

# GRX1200 Series Getting Started



Version 3.0  
English

- when it has to be **right**

**Leica**  
Geosystems

## Introduction

### Purchase

Congratulations on the purchase of a GRX1200 Series instrument.



To use the product in a permitted manner, please refer to the detailed safety directions in the User Manual.

### Product identification

The type and the serial number of your product are indicated on the type plate.

Enter the type and serial number in your manual and always refer to this information when you need to contact your agency or Leica Geosystems authorized service workshop.

Type:

\_\_\_\_\_

Serial No.:

\_\_\_\_\_

### Symbols

The symbols used in this manual have the following meanings:

Type	Description
	Important paragraphs which must be adhered to in practice as they enable the product to be used in a technically correct and efficient manner.

### Trademarks

- Windows is a registered trademark of Microsoft Corporation
  - CompactFlash and CF are trademarks of SanDisk Corporation
  - Bluetooth is a registered trademark of Bluetooth SIG, Inc
- All other trademarks are the property of their respective owners.

# Table of Contents

In this manual

Chapter	Page
<b>1 How to Use this Manual</b>	<b>4</b>
<b>2 Overview</b>	<b>6</b>
<b>3 Configuration</b>	<b>12</b>
3.1 Configure Receiver Communication Settings	12
3.1.1 Overview	12
3.1.2 Default settings	13
3.1.3 Startup Configurator	15
3.2 Access the Receiver via FTP connection	26
3.3 Access the Receiver with LEICA GPS Spider	27
3.4 Configuring and Monitoring a GRX1200 Series Reference Station with Web Interface	31
3.4.1 Overview	31
3.4.2 Activating the Web Interface	33
3.4.3 Web Interface Connection	34
3.4.4 Changing the Web Interface language	60
<b>4 Firmware Upgrade</b>	<b>62</b>
<b>5 Using the Web Interface</b>	<b>66</b>
5.1 Introduction	66
5.2 Adjusting the Receiver Settings	70

## 1

## How to Use this Manual



It is recommended to set up the product while reading through this manual.

## Path

**Control Panel/Phone and Modem Options/Modems** stands for this working sequence: From a menu select **Control Panel**, then **Phone and Modem Options** and then **Modems**.

## Fields, options and buttons

Fields, options and buttons are printed in bold, for example:

Field:           **Maximum Port Speed**  
 Option:       **115200**  
 Button:       **OK**

## Index

The index is at the back of the manual.

## Validity of this manual

This manual applies to all GRX1200 Series instruments. Differences between the various models are marked and described.

## Available documentation

Name of documentation	Description
GPS1200 User Manual	Provides an overview of the system together with technical data and safety directions.
Name of documentation	Description
GPS1200 Technical Reference Manual	Overall comprehensive guide to the system and program functions. Included are detailed descriptions of special software/hardware settings and software/hardware functions intended for technical specialists.

Name of documentation	Description
Equipment List For GPS Networks and Reference Stations	Describes items and setup of permanent GPS reference stations.
GPS Reference Stations and Networks - An introductory guide	Explains principles of GPS reference stations.

**Format of the documentation**

The GPS1200 CD contains the entire documentation in electronic format. All manuals are also available in printed form except for the GPS1200 Technical Reference Manual.

## 2

## Overview

**Description**

The GRX1200 Series Installation Guide

- explains the configuration steps necessary to bring a GRX1200 Series receiver into service.
- explains the different configuration and operation options of GRX1200 Series receivers as requirements may vary from installation to installation.
- gives recommendations for standard setup scenarios.


**Tools for configuration and operation**

GRX1200 Series receivers can be configured and operated using

- a web browser plus a Web Interface. Refer to paragraph "Terminology" for an explanation of the terms.
- LEICA GPS Spider.

The differences are:

Type	Web Interface	LEICA GPS Spider
Firmware version	v2.1 or higher	Any
Connection between computer and receiver	Ethernet OR Serial cables	Any combination of <ul style="list-style-type: none"> <li>• Serial connection</li> <li>• Modem connection</li> <li>• Ethernet connection</li> </ul>

Type	Web Interface	LEICA GPS Spider
Use	<ul style="list-style-type: none"> <li>• Configuration of one receiver</li> <li>• Operation of one receiver</li> </ul>	Simultaneous configuration, operation and communication with one or many receivers.
 Some settings are available both in the Web Interface and in LEICA GPS Spider. If such settings are configured in the Web Interface, and then an Upload Settings or Start is done from LEICA GPS Spider, these will be overwritten. In this case use the Web Interface exclusively for settings that are not available in LEICA GPS Spider, eg. activating a BINEX data stream. If LEICA GPS Spider and the Web Interface are both used for the same receiver, please note that Start and Stop should always be done from LEICA GPS Spider. For more information, please refer to the GRX1200 and LEICA GPS Spider online help.		
Features	Everything needed for receiver setup, for example: <ul style="list-style-type: none"> <li>• To provide conventional RTK corrections through one or more of its ports.</li> <li>• To log raw data onto the CompactFlash card.</li> <li>• To stream GPS data to other users.</li> </ul>	More advanced features than Web Interface, for example: <ul style="list-style-type: none"> <li>• To transfer raw data automatically from the receiver to a central data storage.</li> <li>• To manage a whole network of reference stations.</li> <li>• To supply network RTK corrections.</li> </ul>

---

**Terminology**

Term	Description
<b>Web browser</b>	For example Internet Explorer. Refer to the diagram below.
<b>Interface</b>	The procedures, codes and protocols that enable two entities to interact for an exchange of data.
<b>Web Interface</b>	Kind of an entry form to define receiver relevant settings. Runs in a web browser. Refer to the diagram below.



a                      b

Instrument ID:	1114	Uptime:	0 days 00:00 h	Sat Visible:	3	Logging:	On
Sensor Type:	GRX1200 Pro	Memory:	26% (8 MB)	Sat Tracked L1:	RTK	On	
P Address:	10.60.36.32	Power:	100%	Sat Tracked L2:		Off	11:53:20 2005-03-24

**System Information**

Instrument	
Instrument Type:	GRX1200 Pro
Serial Number:	451114
Instrument ID:	1114
System Language:	English
IMEI Serial Number:	SUE03490076
PPS:	Yes
Event Input:	Yes
Ethernet:	Yes
Extended OWA:	Yes
Firmware Version:	V 2.07

Firmware	
Build:	1091.649
Maintenance End:	2009-06-01
Measurement Engine:	V 2.121
Measurement Engine Boot:	V 2.100
Boot:	V 1.2
LU2/OWE:	V 2.0
Navigation:	V 3.0
API:	V 3.0
EF Interface:	V 2.0
Web Interface:	V 0.9.0

- a) Web browser
- b) Web Interface

**Requirements**

- When using the web browser, firmware v2.1 or higher must be loaded on the GRX1200 Series receiver.
  - The receiver must be connected to a power supply.
  - For a complete configuration into service, the reference station antenna must be set up and connected.
  - CompactFlash card, depending on the configuration method. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.
-



## 3 Configuration

### 3.1 Configure Receiver Communication Settings

#### 3.1.1 Overview

##### Configuration methods

The basic port and address settings of a receiver for connecting with web browser or LEICA GPS Spider

- are pre-configured with default settings.
- can be configured using the Startup Configurator.

Type	Default settings	Startup Configurator
Format	Pre-configured in receiver	Editable ASCII text file to be put on CompactFlash card
Use	<ul style="list-style-type: none"> <li>• To connect from LEICA GPS Spider to the receiver.</li> <li>• To configure receiver from the Web Interface over Ethernet.</li> </ul>	<ul style="list-style-type: none"> <li>• To change the default settings.</li> <li>• To query information from the receiver.</li> </ul>

##### Next step

IF information is required on	THEN
default settings	Refer to "3.1.2 Default settings".
Startup Configurator	Refer to "3.1.3 Startup Configurator".

## 3.1.2

### Default settings

#### Serial ports

---

Type	Setting
Baud rate	115200
Parity	None
Data bits	8
Stop bit	1
Flow control	None
PPP on port RX	Off

---

#### Ethernet

These settings are applicable to GRX1200 Pro/GRX1200 GG Pro.

Type	Setting
IP address	192.168.0.3
Network mask	255.255.255.0
Gateway	1.1.1.1
IP Port numbers	NET1: 5001 NET2: 5002 NET3: 5003
Access ranges	All open

---

**PPP**

These settings are valid for all GRX1200 Series receivers.

Type	Setting
IP address for PPP	192.168.1.3, fixed

**Interfaces**

Type	Setting
Serial ports	Remote interface
NET ports	Remote Interface

**Web Interface**

Type	Setting
User name	Admin
Password	12345678

**Super Administrator**

Type	Setting
User name	PUK
Password	The <b>Personal Unblock</b> ing code as generated by Leica Geosystems.

**FTP server**

Type	Setting
User name	Admin
Password	12345678

### 3.1.3

## Startup Configurator

### Description

The Startup Configurator is an ASCII file-based




- configuration
- extraction

of the basic port and address settings of a GRX1200 Series receiver.

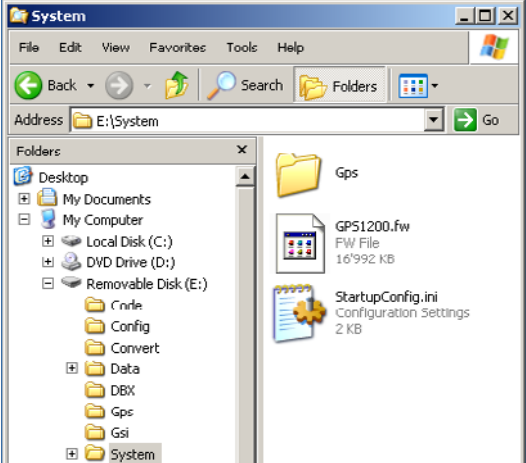


Type	Configuration	Extraction
Use	To set settings.	To query current settings.
File name	StartupConfig.ini	GetConfig.ini
Directory on Compact-Flash card	\SYSTEM	\SYSTEM
Procedure	<ul style="list-style-type: none"><li>• GRX1200 Series receiver is turned on.</li><li>• While powering up, it looks for the file on the CompactFlashcard.</li><li>• It reads the contents.</li><li>• It uses the settings once the startup is finished.</li></ul>	<ul style="list-style-type: none"><li>• GRX1200 Series receiver is turned on.</li><li>• While powering up, it writes its current settings to the file.</li></ul>
Example file	On GPS1200 CD	On GPS1200 CD

Type	Configuration	Extraction
Explanation of file contents	Refer to paragraph "File contents for StartupConfig.ini/ GetConfig.ini".	Refer to paragraph "File contents for StartupConfig.ini/ GetConfig.ini".





### Configure port and address settings step-by-step

Step	Description
1.	Copy the StartupConfig.ini file from a GPS1200 CD to a PC.
 2.	Modify the read only property of the file so the sensor can write to the file.
3.	Modify the StartupConfig.ini file as required using any text editor on a PC.
 3.	Copy the StartupConfig.ini file to the \SYSTEM directory of the CompactFlash card.
	Check the contents of the CompactFlash card. It should then look like this:




Step	Description
	
4.	Remove the CompactFlash card from the PC.
5.	Make sure the receiver is switched off.
6.	Insert the CompactFlash card into the CompactFlash card compartment of the receiver.
7.	Turn the receiver on.
	The receiver reads the file contents and applies the settings.
	Once the settings have been applied successfully, the StartupConfig.ini file is deleted.


### Query port and address settings step-by-step

Step	Description
1.	Copy the GetConfig.ini file from a GPS1200 CD to a PC. OR Create an empty ASCII file called GetConfig.ini on a PC. The content of the file does not matter, but the filename has to be exactly GetConfig.ini.
	When using the GetConfig.ini file from the CD, the read only property of the file need to be modified so the sensor can write to this file.
2.	Copy the GetConfig.ini file to the \SYSTEM directory of the CompactFlash card.
3.	Remove the CompactFlash card from the PC.
4.	Make sure the receiver is switched off.
5.	Insert the CompactFlash card into the CompactFlash card compartment of the receiver.
6.	Turn your receiver on.
	The receiver writes its current settings to the file.
7.	Wait until the red LED beside the CompactFlash card compartment has stopped flashing.
8.	Remove the CompactFlash card.
9.	Insert the CompactFlash card into a PC or card reader.
10.	Read or modify the contents of the GetConfig.ini file in the \SYSTEM directory.
	The the GetConfig.ini file looks exactly the same as the StartupConfig.ini file, only the name is different.
	Rename the GetConfig.ini file to StartupConfig.ini in case it is to be used for receiver configuration in fututre.

**File contents for  
StartupConfig.ini/  
GetConfig.ini**

This is an example of the contents of a configuration file. Example files can be found on the GPS1200 CD in Gps1200\GPS1200\_SampleData\Startup Configurator\_(GRX1200).

Example from file	Explanation
 The format of all lines in the StartupConfig.ini file has to be exactly as shown, except for comment lines starting with #. All settings are case sensitive.	
<pre>##### # Author: Leica Geosystems AG #####</pre>	<p><b>Header</b></p> <ul style="list-style-type: none"> <li>• Standard header when querying settings using GetConfig.ini.</li> <li>• Header can be edited and expanded.</li> <li>• Can be used to keep track of the author, version or the history of the configuration files.</li> <li>• All lines starting with # are comments and are ignored by the receiver when it reads the file.</li> </ul>
<pre># Sensor ##### VersionNr:5.00,= SerialNr:451114,=</pre>	<p><b>Sensor</b></p> <ul style="list-style-type: none"> <li>• Firmware version and serial number of the receiver.</li> <li>• In a StartupConfig.ini file, =, &gt; and &lt; can be used to configure conditional usage of the settings.</li> <li>• For example, to tell the receiver to only use of the StartupConfig.ini if the firmware version is higher than v2.1 use VersionNr:2.10,&gt;</li> </ul>

Example from file	Explanation
<pre># MAC-Address ##### MAC-Address:00:c0:1b:05:3f:73</pre>	<p><b>MAC address</b></p> <ul style="list-style-type: none"> <li>• <b>Media Access Control</b> address.</li> <li>• Applicable for the GRX1200 Pro/GRX1200 GG Pro.</li> <li>• A hardware address that uniquely identifies each receiver's network adaptor.</li> <li>• The MAC address is often required by network administrators when assigning a static IP address to a receiver within a network.</li> </ul> <p> The MAC address cannot be set, but only queried.</p>
<pre># ComPortDevice ##### ComPortDevice:2,Remote,Siemens MC45,,</pre>	<p><b>ComPortDevice</b></p> <ul style="list-style-type: none"> <li>• Set devices with standard configuration on a serial port.</li> <li>• Define Com port, Interface, Device, PIN, PUK</li> </ul>
<pre># ComPort ##### ComPort:1,115200,None,8,1,None ComPort:2,115200,None,8,1,RTS_CTS -&gt; [Siemens MC45] ComPort:3,115200,None,8,1,None ComPort:Rx,115200,None,8,1,None</pre>	<p><b>ComPort</b></p> <ul style="list-style-type: none"> <li>• Settings for port number, baud rate, parity, data bit, stop bit and flow control for each ComPort.</li> <li>• When querying the ComPort settings, any device configured for that port is listed.</li> <li>• The ComPortDevice set on a port has to be listed with the port</li> </ul>

Example from file	Explanation
<pre># Ethernet ##### Ethernet:10.60.36.32,255.255.254.0,10.60.36.5</pre>	<p><b>Ethernet</b></p> <ul style="list-style-type: none"> <li>• This setting is applicable for GRX1200 Pro/ GRX1200 GG Pro.</li> <li>• The receiver's IP address, subnet mask and gateway settings</li> <li>• Defining the address, the size of the subnet and the gateway to contact for connections outside the subnet. Ask your system administrator for these settings.</li> </ul>
<pre># DNS ##### DNS:164.128.36.34,164.128.76.39,</pre>	<p><b>DNS Server</b></p> <ul style="list-style-type: none"> <li>• Ask your internet service provider for the IP address of the DNS Server.</li> <li>• Entering one DNS server IP address is sufficient.</li> </ul>

Example from file	Explanation
<pre># EthernetPort ##### EthernetPort:NET1,5001,Server, 1.1.1.1,254.254.254.254, 1.1.1.1,254.254.254.254, 1.1.1.1,254.254.254.254,1 EthernetPort:NET2,5002,Server, 10.60.36.33,10.60.36.33, 10.60.36.33,10.60.36.33, 10.60.36.33,10.60.36.33,10 EthernetPort:NET3,8001,Client, 10.60.36.251</pre>	<p><b>EthernetPort</b></p> <p>This setting is applicable for GRX1200 Pro/GRX1200 GG Pro.</p> <p>Features of the Ethernet connection of GRX1200 Pro/GRX1200 GG Pro:</p> <ul style="list-style-type: none"> <li>• three logical IP (=NET) ports, which can be used for receiver control over the remote interface, streaming of real-time corrections, GPS raw and other data.</li> <li>• FTP and Web Interface (http) access.</li> </ul> <p>Settings per line for each NET port:</p> <ul style="list-style-type: none"> <li>• NET port number, IP port number, server mode, access range 1 from, access range 1 to, access range 2 from, access range 2 to, access range 3 from, access range 3 to, number of clients allowed to connect to (1-10, only editable with RTK multiplexer option)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• NET port number, server IP port number, client mode, server IP address.</li> </ul> <p>Description of settings</p> <ul style="list-style-type: none"> <li>• IP port number Forms, together with the IP address, the unique address of the port within the network. Ask the system administrator for this setting.</li> </ul>

Example from file	Explanation
	<ul style="list-style-type: none"> <li data-bbox="920 135 1492 348"> <p>• Server/client mode  <b>Server:</b> The port is waiting for clients to connect. Clients can be for example LEICA GPS Spider on the remote interface, or RTK rovers on the real-time interface.  <b>Client:</b> Receiver is establishing connections itself, for example to a NTRIPCaster.</p> </li> <li data-bbox="920 365 1492 549"> <p>• Access ranges  Applicable in server mode. The access to NET ports can be restricted using three access ranges per port. In the example given above, NET2 can only be access by the client with the address 10.60.36.33.</p> </li> <li data-bbox="920 566 1492 689"> <p>• Server IP address, server IP port number  Applicable in client mode. In the example given above, NET3 is configured to connect to 10.60.36.251, port 8001.</p> </li> </ul> <p data-bbox="920 706 1492 824">More details for the Ethernet related settings can be found in the Web Interface Online Help, as well as in the GPS1200 Technical Reference Manual.</p>

Example from file	Explanation
<pre># Webserver ##### Webserver:80,0,443</pre>	<p><b>Webserver</b></p> <ul style="list-style-type: none"> <li>• Web Interface configuration options are for controlling the access to the Web Interface configuration panels and to enable SSL for Web Interface access.</li> <li>• Define Webserver: http port number, SSL off (0) or on (1), https port number</li> </ul>
<pre># DynDNS ##### DynDNS:0,my.hostname.com,,80,1, test,test,0</pre>	<p><b>DynDNS</b></p> <ul style="list-style-type: none"> <li>• DynDNS allows clients to use an internet domain name to address a GRX receiver possessing a dynamic IP address.</li> <li>• Define DynDNS: set DynDNS dynamic (0) DynDNS static (1) DynDNS custom (2), host-name of sensor, DynDNS server (can be left blank), DynDNS server port, activate (1) or deactivate (0) wildcard use, DynDNS service user name, DynDNS service password, transmit IP of: choose automatically (0), ethernet interface (1) internet device (2)</li> </ul>



- When using the Startup Configurator files, make sure that either StartupConfig.ini or GetConfig.ini is in the \SYSTEM directory of the CompactFlash card. In case both files are available, the receiver will only take GetConfig.ini into account, and ignore the settings in StartupConfig.ini.



- The format of all lines in the StartupConfig.ini file has to be exactly as shown, except for comment lines starting with #.
  - In case an invalid entry is found in a StartupConfig.ini file, the receiver will create an error log file StartupConfig.err. This file contains information on why an entry was detected as invalid. Valid settings will be applied, regardless of invalid ones.
-

## 3.2

### Access the Receiver via FTP connection

#### Description

The receiver's CF card can be accessed via FTP connection from e.g. an internet browser or Windows Explorer. Data can then be downloaded manually from the sensor. Also firmware files, Web Interface files or start up configuration files can be loaded onto the CF card using this FTP connection.

#### Access the CF card via FTP step-by-step

Step	Description
1.	Use a web browser, the Windows Explorer, the Total Commander or any other software capable of establishing an FTP connection.
2.	Make a connection with the following configuration: <ul style="list-style-type: none"><li>• User name: Admin (or as configured for the used receiver).</li><li>• Password: 12345678 (or as configured for the used receiver).</li><li>• Host name: the receiver's IP address.</li></ul>
3.	Copy the needed files from or to the CF card.
4.	Close the FTP connection.

### 3.3

## Access the Receiver with LEICA GPS Spider

---

### Requirements

- The reference station hardware is prepared. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.
  - The receiver is powered.
  - The antenna is connected.
  - Depending on the configuration method, CompactFlash card must be inserted.
  - The reference station software is correctly installed.
  - The PC running LEICA GPS Spider is connected with the receiver.
- 

### Remote interface

The remote interface

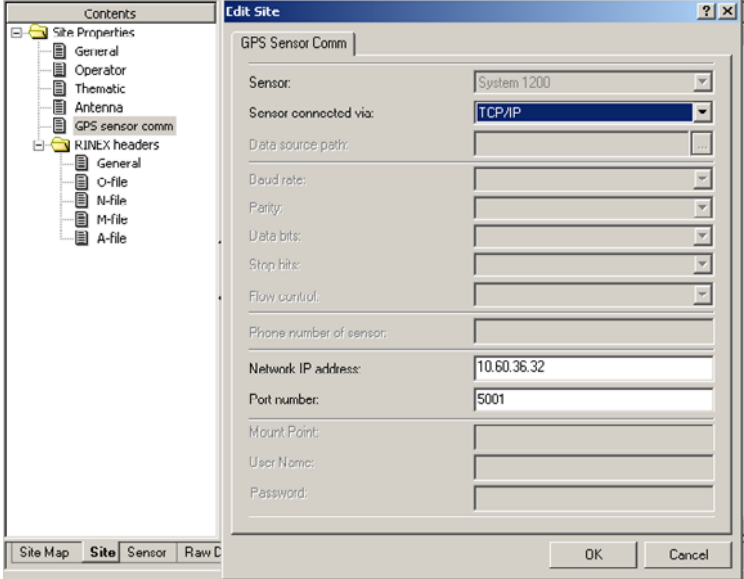
- is a two-way communication interface.
  - is prepared to receive, and reply to, commands according to the Leica OWI standard.
  - has, per default, all serial and NET ports on a GRX1200 Series receiver assigned to it.
  - is the communication interface between LEICA GPS Spider and the receiver.
  - is used by third-party reference station software, which is capable of interfacing with Leica GPS1200 receivers. Accordingly all explanations in this chapter can also applied in the pre-configuration of connections from these software packages.
- 

### Pre-configuration

GRX1200 Series receivers can be pre-configured in one of the following three ways.


Type	Description
Default values	<ul style="list-style-type: none"><li>• GRX1200 Series receivers are pre-configured with default settings. Refer to "3.1.2 Default settings" for information on the settings.</li></ul>

Type	Description
	<ul style="list-style-type: none"><li>• For connections over the serial ports, the default values will normally be sufficient.</li></ul> <p><b>Configuration</b> No further configuration is required.</p> <p><b>Next step</b> Refer to paragraph "Connect from LEICA GPS Spider" for information on how to establish a connection from within LEICA GPS Spider.</p>
<b>Startup Configurator</b>	<ul style="list-style-type: none"><li>• To configure special port settings different to default settings.</li><li>• To configure Ethernet settings different to default settings.</li><li>• The receiver settings must match the settings specified in LEICA GPS Spider receiver configuration dialog:</li></ul>

Type	Description
	 <p><b>Configuration</b> Refer to "3.1.3 Startup Configurator" for information on how to use the Startup Configurator.</p> <p><b>Next step</b> After the configuration has been done, the connection from within LEICA GPS Spider can be established. Refer to paragraph "Connect from LEICA GPS Spider" for information.</p>

Type	Description
RX1200	<ul style="list-style-type: none"><li>• RX1200 can be useful if the receiver is to be pre-configured for modems that cannot be treated as standard RS232 serial devices.</li></ul> <p><b>Configuration</b> Define and assign the modem using RX1200.</p> <p><b>Next step</b> After the configuration has been done, the connection from within LEICA GPS Spider can be established. Refer to paragraph "Connect from LEICA GPS Spider" for information.</p>

### Connect from LEICA GPS Spider

Click  in LEICA GPS Spider to establish communication. LEICA GPS Spider will indicate the successful connection with a progress bar and a watch-view message.

Refer to the corresponding topic of the LEICA GPS Spider Online Help for information on how to troubleshoot receiver communication.

## 3.4 Configuring and Monitoring a GRX1200 Series Reference Station with Web Interface

### 3.4.1 Overview

#### Requirements

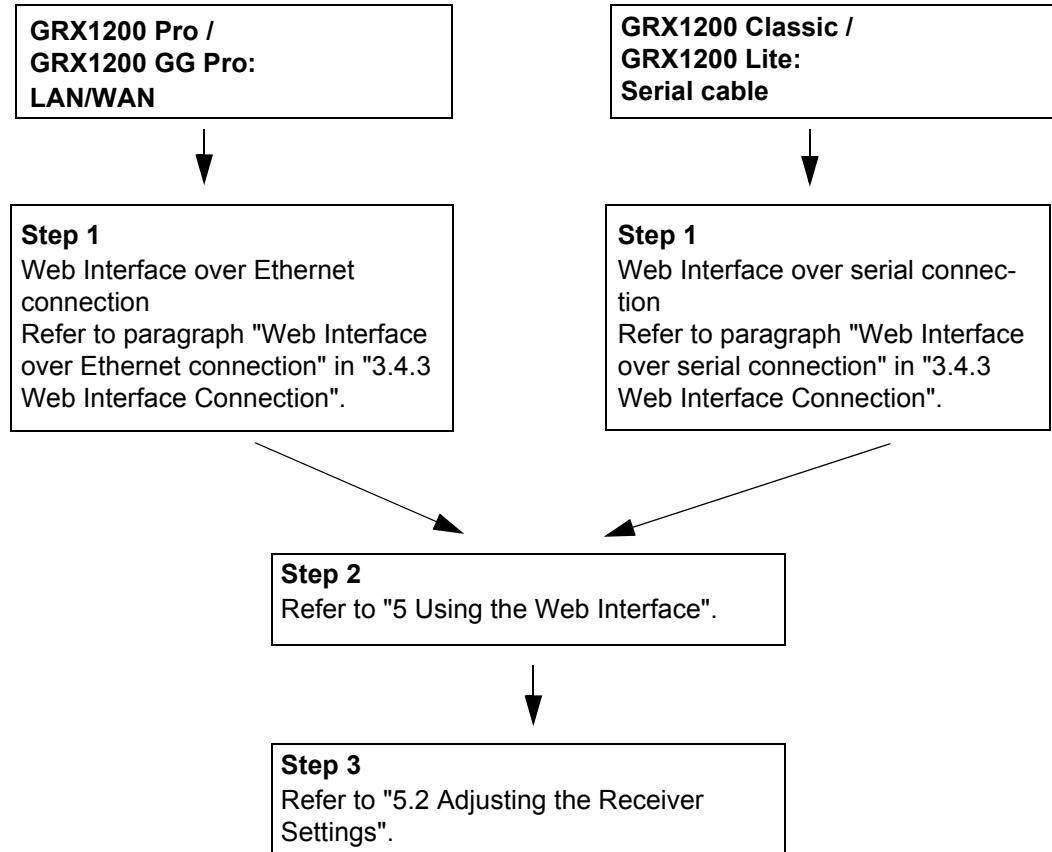
- 
- The reference station hardware is prepared. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.
  - The receiver is powered.
  - The antenna is connected.
  - Depending on the configuration method, CompactFlash card must be inserted.
  - For GRX1200 Pro / GRX1200 GG Pro with port NET for Ethernet connection, the PC running the web browser and the receiver must physically be connected to the same LAN/WAN.

OR

For GRX1200 Classic / GRX1200 Lite without port NET for Ethernet connection, the PC must physically be connected to the receiver port RX using a serial cable.

---

## Procedure





## 3.4.2

## Activating the Web Interface

### Description

If the sensor is to be configured via the Web Interface, the Web Interface first needs to be activated. This is done by loading a zip file containing all necessary data onto the receiver's CF card. The zip file can be found on the GPS1200 CD-ROM that was delivered with the receiver. There are different files to be uploaded for the different languages, e.g. for an English Web Interface, please upload the file grx1200\_webs\_en.zip.

### Installation of the Web Interface files step-by-step

Step	Description
1.	Copy the zip file to the \SYSTEM directory of the receiver's CF card. Do not unzip the file. The CF card can be accessed directly by inserting it in the CF card slot of a PC or via FTP connection. Refer to " <b>3.2 Access the Receiver via FTP connection</b> ".
2.	Reboot the receiver. The Web Interface is then installed.

### 3.4.3

## Web Interface Connection

### Next step

Depending on the type of receiver, the configuration of the Web Interface connection varies.


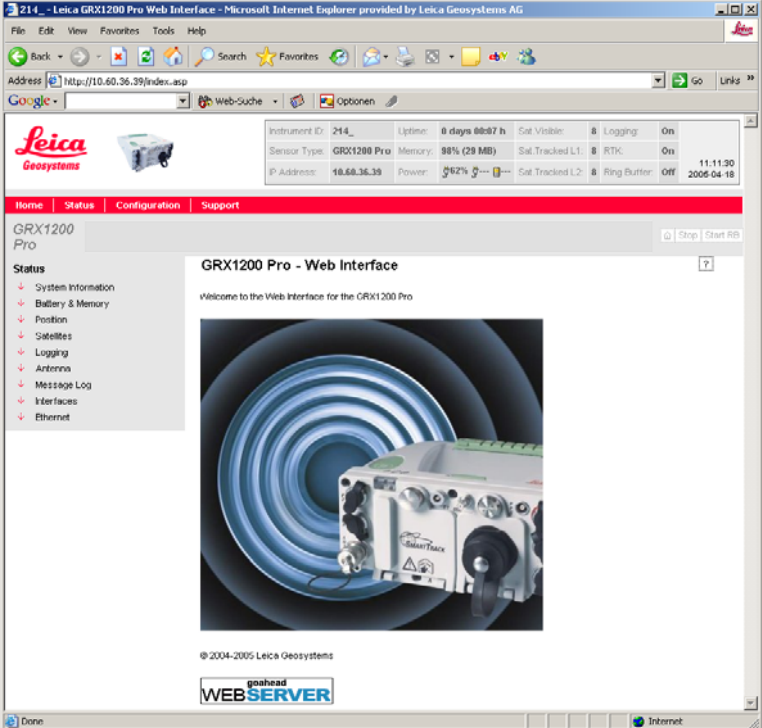
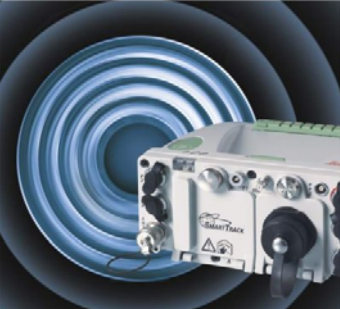
IF the receiver is a	THEN
GRX1200 Pro / GRX1200 GG Pro	refer to paragraph "Web Interface over Ethernet connection".
GRX1200 Classic / GRX1200 Lite	refer to paragraph "Web Interface over serial connection".
GRX1200 Pro / GRX1200 GG Pro / GRX1200 Classic / GRX1200 Lite	connection to the Web Interface is also possible via GPRS connection. Refer to the online help for further information.

### Web Interface over Ethernet connection

Applicable for the GRX1200 Pro / GRX1200 GG Pro. A connection to the Web Interface is made using LAN and the port NET, the receiver's Ethernet port.

Step	Description
1.	Set <ul style="list-style-type: none"> <li>• IP address</li> <li>• subnet mask</li> <li>• gateway on the receiver</li> </ul> using the Startup Configurator. Refer to "3.1.3 Startup Configurator" for information.
2.	Open the web browser.

<b>Step</b>	<b>Description</b>
3.	Type in the IP address of the receiver into the address bar, for example http://10.60.36.39.
4.	Press <b>ENTER</b> .

Step	Description																																								
<p data-bbox="435 171 499 204"></p>	<p data-bbox="539 171 1337 199">After a few seconds, the start page of the Web Interface comes up:</p>  <table border="1" data-bbox="805 339 1284 400"> <tr> <td>Instrument ID:</td> <td>214_</td> <td>Uptime:</td> <td>8 days 00:07 h</td> <td>Sat. Visible:</td> <td>8</td> <td>Logging:</td> <td>On</td> </tr> <tr> <td>Sensor Type:</td> <td>GRX1200 Pro</td> <td>Memory:</td> <td>88% (29 MB)</td> <td>Sat. Tracked L1:</td> <td>8</td> <td>RTK:</td> <td>On</td> </tr> <tr> <td>IP Address:</td> <td>10.60.36.39</td> <td>Power:</td> <td>92%</td> <td>Sat. Tracked L2:</td> <td>8</td> <td>Ring Buffer:</td> <td>Off</td> </tr> <tr> <td colspan="7"></td> <td>11:11:30</td> </tr> <tr> <td colspan="7"></td> <td>2006-04-18</td> </tr> </table> <p data-bbox="550 417 782 428">Home   Status   Configuration   Support</p> <p data-bbox="550 440 614 468">GRX1200 Pro</p> <p data-bbox="550 479 582 490">Status</p> <ul data-bbox="550 501 654 641" style="list-style-type: none"> <li>System Information</li> <li>Battery &amp; Memory</li> <li>Position</li> <li>Satellites</li> <li>Logging</li> <li>Antenna</li> <li>Message Log</li> <li>Interfaces</li> <li>Ethernet</li> </ul> <p data-bbox="742 473 933 484">GRX1200 Pro - Web Interface</p> <p data-bbox="742 507 949 518">Welcome to the Web Interface for the GRX1200 Pro</p>  <p data-bbox="742 865 869 876">© 2004-2005 Leica Geosystems</p> <p data-bbox="742 899 869 921">goahead WEB SERVER</p>	Instrument ID:	214_	Uptime:	8 days 00:07 h	Sat. Visible:	8	Logging:	On	Sensor Type:	GRX1200 Pro	Memory:	88% (29 MB)	Sat. Tracked L1:	8	RTK:	On	IP Address:	10.60.36.39	Power:	92%	Sat. Tracked L2:	8	Ring Buffer:	Off								11:11:30								2006-04-18
Instrument ID:	214_	Uptime:	8 days 00:07 h	Sat. Visible:	8	Logging:	On																																		
Sensor Type:	GRX1200 Pro	Memory:	88% (29 MB)	Sat. Tracked L1:	8	RTK:	On																																		
IP Address:	10.60.36.39	Power:	92%	Sat. Tracked L2:	8	Ring Buffer:	Off																																		
							11:11:30																																		
							2006-04-18																																		
<p data-bbox="443 966 475 988">5.</p>	<p data-bbox="539 966 1042 988">Continue with "5 Using the Web Interface".</p>																																								

## Web Interface over serial connection

Applicable for the GRX1200 Classic / GRX1200 Lite. A connection to the Web Interface is made using a serial cable and **Point-to-Point Protocol**.

The procedure of connecting to the web consists of four parts:


- Configure PPP on port RX of the receiver.
- Define a serial line modem device on the PC.
- Define a PPP network connection.
- Establish a PPP connection.

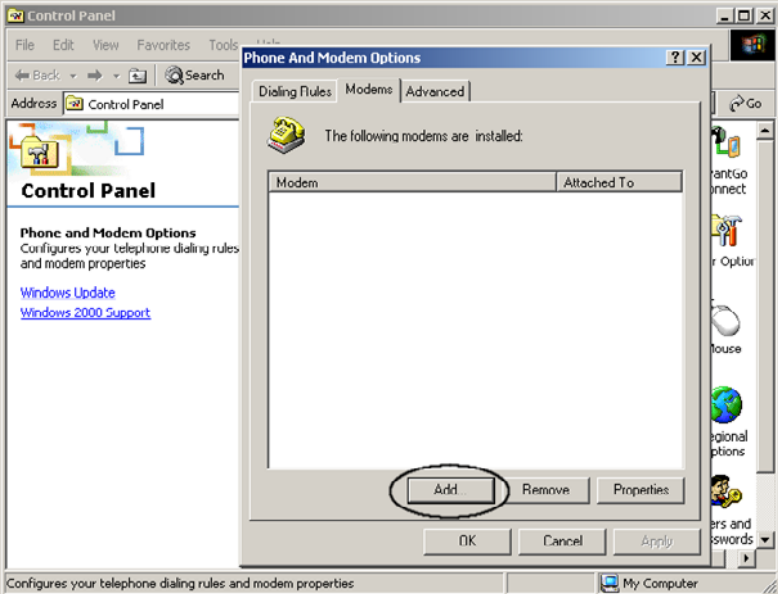
Each part is described below step-by-step. The description is made for Windows 2000. Windows XP configuration is basically the same, however some screens and description of settings may vary slightly.

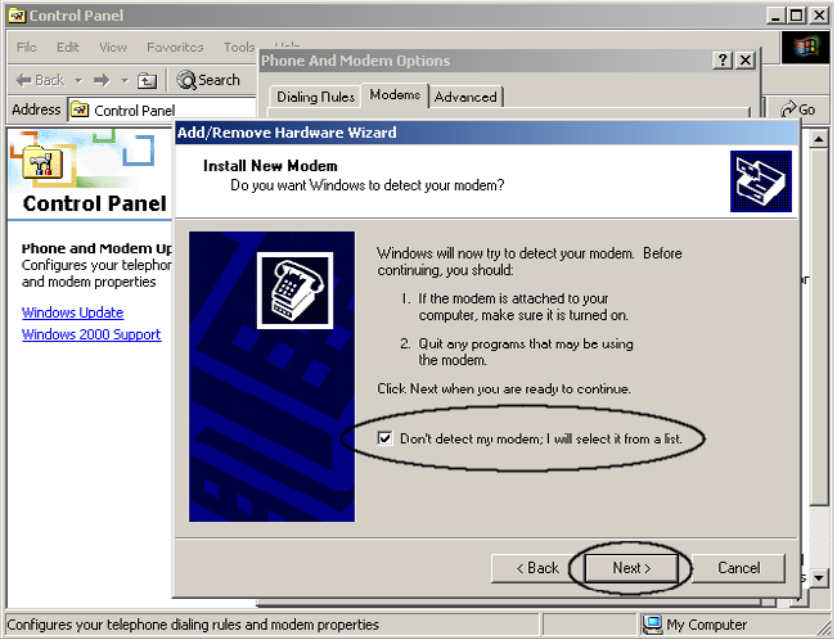
### Configure PPP on port RX of the receiver

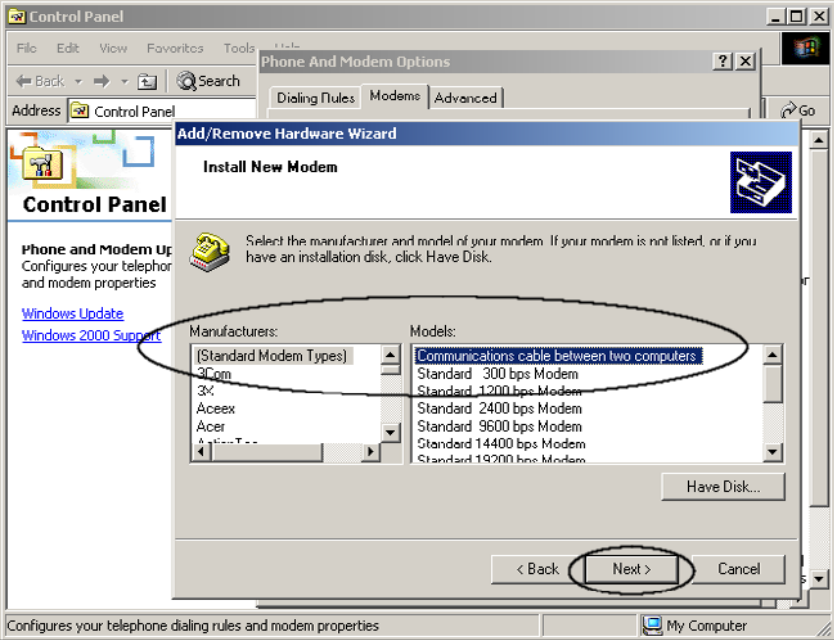
Step	Description
1.	Set <b>PPPOnRxPort:Yes</b> using the Startup Configurator. Refer to "3.1.3 Startup Configurator".

### Define a serial line modem device on the PC step-by-step

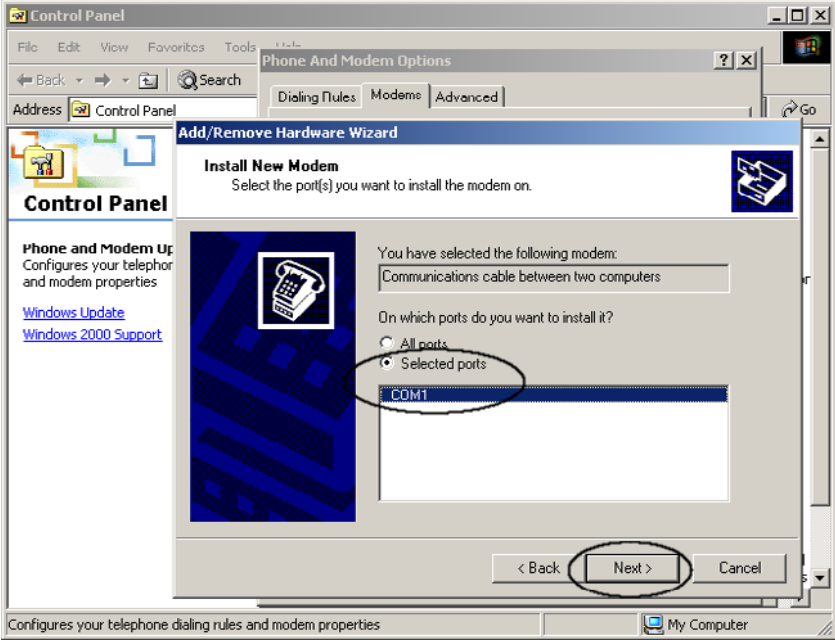

Step	Description
1.	Click  on the desktop of the PC.

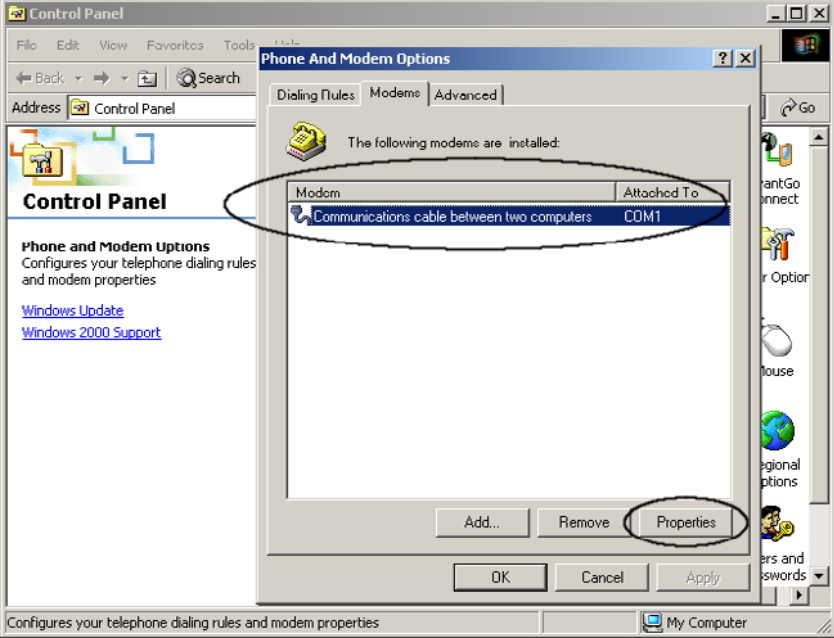
Step	Description
2.	<p>Select <b>Control Panel/Phone and Modem Options/Modems</b> to setup a new modem. This window comes up:</p>  <p>The screenshot shows the 'Phone and Modem Options' dialog box with the 'Modems' tab selected. The text 'The following modems are installed:' is displayed above an empty table with columns 'Modem' and 'Attached To'. Below the table are buttons for 'Add', 'Remove', and 'Properties'. The 'Add' button is circled in red. At the bottom of the dialog are 'OK', 'Cancel', and 'Apply' buttons. The background shows the Control Panel window with the 'Phone and Modem Options' link selected.</p>

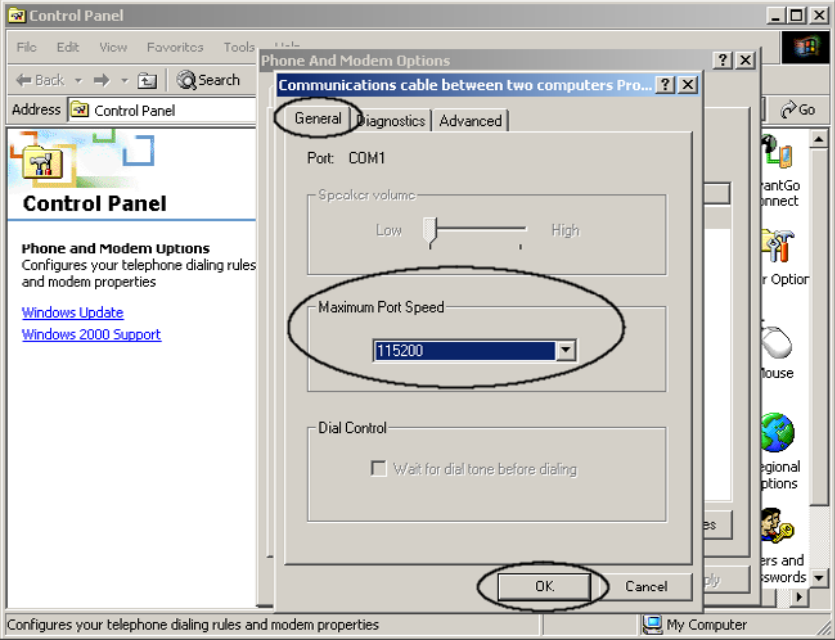
Step	Description
3.	<p>Click <b>Add....</b> This window comes up:</p>  <p>The screenshot shows the Windows XP Control Panel window with the 'Phone and Modem Options' tab selected. An 'Add/Remove Hardware Wizard' dialog box is open, titled 'Install New Modem'. The dialog asks 'Do you want Windows to detect your modem?'. Below this, it says 'Windows will now try to detect your modem. Before continuing, you should:' followed by two numbered instructions: '1. If the modem is attached to your computer, make sure it is turned on.' and '2. Quit any programs that may be using the modem.' Below the instructions, it says 'Click Next when you are ready to continue.' There are three radio button options: 'Detect my modem automatically', 'Don't detect my modem; I will select it from a list.' (which is selected and circled), and 'I will select it from a list.' At the bottom of the dialog, there are three buttons: '&lt; Back', 'Next &gt;' (which is circled), and 'Cancel'.</p>
4.	Tick <b>Don't detect my modem; I will select it from a list.</b>


Step	Description
5.	<p>Click <b>Next</b>. This window comes up:</p>  <p>The screenshot shows the 'Add/Remove Hardware Wizard' window titled 'Install New Modem'. It is overlaid on the 'Phone and Modem Options' window in the Control Panel. The wizard has two columns: 'Manufacturers' and 'Models'. The 'Models' list is highlighted, and the 'Next &gt;' button is circled. The 'Models' list includes: 'Communications cable between two computers', 'Standard 300 bps Modem', 'Standard 1200 bps Modem', 'Standard 2400 bps Modem', 'Standard 9600 bps Modem', 'Standard 14400 bps Modem', and 'Standard 19200 bps Modem'. The 'Next &gt;' button is circled in red.</p>
6.	Highlight <b>Communication cable between two computers</b> .




Step	Description
7.	<p>Click <b>Next</b>. This window comes up:</p>  <p>The screenshot shows the 'Add/Remove Hardware Wizard' window titled 'Install New Modem'. The instruction says 'Select the port(s) you want to install the modem on.' Below this, it states 'You have selected the following modem: Communications cable between two computers'. The question is 'On which ports do you want to install it?' with two radio buttons: 'All ports' (unselected) and 'Selected ports' (selected). A list box below shows 'COM1' selected. At the bottom, the '&lt; Back' and 'Next &gt;' buttons are visible, with 'Next &gt;' circled in red. The background shows the Control Panel window with 'Phone and Modem Options' selected.</p>
8.	Select the COM port on which the receiver is connected to. The COM port is the serial port.
9.	Click <b>Next</b> .
	Windows now takes a while to register the new modem.


Step	Description
10.	<p>Click <b>Finish</b> to finish the modem installation procedure. This window below comes up. The newly added modem is displayed in the list of installed modems.</p>  <p>The screenshot shows the 'Phone and Modem Options' dialog box in Windows. The 'Modems' tab is active, displaying a list of installed modems. The list has two columns: 'Modem' and 'Attached To'. One entry is highlighted: 'Communications cable between two computers' under the 'Modem' column and 'COM1' under the 'Attached To' column. A black oval is drawn around this entry. Below the list, there are buttons for 'Add...', 'Remove', and 'Properties'. The 'Properties' button is also circled with a black oval. The dialog box is overlaid on the Windows Control Panel window.</p>
11.	Select the newly added modem.

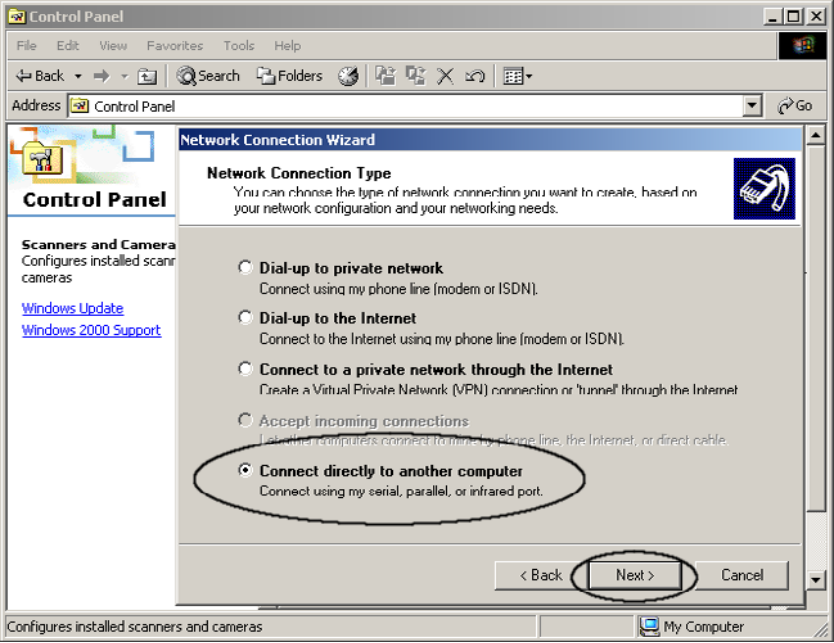
Step	Description
12.	<p>Click <b>Properties</b>. This window comes up:</p>  <p>The screenshot shows the 'Phone and Modem Options' dialog box with the 'General' tab active. The 'Port' is set to 'COM1'. The 'Maximum Port Speed' is set to '115200'. The 'OK' button is circled in red.</p>
13.	Select the <b>General</b> tab.
14.	Select <b>115200</b> as <b>Maximum Port Speed</b> .
15.	Click <b>OK</b> to return to the window <b>Phone and Modem Options</b> .
16.	Click <b>OK</b> to close the window <b>Phone and Modem Options</b> .

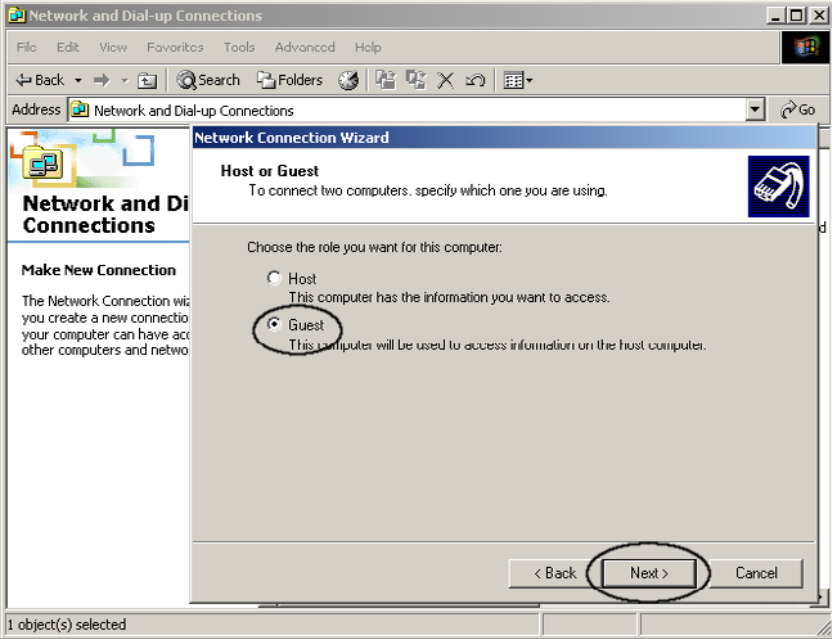
Step	Description
17.	Close the window <b>Printers and Other Hardware</b> .
	The modem installation procedure is completed.
18.	Continue with the next part. Refer to "Define a PPP network connection step-by-step" below.

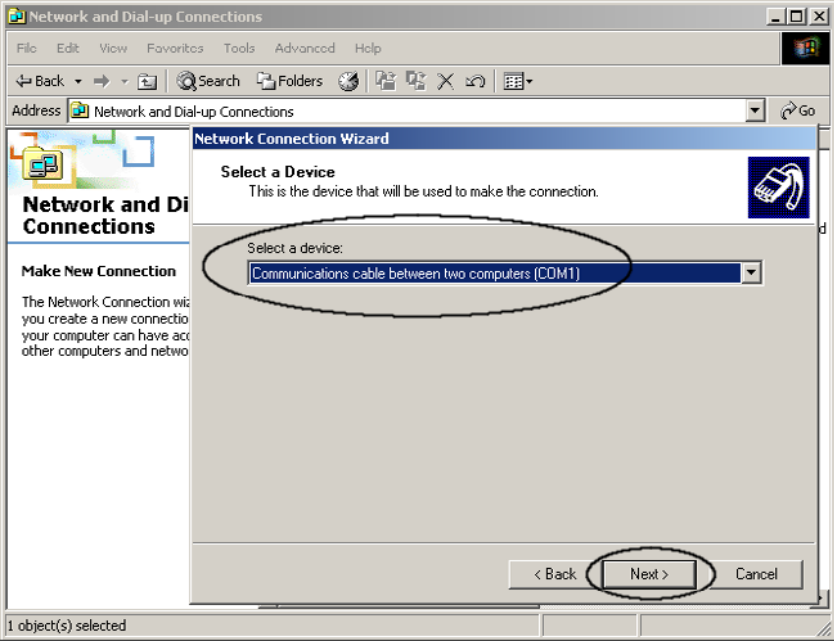
### Define a PPP network connection step-by-step

Step	Description
1.	Click  on the desktop of the PC.

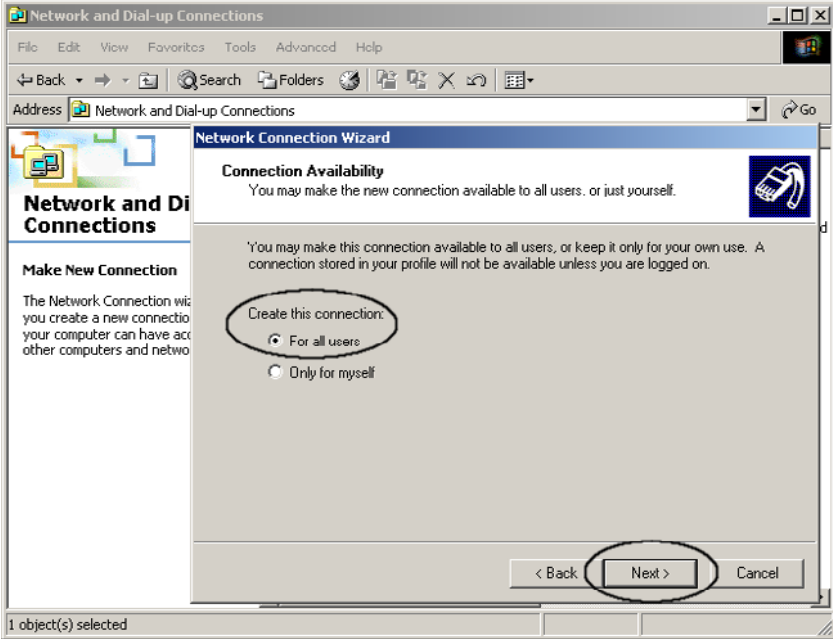
Step	Description
2.	<p>Select <b>Control Panel/Network and Dial-up Connections/Make New Connection</b> to setup a new network connection. This window comes up:</p> 

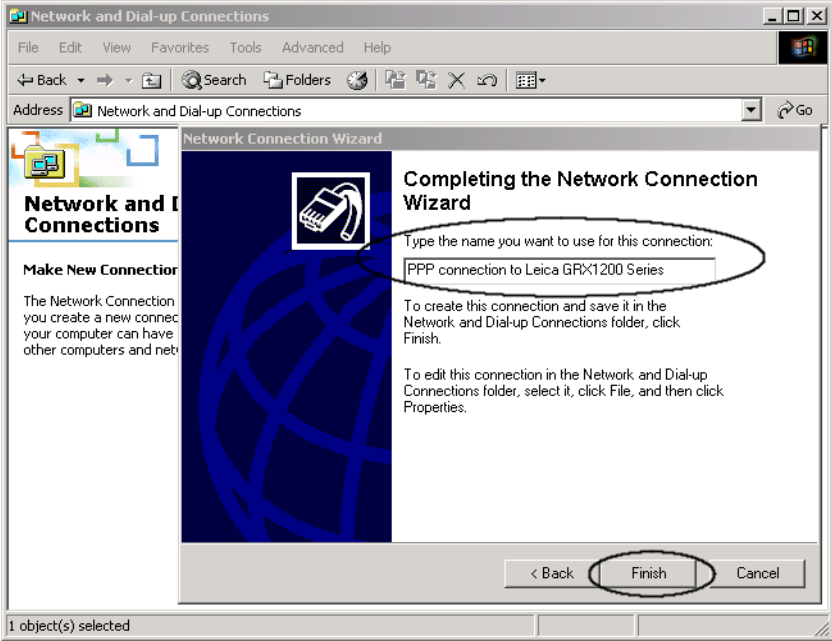

Step	Description
3.	<p>Click <b>Next</b>. This window comes up:</p>  <p>The screenshot shows the 'Network Connection Wizard' window. The 'Network Connection Type' section contains the following options:</p> <ul style="list-style-type: none"><li><input type="radio"/> Dial-up to private network Connect using my phone line (modem or ISDN).</li><li><input type="radio"/> Dial-up to the Internet Connect to the Internet using my phone line (modem or ISDN).</li><li><input type="radio"/> Connect to a private network through the Internet Create a Virtual Private Network (VPN) connection or 'tunnel' through the Internet.</li><li><input type="radio"/> Accept incoming connections Let other computers connect to mine by phone line, the Internet, or direct cable.</li><li><input checked="" type="radio"/> <b>Connect directly to another computer</b> Connect using my serial, parallel, or infrared port.</li></ul> <p>The 'Next &gt;' button is highlighted with a black oval.</p>
4.	Tick <b>Connect directly to another computer</b> .

Step	Description
5.	<p>Click <b>Next</b>. This window comes up:</p>  <p>The screenshot shows a Windows XP desktop environment. In the foreground, a 'Network Connection Wizard' dialog box is open. The dialog has a title bar that says 'Network Connection Wizard' and a subtitle 'Host or Guest'. Below the subtitle, it says 'To connect two computers, specify which one you are using.' There are two radio button options: 'Host' (with the text 'This computer has the information you want to access.') and 'Guest' (with the text 'This computer will be used to access information on the host computer.'). The 'Guest' option is selected and circled in red. At the bottom of the dialog, there are three buttons: '&lt; Back', 'Next &gt;', and 'Cancel'. The 'Next &gt;' button is also circled in red. In the background, a 'Network and Dial-up Connections' window is visible, showing a sidebar with 'Network and Dial-up Connections' and 'Make New Connection' sections. The status bar at the bottom of the window says '1 object(s) selected'.</p>
6.	Tick <b>Guest</b> .

Step	Description
7.	<p>Click <b>Next</b>. This window below comes up. The newly added communication cable is displayed in the list of devices.</p> 
8.	Select the newly created communication cable.
9.	Click <b>Next</b> .


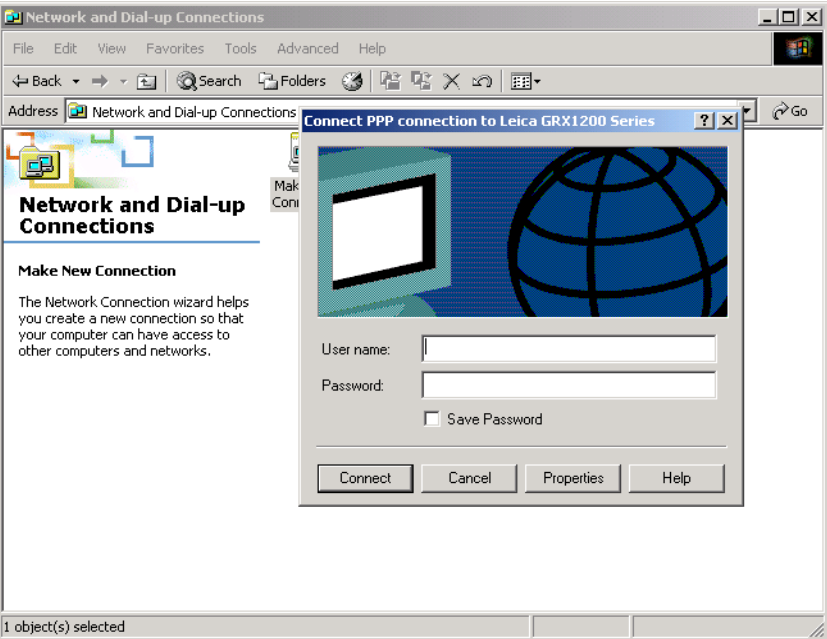


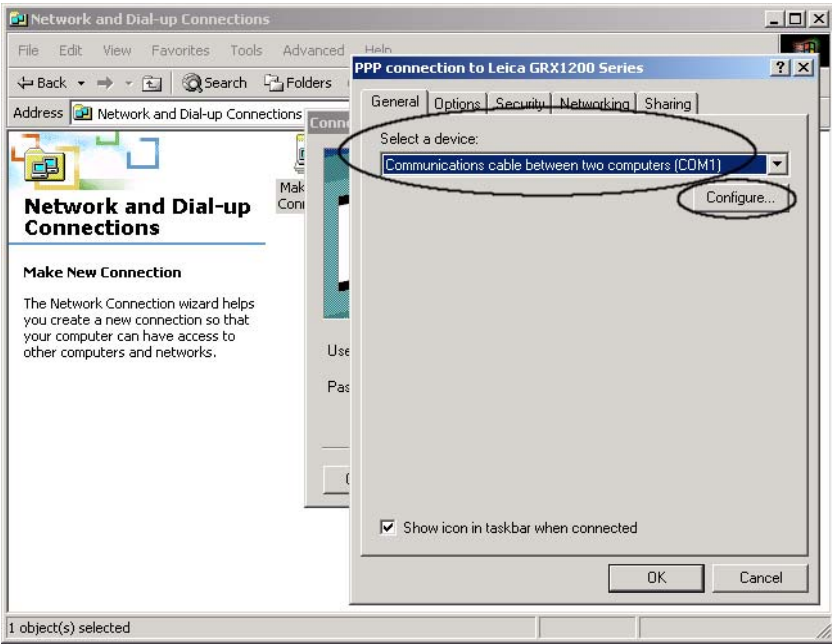
Step	Description
10.	<p>Click <b>Finish</b>. This window comes up:</p> 
11.	Tick <b>For all users</b> .

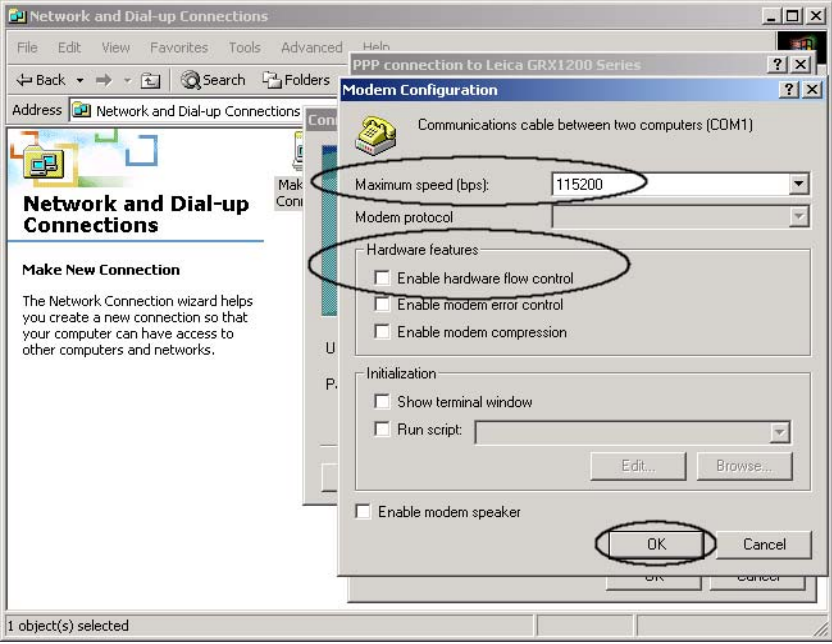
Step	Description
12.	<p>Click <b>Next</b>. This window comes up:</p> 
13.	Type in the connection name <b>PPP connection to Leica GRX1200 Series</b> .
14.	Click <b>Finish</b> .
	The PPP network connection is now defined. A connect window <b>Connect PPP connection to Leica GRX1200 Series</b> is displayed.

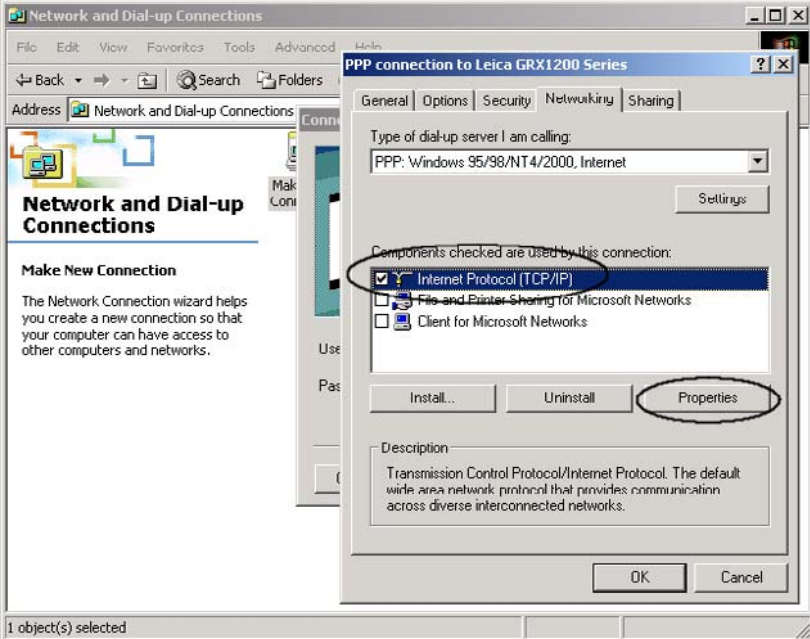
Step	Description
15.	Continue with the next part. Refer to "Establish a PPP connection step-by-step" below.

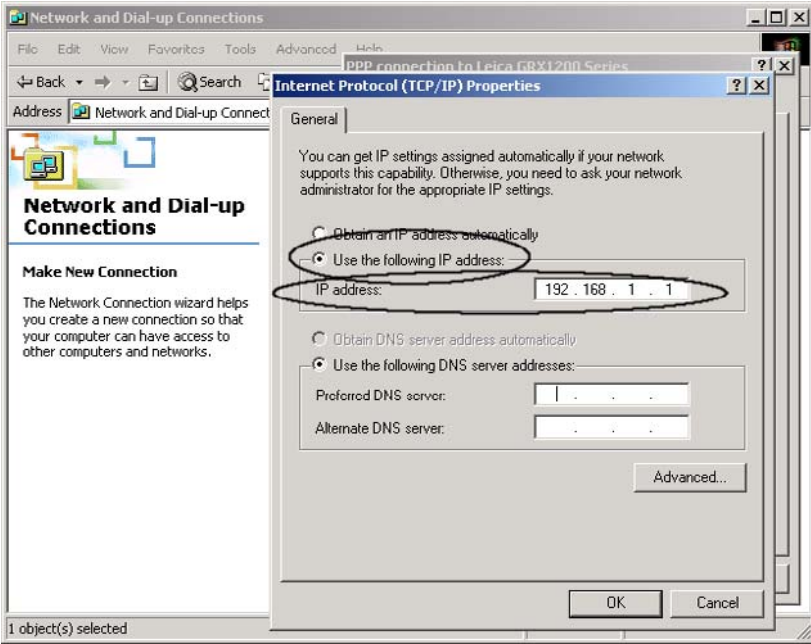
## Establish a PPP connection step-by-step

Step	Description
	<p>The connect window <b>Connect PPP connection to Leica GRX1200 Series</b> is displayed:</p>  <p>The screenshot shows a Windows Explorer window titled "Network and Dial-up Connections". The address bar shows "Network and Dial-up Connections". The main content area displays "Network and Dial-up Connections" with a "Make New Connection" section. Overlaid on this is a dialog box titled "Connect PPP connection to Leica GRX1200 Series". The dialog box contains a "User name:" field, a "Password:" field, a "Save Password" checkbox, and buttons for "Connect", "Cancel", "Properties", and "Help".</p>





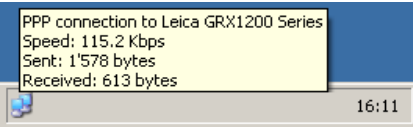
Step	Description
1.	<p>Click <b>Properties</b> to set parameters. This window comes up:</p>  <p>The screenshot shows the 'Network and Dial-up Connections' window in the background. In the foreground, the 'Properties' dialog for a 'PPP connection to Leica GRX1200 Series' is open. The 'Options' tab is active. Under the 'Select a device:' label, a dropdown menu is open, showing 'Communications cable between two computers (COM1)' as the selected option. A 'Configure...' button is located to the right of the dropdown. At the bottom of the dialog, there is a checked checkbox for 'Show icon in taskbar when connected' and 'OK' and 'Cancel' buttons.</p>
2.	Select the <b>General</b> tab.
3.	Select <b>Communications cable between two computers (COM...)</b> as device.


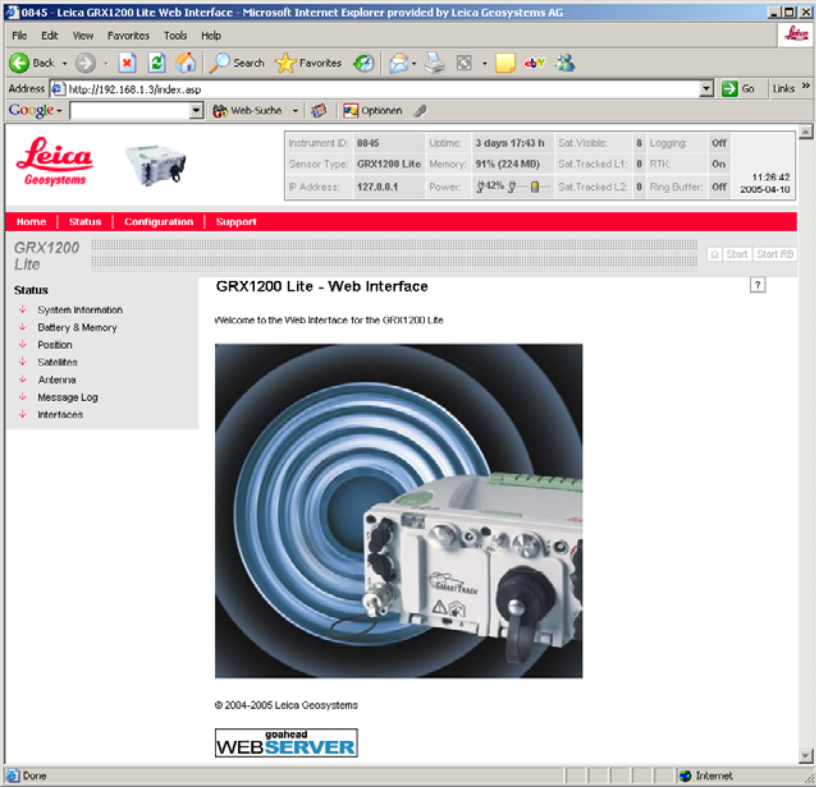
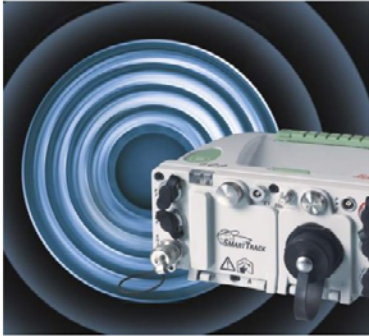
Step	Description
4.	<p>Click <b>Configure....</b> This window comes up:</p>  <p>The screenshot shows the 'Modem Configuration' dialog box for a 'PPP connection to Leica GRX1200 Series'. The 'Maximum speed (bps)' is set to 115200. The 'Hardware features' section has 'Enable hardware flow control' unchecked. The 'OK' button is circled.</p>
5.	Set the <b>Maximum speed (bps)</b> to <b>115200</b> or to the value configured for port RX in step 14. of "Define a serial line modem device on the PC step-by-step" above.
6.	Untick <b>Enable hardware flow control</b> .
7.	Click <b>OK</b> .



Step	Description
8.	<p>Select the <b>Networking</b> tab. it looks like this:</p>  <p>The screenshot shows the 'Network and Dial-up Connections' window. A dialog box titled 'PPP connection to Leica GRX1200 Series' is open, with the 'Networking' tab selected. Under 'Components checked are used by this connection:', the 'Internet Protocol (TCP/IP)' checkbox is checked and circled in red. The 'Properties' button at the bottom right of the dialog is also circled in red. The 'Description' field at the bottom of the dialog reads: 'Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.'</p>
9.	Tick <b>Internet Protocol (TCP/IP)</b> .

Step	Description
10.	<p>Click <b>Properties</b>. This window comes up:</p>  <p>The screenshot shows the 'Network and Dial-up Connections' window. The 'Internet Protocol (TCP/IP) Properties' dialog box is open, showing the 'General' tab. The 'Use the following IP address' radio button is selected, and the IP address field is set to 192.168.1.1. The IP address field and its radio button are circled in red.</p>
11.	Tick <b>Use the following IP address</b> .
12.	Type in <b>192.168.1.1</b> as IP Address.



Step	Description
	This sets the PC IP address so that it can communicate with the <b>GRX1200 Series</b> receiver. This IP address will only be used as long as the connection to the <b>GRX1200 Series</b> receiver is established. Once the connection is closed, the standard IP address is automatically used again.
13.	Click <b>OK</b> to close the Properties window.
	The active window is <b>Connect PPP connection to Leica GRX1200 Series</b> .
14.	Leave the input boxes for <b>User name</b> and <b>Password</b> empty.
15.	Click <b>Connect</b> to connect to GRX1200 Classic / GRX1200 Lite.
	The connection will now be established.
	Look out for a small network icon in the taskbar which is displayed after a successful connection to GRX1200 Classic / GRX1200 Lite.  
16.	Open the web browser.
17.	Type in the receiver default IP address <a href="http://192.168.1.3">http://192.168.1.3</a> .

Step	Description																																								
	<p>The start page of the web interface is displayed after a few seconds.</p>  <p><b>0845 - Leica GRX1200 Lite Web Interface - Microsoft Internet Explorer provided by Leica Geosystems AG</b></p> <p>File Edit View Favorites Tools Help</p> <p>Address <a href="http://192.168.1.3/index.asp">http://192.168.1.3/index.asp</a> Go Links</p> <p>Google Web-Suche Optionen</p> <table border="1"> <tr> <td>Instrument ID:</td> <td>08-45</td> <td>Uptime:</td> <td>3 days 17:43 h</td> <td>Sat. Visible:</td> <td>8</td> <td>Logging:</td> <td>Off</td> </tr> <tr> <td>Sensor Type:</td> <td>GRX1200 Lite</td> <td>Memory:</td> <td>91% (224 MB)</td> <td>Sat. Tracked L1:</td> <td>8</td> <td>RTK:</td> <td>On</td> </tr> <tr> <td>IP Address:</td> <td>127.0.0.1</td> <td>Power:</td> <td>42%</td> <td>Sat. Tracked L2:</td> <td>8</td> <td>Ring Duffler:</td> <td>Off</td> </tr> <tr> <td colspan="7"></td> <td>11:26:42</td> </tr> <tr> <td colspan="7"></td> <td>2005-04-10</td> </tr> </table> <p>Home Status Configuration Support</p> <p>GRX1200 Lite Start Start PB</p> <p><b>GRX1200 Lite - Web Interface</b></p> <p>Welcome to the Web Interface for the GRX1200 Lite</p>  <p>© 2004-2005 Leica Geosystems</p> <p>goahead WEB SERVER</p> <p>Done Internet</p>	Instrument ID:	08-45	Uptime:	3 days 17:43 h	Sat. Visible:	8	Logging:	Off	Sensor Type:	GRX1200 Lite	Memory:	91% (224 MB)	Sat. Tracked L1:	8	RTK:	On	IP Address:	127.0.0.1	Power:	42%	Sat. Tracked L2:	8	Ring Duffler:	Off								11:26:42								2005-04-10
Instrument ID:	08-45	Uptime:	3 days 17:43 h	Sat. Visible:	8	Logging:	Off																																		
Sensor Type:	GRX1200 Lite	Memory:	91% (224 MB)	Sat. Tracked L1:	8	RTK:	On																																		
IP Address:	127.0.0.1	Power:	42%	Sat. Tracked L2:	8	Ring Duffler:	Off																																		
							11:26:42																																		
							2005-04-10																																		

Step	Description
	The PPP connection is now established.
	It is recommended to temporarily disable other network connections as long as the PPP connection to the receiver is established. Connections to the network may be influenced as long as PPP is active, because the PC uses a different, fixed IP address during that time.
18.	Continue with "5 Using the Web Interface".

---

### 3.4.4

## Changing the Web Interface language

---

### Description

To switch the Web Interface language, the Web Interface zip file has to be reloaded. The file can be found on the GPS1200 CD-ROM that was delivered with the receiver. Upload the specific Web Interface zip file for the desired language onto the receiver's CF card. Refer to **"3.2 Access the Receiver via FTP connection"** on how to upload files onto the CF card. Refer to **"3.4.2 Activating the Web Interface"** on how to reload the Web Interface files to the receiver.

---



When changing to the Chinese Web Interface, please allow the receiver to reboot twice. No user interaction is necessary after manually starting the first reboot.

---

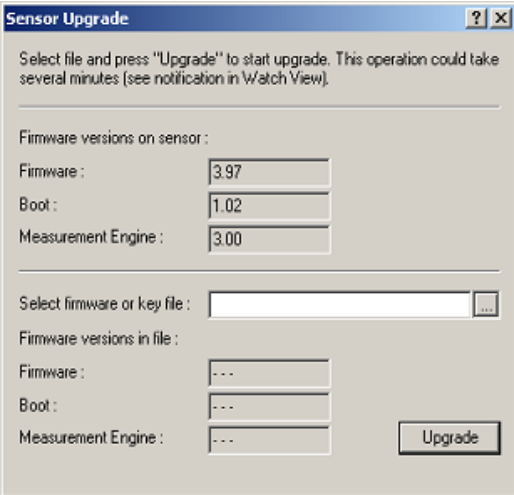


## 4 Firmware Upgrade

### Description

When a firmware upgrade is required, the new firmware file has to be uploaded to the CF card and then needs to be installed on the receiver. When configuring the receiver via Web Interface, the new Web Interface zip file has to be loaded onto the receiver as well.

### Install new firmware with LEICA GPS Spider step-by-step

Step	Description
1.	<p>If the new firmware is to be installed via LEICA GPS Spider, right click on the sensor site and choose <b>Firmware upgrade</b>. The following dialogue appears:</p> 
2.	Select the firmware file to be uploaded and press <b>Upgrade</b> .

Step	Description
3.	The LEICA GPS Spider software will automatically upload and install the new firmware.

To use the Web Interface, a Web Interface upgrade has to be done every time a firmware upgrade is made. Upload the new Web Interface zip file as described in "3.2 Access the Receiver via FTP connection".

### Install new firmware with the Web Interface step-by-step

Step	Description
1.	Upload the firmware file and the Web Interface zip file as described in chapter 3.2.
2.	Go to the Configuration - Firmware upgrades page.
3.	Choose the firmware file to install and press <b>Upgrade</b> .
4.	Wait for the sensor to completely install the firmware and Web Interface files and reboot.
5.	The new firmware is now available on the sensor.

### Install new firmware with the RX step-by-step

Step	Description
1.	Press <b>6 Tools</b> .
2.	Press <b>3 Upload System Files</b> .
3.	Press <b>2 Instrument Firmware</b> .
4.	In the Firmware field choose the firmware file to install.
5.	Press <b>CONT (F2)</b> .

---

Step	Description
6.	Press <b>YES (F6)</b> .
7.	Wait for the sensor to completely install the firmware file and reboot.
8.	The new firmware is now available on the sensor.

---




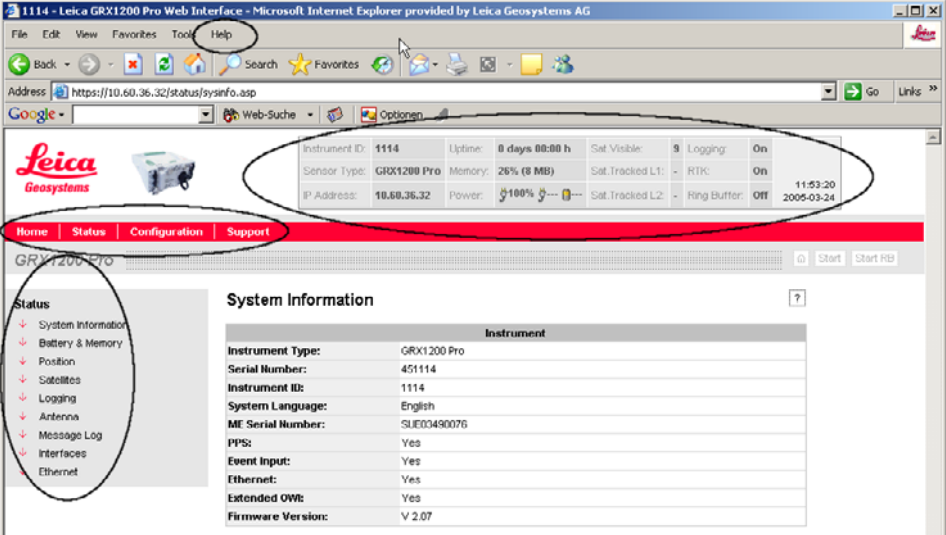









**5****Using the Web Interface****5.1****Introduction****Requirements**

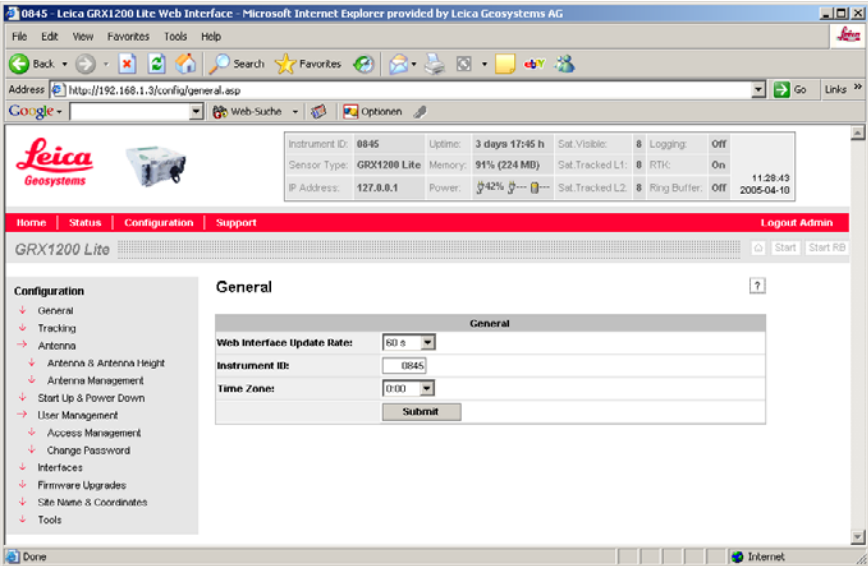

The Web Interface connection must be established. Refer to "3.4.3 Web Interface Connection" for information of the configuration.

**Get started with Web Interface step-by-step**

<b>Step</b>	<b>Description</b>
1.	Open the web browser.
2.	Type the sensors IP or hostname (when using DynDNS) in the browser window.

Step	Description																																														
	<p>The start page of the Web Interface comes up.</p>  <table border="1" data-bbox="837 311 1385 378"> <tr> <td>Instrument ID:</td> <td>1114</td> <td>Uptime:</td> <td>0 days 00:00 h</td> <td>Sat Visible:</td> <td>9</td> <td>Logging:</td> <td>On</td> </tr> <tr> <td>Sensor Type:</td> <td>GRX1200 Pro</td> <td>Memory:</td> <td>26% (8 MB)</td> <td>Sat. Tracked L1:</td> <td>-</td> <td>RTK:</td> <td>On</td> </tr> <tr> <td>P Address:</td> <td>10.60.36.32</td> <td>Power:</td> <td>100%</td> <td>Sat. Tracked L2:</td> <td>-</td> <td>Ring Buffer:</td> <td>Off</td> </tr> </table> <table border="1" data-bbox="762 497 1347 698"> <thead> <tr> <th colspan="2">Instrument</th> </tr> </thead> <tbody> <tr> <td>Instrument Type:</td> <td>GRX1200 Pro</td> </tr> <tr> <td>Serial Number:</td> <td>451114</td> </tr> <tr> <td>Instrument ID:</td> <td>1114</td> </tr> <tr> <td>System Language:</td> <td>English</td> </tr> <tr> <td>MF Serial Number:</td> <td>SUE00480076</td> </tr> <tr> <td>PPS:</td> <td>Yes</td> </tr> <tr> <td>Event Input:</td> <td>Yes</td> </tr> <tr> <td>Ethernet:</td> <td>Yes</td> </tr> <tr> <td>Extended OWB:</td> <td>Yes</td> </tr> <tr> <td>Firmware Version:</td> <td>V 2.07</td> </tr> </tbody> </table>	Instrument ID:	1114	Uptime:	0 days 00:00 h	Sat Visible:	9	Logging:	On	Sensor Type:	GRX1200 Pro	Memory:	26% (8 MB)	Sat. Tracked L1:	-	RTK:	On	P Address:	10.60.36.32	Power:	100%	Sat. Tracked L2:	-	Ring Buffer:	Off	Instrument		Instrument Type:	GRX1200 Pro	Serial Number:	451114	Instrument ID:	1114	System Language:	English	MF Serial Number:	SUE00480076	PPS:	Yes	Event Input:	Yes	Ethernet:	Yes	Extended OWB:	Yes	Firmware Version:	V 2.07
Instrument ID:	1114	Uptime:	0 days 00:00 h	Sat Visible:	9	Logging:	On																																								
Sensor Type:	GRX1200 Pro	Memory:	26% (8 MB)	Sat. Tracked L1:	-	RTK:	On																																								
P Address:	10.60.36.32	Power:	100%	Sat. Tracked L2:	-	Ring Buffer:	Off																																								
Instrument																																															
Instrument Type:	GRX1200 Pro																																														
Serial Number:	451114																																														
Instrument ID:	1114																																														
System Language:	English																																														
MF Serial Number:	SUE00480076																																														
PPS:	Yes																																														
Event Input:	Yes																																														
Ethernet:	Yes																																														
Extended OWB:	Yes																																														
Firmware Version:	V 2.07																																														
	<p>The status header at the top of the window shows important status information.</p>																																														
	<p>The navigation bar below the status header contains the links to the status and configuration pages, and to useful support links.</p>																																														
	<p>Click  accesses the Online Help.  Clicking  always opens the help topic of the current page.  Clicking  on the start page opens the introduction of the Online Help.</p>																																														

Step	Description
3.	<p>Click <b>Configuration</b> from the navigation bar. This window comes up:</p> 
4.	<p>Type in</p> <ul style="list-style-type: none"><li>• <b>User name: Admin</b></li><li>• <b>Password: 12345678</b></li></ul>

Step	Description
5.	<p>Click <b>OK</b>. This window comes up:</p> 
	All configuration settings of a GRX1200 Series receiver can now be accessed..
6.	Take some time to explore the different configuration screens.
7.	Continue with "5.2 Adjusting the Receiver Settings".

---

## 5.2

## Adjusting the Receiver Settings

---

### Description

GRX1200 Series receivers are delivered with a number of default settings to cover the needs of the majority of users, which keeps configuration time to a minimum. The settings can be adjusted according to all customer needs and applications.

---


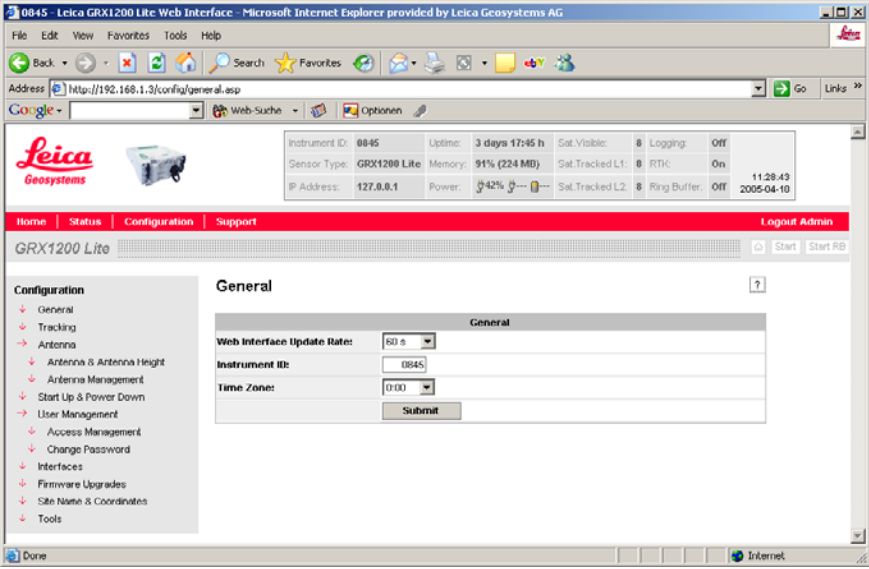


### Requirements




The Web Interface must have been started . Refer to "5 Using the Web Interface" for information on how to start the Web Interface.

---

### Configuration for standard setups step-by-step

For standard setups, it is recommended to run through these basic configuration steps. Refer to the Online Help and the GPS1200 Technical Reference Manual for detailed information on the individual settings.

Step	Description
	<p>This step-by-step instruction starts with the last window of the previous chapter.</p> 
1.	Select <b>Configuration/General</b> .
2.	Type in any <b>Instrument ID</b> .
	Click <b>Configuration/Submit</b> always before leaving a screen.
	If you are interested in raw data logging, change to the <b>Logging</b> page. Configure the settings for <b>Primary Logging</b> .
3.	Select <b>Configuration/Antenna</b> .

Step	Description
4.	Select the <b>Antenna</b> .
5.	Select <b>Configuration/Antenna Height</b> .
6.	Type in the <b>Antenna Height</b> .
	If you want to broadcast real-time corrections, set it up in the <b>Configuration/Interfaces</b> .
7.	Select <b>Configuration/Site Name &amp; Coordinates</b> .
8.	Type in <b>Site Name</b> and the <b>coordinates</b> of the site.
9.	Select <b>Configuration/Access Management</b> .
10.	Delete the default user <b>Admin</b> and create a new administrator user, defining <b>user name</b> and <b>password</b> of free choice. This is recommended for security reasons.
11.	Click <b>Start</b> in the navigation bar to start the receiver logging and/or real-time corrections.
	The status header shows <b>Logging: ON</b> and/or <b>RTK: ON</b> , depending on the configuration.
12.	Click <b>Logout</b> on the navigation bar once the receiver is up and running.
13.	Click  to close the Web Interface.

### Super Administrator

The Super Administrator account

- can be used to log in and to create a new account in case the existing password got lost or the Administrator user has accidentally been removed.
- has the **User name: PUK**.



- uses a **PUK code** as **password**.  
For receivers delivered with firmware version 2.10 or higher, the PUK code comes with the receiver.  
For receivers delivered with firmware versions lower than v2.10, contact a Leica representative to obtain a PUK code.
  - cannot be edited and is not part of the Access Management.  
The Access Management is a component of the Web Interface to manage user accounts.
-

## Index

<b>A</b>	
Address settings	
Configure .....	16
Query .....	18
<b>B</b>	
Buttons .....	4
<b>C</b>	
Configure settings .....	16
<b>D</b>	
Default settings .....	12
Documentation .....	4
<b>E</b>	
Ethernet, default settings .....	13
<b>F</b>	
Fields .....	4
FTP server, default settings .....	14
<b>G</b>	
GetConfig.ini .....	15, 19
<b>I</b>	
Interface .....	8
Interfaces, default settings .....	14
<b>L</b>	
LEICA GPS Spider .....	6
<b>M</b>	
Manual	
GPS1200 User Manual .....	4
How to use this .....	4
<b>O</b>	
Options .....	4
<b>P</b>	
Path .....	4
Point-to-Point Protocol .....	37
Port	
Configure .....	16
Query .....	18
PPP .....	37
PPP, default settings .....	14
<b>Q</b>	
Query settings .....	18

## **R**

Remote interface .....	27
Requirements .....	10

## **S**

Serial ports, default settings .....	13
Startup Configurator .....	12, 15
StartupConfig.err .....	25
StartupConfig.ini .....	15, 19
Super Administrator .....	72
Super Administrator, default settings .....	14

## **W**

Web browser .....	8
Web Interface .....	6, 8
Web interface, default settings .....	14

**Total Quality Management: Our commitment to total customer satisfaction.**



Leica Geosystems AG, Heerbrugg, Switzerland, has been certified as being equipped with a quality system which meets the International Standards of Quality Management and Quality Systems (ISO standard 9001) and Environmental Management Systems (ISO standard 14001).

**Ask your local Leica Geosystems dealer for more information about our TQM program.**

**Leica Geosystems AG**  
Heinrich-Wild-Strasse  
CH-9435 Heerbrugg  
Switzerland  
Phone +41 71 727 31 31  
[www.leica-geosystems.com](http://www.leica-geosystems.com)

- when it has to be **right**

**Leica**  
**Geosystems**

**747061-3.0.0en**  
Original text  
Printed in Switzerland © 2006 Leica Geosystems AG, Heerbrugg, Switzerland