

## TROUBLE SHOOTING GUIDE

### *Smartphone screen colors are different than those in the ROVER User Guide.*

The background and screen theme colors of the sample **ROVER** screens that appear are determined by the user's defined **Settings** and can differ from one phone to the next.

### *I cannot switch between the Pre-, Post- and Detailed Post-Eq Surveys in Rover.*

Each of the listed Surveys (Pre-EQ, Post-EQ, and Detailed Post-EQ) in the startup screen is a separate module sharing a common database. To perform a different type of survey, one must first **Exit** the application after completing data entry and **re-launch** ROVER to access the desired module.

### *How can I enter data?*

- Use the stylus along with the virtual keyboard (click on the keyboard icon at the bottom of the screen);
- Use the smartphone's keyboard. This will usually rotate the working screen into a landscape mode for ease of view and entry.

### *I cannot start ROVER on the smartphone*

With the smartphone turned on, tap on **Start** on the top left corner of the screen and when the popup menu appears, tap on ROVER. Please refer to section 6.1 for the different methods of launching ROVER on a smartphone.

### *I cannot get GPS device to work with ROVER.*

There are usually two causes for this issue: The GPS is either not configured properly through the smartphone's Bluetooth setting or it is not properly partnered or paired with ROVER.

First, make sure that the GPS device is physically turned on and the smartphone can detect the GPS via Bluetooth by successfully following these steps:

1. The GPS has obtained a lock on its position as signified by the GPS indicator light. Please review the GPS manual for specific indicators. Locking the position may take a few moments or several minutes to take place;
2. Make sure that Bluetooth is turned On in the smartphone. See Section 7.4.1, p. 79-80;
3. The GPS device must be recognized by the smartphone; e.g., the smartphone must detect the GPS and list it as a Bluetooth device with a properly assigned serial or com port. See Section 7.4.1.1 for configuring a GPS device that is already detected by the smartphone. See Section 7.4.1.2 for configuring the GPS device as a new device and assigning it a com port;
4. Once the GPS has been recognized by the smartphone as a Bluetooth device, make sure that the phone and GPS are partnered or paired properly through ROVER. Launch Rover, go the desired module (Pre, Post, or Detailed Post-

Inspection) and in the module's start up screen, tap on **Settings**. Follow the steps in Section 7.4.2 for partnering procedures.

If the following procedures do not result in successful operation of the GPS with the smartphone, there may be hardware failures to investigate with either or both devices.

***How do I check to see if the GPS is working?***

A utility called **Test Port** exists both on the smartphone and in Rover that tests the GPS connectivity. This procedure using one of the following options:

- In Rover's startup screen (Main Menu), tap on GPS
- From any of the survey modules, tap on Settings, then tap on GPS
- From the smartphone Start menu, tap on **Start**, then tap on **Bluetooth GPS Util** .

***I am frequently losing the GPS signal. How can I maintain the GPS signal?***

- Make sure the GPS battery is charged.
- Perform the **Test Port** procedure from ROVER's **Settings → GPS (Section 7.4.2)** to make sure that GPS is still locating its position.
- Relocate the GPS to an outdoor spot and re-attempt to lock the position.
- It is recommended that the GPS remain on throughout the duration of the building inspection. This will keep the timestamps between the two devices in sync or approximately close, and will facilitate re-connection should the GPS temporarily lose its connectivity.

***How are latitude and longitude values displayed from the GPS device?***

ROVER designates latitude and longitude values in decimal degrees, e.g., north latitudes and east longitudes are positive values (+) and south latitudes and west longitudes are negative values (-).

***How do I reach the ROVER server from the smartphone to synchronize?***

Synchronization can be performed in two ways:

- A wireless local area network (Wireless LAN or Wi-Fi) or the phone's data service can be used to communicate over the Internet;
- A physical connection using a cable (or cradle) between the smartphone and a local desktop can be used to communicate via ActiveSync.

In both cases, the client must be set up for either Wi-Fi or ActiveSync to be "on" before any synchronization of data can occur between the ROVER Server and Client. In general, the ROVER Server exists on a desktop that will have one or more internet addresses. The ROVER Client must reach the server via a single internet address. This is true whether using phone data service, Wi-Fi, USB or Bluetooth connection. Therefore, the Client must have the Server's IP address to initiate successful communication with the Server. Please refer to Section 8.1.

***I have a Wi-Fi connection via a Wi-fi access point but cannot sync the smartphone to the server.***

Connection to the internet will fail if your Wi-Fi access point is not connected to the internet, or if your laptop/desktop is not connected to the internet. In general, if you can access the internet from Internet Explorer on the smartphone, the phone connectivity is correctly configured.

***How do I know if Wi-Fi is available and turned on?***

Wi-Fi networks are ‘self-discoverable’, that is, no additional steps are needed for connectivity once the access point has been discovered. To use Wi-Fi, the smartphone must have access to the wireless access point of the service provider (public wireless points are known as “hotspots” and can range up to 100m in distance). Typically, the smartphone will have a WLAN switch that turns the feature on or off, very often a toggle switch on the side or back of the smartphone. After Wi-Fi has been turned on, the smartphone scans for available networks and displays a message in a pop-up window, allowing one to choose from a Wireless LAN (WLAN).

***Can I use the USB cable (or cradle) with ActiveSync while the Wi-Fi is on to synchronize the smartphone and server?***

No. You can only use one of the two options. The smartphone must NOT be connected to the desktop via ActiveSync Connection (USB cable or cradle). This will cause an error that will require restarting ROVER. Please see Section 8.2 for Connection to ROVER Server via Wi-Fi and Section 8.3 for Setting Up ActiveSync on Windows.

***I cannot sync the smartphone to the server using Wi-Fi.***

Assure that Wi-Fi is turned on. Often, this feature is turned On/Off with a physical button or toggle switch located on the side or back of the smartphone. Refer to the smartphone’s user manual for details on activating Wi-Fi.

***I can’t find the server’s IP address using Wi-Fi***

To find the server’s IP address,

1. Launch the **ROVER Server** on the desktop and obtain the Host IP as displayed in the **ROVER Server** start screen.
2. On the smartphone, make sure that Wi-Fi is on, and connectivity is achieved by tapping on **Settings** → **Connections** → **Wireless LAN** and properly configuring the network. This may require assistance from the network administrator at the site. Check connection by launching **Internet Explorer** and accessing the Internet.
3. On the smartphone, launch ROVER, tap on **Settings** → **Server**, and check that the **Server IP** and **Server Port** numbers match those from the ROVER Server screen on the desktop. If those numbers do not match, manually enter the Server numbers in the **Server IP** and **Server Port** boxes on the smartphone.
4. Tap on Test Connection to assure that the ROVER Server is found.
5. Once the server is found, tap **Save** to return to the main menu.

Please refer to Section 8.2 for details.

***How can I differentiate between Pre- and Post-EQ Survey photos and sketches?***

ROVER does not distinguish between pre- and post-earthquake photos. The user can specify the type of photo through comments.

***Does deleting a site on the smartphone (client) delete it on the server?***

Deleting a site on the smartphone will **NOT** delete the site on the server **IF** the site has been previously synced. Deleting sites on the server can be done with administrative privileges. Please refer to Section 9.3 for information on deleting sites on the server.

***How can I type or view information entered in different tabs?***

The up/down scroll arrows that allow data entry and viewing beyond the visible portion on the screen.

***I get an error message, “Com port could not be created. Please check your settings and try again” when I designate a certain Com port for the GPS device.***

The particular Com port you designated is already assigned to another Bluetooth device. Choose another Com port number.