

# **DistoX2 Update Manual**

## **Leica Disto X310 based DistoX**

2015/02/22

### **Introduction**

The DistoX2 board allows updating the firmware to a newer version over the Bluetooth connection. To perform an update, follow the points in this manual.

### **Setup**

You need the Updater (DistoUpdateV24.exe) and PocketTopo on the device used for the update. First configure and test the connection to the DistoX using PocketTopo.

Check the versions of the hardware and firmware on your Disto:

- If needed, press CLR to switch off the Laser.
- Press the FUNC key twice to show the versions.

The actual firmware version is 2.4. It runs on the hardware versions 0.9 and 1.0.

An update from V2.1, V2.2, or V2.3 to V2.4 does not change the measurement store and the user preferences.

Make sure your device is fully charged or connect a charger during the update!

Shut down PocketTopo before you start the Updater to avoid conflicts on the Bluetooth connection!

### **Bootloader Mode**

For the actual update, the Disto needs to be started in Bootloader mode:

Press and hold the PLUS and MINUS keys while switching on with the DIST key.

The display illumination will switch on but the screen remains empty.

The Disto cannot be used for anything else but an update in this mode.

It can be switched off at any time using the CLR key.

### **Update**

To start the update, run the DistoUpdate program and use the "Update" function.

The progress of the update is written to the screen.

After a successful update, switch the Disto off with the CLR key and on again with the DIST key. Check the new firmware version as shown above.

If the update fails, restart the Updater and try again.

If you get the error message "Resource Read Error!" you have to install a .NET Compact Framework update (see below).

## **Dump**

The “Dump” function in the DistoUpdate program stores a copy of the whole DistoX memory to a file “DistoXDump.bin”. It can be used for data recovery and problem analysis.

## **Potential Problem with .NET Compact Framework 2.0**

Some versions of the Compact Framework 2.0 installed on Windows Mobile 2003 and early versions of Windows Mobile 5.0 exhibit an error which prevents the Updater from working correctly. Use the following update to correct it:

<http://www.microsoft.com/en-us/download/details.aspx?id=17981>

## **Version History**

### *Version 2.0*

Used for prototype boards only.

### *Version 2.1*

First production version.

### *Version 2.2*

Small improvements:

- Use lower M sensor sensitivity to avoid numeric overflow under all conditions.
- Avoid result degradation due to too short measurements.
- Correction of unit in display of gravity sensor absolute value.

### *Version 2.3*

- Laser and measurement trigger over Bluetooth.
- Accelerometer non-linearity correction.
- Endpiece offset configuration.
- Display illumination level configuration.

### *Version 2.4*

- Added horizontal/vertical/azimuth display (SMART key).
- Option for measuring reversed (backsight) data (MEM & -).
- Option for recognition of triple measurements (SMART & -).

Corrections:

- Prevent spurious switch on.
- Avoid unjustified "2nd" error message during power up.