

## Updating Firmware on the Leica GS10/14/15/16/18 Rover

Note: You'll need to have access to Leica Myworld to download the firmware. You can only update your GS firmware version prior to the CCP expiration date. If you have renewed your CCP, you'll need to download License Key and install it before update. For any additional questions please contact [support@stpg.ca](mailto:support@stpg.ca) or our toll free number 1.855.414.9453

### Description

Before you begin, you will need the following tools to complete the firmware update on your GS controller:

- Leica CS10, CS15, or CS20 field controller
- Leica GS10/14/15/16/18 GNSS sensor you wish to update
- Leica Data Cable GEV234, Lemo to USB**
- Leica SD Card (GS10/15), Leica Micro SD Card (GS14/16/18)
- (2) Fully Charged Leica Li-Ion Batteries
- Up-to-date Leica Customer Care Package (CCP)
- Leica GS .fw Firmware data file and license key, .key file (available from Leica MyWorld)

### Download Firmware File (.fw) and license key (.key)

On Leica Myworld website, Click my downloads - GNSS Product - Choose the GS model you wish to update

In the "Overview" tab, click <Download> to download the license key for the gs sensor

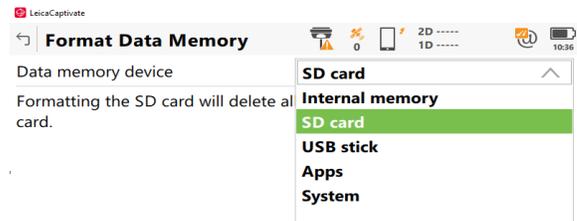
In the "Software" tab, and choose the Firmware version you wish to download.

Download and save.



### Format microSD/SD Card

Insert a blank SD Card into a Leica CS10/15/20 controller.  
Click <Settings>, <Tools>, <Format memory>, - OK  
(In Viva: User - Tools & utilities - Format Data Storage - SD Card - Ok)

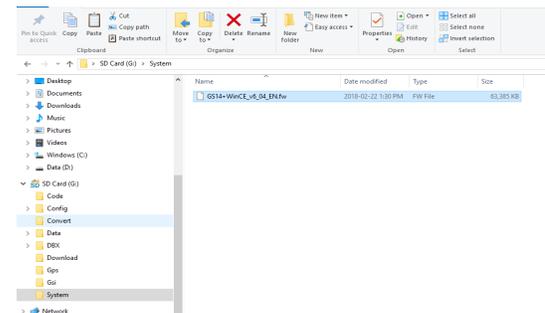


### Save .FW file in (micro)SD Card

The SD card will be formatted into Leica folder structure, save the firmware file in the "SYSTEM" folder, and make sure it is the only file in that folder.

Save .key file in a separate SD/USB to connect with the CS controller

The .key need to applied to the GS before the update of the firmware begins



## Connection

Insert the SD Card into the GS Rover.

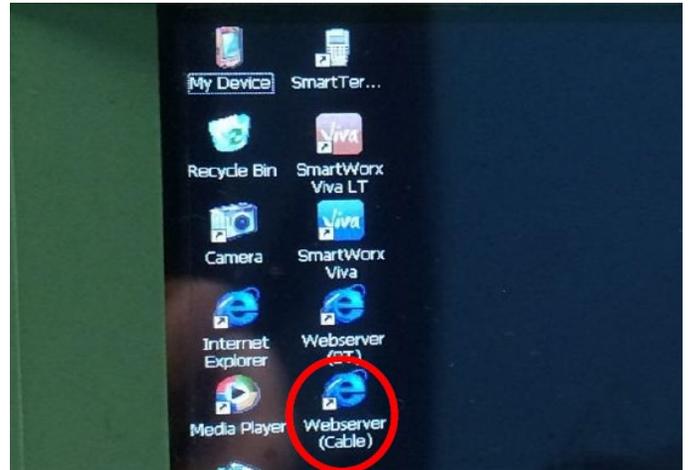
Connect the GS Rover (P1) to the CS controller (USB) using the instrument cable GEV234. (Note: Picture shows a CS15, but this similar with the CS20)

Turn on both Rover and Controller.



## Configuration

On the controller click FN - BACK to exit application. (In Viva, FN - minimize) Double Click Webservice (Cable) option.



### Step 1:

Navigate to <USER>, "Upload option key", browse to the .key on the separate SD/USB key connected to the device.

Click the disk icon to apply the key to the GS sensor.

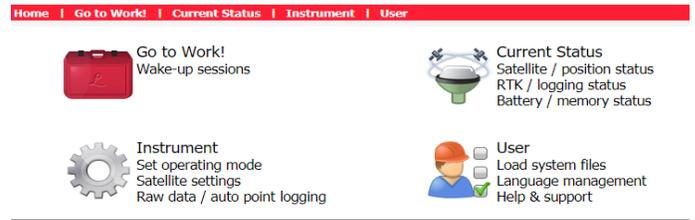
### Step 2:

Click user - Load Firmware

Tick both boxes

Click Load Firmware

Check the box for ".fw file on GS SD Card (System Folder)" and click "+ Load new firmware" to install the firmware update on the GS receiver.



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



- Load firmware
- Upload option key
- Language management
- Upgrade UHF radio firmware
- Help & support
- Legal information



**NOTE:** The process will take several minutes to complete. The GS sensor will power down and back up again twice while the firmware installs. The screen will display a green panel stating that the install has completed, before the actual installation has finished. After the green panel is displayed, allow the sensor to shut down and reboot again before the installation is complete.

File Edit View Favorites Tools Help

GPS --/-- GPS --/--  
 DO --/-- BOS --/--  
 RTK [ ] [ ] 95%  
 www Disconnected [ ] 80%

Leica Geosystems - when it has to be right

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

**User - Load firmware**

**i** • The firmware is being upgraded

Software	Version
Boot:	5.50 (1391)
Firmware:	5.50 (1418)
ME Boot:	6.200 (0)
ME Firmware:	6.403 (0)
EFI:	1.00 (0)
OS:	6.00 (1391)
UHF Radio Firmware:	--
Modem Firmware:	--

Load new firmware  
 .fw file on GS SD Card (System folder)



The green panel stating **FIRMWARE installed successfully** will appear before the actual upload process has completed. Allow the GS sensor to reboot again **AFTER** the green banner appears.

File Edit View Favorites Tools Help

Status Overview

GPS --/-- GPS --/--  
 DO --/-- BOS --/--  
 RTK [ ] [ ] 95%  
 www Disconnected [ ] 100%

Leica Geosystems - when it has to be right

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

**User - Load firmware**

**✓** • Firmware installed successfully.

**i** • The sensor has restarted. Please refresh this page.

Load new firmware  
 .fw file on GS SD Card (System folder)

2014-10-22 21:12 (GMT Standard Time)

| LEICA GS14 | Version: 5.05 (3929) | Serial number: 2811205 | © Leica Geosystems 2009



**NOTE: REFRESH THE SCREEN TO VERIFY THAT THE FIRMWARE UPDATE HAS BEEN COMPLETED AND INSTALLED ON YOUR SENSOR BEFORE ATTEMPTING TO SHUT ANYTHING DOWN OR DISCONNECT THE USB CABLE. THE GS SENSOR WILL REBOOT AGAIN AFTER THE DISPLAY STATES THAT THE FIRMWARE HAS BEEN INSTALLED. PLEASE, BE SURE TO ALLOW THE GS SENSOR TO REBOOT AGAIN AFTER YOU SEE THE ABOVE MESSAGE. The USER page of the Webserver link will display the current version of Firmware on the sensor. Please verify that the installed version is the version shown on the screen before ending the process. It is advised that the user close and re-boot Webserver to verify that installation has completed successfully.**

**User - Load firmware**

Software	Version
Boot:	6.06 (1684)
Firmware:	6.16 (164)
ME Boot:	6.501 (0)
ME Firmware:	6.515 (0)
EFI:	1.01 (1)
OS:	6.00 (1684)
UHF Radio Firmware:	--
Modem Firmware:	--

Load new firmware  
 .fw file on GS SD Card (System folder)  
 I have read and agree to the [Leica Geosystems Legal Agreement](#)

2018-03-07 09:39 (Pacific Standard Time)

**LEICA GS14 | Version: 6.16 (164) | Serial number: 3701614**

Your firmware is now installed and your GS instrument is now ready to use.