BlueChartTM user's guide





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Data Card Caution & Unlock Disclaimer

CAUTION: Preprogrammed BlueChart data cards should not be used for saving MapSource maps. The preprogrammed data will be lost. If you have a BlueChart data card in your GPS unit, remove it before transferring MapSource maps to the unit to avoid losing the preprogrammed data. If you choose to overwrite the preprogrammed data on a BlueChart data card, Garmin will not replace or recover the lost data.

DISCLAIMER: Your MapSource unlock code is valid for use with your own Garmin GPS unit. A separate unique unlock code is needed for each GPS unit. If you own more than one GPS unit or upgrade to a new GPS unit, you will need a separate code for each GPS unit. If you personally own two Garmin GPS units, you are allowed to obtain a second unlock code for the same region for your own personal use at no additional charge. Simply repeat the unlock process for the second unit. No more than two GPS units may be unlocked with the purchase of a single unlock code. A new unlock code must be purchased if you have already unlocked two GPS units. Information on obtaining additional unlock codes can be found at: www.garmin.com/unlock/. This agreement provides a one-user license and it is illegal to share this data with others. We cannot give refunds or exchanges for MapSource unlock code.

Online Registration

Help us better support you by completing our on-line registration today! Have the ID code of your preprogrammed BlueChart data card handy, and connect to our web site, www.garmin.com.

From our home page, use your mouse and left click the "Product Registration" link on the left side under "QuickLinks". Select "Data Card (Pre-Programmed)" and press the **Next** button. Select "BlueChart Data Card" from the drop down list and press the **Next** button. Fill out our contact information and then press **Next** to complete the registration.

Why should you register? By registering your purchase you are assured of notification of product updates and/or information on new products.

Warranty Information

Your preprogrammed BlueChart data card or MapSource BlueChart CD (CD-ROM) should be examined for damage immediately upon receipt. Garmin will accept returned data cards within 10 days of the purchase date if the card is found to be defective. Garmin will accept and replace opened MapSource CDs within 10 days of purchase for defective software. Garmin will not refund or exchange opened software for reasons other than defect.

What is BlueChart?

BlueChart cartography is Garmin's exclusive marine cartography, which complements Garmin's new line of handheld mapping products and marine chartplotters. These detailed electronic nautical charts look just like paper charts when displayed on your Garmin chartplotter. BlueChart data is available in two forms—preprogrammed data cards or MapSource CDs.

The preprogrammed data cards contain BlueChart map detail based on map coverage regions, and are available in three sizes of coverage areas. Data cards are inserted directly into compatible Garmin chartplotters. MapSource BlueChart CDs contain detailed maps that can be downloaded to data cards or directly to units that don't accept data cards. This offers more flexibility in choosing specific maps within a coverage area to download to a unit or data card. For more information on transferring MapSource maps to a data card or a GPS unit, refer to the MapSource User's Manual and Reference Guide.

What BlueChart Data Will I See?

BlueChart electronic charts make extensive use of graphic symbols to denote map features. Some common symbols you will see include (but are not limited to):

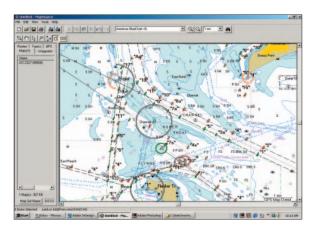
①	Airport/Seaplane Base	0	Fishing Harbor
£	Anchorage Berth	×	Fishing Prohibited
X	Anchoring Prohibited	i	Information
1	Beacon	Ħ	Marina Information
	Building	Þ	Pilot Boarding Area
B	Buoy	9	Precautionary Area
4	Church	\mathbb{B}	Radio Report Point
•	Dangerous Rock	Ĵ-	Recommended Anchorage
ф	Explosive	+	Rescue Station
0	Exposed Rock	ව	Tide Station
	Exposed Wreck	Λ	Yacht Harbor
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Other features common to most BlueChart data include:

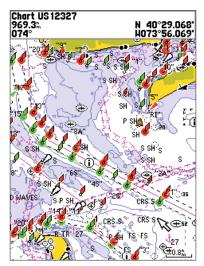
- Depth contour lines (with deep water represented in white)
- Inter-tidal zones (displayed in green on color chartplotters)
- Spot soundings as depicted on the original paper chart
- Navigation aids and symbols
- Obstructions and cable areas

Viewing BlueChart Data

The details and symbols in BlueChart cartography are virtually identical whether you are looking at MapSource data on your PC screen, or directly on your Garmin chartplotter.



Viewing MapSource BlueChart on a PC



Viewing BlueChart on a Garmin unit (GPSMAP 188C)

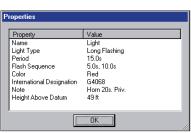
Using BlueChart Cartography

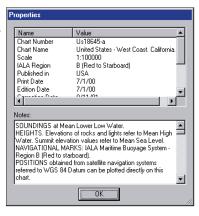
BlueChart cartography is "object oriented," meaning that each feature displayed can be associated with additional information. For example, by placing the chartplotter's cursor on a navigational aid and pressing **ENTER**, a window (like the one to the right) is displayed with additional information for the selected navigational aid.

With a PC, MapSource allows you to view details of many of the BlueChart map features on your monitor screen. When you move the mouse cursor on a map feature, the map feature name is displayed in a white box. With the Selection Tool (Press "S" on the keyboard), click the right mouse button on the desired feature to find out more information. If more than one feature is at a given map location, a list of map feature names appears first. Select the desired feature, then select the "Feature Properties" option. A Properties window similar to the one shown to the right appears.

BlueChart cartography also provides paper chart-specific information such as chart publisher, print date, edition date, NTM (Notice to Mariners) correction date, and scale. Additional notes are available for the paper charts, including details on cautions or warning areas, pollution areas, and the units of measurement used to capture the soundings, depths, bridge clearances, etc. To display chart information on your PC screen using MapSource, place the mouse cursor within the desired chart boundary and (with the Selection Tool) right-click the mouse. Select the name of the desired chart, then select "Feature Properties."













To display paper chart-specific information on your GPS unit, place the chartplotter's cursor on an open area of the chart (absent of any chart features) and press **ENTER**. A window, like the one shown to the left, shows the chart information and allows you to view any additional notes about the chart area.

BlueChart electronic map detail is presented on a chart-bychart basis. By providing paper chart-specific information, you will know exactly what chart and scale each displayed feature is digitized from. BlueChart electronic charts are a faithful reproduction of the published official paper charts that mariners are required to carry.

BlueChart data is not seamless. Just like the paper charts from which the data is derived, you may observe some discontinuity along chart borders, both on your chartplotter and on your PC screen in MapSource. For example, if a contour is present on one chart, and not on the adjacent chart, the BlueChart data will be represented on your chartplotter or PC screen in the same manner, like the window shown to the left. Likewise, if adjacent paper charts used to generate BlueChart data are of different scales, you may encounter shaded areas on the chartplotter. This can occur at any zoom level and can be easily remedied by zooming out one or two scale levels on the chartplotter.

A feature of presenting data in a chart-by-chart manner is selecting only those paper charts that you have on hand or that you want displayed on the chartplotter. By default, all available charts will be displayed from preprogrammed data cards. With MapSource, you may choose which charts to download. See your chartplotter's owners manual for specific steps, but the chartplotter screen will generally appear as shown to the left. From this screen, use the chartplotter's on-screen cursor and **ENTER** key to deselect (remove the check mark from the box) the individual paper charts you do not wish to display.

Using MapSource BlueChart

MapSource CD software allows you to view color maps on a personal computer, with zoom and pan functions for easy map browsing. MapSource also allows you to create waypoints, routes, tracks and map sets to transfer to your GPS (please refer to the MapSource User's Manual and Reference Guide for more information). In MapSource, BlueChart data is in "locked" regions within each of the three coverage areas (Americas, Atlantic and Pacific). Once you have unlocked the desired region(s), you may pick and choose the individual charts you want to use.

Chart boundaries often overlap, and each chart is outlined in gray on your PC screen. As you move the mouse cursor around the map display with the Map Tool selected, each chart is outlined in yellow. You may need to adjust the zoom level to see the entire outline of each chart. To select a chart to be saved to a data card or GPS unit, left-click the mouse inside a chart highlighted in yellow. It's a good idea to select both large scale and small scale charts, so that you may see the BlueChart data at multiple zoom levels on your chartplotter.

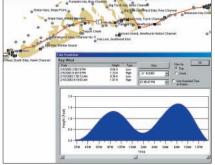


When using MapSource BlueChart, you have the option of focusing on the details of only one chart at a time, like the screen below. With the Map Tool selected, right-click the mouse within the desired chart boundary, select the desired chart name (if necessary) and select "Show This Map Only." To return to the full map display, right-click within the chart again and select "Show All Maps."

Notice the red, green and white circles on the MapSource BlueChart Graphic Map. These are light sectors, which show at what proximity in every direction the mariner will be able to see the lights. If there is a break in the circle, the light cannot be seen from that direction. The color of each circle corresponds with the color of the light. This is a special feature of MapSource BlueChart that is not seen in BlueChart data on all Garmin chartplotters.



MapSource Tides and Marine Services Information



ELake W Bli ^{Pga B} Properties B C Property Palm Beach Yacht Club & Marina Name Location West Palm Beach, Florida (983) 561-655-1944 Phone Number Monitored VHF Channel 16 USA Working VHF Channel 68 USA Palm Be Availability Open All Year Boating Services Slips Hookups Water, Electricity Gas, Diesel Provisions Restaurant, Ice Credit Cards Master Card, VISA, American Ex.. Other Services Phone, Restrooms, Shower, Lau. Bor

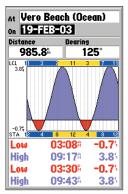
Another special feature of MapSource BlueChart is tide prediction. Because of overlapping charts and duplicate symbols, MapSource separates the Tides and Marine Services information from the rest of the BlueChart data for easier viewing on your PC screen.

To view tide or marine services information in MapSource, goto View, then Region and select Tides and Marine Services. With the Selection Tool (Press "S" on the keyboard), right-click the mouse on a Tide Station symbol and select "Predict Tides" to see the tidal information for that area. A "Tide Prediction" screen like the one shown at the top left appears.

To view details about marine services, right-click the mouse on a Marina Information symbol and select "Feature Properties," just like viewing feature properties for other MapSource BlueChart map features. A "Properties" window like the one shown to the left appears

To view MapSource
Tides and Marine ser-

vices information on your GPS unit, select and download the desired Tide and Marine maps the same way you would with MapSource BlueChart maps. The same marine properties information found in MapSource can be displayed on your chartplotter by placing the map cursor on the desired symbol and pressing **ENTER**. Many Garmin chartplotters have the capability to display tide information. Refer to your chartplotter's owner's manual for compatibility and instructions on viewing tide information on your unit.



MapSource Real Time Tracking

MapSource BlueChart also offers Real Time Tracking when a PC is connected to a chartplotter on

your vessel. With real time tracking enabled, MapSource will read information from the GPS, show the GPS as a red triangle on the Graphic Map, display the tracking data in the GPS Tab, and record a track. The GPS Tab displays the data gathered from the GPS in real time, including tracking status, speed, altitude, compass bearing, position coordinates, date and time. Please refer to the MapSource User's Manual and Reference Guide for details on using the real time tracking feature.

In order to do real time tracking with MapSource BlueChart, you must do the following:

- Have a valid unlock code for your GPS unit installed in MapSource
- Receive real time information from a Garmin unit that supports locked maps
- The GPS unit must be in Garmin transfer mode, not NMEA mode

NOTE: Older Garmin GPS units do not recognize this technology and will not be compatible with MapSource's real time tracking feature.



The Difference Between Pixels & Paper

Occasionally, boaters notice that the BlueChart data doesn't duplicate a particular feature shown on the paper chart they are using. Garmin uses the best charts available and carefully turns the paper charts into a digital format for display on electronic chartplotters. If there are errors, omissions or discrepancies on paper, they may occur electronically, too.

On paper charts, sometimes even large features like a breakwater may not be shown clearly or at all. Large breakwaters are sometimes not shown on the harbor charts, but are shown on coastal charts—or vice versa! These decisions are made by the chart maker, such as NOAA/NOS. In some cases, bridges or other features washed away in storms decades ago are still shown on the paper charts. Recent changes in coastlines are often not reflected on paper charts for years.

The same is true for new marinas and ports. Sometimes, well-known local landmarks may be shown so small on the paper chart they are indistinguishable from surrounding features to someone not familiar with the area. In these cases, a feature may not be accurately depicted on the electronic chart.

What Should I Do if I Notice a Chart Error?

Even when a feature is shown on the paper chart it can be overlooked or misspelled during the data entry process. These are small problems that can be easily corrected and do not affect the quality of the overall BlueChart data.

If you notice something missing or incorrect in BlueChart data, first check the best available scale paper charts of the area to see how the feature is represented on the paper chart. If we have not represented it accurately, or if you know additional information about the feature, please visit our web site and fill out the online error report form. This form can be found at http://www.garmin.com/cartography/bluechart/errorForm.html.

Okay, I'm Ready. Where Does the BlueChart Data Card Go?

There are some differences in configuration from one Garmin chartplotter model to the next, but generally you should look for a compartment door or rubber weather cap along the bottom of your chartplotter. Beneath that door you will find a slot for the BlueChart data card. To insert the data card, simply place the data card into the slot (connector end first) with the label facing toward the front of the chartplotter. Once the data card is in place, close the compartment door or reinsert the rubber weather cap. Refer to your chartplotter's owner's manual for specific data card installation instructions.

CAUTION: Make sure the connector end of the BlueChart data card is inserted into the data card slot, NOT the extractor handle end. Improper installation can result in internal damage to your chartplotter and void your warranty.



BlueChart data cards are not waterproof! When the data card is not in use it should be kept in the original packaging for safekeeping and stored away from exposure to sun and rain. BlueChart data cards are susceptible to damage from static electricity. In low humidity environments, you should ground yourself on a large metal object prior to handling the data card. The data card packaging is sealed and does not contain any user-serviceable parts.

How to Read the ID Code on a Preprogrammed BlueChart Data Card

All factory preprogrammed BlueChart data cards are identified by a seven-digit ID code. This identification system uses the following convention:



Region (xx) codes include:

AE = Asia, East (Japan, China, Indonesia, etc.) AF = Africa AW = Asia, West CA = Canada

EU = Europe (incl. all Mediterranean Sea) PC = Pacific Ocean (Australia, New Zealand, etc.)

SA = South, Central America and Mexico US = United States and the Caribbean

Size of coverage (z) codes include:

S = Small coverage area B = Bathymetric R = Regular coverage area X = Extra Large L = Large or extended coverage area J = Jumbo

As additional areas are mapped electronically, the list of available BlueCharts will continue to grow. For the most up-to-date listing of available BlueChart data cards, please visit our web site at www.garmin.com. From the Cartography section of the Garmin web site, you'll be able to view not only the listing of available BlueCharts, but also the areas of coverage and the paper charts contained within each data card. A printed "availability flyer" is also available which lists our current offering of BlueChart data cards, part numbers and the latest pricing.

Purchasing BlueChart Data Cards or the MapSource BlueChart CD-ROM

You may purchase additional BlueChart data cards or MapSource BlueChart CD-ROMs by contacting Garmin at one of the addresses or phone numbers listing on page 2 of this guide.

Three MapSource BlueChart CD-ROMs are available: Americas, Atlantic and Pacific. One CD-ROM contains BlueChart data for the specific coverage area purchased and is a convenient way to reprogram and use your BlueChart data card in more than one area. MapSource BlueChart is a Microsoft Windows®-based program which uses Garmin unlock technology, allowing you to use one coverage area from the CD-ROM when initially purchased and to purchase additional coverage areas as the need arises (internet access is recommended for completing the unlock process). The CD-ROM is a cost-saving alternative to purchasing multiple BlueChart data cards. Updates will be distributed on new CD-ROMs, providing a convenient method of acquiring the most recent chart data.

Exclusive Garmin Programs

These programs are applicable to the U.S. market only. These programs are not available through our European or Asian offices. All programs listed are available directly from Garmin U.S. to end-users only.

Garmin believes that updates are an extremely critical issue for Marine Cartography, and we are committed to providing our customers with regular semi-annual updates. As updates occur, we will make every effort to ensure that the areas of coverage for a given data card or MapSource region remain the same. Updates may include new data or NTM (Notice to Mariners) changes. Any changes can be viewed on details page for each data card.

BUYER PROTECTION POLICY: (Applies ONLY to preprogrammed BlueChart data cards) If a BlueChart data card is updated within 30 days of the original purchase date you may receive one free update. The identification number and coverage area must remain the same.

UPDATE / TRADE-IN PROGRAM: (Applies ONLY to preprogrammed BlueChart data cards) Garmin will strive to offer semi-annual updates. If you own a factory preprogrammed BlueChart data card that is outdated, or would like to purchase a data card for a different coverage area, Garmin offers an Update/Trade-In program. Simply send us your old factory preprogrammed BlueChart data card, and receive a 50% discount towards Garmin's list price on any factory preprogrammed BlueChart data card that includes sizes of S(mall), R(egular), L(arge), and B(athymetric). These sizes of data cards can be interchangeable, e.g. trade-in a Small BlueChart data card for a Bathymetric data card, or vice versa. For e(X)tra large data cards, you may update or trade-in ONLY for the same extra large data card (exact part number) or for a different extra large card (part number ends in X) for a 50% discount. For (J)umbo data cards, you may update or trade-in ONLY for the same jumbo data card (exact part number) or for a different jumbo card (part number ends in J) for a 50% discount. Only one update or trade-in per new BlueChart data card is allowed. BlueChart pre-programmed data cards CAN NOT be traded in for any MapSource BlueChart CD-ROM. To return a BlueChart for update, contact Garmin Cartography Sales at 800/800.1020 (or via e-mail at: cartography@garmin.com) to obtain a Return Material Authorization (RMA) number. The return authorization number must appear on the outside of the shipping package, and the BlueChart data card must be shipped freight prepaid to Garmin at: 1200 East 151st Street, Olathe, KS 66062.

UPGRADING FROM G-CHARTS TO BLUECHARTS: If you've previously used Garmin's G-Chart line of electronic maps, please note that we will continue to support that product line (however, G-Charts will not work in our BlueChart-compatible chartplotter product line). The BlueChart line provides added flexibility, greater coverage and offers you cost savings. To encourage current Garmin customers to upgrade to our new BlueChart line, Garmin provides a 25% discount on new BlueChart data cards or MapSource BlueChart CD-ROM for end-users who send us an old G-Chart, excluding our Extra Large and Jumbo BlueChart data cards. This is a one-for-one discount available directly from Garmin only. To verify compatibility with BlueChart data, you will be asked to present proof of a new chartplotter purchase. (NOTE: BlueChart is not compatible with older models including: GPSMAP 130/135/175/180/185/205/210/215/220/225/230/235.)

Notes:

BlueChart Data Card Order Form

If you wish to Trade-In or Update BlueCharts, please contact Garmin Customer Service at: 800/800.1020.

Shipping Address:				
Name			 -	Date
Street Address				
City				
Zip/Postal Code		Cou	ntry	
Telephone		Fax	(
E-mail Address				
BlueChart(s) Request	ed (e.g. MUS0	06R - Chesap	eake)	
Model of Chartplotte NOTE: BlueChart data cards 215/220/225/230/235				
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Bill the above to my	Credit Card:			
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Account #				Exp. Date
Signature (as it appe	ars on your ca	rd)		

Mail or fax completed form to Customer Service at Garmin International (see address and phone numbers on page 2). You can also order online at www.garmin.com or by contacting us via e-mail at: cartography@garmin.com. Photocopies of this form are acceptable.

For the latest free software updates (excluding map data) throughout the life of your Garmin products, visit the Garmin web site at www.garmin.com.



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