

Lowrance, Simrad and B&G AT5 Contour Charts User Manual

**Contains
detailed
instructions on
how to use your
custom AT5
Charts with
Lowrance,
Simrad or B&G
Chartplotters**

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INTRODUCTION

Over the years the State and County have been putting down concrete, steel and other material to form artificial reefs where fish can gather and populate. However, for many years the location of the deployment was recorded using Loran and GPS system where the accuracy was intentionally being decreased for national security. In addition, the tug boat, barge and crane offset distances contributed to the inaccuracies. When a deployment was made, the correct location typically was inaccurately recorded. In an effort to eliminate the wasted time and gas driving around looking for dive and fishing sites, we developed a method to visualize the bottom and provide an extremely accurate and detailed map of the bottom structures.

About Contour Charts

The contour maps we produce are a birds-eye (overhead, looking directly down) view of ocean topography (bottom contours or bathymetry). Typically, the closer the contour lines are the sharper the increase or decrease in depth which may indicate a wreck, ledge or reef which attract fish and the greater likelihood you will catch one. Scuba divers will love the ability to see the height and position of the structures and drop anchor, right “down the hatch”. Fisherman will love putting the hook right on the structure and “in the fish’s mouth”. The places to fish and dive are obvious on the charts and extremely accurate.

How the Data Was Collected

Three boats were used for the past 18 years in the collection of hundreds of thousands of sonar data points with the corresponding WAAS GPS Latitude and Longitude from each reef. All contour charts are created from sonar data while slowly “trolling” in a “mowing the lawn” pattern directly over each reef or wreck. For example, more than 25,000 samples were collected for just one area reef. Official county waypoints were used as a starting point and the entire area was scanned. When structures were detected, additional close-in scanning was performed to enhance detail.

How the Plots Were Created

The collected position and depth data is then adjusted for tides, interpolated to fill in uncollected data and analyzed to visualize the bottom. Official county waypoints were overlaid on the plot and the reef deployment data was correlated to nearest detected targets. In some cases, the sites were confirmed by an underwater camera or by scuba diving the site.

How To Use These Maps

For artificial reefs, look for concentric circular contour lines with decreasing depths and color changes per the scale on the right side. These are the structures put down to create the artificial reefs. For ledges and natural reefs look for long closely spaced lines that indicate the presence of a ledge or reef line. We continue to plot ledges and natural reefs until they run out. For example, the Cuda Ledge off of Sarasota is over a mile and a half long. If you move your GPS cursor over a contour chart you will see the exact GPS latitude (North-South) and GPS longitude (East-West) coordinates. A minute of latitude is 6,000 ft so 0.1 minute is 600 feet and 0.01 minute is 60 feet. If you are out on the water and over a reef or wreck, your boats position will be shown over the contour chart.

NOTE: All views on these charts should not be used for navigation.

Contacts

For additional information contact CSS Inc. at 941-739-8394 and please leave a message as I am usually out scanning new reefs and wrecks. Even better is to E-Mail us at Bob@reefsnwrecks.com and we will promptly return your Email. **Checkout our free reef offers for the Alan Fisher reef later in this manual.**

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About the AT5 Lowrance, Simrad and B&G Format

The charts in the AT5 format are way more detailed than the charts that come with your Lowrance, Simrad or B&G GPS chart plotter and they are in full color!

Important!

This format can only be used in recent Lowrance, Simrad or B&G Chart Plotters that support the AT5 format. The list of supported units can be found on the Lowrance or Navico Support website. A firmware update may also be required.

You will also need a PC to download the custom contour maps from our website, unzip the files and download the files to a SD or MicroSD card.

Determine what size SD card your GPS unit requires, SD or MicroSD. An 8GB to 16GB Micro SD should be more than enough room for dozens of maps. If you need a micro SD card, make sure you purchase the Micro SD adaptor for the MicroSD card. Many times, they are sold together.



MicroSD Card and Adapter

Your computer will also need to have a drive for SD cards. If one is not built in, you will need to purchase one at your local store.



External SD Card Reader

About other Formats

We are working hard to produce other formats for other devices. Please contact us if you need support for Raymarine. Check back often to the website as we will be adding additional formats as they are developed.

All the different formats will allow you to find the exact position for a perfect day of fishing or diving.

About the Areas

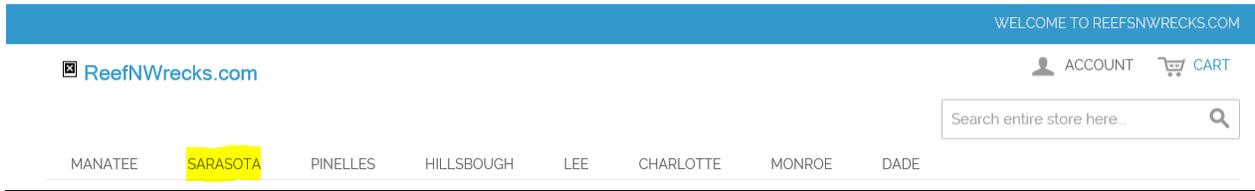
We are also working hard to expand our coverage area. We have scanned over 200 sites around Florida and have started to expand further north and south. Check back often to the website, as we will be adding additional reefs and wrecks on a weekly basis.

Contributions

If you have a boat, good quality GPS/Depth sounder and are interested in joining our data collection team, please contact us at Bob@ReefsnWrecks.com. If you have a favorite area that you would like scanned, let us know and you will receive the completed scan in the format of your choice for free and a promise to limit the sale of that site.

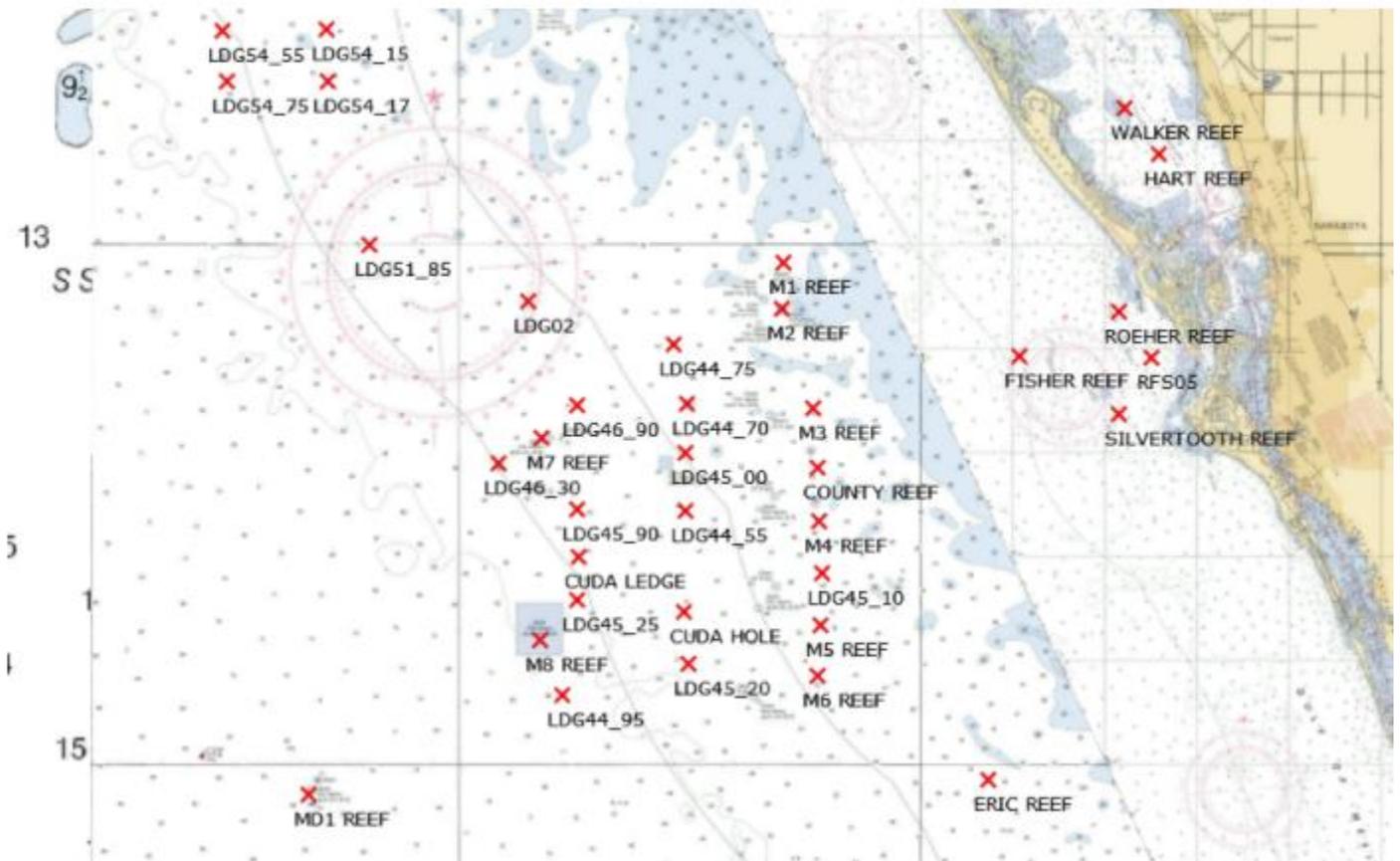
Reefsnwrecks Website

Below is a screen shot from the ReefsnWrecks home page. It has a series of tabs along the top row listing the Florida counties we have made custom contour charts for. In the following examples I have chosen the SARASOTA tab (yellow highlighted)



When that screen comes up, you will see an overall map of the Sarasota area showing the name and location of all the reefs, ledges and wrecks that we have available for you to purchase and download to your system for immediate use.

Sarasota



Scroll down the page and view the various reefs we have available. Selecting the left box in the Shopping Options section at the top of the page just under the county map. This view of the page gives you a little more detail and a description.

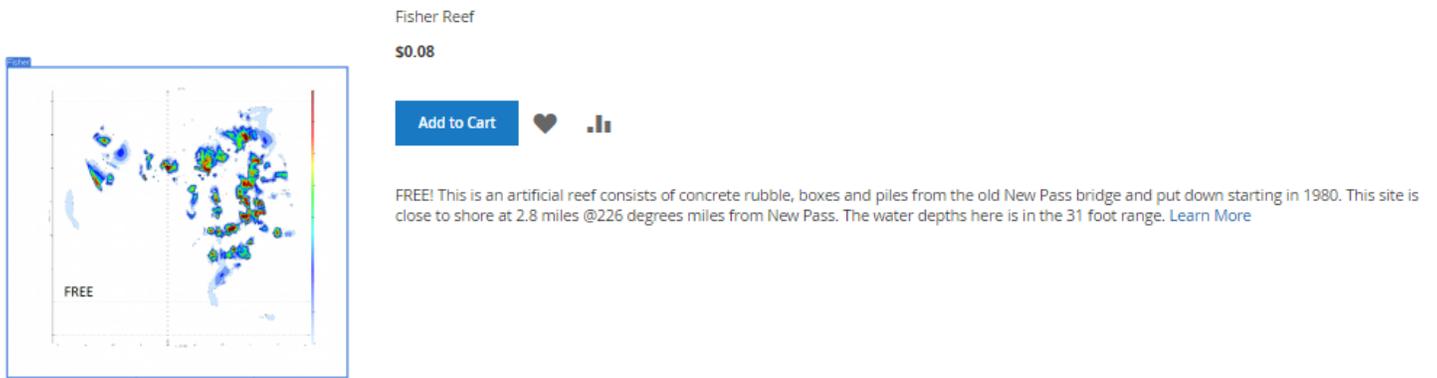
Shopping Options



Items 1-30 of 53

Sort By Product Name ↑

For example, if you selected Sarasota, Fisher Reef, you will see the following screen:

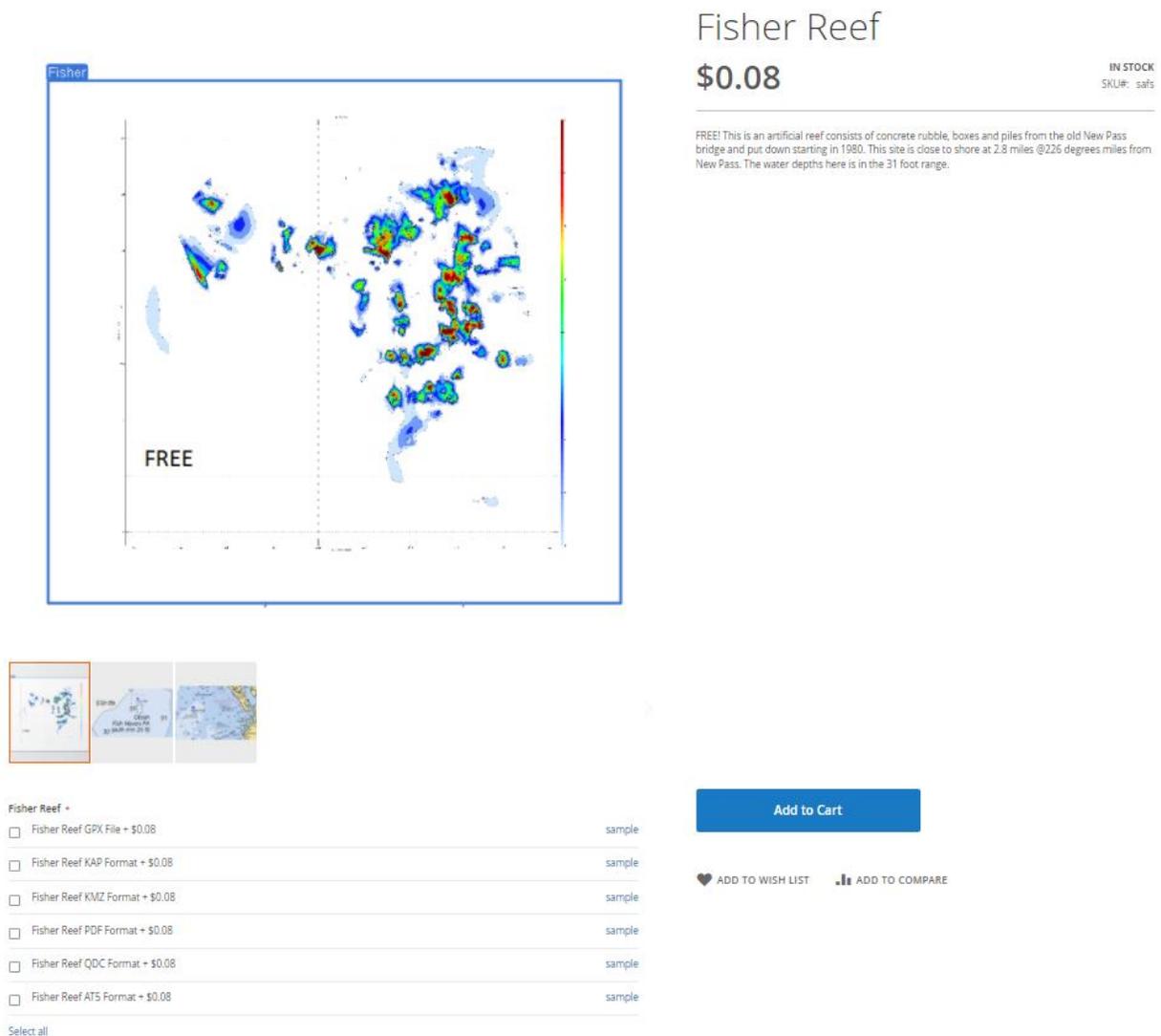


Fisher Reef
\$0.08

[Add to Cart](#)  

FREE! This is an artificial reef consists of concrete rubble, boxes and piles from the old New Pass bridge and put down starting in 1980. This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. [Learn More](#)

If you left mouse click on the reef chart or the reef name it will take you to the format selection and Add to cart page.



Fisher Reef

\$0.08 IN STOCK
SKU#: saf5

FREE! This is an artificial reef consists of concrete rubble, boxes and piles from the old New Pass bridge and put down starting in 1980. This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range.



Fisher Reef

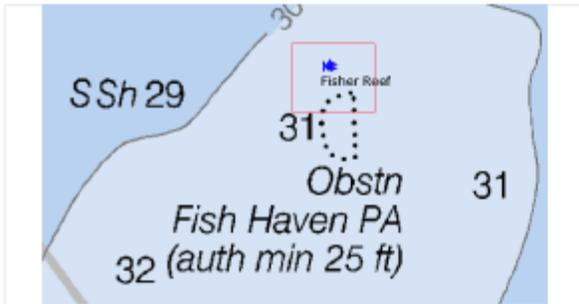
- Fisher Reef GPX File + \$0.08 [sample](#)
- Fisher Reef KAP Format + \$0.08 [sample](#)
- Fisher Reef KMZ Format + \$0.08 [sample](#)
- Fisher Reef PDF Format + \$0.08 [sample](#)
- Fisher Reef QDC Format + \$0.08 [sample](#)
- Fisher Reef AT5 Format + \$0.08 [sample](#)

[Select all](#)

[Add to Cart](#)

 [ADD TO WISH LIST](#)  [ADD TO COMPARE](#)

On middle left of the screen, you will see 3 thumbnail views. For each reef or wreck, we have provided three views, a sample of the actual reef contour map, a close-up of the location on the NOAA chart showing the red custom contour reef chart coverage and a third view zoomed out so you can get a better idea where the reef or wreck is located. The description will tell you the distance off shore and bearing from the nearest inlet or landmark.



FISHER REEF

IN STOCK

This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. The reef consists of concrete rubble and piles from the old New Pass bridge and put down starting in 1980.

MORE VIEWS



FISHER REEF

IN STOCK

This site is close to shore at 2.8 miles @226 degrees miles from New Pass. The water depths here is in the 31 foot range. The reef consists of concrete rubble and piles from the old New Pass bridge and put down starting in 1980.

MORE VIEWS



On the right side you will see a description of the reef or wreck, the distance off shore and bearing from the nearest inlet or landmark, the typical depth in that area and the approximate area shown. On the bottom there is a list of file formats that you can select to purchase. You can select one or all depending on your needs and equipment.

If you select SAMPLE you will be able to download a copy of that format's user manual which has details on ordering, installing and using the selected format.

The GPX format is a file containing the latitude and longitude of points of interest for that reef. It includes all material drops made on an artificial reef, the center of a wreck or a few points along a ledge or drop-off. It is included in all the formats or is available by itself at the base price.

When you select other formats, it adds the additional cost indicated to the base price. For example, ordering the PDF format in the example above will cost \$2.99 (GPX) + \$1.99 (PDF) = \$4.98. Adding the KAP format to the order will cost \$4.98 + \$1.99 or \$6.97. The total price will be shown in the upper right corner.

SKYWAY BRIDGE REEF

\$6.97

IN STOCK

This site is directly south west of the old Sunshine Bridge approaches. The original two-lane bridge was completed in 1954. The main span of the northbound bridge was demolished in 1992 and the approaches for both old spans were made into the Skyway Fishing Pier State Park. It consists of concrete rubble lined up in rows put down in 1992. The water depths here are in the 12 - 22 foot range.

The KAP format contains the GPX file along with the custom contour chart for use on a PC using a full nautical navigation program named OpenCPN or on a smart phone or tablet like an iPad using a full nautical navigation app called SealQ.

The QDC format contains the GPX file along with the custom contour chart for use on a Garmin Depth sounder or Chartplotter compatible with Quickdraw Contours. (Please check your Garmin unit for compatibility with Quickdraw contours on the Garmin website.) If you have a Garmin Handheld GPS chose the KMZ format.

The PDF format contains the GPX file above with a PDF file containing pages of contour maps that can be printed out and brought with you. It contains a list of the various waypoints, their deploy dates and a brief description of the reef along with an overall view and individual zoomed in views of the reef or wreck. Each view contains a grid so you can determine the GPS location of any interesting point.

The KMZ format contains the GPX file along with the custom contour chart in viewable format on Google Earth or on a Garmin Handheld GPS unit. (Please check your Garmin hand held GPS compatibility for Custom Maps on the Garmin website.

The AT5 format contains the GPX file along with the custom contour chart in viewable format directly on a Lowrance, Simrad or B&G chartplotter. (Please check your Lowrance, Simrad or B&G chartplotter compatibility for Custom Charts on the Lowrance, Simrad or B&G website.

I suggest you download the almost FREE Sarasota, Fisher Reef first and try it out on your unit.

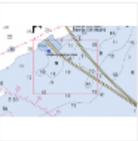
Also, on the right side you will see check boxes for your selection of the format you are purchasing. You can order one or all of the different formats. Each of the graphic chart formats contain the GPX file.

Once you have selected the format you want, select *ADD TO CART*. The following screen will be displayed:

SHOPPING CART

[PROCEED TO CHECKOUT](#)

Skyway Bridge Reef was added to your shopping cart.

PRODUCT	PRICE	QTY	SUBTOTAL	
 SKYWAY BRIDGE REEF <i>SKU: hlsw</i> <i>Download:</i> Skyway Bridge Reef in KAP Format Skyway Bridge Reef in PDF Format	\$6.97	1 Edit	\$6.97	

[EMPTY CART](#) [UPDATE SHOPPING CART](#) -OR- [CONTINUE SHOPPING](#)

DISCOUNT CODES [APPLY](#)

SUBTOTAL \$6.97

GRAND TOTAL EXCL TAX **\$6.97**

GRAND TOTAL INCL TAX **\$6.97**

[PROCEED TO CHECKOUT](#)

If you want to select additional reef or wrecks select [CONTINUE SHOPPING](#). If you are finished, select [PROCEED TO CHECKOUT](#).

If you select Proceed to Checkout you will go to the CHECKOUT screen. As a new customer, select *REGISTER* to create an account and complete the requested information. Please be careful when entering your Email address as all purchases you make will result in an Email to you with a link allowing you to download what you have ordered. Please use a strong password and record it for future use. We have no access to your passwords and they are stored in an encrypted format. If you are a returning customer, enter your Email address and Password on the right and select *LOGIN*.

CHECKOUT

CHECKOUT METHOD

REGISTER TO CREATE AN ACCOUNT

Register and save time!

Register with us for future convenience:

Fast and easy check out

Easy access to your order history and status

REGISTER

RETURNING CUSTOMERS

Sign in to speed up your checkout process

Email Address *

* Required Fields

Password *

[Forgot your password?](#)

LOGIN

Enter your name, address and Email address in the fields provided. Please be sure your Email address is correct, as any purchase you make will send a link to that address.

CHECKOUT

1 CHECKOUT METHOD

[Edit](#)

2 BILLING INFORMATION

YOUR CHECKOUT PROGRESS

BILLING ADDRESS

PAYMENT METHOD

First Name *

John

* Required Fields

Middle Name/Initial

Q

Last Name *

Public

Company

Email Address *

JQPublic@ABC.COM

Top section of the Register Form

Note: You must complete the ordering process to have your Email address and password registered. If you back out before ordering and return later, you will have to re-enter your complete ordering information again.

When complete, press *LOGIN* or *CONTINUE* and you will be directed to the CHECKOUT PAYMENT screen.

Select your payment method and select *CONTINUE*.

CHECKOUT

- CHECKOUT METHOD [Edit](#)
- BILLING INFORMATION [Edit](#)
- PAYMENT INFORMATION**

 What is PayPal?
You will be redirected to the PayPal website when you place an order.

Credit Card (saved)

[CONTINUE](#) [← Back](#)

- ORDER REVIEW**

YOUR CHECKOUT PROGRESS

BILLING ADDRESS | [CHANGE](#)

John Q Public
55 Main Street
Anytown, Florida, 34888
United States
T: 941-555-1212

PAYMENT METHOD

Complete the forms with the requested payment information and press *CONTINUE*.

CHECKOUT

- CHECKOUT METHOD [Edit](#)
- BILLING INFORMATION [Edit](#)
- PAYMENT INFORMATION [Edit](#)
- ORDER REVIEW**

PRODUCT	PRICE	QTY	SUBTOTAL
SKYWAY BRIDGE REEF <i>Download:</i> Skyway Bridge Reef in KAP Format Skyway Bridge Reef in PDF Format	\$6.97	1	\$6.97
	Subtotal		\$6.97
	Grand Total Excl. Tax		\$6.97
	Grand Total Incl. Tax		\$6.97

[PLACE ORDER](#) [Forgot an Item? Edit Your Cart](#)

YOUR CHECKOUT PROGRESS

BILLING ADDRESS | [CHANGE](#)

John Q Public
55 Main Street
Anytown, Florida, 34888
United States
T: 941-555-1212

PAYMENT METHOD | [CHANGE](#)

Credit Card (saved)
Credit Card Type: MasterCard
Credit Card Number: xxx-5642
Name on the Card: John Q Public

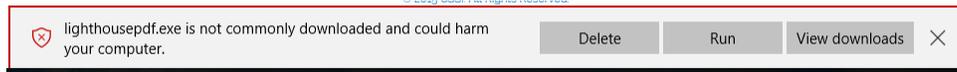
The last step is **ORDER REVIEW** where you can verify your order, billing address and payment method. When done, select [PLACE ORDER](#).

In a few seconds you will receive an Email with a link back to the MY DOWNLOADABLE PRODUCTS screen. Select the blue "Reef XYZ" Format text (highlighted below) to start the download.

Note: You can download the files a maximum of three times.

ORDER #	DATE	TITLE	STATUS	REMAINING DOWNLOADS
100000007	5/3/2016	Cuda Ledge - CUDA LEDGE PDF FORMAT	Available	1

You may receive a download message like the one below. This is because the downloaded file is an .exe self-extracting zip file and for security reasons, the operating system needs to ask you if you want to proceed. Select Run to continue. No software is installed, only files copied to the folder you select.

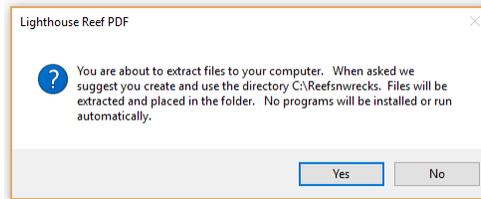


NOTE: We have set the price of Sarasota, Fisher Reef to \$0.08 so you can download a full reef package in any or all the available formats and try them out. Just follow all the instructions above to add it to your cart and checkout. Sorry I have to charge 8¢ because PayPal cannot accept a \$0 payment.

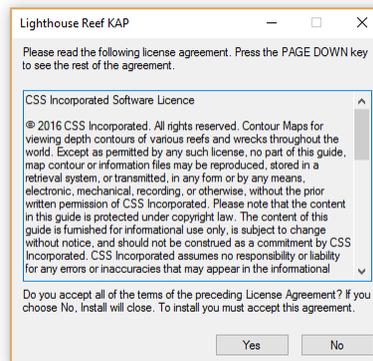
NOTE: All downloadable files are self-extracting .exe files and must be run on a Windows based computer or a computer with Windows compatibility. They cannot be downloaded directly to an Apple computer or tablet. When downloading the .exe files, Microsoft will warn you that the files may be dangerous. Select “Assume the Risk” to override the warning. When activated, the files will automatically un-Zip the various files and place them in a folder of your chose. No programs will be run.

Reefsnwrecks Downloaded File Installation

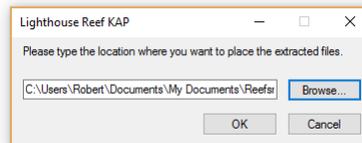
After you select Run the downloaded file will execute and it will give you directions on what to do and suggests where to put the files. The process simply unzips a few files and places them in the folder you specify.



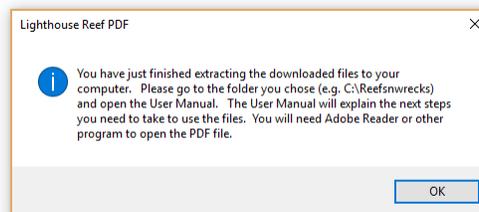
Please read and accept the license agreement.



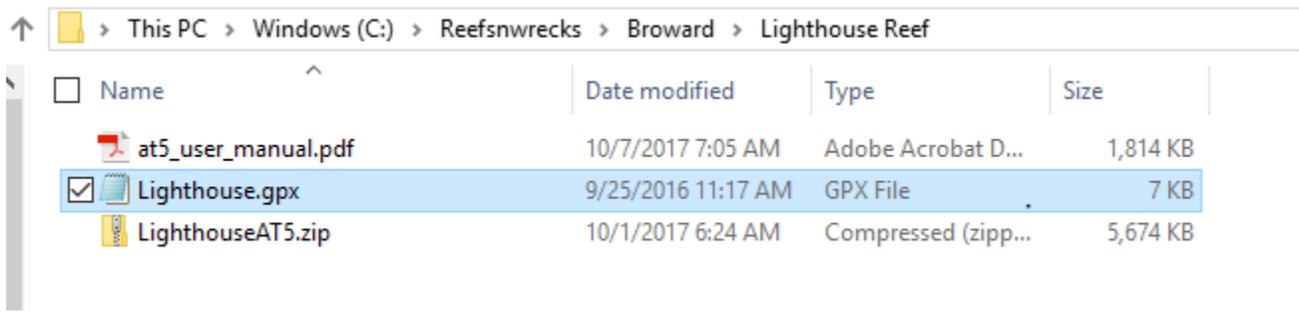
Browse to where you want to put the files. We recommend a dedicated folder called C:\Reefsnwrecks and a folder for each county and reef. For example, C:\Reefsnwrecks\Sarasota\Fisher.



When you are complete you will see this final screen.



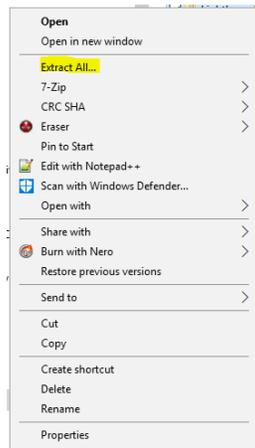
It will copy the AT5_User_Manual.pdf, "ReefAT5".ZIP file which contains the custom contour charts and "Reef".gpx file which contain all the waypoint for that reef to the folder you direct. We recommend a folder named C:\ReefsnWrecks*County**Reef* but any folder will do. (Our instructions will assume C:\Reefsnwrecks.) Just be consistent and place all downloads into the appropriate folder. You should see a series of .AT5 and GPX files. If you have purchased contour charts in the past and are adding new ones, simply put the new ones in the existing folder.



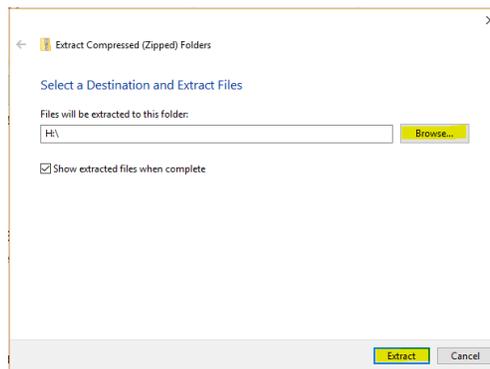
AT5 File Installation

The AT5 format has a number of files associated with each reef or wreck. To download them efficiently they have been Zipped up and need to be Un-zipped for you to use.

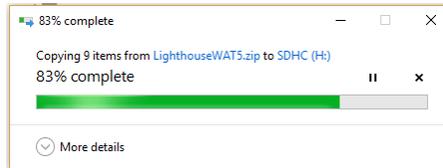
1. Get a small SD card. Most likely a MicroSD card with adapter.
2. Right mouse click on the ReefAT5.zip file and select Extract All...



3. Follow the instructions and Browse to the SD card. Select Extract in the lower right corner.



4. You should see a window showing the extraction process.



5. You should end up with one folder on the card with the name "Reef"AT5 that contains eight `_3DTexture_x.at5` files.

Name	Date modified	Type	Size
_3DTexture_1.at5	9/25/2017 2:09 PM	AT5 File	194 KB
_3DTexture_1D2.at5	9/25/2017 2:09 PM	AT5 File	642 KB
_3DTexture_1D4.at5	9/25/2017 2:09 PM	AT5 File	1,795 KB
_3DTexture_1D8.at5	9/25/2017 2:09 PM	AT5 File	6,247 KB
_3DTexture_2.at5	9/25/2017 2:09 PM	AT5 File	66 KB
_3DTexture_4.at5	9/25/2017 2:09 PM	AT5 File	34 KB
_3DTexture_8.at5	9/25/2017 2:09 PM	AT5 File	34 KB
_3DTexture_16.at5	9/25/2017 2:09 PM	AT5 File	34 KB

6. Copy the "Reef".gpx file to the same "Reef"AT5 folder on the card.

7. Eject the SD card and go to your Lowrance, Simrad or B&G chartplotter. Make sure you have the latest firmware loaded.

8. Insert the SD card into your chartplotter. Verify the direction of the card with your user manual.

Inserting Memory Cards

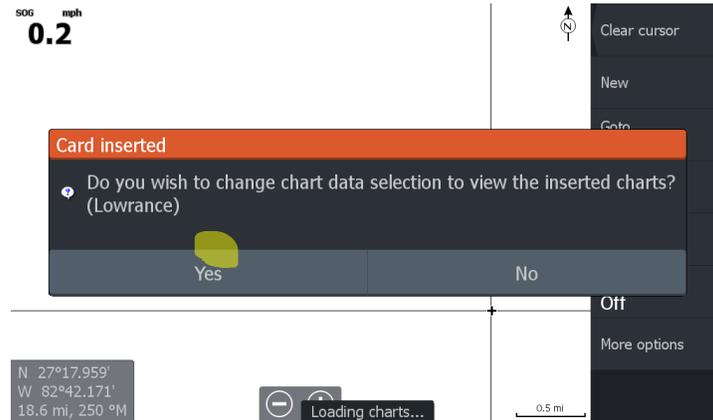
You can use optional memory cards in the chartplotter. Map cards allow you to view high-resolution satellite imagery and aerial reference photos of ports, harbors, marinas, and other points of interest. You can use blank memory cards to record sonar data and transfer data such as waypoints, routes, and tracks to another compatible Garmin chartplotter or a computer.

- 1 Open the access flap or door on the front of the chartplotter.
- 2 Insert the memory card.
- 3 Press the card in until it clicks.

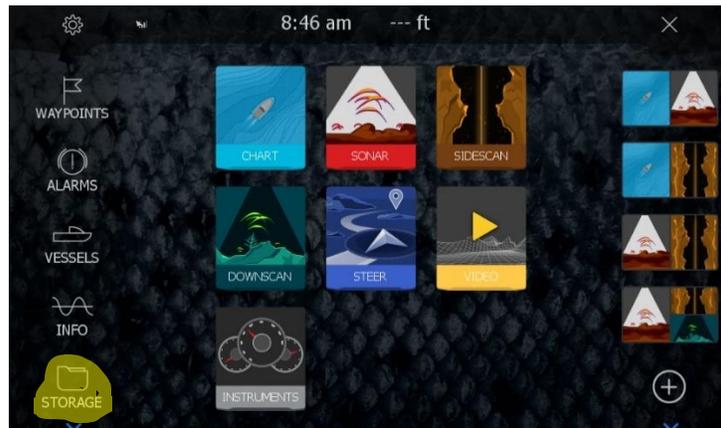


- 4 Close the door.

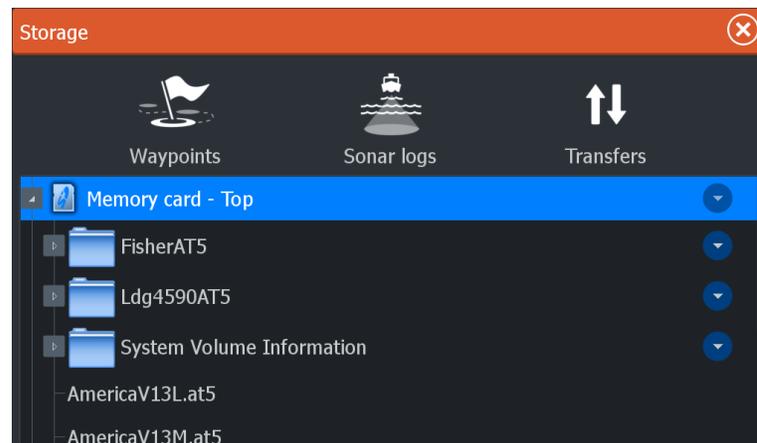
- When you insert the card a window will come up that asks if you wish to change chart data selection to view the inserted charts. Select Yes.



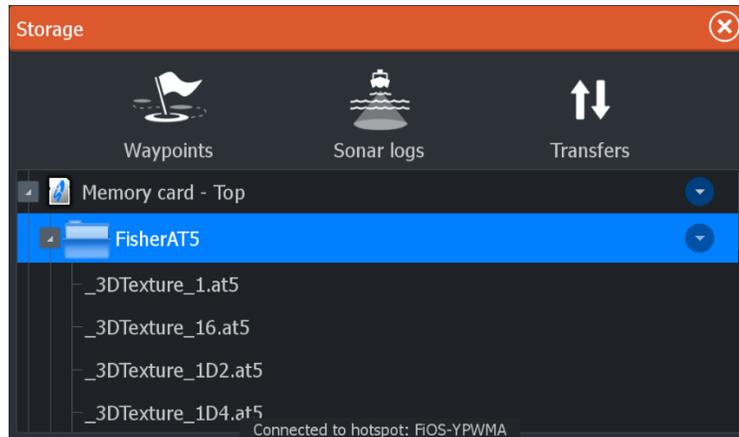
- Go to the main menu and select STORAGE



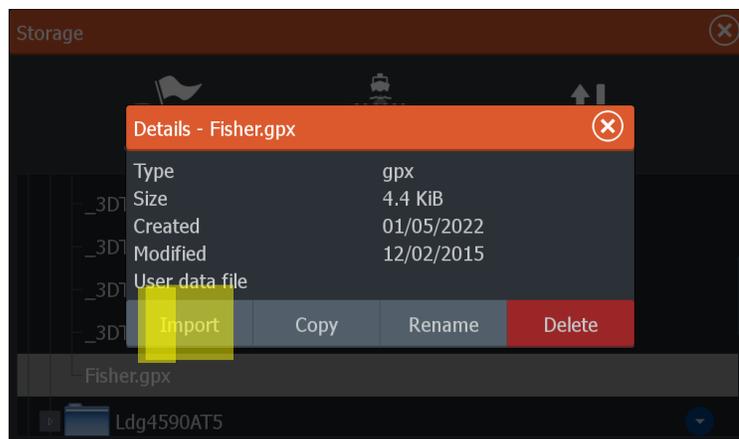
- Select the top menu selection, Memory card – Top (with card in top slot) The custom charts remain on the SD card but the .GPX waypoints need to be imported into the unit.



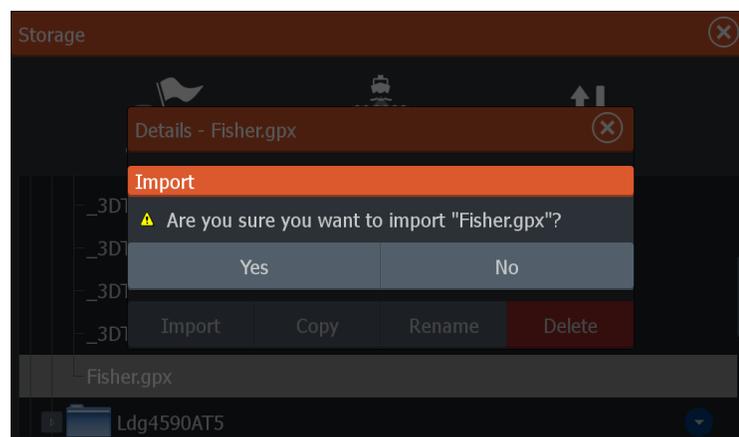
12. Select the first "Reef" AT5 folder.



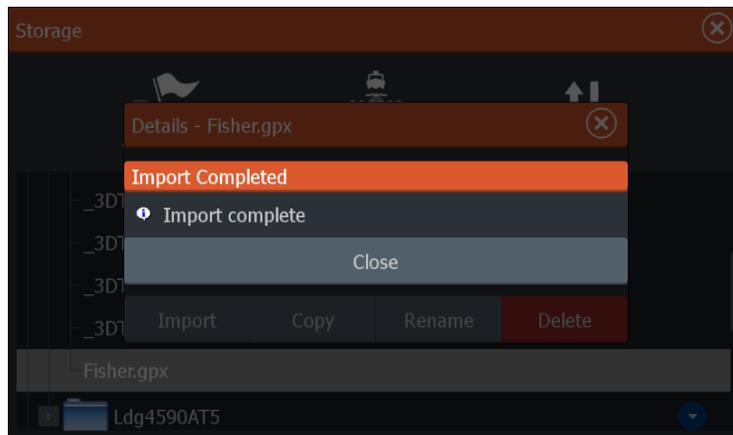
13. Scroll down and highlight the Reef.gpx file.



14. Select *Import* in lower left button

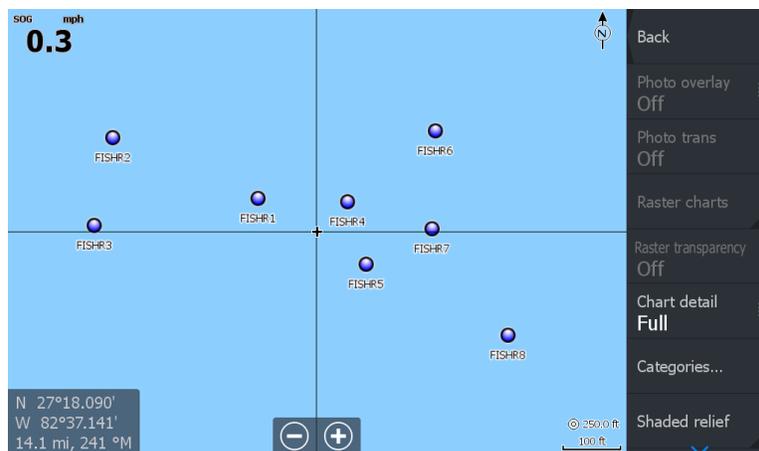


15. Select Yes. After a second the display will show **Import Completed**.

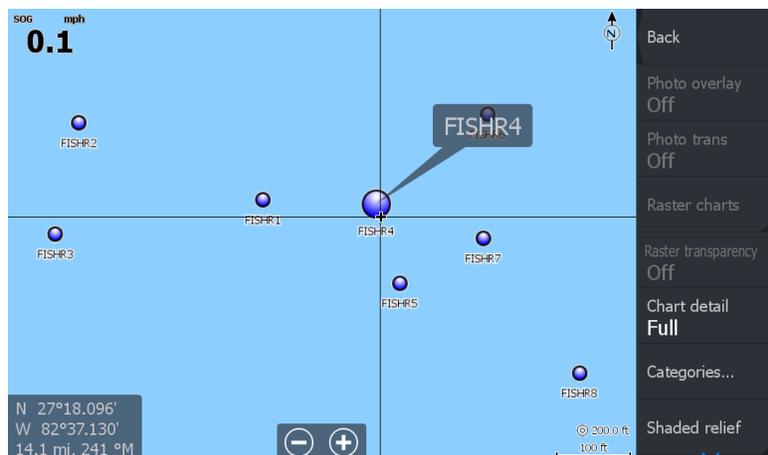


16. Close the Details window and select the next folder then the next "Reef".gpx file and repeat the Import function described above.

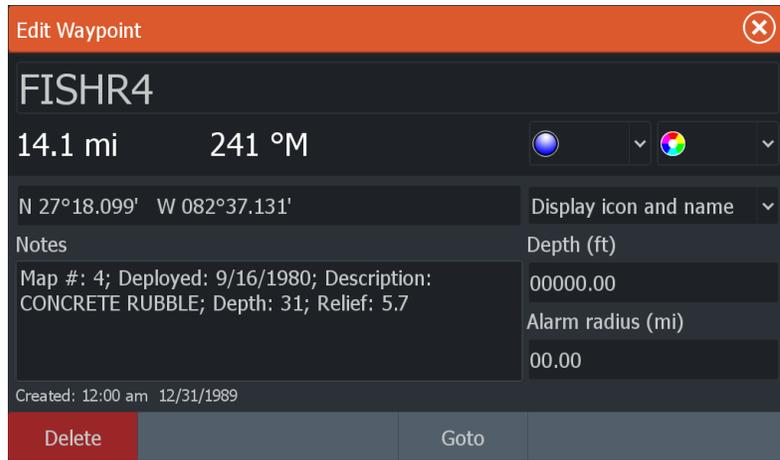
17. Close the Storage window and move the cursor over the reef and check out the imported waypoints.



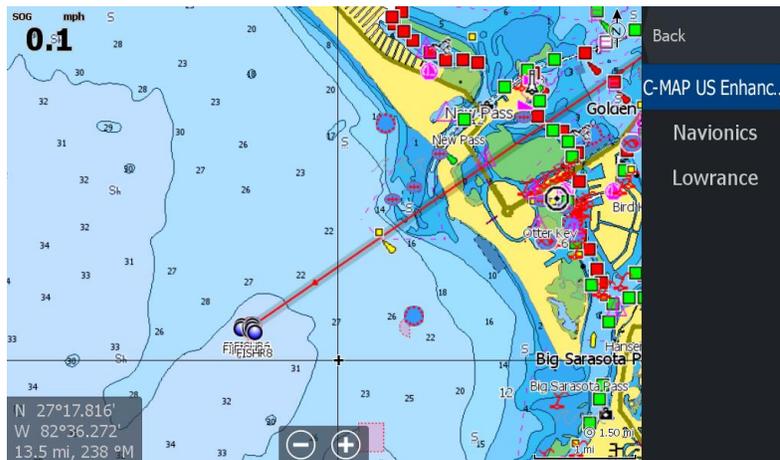
18. Zoom in and touch one of the waypoints. A marker will come up with the waypoint name.



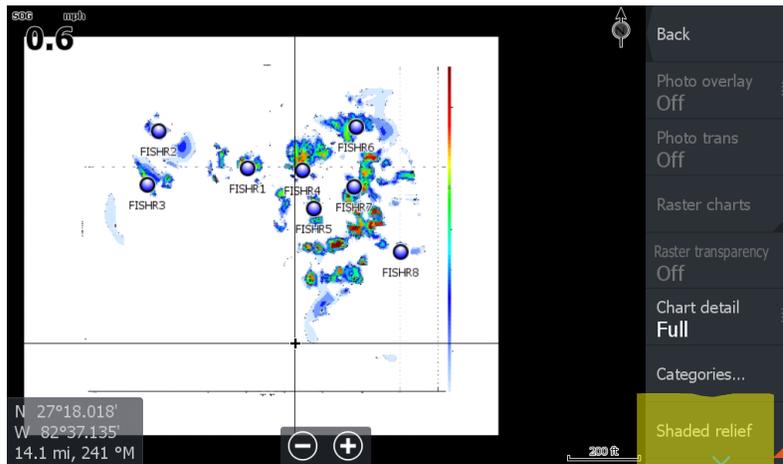
19. Press the Waypoint marker and a Edit Waypoint screen will come up. You will see the distance and bearing from your current position to the waypoint. You can see and modify the waypoint icon. You see the GPS coordinates. You can see the Notes which describe the Map #, Deployed date and a description of the site including the depth and relief in feet off the bottom.



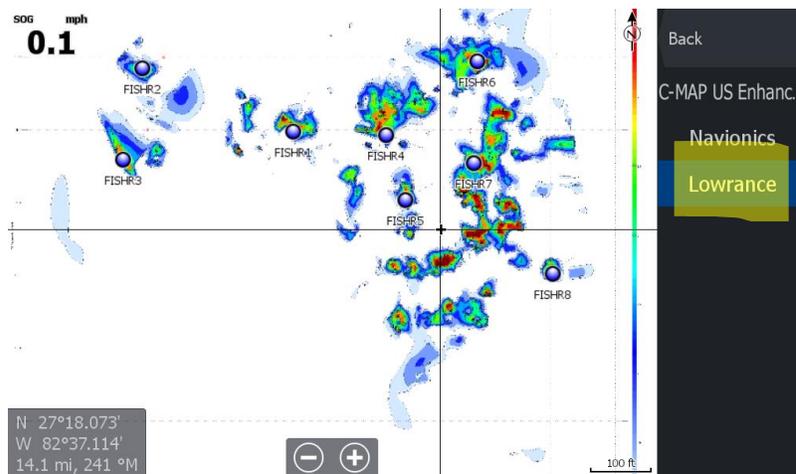
20. If you want to navigate to that waypoint press Goto. A line will direct you from your current location to the waypoint. **NOTE: Remember this is a straight line and not intended as a route. Use your navigation charts to safely navigate to the waypoint.**



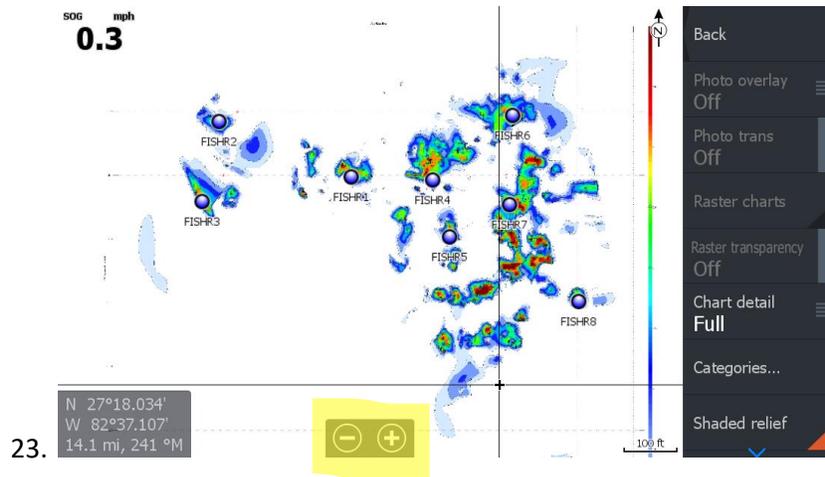
21. When you inserted the SD card it should have loaded the custom AT5 charts. Make sure Shaded relief is on. If not press the Shaded relief screen key and verify the lower right corner of the key is red.



Make sure the Map selection is set to Lowrance. Note Chart source must be set to Lowrance to see your custom charts. Later you can switch back and forth to CMap and Navionics charts when outside the boundaries of the custom charts.



22. You will need to zoom in on the dot and when you get to a close zoom you should see the custom chart. Scroll around and check it out. Zoom all the way in and see the increased detail and resolution.



Getting Started

We strongly urge you to read the User manual for your GPS Chart plotter and become familiar with all the other features of your unit.

Getting Help

Any support questions or problems associated with your GPS Chart plotter should be directed to their support team.

Updates and New Charts

Thank you for your purchase. Check back to the web site often as we are adding new areas and natural ledges to our inventory all the time. Remember, adding new charts are as simple as copying them to your Reefs wrecks folder and unzipping them to your SD card.

Any questions about the Contour Maps should be directed to Bob@reefs wrecks.com.

NOTE: We have set the price of Sarasota, Alan Fisher Reef to \$0.08 so you can download a full reef package in any or all the available formats and try them out. Just follow all the instructions above to add it to your cart. Sorry I have to charge 8¢ because PayPal cannot accept a \$0 payment.