Trans Tech

TRANSTECH SYSTEMS, INC.

SDG 200

Quick Start Guide

Full Manual available online at

www.transtechsys.com/pdf/SDG200Manual.pdf

Table of Contents

Contents

Fold open compartment contents

Charger
AC Cord
DC Cord
CD Manual
Handle

Slot for SDG 200 and Standardization Plate

Case

CD Manual

SDG200

Standardization Plate

DC Cord

AC Cord

Handle

Charger

Charging Batteries

1. Turn the SDG 200 unit OFF.
2. Connect the charger to the charger connector located on the back of the SDG 200.
3. Plug the charger into a standard AC outlet.
4. The red indicator lamp will turn green to indicate that the batteries are charged. (approx. 4hrs)
5. Unplug the charger from the power source before disconnecting the charger from the SDG 200.

Battery Care Tips

- Whenever uncertain about the battery charge level or condition, recharge it
- The battery will self-discharge and should NOT be left uncharged for more than 30 days
- An occasional complete discharge followed by a full recharge is recommended
- **NEVER** drop the battery as this can damage the internals
- **DO NOT** store in freezer or expose to extreme heat
- Battery should be fully charged before use

Starting the Software

Pressing the ON button will power on the SDG 200. After a few seconds the TransTech splash screen will appear followed by the Main Menu screen. The Main Menu screen will display five options, **Start SDG200**, **GPS Control**, **Calculator**, **Contact TransTech** and **Update Software**.

Unit Settings

From the **Main Menu**, press **GPS CONTROL**. GPS status can be toggled ON or OFF. When enabled the satellite dish icon on the status bar at the bottom of the display turns from red to green.

GPS formatting can also be toggled from the **Universal Transverse Mercator (UTM)** grid to **Latitude/Longitude (LAT-LON)**. Initially the display will read Sats 0 for both formats until connections have been made. The below example shows a connection to five satellites (Sats 5). GPS locations will appear on the bottom left corner of the soil reading screen and will store with each reading when enabled. Press **Main Menu** to return to the Main Menu.

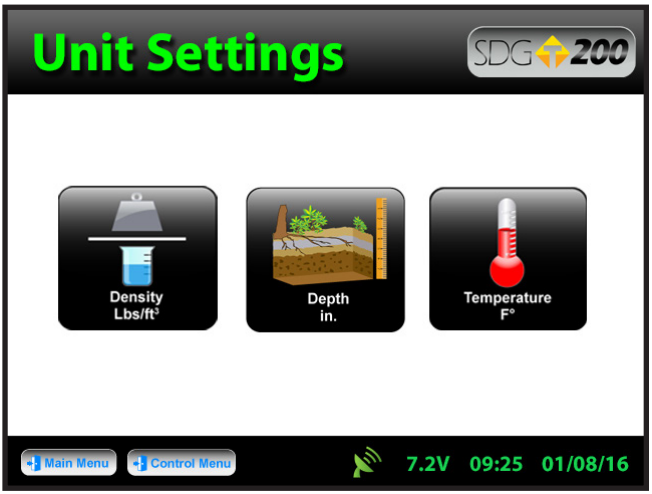
GPS Enabled **GPS Disabled**

Data Logging

From the **Main Menu**, press **Start SDG 200** to enter the **Control Menu**. From this menu, you will select units as well as material and project information.

Unit Settings

From the **Control Menu**, press **Units**. Density, Depth and Temperature can be toggled independently between system international (SI “metric”) and U.S. customary units. For example, you can set the density to **lb/ft³** while the depth is set to **inches** and temperature is set for **celsius**.



Material Details

From the **Control Menu**, press **Material** to enter the Material Details screen. The SDG 200 will store twenty detailed materials. The material highlighted in green on the left is displayed in detail on the right. To edit the details of this material, press **Edit Material**. **Note: Readings taken prior to accurately setting up the Material Details will result in incorrect density results.**

Edit Material

There are fifteen material properties for each material. Eight of these material properties are listed on page one of the edit material screen and the remaining seven are listed on page 2. Each can be edited individually by pressing its corresponding label which prompts a keyboard or alpha numeric keypad. For example, press **Material Name**, the keyboard will open allowing you to change the default name. Press **Clear** if you would like to start over with a new name. Press **Shift** to toggle from lowercase to uppercase letters. Once editing is complete, press the **Back** button located on page 2 of the edit material screen to verify your changes on the material details page.

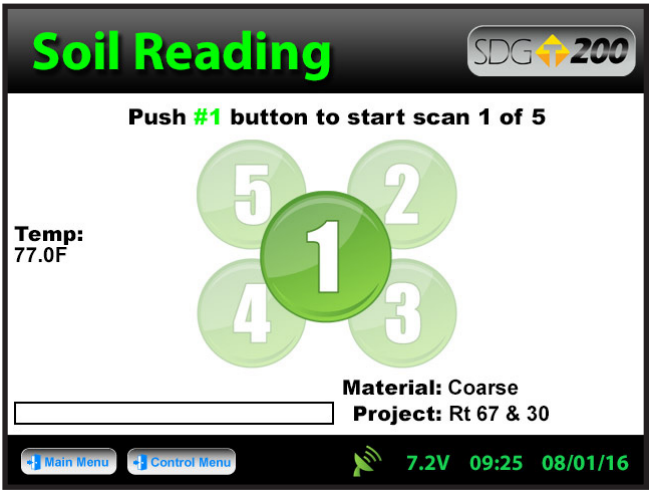
Project Details

Keep track of your projects by entering detailed information into the project details screen. From the **Control Menu**, press **Project**. The green highlighted project is the **CURRENT PROJECT**. Readings taken will store in a text file with a .mnt extension using the **CURRENT PROJECT NAME**. You may revisit each project at any given time to continue taking readings. Data within each project will store in the order of which it was taken. To edit a project, press **Edit Project**. Press the button of the field you want to edit. When editing is complete press the **Back** button to save and return to the project details screen.

Soil Readings

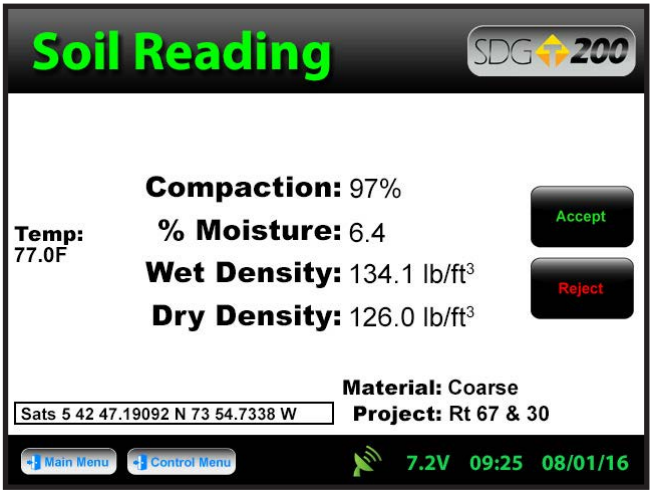
From the **Control Menu**, press **Measure** to enter the **Soil Reading** screen. The name of the material to be tested and project are displayed for verification in the bottom right corner. The temperature of the soil is displayed on the left side of the screen, below that the GPS information is displayed. The cloverleaf measurement pattern is displayed for your convenience with the highlighted position being the current position to measure.

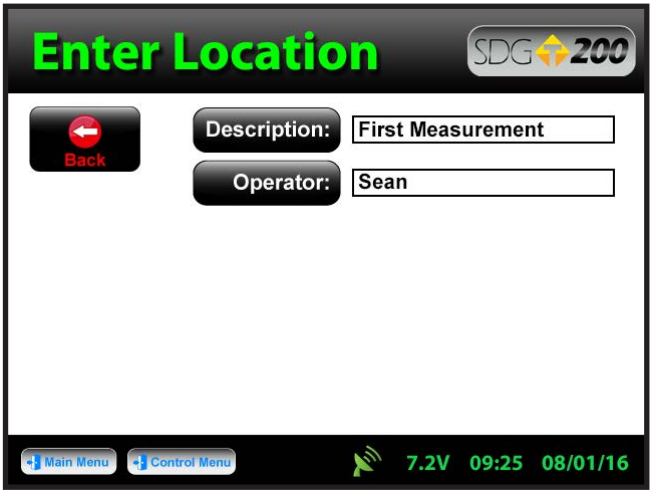
Position the gauge on the soil in position 1 as it appears on the screen and press **1**. **Do not touch the gauge while it is busy taking a measurement.** When reading 1 is complete, the gauge will prompt you to move to location 2. Move the gauge to position 2 and press **2** to continue. Repeat these steps for the remaining three measurements.



Soil Readings

After the fifth measurement has been taken, the in-place density and moisture content will be calculated and displayed on the screen. Here you can choose to **Accept** or **Reject** the recording of the averages into the data file. If you press **Accept**, you will enter the **Enter Location** screen allowing for a description of the location to be entered as well as the operator name.





Data Management

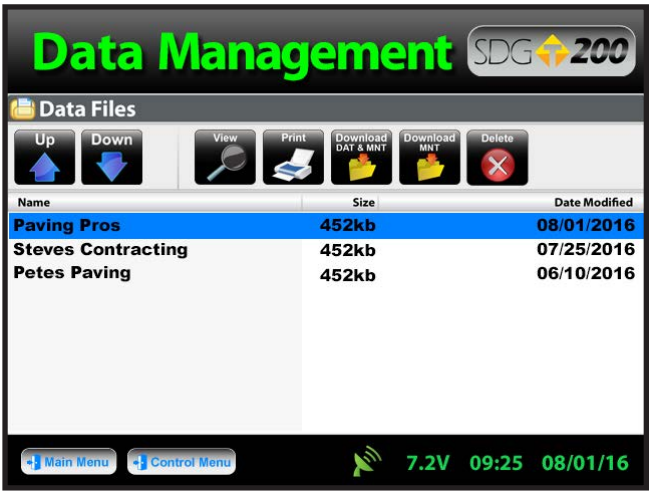
From the **Control Menu**, press **Data Management**. This is where project files will be saved, viewed, printed and downloaded.

Download Data - Use the up and down arrows to scroll, highlight the desired project and press **Download DAT & MNT**. Insert the USB flash drive into the USB port, press **Download**. The gauge will ask if you inserted the USB drive, once ready, press **Download**. When downloading is complete the gauge will display **READY**.

Viewing a Project File - Use the up and down arrows to scroll, highlight the desired project and press **View**. All of your tests saved to this project will be listed in the order they were taken. Only the most pertinent information will be shown in this view including: Test Number, Location, % Moisture, Wet Density, Dry Density, % Compaction. Press the **Back** button to exit the **Project View** screen.

Deleting a Project File - Use the up and down arrows to scroll, highlight the desired project and press **Delete**. You will be prompted with a warning asking if you are sure you wish to delete the file. Once confirmed and deleted, you will no longer be able to retrieve the measurement data.

Printing a Project File - Plug in your TransTech printer, use the up and down arrows to scroll, highlight the desired project and press **Print**.

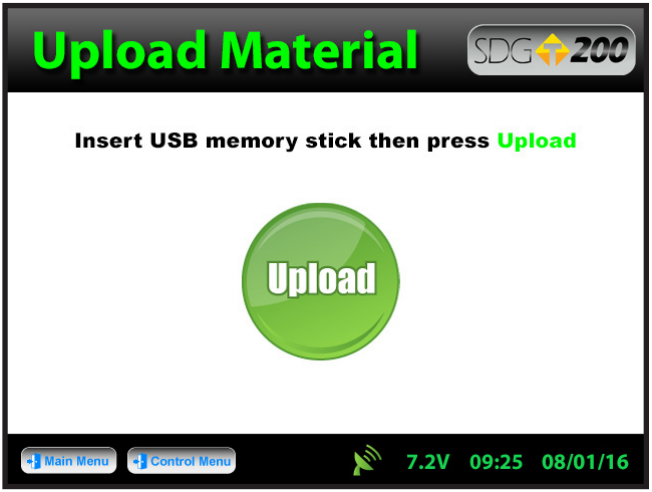


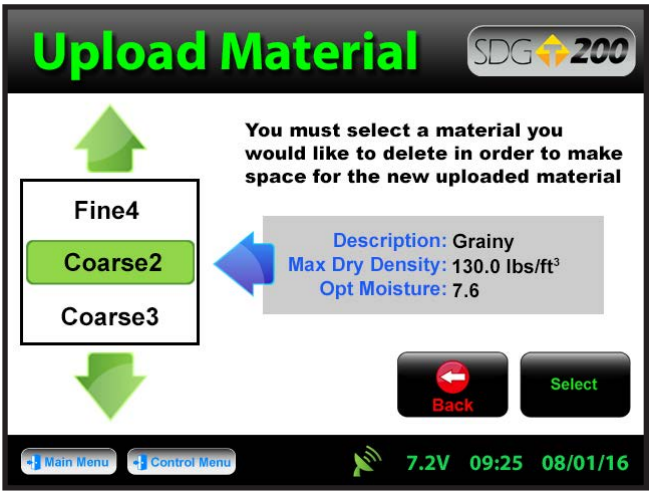
Upload Material

The SDG 200 **MTL Generator** and **MTL File Tool** located on the support disk cd-rom (included in your kit) generates the text files needed to upload material data into the Material Details section of your gauge. Please see the SDG 200 Operator's Handbook for details on how to generate text files. Once your files are loaded onto a USB flash drive, insert the drive into the USB port on the back of the SDG 200. From the **Control Menu**, press **Material**, then press **Upload Material**.

Upload Material

Be sure to have your USB drive inserted into the USB port located on the back of the gauge then press **Upload**. The file name of the materials located on the USB drive will appear on the left and some details identifying that specific material will be displayed on the right. Use the up or down arrows to highlight the material you wish to upload. Once verified, press **Select** to upload the material information into the gauge. Press **Back** to view the uploaded material in detail.





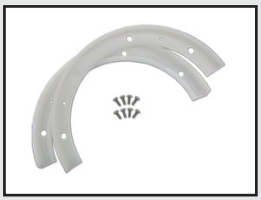
Upload Material

Note: Be sure that the units of the gauge are set for the same units as the material you are uploading. If the gauge was set in U.S. Customary units (ex: 150 lb/ft^3) and you upload the material in SI units (2402.8 kg/m^3) the gauge will notify you that the density is out of range. However, it will continue to load the material. If you switch to SI units AFTER the material has been loaded, the density would convert the 2402.8 as if it were in lb/ft^3 and will result in 38,489.2 kg/m^3.

Correct this by deleting the material, change the units of the gauge and reload the material or by simply editing the density in the material setup.

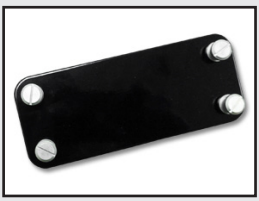
Replacement Parts

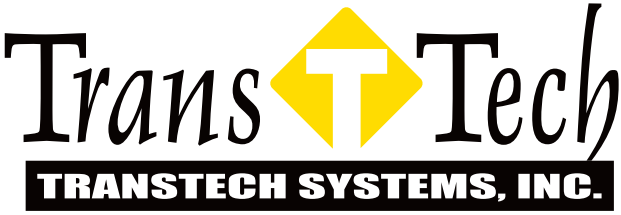
To order parts call the TransTech service department at 1-800-724-6306

7500-0320 **SDG 200 AC Charger**	
7500-0292 **SDG 200 DC Vehicle Charger**	
7500-0235 **SDG 200 Extension Handle Kit**	
1400-0028 **SDG 200 StrongHold Carry Case**	
8000-0061 **SDG 200 Replacement StandOff Feet Kit**	
2100-0159 **SDG 200 Charging Port Dust Cap**	

Replacement Parts

To order parts call the TransTech service department at 1-800-724-6306

8000-0063 **SDG 200 Generation 1** **Battery (3 Pack)**	
7500-0354 **SDG 200 Generation 1** **Battery Cap with Spring**	
7500-0356 **SDG 200 Generation 2** **Battery**	
7000-0336 **SDG 200 Generation 2** **Replacement Battery Door**	



TRANSTECH SYSTEMS, INC.

900 Albany Shaker Road, Suite 2
Latham, NY 12110
Phone: 518-370-5558
Toll Free: 1-800-724-6306
Fax: 518-370-5538
Email: inquiries@transtechsys.com
Web: www.transtechsys.com
Toll Free: TransTech.Systems.Inc01

Follow us on

Ver. 1.3
10/2016