

Overcoming USB download problems with ProMark3

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Some people have reported difficulties downloading data from the ProMark3 receiver via its USB cable to GNSS Solutions. Often the problems arise after upgrading to a new version of GNSS Solutions but failing to install the new USB emulation driver for the ProMark3. The following instructions will help you install these drivers and configure GNSS Solutions for downloading data from the ProMark3:

A. Installing the USB driver

1. The latest version of GNSS Solutions (2.50.06) may be downloaded for free from the /Land Survey/GNSS Solutions/Software/ folder of <ftp:magellangps.com>.
When you copy the GNSS Solutions zip file from <ftp:magellangps.com> to your PC and extract the installation files to your hard drive, the extraction process will create a subfolder called /USB Drivers/PROMARK/. Please make a note of this folder
2. Turn on the ProMark3
3. Attach the I/O module to the back of the receiver and plug in the USB cable to the I/O module and a USB port on your PC that you will always use for ProMark3 communications
4. Windows will inform you that a new USB device was found and will launch an installation wizard. If you downloaded GNSS Solutions from the Magellan Professional ftp site, you will not have a CD. Instead select the Custom installation option which activates a browsing window. Browse to the previously mentioned /USB Drivers/PM3/ folder and select the “ATMELAT 91 USB serial emulation” driver.
5. The driver is not signed by Magellan Professional, so click **Continue Anyway**
6. Disconnect the USB cable from the I/O module

B. Configuring the COM port

7. Launch **Download** from the Windows Task bar on the PC: **Start > Programs > GNSS Solutions > Tools > Download**
8. Select **File > Connect > Receiver > Connect via cable**
9. Make a note of all the COM ports identified by **Download**
10. Close **Download**
11. Re-connect the ProMark3 to the PC using the USB cable (on the same USB port as in the previous steps)
12. Relaunch **Download** from the Windows task bar on your PC: **Start > Programs > GNSS Solutions > Tools > Download**
13. Select **File > Connect > Receiver > Connect via cable**
14. Click the down arrow to list all the COM ports previously identified by **Download**. There should be a new port listed that was not listed in Step 9. This is the port used by **Download**. Make a note of the port number

C. Downloading data for the first time

15. Disconnect the ProMark3 from the PC.
16. Launch the ProMark3 **Surveying** application by double-tapping its icon on the ProMark3 desktop
17. Reconnect the unit to your PC using the USB cable supplied with the unit. Use the same USB port on your PC that you previously used
18. Launch **Download** from the Windows Task bar on your PC: **Start > Programs > GNSS Solutions > Tools > Download**
19. Select **File > Connect > Receiver > Connect via cable**
20. Select the COM port identified in Step 14
21. **Download** will list all the files in your ProMark3 unit

GNSS Solutions will now be configured to communicate with the ProMark3 and will automatically connect to the receiver the next time you run the Download utility.

However, downloading survey data from the ProMark3 can only occur if both of the following conditions are met

- The receiver is turned on before the USB cable is attached
- The Survey or Mobile Mapping Application is running
- GNSS Solutions' Download utility is launched after the cable is connected.

To ensure proper data downloading, we recommend the following download procedure:

1. Disconnect the ProMark3 from the PC
2. Run the ProMark3's Survey application
3. Connect the USB cable (using the mini-USB connector) to the I/O module
4. Run GNSS Solutions' Download utility

A similar sequence of actions is recommended for downloading mobile mapping files:

1. Disconnect the ProMark3 from the PC
2. Run the ProMark3's Mobile Mapping application
3. Connect the receiver to the PC
4. Run MobileMapper Office's Transfer utility. (Version 3.40 is available from ftp.magellangps.com in the /Mobile Mapping/MM Office/Software/ folder.)

A note on downloading data from the ProMark3 using its USB cable

ProMark3 is an "access-restricted" platform and data exchange with the office software (either GNSS Solutions for processing surveying data or MobileMapper Office for processing mobile mapping data) can only be performed when the office software is under the control of the unit. Even though communication is via a USB port, this port emulates a RS-232 port. This is why the instructions for downloading data say to select "Connect via cable" and not "Connect via USB."

For complete instructions on how to download data, please refer to the ProMark3 reference manual at ftp.magellangps.com in the /Land Survey/PM3/Manuals/PM3 Reference Manual/ folder.