

Sending Background Images to TerraSync

September 27, 2007

TerraSync Professional can use multiple file formats as background files in the Map Section. This document describes how to get your background file to work properly in TerraSync.

File Types that can be used in the most recent version of TerraSync Professional:

The vector formats that the TerraSync software supports v3.0 and newer support are the TerraSync software data file format (.cor, .ssf, or .imp) and ArcView Shapefiles (.shp). Other formats such as DXF must be converted to a supported format.

You can also transfer raster files such as aerial photographs to the TerraSync software as background files. The supported formats are bitmap (.bmp), ECW (.ecw), JPEG (.jpg), JPEG2000 (.jp2, .j2c), MrSID (.sid), and TIFF (.tif). The image file *must* be transferred with the following files:

- A World (.wld) file that tells the TerraSync software how the pixels in the file relate to real-world coordinates. You can create the World file in your GIS. If you are downloading your image file, the file extension of the world file may be .jgw for a JPEG, .tfw for a TIFF file or .sdw for a MrSID file. If you download a file that comes with a .aux file, you will need to rename it to have a .wld extension in order for TerraSync to recognize it.
- A coordinate system file that includes the coordinate system that the image file uses. The coordinate system file will be created automatically when you use the Trimble Data Transfer utility to transfer the image to the handheld.

*Tip – If you want to use a data file (.cor, .ssf, or .imp) in the background, but will not be opening it as a data file, you can transfer the file to the TerraSync software as a **background file**. This uses less storage space, because the attribute information is removed. You cannot open a background (.bkg) file for data collection or update, and features in a background file cannot be selected, updated or deleted.*

Transferring Background Data to the Handheld:

Now that you have a background file that can be used in TerraSync, you are ready to transfer that file to the handheld unit. To ensure that the file is displaying correctly and showing up the correct location, it may be a good idea to open the file in Pathfinder Office first.

First, be sure you know what coordinate system the background file is projected in. Then, in Pathfinder Office, go to Options>Coordinate System, and set the coordinate system of the Pathfinder Office display to match the background file. Click OK.

Coordinate System

Select By:

Coordinate System and Zone

Site

System: US State Plane 1983

Zone: Idaho Central 1102

Datum: NAD 1983 (Conus) CORS96

Altitude Measured From:

Height Above Ellipsoid (HAE)

Mean Sea Level (MSL)

Geoid Model:

Defined Geoid (GEOID03 (Conus))

Other

Geoid: GEOID03 (Conus)

Coordinate Units: US Survey Feet

Altitude Units: Meters

OK

Cancel

Help

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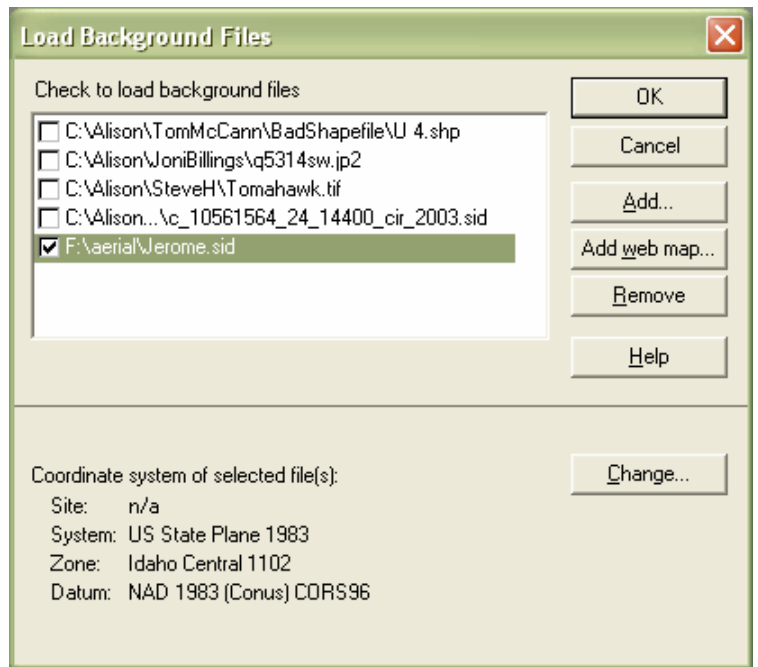
P. O. Box 31, Jerome, ID 83338

Ph: (208) 324-8006 Fax: (208) 324-8015 www.elecdata.com support@elecdata.com

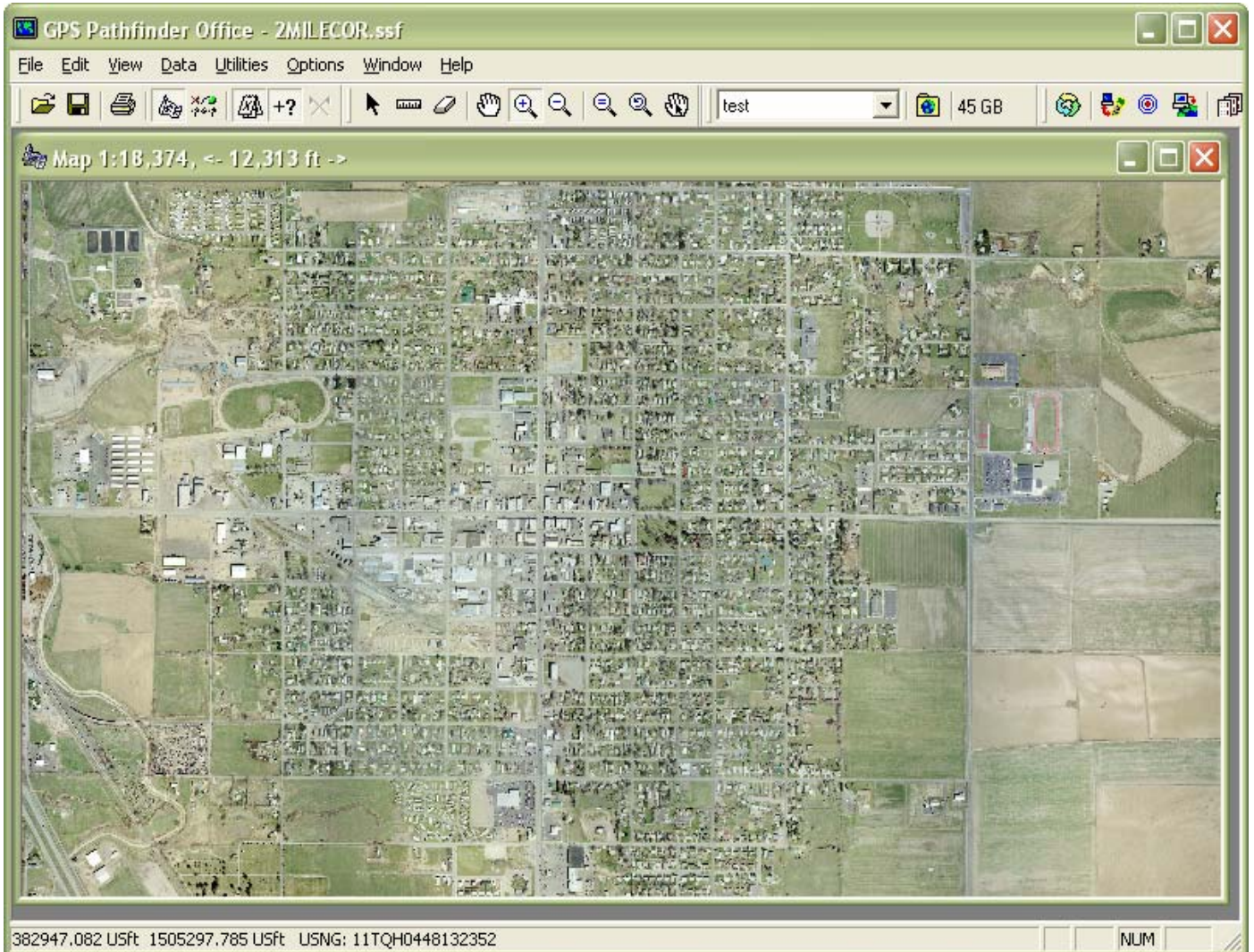
Click File>Background. This will bring up the Load Background Files dialog.

Click Add, and browse to and select the file you want to use as a background. It will be added to the background files list.

Highlight that file, and make sure that the coordinate system listed at the bottom matches the one you just set for the Pathfinder Office display. If it is different, click Change, and adjust the coordinate system accordingly. Please note Pathfinder Office does not detect what the coordinate systems settings for your background file are; it expects you to specify them.



Click OK, and the background will be added to the map in Pathfinder Office. If you cannot see the map, click on View> Map.

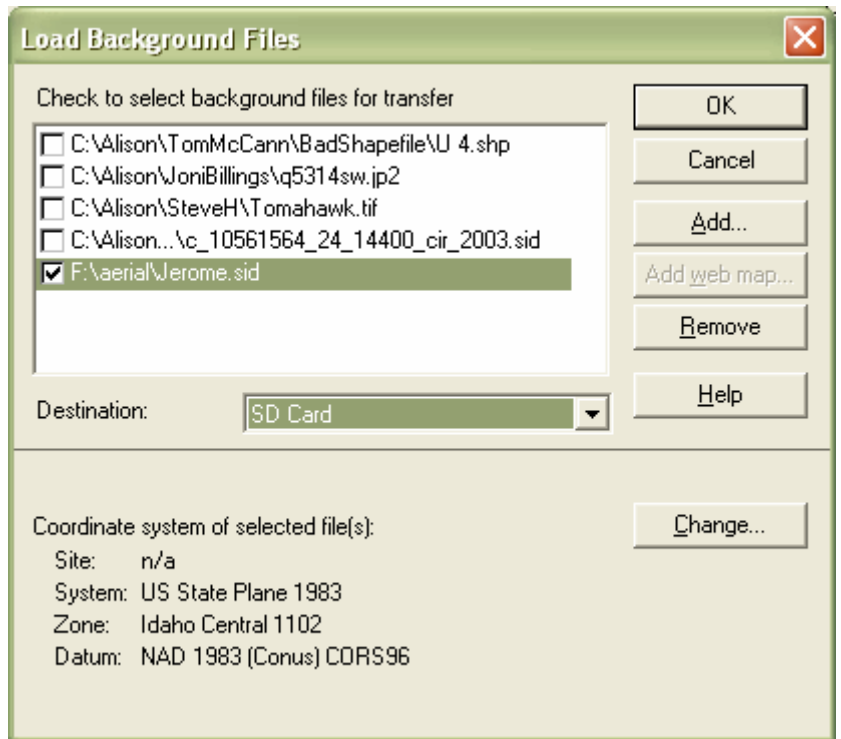


If the background looks good, then go to Utilities>Data Transfer. Make sure Data Transfer is connected to the handheld, and choose the Send tab.

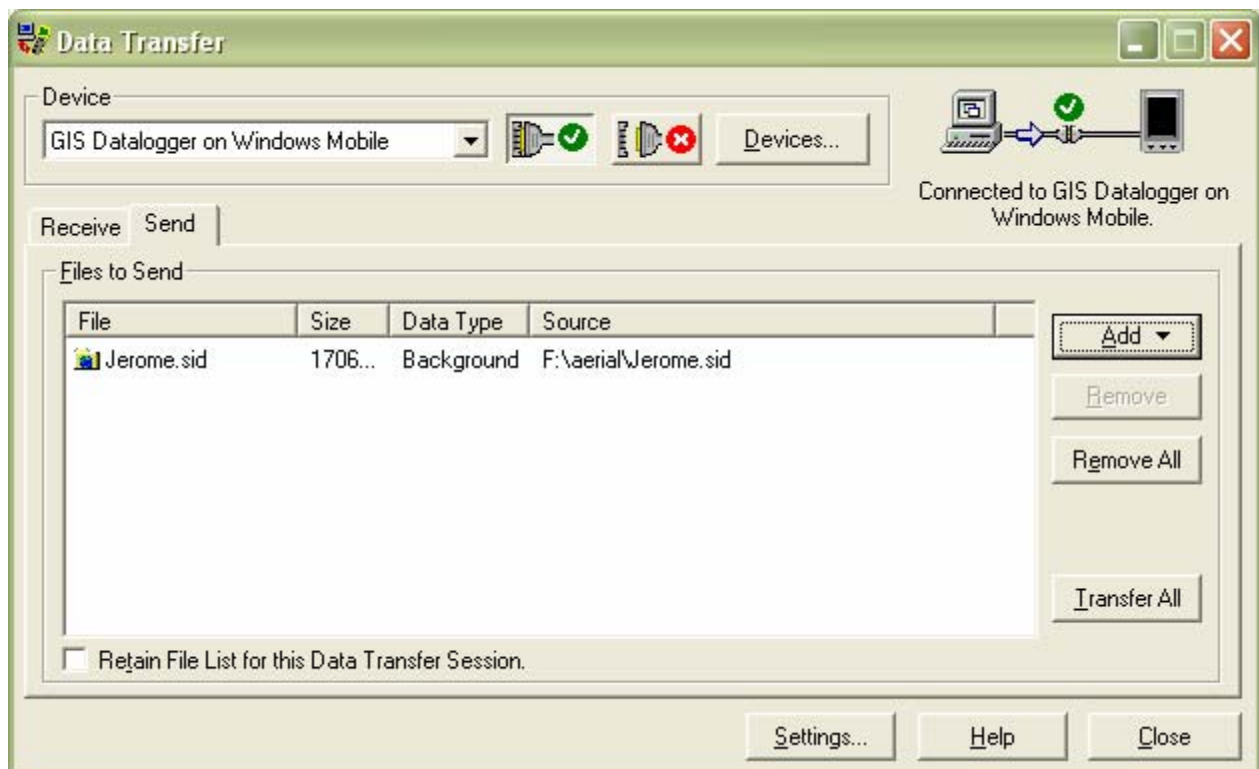
Click Add>Background. This will bring up the same Load Background Files dialog you saw earlier, and your background should already be there. Verify the coordinate system one more time, and check the box next to your background file.

If you are using a storage card to store your background file on the handheld, be sure to pick that card from the drop-down next to Destination and the file will be sent to the storage card.

Otherwise, leave the Location set to Default, and the background file will be sent to the My Documents > TerraSync folder on the handheld.



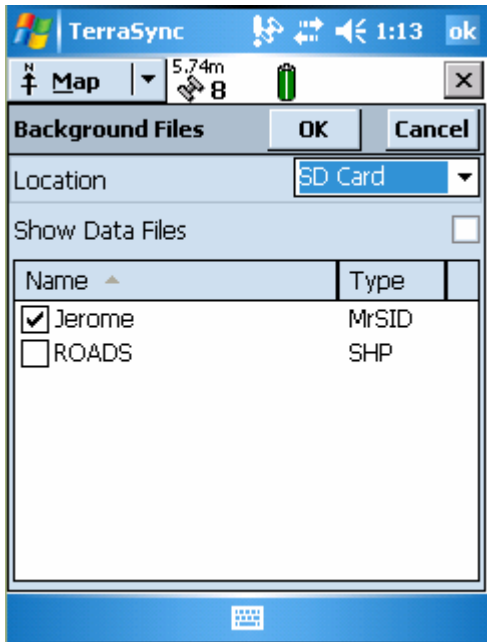
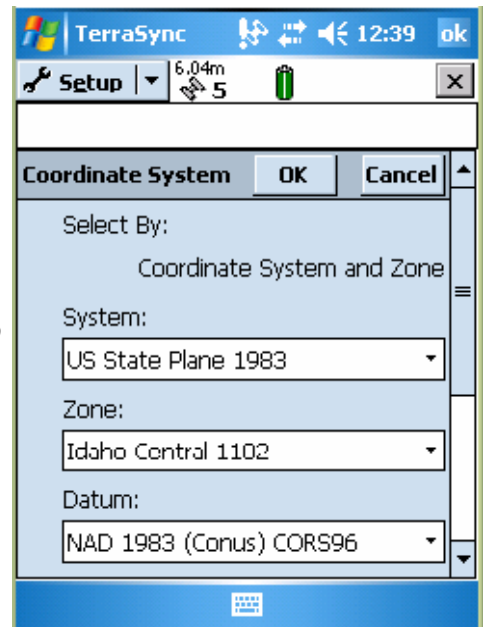
Click OK, and the file will be added to the window under Files to Send. Click Transfer All, and the background will be sent to the handheld.



Viewing your background file in TerraSync Professional:

Now that your background file has been sent to your handheld in the correct projection, you are ready to view it in Terra Sync.

Open TerraSync, and let it connect. If you are using image background layers, you will need to set the TerraSync display coordinate system settings to match them. Tap the dropdown next to Status, go to the Setup page, and tap Coordinate System. Set the coordinate system so that it matches what you set for the background file. Tap OK.



Tap the dropdown next to Setup, and go to Map. Tap Layers > Background Files.

If you did not transfer the file to a memory card, set the location to Default. If the file was transferred to a memory card, tap the dropdown next to Default, and choose the card.

Select the background file that you would like to view and tap OK.

Your background file will be added to the Map, and you should be able to see your GPS position and collected features on top of the background.

