



BuTeL Software - Scanner Over Ip - RemoteServer software - 1.02 - July 2004. http://www.butelsoftware.com

Software installation:

Run setup.exe, software installer will install the RemoteServer software.

Start software:

Select START _ PROGRAMS _ BuTeL _ RemoteServer

Registration:

Software Regis	tration:	
Serial Number:	2762764	
Registration:		
	Cancel	Ok

All copies of RemoteServer require a unique registration number. Without this registration code the software will only work for 4 days after installation!

Start the software and select FILE _ REGISTRATION, write down the serial number and e-mail the serial number to info@butel.nl and a registration code will be e-mailed back. Enter the registration code to unlock the software.

IMPORTANT:

To use 'Scanner Over IP' you must have access to firewalls and possibly cable/dsl modem setup (NAT routing options).

'Scanner over IP' requires that certain 'ports' are open for data/audio transfer. Contact you system administrator so they can open these 'ports'.

FIREWALL software:

We strongly suggest running firewall software at the RemoteServer PC. This firewall software should be configured in such a way that it only allows traffic to/from the RemoteServer software. For the moment only TCP format is used.

STATIC IP - DNS server:

The RemoteServer PC must have either a static IP address or DNS server software installed. Without this the clients are not able to connect to the server. if you do not have a static learn Info at: http://www.no-ip.com/ or http://www.dynip.com http://www.tzo.com





Connect the Scanner:

Two connections must be made between the scanner and server: RS232 serial port and audio.

<u>RS232:</u>

RemoteServer works with the Uniden BC785 and BC796 scanners.

At the back of the scanner you will find a DB9 connector , this is the remote control serial port. Connect a straight thru RS232 cable between the scanner and the DB9 serial port connector at your PC. Make sure that scanner 1 is connected to the com 1 serial port etc.



Make sure that the scanner baud rate is set to 19200:

- Turn scanner ON
- Press 'MENU'
- Press '3' (system option)
- Press '5' (Pc control)
- Use arrow up/down and select 19200 and confirm by pressing 'E'
- Use MENU to leave menu, scanner is now set to 19200 baud rate.





Audio:

Connect the external speaker output from the scanner to the 'line in' connection at the sound card. These connectors use standard 1/8'' mono or stereo connectors. Since streaming is mono a simple shielded cable can be used. Connect ground and the tip.

1/8 "/3.5 mm Stereo Connector



Connecting more than one scanner to the server:

The Uniden BC785/796 use a standard RS232 serial port. If more than one scanner is used, additional hardware may be required.

Most PC motherboards have 2 serial port connections. Use these for scanner 1 and scanner 2.

For scanner 3 and scanner 4 additional hardware is required: we recommend one of the two following options:

- PCI serial port extender card, these cards have 2 extra serial ports.
- USB to serial converters, these are plugged in the USB connector at the back of the PC and output is a normal RS232 connector.

Important: USB devices always require a driver supplied by the manufacturer.

Also every scanner that you connect to the server requires an additional audio card. So a server with 4 scanners connected, requires 4 audio cards to stream separated audio. Without additional soundcardsb the audio cannot be separated at the client.





Serial communication problems:

In case of serial communication problems, use this checklist:

- Make sure comport is enabled in computer BIOS setup.
- Check the Windows device manager for any conflict in serial hardware
- <u>USB devices require a driver and comport number is selected in the windows device manager.</u>
- use a different cable, 95% of com problems are caused by wrong or faulty serial cables.

Checking Serial communication in STATUS window (select STATUS TAB in the software) :



The Status panel displays comport status for all 4 scanners. If you are running a single scanner version, ignore the status for scanners 2-4.

Comopen = green:

If comopen indicator is green, the selected comport is available and the RemoteServer software succesfully opened the port.

Comopen = red:

Selected comport is either disabled or not available in your system. Or another scanner is already using the comport selected.

Comdata:

Indicates whether there is communication with the scanner. Green = communication OK. Red = no communication. Comopen must be green status for Comdata status to become green.





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Software Setup:

<mark>A</mark> BuTeL TC	P/IP Server	1.02		_ 🗆 🗡	
File About					
SCANNER SERVER					
Scanner 1	Scanner 2	Scanner 3	Scanner 4	Status	
Scanner E Comport Baudrate LCD dat LCD1 [S BL][#] Network: Dataport:	C785/BC796 1 : 19: a: + C 499][##]]L LCD4 [1010 . 1011	200 V ILC CD3 (Bank 1- I	Apply - D2 [CAN 3-56-8-0][]		
Audio Device #: Windows Default					

Comport setup:

In the software select the comport and baudrate and click APPLY. When communication is established, data should appear in the LCD data window.

Network IP Port setup:

RemoteServer communicates with RemoteClient via two unique port numbers. These port numbers in the client and server software must be the same. Enter a port number in 1000-1100 range and click Apply.

One port is used for data transfer, the other port is used for audio transfer.

IMPORTANT: 2 unique ports are required per stream. If you use the 4 scanner version you must use 8 unique portnumbers!





Audio Device:

The software must know which audio device to use per stream. If there is only one soundcard, select 'Windows Default'. If there is more than one soundcard installed, select the soundcard used for streaming audio for this stream.

IMPORTANT: a soundcard can only provide one audiostream. If you select the same soundcard for different streams only one of the connections will actually stream the audio.

Audio Setup in Windows:

In Windows, the line input must be selected as the recording audio source. Click the small speaker in the system tray:



Windows will now show the PLAYBACK volume sliders. Select `OPTIONS' $_$ `PROPERTIES':



The properties Window is shown, select the 'Recording' option, and make sure that the 'Line In' box is checked:





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Properties		<u>?</u> ×
<u>M</u> ixer device:	C-Media Wave Device	•
_Adjust volum	e for	
C <u>P</u> layback	<	
Recordir		
◯ <u>O</u> ther	Wave	
Show the follo	wing volume controls:	•
	OK Cano	zel

Click 'OK' and you can now set the volume for the line input, make sure that the line input is selected:

Tecording Control				
Options <u>H</u> elp				
Microphone Balance:	Line In Balance:	Wave Balance:		
		Volume:		
		□ <u>S</u> elect		
C-Media Wave Device				





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Information about installing extra soundcards:

The 4 scanner version of RemoteServer requires additional soundcards to be installed in your PC. To make sure that Windows correctly installs these extra hardware please follow this procedure:

- Shutdown the PC that runs the RemoteServer PC
- Open the PC and install one new soundcard
- Restart the PC and make sure that Windows identifies the new soundcard and installs the correct drivers.
- Repeat this procedure for every extra soundcard you are installing.

In the Windows device manager, make sure there are no conflicts reported.

After installing the new soundcard hardware, run RemoteServer select the right soundcard per scanner.





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Support:

In case of problems please contact info@butel.nl or support@butel.nl , always include the software serial number when contacting BuTel software support.