

# USER MANUAL

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## Avisaro Serial Port Redirector Software (AVI-SPR)



Version 2.0

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## INTRODUCTION

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The Avisaro Serial Port Redirector Software is designed to work together with Avisaro WLAN RS232 Products. The Redirector utility creates a virtual serial (RS232) port on a Windows 2000/XP based computer and transfers all data over a network to the Avisaro WLAN module/box wirelessly.

Thus, software currently using hardware connected over a RS232 interface can be enhanced to use wireless connections. There is no need to change the software – this solution works in most cases entirely transparent.

## COPYRIGHT

The Avisaro Serial Port Redirector Software is free of charge when used with Avisaro products. License fees apply when used with other products. Copyright 2005 by Avisaro AG, Hannover, Germany.

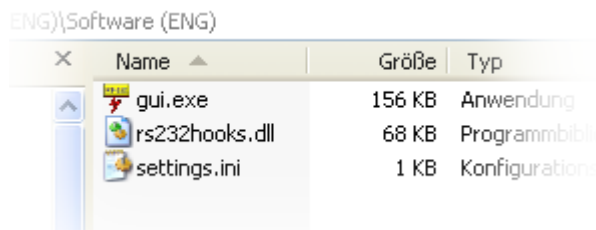
## INSTALLATION

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There is no installation procedure for the AVI-SPR, since the software can be started from a directory. There are no changes to the system, no entries in the Registry. Thus this utility program can be viewed as friendly. To get rid of the utility, just delete the folder.

Follow these steps for installation:

- 1) Create a folder with the name “avisaro spr” on your harddrive c:\ (or any other name at any other location)
- 2) Unzip the file which contains the Redirector Software and place them into the folder
- 3) The content of the folder should look like this:



- 4) Advanced user can create a link of the “gui.exe” to the autostart folder for the utility to start at boot time

“gui.exe” is the executable to launch.

“rs232hooks.dll” is necessary for operation

“settings.ini” contains the settings made in user interface. This file can be edited with a text editor

## OPERATION

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Launch the AVI-SPR by double click on the “gui.exe”.

In order to redirect a serial port, it is important to **start the AVI-SPR tool before you start the application** which should use the redirected port.

The user interface looks like this:



## REDIRECT A SERIAL PORT

The Avisaro serial port redirector (AVI-SPR) takes data send to a serial port and transfers those over a WLAN/LAN network. A connection between the AVI-SPR and the Avisaro WLAN RS232 product needs to be established before data can be transported There are two general modes:

- 1) Automatic Mode: The AVI-SPR tries to connect to a Avisaro WLAN product as soon as a PC application uses the serial port.
- 2) Manual Mode: The user determines when a TCP connection is established. Until a connection is established the PC application can use the serial port, but all data is send to ‘nowhere’.

A decision needs to be made, which part is initiating a TCP connection:

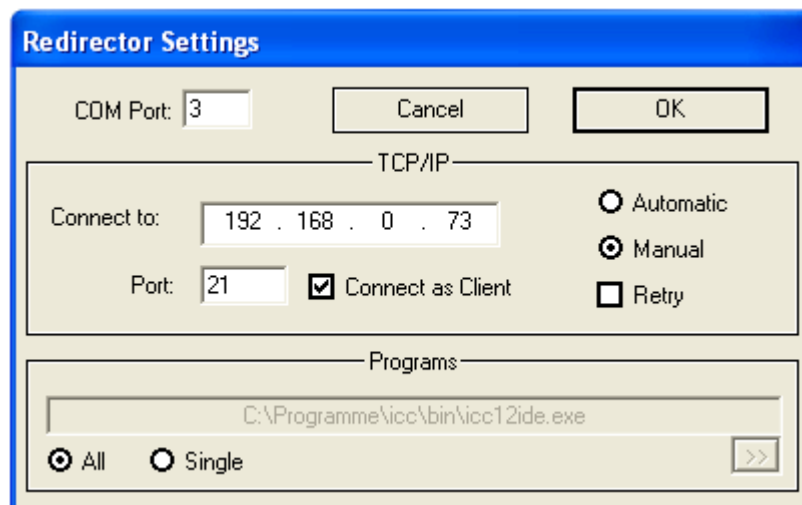
- 1) PC is server: The Avisaro WLAN product could be setup such that it starts a connection to the PC. The PC is waiting for a connection to come in – therefore the PC is a ‘Server’
- 2) PC is client: The Avisaro WLAN product could be setup to listen for an incoming connection. The PC starts the connection – therefore the PC is a ‘Client’

## SETTINGS

User settings can entered by click on “#”:



The User Settings window looks like this:



### COM-PORT NUMBER

Enter the number for the COM-Port to be redirected in this field. Make sure the PC application uses the same number. **Only one COM-Port can be redirected at a time.**

### TCP/IP SETTINGS

The following settings need to be made:

- 1) Choose whether the redirector should accept an incoming connection (Server) or whether it should initiate an outgoing connection (this is true for most cases). By checking the 'Connect as Client' box, the AVI-SPR initiates outgoing connections.
- 2) Choose automatic or manual mode. With automatic mode, a connection is started as soon as a PC connection uses the serial port.
- 3) In case of a connection break down, the redirector can try to establish the connection again. Check the 'Retry' box if this behavior is desired (usually it is)
- 4) Enter the TCP address and port number to whom the connection should be established (in case the redirector is client. If the redirector is server, only a port number is necessary).

## PROGRAMS

A port redirection can be made valid for all PC applications started or only for a specified application. Remember, that a PC application must be started after the redirector has been started.

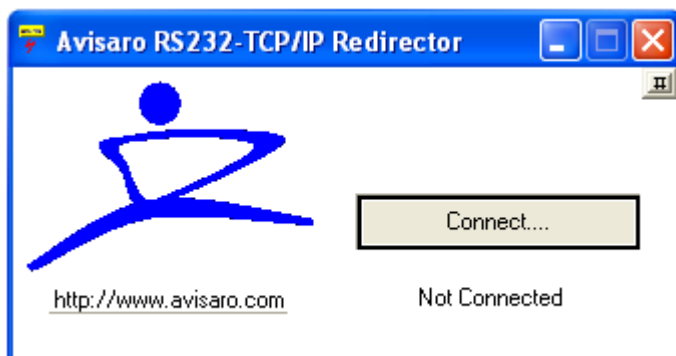
Choose 'All' if the redirection should be valid for all PC applications. Choose 'Single' if only one application should be redirected. By clicking on >> , an application can be selected with a browser.

## USAGE

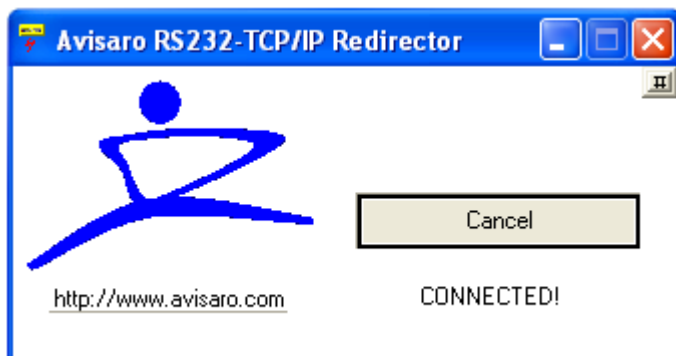
Once configuration is complete (you can change configuration also by editing the \*.ini file), the redirector is ready for operation.

Example:

- 1) Configure the Avisaro WLAN Product to accept an incoming connection
- 2) Configure the redirector to be a client and enter the TCP address of the Avisaro product
- 3) Click on 'Connect':



- 4) The redirector should show the connected status:



- 5) Click on 'cancel' to terminate the connection



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## THINGS TO KNOW

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### RESTART

The redirector software takes some time to 'unload' if you quit the program. During that time, you can not restart the program. So if you quit the redirector, you have to wait some time before restarting it. If you restart too early, nothing will happen if you double click on the 'gui.exe'.