defined IP address and a DHCP server, the following alternative configuration is recommended: Under the General tab choose Obtain an IP address automatically, and on the Alternate Configuration tab, click User configured and enter a user defined IP address:

You can get IP settings assigned automatically if your this capability. Otherwise, you need to ask your netw for the appropriate IP settings.	r network supports vork administrator	If this computer is used on more th settings below.	
Obtain an IP address automatically		Automatic private IP address     Oser configured	5
O Use the following IP address:		IP address:	192.168.0.1
		Subnet mask:	255,255,0,0
Subnet mask:		Default gateway:	
Default gateway:		Dentan gatemay.	
Obtain DNS server address automatically		Preferred DNS server:	
Use the following DNS server addresses:		Alternate DNS server:	
Preferred DNS server:		Preferred WINS server:	
Alternate DNS server:		Alternate WINS server:	
Validate settings upon exit	Advanced	Validate settings, if changes	d, upon exit

# Starting the program WuTility

6. To change the network settings of the USB server start the *WuTility* program:

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📼 Unt	titled - WuTility						
File	Device Configura	ation Firmware	Options Help				
Ne	1 🗃 ew Open		🔊 🤆 an IP Address	🗐 🚯 🚺	er Firmware	୍ଭ <b>?</b> Help A	e lbout
	Ethernet address	IP address	Product ID	Product name	Version		
<b></b>	00c03d:07055e	190.107.233.110	#53662 / TB900979	USB-Server Industry Gigabit	1.15		
Ready						NUM	

Independent on the current network settings of the USB server the device is displayed now (if not, refresh the current view with **Scan**).

Untitled - WuTility		Set Inventorying Method
le Device Configuration Firmware Device Configuration Firmware New Open Save Si Ethernet address IP address Pro	Double-click on list item	Local broadcasts (NOT recommended) Gobal broadcast Gobal broadcast, select interface Gobal broadcast, select interface Goteway Address Mask Gateway This computer seems to be connected to only one network. "Global broadcast" is the recommended mentarying method for this configuration.

7. Mark the USB server and then press IP Address:



	titled - WuTility Device Configur	ation Firmwar	e Opt	ions Help	_		_			
	ew Open	Save S	(ᡣ) Scan	IP Address	의 Telnet	() Browser	Register	- <b>∱</b> Firmware	୍ଦି <b>?</b> Help	6 About
	Ethernet address 00c03d:07055e			luct ID 62 / TB900979		t name erver Industry		Version 1.15		
Ready									1	NUM

8. The standard setting of the USB server is DHCP. On a direct connection to a PC set a static IP address to the device. Take care that the network part of the address is identical to the network part of the IP address of the connected PC (therefore: **192.168.0**). The host part must have a different digit than the user-defined IP address of your PC (for example: 192.168.0.2):

static									Address range:
IP address (must be unique):	192		168	×	0	×	2	*	Subnet #0
This address might	t be uni	ised							Check again
									Default values from
Subnet mask:	255		255		255		0		Windows networking
Default gateway:	0		0		0		0		
DNS server A:									
DNS server B:									

9. Now press Next and then Finish. The network connection between PC and USB server will be established and you can perform the USB Redirector as described previously. Close the *WuTility* software.

📼 Un	titled - Wu	Tility										. o x
File	Device C	onfigura	tion Firr	nware	0	ptions Help						
N		🗃 pen	Rave	S	(ာ့) can	iP Address	🚚 Telnet	(C) Browser	Register	<b>F</b> irmware	୍ଭ <b>?</b> Help	6 About
	Ethernet a	ddress	IP addres	s	Pro	oduct ID	Produc	t name	V	ersion		
	00c03d:07	055e	192.168.0	2	#5	3662 / TB900979						

# Starting the USB Redirector

10. Start the **USB Redirector**. The local network will be automatically scanned for available USB servers (if not, refresh the current view with File/ New).

File E	Edit Devices	Options	Help									
D New	😅 Open	Save	୍ଲେ) Scan	Insert	Edit	(f) Browser	Claim	Advanced	<b>l∷</b> Release	<b>97</b> Details	یتر Options	6 About
	Identification	Port	Description				Annota	tion Requ	ested	Client	Status	
٠	192.168.0.2	32032	USB-Server									
÷	0403-DE37	1	PIIMAGE	R								
- <b>C</b>	0403-DE37	1	PI IMAGE	R		m						



If several USB servers are in your network you can identify your own by the number you find in the overview of *Redirector* (under *Description*) as well as on the serial number label of your device(e.g.: USB server-**07055e**).

11. You see in the *Redirector* the connected USB device. Mark it and press the Claim button.



The status is changing now to Connected. You can see the IP address of your local PC under Client:



The device (IR camera PI, CTvideo or CSvideo) can now be used in the same way as it would be connected directly to a local USB port of your PC.

The program *Redirector* can be minimized – the connection will be determined if you close the window.

#### Automated USB Redirector

Open the *Redirector* and mark the connected device.

#### Then press Advanced:



#### Select permanently:



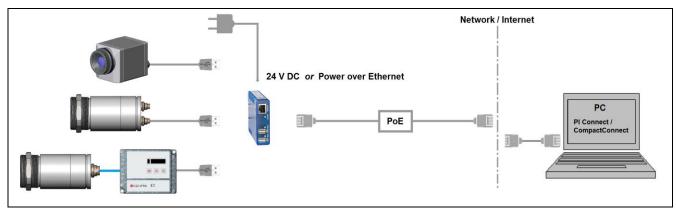
# Stopping the USB Redirector

To stop the connection between the USB Redirector and the device, start the *Redirector* and press the **Release** button:

Identification Port Description Annotation Requested Client Status	Open         Save         Scan         Insert         Edit         Browser         Claim         Advanced         Release         Details         Options         About           lentification         Port         Description         Annotation         Requested         Client         Status	R R			
192.168.0.2 32032 USB-Server-07055E	92.168.0.2 32032 USB-Server-07055E			سر Options	
		Requested	Client	Status	
	0403-DE37 1 PTIMAGER permanen 192.168.0.1 connected				
0403-DE37 1 PI IMAGER permanen 192.168.0.1 connected		permanen	192.168.0.1		
ିଙ୍କ 0403-DE37 I PLIMAGER				•	•

# 2. Connection USB Server Gigabit [ACPIUSBSGB] via Network

**Installation** 

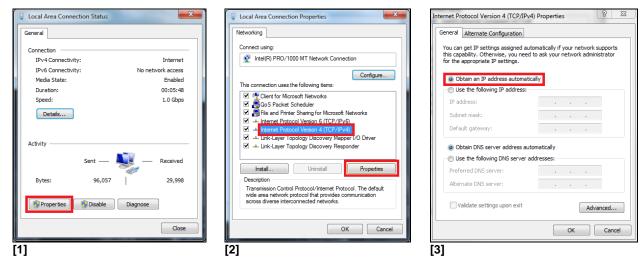


On a connection to a PC both over the network, the USB server as well as the PC must use an automatic IP address. Here the DHCP server is available. Review the following settings on your PC once (depending on the operating system the procedure can differ from the here shown – the following description refers to a Windows 7 system).

1. Go to Control Panel; open Network and Sharing Center.

View your basic network information and s	et up connections	
your computer your current network	Internet	See full map
View your active networks		<ul> <li>Connect or disconnect</li> </ul>
your current network Domain network	Access type: Local and Connections: Local Are	Internet a Connection

- 2. Enter Local Area Connection status screen [1] is shown and subsequently Properties.
- 3. Mark Internet protocol Version 4 (TCP/IPv4) [2] and go to Properties again.



4. In the register card General enable the checkbox Obtain an IP address automatically [3]

The default setting for the USB server is DHCP. If you have not previously used the *WuTility* program, you do not have to start it. If you have already used it before, e.g. a direct connection, make sure that the following setting is configured:

- Start the *WuTility* program. Regardless of the network settings of the USB server, this is now displayed (if not, simply update the view with *scan*).
- Select the USB server and then press the IP address:
   PAddress



• The setting of the USB server must be set to dynamic (DHCP).

🔨 Device Settings: N	etwork Parameters	×
ø dynamic (DHCP)		
static		Address range:
IP address (must be unique):	192 A 168 49 49 154 A	Subnet #0 👻
This is your own IF	<sup>o</sup> address.	Check again
		Default values from
Subnet mask:	255 . 255 . 255 . 0	Windows networking -
Default gateway:	192 . 168 . 49 . 253	
DNS server A:	192 . 168 . 49 . 31	
DNS server B:	192 . 168 . 47 . 31	
	< Back	Next > Cancel

Now press **Next** and then **Finish**. The network connection between PC and USB server will be established and you can close the **WuTility** software.

#### Starting the USB Redirector

5. Start the **USB Redirector**. The local network will be automatically scanned for available USB servers (if not, refresh the current view with File/ New).

	e Abo
	Abo
tion Port Description Annotation Requested Client Status	
4 32032 USB-Server-07055E	
DE37 1 PIIMAGER	



If several USB servers are in your network you can identify your own by the number you find in the overview of *Redirector* (under *Description*) as well as on the serial number label of your device(e.g.: USB server-07055e).

6. You see in the *Redirector* the connected USB device. Mark it and press the Claim button.

	evices Options				
	pen Save	(아) 🗉 Scan Insert	Edit Browser	L IIII Advanced Release	ୁମ୍ଭ କୁନ୍ଦି 🚯 Details Options About
Identifi	ication Port	Description		Annotation Requested	Client Status
192.16	58.4 32032	USB-Server-07055E			
L 😂 040					

The status is changing now to connected. You can see the IP address of your local PC under Client:

U Unti	tled - W&T US	B Redirect	or										• X
File E	dit Devices	Options	Help										
D New	🗃 Open		(ූා Scan	E. Insert	©¶ Edit	6 Browser	Claim			<u>l</u> <u></u> Release	<b>Q?</b> Details	یکر Options	6 About
	Identification	Port	Description				Annot	ation	Requ	ested	Client	Status	
٠	192.168.4	32032	USB-Server-	07055E									
- <del>4</del>	0403-DE37	1	PI IMAGER	र					until	exit	192.168.49.15	4 connect	ed
•													•
Ready												NU	M a

The device (IR camera PI, CTvideo or CSvideo) can now be used in the same way as it would be connected directly to a local USB port of your PC.

The program *Redirector* can be minimized – if you close the window, the *Redirector* will be automatically terminated.

#### Automated USB Redirector

Open the *Redirector* and mark the connected device.

Then press Advanced:

		Options	Help									
D New	🗃 Open	Rave Save	(ල) Scan	Insert	<b>₽</b> Edit	C Browser	Claim	문 Advanced	∥ <u></u> . Releas	e Details	یں۔ Options	<b>e</b> About
	Identification	Port	Description				Annota	tion Requ	ested	Client	Status	
	192.168.4	32032	USB-Server	-07055E								
÷	0403-DE37		PIIMAGE	R				until	exit	192.168.49.154	connecte	d

#### Select permanently:

Claim for Local Use - 192.168.49.184:32032/1	? ×	U Unti	tled - W&T USB	Redirect	or									• X
When and how long would you like to use the device?		File E New	dit Devices Devices Open	Options Save	Help (ෆූ) Scan	E Insert	Edit	(°) Browser	dia. Claim	R Advanced	¦⊉ I Release	<b>()?</b> Details	نتر. Options	B About
🛐 🔘 Until Windows is restarted			Identification		Description				Annota	tion Req	uested	Client	Statu	s
			192.168.4		USB-Server									
🛛 💿 Permanently		-4	0403-DE37	1	PIIMAGE	R				peri	manently	192.168.49.	154 conn	ected
More >> Use as default settings OK	Cancel	•						m						•
		Ready											NU	M

The connection is now kept also if the program *Redirector* will be closed. If the PC and/ or the USB server are restarted, the connection will be recovered automatically.

### Stopping the USB Redirector

To stop the connection between the USB Redirector and the device, start the *Redirector* and press the **Release** button:

