

Instructions and File Links for Installing My Maps in Back Country Navigator, Orux Maps, and Garmin GPS's.

BobT, updated 6/10/17

This is a lengthy document since I have tried to go into great detail with screenshots. BCN instructions are at the beginning followed by Orux instructions and then Garmin GPS instructions.

Back Country Navigator (BCN) Instructions and File Links

This APP works great on any Android Tablet that has a GPS chip which almost all do. Works well on phones also. First you need to download the BCN App, File Manager HD App, and the BCN Map files.

Get Android "BCN" App here

<https://play.google.com/store/apps/details?id=com.gn%3DPlayButton>

Get Android "File Manager HD" App here

<https://play.google.com/store/apps/details?id=com.rhmsoft.fm.hd&hl=en>

Get BCN Map Files Here

http://www.mediafire.com/download/ddlukdqi0ackcgo/BCN_Files_and_Instructions_2016-All_Maps.zip

You should use your Android device to download this file so that it will be in your devices "Download" folder.

The following files were included in the ZIP file you downloaded. These will always be the latest files.

WV ATV Trails 20???.bcn

Taylor Park 20???.bcn

Moab Trails 20???.bcn

Paiute 20???.bcn

You will use "File Manager HD" (FMHD), which is similar to Windows Explorer for a PC, to install the map files onto your Android device. You will not use BCN so do not open it at this time.

The map installation is very simple, all you have to do is copy a map file from the downloaded "BCN Map Files" that you have previously downloaded to your Android device and move it to the correct BCN folder. You will use FMHD to copy and paste this file.

Another option is to plug your Android device into your PC and view the files in Windows Explorer like a memory stick. You can then copy the files from your PC to the folder that I mention below.

Let's get Started.

Select "FMHD" to open it. See screenshot below.

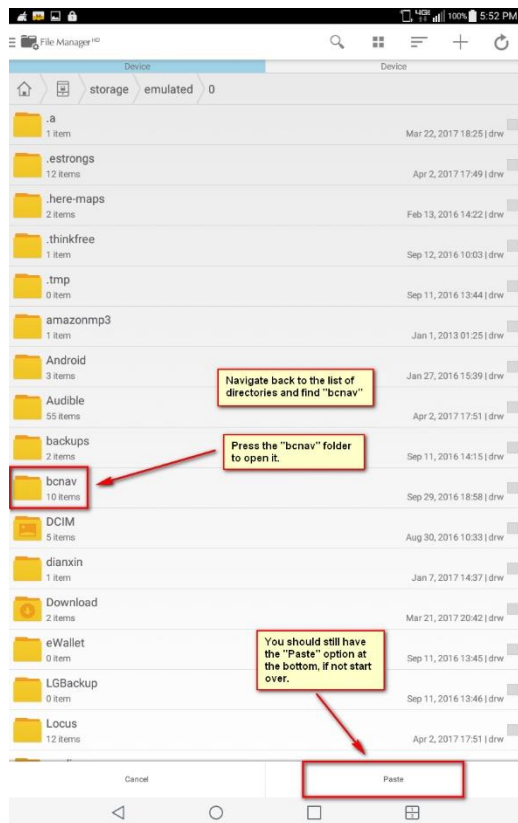


Navigate to your "Download" folder. (screenshot on left below) This is most likely where you will find the BCN zip file that you downloaded. If not it may be in your email and needs to be downloaded. Press the "Download" folder to open it. Once you have located it click the zip file to open it and display the list of files inside it. (screenshot on right below) Long press the map files that you want to install in BCN. The box on the right should have a green check mark in it. After you have selected all of the maps you want to install press the "Copy" button at the bottom. After pressing "Copy" you will see "Paste" on the bottom right of the screen.



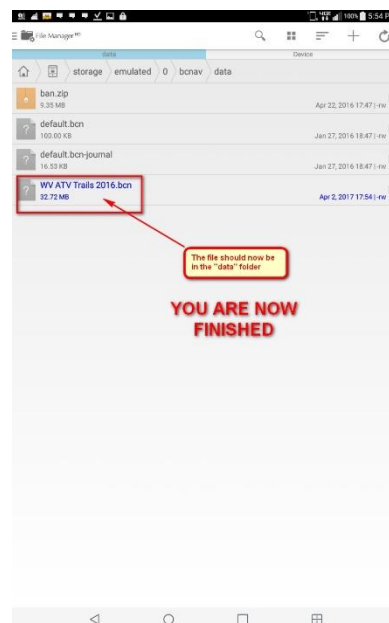
Now arrow back or navigate to the “bcnav” folder on your device. It will either be under “Device” or “SD Card”. (screenshot on left below) Press on the “bcnav” folder to open it. Notice that you should still have the “Paste” option at the bottom right.

Now press the “data” folder to open it. (screenshot on the right below)



You should now see a screen that has two “default” files in it. (screenshot on the left below) Press the “Paste” button at the bottom right. This will paste the files into this folder.

You should now see the map files you wanted in this folder. (screenshot on the right below)
THAT IS ALL THERE IS TO IT, YOU ARE FINISHED INSTALLING THE MAPS



How to display the map on your device

- 1) Select "Trip Data" at the top right.
- 2) Then select "Switch to another trip database".
- 3) Then you should see multiple options, "default" and "WV ATV Trails 2016".
- 4) Select "WV ATV Trails 2016".
- 5) Then select "Choose this trip".
- 6) The tracks will now be showing, but remember you may not be in WV, CO, or Utah and the tracks are in WV, CO, and Utah. You will have to slide the map up to WV, CO, or Utah.
- 7) Also under "Trip Data" you should see "WV ATV Trails 2016" in the top box. You can click on this to see a list of each waypoint and track.
- 8) You just need to explore the settings and various screens to see what your options are. You will have to experiment with which background map you like best. I like the Worldwide Open Street and Open Cycle maps the best. Play with the "Settings" to suit your desires.

BCN Tips and Tricks

BCN stores GPS (.gpx) tracks in a database. The database files are what I have distributed to save you time and effort. My WV ATV Trails 2016 is not really a map in BCN, it is a database collection of all the individual tracks. I interchange the words map, database, and tracks in this document.

Trip Data and Settings:

If you touch the "Trip Data" button in the upper right you will get the following menu options.

Trip Data

WV ATV Trails 2016 has (437) waypoints and (821) tracks: touching this will bring up a list of the waypoints and tracks. You can select an individual one and change color, rename, delete, etc. **If you record a track I will show up at the top of the list.**

Share the data from this trip: gives you sharing options.

Import Tracks or Waypoints: gives you options to import various formats of tracks. You can import into the current database or create a new one. If you created your own track and wanted to import it into the WV Trails this is where you would do it. It would then show up on the WV Trails map/tracks.

Choose another trip database: this is where you could choose another set of tracks database such as Moab, or one you have created or gotten from someone else.

Create a new (empty) trip database: If you decide to create your own set of tracks into a database this is where you will create that database.

Settings - (3 dots at the far top right)

There are several settings here you need to experiment with to your liking.

Storage Options: If you put a SD card in your tablet and want to store BCN data there this is where you will tell BCN to look. You will have to use a program like "File Manager" to create the BCN directory and sub directory bcnv/data there.

Track Options: These are setting for when you are using BCN to record tracks. I recommend a Time Interval of 5 seconds and a Minimum Distance of 10m. Default track color, I would select yellow so that it shows up on my map. Track width, experiment with Small and Medium.

Map Layers - (BCN is constantly changing which maps are available)

If you touch the 3 sheets of paper (layers) you will get the following options:

More Map Sources: This is where you select your background maps. I like Worldwide/Worldwide Open Street Map-Mapquest, Worldwide/Worldwide Topo:Open Cycle Map, and Central Europe/HungaryMap (clear white background). USA: Imagery/US Topo Imagery (recommended) is like Google Earth.

Internet Loading of tiles on: I have this turned on.

Select Areas for Download: Here is where you download maps to you tablet for when you will not have service (basically all the time) You need to be somewhere where you have WiFi internet so you can connect to the Internet to download the map tiles. Have the background map you want to download and zoomed into the area you want to download on and touch "Select Areas for Download". Touch one corner of the screen with your finger and drag a rectangle. Touch the folder at the top with an arrow and select "Cache to Main Tile Cache (Preview cache) and touch "Begin Download", then touch "Proceed". If you cannot drag a rectangle you may have to zoom in or out.

Turning GPS On

Touching the concentric circles at the top will give you options for centering the map on your current locations and to start tracking. If you have not already turned on the GPS this will give you the option to do it? If you want the trip to be recorded in the current WV Trails database just touch "Start Recording". This will show a yellow track on top of the map as you move. You can delete this later.

Orux Maps Instructions and File Links

This APP works great on any Android Tablet that has a GPS chip which almost all do. Works well on phones also. First you need to download the Orux App, File Manager HD App, and the Orux Map files.

Get Android "Orux" App here (May not be available on Play Store)

<https://play.google.com/store/apps/details?id=com.orux.oruxmapsDonate&hl=en>

Get Android "Orux" App directly from Orux

<http://www.oruxmaps.com/cs/en>

Get Android "File Manager HD" App here

<https://play.google.com/store/apps/details?id=com.rhmsoft.fm.hd&hl=en>

Get Orux Map Files here

http://www.mediafire.com/download/gl3xhsm9kaqms96/OruxMap_ATV_Trails_and_Instructions.zip

You should use your Android device to download this file so that it will be in your devices "Download" folder.

Link to instructions on how to make an Orux Multimap (background maps)

http://www.mediafire.com/download/4581ujm48pap228/Making_a_Multimap_for_Orux.pdf

OruxMaps website (you can get the manual here)

http://www.oruxmaps.com/index_en.html

You should use your Android device to download this file so that it will be in your devices "Download" folder.

The following files were included in the ZIP file you downloaded. These will always be the latest files.

WV ATV Trails 20???.img

WV ATV Trails 20???.typ

Taylor Park 20???.img

Taylor Park 20???.typ

Moab Trails 20???.img

Moab Trails 20???.typ

Paiute 20???.img

Paiute 20???.typ

North Cumberland.img

North Cumberland.typ

Onlinemapsources.xml (this may provide some earlier Google and Bing maps)

Orux uses my Garmin map files. The .img file is the image file and the .typ file tells it how to display the track lines such as dashed.

You will use "File Manager HD" (FMHD), which is similar to Windows Explorer for a PC, to install the map files onto your Android device. You will not use Orux so do not open it at this time.

The map installation is very simple, all you have to do is copy the two map files (.img and .typ) from the downloaded "Orux Map Files" that you have previously downloaded to your Android device and move it to the correct Orux folder. You will use FMHD to copy and paste this file.

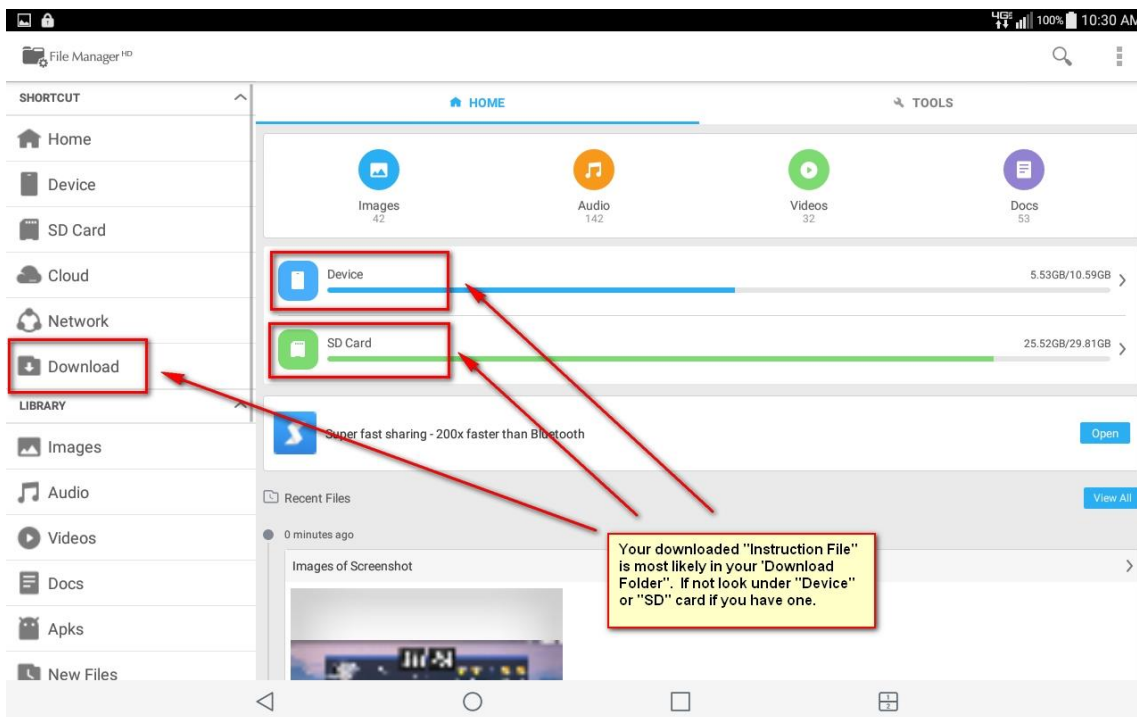
Another option is to plug your Android device into your PC and view the files in Windows Explorer like a memory stick. You can then copy the files from your PC to the folder that I mention below.

Let's get Started

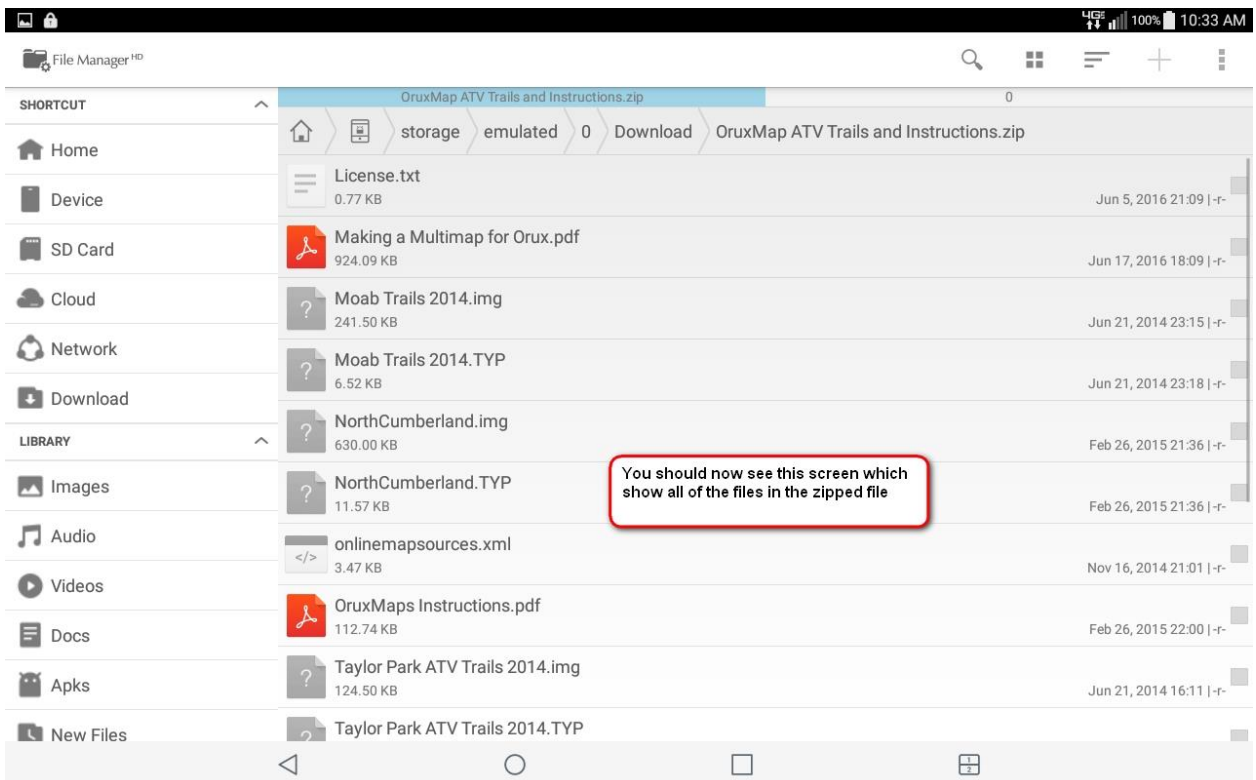
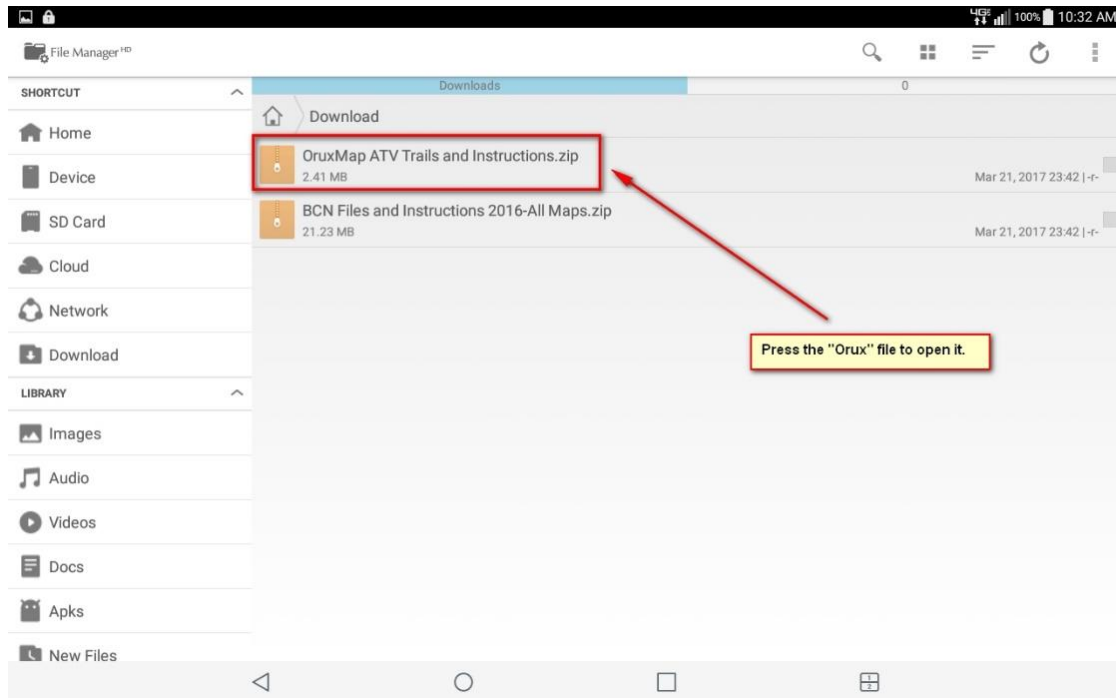
Select "FMHD" to open it. See screenshot below.



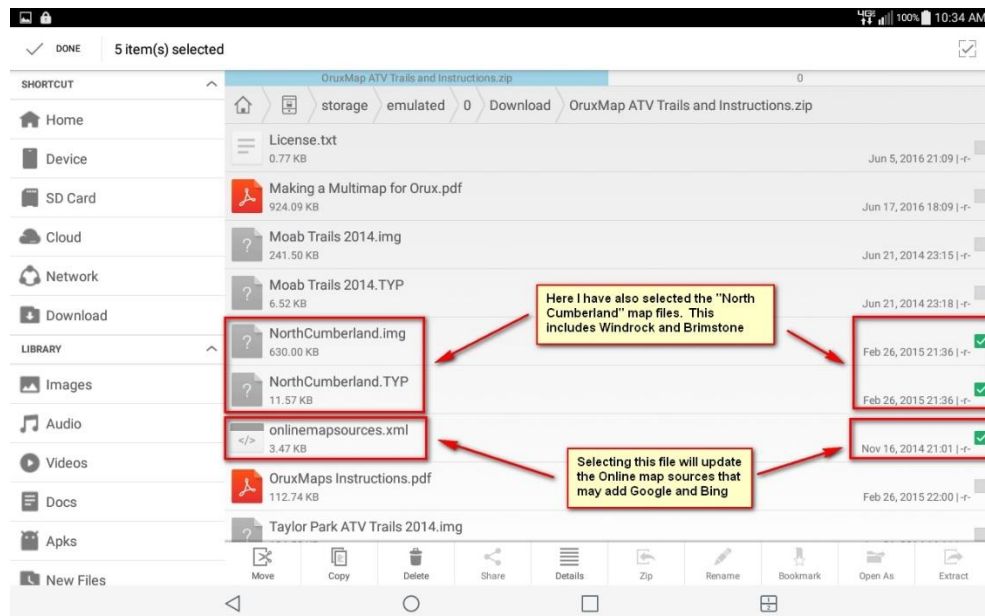
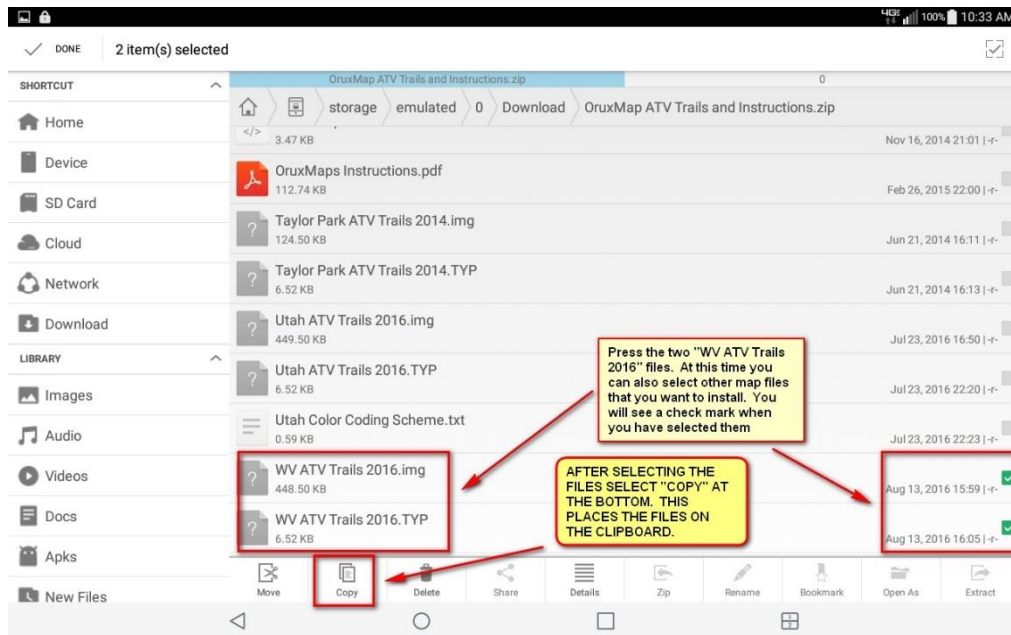
Navigate to your "Download" folder. (screenshot below) This is most likely where you will find the Orux zip file that you downloaded. If not it may be in your email and needs to be downloaded. Press the "Download" folder to open it.



Once you have opened the “Download” folder click the zip file to open it and display the list of files inside it. (screenshot below)

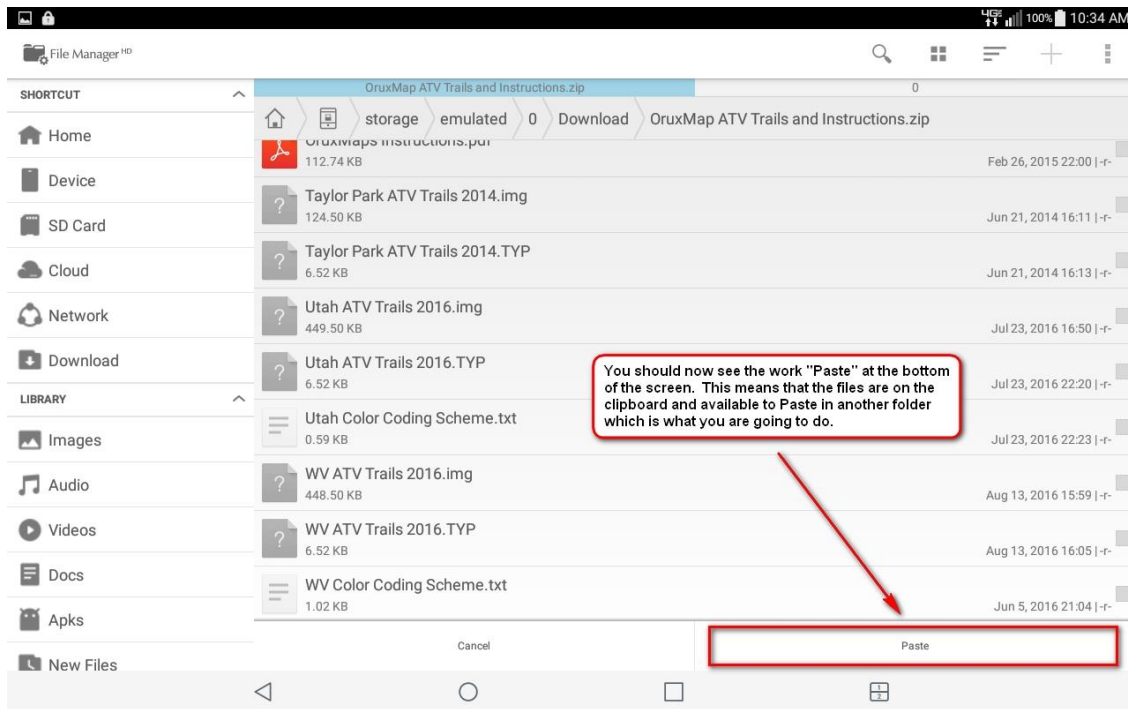


Long press the map files that you want to install in Orux. The box on the right should have a green check mark in it. After you have selected all of the maps you want to install press the “Copy” button at the bottom. After pressing “Copy” you will see “Paste” on the bottom right of the screen.

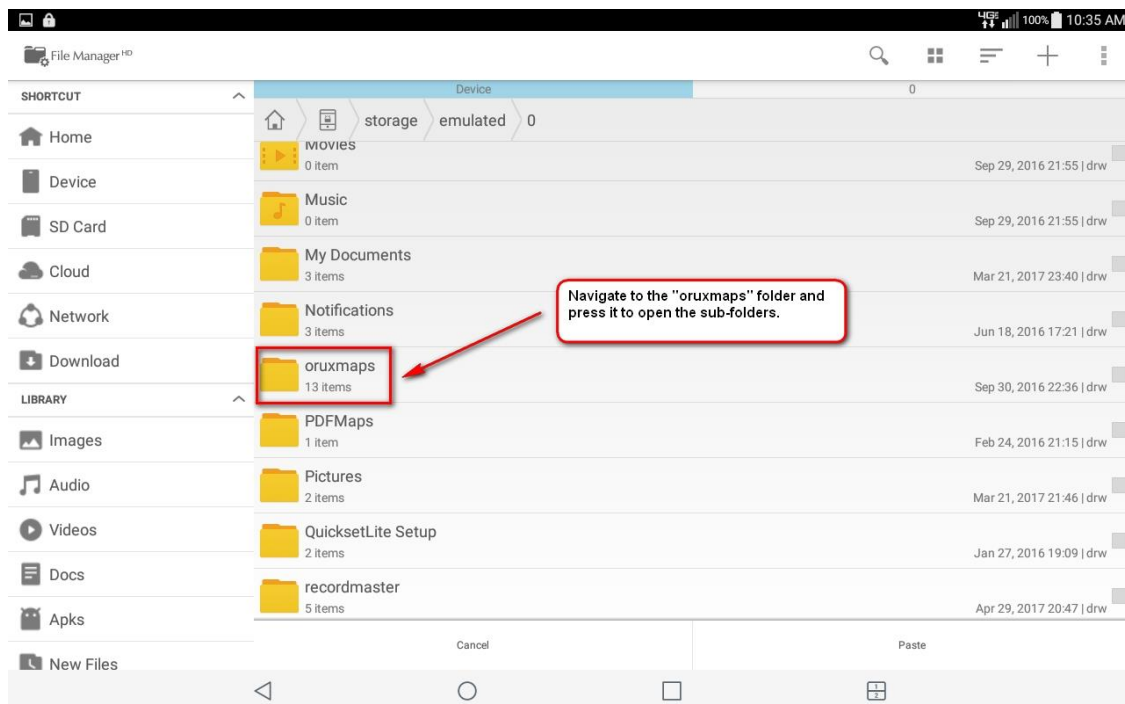


If you want to replace the “onlinemapsources.xml” file check it also. This may give you access to some Google and Bing maps. Google and Bing are not allowing Apps to use their maps anymore so this is an old file prior to that. They are constantly changing the links so this may not work any longer. Also, every time Orux updates it will overwrite this file so you may have to copy it back. You may want to rename the existing file something like “onlinemapsourcesoriginal.xml” prior to copying this file. You can use FMHD to rename it.

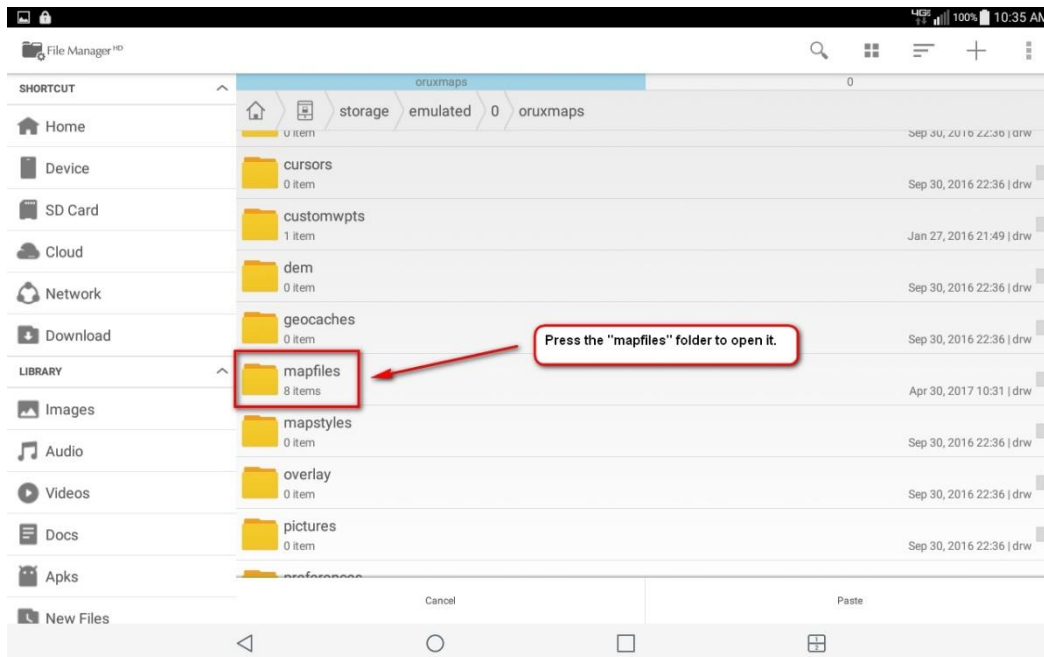
After selecting “Copy” you should have the “Paste” option at the bottom.



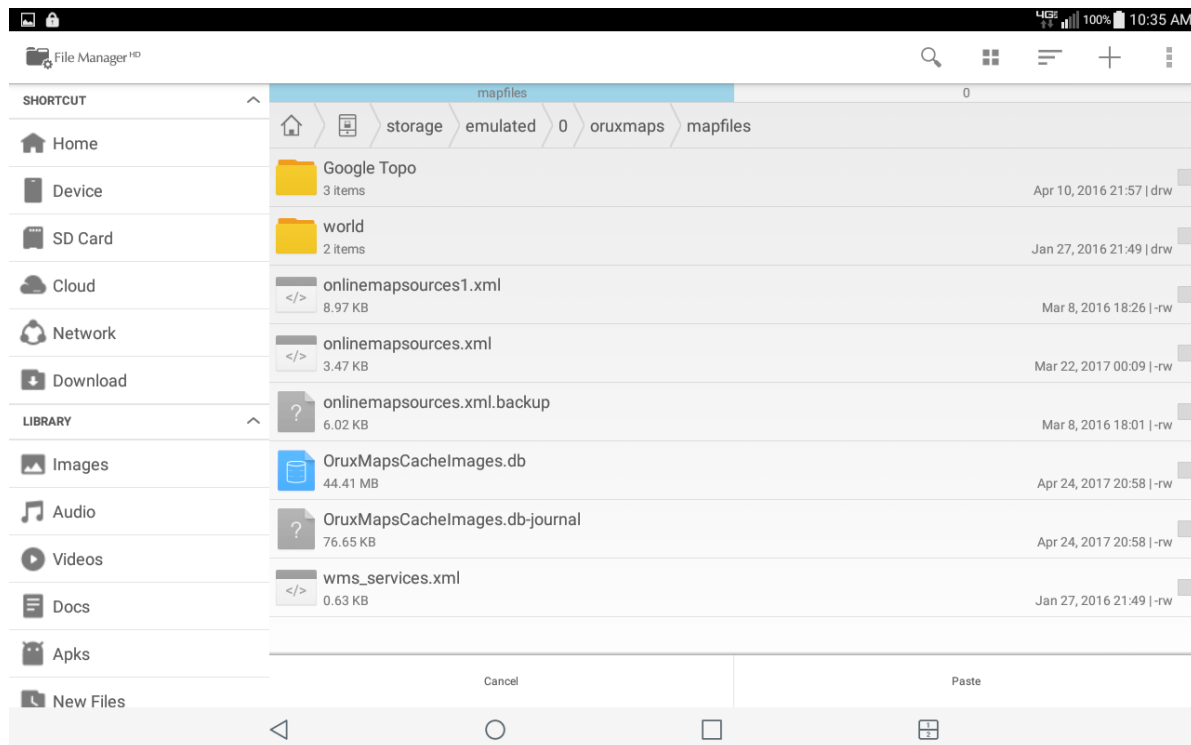
Navigate to the “oruxmaps” folder and press it to open it. See below. You should still have the “Paste” option at the bottom.



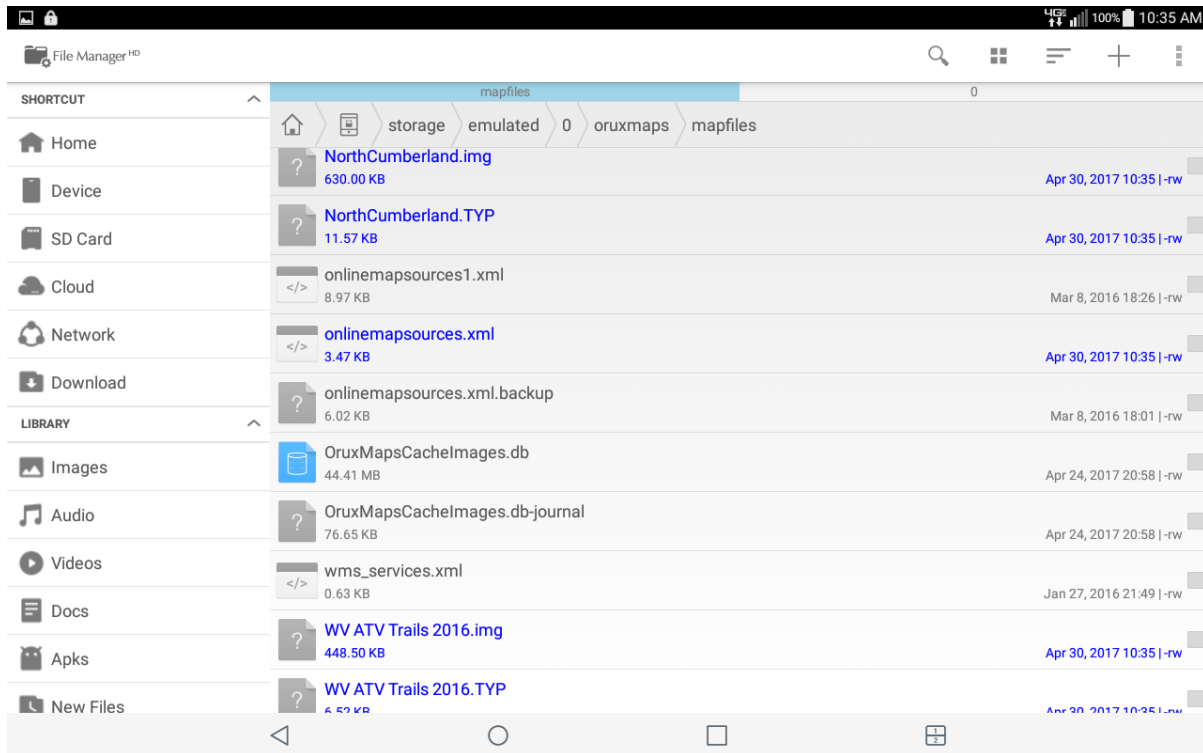
After opening the “oruxmaps” folder you will get the screen below. You will still have the “Paste” option.



You should now see a screen similar to the one below. Now press the “Paste” button at the bottom to paste the files into this folder.



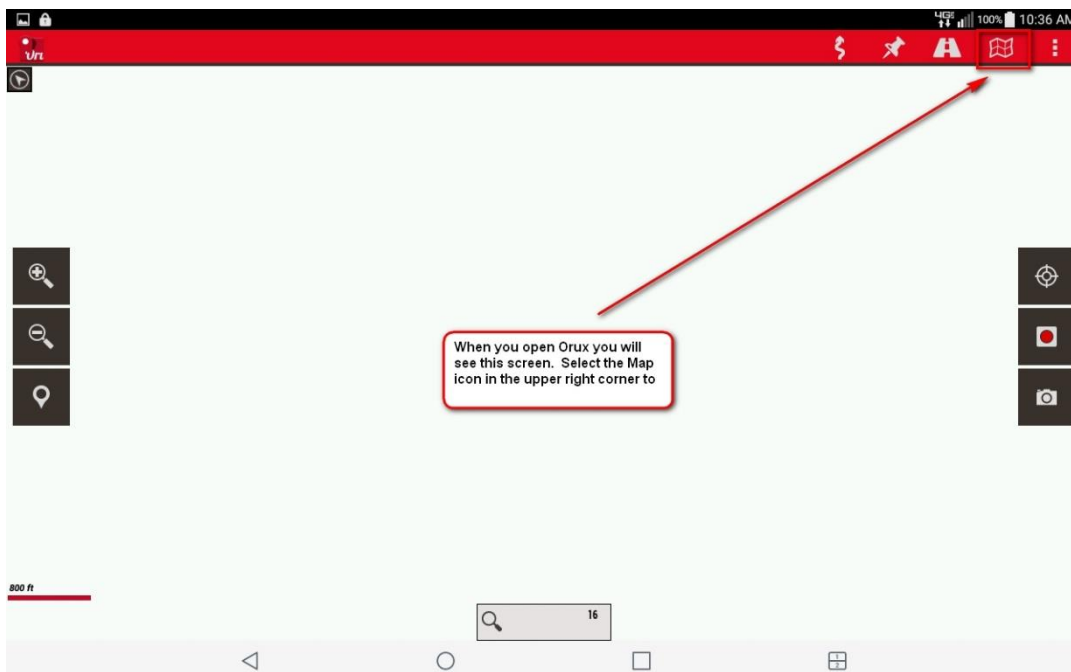
After pasting the files your “mapfiles” folder should show the files in it similar to below.



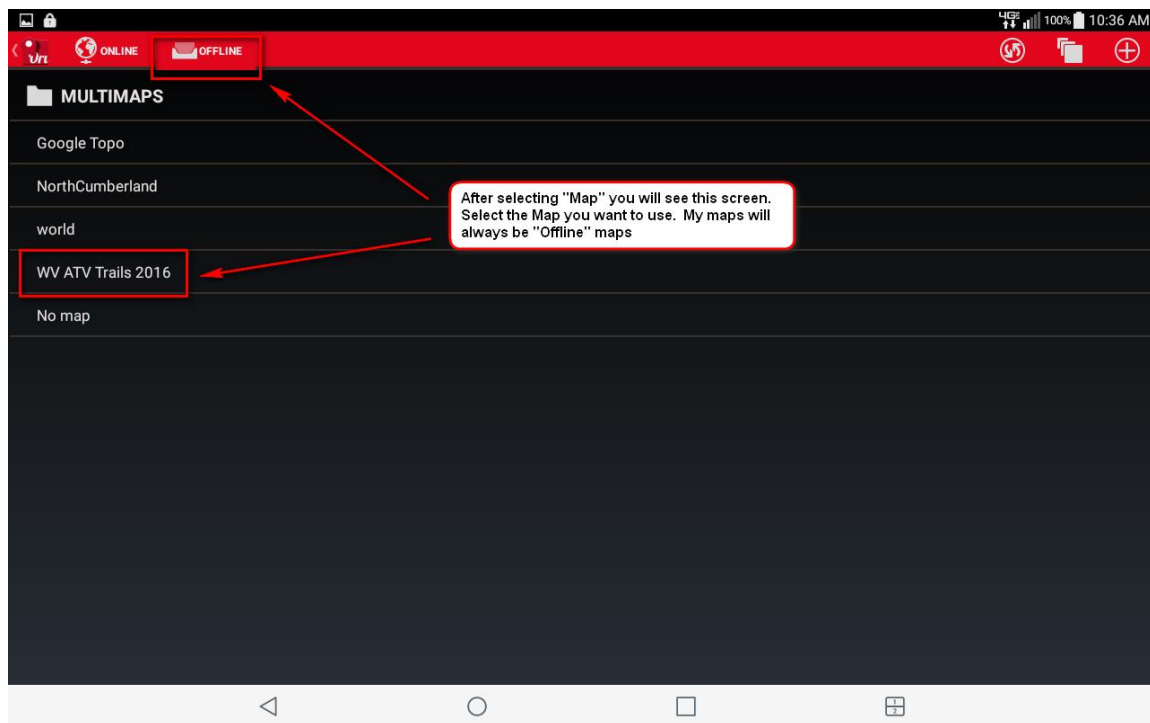
THAT IS ALL THERE IS TO IT, YOU ARE FINISHED INSTALLING THE MAPS THAT IS ALL THERE IS TO IT.

Opening the map in Orux.

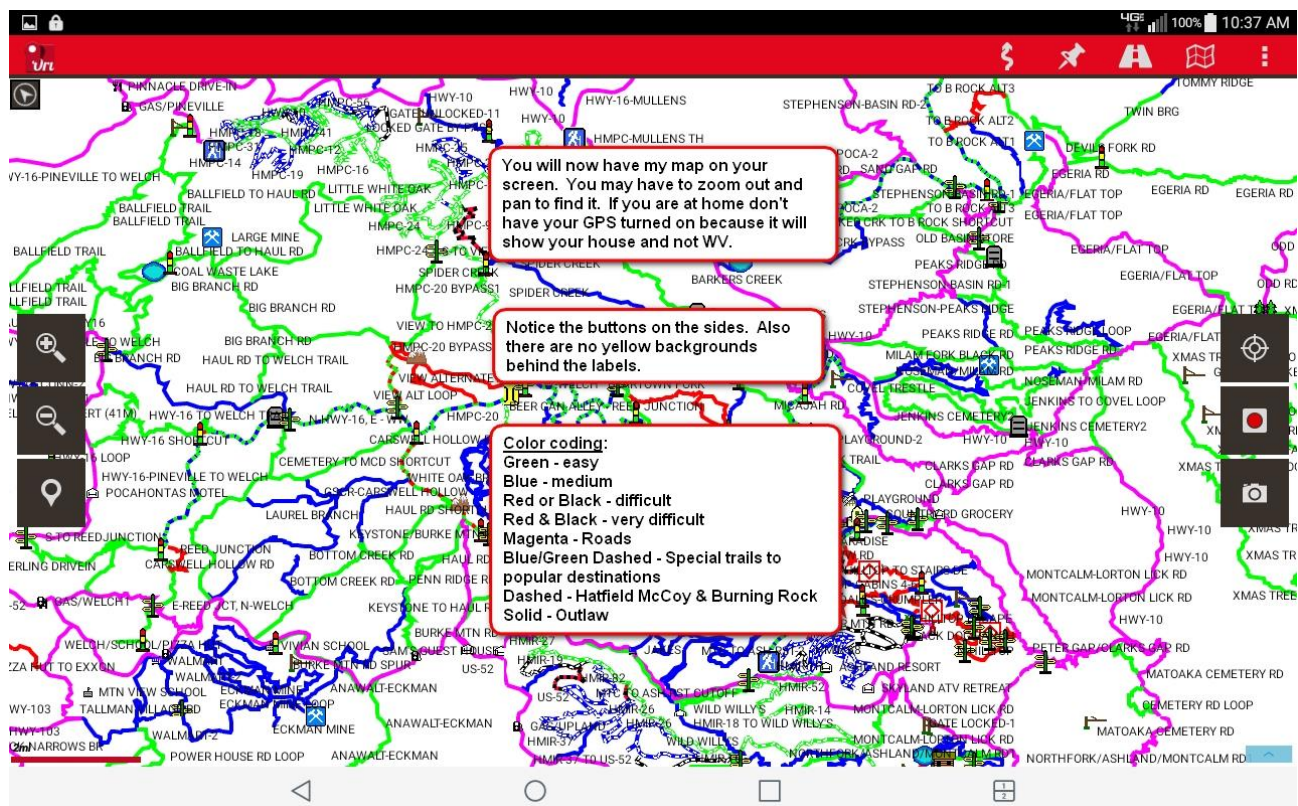
Open Orux and press the “Map” icon at the top right. See below. Then press “Switch Map”.



Select "Offline". My map is an offline map meaning you do not need cell service. Select the map you want to use.

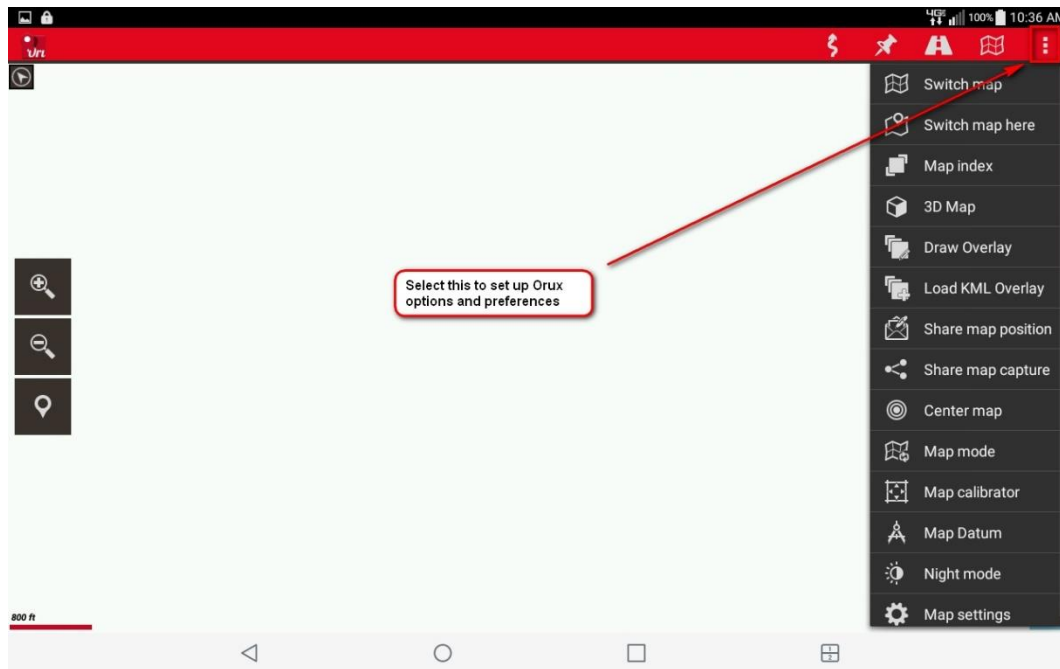


Your screen should now have the map showing. You may have to zoom out or pan to WV for it to show. If you have the GPS turned on it will show you at your house and not in WV. The color scheme is listed on the screenshot below.

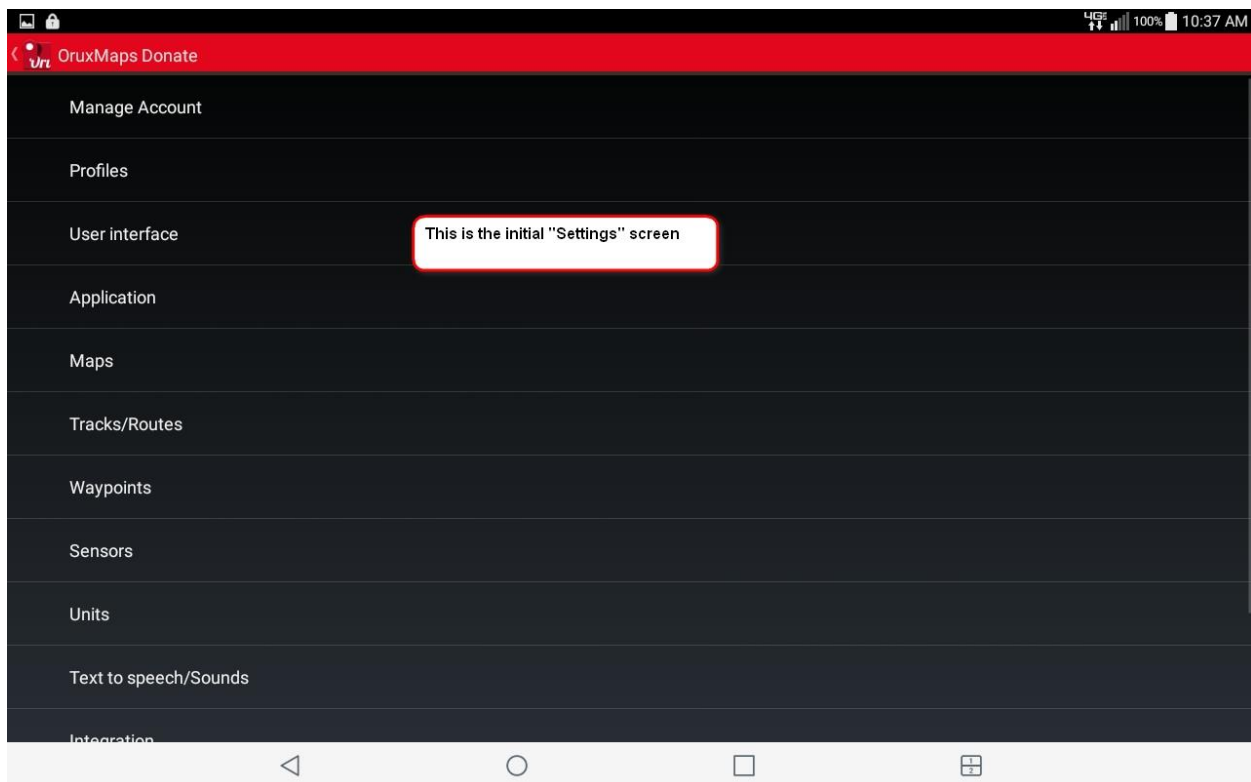


Setting up your preferences

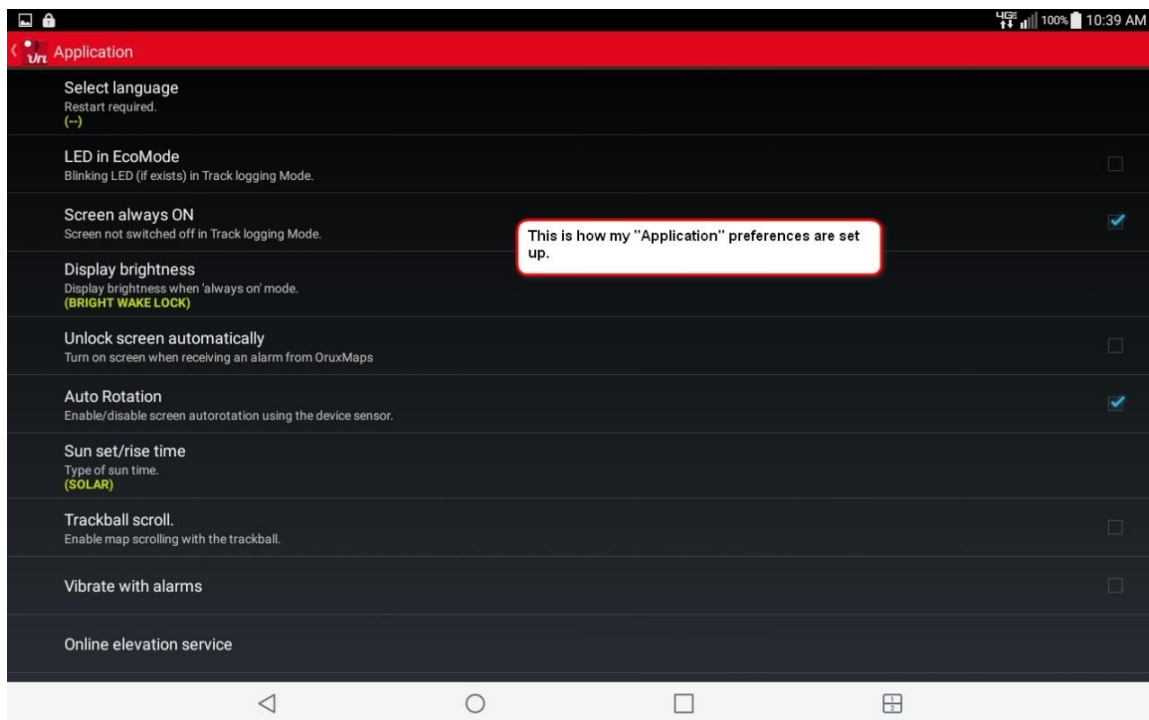
Press the 3 dots in the upper right corner to bring up the “Global Settings” menu.



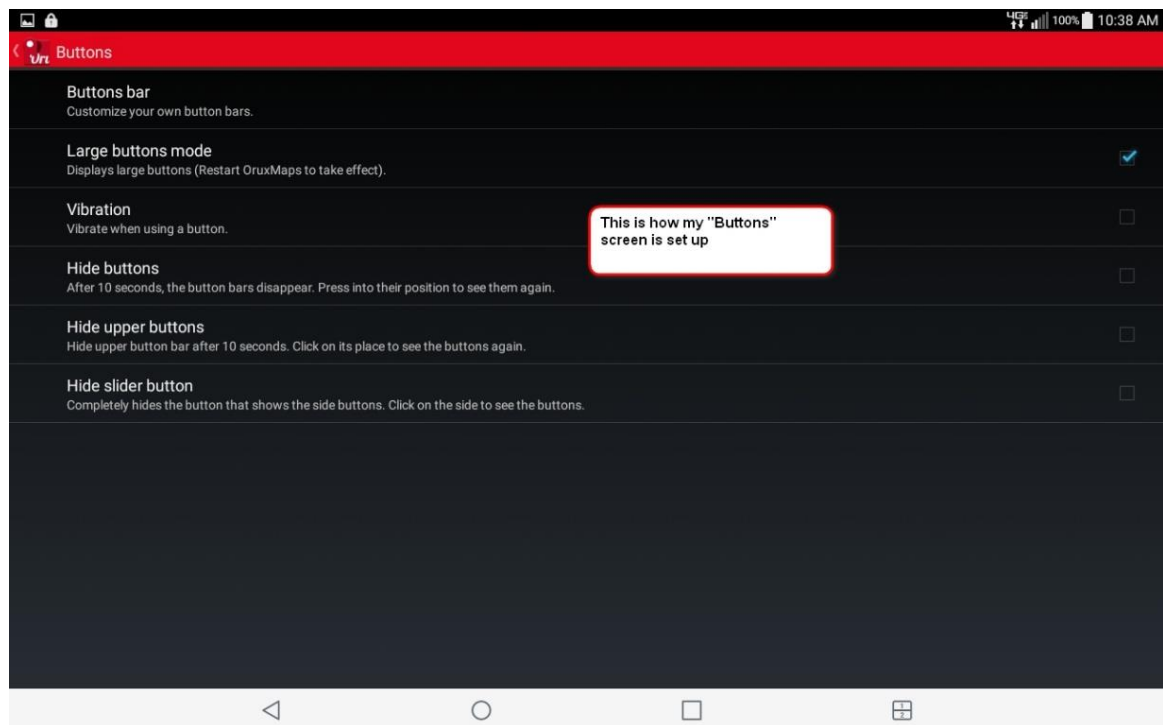
Below is the initial settings screen. From here you can change the settings/preferences for various items. The next several pages will show my recommendations for most of these settings.



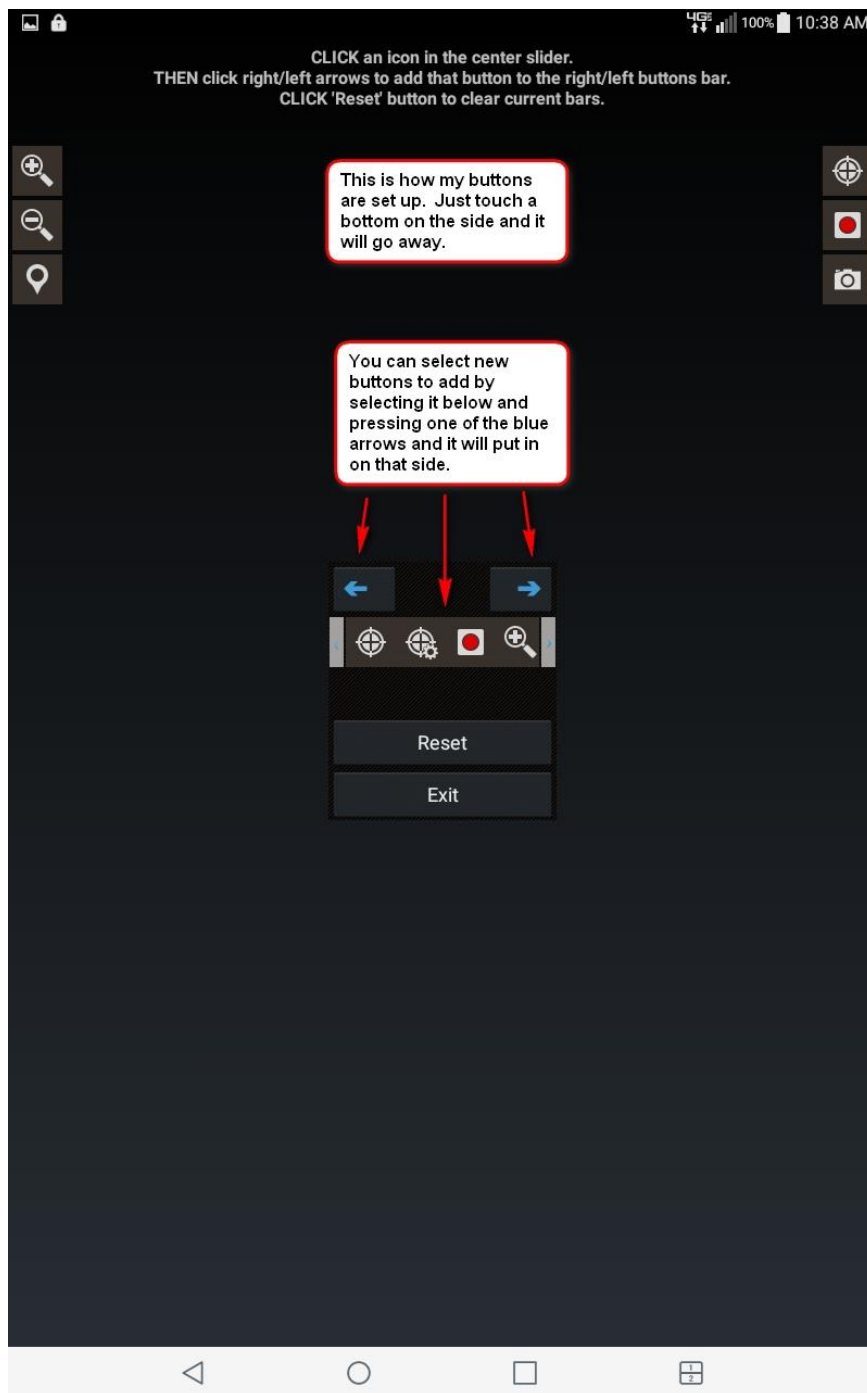
“Application” settings



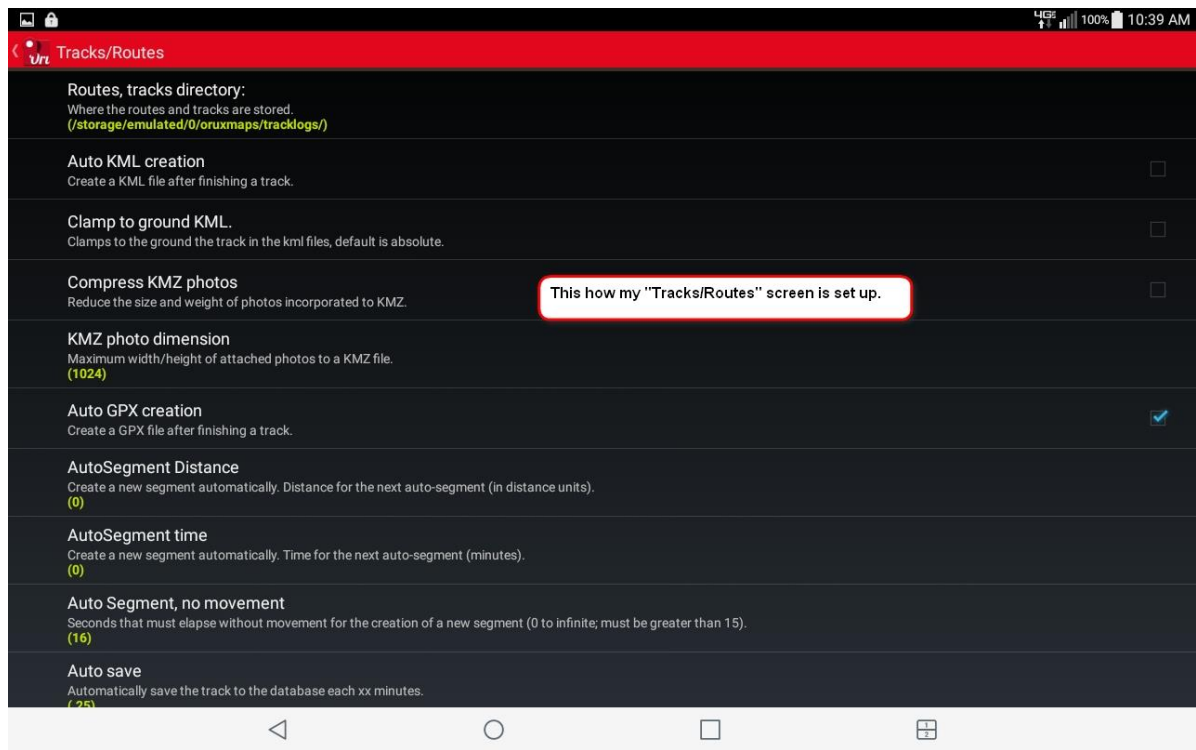
“Buttons” settings



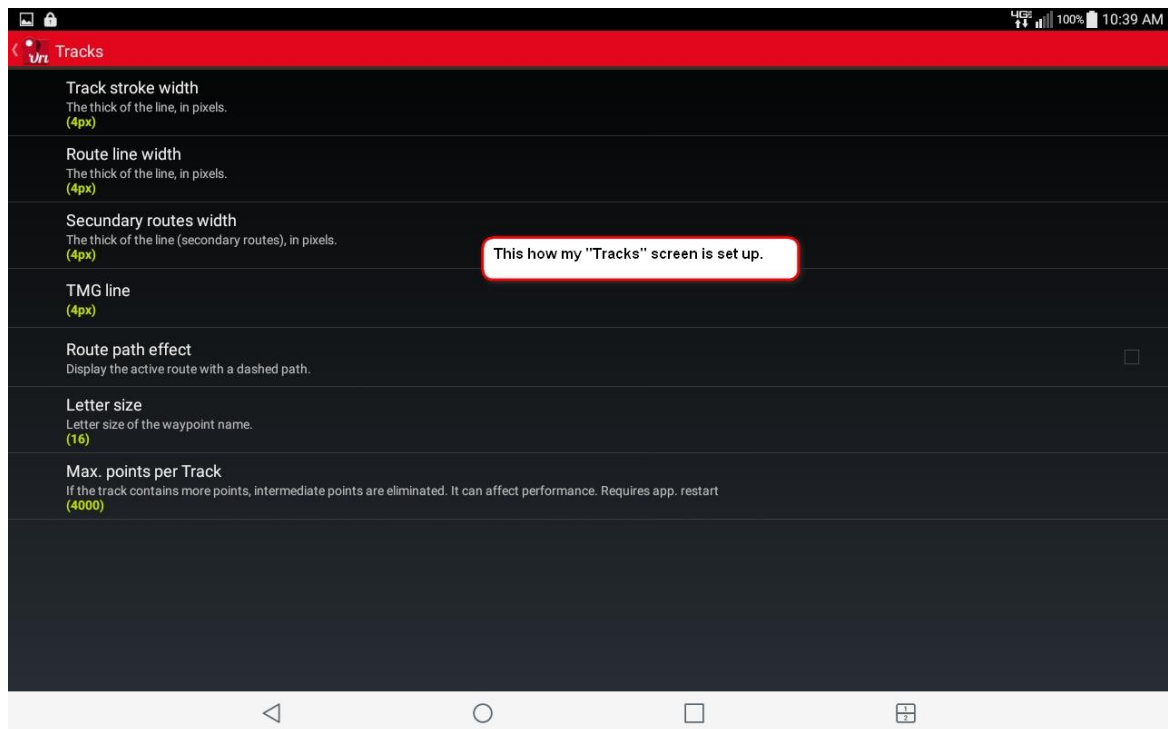
This screen allows you to change what buttons show on the map screen.



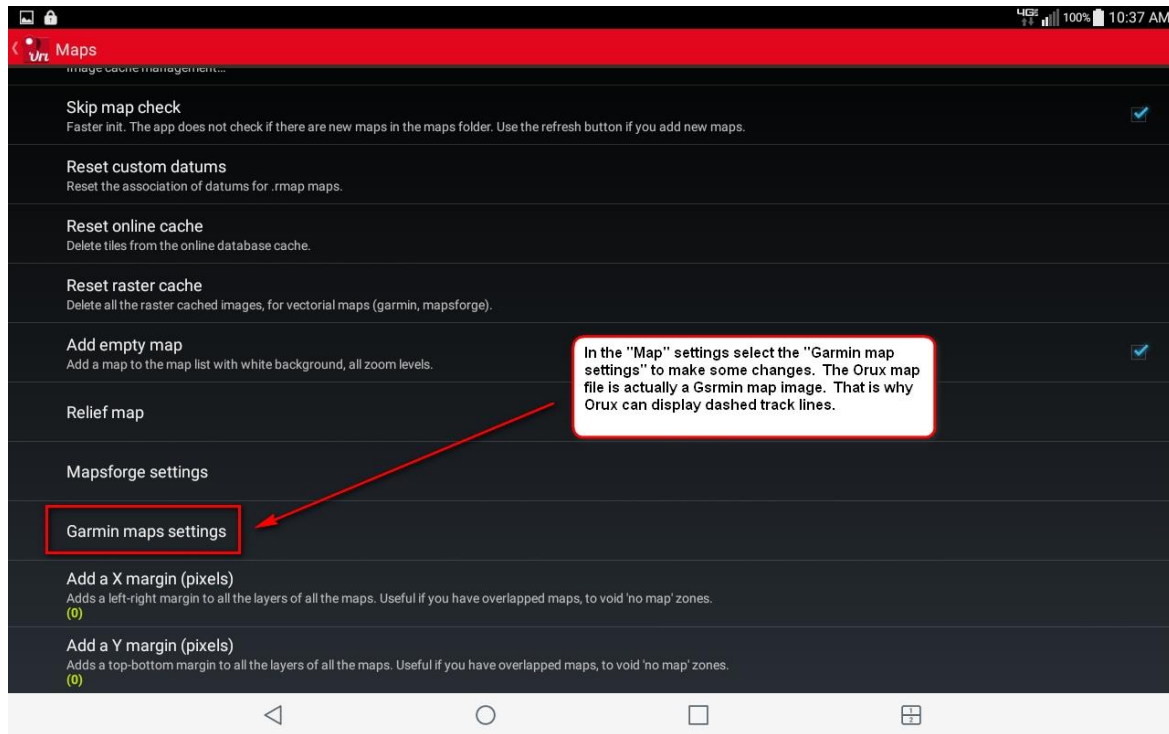
“Tracks/Route” settings



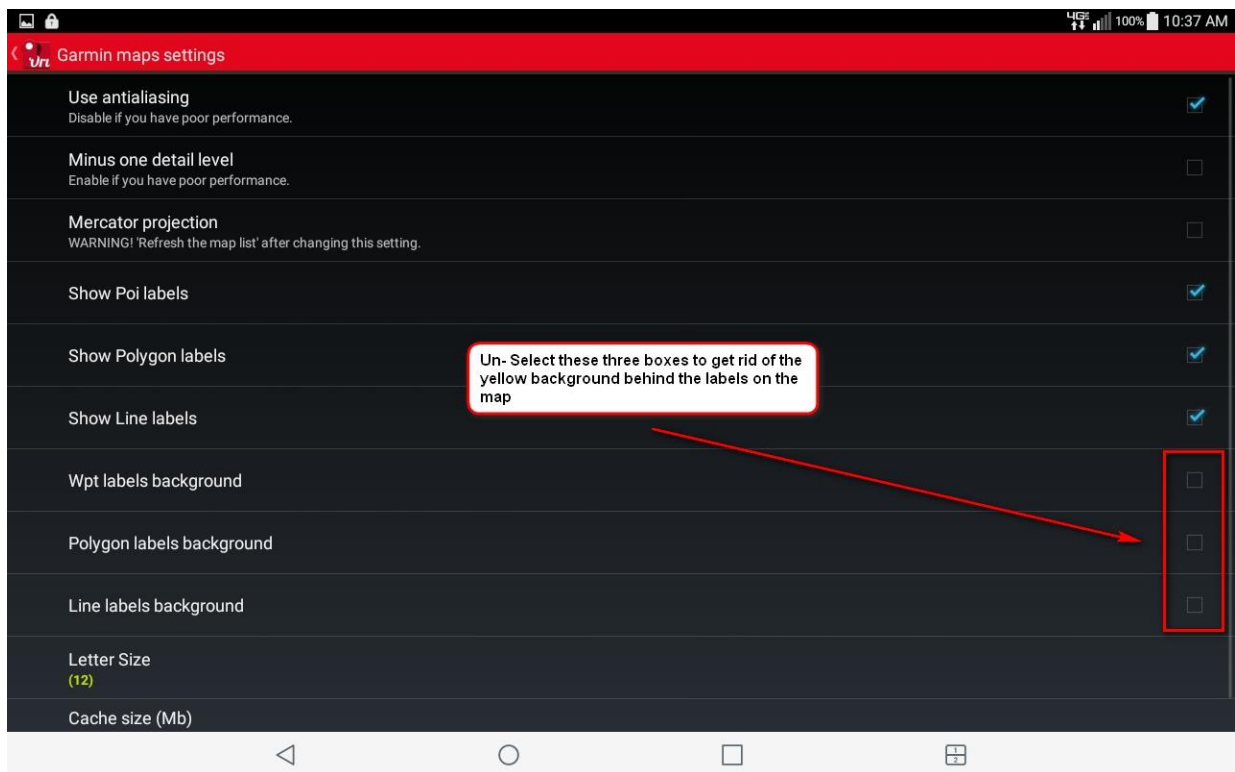
“Tracks” screen



“Maps” screen. Select the “Garmin maps settings” folder to make some changes. Orux is using my Garmin maps.



In the “Garmin map settings” un-check the 3 boxes for the “backgrounds”. This will get rid of the yellow backgrounds behind the labels on the map.



Garmin GPS Instructions and File Links

How to Get Garmin Software and Install Maps

This is not as hard as it may first appear, I have just gone into great detail in order to help

Overview

You need a Garmin program on your PC that you will use to install the map onto your GPS. You can also use this program to view, edit, draw, etc. tracks and you can also use it to view the tracks on Google Earth. These programs are also used to download tracks that you have made on your GPS. These programs will not download tracks from Nuvi's but later in this document I explain how to get tracks off of your Nuvi.

Garmin PC Programs and where to get them (free)

The links below will take you to where you can get Garmin Basecamp and Mapsource. Mapsource is an older program that is no longer supported but is much easier to use than Basecamp. If you have a Nuvi or older GPS I recommend Mapsource. You can get Basecamp directly from Garmin's website. These are the programs that you will use to view the maps and install them onto your GPS. The newer GPS's like the Montana and Oregon work best with Basecamp.

Link to Instructions on how to get Basecamp

<http://www.garmin.com/en-US/shop/downloads/basecamp>

Instructions on how to get Mapsource

Garmin requires that you have a Garmin map product such as one of their TOPO's on your computer before you can download the update which is the complete program. If you have Basecamp installed then Mapsource will install since you have a Garmin product installed.

Link to download Mapsource update (Full Program)

http://www8.garmin.com/support/download_details.jsp?id=209

Where to get free maps

The difference between a map and tracks is that a map is vector image (picture) of all tracks and waypoints. Tracks are just individual tracks and in the case of my maps some have over 800 individual tracks and 400 waypoints. Most GPS's have a limit on how many tracks they will hold and most will only show a few at a time. Some newer models are more flexible. You can only load maps onto a Nuvi, you cannot load tracks onto them and view them. Personally I don't have any tracks on my GPS since it would be impossible to know which ones to have turned on.

The best source for free Garmin maps is GpsFileDepot.com, this is where I host my ATV Maps. They have excellent free Topo's for each state.

<http://www.gpsfiledepot.com/>

Below are the links to the latest maps that I have made. **The maps are self-installing, just click on the setup file.**
Be sure to have installed either Basecamp or Mapsource before installing a map. Do not have Mapsource or Basecamp open when you install the map since it will not show up, you will have to restart them for the map to show up in the Maps window.

My latest Garmin maps for these riding areas will always be at these links.

WV ATV Trails 20??

<http://www.gpsfiledepot.com/maps/view/500/>

Paiute ATV Trails 20??

<http://www.gpsfiledepot.com/maps/view/653>

Moab ATV Trails 20??

<http://www.gpsfiledepot.com/maps/view/508>

Taylor Park ATV Trails 20??

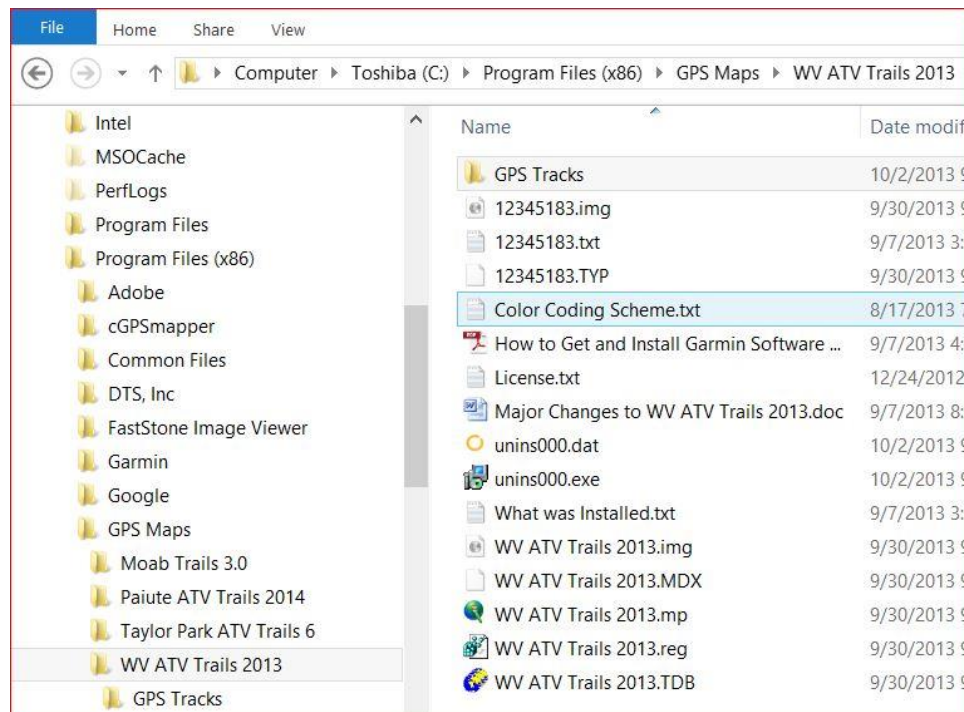
<http://www.gpsfiledepot.com/maps/view/445/>

WV Topo Map (not my map)

<http://www.gpsfiledepot.com/maps/view/117/>

Installing a Map Using BaseCamp and MapSource

These instructions will be based on the map “WV ATV Trails 2013. When you run the “WV ATV Trails 2013 Setup.exe” program it will copy some files to your PC and will also write some Registry entries so that Basecamp and Mapsource will recognize the map. If you have Basecamp or Mapsource open when you run the Setup program you will have to close them and re-open them in order for them to load the maps since they only look for maps when they start. The screenshot below shows what the directory that was created on your PC looks like. You will notice that there is a sub-directory called “GPS Tracks” that contains the original Garmin GPS tracks for the map. You may want to move these to an easier location for access. These can be opened in Basecamp and Mapsource so that you can view them on top of a Topo map on your PC. Garmin Basecamp and Mapsource will only show one map at a time on your PC so you cannot view ATV Trail Maps over a Topo.

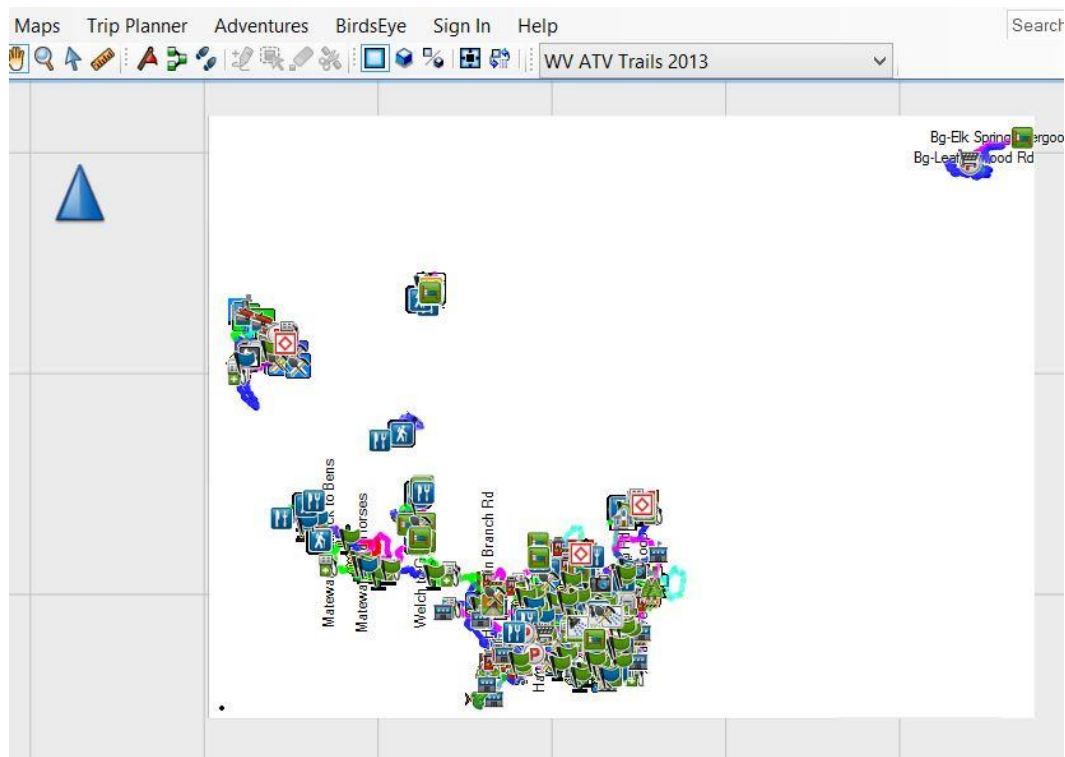


Installing a Map Using Basecamp

Verifying that the map was installed correctly

If you have a newer Garmin GPS such as a Montana, Oregon, or 62 I think you will want to use Basecamp. If you have a Nuvi or an older Garmin GPS I highly recommend you use Mapsource since it is easier to use and the added functionality of Basecamp is not required.

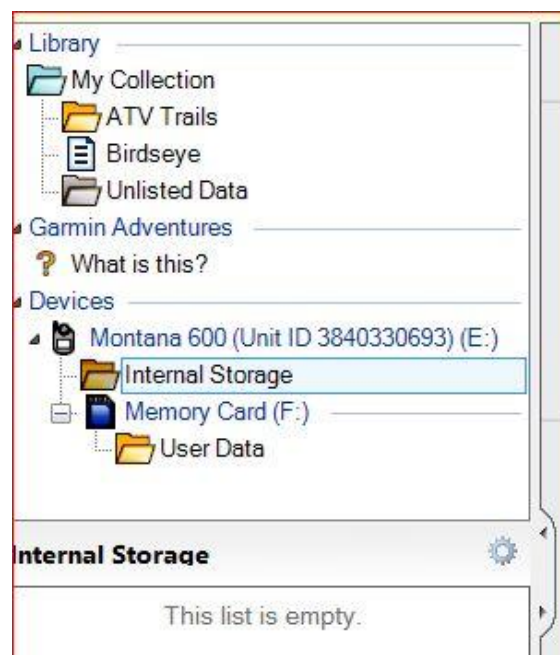
I suggest you go to “View|Toolbars” and select the ones you will use so that they show at the top of your screen. Under Maps you should see “WV ATV Trails 2013”, this confirms that the map is installed correctly. See the screenshot below.



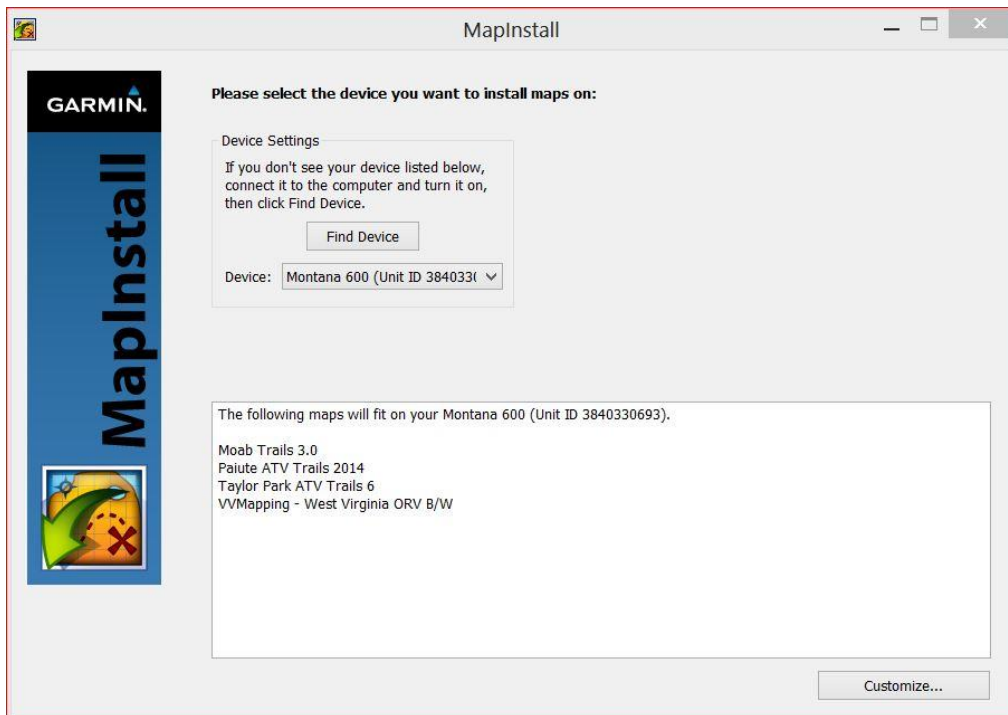
Installing

Map on a Newer GPSr using Basecamp

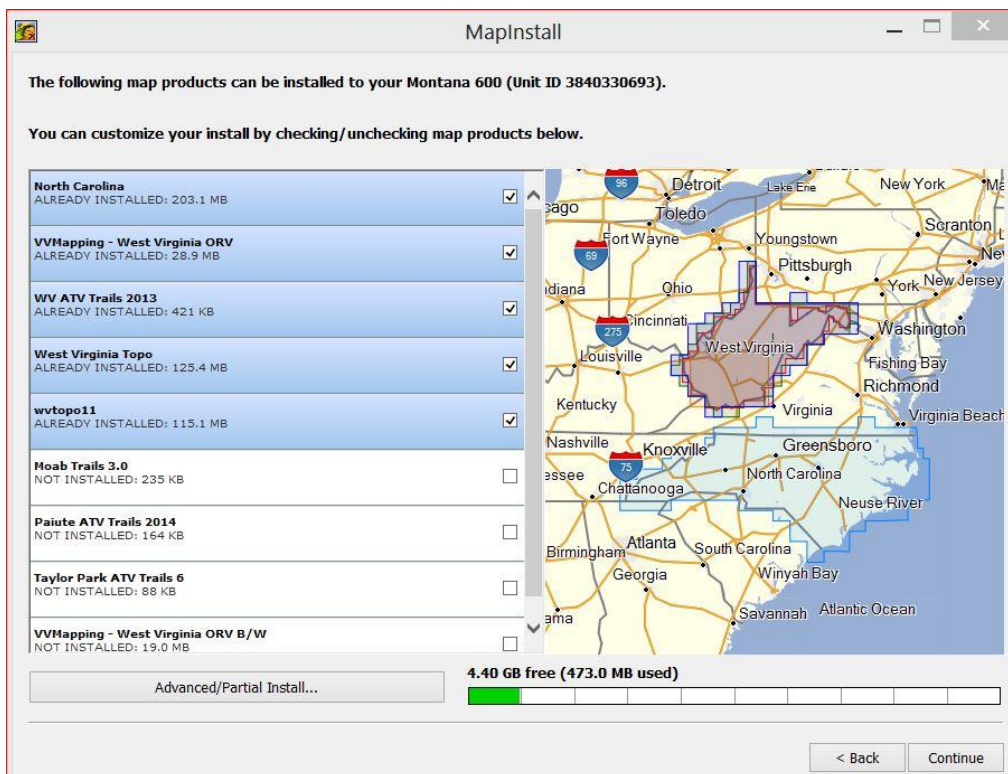
Open Basecamp and connect your GPS to your computer using a USB cable. On the left side of the screen you should see something similar to the screenshot below. This screenshot shows my Montana connected to my PC.



Click on “Maps” in the top toolbar and select “Install Maps”. You will then see the screen below.

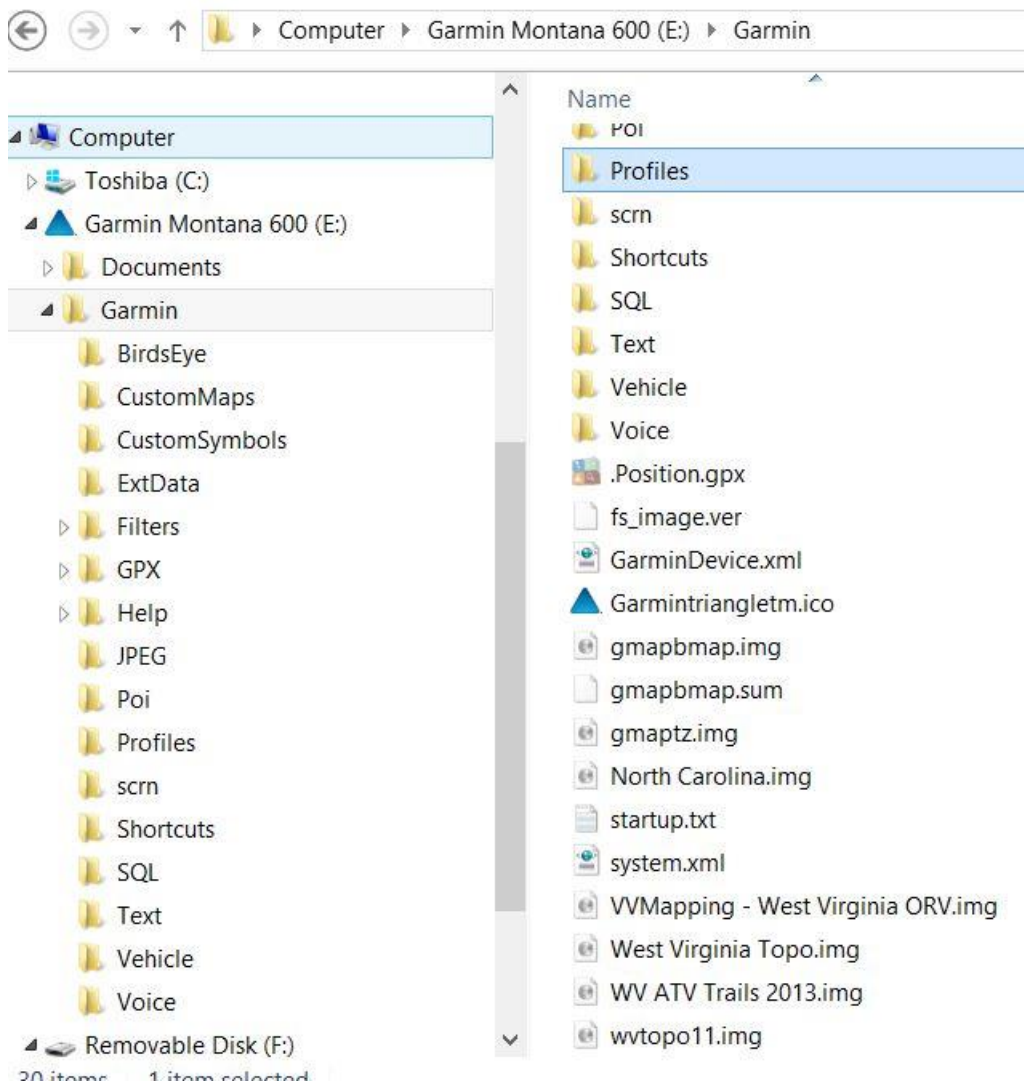


Click on “Customize” and you will see the screen below.



“WV ATV Trails 2013” should be on the list, check the box. If you have installed any other maps they will show up on the list, check them if you want to install them. Un-check them if you want to uninstall them. Click “Continue” and the maps should install onto your GPS. You can plug your GPS into your computer and view the files on it just like you would with a Memory Stick. Below is a screenshot of what my Montana files look like. You will notice that in the “Garmin”

root directory that there are 5 files with specific names that end in “.img”. These are the Map Images that are displayed on your GPS. (gmapbmap.img is the GPS basemap, gmaptz.img is the time zone file)

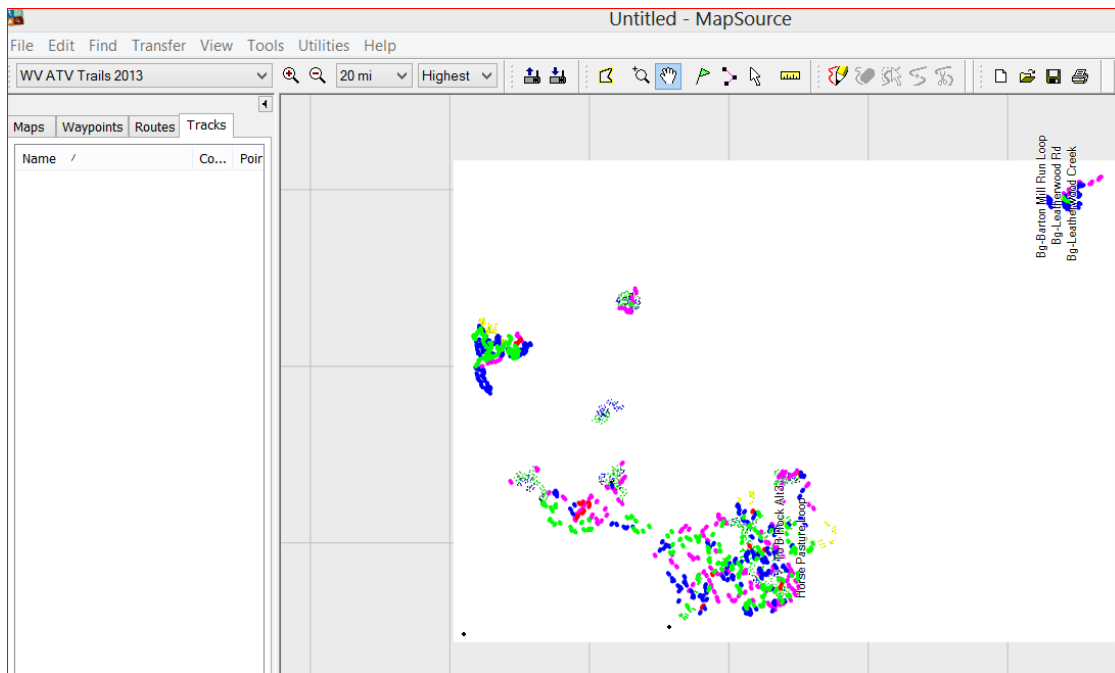


Installing a Map Using Mapsource

Verifying that the map was installed correctly

If you have a Nuvi or an older Garmin GPS I highly recommend you use Mapsource since it is easier to use and the added functionality of Basecamp is not required.

I suggest you go to “View|Toolbars” and select the ones you will use so that they show at the top of your screen. In the screenshot below you will notice that “WV ATV Trails 2013” is showing in the Map Window. Under Maps you should see “WV ATV Trails 2013”, this confirms that the map is installed correctly. See the screenshot below.

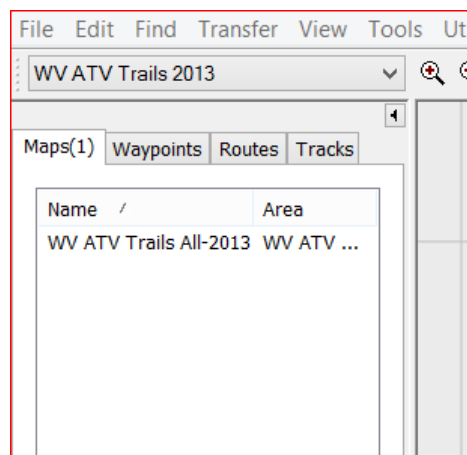


Installing Map on a GPSr using Mapsource

Connect your GPS to your PC with a USB cable. Have the map that you want to install showing on the screen as above. Click on the “Map” tool, the one circled below.



Using the “Map” tool click on the map that is on the screen, it should turn Pink. In the upper left of your screen you should see something similar to the screenshot below.



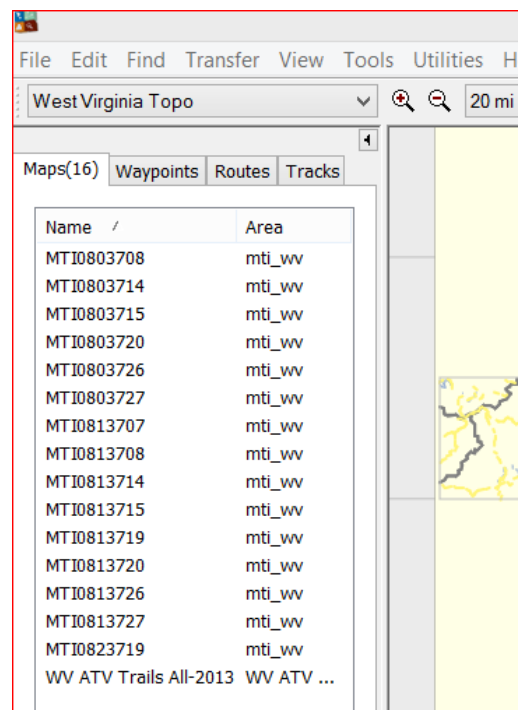
Warning: Mapsource will not install map files with different names. It will combine all maps into one file called “gmapsupp.img”. You will need to install all maps that you want at the same time. Mapsource will overwrite the current “gmapsupp.img” on your GPS so you will lose any previous custom maps that you installed. This does not affect your Garmin installed Basemap. Nuvi’s and older GPS’s will

only read a “gmapsupp.img” file so there is no point to use Basecamp since it will also create a “gmapsupp.img” file when you connect a Nuvi or older GPS.

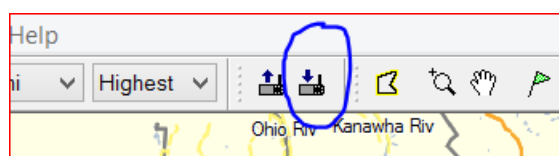
My maps are only one “Tile”, however Topo maps are made up of many “Tiles”. When installing a Topo you can highlight only the areas you want or the entire state.



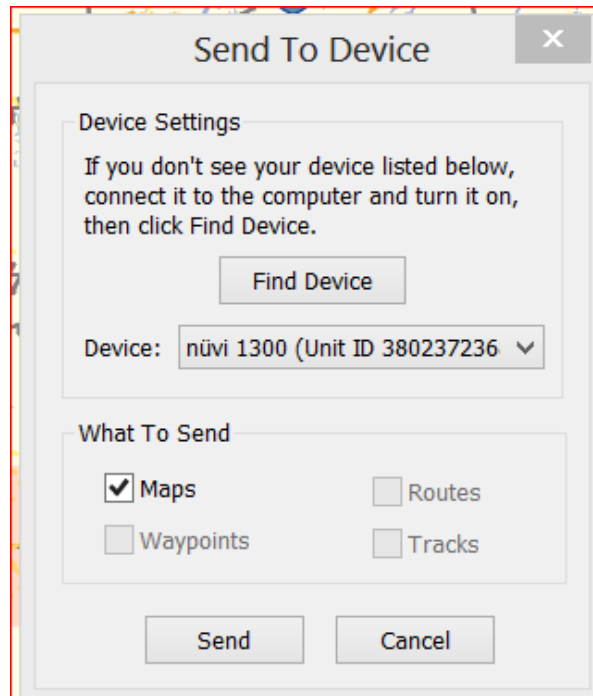
The screenshot below shows what the “Map” tab will look like when you include several “Tiles” from a Topo.



Next click on the “Send to Device” icon.



The screen below will now be displayed. If you had some Tracks or Waypoint open in Mapsource you would see check marks next to them in the boxes below. Un-check them since you only want to install a map. Click "Send" and the maps will be installed on your GPS. There is not a shortcut for installing maps on Nuvi's and older GPS's since Mapsource has to create the "gmapsupp.img" file. You can copy an older "gmapsupp.img" file to your PC if you want to save that mapset before you write over it with the new "gmapsupp.img".



Some useful links:

How to load map onto GPS – GpsFileDepot has a lot of good tutorials

<http://www.gpsfiledepot.com/tutorials/how-to-load-maps-on-my-garmin-gps-unit/>

This site is a good site to learn how to use Basecamp.

<http://garminbasecamp.wikispaces.com/home>

Usefull Nuvi Tips

How to view maps on a Nuvi

To view the maps on a Nuvi you need to go into “Tools – Settings – Map – Info” and select the maps you want to show. This may vary slightly by Nuvi. My ATV Maps are transparent which means you can have them on with other maps and they will show on top of the other map.

Other tips: (the location of these may vary by Nuvi model)

Change Map View to “Track Up” (this works best when you come to an intersection) or “North Up”,.

Change Trip Log to “Show”, this will leave bread crumbs on the screen showing where you have been.

Change Route Preference to “Off Road”, this prevents the cursor from jumping/showing on the closest road.

How to get tracks you rode off of a Nuvi

Nuvi's do track and save the tracks. You need to plug the Nuvi into your PC with a USB cable in order to get them off. A bunch of windows will pop up as if you plugged a memory stick in, which is basically what you did. You can either use one of the windows or close them all and use Windows explore to find your Nuvi. It will probably be called “Garmin”, if you have a memory card inside your Nuvi it will show up also. Find the directory called “GPX”, that is where you will find some files with the .gpx extension. These are the tracks that the Nuvi recorded. Just copy them onto your computer and you can open them in Mapsource or Basecamp to view them.

The above method is what I use since I like to delete the old tracks off of my Nuvi. You can also use Mapsource or Basecamp and download the tracks, click on the “Receive from Device” icon.