GARMIN

GPSMAP 295 Buyer's Guide

Thank you for taking the time to learn about the most exciting advancement in portable aircraft navigation systems since the advent of the moving map! The GARMIN GPSMAP 295 combines what we've learned from our previous GPSMAP 195 and GPS III Pilot models into a new one-size-fits-all sytem, with a COLOR display!

This booklet is an introductory guide to acquaint you with the unit's major features. At press time, the product was still under development and some changes may occur from the illustrations provided here. An Owner's Manual is included in the package when you purchase a GPSMAP 295 and describes all the features of the the GPSMAP 295.

GPSMAP 295 FEATURES

The GPSMAP 295 features an 11-key keypad and a 16-color LCD display. Both the display and keypad may be illuminated for nighttime operation.

The GPSMAP 295 Package includes:

- *GPSMAP 295 Receiver*
- *Mount*
- *Cigarette Lighter Adapter*
- *Remote Antenna Kit*
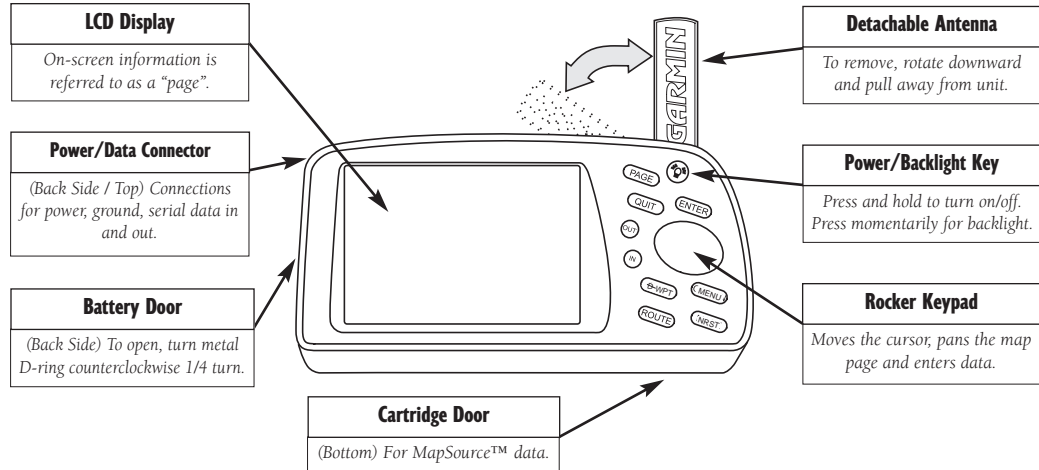- *Owner's Manual*
- *QuickStart Guide*

MAP DISPLAY GRAPHIC

TEXT FIELDS

The information displayed on your GPSMAP 295's screen is referred to as a "page". A page can include graphics, text or both.

LCD Display

On-screen information is referred to as a "page".

Power/Data Connector

(Back Side / Top) Connections for power, ground, serial data in and out.

Battery Door

(Back Side) To open, turn metal D-ring counterclockwise 1/4 turn.

Cartridge Door

(Bottom) For MapSource™ data.

Detachable Antenna

To remove, rotate downward and pull away from unit.

Power/Backlight Key

Press and hold to turn on/off. Press momentarily for backlight.

Rocker Keypad

Moves the cursor, pans the map page and enters data.

The ROCKER KEYPAD is used to enter data. In this case, to retrieve database information by entering an airport name (identifier).

The ROCKER KEYPAD can also be used to move the cursor (highlighted area). In this example, to the on-screen GOTO button.

(POWER)— Red key turns the unit on and off. Controls three levels of screen backlighting intensity.

(PAGE)— Scrolls main pages in sequence and returns display from a menu/options page to a main page.

(QUIT)— Returns the display to a previous page or restores a data field's previous value.

(ENTER/MARK)— Activates highlighted fields and confirms menu options and data entry. Press and hold this key to mark present position as a waypoint.

(IN and OUT)— Allows you to zoom in/out through 24 scales on the Map Page.

(ROCKER KEYPAD)— Controls the movement of the cursor, is used to select options and positions, and to enter data.

(Ð→WPT)— Allows you to retrieve Jeppesen database information and/or select a destination waypoint.

(MENU)— Displays a menu of available options for the current page. Press twice to display the Main Menu.

(ROUTE)— Displays a list of stored routes and allows you to create new routes.

(NRST)— Displays nine nearest airports, navaids, airspaces, user waypoints, ARTCC and FSS frequencies.

DATA ENTRY

Entering data, such as waypoint names, typically begins and ends with the ENTER key. Use the ROCKER KEYPAD to enter the actual data: UP/DOWN to change the highlighted character, RIGHT to move on to the next character.

To select a GOTO destination:

1. Press the Ð→WPT key.

2. Use the ROCKER KEYPAD to highlight the waypoint name field and press ENTER.

3. Use the ROCKER KEYPAD to enter the name (identifier) of the desired destination. Again, UP/DOWN to select the highlighted character; RIGHT to move to the next character. Press ENTER when finished.

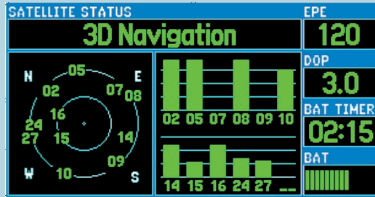4. Use the ROCKER KEYPAD to highlight the on-screen GOTO button and press ENTER.

The Satellite Status Page shows the location of overhead satellites and the signal strength of each satellite received.

To turn the GPSMAP 295 on, press and hold the red power key.

A Welcome Page will be displayed while the unit conducts a self test. Once testing is complete, the Welcome Page will be replaced by a database page (which shows the effective date for the Jeppesen database), then by the Satellite Status Page. The GPS antenna requires a clear, unobstructed view of the sky for best performance. The Satellite Status Page can be used to determine a location in the cockpit which provides good satellite visibility. The graphic circles depict the location of each satellite—both direction and elevation above the horizon (with the inner circle representing 45º). The bar graph display shows the signal strength for each satellite received.

Once the GPSMAP 295 has determined your position, you'll typically be receiving five to nine satellites. If you haven't pressed any keys (other than the red power key), the display will automatically change to the Map Page, showing your current location.

To turn the GPSMAP 295 off, press and hold the red power key.

| Satellite Status Page | Position Page | Map Page | HSI Page | Active Route Page |

(PAGE) ▶▶▶   ◀◀◀ (QUIT)

The GPSMAP 295 has five main pages which are linked together in a continuous loop. You can quickly cycle through these pages in either direction using the PAGE or QUIT keys, as shown above.

To display the next page in the sequence, press the PAGE key.

To display the previous page in the sequence, press the QUIT key.

The Position Page indicates your current latitude/longitude location–along with ground track, ground speed and trip computer functions.

File tabs along the top of the page indicate which waypoint information is currently being displayed. "RUNWAY" information appears in the example above.

With the addition of optional MapSource data, your GPSMAP 295 will join you on-the-road; providing exit information, address lookup and business listings.

The Đ→WPT key allows you to easily review the Jeppesen database information for any airport, VOR, NDB or inter-section, or display information on a user-created waypoint. A series of file tabs along the top of the the waypoint information pages shows which information type is being displayed.

To display database information:

1. Press the Đ→ WPT key. The waypoint information pages will appear. A highlighted tab along the top of the page will indicate which information type is currently being displayed.

2. Use the LEFT/RIGHT keys on the ROCKER KEYPAD to select the desired file tab (information type).

3. For airports, navaids or user-created waypoints: Use the UP/DOWN keys on the ROCKER KEYPAD to highlight the waypoint name (identifier) field, and press ENTER. (NOTE: Airport, VOR and NDB information can also be retrieved by facility name or city name–eliminating those brief moments of stress when you can't remember the airport/navaid identifier!)

4. Use the ROCKER KEYPAD to enter the name (identifier) of the desired waypoint: UP/DOWN to select the highlighted character and RIGHT to move to the next character. (Use LEFT if you make a mistake and need to back up.)

5. Press ENTER when finished. If an airport is selected, return the cursor (highlight) to the file tabs along the top of the page to review other airport information: location, runways, communication frequencies and available approaches.
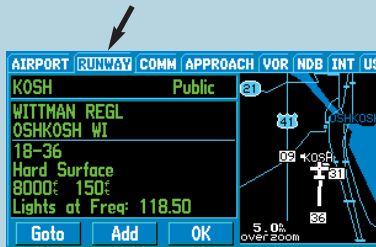
With the addition of an optional MapSource™ CD-ROM & Cartridge Kit, your GPSMAP 295 will become your Personal Navigator™ on the ground as well. MapSource data is available in MetroGuide, Roads&Rec or Topographic formats. MetroGuide data provides information on business addresses/phone numbers, address lookup capabilities and available services at highway exits within the selected metropolitan area. Topographic data is available in 1:100,000 quadrangles—covering the contiguous United States, Alaska and Hawaii.
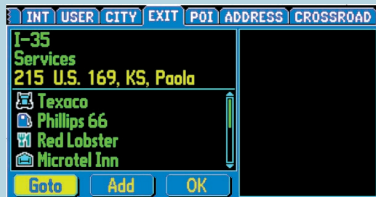
Once the desired airport, navaid or user-created waypoint is displayed, you're only one easy step away from designating the waypoint as a "direct-to" destination. A straight-line course is then plotted from your present position to the selected waypoint.

To designate a direct-to destination:

1. Select the desired destination waypoint using the steps described above.

2. Use the ROCKER KEYPAD to highlight the on-screen GOTO button and press ENTER.

Several layout options are available for the Map Page, including, a full-screen map (shown above), a map with two "Big Numbers" data fields,...

...a map with small-text data fields (shown at right), or a map/HSI combination (shown above).

The Map Page displays your present position as an airplane icon in the center of the map. Nearby airports, VORs, NDBs, intersections and user-created waypoints are depicted on the map (each with its own unique symbol) with the identifier listed directly above the waypoint's symbol. Airspace boundaries, lakes, rivers, highways, railroads and towns will also appear on the map. And, the color display makes concerns over screen clutter a thing of the past!

The map scale is shown in the lower left-hand corner of the map. Use the zoom keys (IN and OUT) to adjust the map to the desired scale.

Nearby Airport

Present Position

Definable Data Fields

To change the map scale:

> 1. Press the IN zoom key to show more detail for a smaller area.
>
> 2. Press the OUT zoom key to show a larger area.

The map can be oriented with the top of the page always pointing north, orientied along your desired course, or it can automatically rotate to keep your current direction of travel (track) at the top of the screen.
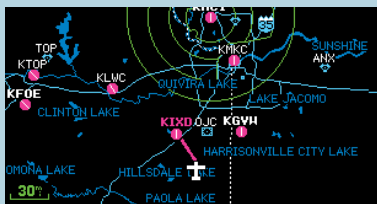
When viewing the map page, the ROCKER KEYPAD provides map panning and database retrieval capabilities.

To pan to another area on the map:

> 1. Use the ROCKER KEYPAD to move the panning cursor. Simply press and hold one side of the ROCKER KEYPAD to move more quickly. A data field will appear above the map, showing bearing and distance to cursor and the cursor's position.
>
> 2. When finished panning, press QUIT to return the map to your present position.

To view database information for an airport, navaid or user-created waypoint displayed on the map:
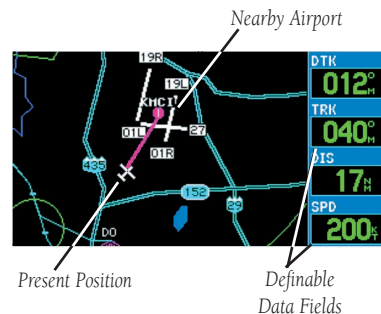
> 1. Use the ROCKER KEYPAD to point to the desired waypoint. Once the panning cursor is place over the waypoint, its identifier will be highlighted.
>
> 2. Press ENTER to view the database information for the selected waypoint. If an airport is selected, use the LEFT/RIGHT keys on the ROCKER KEYPAD to view additional waypoint information pages.
>
> 3. To select the waypoint as a direct-to destination, use the ROCKER KEYPAD to highlight the on-screen GOTO button and press ENTER.
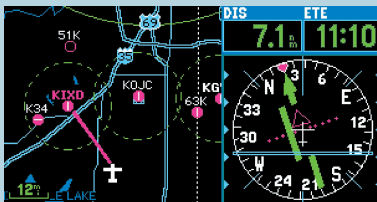
A "Big Numbers" option is available to display larger characters in the definable data fields adjacent to the graphic HSI.

The "nearest" information pages provide listings for the nine nearest airport, VORs, NDBs, intersections and user waypoints. Listings are also provided for nearby center frequencies, flight service stations and airspaces.

HSI PAGE FEATURES

The HSI Page provides a graphic depiction of a mechanical HSI, guiding you to your destination. The graphic HSI depicts the desired course to the destination waypoint (or the next waypoint in a route), current ground track, off course error and a TO/FROM indication. The rotating compass card indicates your current ground track, at the top of the page. (NOTE: This is different from a mechanical HSI, which indicates aircraft heading instead of ground track.) The desired course pointer and CDI indicate the desired course and whether or not you're on the desired course.
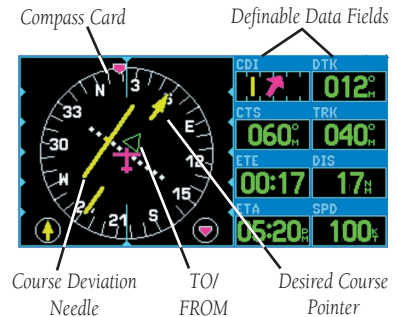
The CDI is indicated by a course deviation scale (across the center of the HSI) and a moving course deviation needle. If you move off course, the needle will indicate how far off course you are, based upon its placement along the course deviation scale. To get back on course and center the needle, simply steer toward the needle. The CDI scale setting is adjustable for 0.25, 1.25 or 5.0 (nautical mile/statute mile/kilometer).

As you reach your destination, a TO/FROM indicator at the center of the HSI will indicate waypoint passage. Along the right-hand side of the page are eight user-definable data fields that display such items as ground speed, distance and time to next waypoint, and vertical navigation guidance.

NEAREST AIRPORTS

The NRST key provides detailed information on the nine nearest airports, VORs, NDBs, intersections and user waypoints within 200 miles of your present position. Information regarding the five nearest FSS (flight service station) and center (ARTCC) communication outlets, along with associated frequency(s) is available from the NRST key, as well. When an airspace alert is provided, pressing NRST will even provide additional detail about the airspace. "Nearest" information is selected by choosing the appropriate "file tab", based upon the desired information type.

To view the nearest airports, navaids, etc.:

1. Press the NRST key.

2. Use the ROCKER KEYPAD to select (highlight) the desired file tab.

The database information pages, described previously under "Retrieving Database Information", are also available from "nearest" information pages. For a nearby airport, this allows you to quickly retrieve data on available runways, communication frequencies, field elevation and available fuels.

To view additional information for a nearby airport, navaid, user waypoint or airspace:

1. Select the desired "nearest" information page as describe above.

2. Use the ROCKER KEYPAD to highlight the desired item on the page.

3. Press ENTER to view the database information for the selected item.

4. If an airport is selected, use the LEFT/RIGHT keys on the ROCKER KEYPAD to select between "Airport [location]", "Runway", "Comm [frequency]", and "Approach" information.