



# **G100 and G200 Series**

## **Firmware Tool**

### **Installation and Operating Instructions**

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## 1.0 Introduction

✍ Note: Please read the entire manual before updating your instrument firmware.

### 1.1 Document History

Issued By	Issue Date	Change Control ID	Issue No.	Reason for Change
LA	Apr 2010	OMADMUFN1.2	2	New manual for G100 and G200 Series Firmware Update Tool (supports software ADM1.2.1)

### 1.2 Notes

Important/useful information and instructions are shown clearly throughout the manual in a note format.

For example:

✍ Note: For further information please contact Technical Support at Geotech (UK) Limited on +44(0)1926 338111 or email [technical@geotech.co.uk](mailto:technical@geotech.co.uk).

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## **2.0 Introduction**

### **2.1 Compatibility**

This manual explains how to install and operate the Firmware Update Tool. It is compatible with the following instruments:

- G100 CO<sub>2</sub> 0-20%
- G110 CO<sub>2</sub> 0-100%
- G150 CO<sub>2</sub> 0-10,000ppm
- G200 N<sub>2</sub>O 0-1,000ppm
- G210 N<sub>2</sub>O 0-100%

### **2.2 Computer Requirements**

The software is compatible with the 32-bit editions of the following Microsoft operating systems: Windows XP with Service Pack 3, Windows Vista with Service Pack 2 and Windows 7.

- The PC must have one spare USB ports available.
- It is highly recommended that the system has at least 1GB RAM and a 2GHz processor.
- Microsoft .NET Framework 3.5 SP1 (supplied).
- Java Runtime 1.6 (supplied).

## **3.0 Software Installation and Removal**

### **3.1 Download**

The Inca Firmware Update Tool software is provided as a download on the Geotech website. Select 'Downloads -> Additional Downloads -> Applications'.

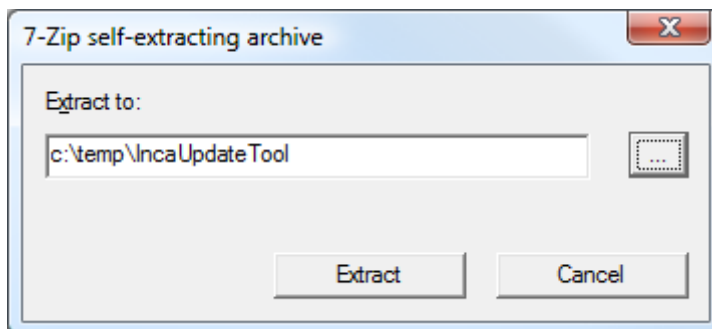
The download is available in two forms, a 'Core' version which excludes the Java Runtime or Microsoft .NET Framework and the 'Full' version which includes both of those components.

Download the Core version only if your computer already has Java Runtime 1.6 and Microsoft .Net Framework V3.5 SP1 and you have a slow internet connection.

After downloading either version, execute the downloaded file by double-clicking it.

 Note: You will require Administrative privileges to install the software.

When prompted to 'Extract to' enter a suitable folder name on your local computer either by typing the folder name or choosing a folder by clicking the [...] button.

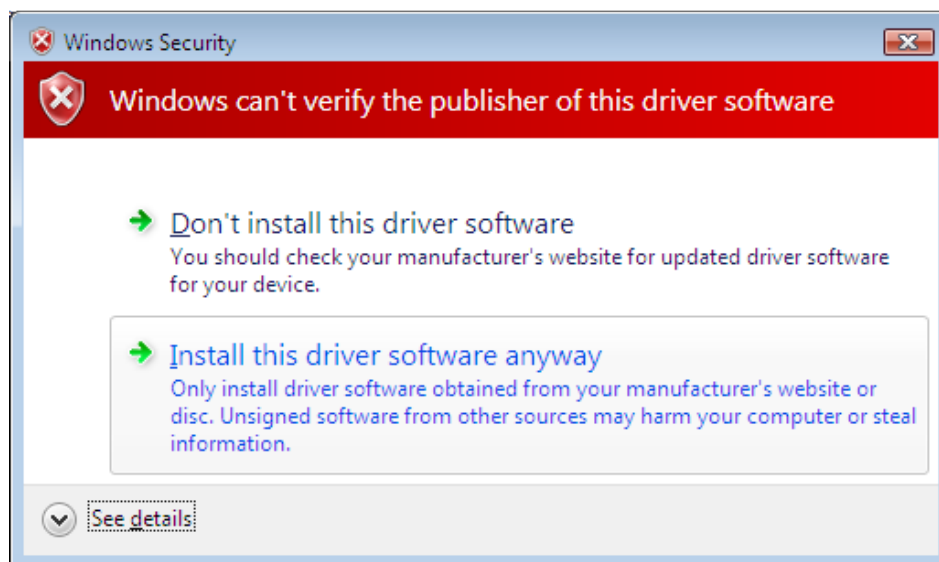


Click the 'Extract' button to begin the extraction process.

After extraction of the files has completed use Windows Explorer to navigate to the specified folder and then run 'Setup.exe'.

Follow the on-screen instructions to complete the installation of the software.

If your computer is running either Microsoft Windows Vista or Windows 7 operating systems, the following 'Windows Security' will prompt the user to verify the driver installation. Click 'Install this driver software anyway option'.



Windows Vista or Windows 7 Security Verification

After installing the software you may be prompted to restart your computer.

## 4.0 Operation

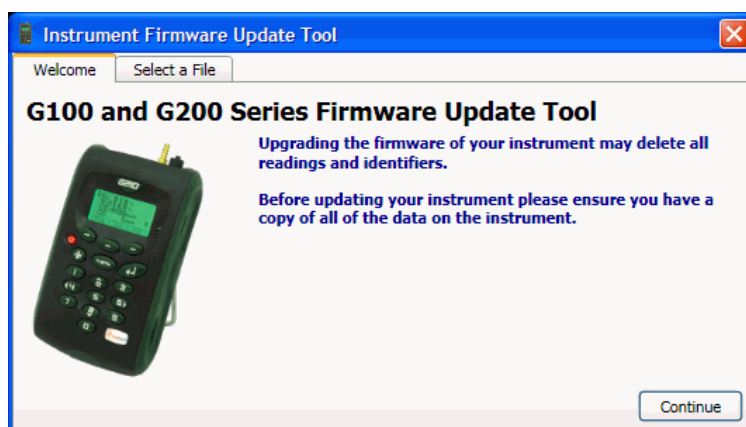
The Firmware Update Tool enables the firmware and settings of the connected instrument to be updated.

**Note:** Please read this complete section before applying a firmware update.

Firmware updates are occasionally supplied by the instrument manufacturer to improve performance of the instrument. The update will be provided as an 'a90' or 'incaupdate' file and will be provided by email. When an email is received, save the attachment to a location on your computer, for example 'My Documents' or 'Desktop'.

Great care should be taken when performing this action as it is possible to render the instrument inoperable. If this occurs the instrument will need to be returned to the factory. Please contact Technical Support on +44(0)1926 338111 or email [technical@geotech.co.uk](mailto:technical@geotech.co.uk).

- 1) After receiving the file by email, save the attached file to a folder in 'My Documents' folder.
- 2) Start the application by choosing 'Geotech G1xx G2xx Firmware Update Tool' from the Geotechnical Instruments group on the Windows Start menu.



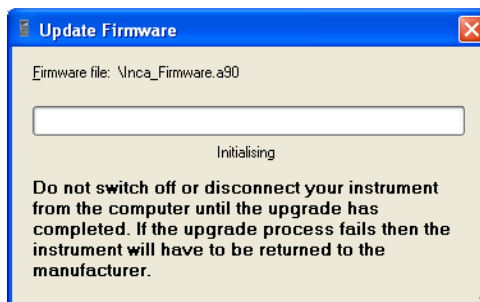
Instrument Firmware Update Tool

- 3) Click 'Continue' or on the 'Select a File' tab and select the firmware file to be updated.
- 4) Select the 'Continue' button to continue with the firmware update.
- 5) Confirm the file choice and select the 'Continue' button to confirm or the 'Cancel' button to abort the update.

**Note:** The user MUST NOT unplug the device during firmware update as this is highly likely to render the instrument inoperable. If this occurs the instrument will need to be returned to the factory. Please contact Technical Support on +44(0)1926 338111 or email [technical@geotech.co.uk](mailto:technical@geotech.co.uk).

At all points up to this final dialog the user can cancel with no detrimental effect to the system or instrument. If the user selects 'Yes' the device is programmed with the code contained in the selected file.

During the update the progress is indicated:



When the upgrade is complete the progress indicator will display 'Completed OK'.

#### 4.1 Firmware Update Device Drivers on Microsoft Windows XP

When updating the firmware of an instrument for the first time the user will be prompted by the Windows 'Found Hardware Wizard' to install new drivers. Follow the on-screen instructions.

When prompted for 'Windows to Connect to Windows Update' select 'No, not this time'.

When prompted select 'Install the software automatically (recommended)'.

#### 4.2 Failed Updates

If the upgrade fails or if it is aborted it may be possible to recover your instrument.

When the instrument displays the 'Update Flash' message, hold the instrument power button for at least 15 seconds and release. Leave the instrument for 15 seconds and the instrument should restart automatically. If not, press the power button again, repeating the hold and release steps above and wait for the instrument to start.

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