

TERRASYNC SOFTWARE QUICK REFERENCE CARD

This guide provides an overview of collecting and maintaining geospatially-referenced features and their attributes using the Trimble® TerraSync™ software.

The TerraSync software comes in three editions: Standard, Professional, and Centimeter. This guide uses the TerraSync Professional edition software running on a Trimble GeoExplorer® 6000 series GeoXH™ handheld to illustrate workflow and concepts.



© 2011. Trimble Navigation Limited. All rights reserved. This product is protected by US and international copyright, trademark, and patent law as described in "Legal Notices" in the TerraSync Software Getting Started Guide.

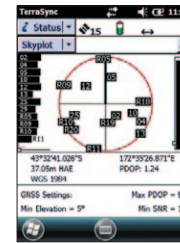
Trimble Navigation Limited
10355 Westmoor Drive
Suite #100
Westminster, CO 80021
USA

www.trimble.com

Start the TerraSync software

To start the TerraSync software, tap and then select the TerraSync icon.

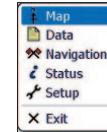
The welcome screen displays, showing software registration details. The *Skyplot* screen then appears, which shows the GNSS satellite position information.



Selecting sections

The TerraSync software is arranged in the following five sections:

- Map
- Data
- Navigation
- Status
- Setup



One of these sections is always active and visible. The Section list button in the top left corner of the TerraSync software screen shows the section that is currently active. To switch to a different section, or to exit the application, tap the Section list control. Select the section you want, or select *Exit*, from the list.

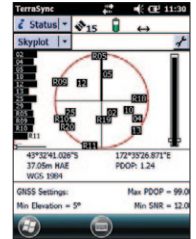
If the current section has subsections, the Subsection list control appears immediately below the Section list control. Use the Subsection list control to switch to a different subsection of the current section.

Connect to a GNSS receiver

- If the field computer running the TerraSync software has an integrated GNSS receiver, the software automatically connects to the GNSS receiver when you start the software.
- If you are using a separate GNSS receiver:
 - a. Use either a cable or Bluetooth® wireless technology to connect the receiver to the field computer running the TerraSync software.
 - b. In the TerraSync software, select *Setup* from the Section list and then tap **GNSS Settings**.
 - c. Select the COM port that the receiver is connected to from the *GNSS Receiver Port* list and then tap **OK**.
 - d. In the *Setup* section, tap **GNSS** to connect the TerraSync software to the receiver.

The *Skyplot* screen shows the status of the connected GNSS receiver.

Note – GNSS positions may not always be available, particularly in or near buildings, in vehicles, or under tree canopy. If the Trimble Floodlight™ satellite shadow reduction technology is enabled on the GeoExplorer 6000 series handheld, yield and GNSS performance is increased in marginal conditions.



1

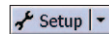


2

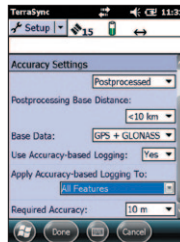
3

Configure your required accuracy settings

1. Select *Setup* from the Section list.
2. Tap **Logging Settings**.
3. Tap the Setup button beside the *Accuracy Settings* field.
4. From the *Accuracy Value for Display/Logging* fields, select the parameters that will be used to determine the estimated accuracy:



- Select whether to display the horizontal or the vertical accuracy of the current GNSS position.
- Select *In the field* to use the current estimated accuracy, or select *Postprocessed* to use the predicted accuracy once the field data has been postprocessed.



5. If you selected *Postprocessed*, select the approximate distance to the base station from the *Postprocessing Base Distance* field.
6. Select *Yes* from the *Use Accuracy-based Logging* field.
7. Select the feature types that your accuracy requirements will apply to from the *Apply Accuracy-based Logging To* list.
8. Select the estimated accuracy that is required before GNSS positions are logged from the *Required Accuracy* list.
9. Tap **Done**.

4

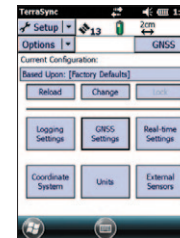
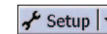
Configure GNSS and data logging settings

Configure additional settings, if required, in the Setup section.

To configure:

- a source of real-time differential corrections, tap **Real-time Settings**.
- data logging settings, tap **Logging Settings**.
- settings for the GNSS receiver, tap **GNSS Settings**.

Tip – You can also quickly and easily configure settings for the GNSS receiver using the GPS slider bar, whenever it is available based on the capabilities of the connected GNSS receiver.



5

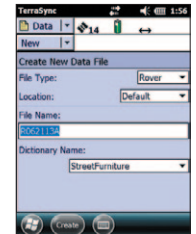
Create a new data file

1. Select *Data* from the Section list.
2. Select *New* from the Subsection list.
3. Use the default file location or select a different location from the *Location* list.
4. Use the default file name or enter a new file name in the *File Name* field.
5. Select the data dictionary from the *Dictionary Name* drop-down list.

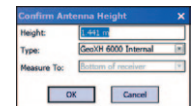


Tip – The data dictionary defines the features that you will be able to collect.

6. Tap **Create**. The *Confirm Antenna Height* dialog appears.
7. Make any required changes and then tap **OK**.



The *Collect Features* screen appears, showing a list of all the features in the data dictionary.



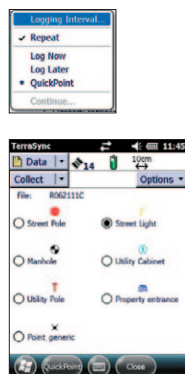
6

Create a point feature in QuickPoint mode – Data section


1. If the *QuickPoint* data collection mode is not enabled:
 - a. Select *Data* from the Section list.
 - b. Tap **Options** and then select *QuickPoint*.
2. In the panel of point features, tap the point feature that you want to collect.
3. Tap **QuickPoint**.

If there are any required attributes for the feature, the attribute entry form for the feature appears. Otherwise, default or Repeat (if enabled) values are used.

Tip – Each quick point uses a single GNSS position.



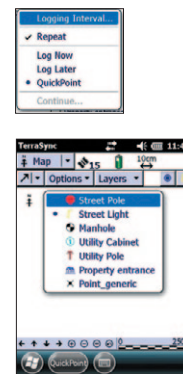
Create a point feature in QuickPoint mode – Map section

1. If the *QuickPoint* data collection mode is not enabled:
 - a. Select *Data* from the Section list.
 - b. Tap **Options** and then select *QuickPoint*.
2. Select *Map* from the Section list.
3. Tap the QuickPoint feature selection key , and then select the point feature that you want to collect.
4. Tap **QuickPoint** to collect each point feature.

If there are any required attributes for the feature, the attribute entry form for the feature appears. Otherwise, default or Repeat (if enabled) values are used.


Tip – Each quick point uses a single GNSS position.

Tip – If you are using a Trimble LaserAce™ 1000 laser rangefinder, triggering the range automatically creates a quick point.

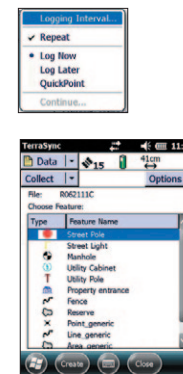


Create a point feature using the Log Now data collection mode

1. If the *Collect Features* screen is not open, select *Data* from the Section list.
2. Tap **Options** and then select *Log Now*.
3. In the *Choose Feature* list, tap the point feature you want to collect.
4. Tap **Create**. The attribute entry form for the feature appears.

Tip – In Log Now data collection mode, the TerraSync software begins logging features as soon as you open a feature. The logging icon  in the status bar shows how many positions have been logged for the point feature.

5. Remain stationary while you fill out the attributes for the point feature in the attribute entry form.
6. Tap **OK** to close the feature.



7

8


9

Create a line or area feature using the Log Later data collection mode

1. If the *Collect Features* screen is not open, select *Data* from the Section list.
2. Tap **Options** and then select *Log Later*.
3. In the *Choose Feature* list, tap the line or area feature you want to collect.
4. Tap **Create**. The attribute entry form for the feature appears.

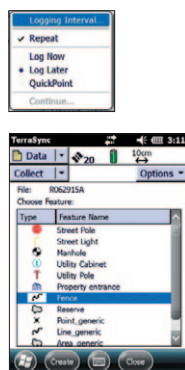
Tip – In Log Later mode, the TerraSync software does not begin logging features until you tap **Log**.

5. Fill out the attributes for the line or area feature in the attribute entry form.
6. Move to the start of the feature and then tap **Log**.

Tip – The number on the logging icon  in the status bar increments as each position is recorded.

7. Continue moving along the line or around the area feature.
8. When you reach the end of the feature, tap **OK** to close the feature.

Note – You can also log line and area features using Log Now. You can then fill out the attributes for the feature as you travel along the feature.



Updating data

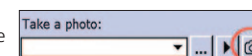
1. Select *Data* from the Section list, and then select *Existing File* from the Subsection list.
2. Tap the file that you want to use and then tap **Open**. The *Confirm Antenna Height* dialog appears.
3. Make any required changes and then tap **OK**.
4. In the *Update Features* screen, tap the feature you want to update.
5. Tap **Options**, select *Set Nav Target* and then select the option required. The target icon appears beside the selected feature.
6. Select *Navigation* from the Section list, and then select *Navigate* from the Subsection list.
7. Use the *Direction Dial* screen and the *Close-up* screen to navigate to the target. When you reach the target, return to the *Update Features* screen in the Data section.
8. If it is not already selected, tap the feature to update and then tap **Begin**. The attribute entry form for the feature appears.
9. Fill out the attributes and then tap **OK** to update the feature.

Using an integrated camera

If the device the TerraSync software is running on has an integrated camera, and the data dictionary is set up to enable you to associate an image with the feature you are collecting, the camera icon displays.

Click the camera icon to launch the camera application.

You can frame and capture a photo, and make changes to exposure as required, before associating the photo with the feature.



End the data collection session

1. If the *Collect Features* screen is not open, select *Data* from the Section list and then select *Collect Features* from the Subsection list.
2. Tap **Close**.
3. Tap **Yes** to close the file.
4. Select *Exit* from the Section list to close the TerraSync software.
5. Tap **Yes** to close the software.

10

11

12