

GIS Data Ordering System

User Manual

Users Manual

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1. Introduction

The GIS Data Ordering System is a web based data download system. Users register and authenticate to the GIS Data Ordering system to have access to GIS data files. The user may select any/all shapefile formats or up to 15 tiles of orthophotography and contour-planimetric data per download session. The system then bundles the files requested into a zip file and provides the URL file link to the user.

2. System Requirements

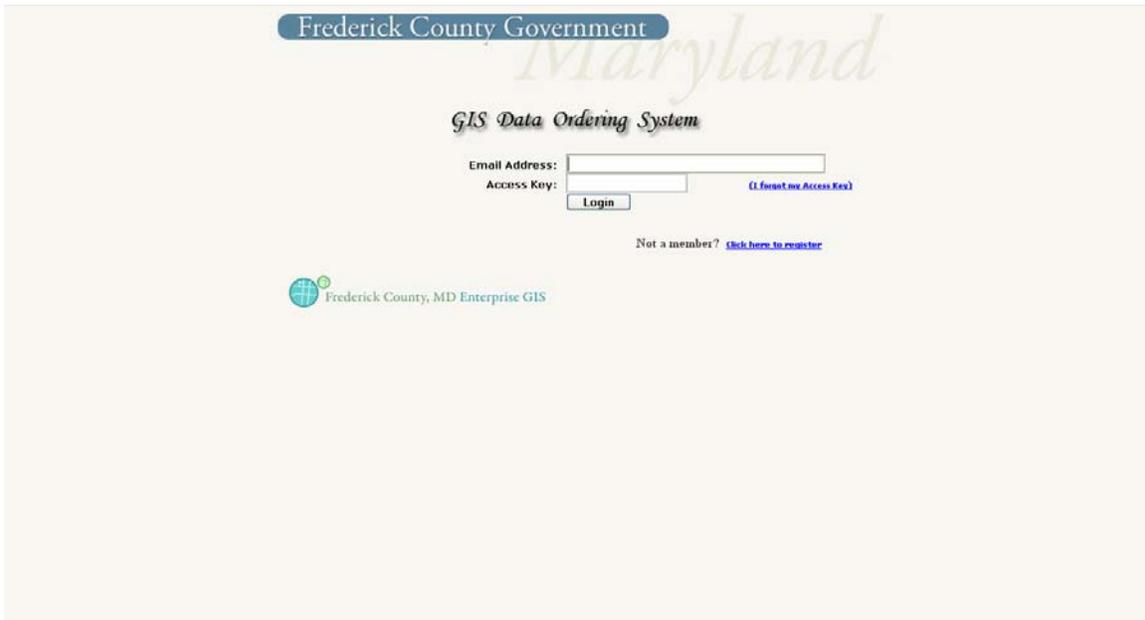
Your PC must have the following specifications:

- Internet Explorer 5.5 or higher, OR other browsers
- Recommend Display setting 1024 X 768 or higher

3. Getting Started

To get started, you must register and obtain an initial password. To do so, you must select the “Click here to register” link on the system Login screen and then complete the registration form. You must supply a valid email address on the registration form, as the initial logon password will be mailed to that address.

If you have problems logging into the system, please contact Enterprise GIS at (301) 600-2310 or email gis_enterprise@frederickcountymd.gov .



Selecting the “Click here to register” link will display the License Agreement page. If the user agrees to the terms he/she will click the icon. The User Registration form will come up.

GIS Data Ordering System

Registration Information
* indicates required field

Name: **First** **MI** **Last** *

Title:

Phone: () - * ext:

Email: *

Company Name: * or your own name if unassociated

Type of Company: Select a Category *

Industry: Select an Industry *

Mailing Address: *

City: *

State: MD * Zip: * Country: United States *

Frederick County, MD Enterprise GIS

The user must fill in all the required fields on the form, designated by an asterisk (*). A valid email address is essential to completing the registration process, because an email will be sent to the user containing a randomly generated password. The user will then return to the log in screen and enter the email address and password.

There is an option on the log in screen for registered users to request a new password if they have forgotten it. Clicking on this link (“I forgot my Access Key”) will require the user to enter his/her email address. An email will be sent to the user with a new randomly generated password.



The screenshot shows the registration form for the GIS Data Ordering System. At the top, the title "GIS Data Ordering System" is displayed in a stylized font. Below the title, there is a text input field labeled "Enter your Email Address:". To the right of this field is a button labeled "I need a new password!".

4. Logging On

After the user has completed the initial registration process and received an email with the log on password, he/she can now log into the GIS Data Ordering System. The user will enter the email address and access key, which will be authenticated by the system. Upon positive validation, the main menu will be displayed.



The screenshot shows the main menu of the GIS Data Ordering System. The title "GIS Data Ordering System" is at the top. Below the title, there are six buttons arranged vertically: "Download GIS Base Data", "Download Orthophotography Data", "Download Contour-Planimetric Data", "Update Profile", "License Agreement", and "Log Off". At the bottom left, there is a logo for "Frederick County, MD Enterprise GIS" and a link "Need help using this site?".

There are six options on the main menu.

1. Download GIS Base Data
2. Download Orthophotography Data
3. Download Contour-Planimetric Data
4. Update Profile
5. License Agreement
6. Log off

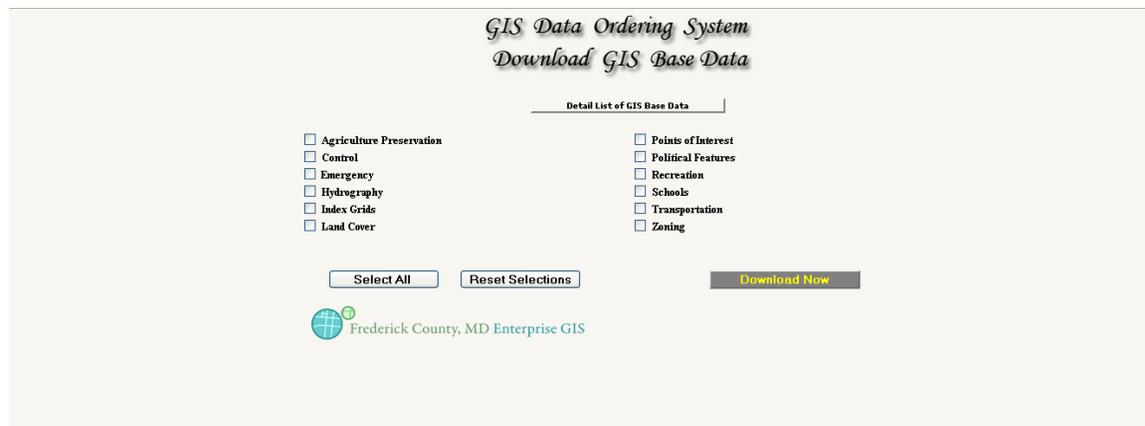
- Option 6 will log the user out of the application.
- Option 5 displays the License Agreement.
- Option 4 will allow the user to access his/her registration profile and make changes.
- Option 3 displays the contour-planimetric data available.
- Option 2 displays the orthophotography data available by tile.
- Option 1 displays the list of available GIS Base Data in shapefile format.

5. Selecting and Downloading Base Data Shapefiles

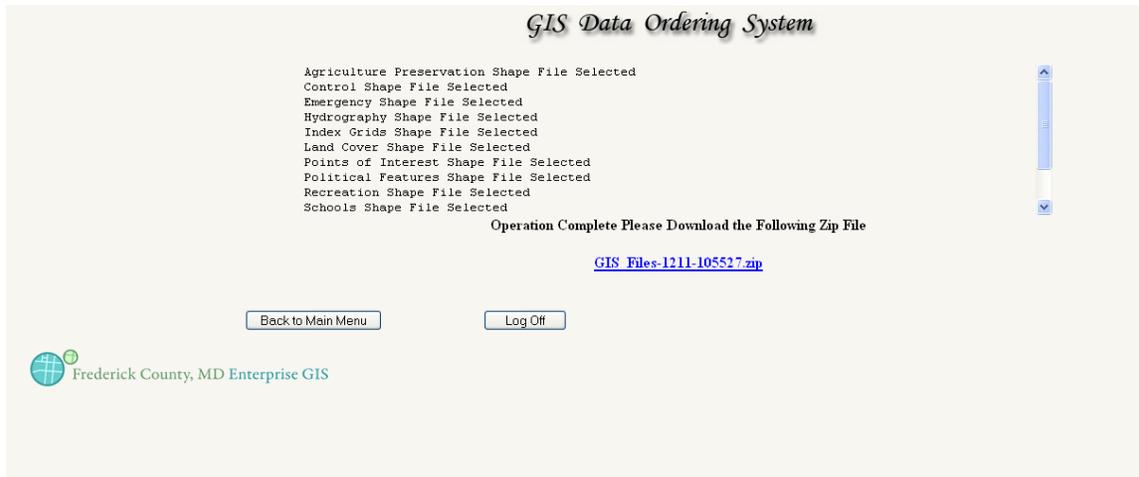
The Download GIS Base Data screen contains all of the base data files that are currently available for downloading.

The button  will open up the Frederick County GIS website to the list of GIS Base Data. Clicking SHOW / HIDE THE DETAILS will allow the user to see what each base data set contains before making his or her choice.

On the GIS Base Data screen, the user can check as many files as he/she wants.



When the user is finished selecting the shapefiles, he/she will click the “Download Now” button at the bottom of the form. The files selected will be written to a temporary directory on the server and then zipped into a zip file. A message screen will be displayed indicating the files that were selected and zipped, as well as a link to the zip file.



To download the zip file, the user clicks on the zip file after the “Operation Complete Please Download the Following Zip File” message (i.e. GIS_Files-1211-105527.zip shown above).

After downloading the zip file, users will need to extract the folder to access the shapefiles, and use appropriate viewers that can handle GIS data in shapefile format.

7. Selecting and Downloading Orthophotography Data

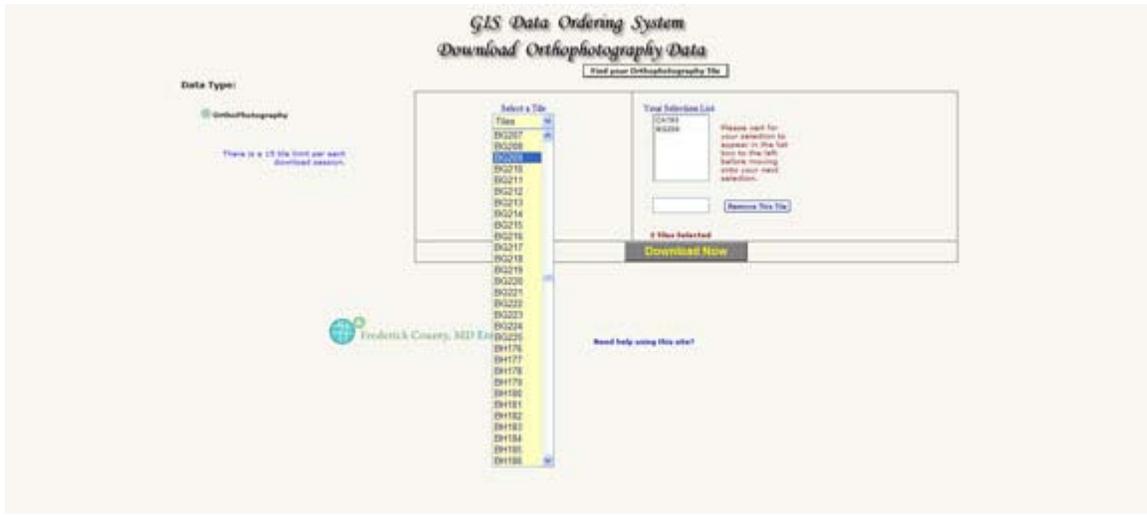
The Download Orthophotography Data screen only has one data type.

If the user is unsure of what tiles he/she would like to download, the user may click the

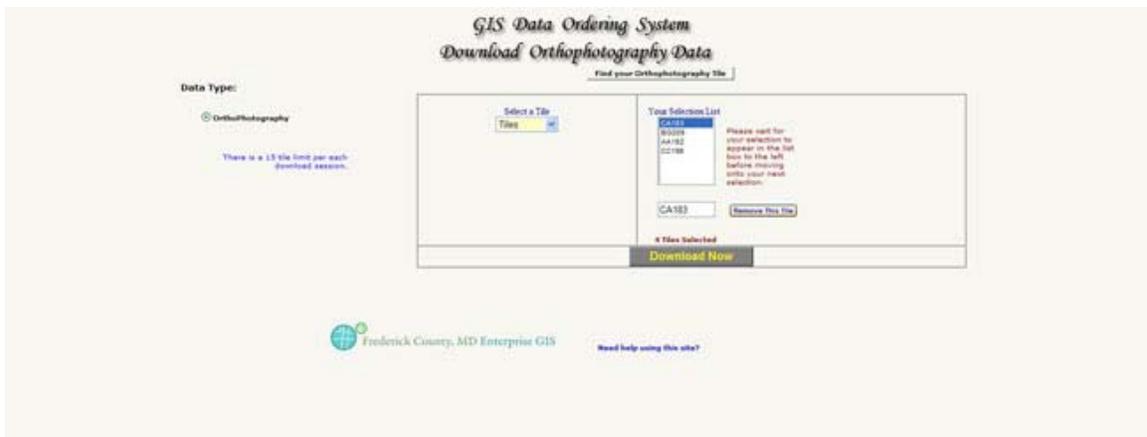
Find your Orthophotography Tile

button. This will open up the Frederick County GIS website to the Frederick County Internet Map Service (IMS) agreement page. Clicking “I agree” button will open the IMS web site in a new window. In the IMS site the user will need to chose the Zoom In tool and then click and drag on the area of the map they are interested in. Once zoomed in far enough, additional layers will be visible, including “Orthophotography Grid 2007”. This grid displays each individual orthophotography tile and includes a label in the middle. These labels shown in the “Orthophotography Grid 2007” are the same tile names that will be chosen in the next paragraph.

The user can begin selecting Tiles from the drop down bar. A few seconds after being selected the tile will appear in Your Selection List.



To remove any tiles before downloading, the user must select the unwanted tile in Your Selection List. It is then seen in the box below the selection list.



The user then clicks [Remove This Tile](#) button to remove the tile.

When the user is finished selecting the tiles, he/she will click the “Download Now” button at the bottom of the form. The tiles selected will be written to a temporary directory on the server and then zipped into a zip file. A message screen will be displayed with a link to the zip file.

GIS Data Ordering System

Operation Complete Please Download the Following Zip File

[GIS_Files-1211-115059.zip](#)

[Back to Main Menu](#)

[Log Off](#)



To download the zip file, the user clicks on the zip file under the “Operation Complete Please Download the Following Zip File” message (i.e. GIS_Files-1211-115059.zip shown above).

After downloading the zip file, users will need to extract the folder to access the files, and use appropriate viewers that can handle GIS data in these file formats.

8. Selecting and Downloading Contour-Planimetric Data

The Download Contour-Planimetric Data screen allows the user to first choose a data type.

There are three options:

- 1-Contour-Planimetric
- 2-Digital Elevation Models
- 3-All

If the user is unsure of what tiles he/she would like to download, the user may click the

Find your Contour-Planimetric Tile

button. This will open up the Frederick County GIS website to the Frederick County Internet Map Service (IMS) agreement page. Clicking “I agree” button will open the IMS web site in a new window. In the IMS site the user will need to choose the Zoom In tool and then click and drag on the area of the map they are interested in. Once zoomed in far enough, additional layers will be visible, including “Contour-Planimetric Grid 2005”. This grid displays each individual orthophotography tile and includes a label in the middle. These labels shown in the “Contour-Planimetric Grid 2005” are the same tile names that will be chosen in the next paragraph.

GIS Data Ordering System

Operation Complete Please Download the Following Zip File

[GIS_Files-1211-115059.zip](#)

[Back to Main Menu](#)

[Log Off](#)



To download the zip file, the user clicks on the zip file under the “Operation Complete Please Download the Following Zip File” message (i.e. GIS_Files-1211-115059.zip shown above).

After downloading the zip file, users will need to extract the folder to access the files, and use appropriate viewers that can handle GIS data in these file formats.

Frequently Asked Questions

1. How do I view the data?
2. What type of format is required to view the data?
3. How do I view additional tax accounts for one parcel (as with condos)?

1. How do I view the data?

- Viewing Data with ESRI Products
- Viewing Data with Non-ESRI Products
- Viewing Data with AutoCAD

Viewing Data with ESRI Products

Shapefiles were originally created by ESRI, although they are now a standard format file. The highest recommended software to view the data is ESRI software, which includes ArcGIS, ArcView and ArcExplorer. Viewing this data in ArcExplorer may take longer, and is recommended only for more experienced GIS users. The ESRI website provides a list of products as well as How to Buy guidelines. Free trial versions of ESRI products are available:

[ArcGIS Free-60-day Trial](#)
[ArcExplorer Free Download](#)

Viewing Data with Non-ESRI Products

The recommended non-ESRI product free map viewer is TatukGIS Free Viewer. TatukGIS Free Viewer allows you to view shapefiles as well as sid files. This program is very user-friendly and seems to have many useful tools, much like you would see on ArcMap (ESRI).

[TatukGIS Free Viewer](#)

Viewing Data with AutoCAD

If the user already has access to AutoCAD it may be more efficient to purchase additional software that will convert shapefiles to AutoCAD format:

[Arcv2CAD 5.0](#)
[CAD2Shape](#)

2. What type of format is required to view the data?

- Base Data
- Contour-Planimetric Data
- Digital Elevation Models
- Orthophotography

Base Data

The base data provided is all in shapefile format. Shapefiles were originally created by ESRI, although they are now a standard format file. Shapefiles can be viewed with any ESRI product, TatukGIS, and AutoCAD

Contour-Planimetric Data

Contour/planimetric data is provided in a personal geodatabase format. This format can be viewed using ESRI products, with the exception of ArcGIS Explorer, which will only allow the user to view in a file geodatabase format.

Digital Elevation Models

Digital Elevation Models (DEMS) are provided in a ASCII file format. To view DEMS in a raster file format, the ASCII will need to be converted. The following links may help in this process:

- [ESRI Help](#)
- [Autodesk Help](#)

Orthophotography

Orthophotography is provided in a raster format as SID files. SID files can be viewed with ESRI products, TatukGIS or AutoCAD.

Additionally, SID files can also be viewed by a [free MrSID viewer](#), provided by LizardTech. Using the free [free MrSID viewer](#), you are able to export a SID file as a geo-referenced image file which can then be viewed in AutoCAD. [CENTREMAPS](#) provides a [step by step guide \(pdf\)](#) of how to import a geo-referenced image into AutoCAD.

3. How do I view additional tax accounts for one parcel (as with condos)?

The MultiUnitRelate table was created to relate multiple tax accounts to a single base tax account, a situation usually associated with condominium complexes. Relating

this MultiUnitRelate table with the parcel data allows users to find all of the associated tax accounts with a given parcel, as well as the weblink to Maryland Department of Assessments and Taxation for these accounts.

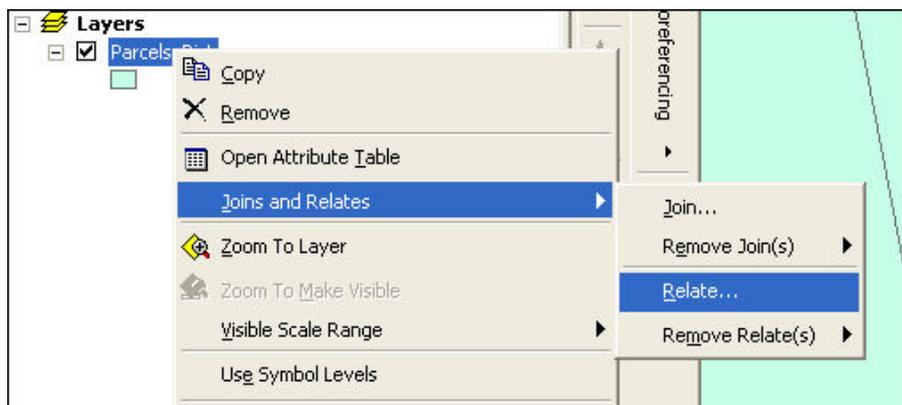
- Step 1
- Step 2
- Step 3
- Step 4
- Step 5

Step 1

Download the parcel data from Frederick County's GIS data download service. This should include a Parcel_Dist.shp, Parcels.lyr and MultiUnitRelate.dbf. Open up a blank document in ArcMap and add this data.

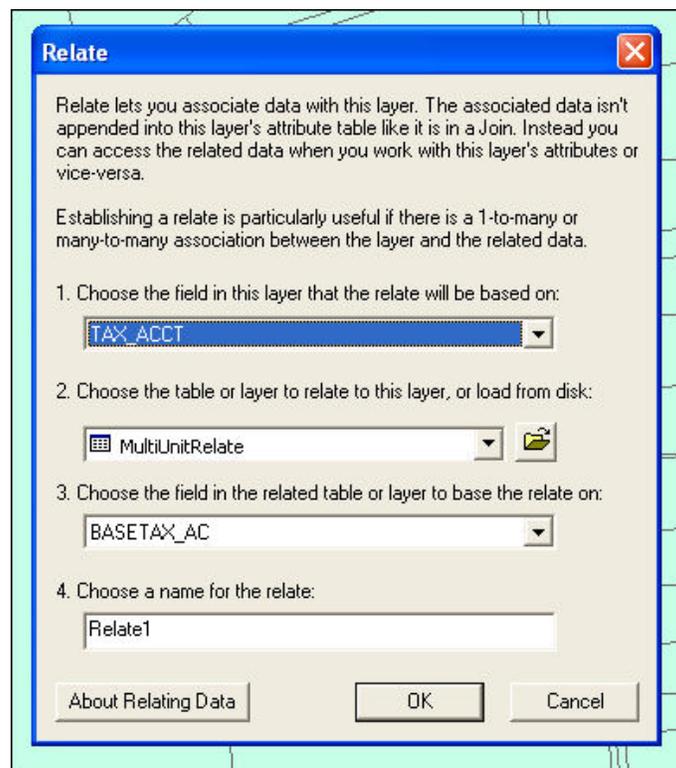
Step 2

Right-click the Parcel_Dist, choose Joins and Relates, and choose Relate.



Step 3

The Relate Data box will open up. In the first drop down box, pick “TAX_ACCT”. Under number two, choose the MultiUnitRelate table if it has already been added to your map, or browse for it under the folder tab. Under number three, choose BASETAX_ACCT. You may choose to name the Relate or you can simply leave it as the default ‘Relate1’. Click OK.

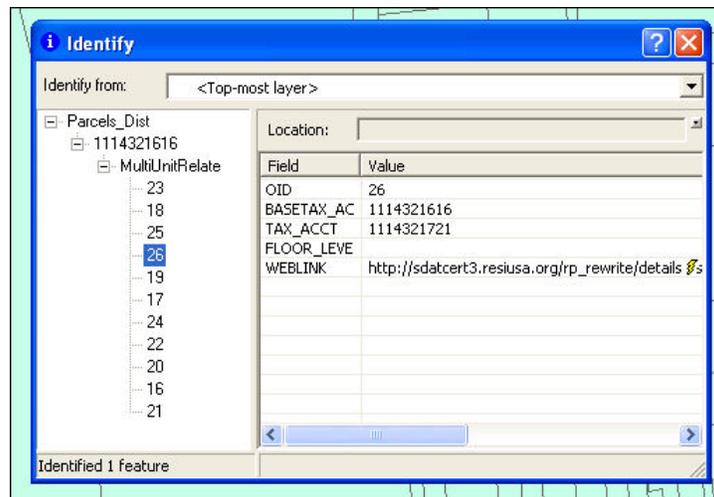


Step 4

Use the identification tool and identify the parcel you wish to look at. In the left column of the Identify box, Parcel_Dist will be listed first. Underneath of this will be the tax account number for that parcel. Clicking the plus sign next to the tax account number will open the MultiUnitRelate table underneath.

Step 5

Click the plus sign next to the MultiUnitRelate table. The associated OBJECTIDs will be listed. Clicking one of these will open the table, which includes OBJECTID, BASETAX_ACCT, TAX_ACCT, FLOOR_LEVEL and WEBLINK. The base tax account will match the original tax account number. (If the MultiUnitRelate table does NOT have a plus sign next to it, then there are no more tax accounts associated with that parcel).



4. What datum is the data projected in?

All of the county data is projected in NAD 1983 Maryland State Plane, feet (horizontal datum) and NADV 1988 Maryland State Plane, feet (vertical datum) for the 2005 Orthophotography Project.

DISCLAIMER:

Frederick County GIS provides data for free download, but it is up to the user to learn the functionality of the map viewer they choose to view the data in. Frederick County GIS does not endorse any specific software nor is responsible for the software mentioned above. This page is meant to be a reference for the user only.

