# How To Make .KAP Files From Your .AT5 Working Files by twoatsea.com

There are at least two reasons to make .kap files from the files you used to create .at5 charts. One: you can display them on a program like openCPN and use them for navigational planning. Two: you can use the .kap files in openCPN as kind of a catalog of the .at5s you've made.

To do this, I use the .jpg, .jgw or .kml files I created with either Google Earth Image Downloader, Universal Maps Downloader, or SAS Planet. I create the .kap files with either ge2kap or cmap2cmap. Here's a little about the advantages and disadvantages of each...

#### ge2kap:

This free program is the best I've found at handling the reduced colors (only 127 colors) in a KAP file but it has problems creating large maps. There are things you can do to reduce the source file size so ge2kap can deal with them, but this process is either annoying and time consuming or the alternative method reduces the resulting map quality.

### mapc2mapc:

The program costs about \$25 US but it's well worth the money. The latest version (version 576f or later), with the dither option checked, handles KAP colors almost as well as ge2kap – you have to look very closely to see the difference. I've never found a map size limit with this program. To create KAPs from Google Earth Image Downloader or Universal Maps Downloader, you'll need mapc2mapc anyway to create the necessary .kml file that ge2kap needs.

I'll explain the process using both programs below.

## Using ge2kap:

To use ge2kap, you'll need a .kml location file along with the .jpg image file. If you've used SAS Planet to download the images, you'll will have created a .kml file when you made the stitched image. Skip the next step. It's only necessary for images downloaded with Google Earth Image Downloader or Universal Maps Downloader.

Step 1: Creating a .kml File with mapc2mapc.

Open mapc2mapc. Select File/Load Calibrated Map from the main menu. Select the .jgw (world file) that the downloader program created. When prompted, select WGS 84 from the window that pops up.

Next select File/Write Calibrations from the main menu. If prompted, it's OK to overwrite the .map file. When the program finishes wit h this step, you'll have the .kml file you need located in the same directory as the .jgw you used.

Step 2: Making the KAP with ge2kap.

Delete all the files in you working directory except the .jpg and the .kml files. Alternatively, you can move those files to another directory to make the KAP. The other files will prevent ge2kap from working properly.

In the right ge2kap panel...

Make sure "Creat chart from overlay. Do not use Google Earth." checkbox is checed

In the "Overlay Chart/Image path or select opencpn or sasplanet" box, select the .jpg file you created.

In the left ge2kap panel...

Select the directory where you want to .kap file on the "Chart Location/Name:" box. You can add a filename here if you wish but that's optional.

Here's what your window should look like...

You will create a chart from the overlay only, Google earth will not be used.	Polygon/Path:		
"Create chart from overlay. Do not use Google Earth." is checked.			
Press Create Chart	Overlay Chart/Image path or select opencpn or sasplanet		
	C:\Users\vich\Desktop\foo from umd\foo from und_cc 👻 <		
	Make land transparent Threshold: 20 %		
	- Bypass GE Image Edit		
Chart Location \Name:	< Create chart from overlay. Do not use Google Earth.		
C:\Users\rich\Desktop\foo from umd\			
Tile Unknown    Depth Units:	Image Editor:		
Unknown   Depth Units:	View.exe <		
Step By Step Create Chart	Overlay Before GE Adjustments     Overlay After GE Adjustments		
Procedures	Final Output		

Hit the "Create Chart" button. Wait a bit, and you'll hear the obnoxious ta-da music when it's done.

## Using mapc2mapc:

In the main menu, select File/Load Calibrated Map.

In the Open Calibration window, navigate to the folder containing your files. Make sure that the drop down list to the right of the File\_name box shows Google Earth Overlay kml/kmz. If not, select it from the list. Then select your .kml file in the File\_name box.

A "Save image file" window will open. You can select your .jpg image, in which case, you will be told that it already exists and asked if you want to replace it. That's OK. Or you can give the image a new name like copy.jpg.

After the main program window says done, select "File/Write KAP/BSB compatible chart." and select the directory and name for the KAP chart.

Fill in the KAP file data window that opens as follows:

🚽 KAP file data		-	-		
Name	West End				
ID	11111		scale	180748	
Depth Units (UN)		METRES			
Soundings (SD)	MEAN LOWER LOW WATER				
Source Edition (SE	)	01			
Updated date (ED)	(mm/dd/yyyyy)	07/21/	2018		
Colours in KAP file	palette 3/7/15/3	1/63/127			
127	Use 7-colour KAP palette   Dither?				
try increasing ti	the created KAP he number of col eans a larger file	ours.		Use PWX/2	2 etc
cancel				ОК	

Make sure you select 127 colours and check the Dither? Box. Don't try to change the name in this window. It won't work. You can always rename the KAP when it's finished.

When you're done, select the OK button. Depending on the size of your map, this could take quite a while to complete. Go for coffee! (Don't worry if the program says not responding. It's just busy thinking.)

### Displaying your KAP files in openCPN:

Put the KAP files you created in your openCPN chart file, or make one if you don't have a usual place you store them.

In openCPN, click on the wrench icon and then the charts icon in the Options window that opens.

Select the Chart Files tab.

If your directory with your new KAP file isn't already in the list, click on the Add Directory button and select the directory with your KAP files.

**Important:** Check the "Force Full Database Rebuild" checkbox and hit either the OK or Apply button. If you don't do this, you won't see your new charts.

Note: if you've just added charts to a directory that was already in the directory list, you can select the "Scan Charts and Update Database" checkbox, and then hit OK or Apply. This is faster than the full rebuild.

After you've done this, zoom and pan to an area that includes your new chart and select it with the "chicklet" button on the bottom of the chart window. If you hover over the chicklets, you will see the chart name and directory.