

# GeoMax TPS

## Zoom80 Series

## Installation Guide



**Version 1.1**  
**English**



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## 1 INTRODUCTION

This guide provides complete step-by-step instructions for preparing the Zoom80 TPS series for measuring work. The instructions cover all the required installation tasks for the Zoom80 instrument, Getac handheld and Field Genius/Layout Pro software.

The latest versions of GeoMax documents and software referred to in this document are all available from the GeoMax Partner Area in the Zoom80 folder at [www.geomax-positioning.com/partner-area](http://www.geomax-positioning.com/partner-area)

Only the tasks required for the initial setup of a new Zoom80 system are described in this document. For further information regarding the operation of the Zoom80 components, please refer to the respective manuals.

- The Zoom80 Quick Guide is included with the container set. The comprehensive User Manual for the TPS instrument is available from the included Zoom80 CD and also from GeoMax Partner Area in the Zoom80 folder at [www.geomax-positioning.com](http://www.geomax-positioning.com)
- The appropriate use of the included accessories are described in the Zoom80 User Manual.
- The Getac Quick Start Guide is supplied together with the Handheld. The complete User Manual can be downloaded from Getac's website at <http://en.getac.com/products/GETAC>
- The Field Genius/Layout Pro manual and Release Notes for the current software version can be downloaded from MicroSurvey's Knowledgebase at <http://www.microsurvey.com/helpdesk>

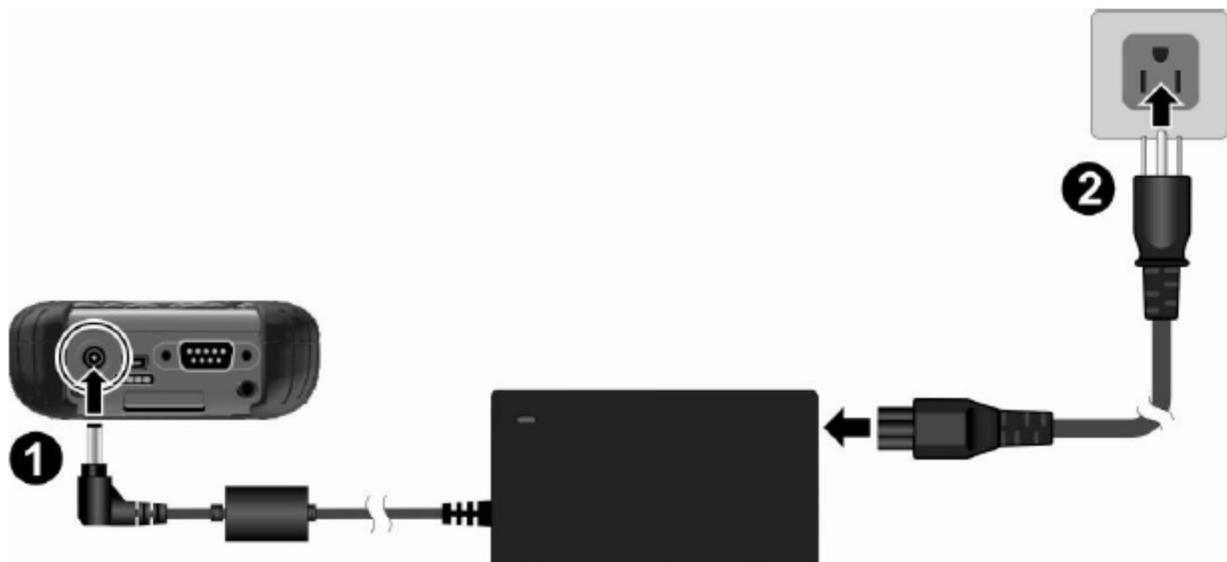
## 2 BATTERY CHARGING

### 2.1 ZOOM80 INSTRUMENT

Before using the instrument, the included ZBA400 battery should be charged. Insert the battery into the ZCH201 charger and plug the adapter into an AC supply. Do not disconnect from power until the green FULL indicator flashes, indicating that the battery is fully charged. Once charged, insert the battery into the side cover slot of the Zoom80 instrument and switch on.

### 2.2 GETAC HANDHELD

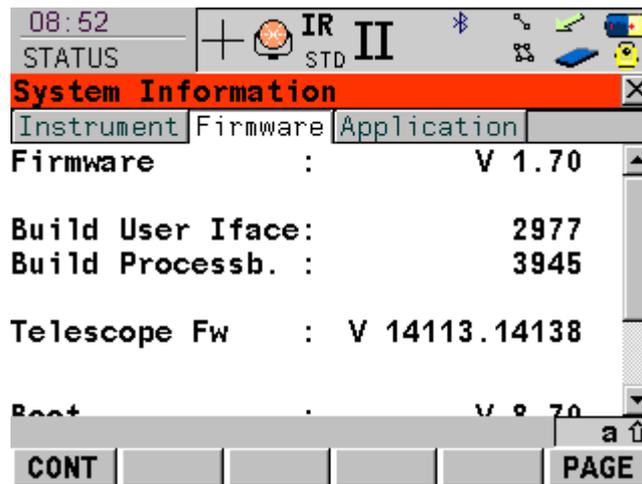
The Getac handheld is supplied in a cardboard box which includes the handheld device, battery and charging adapter. Insert the supplied battery into the handheld's battery compartment. Charge the internal battery with the supplied adapter as shown below. While charging, the circled indicator on the front of the GETAC glows amber. Do not disconnect from power until the indicator glows green, indicating that the battery is fully charged.



### 3 PREPARATION OF THE INSTRUMENT

#### 3.1 OBTAINING SYSTEM FILES

When receiving a new instrument, it should be checked that the latest firmware version is installed. The installed version can be seen on the System Firmware page, accessed by pressing *USER / F3.STAT / 3.System Information / F6.PAGE*. If this version does not match the one available from Geomax Partner Area, then the instrument should be updated.



To customize the instrument for personal requirements, the respective languages and loadable applications must also be installed. The required files can be obtained from Geomax Partner Area in the Zoom80/Firmware folder and are in the following format:

**Zoom80.fw** - The "main" firmware file

**SYS\_Lang.sde** - An example language file. The extension indicates the language, in this case "de" for German.

**Z80\_Sets.aen** - An example application file. The extension indicates the language. This example is the Sets of Angles application in English.

#### 3.2 UPLOADING TO THE INSTRUMENT

The system files are uploaded to the instrument directly from the CF card. Therefore copy all the downloaded files to the **System** directory on the CF card using a suitable card reader. Insert the CF card into the instrument and power on. To load the files onto the instrument, choose *6.Tools / 3.Upload System Files*. If the firmware needs upgrading, firstly install this file by choosing *3.Instrument Firmware*. Then install the customization files with *1.Application Programs* and *2.System Languages*.



**Note:** Ensure that fully charged batteries are inserted when uploading firmware. This process can take some time and the power supply must NOT be interrupted during the loading process.

### 3.3 LOADING LICENCE KEYS

Some applications are licence protected and require the installation of a licence key to use. If optional applications were ordered, the corresponding keys are supplied on a sheet of paper included with the instrument. To enter the keys choose *6.Tools / 6.License Keys* and type them into the provided field.



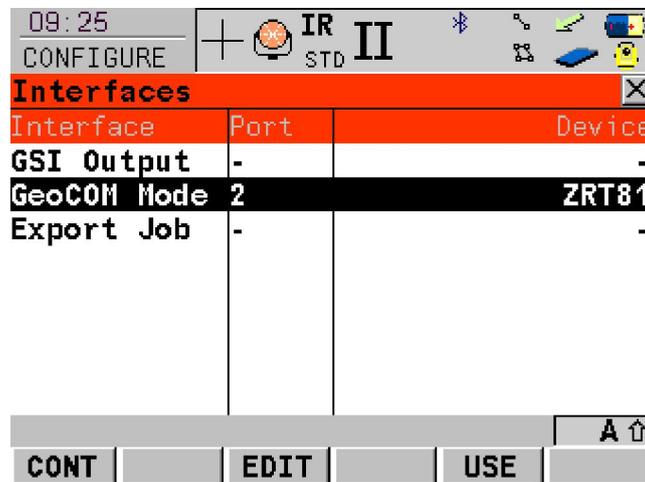
Method : Manual Entry of Key  
 Key : JKLJ89745JHKDHF923



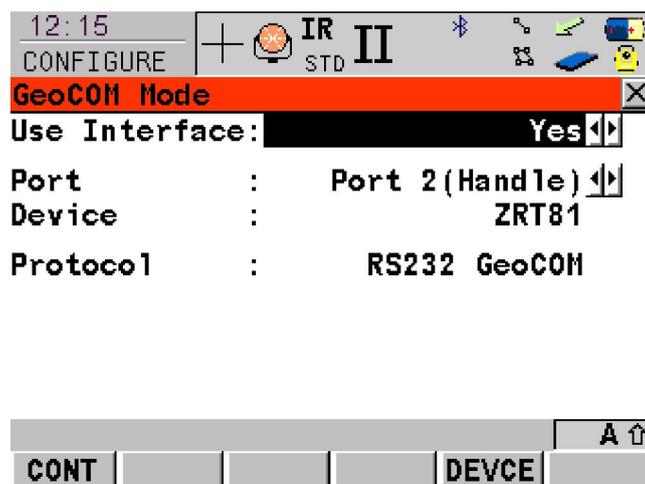
**Note:** With a new instrument, all applications can be used without a licence key for 180 days from when first used. After this period, a key must be purchased to continue using the application.

### 3.4 CONFIGURATION OF LON RANGE BLUETOOTH HANDLE

If the optional ZRT81 long range Bluetooth handle was ordered with the Zoom80, then this component needs to be configured before use. Replace the standard instrument handle with the ZRT81. Swing the antenna into the upright position. To configure the handle, choose *5.Config / 4.Interfaces* and highlight the "GeoCOM Mode" field.



Then choose *F3.EDIT* to enter the GeoCOM Mode panel. Switch "Use Interface" to **YES** and "Port" to **Port 2(Handle)**. Select the handle type with *F5.DEVCE* and choose **ZRT81**.



Your Zoom80 instrument is now ready to be used. If using a Getac remote controller, the following section describes the handheld preparation procedure.

## 4 PREPARATION OF THE HANDHELD

### 4.1 SETTING UP THE HANDHELD

Once the battery is fully charged or while connected to AC power, press the power button of the handheld. Follow the steps of the wizard to setup Windows and the touch screen. The Windows software on the supplied Getac Handheld is only available in English language. Microsoft restricts the installation of alternative languages with this operating system.

### 4.2 CONNECTING TO THE PC

To establish communication between the handheld and your PC, the Windows Mobile Device Centre needs to be installed. For Windows XP the communication software Microsoft ActiveSync is required. These softwares can be downloaded from Microsoft's website. After the software installation, connect the handheld to your PC with the USB cable supplied with the Getac as shown below.



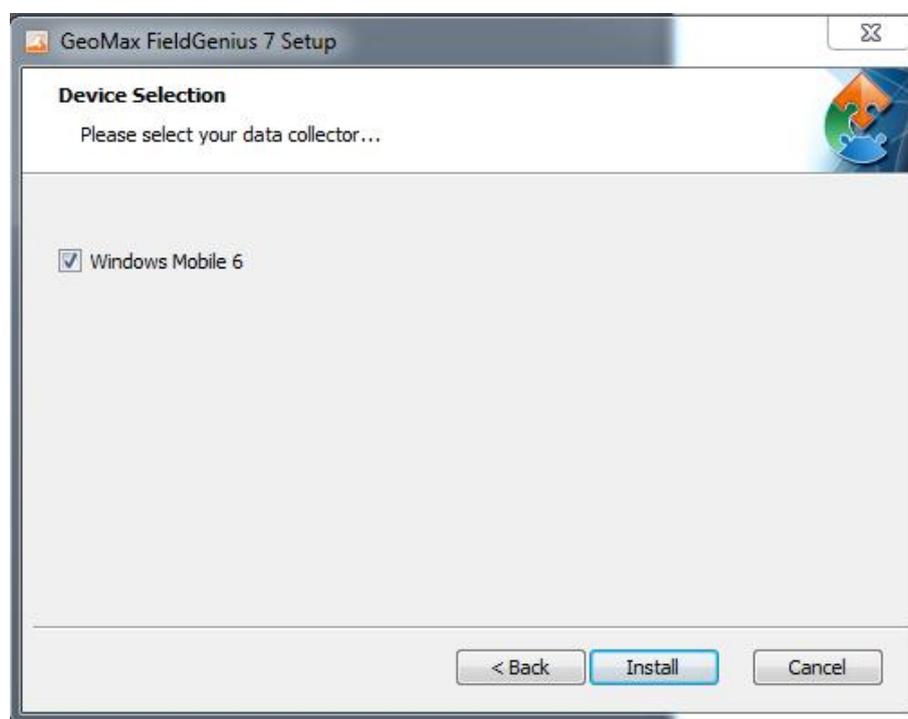
The device drivers will now automatically be installed. If the Windows **Found New Hardware Wizard** starts, click the Close button. After the drivers are installed, the Mobile Device Centre or ActiveSync will automatically start. The contents of the Getac internal memory can be seen with Windows Explorer and are defined as a drive named **Portable Device**.

### 4.3 INSTALLATION OF FIELDGENIUS/ LAYOUT PRO

Download the latest version of GeoMax Field Genius/Layout Pro from from GeoMax Website at <http://www.geomax-positioning.com/Downloads.htm?cid=15613>

Here the latest installation version and Release Notes of FieldGenius/Layout Pro is available. Download the *Devices Installation* and save onto your PC.

With the handheld connected to your PC, run the installer file *fieldgenius-devices-v.v.v.v-xxu.exe* where *v.v.v.v* is the version number and *xx* the language. The PC will attempt to connect to the handheld and install the Field Genius/Layout Pro software. Follow the instructions of the Windows installation wizard. At the Device Selection window, select the data collector type as **Windows Mobile 6**.



When prompted by the handheld for where to install, choose **Device**. Once the installation process is completed, the Field Genius/Layout Pro software can be started by selecting it from the Windows Start Menu.

### 4.4 REGISTRATION OF FIELDGENIUS/ LAYOUT PRO

When FieldGenius/ Layout Pro is started, a registration window with the Device ID is displayed as shown below. It is possible to use Field Genius/Layout Pro without

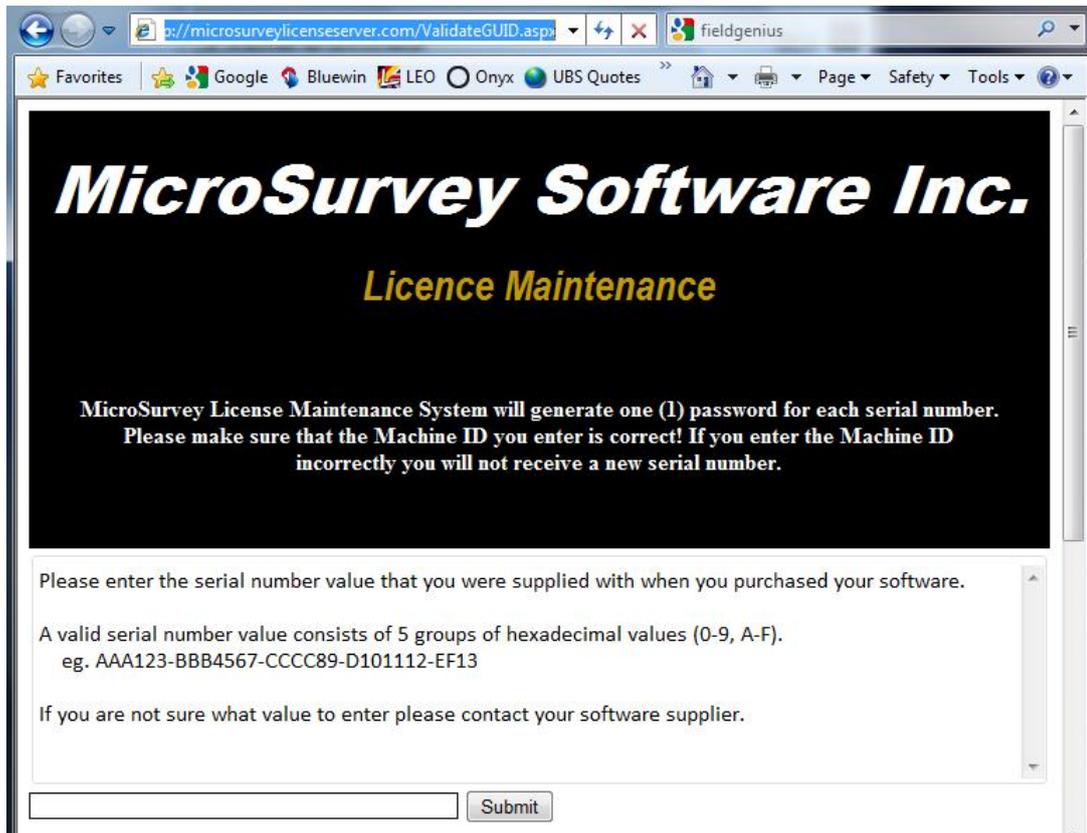
registration by tapping **Run Demo Mode**. This provides full functionality, but is limited to the storage of 30 points.

To register your version of FieldGenius, an activation key needs to be entered. The displayed Device ID together with the GUID (global unique identity) is used to obtain the key. The GUID can be found on the printed Field Genius/Layout Pro card that was supplied together with your Zoom80 equipment.



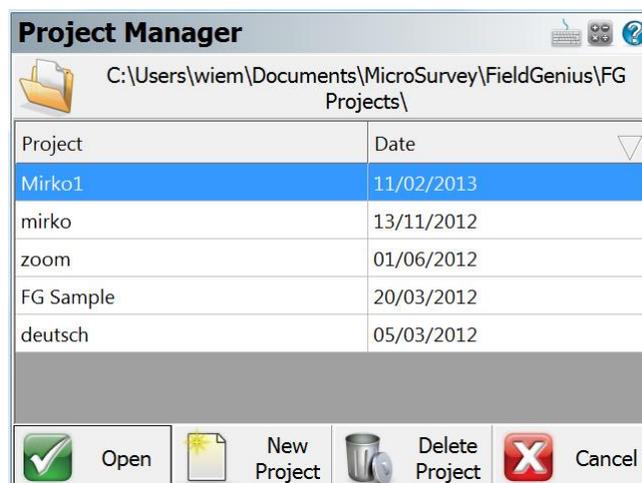
The activation key can be generated by using MicroSurvey's webportal, at the link <http://microsurveylicenseserver.com/ValidateSerialNumber.aspx>. This webportal is shown in the screenshot below. At the blank serial number field, enter your GUID and click **Submit**. At the next screen, enter the Device ID shown on the handheld. The activation key will then be displayed in the password field. Enter this key into the handheld at the provided fields and click **Apply Key**.

**Note:** Please make certain that the Device ID is entered correctly first time, since an activation key cannot be generated again with a different ID.

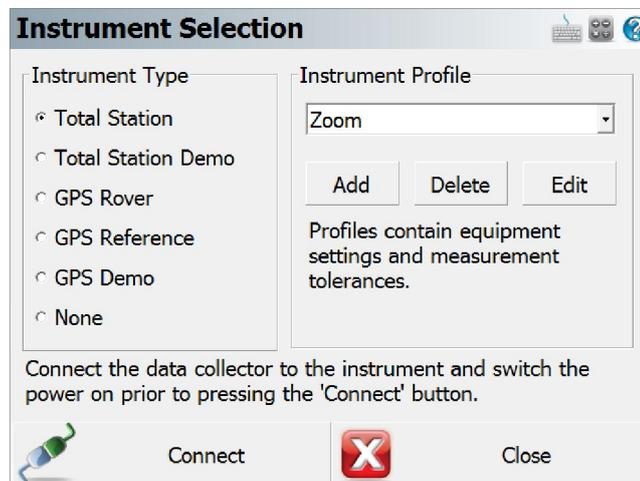


#### 4.5 CONNECTION TO THE INSTRUMENT

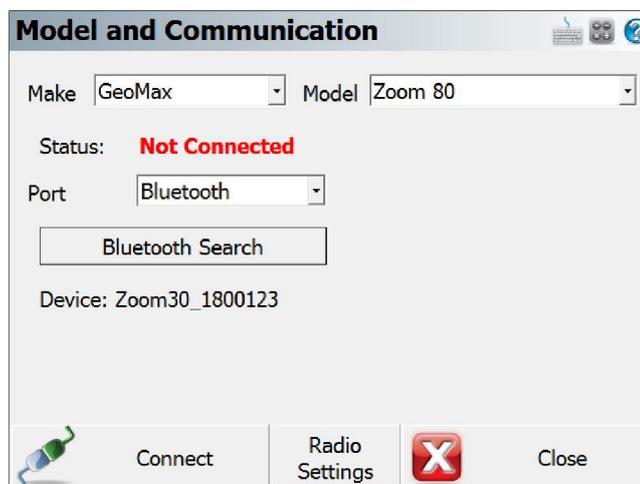
When starting FieldGenius, the *Project Manager* screen is displayed each time. Create a new project by tapping the appropriate icon and enter a project name. The onscreen keyboard can always be accessed by double tapping on the editable field. The screens that follow are used to set the default settings for this project.



At the *Instrument Selection* screen, a connection to the instrument can be made. Ensure that the instrument is switched on and select Instrument Type as **Total Station**. In the Instrument Profile window, tap Add and enter a name for your instrument. Save the name and then tap Edit to configure the profile.



At *Model & Communication* select the Make as **GeoMax**, Model as **Zoom80** and Port as **Radio**. Tap Bluetooth Search to find all available devices and choose the required instrument by its serial number.



When everything has been configured as required, tap Connect. The map view is shown next and you are ready to measure. For further information on using Field Genius/Layout Pro for total station measurements, refer to the Field Genius/Layout Pro instruction manual.