

Leica GS18 FW update via Web Server

Date	27 November 2024
Creator	Leica GNSS Product Management
Equipment	GS18, PC, CS20 or tablet

Introduction

The information provided in this document applies to GS18 Basic, GS18 T and GS18 I. For simplicity, only the term GS18 will be used.

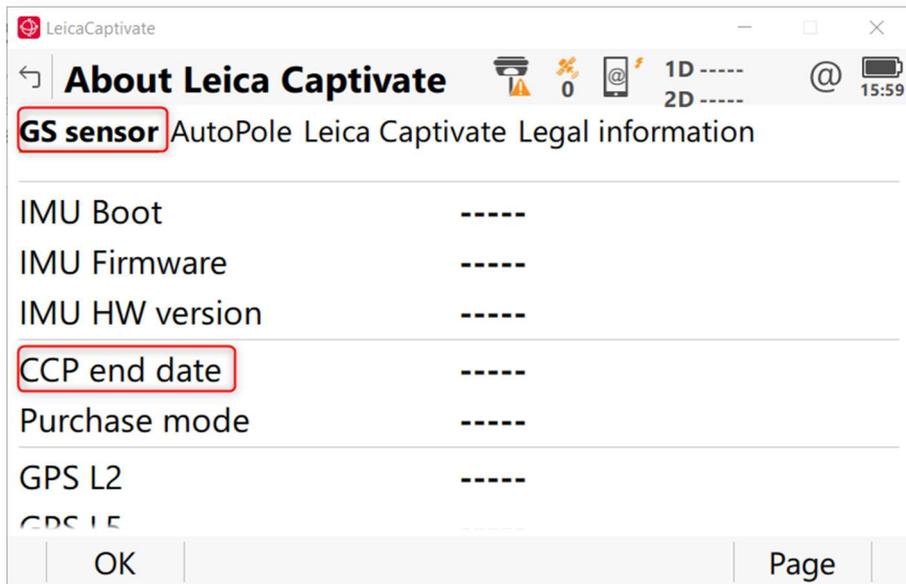
This document will explain how to update the Firmware on the GS18 via Web Server.

Guide Contents:

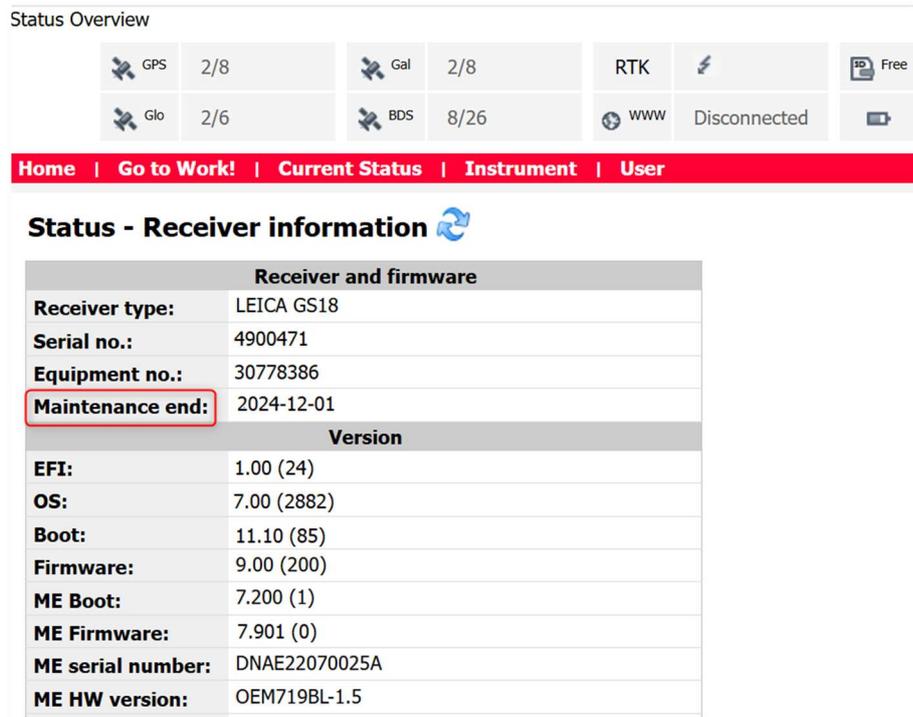
- [Useful tips](#)
- [Downloading GS18 Firmware](#)
- [FW installation via Web Server \(CS20\)](#)
- [FW installation via Web Server \(tablet\)](#)
- [FW installation via Web server \(PC\)](#)

Useful tips

- Make sure that the CCP end date will allow you to update the Firmware in your GS18
 - The CCP end date can be checked via Captivate>Settings>About Leica Captivate>GS sensor, via Web server>Current status>Receiver information or in MyWorld (see screenshots below)
 - Compare the CCP end date with the Software maintenance date for Installation reported in myWorld (see screenshot below)



CCP end date information from Leica Captivate About panel.



CCP end date information from GS18 Web Server.

Home > Products & Services > My Products

Overview **Software** Manuals Tools Accessories

Back

General

	Product	GS18 TLTE&UHF Unlimited	Article No.	855305
	My Reference		Equipment No.	30778386
	Serial No.	4900471		
	Version	<input type="text" value="8.10"/>	<input type="button" value="Save"/>	
	SW Maint. End	25.08.2024		

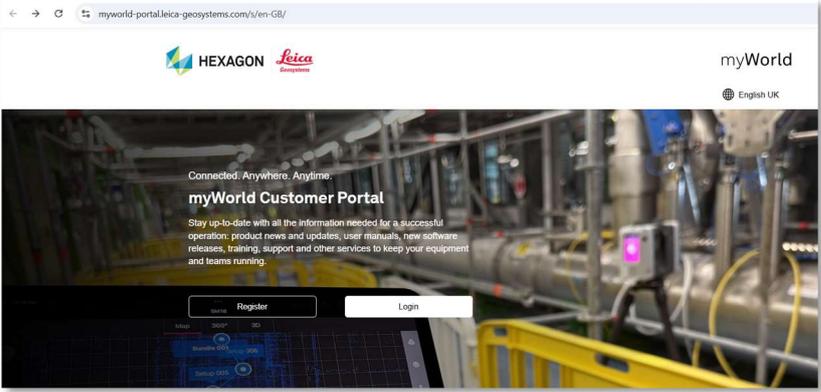
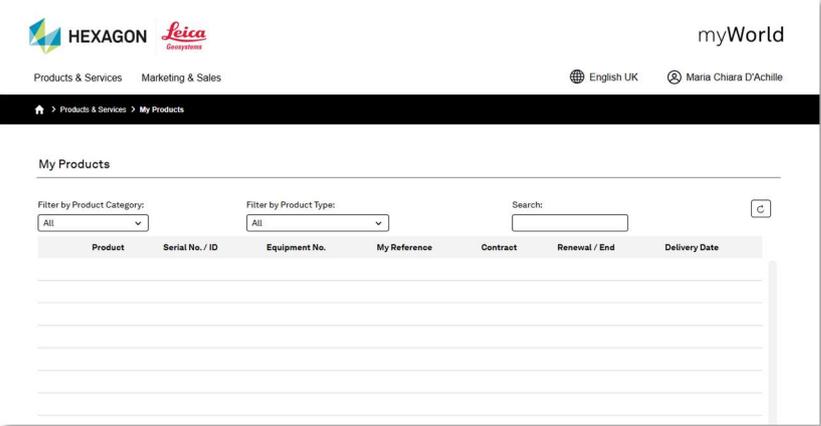
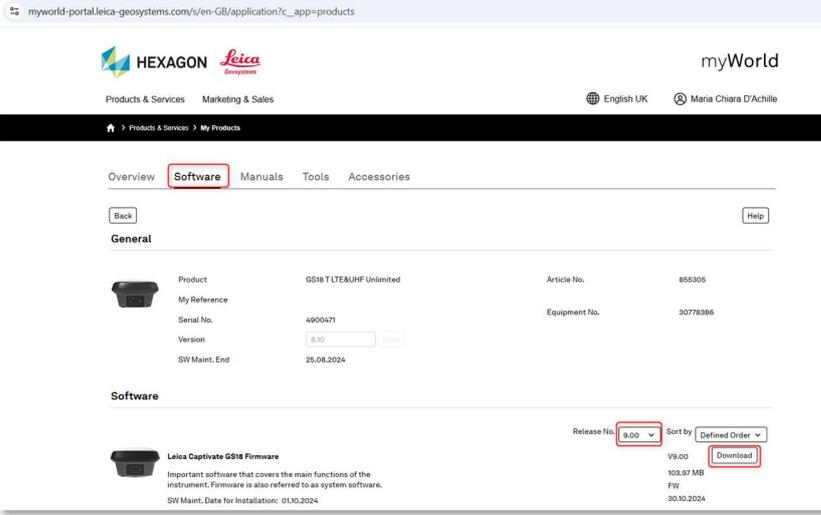
Software

	Release No.	Sort by	
	Leica Captivate GS18 Firmware	9.00	Defined Order
	Important software that covers the main functions of the instrument. Firmware is also referred to as system software.	V9.00	<input type="button" value="Download"/>
	SW Maint. Date for Installation: 01.10.2024	103.97 MB	
	Leica Captivate Release Notes	FW	<input type="button" value="Download"/>
		30.10.2024	
		V9.00	<input type="button" value="Download"/>

Current CCP end date and required minimum CCP end date for GS18 firmware installation.

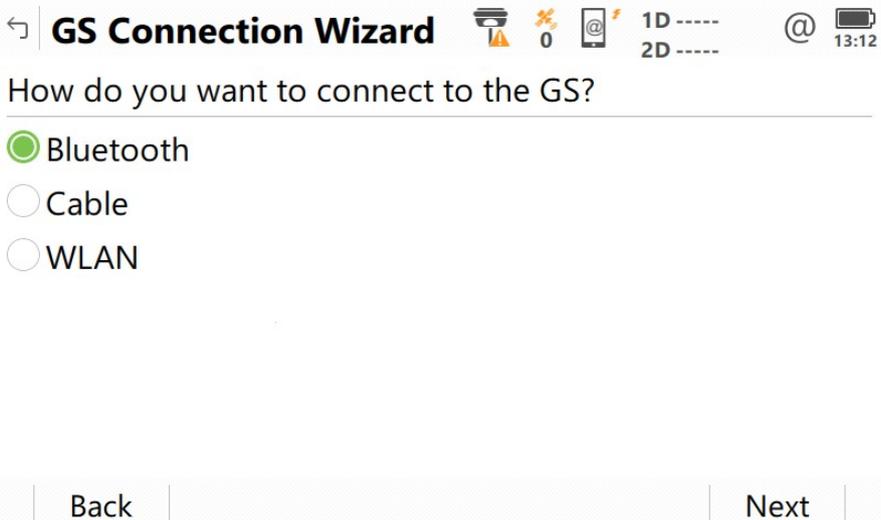
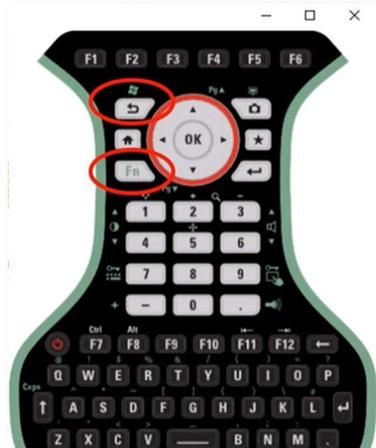
- You will need an SD Card to copy the Firmware file on it and insert into your GS18
- Uploading GS firmware can take some time. Ensure that the battery is at least 75% full before beginning the upload, and do not remove the battery during the upload process.

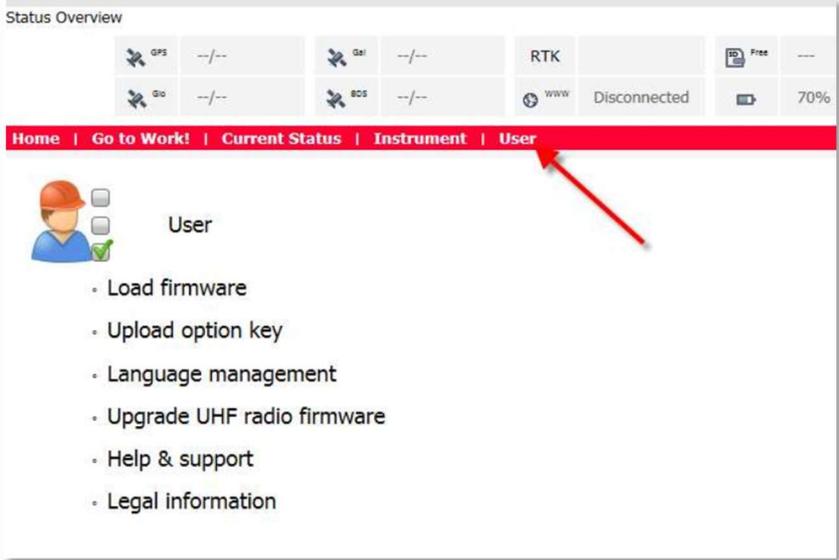
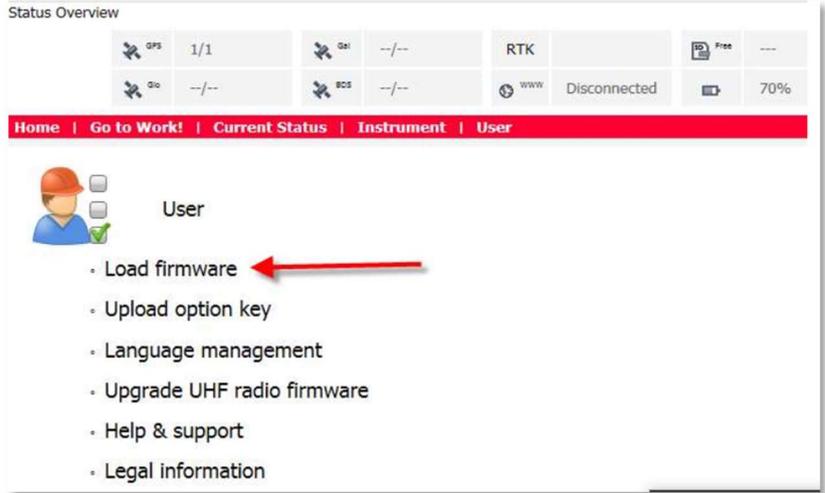
Downloading GS18 Firmware

Downloading GS18 FW file from myWorld portal	
https://myworld-portal.leica-geosystems.com/	
<p>1 Log in to the Leica myWorld portal.</p> <p>Note: If you don't have an account yet, please register.</p>	
<p>2 Navigate to Product & Services, myProducts.</p>	
<p>3 Select your GS18.</p> <p>Page to Software.</p> <p>Download the GS18 FW file.</p>	
<p>4 Copy the GS18 FW file to the System folder of the</p>	

	<p>SD Card.</p> <p>Note: If the System folder does not exist, please create it.</p> <p>Make sure that the GS18 FW file is only available in the System folder.</p>	
5	Insert the SD Card into the GS18.	

FW Installation via Web Server (CS20)

FW Installation via Web Server (CS20)		
Bluetooth		
1	Use Captivate to connect via Bluetooth to the GS18 from the CS20 as normal.	
2	<p>To access Webserver (BT).</p> <p>Firstly, we need to minimise Captivate software on CS20 by press & hold 'Fn' key and then pressing 'back arrow' key at the same time.</p>	

<p>3 Captivate will be minimised, start the Webserver (BT) icon from the desktop.</p> <p>Alternatively, the Web server can be accessed by opening a browser and entering: http://192.168.253.2</p>	
<p>4 Tap on 'User' option located on the top red bar.</p>	
<p>5 Select Load Firmware.</p>	

6 **Update Software**
 Please make sure that you tick the checkboxes:

- .fw file on GS SD card
- I read, understood and agree to the Software license agreement

Finally press 'green plus' icon to load firmware.

Status Overview

GPS	11/11	Gal	4/5	RTK	Free
Glo	5/7	BDS	11/12	WWW	Disconnected

Home | Go to Work! | Current Status | Instrument | User

User - Load firmware

Software	Version
Boot:	11.10 (85)
Firmware:	9.00 (200)
ME Boot:	7.200 (1)
ME Firmware:	7.901 (0)
EFI:	1.00 (24)
OS:	7.00 (2882)
IMU Boot:	2.01 (2)
IMU Firmware:	2.03 (4)
UHF Radio Firmware:	07.58.3.6.0.1
Modem Firmware:	03.017 (01.000.09)

Load new firmware
 .fw file on GS SD Card (System folder)
 I read, understood & agree to the [Software License Agreement](#)

| LEICA GS18 | Version: 9.00 (200) | Serial number: 3624518

7 Allow the GS to restart and wait for all the lights to return to stabilise. Then refresh this page, the firmware should now be updated. (this may take a few minutes)



WLAN

1 Use Captivate to connect via WLAN to the GS18 from the CS20 as normal.

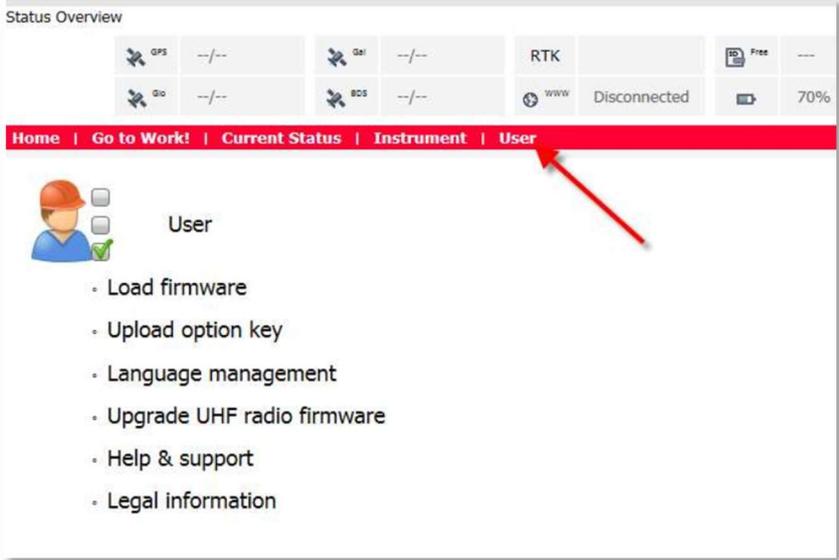
Note:
 WLAN is supported from CPT v.5.50 onwards.

← **GS Connection Wizard** 0 1D ---- 2D ---- @ 13:16

How do you want to connect to the GS?

Bluetooth
 Cable
 WLAN

Back Next

<p>2 To access Webserver(WLAN).</p> <p>Firstly, we need to minimise Captivate software on CS20 by press & hold 'Fn' key and then pressing 'back arrow' key at the same time.</p>	
<p>3 Captivate will be minimised, start the Webserver (WLAN) icon from the desktop.</p> <p>Alternatively, Web server can be accessed by opening a browser and entering: http://192.168.251.2</p>	
<p>4 Tap on 'User' option located on the top red bar.</p>	
<p>5 Further steps are the same as for the Bluetooth connection.</p>	

Cable

1 Connect via cable to the GS18 from the CS20 as normal.

Note:
Both GEV234 (Lemo to USB) and GEV237 (Lemo to lemo) can be used.



How do you want to connect to the GS?

Bluetooth

Cable

WLAN

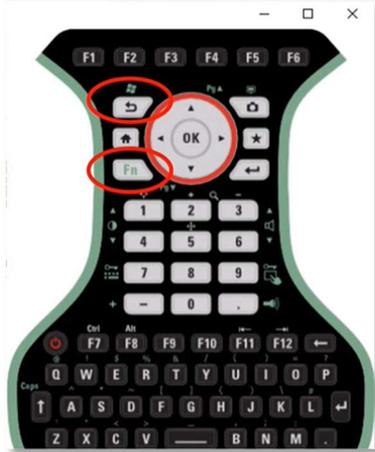
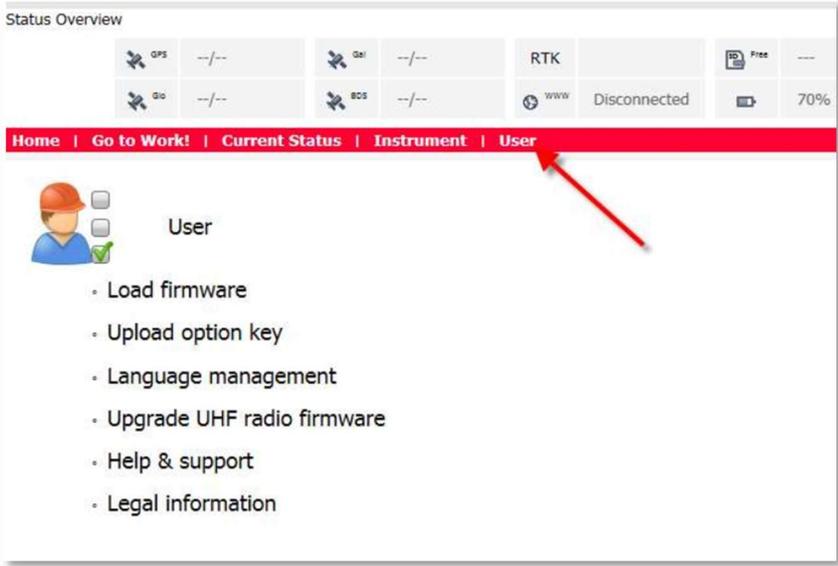
Back | Next

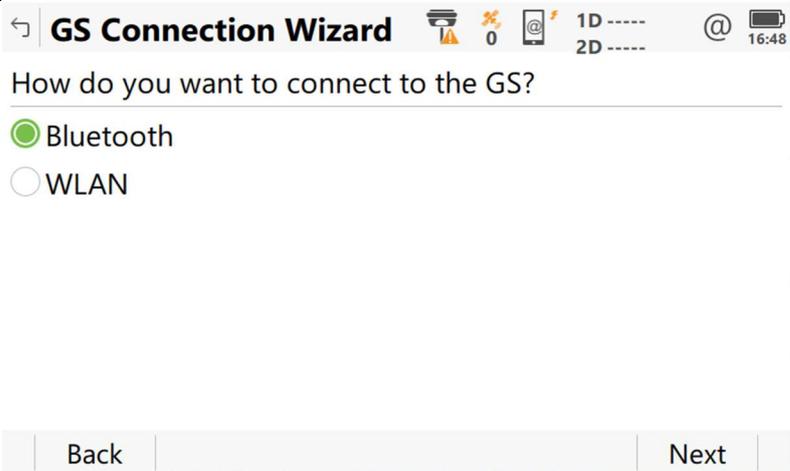


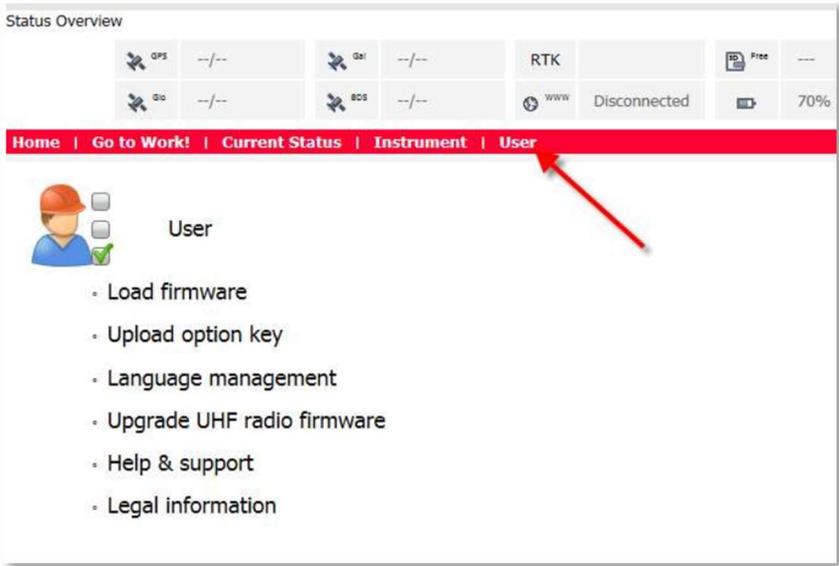
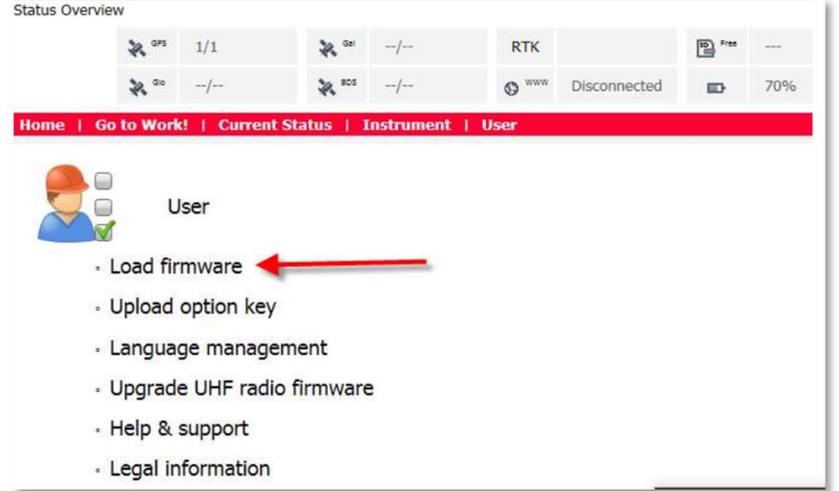
GEV234

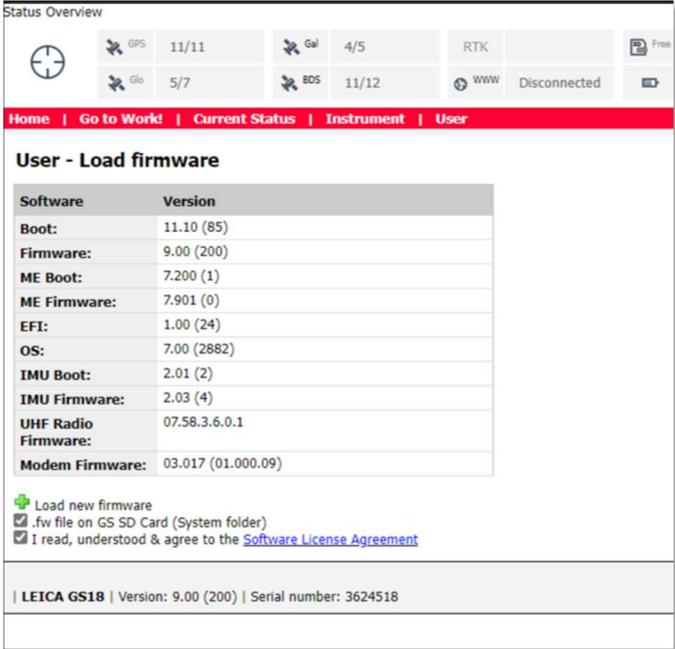
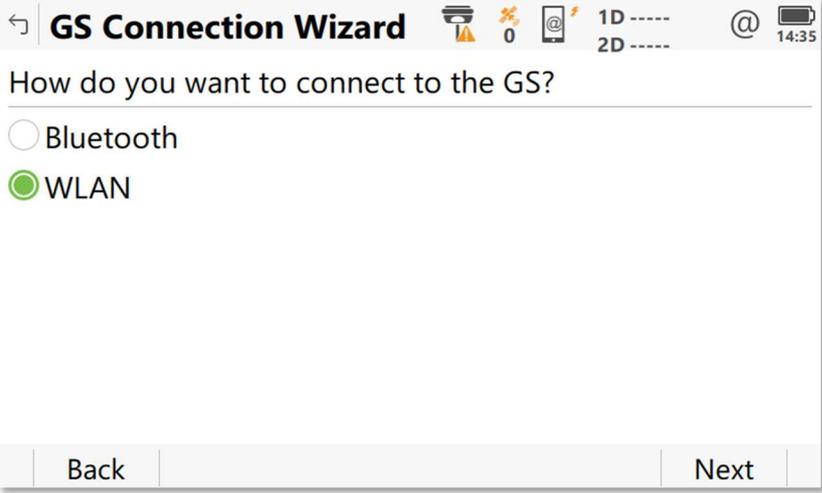


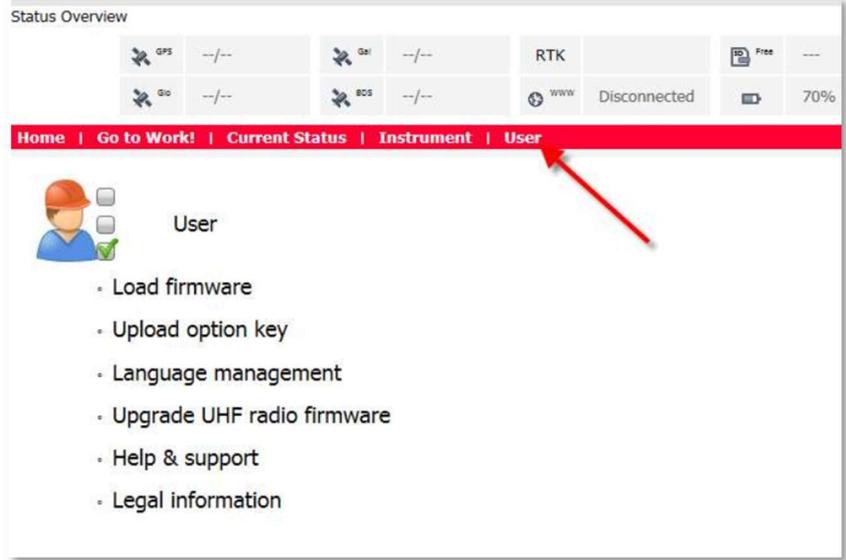
GEV237

<p>2 To access Webserver(Cable).</p> <p>Firstly, we need to minimise Captivate software on CS20 by press & hold 'Fn' key and then pressing 'back arrow' key at</p>	
<p>3 Captivate will be minimised, start the Webserver (Cable) icon from the desktop.</p> <p>Alternatively, the Web server can be accessed by opening a browser and entering: http://192.168.254.2</p>	
<p>4 Tap on 'User' option located on the top red bar.</p>	
<p>5 Further steps are the same as for the Bluetooth connection.</p>	

FW Installation via Web Server (Tablet)	
Bluetooth	
<p>1 Use Captivate to connect via Bluetooth to the GS18 from the tablet as normal.</p>	
<p>2 To access Webserver(Bluetooth).</p> <p>Firstly, we need to minimise Captivate software on the tablet.</p> <p>CS35/CC200: Press the 'Windows' key.</p> <p>CS30/CC180: Swipe right from the left edge of the screen.</p>	

<p>3 Open a browser and enter: http://192.168.253.2</p> <p>Tap on 'User' option located on the top red bar.</p>	 <p>The screenshot shows the 'Status Overview' section at the top with various system status indicators. Below this is a red navigation bar with the following menu items: Home, Go to Work!, Current Status, Instrument, and User. A red arrow points to the 'User' option. Below the navigation bar, there is a user profile icon and the name 'User'. A list of options is displayed below the profile:</p> <ul style="list-style-type: none"> · Load firmware · Upload option key · Language management · Upgrade UHF radio firmware · Help & support · Legal information
<p>4 Select Load Firmware.</p>	 <p>This screenshot is similar to the previous one, but with a red arrow pointing to the 'Load firmware' option in the user menu. The 'Status Overview' section at the top shows 'GPS' as '1/1' and 'www' as 'Disconnected'. The red navigation bar remains the same.</p>

<p>5 Update Software Please make that you tick the checkboxes:</p> <ul style="list-style-type: none"> • .fw file on GS SD card • I read, understood and agree to the Software license agreement <p>Finally press 'green plus' icon to load firmware.</p>	 <p>The screenshot shows the 'Status Overview' page for a Leica GS18. At the top, there are status indicators for GPS (11/11), Gal (4/5), RTK, Glonass (5/7), BDS (11/12), WWV, and Disconnected. Below this is a navigation bar with 'Home', 'Go to Work', 'Current Status', 'Instrument', and 'User'. The main section is titled 'User - Load firmware' and contains a table of software versions:</p> <table border="1"> <thead> <tr> <th>Software</th> <th>Version</th> </tr> </thead> <tbody> <tr><td>Boot:</td><td>11.10 (85)</td></tr> <tr><td>Firmware:</td><td>9.00 (200)</td></tr> <tr><td>ME Boot:</td><td>7.200 (1)</td></tr> <tr><td>ME Firmware:</td><td>7.901 (0)</td></tr> <tr><td>EFI:</td><td>1.00 (24)</td></tr> <tr><td>OS:</td><td>7.00 (2882)</td></tr> <tr><td>IMU Boot:</td><td>2.01 (2)</td></tr> <tr><td>IMU Firmware:</td><td>2.03 (4)</td></tr> <tr><td>UHF Radio Firmware:</td><td>07.58.3.6.0.1</td></tr> <tr><td>Modem Firmware:</td><td>03.017 (01.000.09)</td></tr> </tbody> </table> <p>Below the table, there are checkboxes for 'Load new firmware', '.fw file on GS SD Card (System folder)', and 'I read, understood & agree to the Software License Agreement'. At the bottom, it shows 'LEICA GS18 Version: 9.00 (200) Serial number: 3624518'.</p>	Software	Version	Boot:	11.10 (85)	Firmware:	9.00 (200)	ME Boot:	7.200 (1)	ME Firmware:	7.901 (0)	EFI:	1.00 (24)	OS:	7.00 (2882)	IMU Boot:	2.01 (2)	IMU Firmware:	2.03 (4)	UHF Radio Firmware:	07.58.3.6.0.1	Modem Firmware:	03.017 (01.000.09)
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<p>6 Allow the GS to restart and wait for all the lights to return to stabilise. Then refresh this page, the firmware should now be updated. (this may take a few minutes)</p>	 <p>The image shows the physical Leica GS18 receiver. The control panel on the front has several buttons and indicators. A green plus sign icon is highlighted, indicating the button to press for loading firmware.</p>																						
<p>WLAN</p>																							
<p>1 Use Captivate to connect via WLAN to the GS18 from the tablet as normal.</p> <p>Note: WLAN is supported from CPT v.5.50 onwards.</p>	 <p>The screenshot shows the 'GS Connection Wizard' screen. The title is 'GS Connection Wizard' and the question is 'How do you want to connect to the GS?'. There are two radio button options: 'Bluetooth' and 'WLAN'. The 'WLAN' option is selected, indicated by a green circle. At the bottom, there are 'Back' and 'Next' buttons.</p>																						

<p>2 To access Webserver(WLAN).</p> <p>Firstly, we need to minimise Captivate software on the tablet.</p> <p>CS35/CC200: Press the 'Windows' key.</p> <p>CS30/CC180: Swipe right from the left edge of the screen.</p>	
<p>3 Open a browser and enter: http://192.168.251.2</p> <p>Tap on 'User' option located on the top red bar.</p>	
<p>4 Further steps are the same as for the Bluetooth connection.</p>	

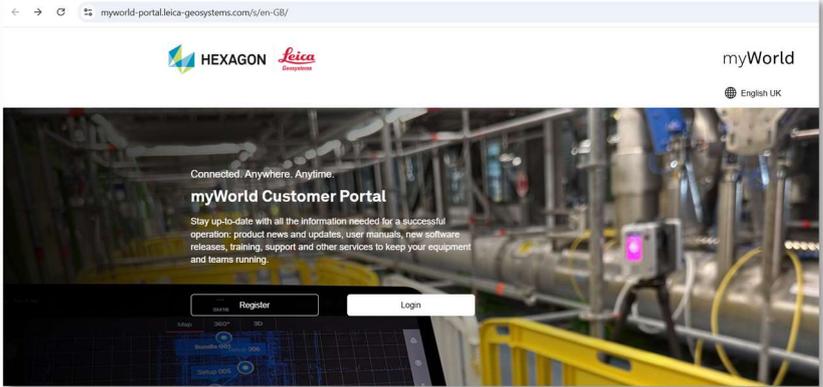
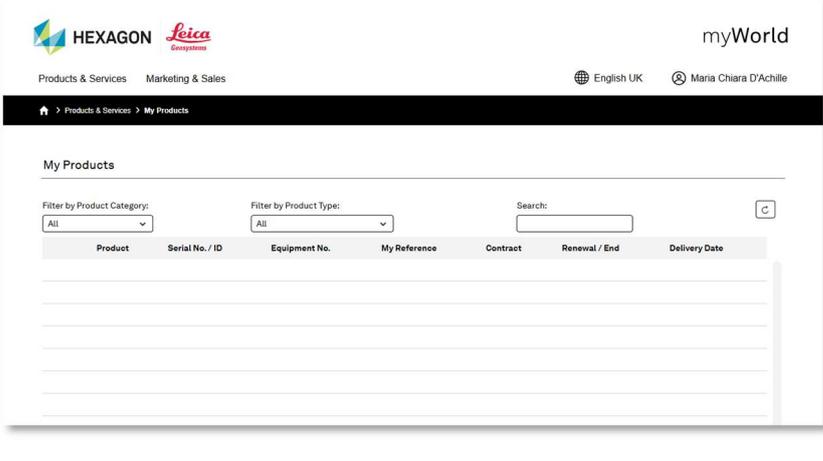
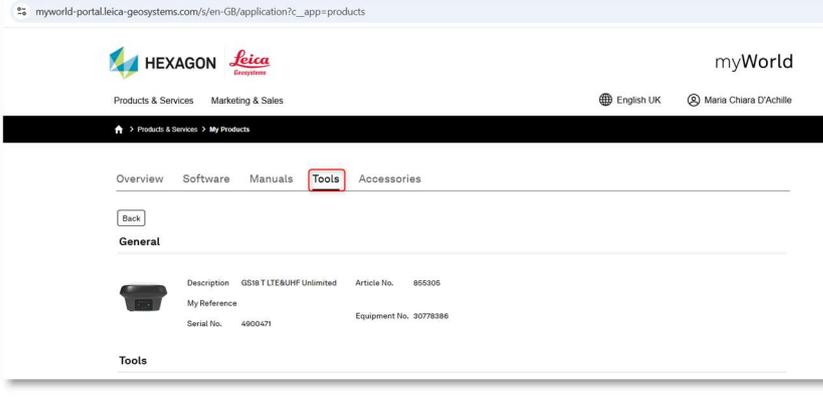
FW Installation via Web Server (PC)

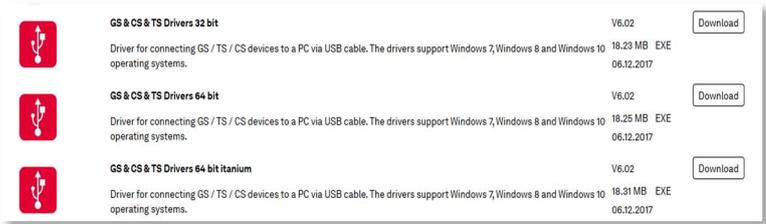
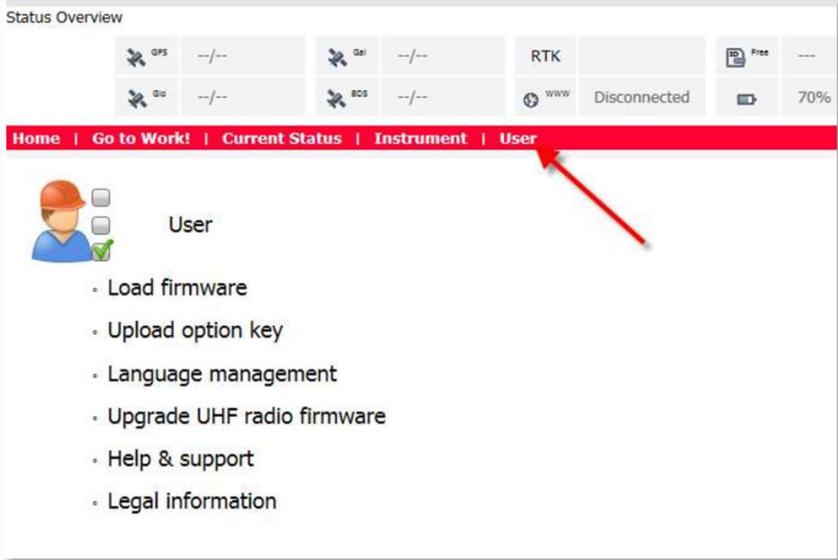
General note:

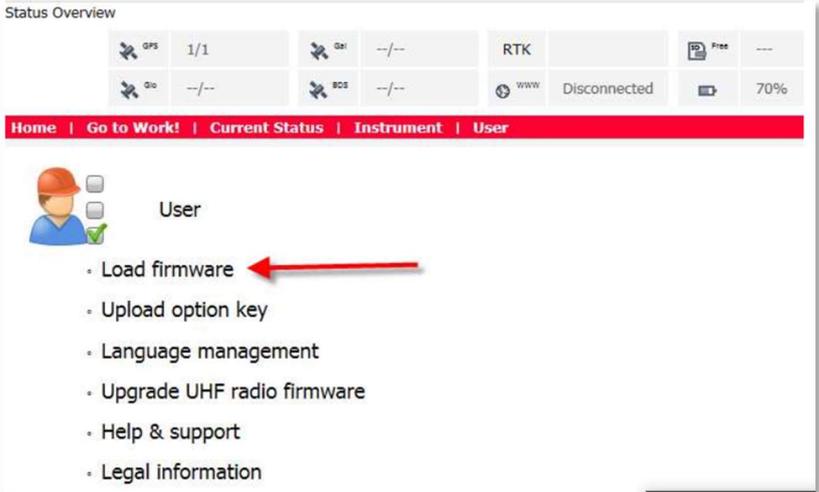
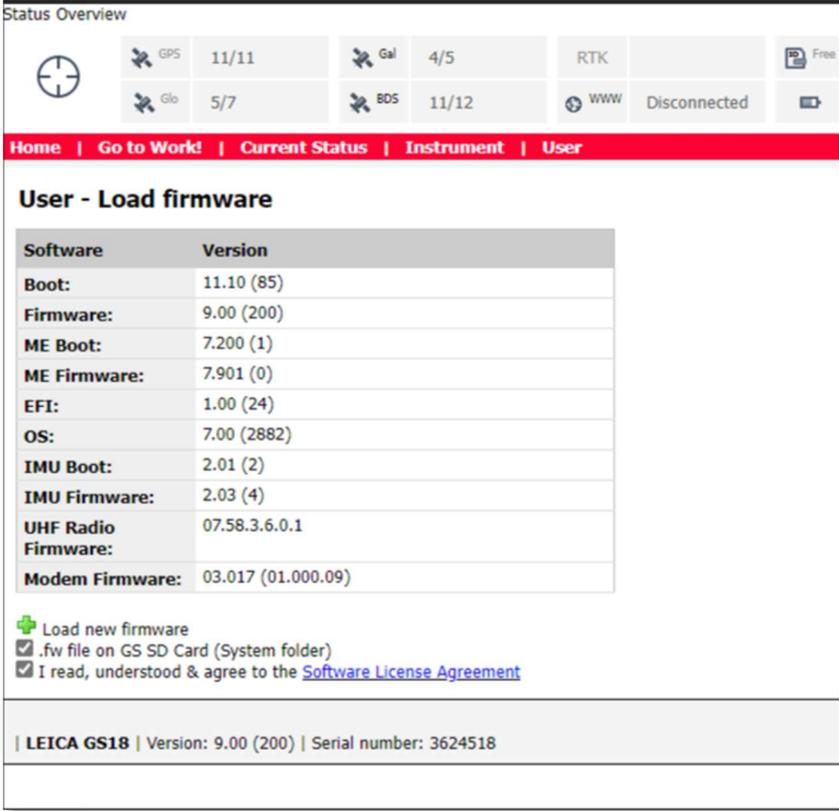
For PC connections, cable connection is recommended rather than Bluetooth and WLAN.

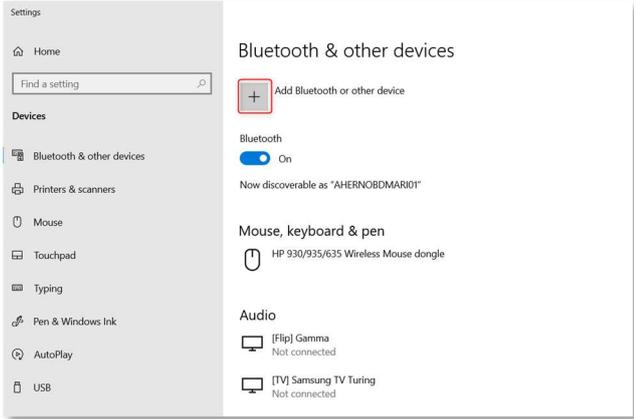
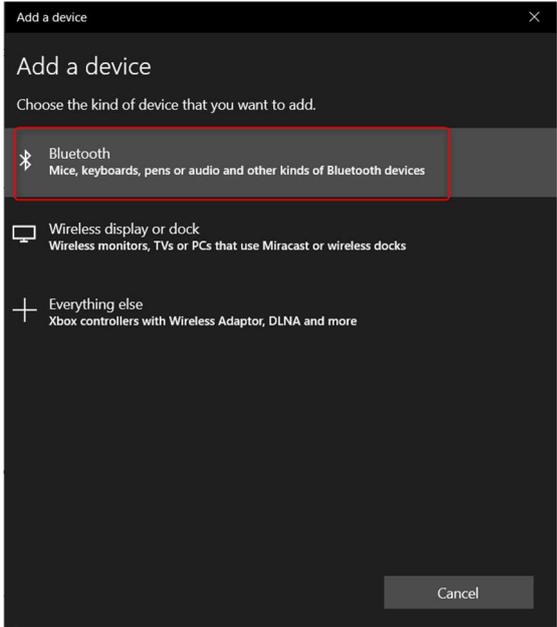
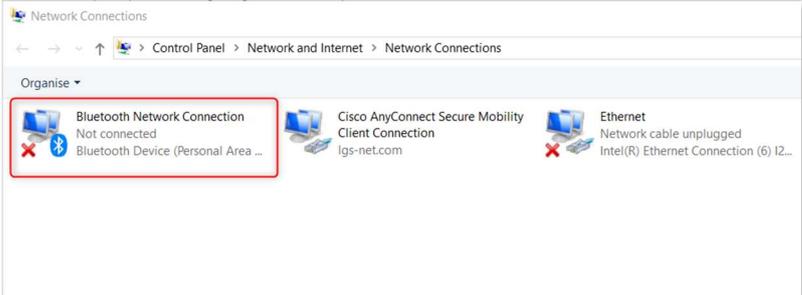
For Bluetooth and WLAN connections, the procedure mentioned below needs to be repeated for every single GS instrument you want to connect to.

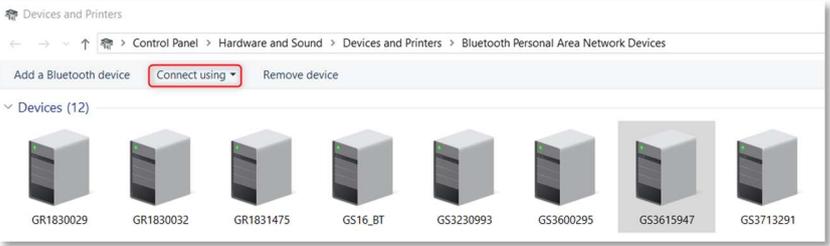
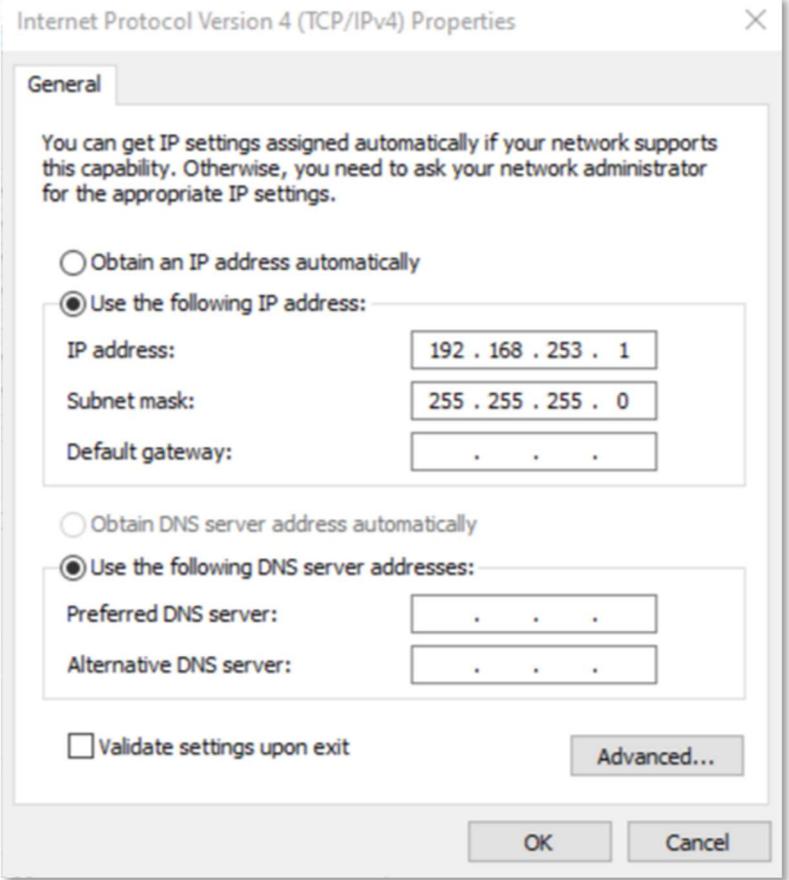
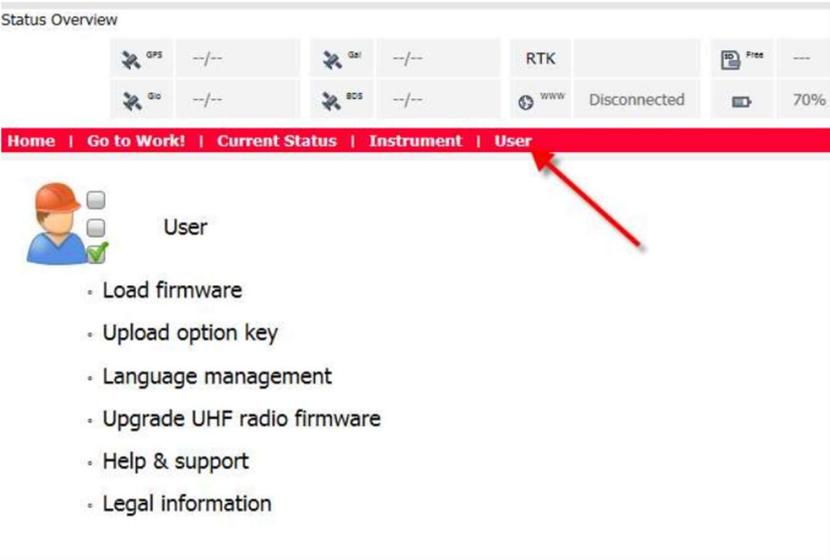
Moreover, WLAN connection might be unstable because Windows tends to disconnect easily from the GS18 because it connects to networks that provide Internet access.

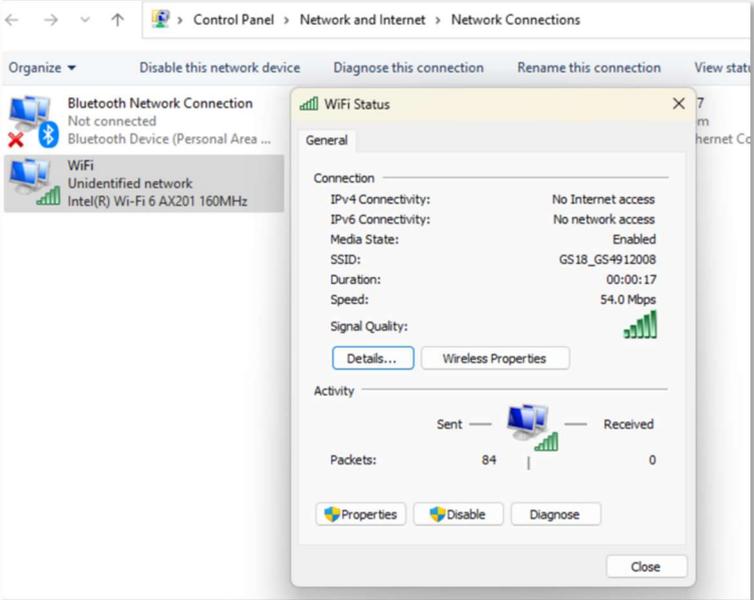
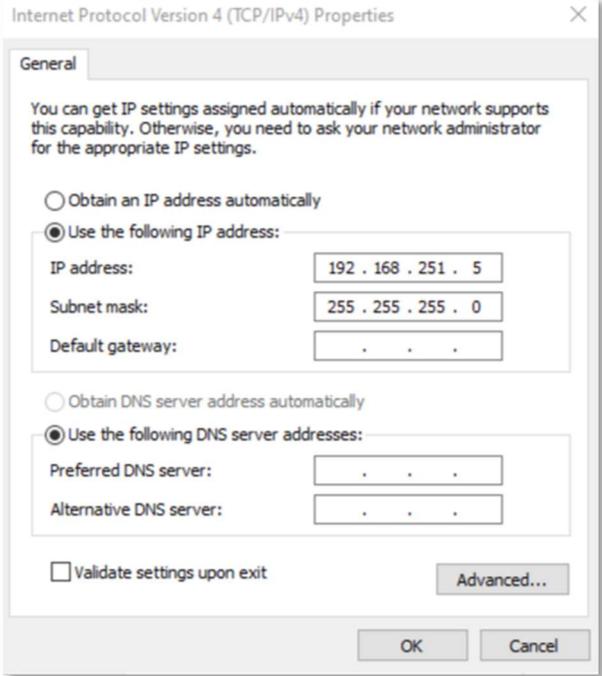
FW Installation via Web Server (PC)	
Cable	
<p>1 Log in to the Leica myWorld portal.</p> <p>Note: If you don't have an account yet, please register.</p>	
<p>2 Navigate to Product & Services, myProducts.</p>	
<p>3 Select your GS18.</p> <p>Page to Tools.</p> <p>Download the GS & CS & TS driver.</p>	

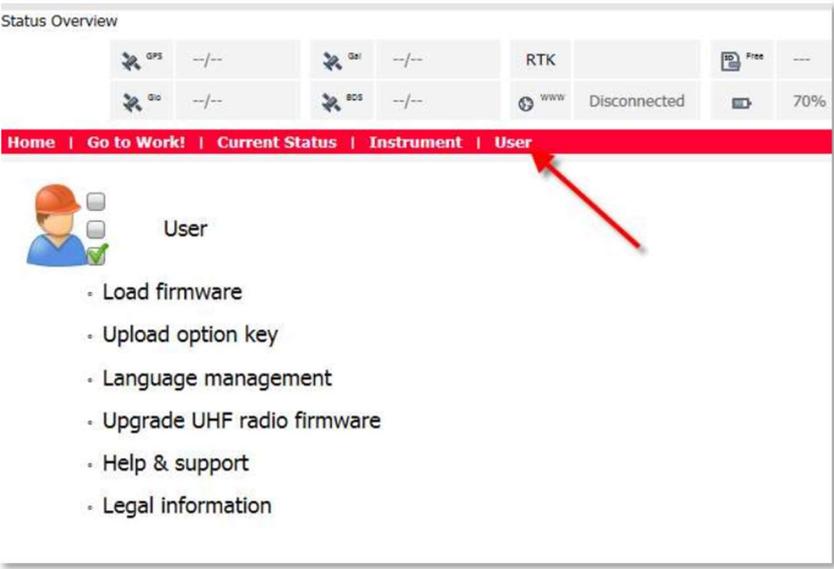
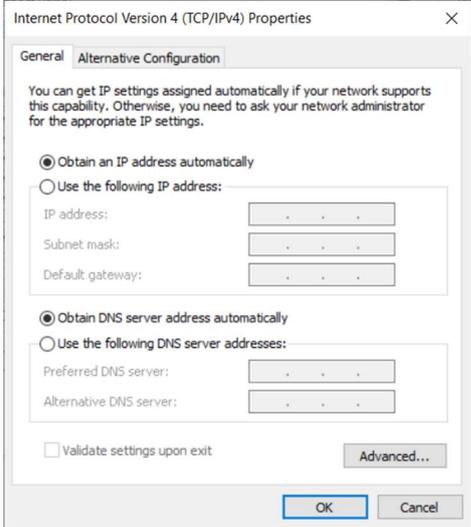
	
<p>3 Install the GS GS & CS & TS driver on your PC.</p>	
<p>4 Connect the GS18 to your PC via cable.</p> <p>Note: GEV234 (Lemo to USB) can be used.</p>	
<p>5 Open a browser and enter: http://192.168.254.2</p> <p>Tap on 'User' option located on the top red bar.</p>	

<p>6 Select Load Firmware.</p>	 <p>Status Overview</p> <p>GPS 1/1 Gal --/-- RTK Free --- Glo --/-- BDS --/-- www Disconnected 70%</p> <p>Home Go to Work! Current Status Instrument User</p> <p>User</p> <ul style="list-style-type: none"> · Load firmware · Upload option key · Language management · Upgrade UHF radio firmware · Help & support · Legal information 																						
<p>7 Update Software Please make that you tick the checkboxes:</p> <ul style="list-style-type: none"> • .fw file on GS SD card • I read, understood and agree to the Software license agreement <p>Finally press 'green plus' icon to load firmware.</p>	 <p>Status Overview</p> <p>GPS 11/11 Gal 4/5 RTK Free Glo 5/7 BDS 11/12 www Disconnected</p> <p>Home Go to Work! Current Status Instrument User</p> <p>User - Load firmware</p> <table border="1"> <thead> <tr> <th>Software</th> <th>Version</th> </tr> </thead> <tbody> <tr> <td>Boot:</td> <td>11.10 (85)</td> </tr> <tr> <td>Firmware:</td> <td>9.00 (200)</td> </tr> <tr> <td>ME Boot:</td> <td>7.200 (1)</td> </tr> <tr> <td>ME Firmware:</td> <td>7.901 (0)</td> </tr> <tr> <td>EFI:</td> <td>1.00 (24)</td> </tr> <tr> <td>OS:</td> <td>7.00 (2882)</td> </tr> <tr> <td>IMU Boot:</td> <td>2.01 (2)</td> </tr> <tr> <td>IMU Firmware:</td> <td>2.03 (4)</td> </tr> <tr> <td>UHF Radio Firmware:</td> <td>07.58.3.6.0.1</td> </tr> <tr> <td>Modem Firmware:</td> <td>03.017 (01.000.09)</td> </tr> </tbody> </table> <p> <input checked="" type="checkbox"/> Load new firmware <input checked="" type="checkbox"/> .fw file on GS SD Card (System folder) <input checked="" type="checkbox"/> I read, understood & agree to the Software License Agreement </p> <p> LEICA GS18 Version: 9.00 (200) Serial number: 3624518</p>	Software	Version	Boot:	11.10 (85)	Firmware:	9.00 (200)	ME Boot:	7.200 (1)	ME Firmware:	7.901 (0)	EFI:	1.00 (24)	OS:	7.00 (2882)	IMU Boot:	2.01 (2)	IMU Firmware:	2.03 (4)	UHF Radio Firmware:	07.58.3.6.0.1	Modem Firmware:	03.017 (01.000.09)
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<p>8 Allow the GS to restart and wait for all the lights to return to stabilise. Then refresh this page, the firmware should now be updated. (this may take a few minutes)</p>																							

Bluetooth	
<p>1 Open Bluetooth & other devices settings page. Select Add Bluetooth or other devices button.</p> <p>Note: The procedure may slight differ depending on the installed Windows version.</p>	 
<p>2 Select your GS18 and enter the code 0000 to pair with it.</p>	
<p>3 Once the devices are paired, open Control Panel\Network and Internet\Network Connections and select the Bluetooth Network Connection adapter.</p>	

<p>4 Select your GS18 and press Connect using> Ad hoc network.</p>	
<p>5 Once the connection has been established, right click on the GS18. Select properties > Internet Protocol Version 4 (TCP/IPv4) and configure it as shown on the right side.</p>	
<p>6 Open a browser and enter: http://192.168.253.2</p> <p>Tap on 'User' option located on the top red bar.</p>	

7	Further steps are the same as for the Cable connections.	
WLAN		
1	Open the Wifi settings, select your GS18 and connect to it.	
2	Once the devices are connected, open Control Panel\Network and Internet\Network Connections and select the Wifi network adapter.	
3	<p>Select properties > Internet Protocol Version 4 (TCP/IPv4) and configure it as shown on the right side.</p> <p>The IP address should be: 192.168.251.x with x greater than 3.</p>	

<p>5 Open a browser and enter http://192.168.251.2</p> <p>Tap on 'User' option located on the top red bar.</p>	 <p>Status Overview</p> <p>GPS --/-- Gal --/-- RTK --/-- Free --</p> <p>SD --/-- BGS --/-- WWW Disconnected 70%</p> <p>Home Go to Work! Current Status Instrument User</p> <p>User</p> <ul style="list-style-type: none"> • Load firmware • Upload option key • Language management • Upgrade UHF radio firmware • Help & support • Legal information
<p>6 Further steps are the same as for the Cable connection.</p> <p>Note: After successful update, make sure to revert the properties of the Wifi adapter to their default settings as shown in the picture on the right side.</p>	 <p>Internet Protocol Version 4 (TCP/IPv4) Properties</p> <p>General Alternative Configuration</p> <p>You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.</p> <p><input checked="" type="radio"/> Obtain an IP address automatically</p> <p><input type="radio"/> Use the following IP address:</p> <p>IP address: . . .</p> <p>Subnet mask: . . .</p> <p>Default gateway: . . .</p> <p><input checked="" type="radio"/> Obtain DNS server address automatically</p> <p><input type="radio"/> Use the following DNS server addresses:</p> <p>Preferred DNS server: . . .</p> <p>Alternative DNS server: . . .</p> <p><input type="checkbox"/> Validate settings upon exit</p> <p>Advanced...</p> <p>OK Cancel</p>