

The Garmin logo is displayed in white on a black rectangular background at the top left of the page. It consists of the word "GARMIN" in a bold, sans-serif font, with a small white triangle above the letter "I".

**GARMIN**

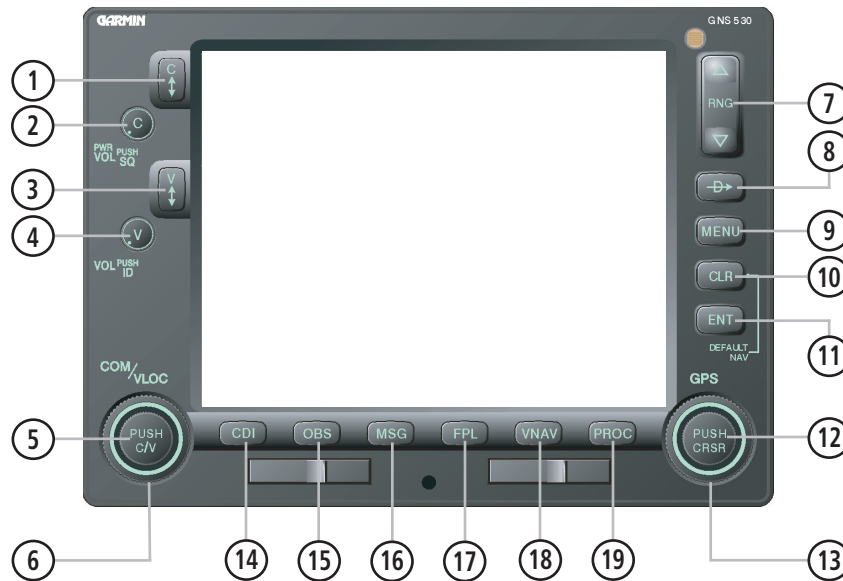
A blue decorative shape is located in the upper left quadrant of the page. It is a curved, wedge-like shape that tapers towards the left edge and bottom edge.

# **GNS 530(A)**

*Quick Reference*

A light blue decorative shape is located at the bottom of the page. It is a wide, curved shape that tapers towards the right edge, mirroring the shape of the blue shape above it.

## KEYS AND KNOBS



### LEFT-HAND KEYS AND KNOBS

**(1) COM Flip-flop Key** – Swaps the active and standby COM frequencies. Press and hold to select emergency channel (121.500 MHz).

**(2) COM Power/Volume Knob** – Controls unit power and communications radio volume. Press momentarily to disable automatic squelch control.

**(3) VLOC Flip-flop Key** – Used to swap the active and standby VLOC frequencies (i.e., make the selected standby frequency active).

**(4) VLOC Volume Knob** – Controls audio volume for the selected VOR/Localizer frequency. Press momentarily to enable/disable the ident tone.

**(5) Small Left Knob (COM/VLOC)** – Used to tune the kilohertz (kHz) value of the standby frequency for the communications transceiver (COM) or the VLOC receiver, whichever is currently selected by the tuning cursor. Press this knob momentarily to toggle the tuning cursor between the COM and VLOC frequency fields.

**(6) Large Left Knob (COM/VLOC)** – Used to tune the megahertz (MHz) value of the standby frequency for the communications transceiver (COM) or the VLOC receiver, whichever is currently selected by the tuning cursor.

### RIGHT-HAND KEYS AND KNOBS

**(7) RNG Key** – Allows the pilot to select the desired map range. Use the up arrow to zoom out to a larger area, or the down arrow to zoom in to a smaller area.

**(8) Direct-to Key** – Provides access to the direct-to function, which allows the pilot to enter a destination waypoint and establishes a direct course to the selected destination.

**(9) MENU Key** – Displays a context-sensitive list of options. This options list allows the pilot to access additional features or make settings changes which relate to the currently displayed page.

**(10) CLR Key** – Used to erase information, remove map detail, or to cancel an entry. Press and hold the **CLR** Key to immediately display the Default NAV Page.

**(11) ENT Key** – Used to approve an operation or complete data entry. It is also used to confirm information during power on.

**(12) Small Right Knob** – Used to select pages within the page groups. Press this knob momentarily to display the on-screen cursor. The cursor allows the pilot to enter data and/or make a selection from a list of options. When entering data, the small **right** knob is used to select the desired letter or number and the large **right** knob is used to move to the next character space. The small **right** knob is also used to move the target pointer up (turn clockwise) or down (counterclockwise) when the map panning function is active.

**(13) Large Right knob** – Used to select page groups: NAV, WPT, AUX, or NRST. With the on-screen cursor enabled, the large **right** knob allows the pilot to move the cursor about the page. The large **right** knob is also used to move the target pointer right (turn clockwise) or left (counterclockwise) when the map panning function is active.

### BOTTOM ROW KEYS

**(14) CDI Key** – Used to toggle which navigation source (GPS or VLOC) provides output to an external HSI or CDI.

**(15) OBS Key** – Used to select manual or automatic sequencing of waypoints. Pressing the **OBS** Key selects OBS mode, which retains the current 'active to' waypoint as the navigation reference even after passing the waypoint (i.e., prevents sequencing to the next waypoint). Pressing the **OBS** Key again returns the unit to normal operation, with automatic sequencing of waypoints. When OBS mode is selected, the pilot may set the desired course to/from a waypoint using the Select OBS Course pop-up window, or an external OBS selector on the HSI or CDI.

**(16) MSG Key** – Used to view system messages and to alert the pilot to important warnings and requirements.

**(17) FPL Key** – Allows the pilot to create, edit, activate, and invert flight plans, as well as access approaches, departures, and arrivals. A closest point to flight plan feature is also available from the **FPL** Key. See pages 17 and 18 for more information on flight plans.

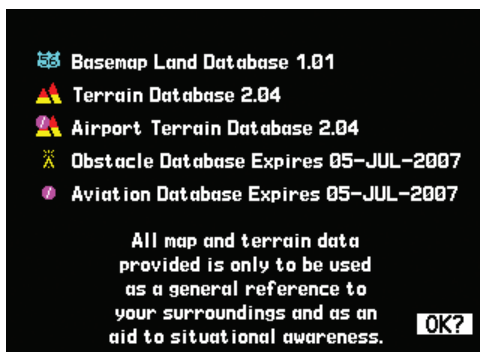
**(18) VNAV (Vertical Navigation) Key** – Allows the pilot to create a three-dimensional profile which provides guidance to a final (target) altitude at a specified location.

**(19) PROC Key** – Allows the pilot to select and remove approaches, departures, and arrivals from the flight plan. When using a flight plan, available procedures for the departure and/or arrival airport are offered automatically. Otherwise, the pilot may select the desired airport, then the desired procedure.

### Powering on the GNS 530

- 1) Turn the **COM Power/Volume** Knob clockwise to turn the unit power on and set the desired radio volume.
- 2) A welcome page appears briefly while the unit performs a self test, followed sequentially by the Unit Type Page and the Software Version Page. Then (depending on configuration) the Weather Page, the Traffic Page, the Aviation Database Page, and the Land/Terrain/Obstacles Database Page are sequentially displayed.
- 3) Once the self-test concludes, the Database Versions Page appears which shows the current database information on the NavData® Card and Terrain Data Cards. Press the **ENT** Key to acknowledge the Database Versions Page and proceed to the Instrument Panel Self-test Page.

## POWER ON



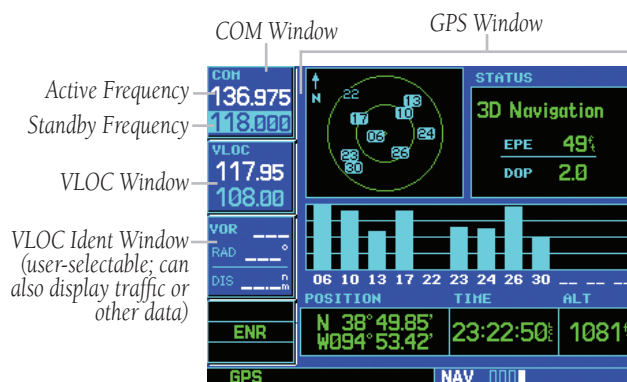
- 4) The Instrument Panel Self-test Page allows the pilot to verify that the GNS 530 is communicating properly with in-panel instruments. Compare on-screen indications with the information depicted on connected instruments, such as the CDI, HSI, RMI, and/or external annunciators.



- 5) After verifying proper operation, press the **ENT** Key to display the Satellite Status Page.

## DISPLAY LAYOUT (WINDOWS)

The GNS 530's display is divided into four separate *windows* (or display areas). The left side of the display provides a COM Window (top two lines) and a VLOC window (by default with VOR ident/radial, but selectable for other data). The right side of the display consists of a GPS Window, which shows the various navigation, waypoint information and settings *pages*. The bottom of the display is used for annunciators.



Each unique screen of information is referred to as a *page*. Pages are typically selected using the small and large **right** knobs, with the cursor removed from the GPS Window. See pages 6 and 7 for details on arrangement of the GNS 530's main pages.

## CURSORS

There are two separate cursors: a tuning cursor and a GPS window cursor. The tuning cursor is used to select the standby COM or VLOC frequency. Press the small **left** knob to move the tuning cursor to VLOC Window. Then, use the small and large **left** knobs to select the desired frequency. The **COM Flip-flop** and **VLOC Flip-flop** keys are used to activate the selected frequency. Use the large **right** knob to move the GPS window cursor around the page.

## FREQUENCY SELECTION

### Selecting a frequency:

- 1) If the tuning cursor is not currently in the desired window (COM or VLOC), press the small **left** knob momentarily.
- 2) Turn the large **left** knob to select the desired megahertz (MHz) value. For example, the '117' portion of the frequency '117.70'.



- 3) Turn the small **left** knob to select the desired kilohertz (kHz) value. For example, the '.70' portion of the frequency '117.70'.



- 4) To activate the selected frequency, press the **COM Flip-flop** Key for COM frequencies, or the **VLOC Flip-flop** Key for VLOC frequencies.



### Quickly tuning and activating the 121.500 Emergency Channel

Press and hold the **COM Flip-flop** Key for approximately two seconds.

### DATA ENTRY

Data is entered in the GPS Window using the large and small **right** knobs. The large **right** knob is used to move the cursor about the page. The small **right** knob is used to select individual characters for the highlighted cursor location. For example, to change the "N" in the following illustration to a different character, turn the small **right** knob.



# MAIN PAGE GROUPS

## MAIN PAGE GROUPS

The GNS 530's main pages are divided into four separate page groups: NAV, WPT, AUX, and NRST. Each page group is comprised of multiple pages. The *page groups* are selected using the large **right** knob. The individual *pages* are selected using the small **right** knob.

Page Groups			
NAV Group	WPT Group	AUX Group	NRST Group
5 NAV Pages	10 WPT Pages	3 AUX Pages	8 NRST Pages



Current Page Group      Number of Pages in Current Page Group      Position of Current Page within Current Page Group

The bottom of the display indicates which page group is currently being displayed (e.g., NAV, WPT, AUX, or NRST), the number of pages available within that group (indicated by the square icons), and the placement of the current page within that group (indicated by a highlighted square icon).

### Selecting the desired page group and page:

- 1) Press and hold the **CLR** Key to select the Default NAV Page.
- 2) Turn the large **right** knob to select the desired Page Group.
- 3) Turn the small **right** knob to select the desired page.

## NAV PAGE GROUP

The NAV Page Group includes five pages (if configured with TAWS or TERRAIN).



Default NAV

Map

TAWS or TERRAIN



NAV/COM

Satellite Status



**NOTE:** Six or seven NAV pages are available when the GNS 530 installation includes connection to traffic and/or weather information sources.

## WPT PAGE GROUP

The WPT Page Group includes ten pages.



Airport Location

Airport Runway

Airport Frequency

Airport Approach



Airport Arrival

Airport Departure

Intersection

NDB



VOR

User Waypoint

## AUX PAGE GROUP

The AUX Page Group includes three pages.



**NOTE:** The AUX Page Group may have four AUX pages available when the GNS 530 installation includes connection to a weather information source.

## NRST PAGE GROUP

The NRST Page Group includes eight pages.



**NOTE:** The flight plan pages are selected by pressing the FPL Key and using the small **right** knob to select the desired page.



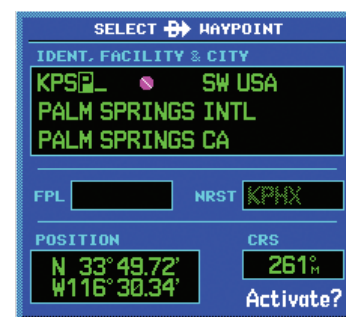
**NOTE:** The vertical navigation and procedures pages are selected by pressing the VNAV and PROC keys.

## Selecting a direct-to destination:

- 1) Press the **Direct-to** Key. The Select Direct-to Waypoint Page appears, with the waypoint identifier field highlighted.



- 2) Use the small and large **right** knobs to enter the identifier of the desired destination waypoint.



- 3) Press the **ENT** Key to confirm the selected waypoint, and press the **ENT** Key again to activate the direct-to function.



## DIRECT-TO NAVIGATION

### Selecting a direct-to destination from the Map Page:

- 1) Select the Map Page from the NAV Page Group.
- 2) Press the small **right** knob to display a panning pointer.
- 3) Turn the small and large **right** knobs to place the panning pointer at the desired destination location.
- 4) If the panning pointer is placed on an existing airport, NAVAID, or user waypoint, the waypoint name is highlighted. Press the **Direct-to** Key and the **ENT** Key twice to navigate to the waypoint.



- 5) If the panning pointer is placed on an open location, press the **Direct-to** Key then press the **ENT** Key twice to create a '+MAP' waypoint and navigate to it.

### Selecting a direct-to destination by facility name or city:

- 1) Press the **Direct-to** Key. The Select Direct-to Waypoint Page appears, with the waypoint identifier field highlighted.
- 2) Turn the large **right** knob to highlight the facility name (second line) or the city (third line) field.
- 3) Use the small and large **right** knobs to enter the facility name or city location of the desired destination waypoint. When spelling the facility name or city, the GNS 530's Spell'N'Find feature selects the first entry in the database based upon the characters the pilot has entered up to that point.



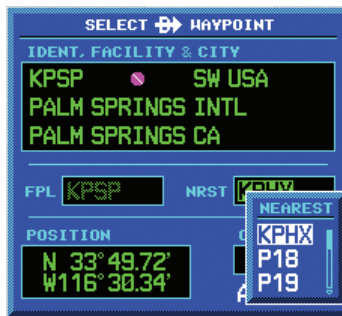
- 4) Continue turning the small **right** knob to scroll through any additional database listings for the selected facility name or city. If needed, use the small **right** knob to scroll backwards.
- 5) Press the **ENT** Key to confirm the selected waypoint, and press the **ENT** Key again to activate the direct-to function.



## VIEWING AIRPORT INFORMATION

### Selecting a nearby airport or a flight plan waypoint as a direct-to destination:

- 1) Press the **Direct-to** Key.
- 2) Turn the large **right** knob to highlight the nearest airport (NRST) or flight plan (FPL) field.
- 3) Turn the small **right** knob to display a window listing nearby airports or all waypoints in the active flight plan.



- 4) Continue turning the small **right** knob to scroll through the list and highlight the desired airport.
- 5) Press the **ENT** Key to confirm the selected waypoint, and press the **ENT** Key again to activate the direct-to function.

### Viewing airport information:

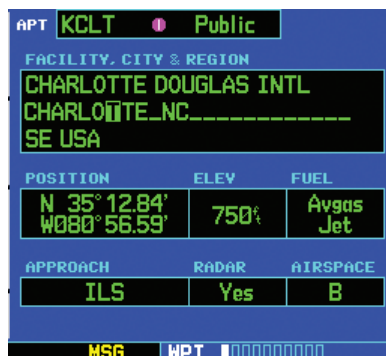
- 1) Turn the large **right** knob to select the WPT Page Group. 'WPT' appears along the bottom of the display.
- 2) Turn the small **right** knob to select the desired WPT page. Airport information is displayed on the first six WPT pages: airport location, airport runway, airport frequency, airport approach, airport arrival, and airport departure.
- 3) Press the small **right** knob to activate the cursor.
- 4) Use the small and large **right** knobs to enter the identifier of the desired airport.
- 5) Once the identifier is entered, the information for that airport appears on the page. Press the **ENT** Key to accept the selected identifier.
- 6) To view the other airport information pages, press the small **right** knob to remove the flashing cursor and turn the small **right** knob to select the desired page.



## VIEWING AIRPORT INFORMATION

### Viewing airport information by facility name or city:

- 1) Select the Airport Location Page (see page 6).
- 2) Press the small **right** knob to activate the cursor.
- 3) Turn the large **right** knob to highlight the facility name (second line) or the city (third line) field.
- 4) Turn the small and large **right** knob to enter the facility name or city location of the desired destination waypoint. When spelling the facility name or city, the GNS 530's Spell'N'Find feature will select the first entry in the database based upon the characters that have been entered up to that point.

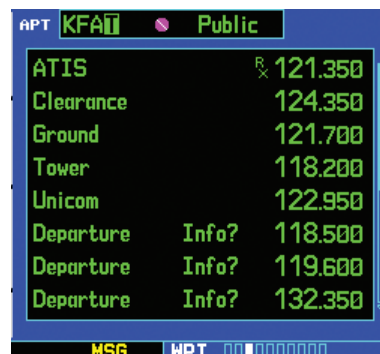


- 5) Once the facility name or city is entered, the information for that airport appears on the page. Press the **ENT** Key to accept the selected airport.
- 6) To view the other airport information pages, press the small **right** knob to remove the flashing cursor and turn the small **right** knob to select the desired page.

### Auto-tuning a frequency from a list:

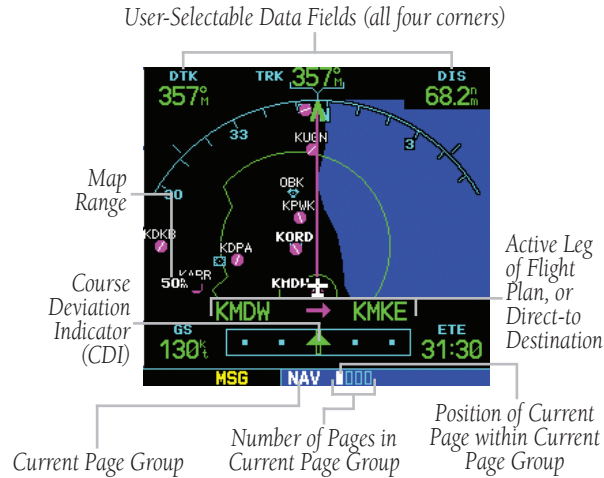
The GNS 530's auto-tune feature allows the pilot to quickly select any database frequency in the GPS Window as the standby frequency. With a minimum of keystrokes, any frequency listed in the GPS Window can be transferred to the standby field of the COM or VLOC window.

- 1) Select the Airport Frequencies Page from the WPT Page Group (see page 6).
- 2) Press the small **right** knob to place the cursor on the airport identifier field.
- 3) Use the small and large **right** knobs to enter the identifier of the desired airport. Press the **ENT** Key when finished.



- 4) Turn the large **right** knob to highlight the desired frequency.
- 5) Press the **ENT** Key to place the highlighted frequency in the standby COM or VLOC Window field (as appropriate).
- 6) To activate the selected frequency, press the **COM Flip-flop** or **VLOC Flip-flop** Key (as appropriate).

## DEFAULT NAV PAGE



The following symbols are used on the Default NAV Page (directly above the CDI), to depict the 'active leg' of a flight plan or direct to:

Symbol	Description
	Direct-to a Waypoint
	Course to a Waypoint, or Desired Course between Two Waypoints
	Procedure Turn
	Procedure Turn
	Vectors-to-Final
	DME Arc to the Left
	DME Arc to the Right
	Left-hand Holding Pattern
	Right-hand Holding Pattern

## Quickly displaying the Default NAV Page:

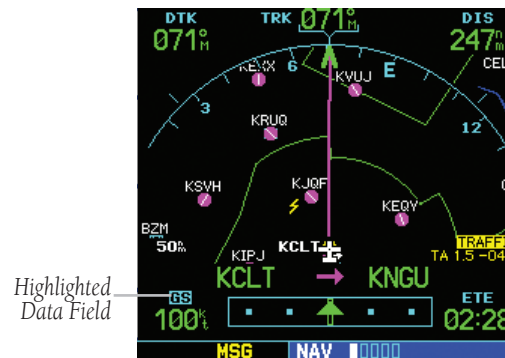
From any page, press and hold the **CLR** Key for approximately two seconds.

## Selecting a different data item for any data field:

- 1) With the Default NAV Page displayed, press the **MENU** Key to display the Default NAV Page Menu.
- 2) The 'Change Fields?' option is already highlighted, so press the **ENT** Key to select this option.

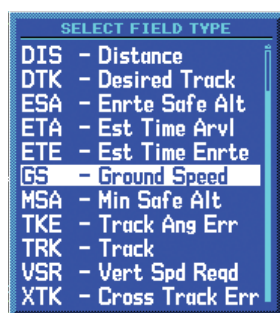


- 3) Use the large **right** knob to highlight the data field to be changed.



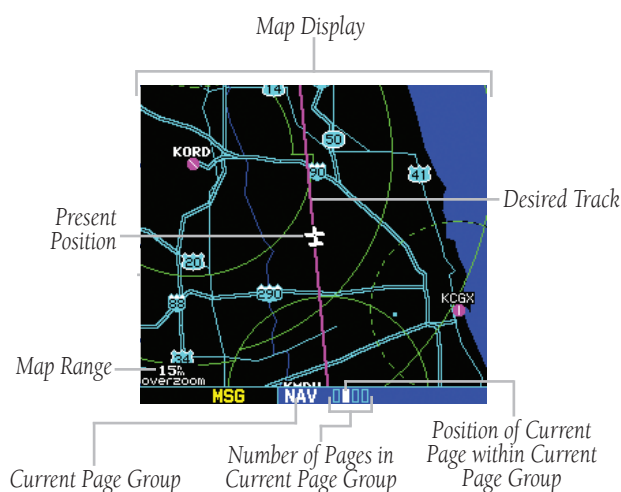
## MAP PAGE

- Turn the small **right** knob to display the list of available data items. Continue turning the small **right** knob to select the desired data item from the list.



- Press the **ENT** Key to select the desired data item and return to the Default NAV Page.
- Press the small **right** knob momentarily to remove the cursor from the page.

## MAP PAGE



The following symbols are used to depict the various airports and NAVAIDS on the Map Page:

Symbol	Description
	Airport with hard surface runway(s); (primary runway shown)
	Airport with soft surface runway(s) only
	Private Airfield
	Heliport
	VOR
	VOR/DME
	DME
	Localizer
	Intersection
	VORTAC
	TACAN
	NDB
	Locator Outer Marker

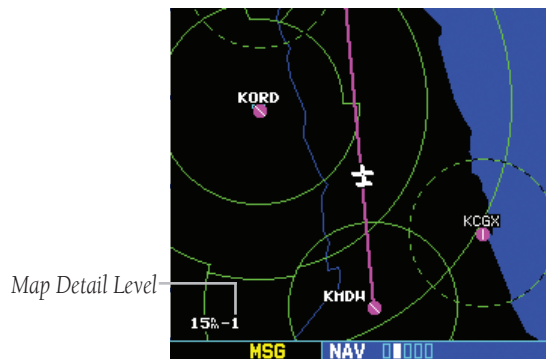
### Selecting a map range:

- Press the up arrow of the **RNG** Key to zoom out to a larger map area.
- Press the down arrow of the **RNG** Key to zoom in to a smaller map area and more detail.

## MAP PAGE

### Quickly decluttering the Map Display:

Press the **CLR** Key momentarily (as often as needed) to select the desired amount of map detail.



### Turning on the Map Page data fields:

- 1) With the Map Page displayed, press the **MENU** Key to display an options menu.
- 2) Turn the large **right** knob to highlight 'Data Fields On?' and press the **ENT** Key.



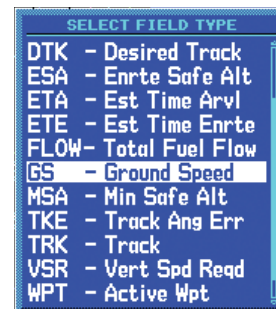
- 3) To turn off the data fields, follow steps 1 and 2, but instead select 'Data Fields Off?' from the options menu.

### Selecting a different data item for any data field on the Map Page:

- 1) With Map Page displayed, press the **MENU** Key to display an options menu.
- 2) Turn the large **right** knob to highlight 'Change Fields?' and press the **ENT** Key.
- 3) Turn the large **right** knob to highlight the data field to be changed.



- 4) Turn the small **right** knob to select the desired type of data for this field and press the **ENT** Key.



- 5) Press the small **right** knob to remove the cursor.

## INHIBITING TAWS OR TERRAIN

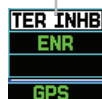
### Inhibiting TAWS or TERRAIN:

- 1) Select the TAWS or TERRAIN Page and press the **MENU** Key. 'Inhibit Terrain?' is selected by default.



- 2) Press the **ENT** Key. The 'TER INHB' annunciation is displayed in the annunciator field when TAWS or TERRAIN is inhibited.

Annunciator Field



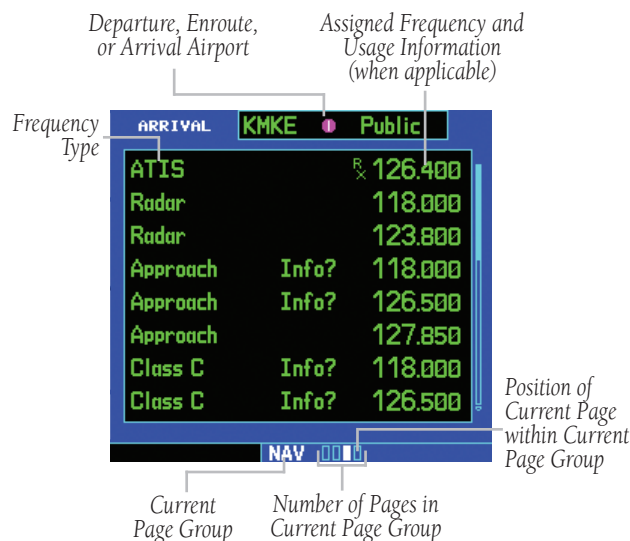
**NOTE:** Inhibit mode deactivates TAWS or TERRAIN alerting when deemed unnecessary by the pilot. Flying VFR into an area where unique terrain exists could cause the system to annunciate nuisance alerts. Pilots should use discretion when inhibiting the TAWS or TERRAIN system and always remember to enable the system when appropriate.

### Enabling TAWS or TERRAIN:

- 1) Select the TAWS or TERRAIN Page and press the **MENU** Key. 'Enable Terrain?' is selected by default.
- 2) Press the **ENT** Key. The TAWS or TERRAIN system is functional again.

## NAV/COM PAGE

The NAV/COM Page provides a list of the airport communication and navigation frequencies at the departure, enroute, and arrival airports.



### Selecting a frequency list for a departure, enroute, or arrival airport:

- 1) From the NAV/COM Page, press the small **right** knob to activate the cursor.
- 2) Turn the large **right** knob to place the cursor on the airport identifier field (top line on the NAV/COM Page).
- 3) Turn the small **right** knob to select the desired airport and press the **ENT** Key.

## NEAREST AIRPORTS

### Scrolling through the list of frequencies:

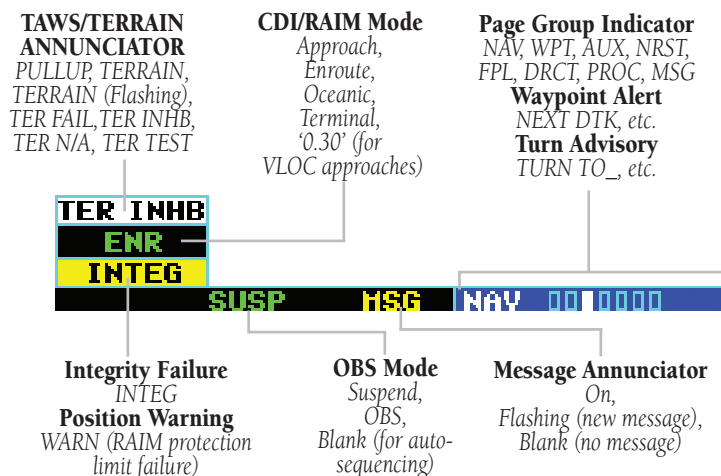
- 1) Activate the cursor, if not already active, by pressing the small **right** knob.
- 2) Turn the large **right** knob to move the cursor through the list of frequencies. If there are more frequencies in the list than can be displayed on the display, a scroll bar along the right-hand side of the display indicates which part of the list is currently being displayed.

### Auto-tuning a frequency from the NAV/COM Page:

- 1) Highlight the desired frequency by scrolling through the list of frequencies, as described in the preceding procedure.
- 2) To place a frequency in the standby field of the COM or VLOC Window, highlight the desired frequency and press the **ENT** Key.

## BOTTOM ROW ANNUNCIATORS AND MESSAGES

See Pilot's Guide for detailed information.



### Viewing a list of nearest airports:

- 1) Turn the large **right** knob to select the NRST Page Group. 'NRST' will appear along the bottom of the display.
- 2) If necessary, turn the small **right** knob to select the Nearest Airport Page.



### Scrolling through the list of nearest airports:

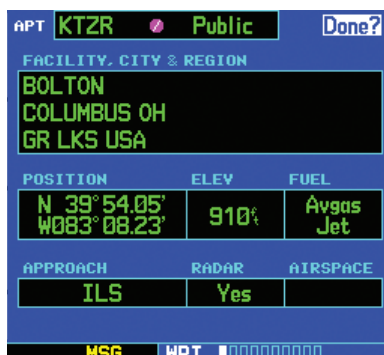
- 1) From the Nearest Airport Page, press the small **right** knob to activate the cursor.
- 2) Turn the large **right** knob to scroll through the list. The scroll bar along the right-hand side of the page will indicate which part of the list is currently being viewed.
- 3) To remove the flashing cursor, press the small **right** knob.



## NEARBY AIRPORTS

### Viewing additional information for a nearby airport:

- 1) Highlight the identifier of the desired airport by scrolling through the list, as described in the preceding procedure.
- 2) Press the **ENT** Key to display the Airport Location Page for the selected airport.



- 3) To view additional WPT pages for the selected airport (including the airport runway and airport frequency pages), press the small **right** knob to remove the flashing cursor. Turn the small **right** knob to display the additional WPT pages. When finished, press the small **right** knob to return the flashing cursor to the display.



- 4) To return to the Nearest Airport Page, verify that 'Done?' is highlighted by the flashing cursor and press the **ENT** (or **CLR**) Key.

### Selecting a nearby airport as a direct-to destination:

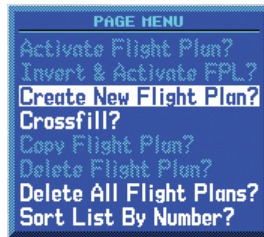
- 1) Press the **Direct-to** Key. The Select Direct-to Waypoint Page appears, with the waypoint identifier field highlighted.
- 2) Turn the large **right** knob to highlight the nearest airport (NRST) field.
- 3) Turn the small **right** knob to display a window showing up to nine nearby airports.



- 4) Continue turning the small **right** knob to scroll through the list and highlight the desired airport.
- 5) Press the **ENT** Key to confirm the selected airport. Press the **ENT** Key again (with 'Activate?' highlighted) to activate the direct-to function.

## Creating a new flight plan:

- 1) Press the **FPL** Key and turn the small **right** knob to display the Flight Plan Catalog Page.
- 2) Press the **MENU** Key to display the Flight Plan Catalog Page Menu.
- 3) Turn the large **right** knob to highlight 'Create New Flight Plan?' and press the **ENT** Key.



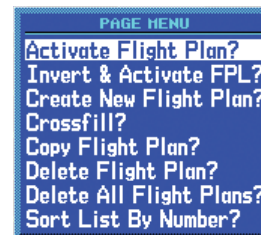
- 4) A blank Flight Plan Page appears for the first empty storage location. Use the small and large **right** knobs to enter the identifier of the departure waypoint, and press the **ENT** Key.



- 5) Repeat step 4 above to enter the identifier for each additional flight plan waypoint.
- 6) Once all waypoints have been entered, press the small **right** knob to return to the Flight Plan Catalog Page.

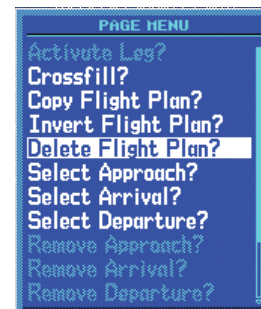
## Navigating a flight plan:

- 1) Press the **FPL** Key and turn the small **right** knob to display the Flight Plan Catalog Page.
- 2) Press the small **right** knob to activate the cursor.
- 3) Turn the large **right** knob to highlight the desired flight plan and press the **MENU** Key to display the Flight Plan Catalog Page Menu.
- 4) Turn the large **right** knob to highlight 'Activate Flight Plan?' and press the **ENT** Key.



## Stop navigating a flight plan:

- 1) Press the **FPL** Key
- 2) Press the **MENU** Key to display the Flight Plan Catalog Page Menu.
- 3) Turn the large **right** knob to highlight 'Delete Flight Plan?', and press the **ENT** Key.



- 4) With 'Yes?' highlighted, press the **ENT** Key to delete the flight plan.

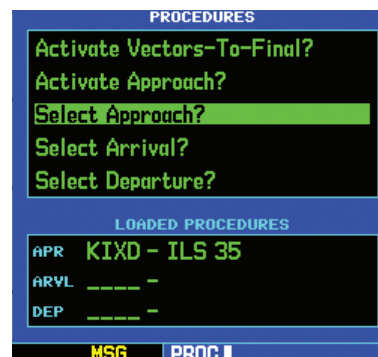
## SELECT AN APPROACH

### Editing a flight plan:

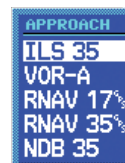
- 1) Press the **FPL** Key and turn the small **right** knob to display the Flight Plan Catalog Page.
- 2) Press the small **right** knob to activate the cursor.
- 3) Turn the large **right** knob to highlight the desired flight plan and press the **ENT** Key.
- 4) To add a waypoint to the flight plan:
  - a) Turn the large **right** knob to select the point to add the new waypoint. (If an existing waypoint is highlighted, the new waypoint is placed directly in front of this waypoint.)
  - b) Use the small and large **right** knobs to enter the identifier of the new waypoint and press the **ENT** Key.
- 5) To delete a waypoint from the flight plan:
  - a) Turn the large **right** knob to select the waypoint to be deleted.
  - b) Press the **CLR** Key to display a 'remove waypoint' confirmation window.
  - c) With 'Yes' highlighted, press the **ENT** Key to remove the waypoint.
- 6) Once all changes have been made, press the small **right** knob to return to the Flight Plan Catalog Page.

### Selecting an approach:

- 1) Press the **PROC** Key to display the Procedures Page.
- 2) Turn the large **right** knob to highlight 'Select Approach?' and press the **ENT** Key.



- 3) A window appears listing the available procedures. Turn the large **right** knob to highlight the desired procedure and press the **ENT** Key.

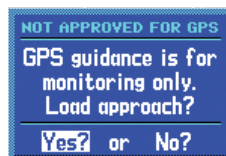


- 4) A second window appears listing the available transitions. Turn the large **right** knob to highlight the desired transition waypoint and press the **ENT** Key. The approach 'Vectors' option assumes the pilot will receive vectors to the final course segment of the approach and will provide navigation guidance relative to the final approach course.

## ACTIVATE AN APPROACH



- 5) Turn the large **right** knob to highlight 'Load?' or 'Activate?' and press the **ENT** Key. 'Load?' adds the procedure to the flight plan without immediately using it for navigation guidance. This allows the pilot to continue navigating the original flight plan, but keeps the procedure available on the Active Flight Plan Page for quick activation when needed.
- 6) For precision approaches and some non-precision approaches, a reminder window appears indicating that GPS guidance on such approaches is strictly for monitoring only — use the VLOC receivers and external CDI (or HSI) for primary navigation. To confirm this reminder, highlight 'Yes?' and press the **ENT** Key.



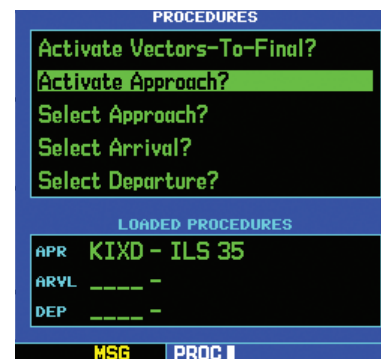
Not all approaches in the database are approved for GPS use. As the pilot selects an approach, a 'GPS' designation to the right of the procedure name indicates the procedure can be flown using the GPS receiver. Some procedures do not have this designation, meaning the GPS receiver may be used for supplemental navigation guidance only. ILS approaches, for example, must be flown by tuning the VLOC receiver to the proper frequency and coupling the VLOC receiver to the external CDI (or HSI).

A selected approach may be *activated* or *loaded*. Once an approach is selected, it may be activated for navigation from the Procedures Page. Activating the approach overrides the 'enroute' portion of the active flight plan, proceeding directly to the 'approach' portion (for a full approach, directly to the initial approach fix). Activating the approach also initiates automatic CDI scaling transition as the approach progresses.

In many cases, it may be easiest to 'Load' the full approach while still some distance away, enroute to the destination airport. Later, if vectored to final, use the following steps to select 'Activate Vector-To-Final'—which makes the inbound course to the final approach fix (FAF) waypoint active. Otherwise, activate the full approach using the 'Activate Approach?' option.

### Activating an approach:

- 1) With an approach loaded in the active flight plan, press the **PROC** Key to display the Procedures Page.
- 2) Turn the large **right** knob to highlight 'Activate Approach?' and press the **ENT** Key.

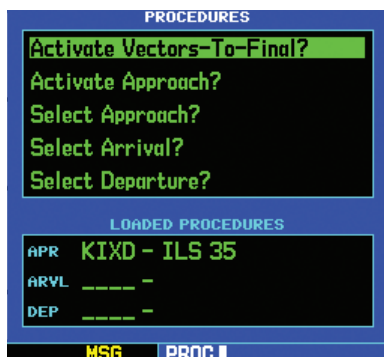


The 'Activate Vector-To-Final?' option allows the pilot to activate the final course segment of the approach. This option assumes the pilot will receive vectors to the FAF and provides guidance to intercept the final course, before reaching the FAF.

## FLYING AN APPROACH

### Activating the approach with vectors to final:

- 1) With an approach loaded in the active flight plan, press the **PROC** Key to display the Procedures Page.
- 2) Turn the large **right** knob to highlight 'Activate Vector-To-Final?' and press the **ENT** Key.



### GUIDELINES FOR FLYING AN APPROACH

Due to the variety of available approach procedures, the specific steps required will vary according to the approach selected. Keep in mind the following while flying the approach:

- Selecting the destination airport as the last waypoint in the active flight plan, or using the **Direct-to** Key ensures that the desired waypoint will automatically appear when choosing the 'Select Approach?' option from the Procedures Page. Otherwise, the airport should be selected first, then the approach procedure.
- As the aircraft progresses to each approach waypoint, a waypoint alert message ('NEXT DTK # # #°') will appear along the bottom of the display (see page 15).
- Turn advisories ('TURN TO # # #°') will appear along the bottom of the display (see page 15) when the pilot should begin a course change (via a standard rate turn).
- For GPS-based approaches, receiver autonomous integrity monitoring (RAIM) monitors satellite conditions and alerts the pilot using an 'INTEG' or 'WARN' annunciation at the bottom left corner of the display (see page 15) if protection limits cannot be maintained. If this occurs, the GPS receiver should not be used for primary navigation guidance. Revert to an alternate navigation source, or select an alternate destination airport.
- Within 30 nm of the destination airport, CDI scaling will transition from 5.0 nm (enroute mode, 'ENR') to 1.0 nm (terminal mode, 'TERM') or when leaving the departure airport, from 1.0 to 5.0 nm. Within 2.0 nm of the final approach fix, GPS-based approaches will see a second transition from 1.0 to 0.3 nm (approach mode, 'APR').
- A 'START PROC TRN' prompt will appear along the bottom of the display to advise the pilot when the aircraft is at a safe distance to initiate a procedure turn. The procedure turn is displayed on the Map Page, but guidance through the turn itself is not provided.
- Alerts for proper holding pattern entry (e.g., 'HOLD DIRECT') are displayed along the bottom of the display. Waypoint sequencing is automatically suspended (indicated by 'SUSP' directly above the **OBS** Key) at the holding waypoint. Press the **OBS** Key again to return to automatic waypoint sequencing. For course reversals, waypoint sequencing is suspended for one trip around the holding pattern only (after which it will return to automatic waypoint sequencing).

## FLYING THE MISSED APPROACH

- The CDI will guide the pilot through a DME arc. Just keep the needle centered to fly along the arc. When using an autopilot, the course select on the CDI (or HSI) must be periodically updated with the desired track (DTK).
- When crossing the missed approach point, 'SUSP' will appear above the **OBS** Key, indicating that automatic sequencing of waypoint is suspended at the missed approach point, and a 'from' indication will appear on the CDI (or HSI).



### Flying a missed approach:

- 1) Press the **OBS** Key. The next waypoint in the approach (MAHP; in this case 'SWARM' intersection) is automatically offered as the destination waypoint.
- 2) Follow the missed approach procedures, as published on the approach plate, for proper climb and heading instructions.
- 3) An alert message along the bottom of the display recommends entry procedures for the holding pattern (e.g., 'HOLD TEARDROP'). When flying the holding pattern, a timer appears on the Default NAV Page. The timer automatically resets on the outbound side of the hold when the aircraft turns abeam the hold waypoint. The timer again resets as the pilot turns inbound (within approximately 30° of the inbound course). This allows use of standard timing (typically one minute) to fly the inbound and outbound legs of the hold.



- 4) The GNS 530 provides course guidance only on the inbound side of the holding pattern. When leaving the holding pattern to re-fly the approach (or another approach) press the **PROC** Key to 'Select Approach?' or 'Activate Approach?' as previously described. Or, use the **Direct-to** Key to select another destination.



Garmin International, Inc.  
1200 East 151st Street  
Olathe, KS 66062, U.S.A.  
p: 913.397.8200 f: 913.397.8282

Garmin AT, Inc.  
2345 Turner Road SE  
Salem, OR 97302, U.S.A.  
p: 503.391.3411 f: 503.364.2138

Garmin (Europe) Ltd.  
Liberty House, Bulls Copse Road  
Hounslow Business Park  
Southampton, SO40 9RB, U.K.  
p: +44/ (0) 870.8501241 f: +44/ (0) 870.8501251

Garmin Corporation  
No. 68, Jangshu 2nd Road  
Shijr, Taipei County, Taiwan  
p: 886/2.2642.9199 f: 886/2.2642.9099

[www.garmin.com](http://www.garmin.com)