GARMIN®

GTR™ 205
GNC® 215

Pilot's Guide

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SOFTWARE VERSION

This manual reflects the operation of system software v2.31. Some differences in operation may be observed when comparing the information in this manual to later software versions.

INFORMATION & SUPPORT

For information regarding the Aviation Limited Warranty, refer to Garmin's website.

For aviation product support, visit flyGarmin.com.

WARNING

Do not learn operational procedures for this product in the air. For safety reasons, thoroughly practice basic operation of this product on the ground before use during flight.

WARNING

Review and understand all aspects of this pilot's guide. Doing so reduces the risk of unsafe operation.

WARNING

Never use expired databases. Update databases regularly to ensure currency. Use out of date database information at your own risk.

WARNING

Always resolve any discrepancies between the display and other navigation sources when they occur. During flight operations, compare display indications to information from other NAVAIDs, visual sightings, charts, and other available sources before continuing navigation.

WARNING

Do not rely on the accuracy of bearing and distance indications in geographic areas north of 89 degrees North latitude or south of 89 degrees South latitude. Always confirm bearing and distance data with other sources.

WARNING

Be aware that this product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our website at www.garmin.com/prop65.

CAUTION

Do not clean display surfaces with abrasive cloths or cleaners containing ammonia. They will harm the anti-reflective coating. Use a clean, lint-free cloth and anti-reflective lens cleaner.

CAUTION

Ensure that any unit repairs are made by an authorized Garmin service center. Unauthorized repairs or modifications could void both the warranty and affect the airworthiness of the aircraft.

NOTE

The COM application supports channel tuning for both 8.33 kHz and 25 kHz channels within radio-frequency range. If flying in a region where 8.33 kHz channel spacing is available, set the COM radio to 8.33 kHz to prevent the loss of any stored or recently used frequencies.

NOTE

The COM transceiver antenna(s) of the device is (are) intended to be mounted along the fuselage of the aircraft and accessible only to aircraft maintenance personnel. To reduce RF exposure, avoid installation of antenna(s) in areas of the aircraft that provide crew or passengers direct exposure to antenna radiation. For installations that may provide direct exposure, the limits specified by FCC regulations 47 CFR 1.1310 should be referenced by the installer.

NOTE

All visual depictions contained within this document, including screen images of the system panel and displays, are subject to change and may not reflect the most current system software and aviation databases. Depictions of equipment may differ slightly from the actual equipment. Feature depictions may differ from actual unit features depending on configuration.

NOTE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE

Use of polarized eye wear may cause the flight displays to appear dim or blank.

NOTE

Canadian installations: In accordance with Canadian Radio Specifications Standard 102 (RSS 102), RF field strength exposure to persons from an antenna connected to this device should be limited to 51 V/m for controlled environment and 22 V/m for uncontrolled environment.
Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

NOTE

The pilot/operator must review and be familiar with Garmin's database exclusions list, as discussed in SAIB CE-14-04, to determine what data may be incomplete. Visit flyGarmin.com and select "Database Exclusions List."

NOTE

The pilot/operator must have access to Garmin and Jeppesen database alerts and consider their impact on the intended aircraft operation. To view these alerts, visit flyGarmin.com and select "Aviation Database Alerts."

NOTE

Contact Garmin Product Support if you want or need to adjust the database.

NOTE

Garmin requests the flight crew report any observed discrepancies related to database information. These discrepancies could come in the form of any displayed item used for navigation or communication in the air or on the ground. Visit flyGarmin.com and select "Aviation Data Error Report."

NOTE

This unit has a very high degree of functional integrity. However, the pilot must realize that providing monitoring and/or self-test capability for all conceivable system failures is not practical. Although unlikely, it may be possible for erroneous operation to occur without fault indication. It is the responsibility of the pilot to detect such occurrences by cross-checking with all redundant or correlated information available in the cockpit.

Record of Revision

REVISION	DATE	CHANGE DESCRIPTION
D	06.23.26	Updates for software v2.31.
C	05.16.25	Updates for software v2.30.
B	01.28.25	Updates for software v2.22.
A	01.11.24	Production Release.

Available for Download

The following documents are available for viewing on your computer or portable device. Go to garmin.com/manuals and enter the product name or serial number.

Electronic Pilot's Guide

A version of this guide saved in Adobe Acrobat.

Upgrade Supplement

Details document changes for software enhancements.

Product Descriptions

This guide covers the operation of the following Garmin product series.

GTR 205 GNC 215

When you see	It means
a product name in bold (e.g., **GNC 215**)	the information pertains to that specific model only
product names separated by a forward slash (e.g., GTR 205/GNC 215)	the information pertains to both products

Unless otherwise stated, information pertaining to *the unit* is applicable to both products: GTR 205 and GNC 215

Feature Depictions

Except for cases when operational differences dictate, the GNC 215 display is shown as typical.

Special Notices

This guide uses the following message types when applicable.

WARNING

Indicates when serious injury or death will occur.

CAUTION

Indicates when equipment damage is possible.

NOTE

Emphasizes a point about a specific feature, function, or operation.

Information Insets

Gray boxes highlight information about a particular feature or application function.

Green boxes may include references to additional information or a useful pilot's tip.

Blue boxes address common questions about Garmin product features and services.

Reference Websites

WEBSITE	QR CODE (SCAN/GO)
Aviation Limited Warranty https://www.garmin.com/en-US/legal/aviation-limited-warranty	
Declaration of Conformity https://www.garmin.com/en-US/legal/compliance/	
UK Declaration of Conformity https://www.garmin.com/en-GB/legal/compliance/	

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1 System at a Glance

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Overview

The GTR™ 205 COM transceiver and GNC® 215 NAV/COM transceiver employ a 3.2″ high-resolution color liquid-crystal display. They comprise the Slimline series of 1.35″ by 6.25″ panel-mount COM radio products.

GNC 215 shown as typical.

Each unit has 10 W of transmit power. Optional 16 W of transmit power is available with the purchase of a feature enablement.

Unit Configurations

GTR 205

COM

GNC 215

COM/NAV

Unit Features

Features vary depending on model and unit configuration.

GTR 205 COM TRANSCEIVER	GNC 215 NAV/COM TRANSCEIVER
• 2-place intercom system[1] • 4-place intercom system[2, 3] • 8.33 kHz or 25 kHz channel spacing • 3D audio (COM & ICS)[1] • 16 W transmit power capability[1, 3] • Bearing and distance to COM stations[4] • Built-in Bluetooth® wireless technology[1] • COM Playback[2, 3] • Customizable soft key shortcuts[1] • Dual-COM[2, 3] • Find frequency • Flight timers • Hands-free calling[1, 5] • Media player[1, 5] • NVIS[3] • Remote COM radio frequency tuning[6] • Remote management of audio sources[1, 5] • Reverse frequency look-up[4] • System messages • VHF radio transceiver	• 2-place intercom system[1] • 8.33 kHz or 25 kHz channel spacing • 16 W transmit power capability[1, 3] • Bearing and distance to NAVAID and COM stations[4] • CDI • Customizable soft key shortcuts[1] • NAV frequency for DME tuning[6] • Find frequency • Flight timers • NAV radio receiver • NVIS[3] • Remote COM/NAV radio frequency tuning[6] • Reverse frequency look-up[4] • System messages • VHF radio transceiver

[1] Available with system software v2.22 and later.
[2] Available with system software v2.30 and later.
[3] Optional. Requires purchased feature enabled on unit.
[4] Requires Navigation database and input from a GPS navigator for location-based information.
[5] Requires pairing with a Bluetooth enabled device.
[6] Availability dependent upon aircraft interfaces.

Pilot Interface

Bezel

The bezel provides a combination of mechanical knobs and push-keys. Soft keys correspond to selectable features on the display screen.

1 **microSD Card Slot**
Interface for loading database, exporting log files, and updating software.

2 **Soft Keys**
Controls for navigating display pages and executing onscreen commands.

3 **Transfer (Flip-Flop) Key**
Swaps active and standby frequency values for the active radio.

4 **Menu Key**
Provides direct access to customization options and system information.

5 **Monitor Key**
Allows monitoring of the active frequency while listening to the standby frequency.

6 **Volume/Power Knob**
Allows audio volume adjustment for the active COM radio. COM squelch functionality is accessible via knob push. Turning the knob past the detent powers the unit on/off.

7 **Inner & Outer Knobs**
Multipurpose dual concentric knob allows data entry, list scrolling, frequency look-up, NAV ident, and NAV/COM direct tuning.

8 **Photocell**
Measures cockpit ambient light level to automatically adjust display brightness for day and night.

Bezel Shortcuts

Pushing and holding either the volume knob or **Flip-Flop** key for 1.5 seconds automatically tunes the COM emergency frequency (121.50 MHz).

Pushing and holding the dual concentric knob for 1.5 seconds provides direct access to frequency search options.

Read more about these features in section 3.

microSD Card Slot

NOTE

Do not remove or insert a microSD card while in flight. Always verify the system is powered off before inserting or removing a microSD card.

FEATURE LIMITATIONS

- *Use only microSD cards in the FAT32 format, with memory capacity between 8 GB and 32 GB*

The unit uses the microSD card slot for the following tasks.

- Capturing screen images
- Exporting data logs and configuration summary
- Updating the database
- Upgrading software

Insert Card

1. Verify unit power is off and the slot is empty.
2. Hold card such that label faces the top edge of display screen.
3. Ensure back edge of card is flush with display bezel after insertion.

Eject Card

1. Power off the unit.
2. Release the spring latch by pressing lightly on exposed edge of card.

Formatting the microSD Card

In the event that there is a file corruption or formatting issue with the microSD card, it may be necessary to reformat.

Formatting the microSD card improperly can cause it to not be recognized by the avionics system. To avoid this, and to ensure maximum compatibility with Garmin avionics and your personal computer, format the microSD card with the Master Boot Record (MBR) partition scheme and the FAT32 (MS-DOS) file system format. Garmin recommends using the SD Memory Card Formatter application available as a download from SDcard.org. When running the application, use the Quick Format option.

For more information, visit the Aviation Product Support page at flyGarmin.com.

Display Features

A high-resolution color LCD display provides onscreen controls that correspond to the mechanical knobs and push-keys on the bezel. Optional night vision capability (NVIS) is available with the purchase of a feature enablement.

Soft Keys

Selections change based on the active page or function.

COMMON COMMANDS

MSG	Open the system messages list. A flashing icon indicates unread messages.
Find COM	Display COM frequency search options.
Home	Return to the Home page.
Back	Return to the previous page.
Cancel	Cancel an active function without inputting data.
Reset	Reset timer.
Start	Start timer.
Stop	Stop timer.
Edit	Edit a selected user frequency.

GNC 215 SPECIFIC COMMANDS

Not all options may be available.

NAV VOL	Adjust NAV radio volume.
Find NAV	Display NAV frequency search options.
ICS	Display intercom controls.
Direct CRS	Set the manual CDI OBS selector on direct course to the VOR station.

GTR 205 SPECIFIC COMMANDS

Not all options may be available.

Enable pilot isolation mode.

Transmit pilot audio over the active COM channel (push to talk).

Mute/unmute wired music audio.

Bluetooth Commands

These commands require connection to a Bluetooth enabled device.

Play Bluetooth media audio.

Pause Bluetooth media audio.

Answer an incoming call.

Hang up on an active call.

Open the setup page to enable the Bluetooth interface.

Audio Panel Commands

These commands are available with purchase of the Audio Panel feature enablement.

Dual-COM Commands

Toggle transmitter selection (COM 1 mic or COM 2 mic).

Toggle active COM receiver (COM 1 and/or COM 2).

COM Playback Commands

Play the last saved COM audio clip.

Stop playback.

Play previous clip. Denotes total number of saved clips.

For information about customizable soft key options, read *Assign Soft Key Shortcuts* in section 2.

Function Keys

Toggle keys turn a specific function on or off. The current state of the function is indicated below the key label.

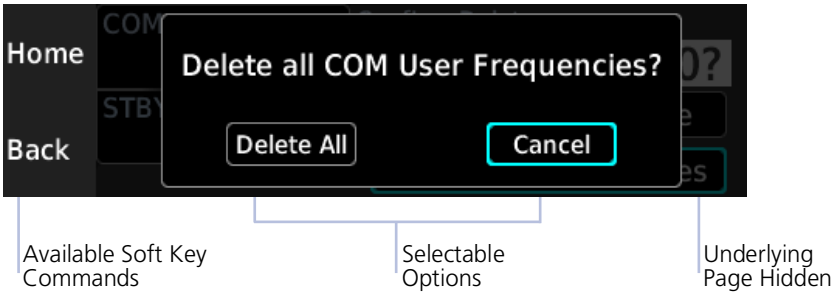
Menu Tabs

Tabs group information and related controls into individual panes. Contents may include scrolling lists, data fields, function keys, or a combination of controls.

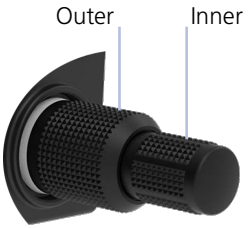
Tabs are located along the left side of the menu pane.

Pop-ups

Pop-ups present messages related to a function or setting that require confirmation.



Control Knobs



Dual Concentric Knob

Inner and outer control knobs offer the ability to select and modify data and settings.

Volume/Power Knob

A single volume knob controls audio volume for the COM radio and powers the unit on/off.

Pushing these knobs momentarily performs additional functions.

VOLUME/POWER KNOB FUNCTIONS	
Knob Turn	• Adjusting COM radio volume • Powering on/off the unit (turn past the detent)
Knob Push	• Enabling/disabling the COM automatic squelch function • Tuning the emergency COM frequency (push & hold)

DUAL CONCENTRIC KNOB FUNCTIONS	
Outer Knob Turn	• Moving cursor forward or backward within data field • Scrolling menu tabs • Selecting page controls and adjustment fields • Tuning major frequency digits
Inner Knob Turn	• Modifying individual characters in data entry field • Scrolling lists/control options • Tuning minor frequency digits • Adjusting ICS/Media/Phone volume[1]
Knob Push	• Entering current or specified numerical value • Selecting a menu item • Toggling page functions on/off • Initiating frequency look-up options (push & hold) • Enabling/disabling ident tone for the NAV radio[2] • Switching between COM, Timer/OBS, and NAV functions[3]

[1] Feature availability dependent upon unit and configuration.[2] GNC 215 only.
[3] OBS and NAV functions available with GNC 215 only.

Knob Function Indicators

Available knob functions annunciate at the bottom of the display. Icons indicate the associated pilot actions: knob turn and/or push.

Outer Knob Turn Only

Single or Inner Knob Turn & Push

Indications include, but are not limited to:

COM Standby Frequency Active, GTR 205

Available knob functions:

- Adjust COM radio volume
- Override automatic squelch
- Tune COM standby frequency
- Access frequency search options

COM Standby Frequency Active, GNC 215

Available knob functions:

- Adjust COM radio volume
- Override automatic squelch
- Tune active standby frequency
- Set knob focus to NAV standby frequency
- Access frequency search options

Find Frequency Active

Category Freq

Available knob functions:

- Scroll search categories
- Select frequency
- Add user frequency

Menu Active

Tab Item

Available knob functions:

- Scroll menu tabs
- Select list items

NAV Volume Active[1]

NAV VOL Push ID

Available knob functions:

- Adjust NAV radio volume
- Activate NAV ident

System Message List Active

Scroll

Available knob functions:

- Scroll message list

Timer Active

Timer Type Edit | Push COM

Available soft key functions:

- Reset timer
- Start/Stop timer

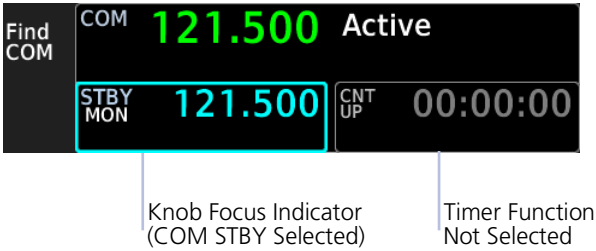
Available knob functions:

- Select timer type
- Set countdown timer
- Set knob focus to COM/NAV standby frequency[1]
- Access frequency search options

[1] NAV radio options available with GNC 215 only.

KNOB FOCUS INDICATIONS

A cyan border around the active feature window indicates changes in knob focus. This is useful when transitioning between different control modes.



Text within the active window turns cyan to indicate that it is selectable.

Knob Shortcuts

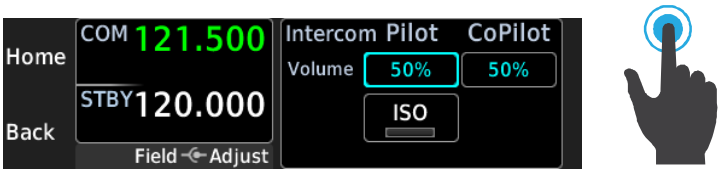
For convenience, the unit allows you to access certain controls quickly via knob push.

TUNE A COM FREQUENCY

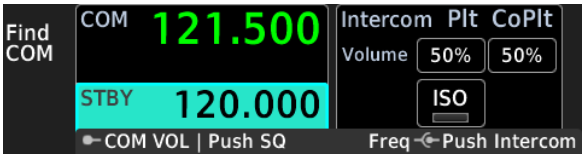
From the Home page:

Pushing the dual concentric knob once switches knob focus from the COM radio to right side features (if available). Use the **Back** soft key to return knob focus to the COM radio controls.

GTR 205



When knob focus is set to the COM radio (default), turn the inner and outer knobs to tune the COM standby frequency.



TUNE THE COM EMERGENCY FREQUENCY

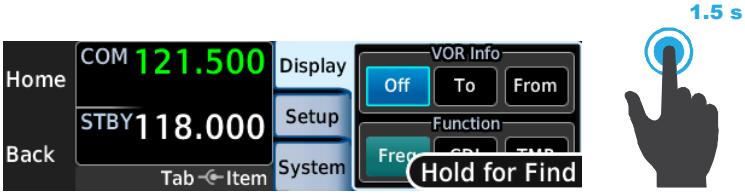
Pushing and holding the volume/squelch knob for 1.5 seconds automatically tunes the COM emergency frequency (121.50 MHz) from any page or tab. The frequency automatically loads to the COM standby window and then transfers to the active COM frequency.

Prior to activation, the "Hold for 121.50" control label appears in the annunciator bar.

FIND A COM FREQUENCY

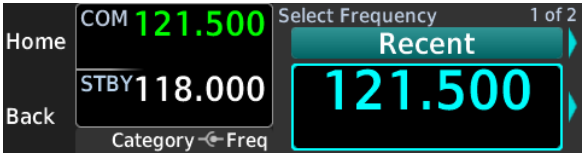
From any page or tab:

Pushing and holding the dual concentric control knob for 1.5 seconds automatically displays frequency search options. The Select Frequency menu opens from the last viewed search result.



Prior to activation, the "Hold for Find" control label appears in the annunciator bar.

Turn the outer knob to select a search category. Turn the inner knob to select a frequency, waypoint, or station.



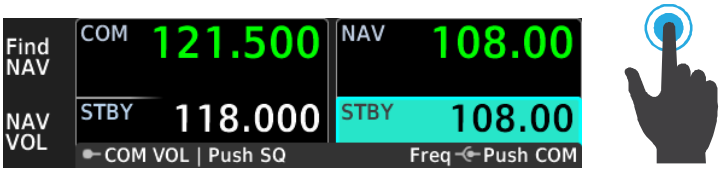
COM volume and squelch controls remain available via the volume/power knob when a page is active.

TUNE OR FIND NAV FREQUENCY

AVAILABLE WITH: GNC 215

From the Home page:

Pushing the dual concentric knob once enables standby NAV frequency tuning. Turn the inner and outer knobs to tune the NAV standby frequency.



Find a NAV Frequency

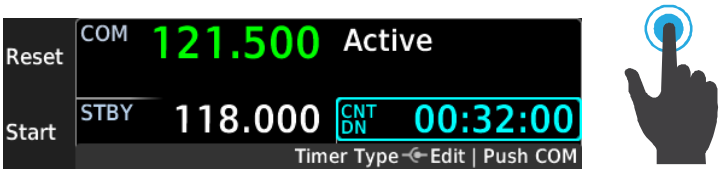
With standby NAV frequency tuning enabled, push and hold the dual concentric knob for 1.5 seconds to display NAV frequency search options. Turn the outer and inner knobs to select a search category and frequency.

ACTIVATE TIMER

From the Home page:

If enabled, pushing the dual concentric knob once activates the timer function. Turn the outer knob to toggle between timer types. Turn the inner and outer knobs to specify a countdown time. Push knob to enter value.

GTR 205

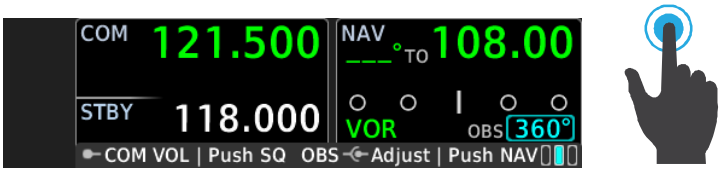


SET AN OBS COURSE

AVAILABLE WITH: GNC 215

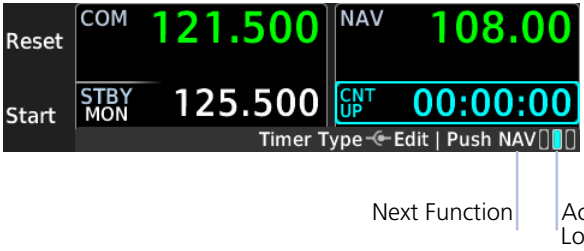
From the Home page:

If enabled, pushing the dual concentric knob once activates the OBS entry field. Turn the inner and outer knobs to set a course.



Three-way Toggle Indication

Locater bars work in conjunction with the inner control knob, providing a quick indication of current knob focus as you transition between multiple functions (e.g., COM standby frequency tuning > CDI/Timer > NAV standby frequency tuning).



A cyan locater bar indicates active function and knob focus.

Pushing the inner knob moves the locater through the available functions. The COM standby frequency window is active by default.

COM Active

Push to activate OBS/timer control.

OBS/Timer Active

Push to activate NAV frequency control.

NAV Active

Push to activate COM frequency control.

Screenshots

FEATURE REQUIREMENTS

- *A microSD card in the FAT32 format, with memory capacity between 8 GB and 32 GB*

Save images to a microSD card at any time using Screenshot.

1. Verify that a microSD card is present in the slot.
2. Go to the page of interest.
3. Push and hold the **MON** key.
4. With the **MON** key depressed, push and release the top soft key.

A camera icon momentarily shows in the annunciator bar indicating that Screenshot was successful.

The image automatically saves to the *print* folder in the microSD card root directory.

To view saved images, remove the card and open the *print* folder on a computer.

For more about proper microSD card installation, read *microSD Card Slot*.

Color Conventions

	Red • Radio failure
	Green • Active radio frequency, function • Distance to station (from DME) • Valid station ID[1] • VOR/localizer data
	White • Active system message, mode • Current data and values • Distance to station (from non-DME source) • Menu options • Scales and markings • Standby radio frequency (non-selected radio) • Station ID (from database)
	Magenta • GPS data
	Purple • Feature available via Bluetooth wireless technology
	Cyan • Active selection, display feature (e.g., timer) • Standby radio frequency
	Gray • Missing or expired data • Product unavailable • Inactive display feature

[1] Decoded from Morse code or confirmed by the DME.

Compatible Equipment

Line Replaceable Units

SYSTEM REQUIRED LRUs
COM radio antenna
NAV radio antenna[1]
OPTIONAL LRUs
AXIS flight display
DME
G3X
G500/G600
G500(H)/G600/G700 TXi
GFC 500/600(H)
GI 275
GMX 200
Garmin GPS navigator
MX20
Non-Garmin autopilot

[1] GNC 215 only.

The system consists of multiple LRUs, which are installed behind the instrument panel or in a separate avionics bay. Their modular design aids system maintenance and unit replacement.

Optional LRUs may include compatible equipment from either Garmin or a third party manufacturer. These vary by unit and installation type (VFR or IFR).

Some LRUs provide features that require registration and/or enablement prior to activation.

Compatible LRUs are not limited to the devices shown here. Check unit software version for compatibility.

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2 Get Started

POWER UP THE UNIT 2-2
LOAD DATABASE 2-3
SET UP BLUETOOTH 2-12
CUSTOMIZE PILOT SETTINGS 2-15
VIEW SYSTEM INFORMATION 2-22

Power Up the Unit

The unit receives power directly from the aircraft's electrical system. Upon power-up:

- Bezel key backlight momentarily illuminates
- Navigation database automatically updates if a newer version is available

Splash Page

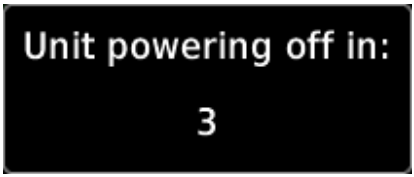
Garmin logo displays as the unit checks for an available database update.

Read more about database update methods in *Load Database*.

Power Off the Unit

WARNING

Never attempt to power off the unit while airborne unless operational procedures dictate.



Turning the **Volume/Power** knob past the detent initiates the power off sequence.

Shutdown occurs once the timer reaches zero.

Load Database

Supported Database

This system uses the Navigation database for frequency related information (Garmin or Jeppesen).

Databases are stored in the unit's internal memory. To view update cycles, or to purchase individual databases or database packages, go to flyGarmin.com.

Active and Standby Databases

The unit uses two types of databases. Both transfer to the unit's internal storage.

Active Database	Standby Database
• Database currently in use by the system	• Database that has not reached the effective date • Database that was installed prior to the last update

To view active and standby databases once they are installed, read *View Database Information*.

DATABASE TRANSFER & ACTIVATION

The Navigation database automatically transfers from the microSD card to the unit's internal Standby storage if it is newer than the database currently in standby. Total transfer time depends on the microSD card type.

Activation of the standby database is required to complete the update. The manner in which this occurs depends on whether or not a GPS source is present.

If	Then
The unit is configured to receive GPS data	The database automatically updates at the next unit power cycle once it reaches its effective date and the existing database expires
A GPS source is absent	The database automatically updates at the next unit power cycle

Installations Equipped with a GPS Source

In some cases, automatic database updates may occur in two steps:

1. The database transfers to the internal Standby storage but is deemed not yet effective. At this point, the pilot may remove the card. The database will remain in standby until the effectivity date is reached and automatic activation can occur.
2. The unit automatically activates the standby database based on current date and database effectivity.

The unit determines effectivity status using the current date and time from the configured GPS source (if present). Read more about database effective status in *Understand Database Effective Cycles*.

Load Database from a microSD Card

NOTE

The unit supports microSD cards in the FAT32 format only, with capacities ranging between 8 GB and 32 GB.

The unit stores all databases it receives in its internal storage. After a database updates, the microSD card is no longer required.

Do not attempt to load or update the database while in flight (on ground only).

Install or update a database using a micro SD card:

1. Download a database onto a microSD card.
2. Insert the card with the most recent database into the card slot.
3. Power on the unit.

Once loading completes, you may power off the unit and remove the card.

A unit restart is required to complete installation.

The available database is indicated in the Standby tab.

Automatic Updates

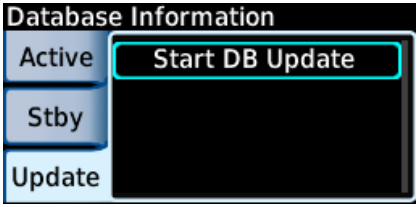
Automatic updates occur when:

- A newer database is detected on the microSD card or in the internal Standby storage
- A newer database is within its effective dates[1]

[1] Applicable only if a GPS source is present.

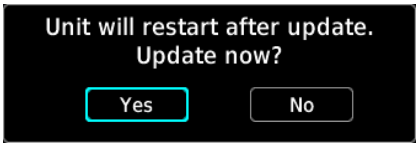
Updates occur during power up when a newer version of the database is available. The same process occurs when you load a new database for the first time.

Manual Updates



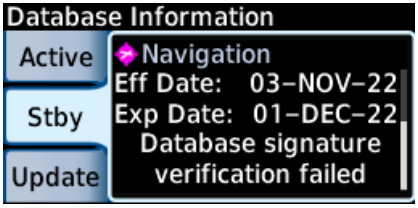
You can access the Update tab at any time for review purposes or to perform a manual database transfer.

MENU > **System** > **Database** > **Update** > **Start DB Update**



The unit automatically restarts once the update is complete.

Database Errors



If a database error occurs:

- An advisory appears in the message list
- Details regarding the state of the database display on the appropriate information tab

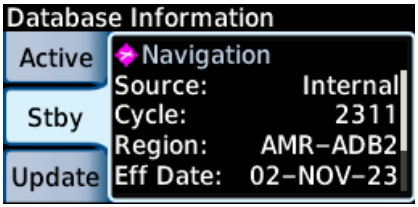
Aviation Database Errors

Visit flyGarmin.com to report any discrepancies in database information. These may include incorrect procedures, inaccurate depictions of terrain, obstacles and fixes, or errors with any other screen element used for navigation or communication purposes.

For information regarding third-party navigation databases, go to jeppesen.com.

Revert to Previous Database Version

Updating a database does not overwrite its previous version. Once the update process completes, the previously active version of the database transfers to the unit's internal Standby storage. In the event that an automatic update is undesirable, you can revert to the previous version using the manual update feature.



Source field displays "Internal" for the previous database version.

The previous database version appears in the Standby tab. It remains available for manual install until a newer version transfers to the unit's internal Standby storage.

To revert to a previous database version:

1. Ensure that the card slot is empty.
2. Verify that the previous database version is in standby (**Menu** > **System** > **Database** > **Standby**).
3. Open the Update tab.
4. Select **Start DB Update**.

The unit restores the previous database version and transfers the newer database to the standby storage. The unit automatically restarts once the swap is complete.

View Database Information

WHERE TO FIND IT

MENU
- System
  - Database

During normal operation, you can view information about active and standby databases from the Database Information page.

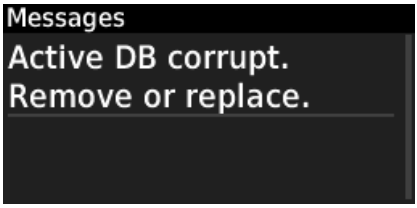
MENU > **System** > **Database**

Select the appropriate menu tab to view information about active and standby databases.

Active Database

Selecting **Active** displays information about the database version currently in use.

ACTIVE DATABASE CORRUPT



A message informs you when the active database is corrupt and requires removal or replacement.

Active Database Info

- Database name
- Cycle number
- Region
- Effective & expiration dates
- Copyright information

Standby Database

"Standby database OK" appears at the bottom of the Standby tab whenever a valid database is present on the installed microSD card or in the internal memory.

Selecting **Standby** displays information about the database that is not currently in use by the system.

The previously installed database also appears here once an update completes.

DATABASE AVAILABLE ON CARD

The Standby tab informs you when a valid database is available on the installed microSD card.

Check the Source field for the current location of the standby database: "Card" or "Internal."

Scroll to the bottom of the tab to see if a standby database is available.

To view and update the database from the internal standby:

1. Ensure that the card slot is empty.
2. Verify that a valid database version is in standby (**Menu** > **System** > **Database** > **Standby**).
3. Open the Update tab.
4. Select **Start DB Update**.

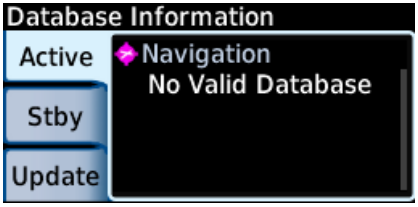
Standby Database Info

- Database name
- Source (e.g., Internal)
- Cycle
- Region
- Effective & expiration dates
- Status

Understand Database Effective Cycles

DATABASE EFFECTIVE STATUS	
Database with specified effective dates	• Effective during a specific period • Unit determines database status using the current date and time from GPS • Automatic activation occurs on the effective date during unit power cycle

NO VALID DATABASE



A message informs you when no valid database is available.

When the Navigation database is absent, the radio is still usable but with reduced functionality. Lost features include:

- Waypoint names
- GPS-based distance to station
- Frequency lookup for tuning

Overwriting microSD Card Database Files

When database files are loaded to the microSD card, any previously loaded database files of the same type residing on the card are overwritten. This includes loading a database of a different coverage area or data cycle than that currently residing on the microSD card.

Set Up Bluetooth

AVAILABLE WITH: GTR 205

WHERE TO FIND IT

MENU
- Setup
  - Bluetooth

During normal operation, you can pair and manage Bluetooth enabled devices from the Bluetooth wireless audio page.

MENU > **Setup** > **Bluetooth**

FEATURE REQUIREMENTS

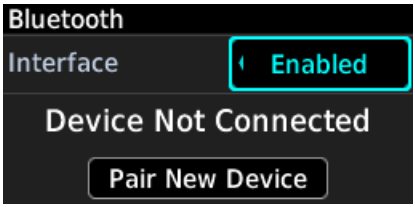
- *GTR 205 software v2.22 or later*
- *All portable devices must be Bluetooth enabled to connect to GTR 205*

FEATURE LIMITATIONS

- *The unit allows up to eight total device connections via Bluetooth wireless technology, with only one active device connection at a time*

Pair a Bluetooth Enabled Device

Pair a device from the Bluetooth wireless audio setup page.



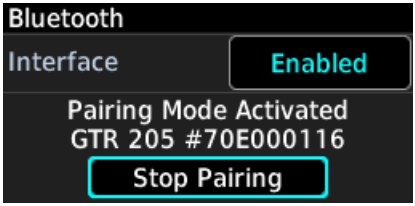
"Device Not Connected" displays in the message window until you pair the new device.

From the Home page:

1. **Menu** > **Setup** > **Bluetooth**.
2. Toggle the Interface option to **Enabled**.

The Bluetooth enabled device name appears upon detection. Depending on the device type, phone and/or media icons appear.

3. Observe that the Bluetooth device name appears in the message window.
4. Select **Pair New Device** to initiate pairing.



Unit ID and pairing mode status display in the message window. A Stop Pairing option allows you to exit pairing mode.

On your personal electronic device:

5. Open Bluetooth Settings.
6. Initiate pairing by selecting the "GTR 205" device name.

Once the device is paired, icons along the right of the display indicate the presence of a wireless connection and feature active status.

A purple connected icon means the indicated device is connected to GTR 205 via Bluetooth wireless technology. This icon is absent when the device is not connected.

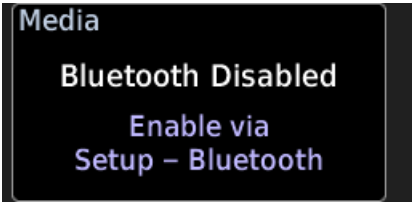
Feature active icons appear only when the function is in use.

Example of connected device features on the Media page.

The unit retains Bluetooth wireless audio settings over power cycles.

The unit supports up to eight paired devices. Pairing more than eight will cause the unit to replace the least recently connected device with the new one.

BLUETOOTH DISABLED



Example of "Bluetooth Disabled" status message on the Media page.

This message displays on the setup and feature pages when the Interface option is set to **Disabled**.

DEVICE NOT CONNECTED

"Not Connected" messages appear on the setup and feature pages when device connection is lost.

Bluetooth wireless audio controls become inactive when the device connection is lost (i.e., the unit and the paired device are out of range).

Reconnecting Your Device after a Software Update

Bluetooth connections are lost during software updates on the GTR 205 COM transceiver. To reconnect, open the Bluetooth settings on your personal electronic device and select the "GTR 205" device name.

Customize Pilot Settings

Unit customization options are accessible via the **MENU** key. For details about specific radio settings and timer functions, refer to the respective section.

MENU OPTIONS	
Display Tab	• Manage audio sources[1] • View COM playback[1] • View intercom[1] • View media player[1] • View phone[1] • View flight timer • Return to basic display format[1] • Enable CDI option[2] • Display VOR information[2]
Setup Tab	• Access COM radio settings • Enable speaker output[1] • Access intercom settings[3] • Enable device connection via Bluetooth wireless technology[1] • Access media player settings[1] • Access COM playback settings[1] • Assign soft key shortcuts • Set the display units[4]
System Tab	• View system messages • Adjust display brightness • Access database information and update/sync options[4] • View system information • View COM status

[1] GTR 205 only.
[2] GNC 215 only. CDI and flight timer functions are mutually exclusive; enabling one automatically disables the other.
[3] On GNC 215, intercom controls are accessible from the Setup tab.
[4] Available only when the database source is configured as Internal.

Customize Display Layout

AVAILABLE WITH: GNC 215

Knob focus is set to Off by default.

Choose any combination of features for display in the active and/or standby areas of the NAV radio. Options are accessible from the Display tab (**MENU** > **Display**).

To enable a display feature, select it from the menu. Features that require pilot interaction are active by default (e.g., timer).

Re-open the Display tab to choose a feature for the other area.

AREA	AVAILABLE DISPLAY FEATURES	
VOR Info	• To • From	• Off
Standby	• CDI[1]	• TMR
	• STBY (with Reverse Frequency Look-up)	

[1] Availability dependent upon configuration.

To

Adds decoded "to" bearing information to the active NAV frequency.

From

Adds decoded "from" radial information to the active NAV frequency.

"To" and "from" information includes distance to station when an internal database and GPS source are present.

TMR

Adds an active timer to the NAV display. Use the outer knob to select timer type or select **Start**. Select **Reset** to stop and clear the timer.

CDI

Replaces NAV STBY window with a CDI scale. COM radio is active by default when the frequency is a LOC/ILS or a VOR with decoded OBS heading. OBS field is active when manual entry is required.

Assign Soft Key Shortcuts

WHERE TO FIND IT

MENU
- Setup
  - Softkey Settings

Customize the default function of the top and bottom soft keys. Options are accessible from the Setup tab.

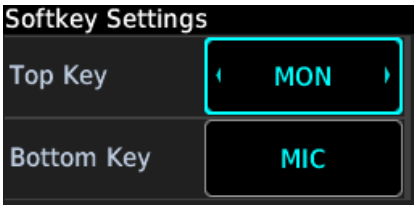
MENU > **Setup** > **Softkey Settings**

FEATURE REQUIREMENTS

- *GTR 205/GNC 215 software v2.22 or later*

FEATURE LIMITATIONS

- *Available shortcut options are dependent upon configuration*



To assign a soft key shortcut:

1. Select a key using the outer control knob.
2. Select a shortcut option using the inner control knob.

Selections appear at the left of the display upon exiting the menu.

GTR 205 with Dual-COM Soft Key Shortcuts

Soft key commands related to active functions and page navigation still appear as required (e.g.,MSG, BACK, HOME).

Shortcut Options

Not all options may be available.

GNC 215 SHORTCUT OPTIONS

Find	Find COM/NAV	**PTT**	Push to talk
ICS	Intercom	**Blank**	Do not display shortcut
NAV VOL	NAV Volume		

GTR 205 SHORTCUT OPTIONS

Bluetooth	Bluetooth Media/Phone	**MON**	Monitor COM receiver(s)[1]
COM Playback	COM audio playback[1]	**Pilot ISO**	Isolation
Find	Find COM	**PTT**	Push to talk
ICS	Intercom	**Wired Music**	Wired AUX Media On/Off
MIC	COM transmitter (mic)[1]	**Blank**	Do not display shortcut

[1] Available only with GTR 205 software v2.30 and later. Requires Audio Panel feature enablement.

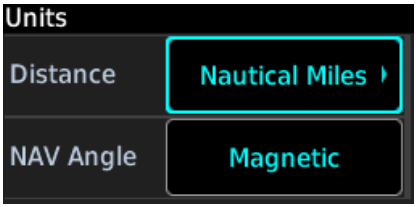
Customize Unit Settings

WHERE TO FIND IT

MENU
- Setup
  - Units

Customize the display unit settings. Selecting **Units** opens a menu of available unit types.

MENU > **Setup** > **Units**



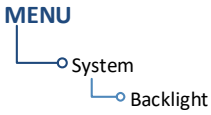
To specify unit type:

1. Review the current unit selections.
2. Select a parameter using the outer control knob.
3. Select a unit type using the inner control knob.

PARAMETER	UNIT SETTINGS	
Distance	• Nautical Miles (NM/kt) • Statute Miles (sm/mph)	• Kilometers (km/kph)
NAV Angle	• Magnetic (°)	• True (°T)

Adjust Display Brightness

WHERE TO FIND IT

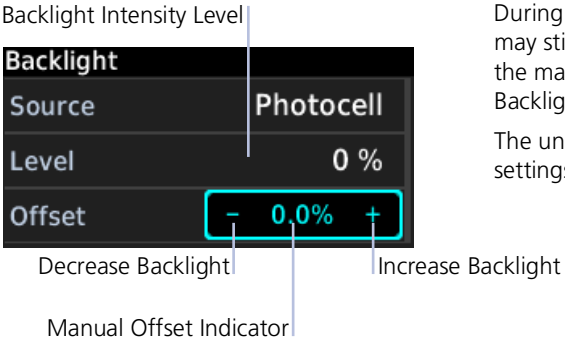


Depending on configuration, display brightness is controlled using inputs from the built in photocell, aircraft dimmer bus, or both.

MENU > **System** > **Backlight**

Automatic Brightness Control

Dimming is limited to prevent on-screen indications from becoming unreadable. The built-in photocell automatically controls display brightness based on ambient light levels.



During automatic control, you may still adjust brightness using the manual offset controls in the Backlight page.

The unit retains manual offset settings over power cycles.

Manual Brightness Control

Optionally, the unit is configurable to use an aircraft dimming bus for display brightness control. Upon reaching minimum input level, display brightness reverts to the photocell. This prevents the display from going black in the event of a dimmer input failure.

Installer configured curves determine the amount of change in brightness that occurs in response to a control adjustment. If brightness control is not satisfactory, contact a Garmin dealer to adjust the lighting curves.

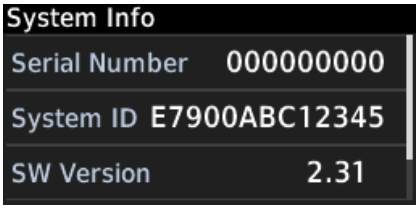
View System Information

WHERE TO FIND IT

MENU
- System
  - System Info

View information specific to the unit and its software.

MENU > **System** > **System Info**



Refer here when contacting customer service.

System Info

- Serial number
- System ID
- Main software version
- Bluetooth software version[1]

[1] GTR 205 only.

3 COM

SET UP COM RADIO 3-2
ADJUST COM RADIO VOLUME & SQUELCH 3-6
TUNE A COM FREQUENCY 3-8
MONITOR A COM FREQUENCY 3-11
REPLAY COM TRANSMISSIONS 3-12
FIND A COM FREQUENCY 3-16
CREATE COM USER FREQUENCIES 3-23
VIEW COM STATUS 3-26
RESPOND TO A COM ALERT 3-27

Set Up COM Radio

WHERE TO FIND IT

MENU
- Setup
  - COM Settings

VHF COM radio customization options are accessible via the Setup tab.

MENU > **Setup** > **COM Settings**

COM RADIO SETTINGS	
COM Squelch	Set transceiver squelch to Auto or adjust the threshold manually.
COM Spacing	Set transceiver channel spacing. Options: • 8.33 kHz • 25 kHz (default)
Sidetone Volume	Enable offset adjustments from the COM receiver volume. Options: • Fixed+Offset • Link to COM
Sidetone Offset	Adjust sidetone volume offset. Default setting: 0%
3D COM	Enable 3D audio for transmissions received while standby COM channel monitoring is active.[1]
COM Mutes ICS	Set transceiver to automatically mute intercom audio when receiving a transmission.[1]
COM Mutes Music	Set transceiver to automatically mute media playback when receiving a transmission.[1]

[1] Availability dependent upon ICS configuration.

Set COM Channel Spacing

The unit supports channel tuning for both 8.33 kHz and 25 kHz channels within radio-frequency range. Channel spacing is set to 25 kHz by default.

Turning the inner knob toggles the transceiver channel spacing between 8.33 kHz and 25 kHz.

8.33 kHz

8.33 kHz step configuration is available for European operations.

25 kHz

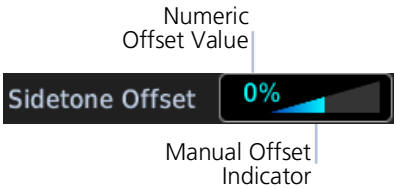
COM radio operates in the aviation voice band, between 118.000 and 136.975 MHz, in 25 kHz steps.

If flying in a region where 8.33 kHz channel spacing is available, set the COM radio to 8.33 kHz to prevent the loss of any stored or recently used frequencies.

Adjust Sidetone Volume Offset

FEATURE LIMITATIONS

- *Availability dependent upon configuration*
- *Offset range: +/-25% of total COM audio volume range*



If the unit is wired for audio output, set the sidetone volume offset to the preferred level. By default, the offset value is set to zero percent.

The unit retains manual offset settings over power cycles.

COM sidetone is audio spoken into the microphone that is played back in real time over the headset. The offset setting determines sidetone volume for the COM during radio transmission. Adjustments determine the amount that the sidetone volume level is offset from the COM receiver volume or the configured sidetone volume.

Link to COM Volume

Enabling this function allows you to adjust the amount that the sidetone volume level is offset from the COM receiver volume. These adjustments are dynamic in that they vary with the COM receiver volume level.

To adjust the offset from the COM receiver volume:

1. Enable **Link to COM**.
2. Adjust the offset as necessary.

To adjust the offset from the configured sidetone volume, disable the Link to COM function by selecting **Fixed+Offset** and then adjust the offset as necessary. These adjustments are fixed as they are relative to the configured sidetone volume.

Enable 16 W COM Transmitter Output

You must be the aircraft account holder to download this feature. Contact your Garmin dealer for assistance.

For convenience, a 16 W COM Transmitter Output enablement is available for download at flyGarmin.com. This process is similar to downloading the database and does not require a visit to the dealer.[1]

FEATURE REQUIREMENTS

- *GTR 205/GNC 215 software v2.22 or later*

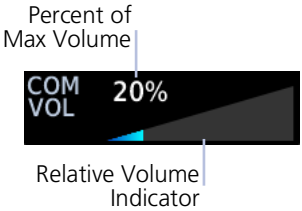
To add 16 W COM transmitter output to your system:

1. Sign in to you flyGarmin.com account.
2. Select the Devices tab, then locate your aircraft and radio unit.
3. Scroll to the "Feature Enablements" section. Select **Buy Enablement** and then complete the checkout process.
4. Insert a blank microSD card into the computer/card adapter. Complete the on-screen prompts to create an enablement card.
5. Place the enablement card in the radio unit's microSD card slot.
6. Power up the unit.

Enablement occurs upon system startup. While this process is quick, use of a ground power unit or running the engine may be advised depending on the aircraft.

[1] GTR 205/GNC 215 software earlier than v2.22: 16 W COM Transmitter Output feature requires enablement by the installer. Contact dealer for support.

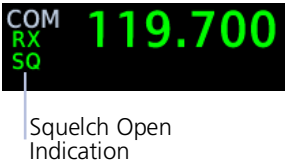
Adjust COM Radio Volume & Squelch



Adjust radio volume with the small knob according to your preference.

The unit retains volume settings over power cycles.

Open Squelch

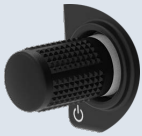


Push the volume/squelch knob to override the automatic squelch function. Push it again to return the squelch to automatic operation.

"SQ" annunciates in the COM active frequency window to show when the squelch is overridden (i.e., when the squelch is open).

The automatic squelch function rejects many localized noise sources. Overriding this function may be helpful when listening to a distant station or setting the volume level.

Volume/Squelch Knob Adjustments



Pushing the volume/squelch knob disables automatic squelch control.

Turning the knob adjusts the COM volume percentage.

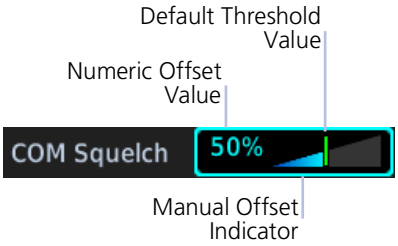
Adjust Squelch Threshold

WHERE TO FIND IT

Setup
- COM Settings
  - COM Squelch

Adjust the squelch threshold via the manual control in the Setup tab.

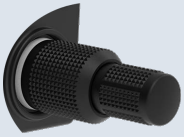
MENU > **Setup** > **COM Settings** > **COM Squelch**



Push the dual concentric knob to select COM Squelch and activate the manual threshold setting.

Push the knob again to return the squelch to automatic operation.

Manual Squelch Threshold Adjustment



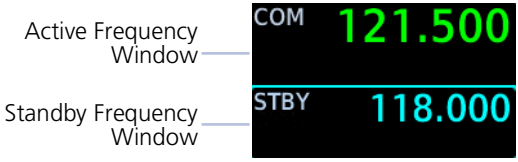
Pushing the dual concentric control knob toggles the COM squelch threshold setting between automatic and manual control.

Turning the inner knob adjusts the squelch threshold value.

Tune a COM Frequency

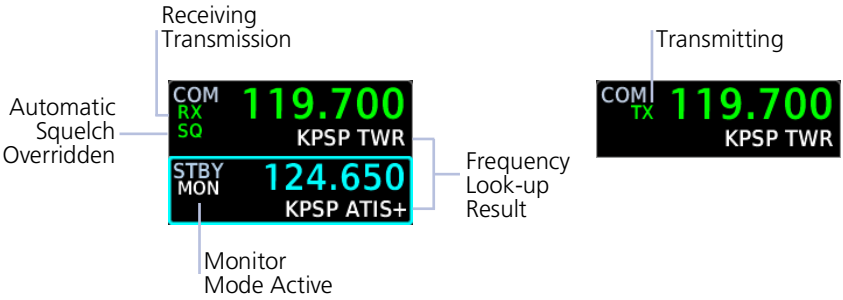
Communication frequencies are split between two selectable windows:

- The upper window presents the active COM radio frequency. This is the frequency currently in use for transmit and receive operations.
- The lower window presents the standby radio frequency. This frequency may be set and activated at any time.



COM STATUS INDICATIONS

Status annunciations denote active functions, modes, and frequency types.



RX	Receiving transmission
TX	Transmitting
SQ	Automatic squelch is overridden (i.e., squelch is open)
MON	Monitor mode active
MON	Standby frequency is receiving
KPSP ATIS+	Reverse frequency look-up information (sample text)

Tune a Standby Frequency

The dual concentric control knob allows you to enter a standby frequency. Pushing and holding the dual concentric control knob for 1.5 seconds automatically displays frequency search options.

The selected STBY window turns cyan when you use the control knob to change the standby COM frequency.

If no action occurs, the STBY window reverts to cyan text after 3 seconds. This indicates that the standby COM frequency is still adjustable using the control knob.

When the STBY COM frequency is no longer selected, it reverts to white text.

Transfer Frequency to Active (Flip-Flop)

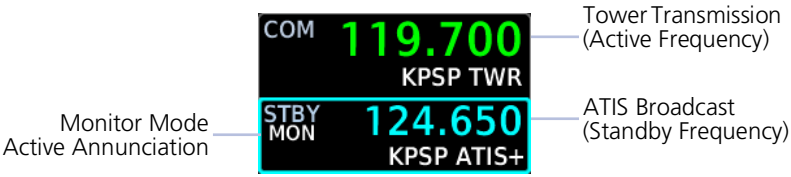
The transfer (or *flip-flop*) function allows you to swap the active and standby frequency values.

Before **After**

Monitor a COM Frequency

Enabling monitor mode allows you to listen to the standby frequency while the unit continues monitoring the active COM channel.

When the COM active frequency receives a signal, the unit automatically switches back to the active frequency. Once activity on the COM active channel ceases, the unit returns to listening to the standby frequency.



Monitor mode is useful when you want to listen to a recorded broadcast (e.g., ATIS) on the standby channel, but still receive control tower transmissions on the active channel.

Replay COM Transmissions

AVAILABLE WITH: GTR 205

WHERE TO FIND IT

MENU
- Display
  - Playback

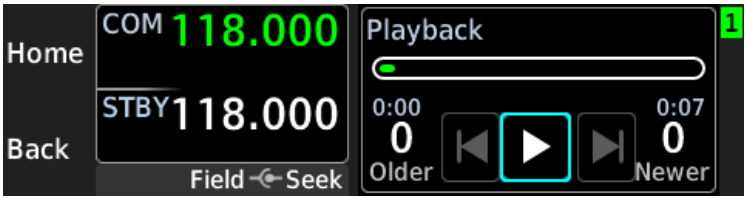
Replay recently received COM transmissions using the COM Playback function.

MENU > **Display** > **Playback**

FEATURE REQUIREMENTS

- *GTR 205 software v2.30 or later*
- *Purchased Audio Panel feature enabled on unit*

Playback controls appear to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to COM Playback.



Select control options by turning the outer control knob.

Playback Features

1	Playback Controls	**3**	Current Clip Duration
2	Total Number of Older Clips	**4**	Total Number of Newer Clips

Playback controls are not available while the unit is recording.

GTR 205 automatically records up to 2.5 minutes of the active COM radio signal for playback. Each recording is saved as a separate audio clip in the unit's internal storage. The unit records over the oldest clip when it reaches capacity.

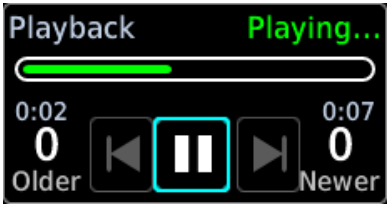
The unit does not retain audio clips over power cycles.

Play Audio Clips

PLAYBACK CONTROLS	
	Play/Pause
	Previous Clip
	Next Clip

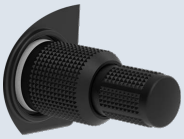
Playback is heard by anyone listening to COM radio. Basic playback functions (Play/Pause, Previous, Next) are accessible via dual concentric knob push.

Control options change according to the current playback state.



A progress bar shows when playback is complete.

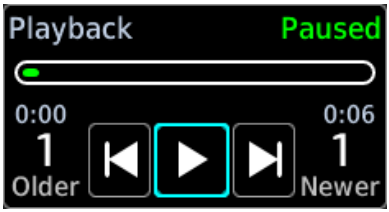
Playback Seek via Control Knob



Turning the inner knob during playback advances the recording 2 seconds at a time.

Stop Playback

During COM playback, the **STOP** soft key is available when knob focus is set to another page or function.



Playback stops automatically when the COM radio squelch opens and when the pilot or copilot:

- activates the **Pause** control on the Playback display
- begins transmitting on the COM radio
- overrides the squelch by pushing the volume knob (indicated by the “RX” state annunciation)

Find a COM Frequency

Find and select a standby COM frequency from a list of available database frequencies.

Pushing the **Find COM** soft key while the COM radio is active provides access to multiple search options. Each category displays a list of selectable identifiers based on specific criteria.

FEATURE REQUIREMENTS

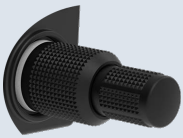
- *GPS source for Nearest waypoint search options*

FEATURE LIMITATIONS

- *Database search option available only when Navigation database is present*

FREQUENCY SEARCH OPTIONS	
Recent	Lists up to 20 of the most recently tuned frequencies.
User	Lists up to 20 user-defined frequencies.
Database	Lists the frequencies associated with the specified 5-character facility identifier.
Nearest Airport	Lists up to 20 airport frequencies within a 200 NM radius.
Nearest ARTCC	Lists up to 20 area control center frequencies within a 200 NM radius.
Nearest FSS	Lists up to 20 flight service center frequencies within a 200 NM radius.
Nearest WX	Lists up to 20 weather frequencies within a 200 NM radius.

Find Frequency via Control Knob



Pushing and holding the dual concentric control knob for 1.5 seconds automatically displays frequency search options from any page or tab.

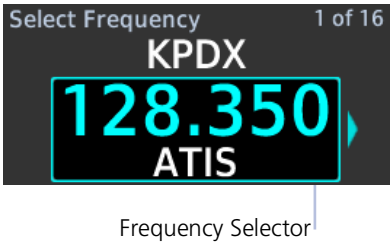
- "Hold for Find" control label appears in the annunciator bar
- Select Frequency menu opens from the last viewed search result

SEARCH RESULTS

Each frequency includes general information about the associated waypoint.

Nearest airports include bearing and distance to field information based on GPS data.

MULTIPLE FREQUENCIES



A selector appears when more than one frequency type is available at the indicated identifier.

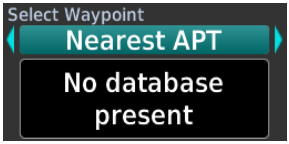
Applicable to search options displaying information only (ARTCC, FSS, and Nearest Airports).

FREQUENCY SEARCH ERRORS

Search errors may display if any one of the following conditions exist.

Nearest Frequency Search Options

The unit is configured for GPS but is not receiving a position.

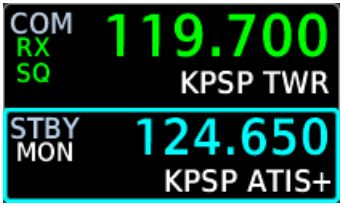


The unit is configured for GPS but no database is present.

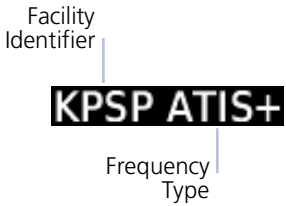
Database Search Option

No database is present.

Reverse Frequency Look-up



This function automatically displays the facility identifier and frequency type for active and standby frequencies. The unit verifies the displayed frequency against the database at least once per minute.



"+" denotes more than one type associated with the frequency.

Reverse frequency look-up results are based on GPS position and database information. If no GPS navigator is present in the system, reverse frequency look-up text will only appear if the frequency was recently loaded via the Find function.

When Reverse Frequency Look-up is active, COM displays:

- Nearest facility identifier (if available)
- Multiple facility indication (if more than one)
- Frequency type
- Approach or Departure indications (if applicable)

When flying between airports that use the same frequency, it may take up to 2 minutes for look-up information to change after crossing the halfway point.

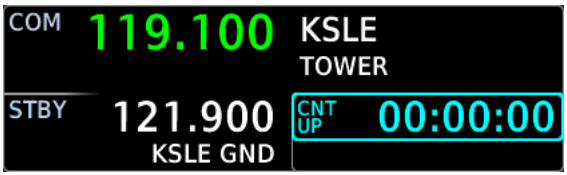
DATA SIZE & POSITION

The size and location of Reverse Frequency Look-up text is dependent upon the status of right side features.

Default View

Text is larger for easier viewing.

Timer Enabled



Text shifts beneath the frequency value when you enable right side features.

DATA SOURCE PRIORITY

RFL data prioritization is dependent upon certain required conditions, including whether the database source is configured as internal or external.

Internal Database

RFL information is received from the following sources in order of priority, from highest (1) to lowest (3).

SOURCE		REQUIRED CONDITIONS
1	Proximity search of database	Navigation database and GPS are present.
2	Recent database selection	Navigation database present; no GPS.
3	User frequency list	No required conditions.

External Database

RFL information is received from the following sources in order of priority, from highest (1) to lowest (5).

SOURCE		REQUIRED CONDITIONS
1	Proximity search of database	Navigation database and GPS are present.
2	Recent database selection	Navigation database present; no GPS.
3	Remote lists	Navigation database present on external LRU.
4	Remote frequency tables	Frequency data from external LRU.
5	User frequency list	No required conditions.

Remote Frequency Selection

FEATURE LIMITATIONS

- *Availability dependent upon configuration*

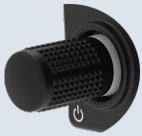
If configured for remote frequency recall, COM user frequencies are selectable via a remote switch.

- Pressing the switch once loads the next user frequency into the STBY window
- Pressing the switch repeatedly scrolls through the list of presets
- Some installations may have two dedicated recall switches: one to scroll up, one to scroll down
- Selections do not activate until transfered to active

Emergency Frequency Selection

Pushing and holding either the volume knob or **Flip-Flop** key for 1.5 seconds provides a quick method for remotely tuning the emergency frequency (121.50 MHz). This feature is available any time the unit is on, regardless of GPS or display status.

Volume/Squelch Knob Shortcut



Pushing and holding the volume knob for 1.5 seconds automatically tunes the COM emergency frequency (121.50 MHz).

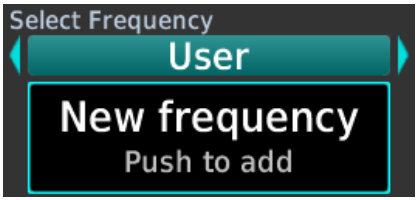
- “Hold for 121.50” control label appears in the annunciator bar
- Frequency automatically loads to the COM standby window and then transfers to the active COM frequency

Create COM User Frequencies

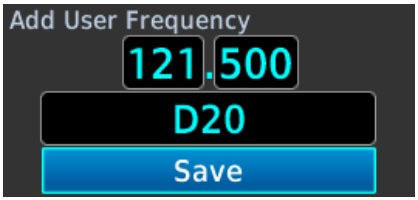
FEATURE LIMITATIONS

- *Names may be up to 10 characters in length*
- *Maximum number of 20 user frequencies*

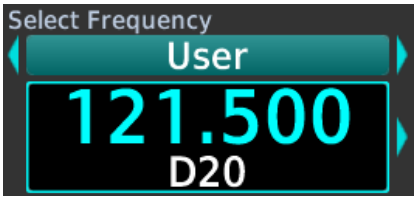
Add a frequency to the user frequency list. Controls are accessible via the Select Frequency menu.



1. Open the Select Frequency menu.
2. Scroll to the User category.
3. Push the inner control knob to add a new frequency.
4. Specify a frequency value.
5. Assign the frequency a unique identifier.
6. Select **Save**.



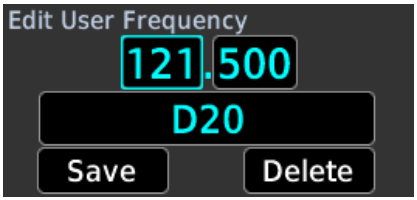
To cancel the request and close without saving, select **Cancel**.



User frequencies remain in the list until you delete them.

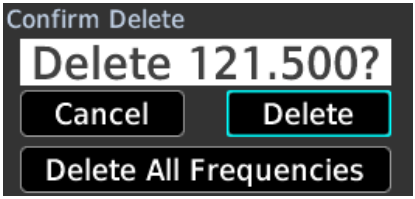
Edit a COM User Frequency

Modify an existing user frequency. Selecting a user frequency gives you the EDIT option.



1. Select the user frequency from the list.
2. Push the **Edit** soft key.
3. Modify the current frequency name and/or value using the dual concentric knob.
4. Select **Save**.

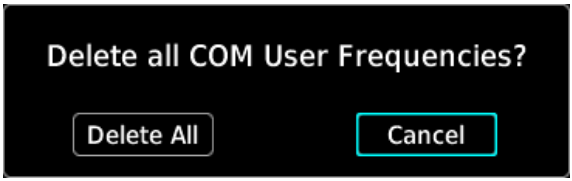
Delete a COM User Frequency



Selecting **Delete** opens a confirmation page. From here you can delete the selected user frequency or all user frequencies in the list.

Confirm the request to remove the selected user frequency from the list.

Selecting **Delete All Frequencies** opens a pop-up. Confirming the request removes all COM user frequencies from the list.



DELETE A COM USER FREQUENCY

1. Select a COM user frequency from the list.
2. Push the **EDIT** soft key.
3. Select **Delete**.

From here you may:

- *Confirm deletion of the selected user frequency:* Select **Delete**.
- *Delete all COM user frequencies:* Select **Delete All Frequencies** > **Delete All**.
- *Cancel the request:* Select **Cancel**.

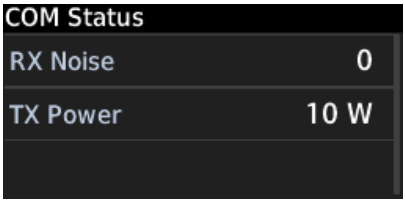
View COM Status

WHERE TO FIND IT

MENU
- System
  - COM Status

View COM radio transmit voltage and received noise. This information is accessible via the System tab.

MENU > **System** > **COM Status**



This page is for reference only. Information includes:

- Receiver noise
- Transmit power

Respond to a COM Alert

Radio failures are indicated by one or more of the following:

- Red "X" displays over the COM radio control
- Advisory message alerts
- COM control options are not available

COM radio fail annunciations are designed to be immediately recognizable.

For information regarding pilot response to a COM radio failure, consult the AFMS.

Stuck Microphone

The COM transmitter automatically times out after 30 seconds of continuous broadcasting. This may occur when:

- Push-to-talk key on the microphone is stuck or accidentally left in the keyed position
- Push-to-talk function continues to transmit after releasing the key

The advisory message "COM MIC <1/2> key is stuck" alerts for as long as the condition exists.

INTENTIONALLY LEFT BLANK

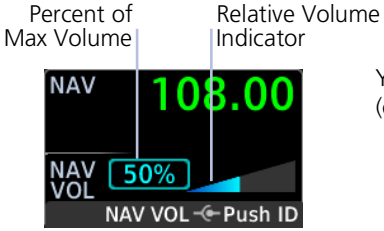
GNC 215 ONLY

4 NAV

ADJUST NAV RADIO VOLUME 4-2
ACTIVATE NAV IDENT 4-2
TUNE A NAV FREQUENCY 4-3
MONITOR A NAV FREQUENCY 4-6
FIND A NAV FREQUENCY 4-7
VIEW NAVIGATION DATA 4-9
SPECIFY AN OBS COURSE 4-13
RESPOND TO A NAV ALERT 4-15

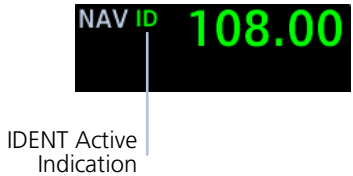
Adjust NAV Radio Volume

Pushing the **NAV VOL** soft key while the NAV or COM radio is selected provides access to volume controls. Adjust radio volume with the inner and outer control knobs according to your preference.



You can adjust the volume by increments of ten (outer control knob) or one (inner control knob).

Activate NAV IDENT



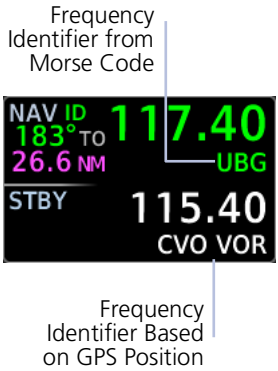
Activate the NAV IDENT function by pushing the **NAV VOL** soft key then the inner control knob.

- "ID" annunciates in the active NAV frequency window
- Morse code tones are audible

Tune a NAV Frequency

Navigation frequency tuning, transfer, and selection functions are identical to those used for communication frequencies.

NAV STATUS INDICATIONS



The unit automatically decodes Morse code and displays the Ident for the active frequency above it.

The reverse frequency look-up identifier displays below the frequency value. Reverse frequency look-up results are based on GPS position and database information. If no GPS navigator is present in the system, reverse frequency look-up text will only appear if the frequency was recently loaded via the Find function.

Identifier information received via Morse code has display priority over reverse frequency look-up results.

Received from Database & GPS

Station information appears white when the identifier is inferred from the database and current location.

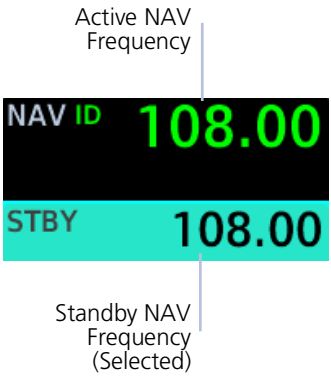
Received from Morse Code

The identifier turns green when a valid ID is decoded from Morse code.

Custom User NAV Frequencies

User stored NAV frequencies may display in the absence of a remote source or internal database. These custom user NAV frequencies receive the “FARM VOR” identifier.

STANDBY NAV FREQUENCY ENTRY



To change the standby NAV frequency:

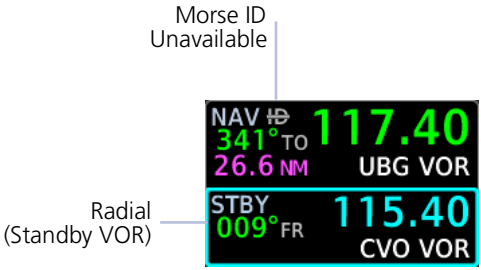
1. Activate the standby NAV frequency window by selecting **Home**, then pushing the dual concentric control knob once or twice depending on pilot settings. Upon selection, the standby NAV frequency window remains active for approximately 30 seconds.
2. Enter a standby frequency by turning the inner and outer control knobs.
3. Assign the standby value as the active frequency by pushing the **Flip-Flop** key.

Navigation frequencies include:

- Glideslope (ILS)
- Localizer (LOC)
- VOR

Monitor a NAV Frequency

The NAV radio provides a monitor function for VORs as the standby channel similar to the COM radio. Pushing the **MON** key while the NAV standby frequency is selected activates VOR monitoring.



During monitor mode:

- A gray “ID” with strike-through indicates that Morse ID is unavailable on the active frequency.
- The current radial of the standby VOR station appears next to the standby frequency.

Find a NAV Frequency

Find and select a standby NAV frequency from a list of available database frequencies.

Pushing the **Find NAV** soft key while the NAV radio is selected provides access to multiple search options. Each category displays a list of selectable identifiers based on specific criteria.

FEATURE REQUIREMENTS

- *GPS source for Nearest waypoint search options*

FEATURE LIMITATIONS

- *Database search option available only when Navigation database is present*

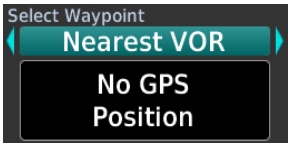
FREQUENCY SEARCH OPTIONS	
Recent	Lists up to 20 of the most recently tuned frequencies.
User	Lists up to 20 user-defined frequencies.
Database	Lists the frequencies associated with the specified 5-character facility identifier.
Nearest VOR	Lists up to 20 VOR frequencies within a 200 NM radius when interfaced with a GPS receiver.
Nearest LOC	Lists up to 20 localizer frequencies within a 200 NM radius when interfaced with a GPS receiver.

Magenta bearing info displayed for the purpose of Find NAV is based on GPS and the Navigation database, not the VHF NAV function. For more about data color indications, read *Color Conventions*.

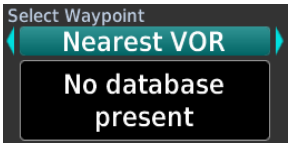
FREQUENCY SEARCH ERRORS

Search errors may display if any one of the following conditions exist.

Nearest Frequency Search Options



The unit is configured for GPS but is not receiving a position.



The unit is configured for GPS but no database is present.

Database Search Option

No database is present.

View Navigation Data

Navigation data include:

- Decoded From radial and To bearing
- Distance to station (GPS or DME)
- Lateral deviation and to/from indication on a CDI scale
- OBS course heading

Depending on configuration, you may view supplemental navigation data in the active and standby areas of the NAV radio.

Data options are selectable from the Display tab (**MENU** > **Display**).

Read more about data display options in *Customize Display Layout*.

NOTE

Information provided by the onscreen CDI is for backup purposes only. Do not use for primary navigation.

FEATURE LIMITATIONS

- *Data availability dependent upon configuration*
- *OBS heading course data not available when the system is configured with a composite external indicator*

VOR Info & Distance Data

To/From/Off

When enabled, the "from" (FR) radial or "to" (TO) bearing is decoded from the active NAV frequency.

Distance to Station

Distance to station appears if:

- An internal database is present and the unit is receiving GPS position

OR

- A Garmin DME is present

DME Distance to Station

FEATURE REQUIREMENTS

- *Garmin DME*
- *GNC 215 software v2.31 or later*

When interfaced with a Garmin DME receiver, DME distance to station appears when GPS distance or the internal database are unavailable.

Distance & Bearing

Valid distance-to-station values received directly from the DME appear in green. Bearing displays if received from the tuned VOR.

Distance Only

Bearing is absent when the unit is tuned to a LOC and the DME is tracking the associated station.

Distance Unavailable

Green dashes indicate when the DME signal is invalid and GPS is not available (i.e., the unit is not configured for GPS or no database is present).

Always verify DME-displayed identifiers independently to ensure accuracy.

HOLD STATUS INDICATIONS

During LOC mode, DME identifier and distance-to-station values change appearance to reflect DME active hold status and the absence of GPS.

IDENT Confirmed

If confirmed, the DME identifier appears in white.

IDENT Unconfirmed

White dashes indicate when the identifier is unconfirmed.

DME holds require pilot activation of the DME hold function via the interfaced Garmin display unit (e.g., AXIS, TXi). For more information, consult the associated pilot's guide.

DME MISMATCH INDICATIONS

If the DME signal becomes invalid during VOR mode, distance-to-station values change appearance to reflect GPS availability. Mismatches occur when the current station is a LOC, but the DME frequency is tuned to a VOR.

GPS Available

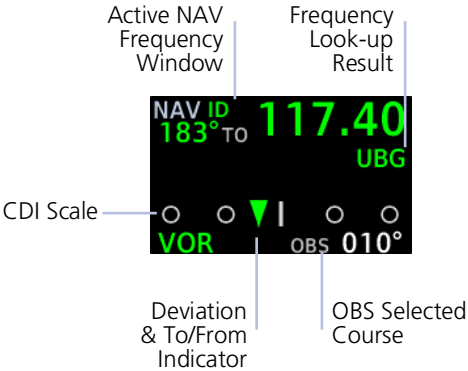
Magenta distance-to-station value means the data sourcing is via GPS.

GPS Unavailable

Magenta dashes indicate when the DME signal is invalid and GPS is unavailable.

CDI

When enabled, a CDI replaces the NAV STBY window. It appears between the active and standby windows when you are actively monitoring the NAV standby frequency.



The CDI presents a sliding lateral deviation indicator on a horizontal scale.

A pointer moves left or right to portray aircraft position relative to the selected course. Pointer direction indicates the current leg type: To (up) From (down).

An OBS selected course field accompanies the CDI scale. Manual course adjustments are not available while receiving selected course input from the external CDI/HSI.

STBY window replaces the CDI when you tune the standby NAV frequency. The CDI is absent when course deviation data are invalid.

Each circle on the CDI scale represents 5 degrees deflection with 11 degrees full deflection to each side. Fly toward the center bar to be on-course.

TO/FROM LEGS ON THE CDI

These legs are depicted as an upright or inverted triangle based on CDI data.

"To" Legs

- Upward pointing indicator indicates "to"
- Distance to station decreases as you navigate the leg

"From" Legs

- Downward pointing indicator indicates "from"
- Distance to station increases as you navigate the leg

Specify an OBS Course

The unit allows manual entry of the OBS selected course in the absence of an external CDI/HSI selected course input.

OBS Entry Field Active

Specify a selected course using the dual concentric knob.

Exit entry mode by doing one of the following:

- Pushing the dual concentric knob
- Allowing entry mode to expire

Entry mode expires after approximately 30 seconds of inactivity. The unit retains the bearing setting until you enter a new one.

DIRECT COURSE OPTION

Selecting the **Direct CRS** soft key while the OBS entry field is active sets the OBS on a direct course to the VOR station based on the current bearing.

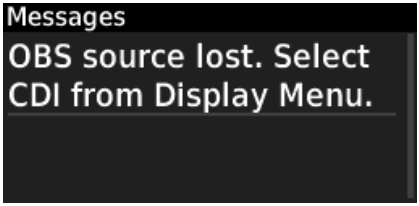
OFF SCALE INDICATION

Deviation & To/From Indicator Off Scale

Off Scale Indication

An arrow and value display when the deviation & to/from indicator exceeds 11 degrees. The indicator parks on the side nearest to its actual position (a partial indicator is visible at the left or right of the display).

OBS SOURCE LOST



A message informs you when GNC 215 loses selected course input from the external NAV indicator. When this occurs, you may select OBS.

Respond to a NAV Alert

Radio failures are indicated by one or more of the following:

- Red “X” displays over the NAV radio control
- Advisory message alerts
- NAV control options are not available

NAV radio fail annunciations are designed to be immediately recognizable.

Use an alternate method of navigation in response to a NAV radio failure.

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5 Timers

VIEW TIMERS 5-2
SET COUNTDOWN TIMER 5-4
SET COUNT UP TIMER 5-5

View Timers

Set a generic timer for general timing needs. Two stopwatch style counters allow you to count up or count down.

WHERE TO FIND IT

MENU
- Display
  - Timer

Select the Timer option from the Display tab.

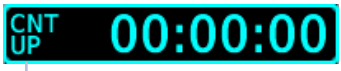
MENU > **Display** > **Timer**

A timer appears to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to Timer.

Timer is grayed out until you activate the function. Count up (CNT UP) is the default timer selection.

TIMER TYPE ANNUNCIATIONS	
CNT UP	Count up timer
CNT DN	Countdown timer

Toggle between timer types by turning the outer control knob. The timer type annunciates at the left of the timer display.



Active Timer Type

Timer Controls

ACTION	SOFT KEY
Cancel start value entry[1]	Cancel
Start timer	Start
Stop timer	Stop
Reset timer	Reset

[1] Countdown timer only.

Basic timer functions are accessible via dual concentric knob push.

Control options change according to the current timer state.

Set Countdown Timer

The unit retains the last countdown timer value setting following a power cycle. For example, if the timer is set to 5 minutes, then the default timer value following power cycle becomes 5 minutes.

1. Set direction to count down (CNT DN) using the outer control knob.

2. Specify countdown time using the inner and outer control knobs. The timer is factory set to 1 minute.

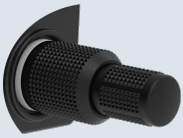
3. Select **Start**.

Timer flashes as the value reaches zero (00:00:00).

Upon reaching zero, timer continues counting as a negative value until you select **Stop**.

To reset timer, push the **Reset** soft key.

Set Countdown Time via Control Knob



Turning the outer knob moves the cursor between hours, minutes, and seconds.

Turning the inner knob adjusts the highlighted value. Pushing the knob enters the timer value.

Set Count Up Timer

1. Set direction to count up (CNT UP) using the outer control knob (if necessary).
2. Select **Start**.

To reset timer, push the **Reset** soft key.

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GTR 205 ONLY

6 Audio Sources

MANAGE AUDIO SOURCES.....6-2
SET PLAYBACK KEY FUNCTIONALITY 6-4
CONTROL DUAL COM RADIOS.....6-6
ENABLE 3D AUDIO 6-7
MUTE AUDIO SOURCES.....6-8
UNDERSTAND FAIL-SAFE OPERATION 6-9

Manage Audio Sources

WHERE TO FIND IT

MENU
- Display
  - Audio Sources

Control audio input sources (e.g., other radios, wired music) and output to a cabin speaker. Access Audio Sources from the Display tab.

MENU > **Display** > **Audio Sources**

FEATURE REQUIREMENTS

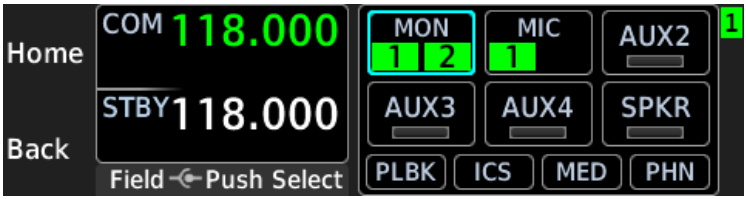
- *GTR 205 software v2.22 or later*

FEATURE LIMITATIONS

- *Availability dependent upon configuration*

Audio controls appear to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to Audio Sources and displays additional controls (if available).

GTR 205 with Audio Panel Enablement



Audio control key labels are customizable and dependent upon installer configuration.

When configured, audio controls allow you to:

- Select between internal and external COM radios using MIC and MON functions
- Toggle audio output to the cabin speaker on/off
- Toggle auxiliary audio inputs on/off

Audio Controls

Example of audio control keys.

From here, you may toggle an auxiliary audio source (e.g., dual-COM, other radios, music) and/or the cabin speaker on or off.

Depending on configuration, COM Playback, Intercom, Media, and Phone functions are accessible from here.

ENABLE OR DISABLE AN AUDIO INPUT/OUTPUT

1. Select the input/output using the outer control knob.
   - *For auxiliary audio:* Select the appropriate toggle key.
   - *For cabin speaker:* Select **SPKR**.
2. Toggle the input/output on or off by pushing the inner knob.

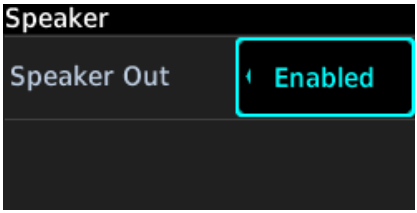
ENABLE CABIN SPEAKER WITHOUT AUDIO SOURCES

FEATURE LIMITATIONS

Speaker Out options available only when:

- *The Audio Sources display is not available*
- *GTR 205 is configured for cabin speaker output and not Intercom*

You can enable or disable the cabin speaker when the Audio Sources display is not present. Speaker Out settings reside in the Setup tab.



1. **Menu** > **Setup** > **Speaker**.
2. Enable Speaker Out.

Set Playback Key Functionality

WHERE TO FIND IT

MENU
- Setup
  - Playback Settings

Set the function of the **COM Playback** key. Options are accessible via the Setup tab.

MENU > **Setup** > **Playback Settings**

FEATURE REQUIREMENTS

- *GTR 205 software v2.30 or later*
- *Purchased Audio Panel feature enabled on unit*

The Audio Panel enablement provides two control options: Open Playback Page and Play Last Message.

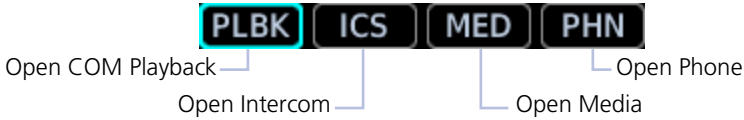
CONTROL OPTION	KEY LABEL
Open Playback Page	PLBK
Play Last Message	PLAY

On the Audio Sources display, the label of the **COM Playback** key changes to reflect the current selection.

OPEN PLAYBACK PAGE

Selecting this option provides direct access to the COM Playback display from Audio Sources. This is the default control setting.

Select **PLBK** using the outer control knob and then push the inner knob.



PLAY LAST MESSAGE

Selecting this option adds a control for playing the most recent COM audio clip.

Select **PLAY** using the outer control knob and then push the inner knob.

During COM playback:

- **STOP** and **OLDR#** soft keys are available
- **PLAY** key label changes to "OLDR"
- Selecting **OLDR** plays the previous audio clip or ends playback if no clip is available

Play Last Message Function Active

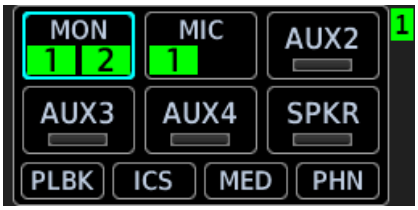
Control Dual COM Radios

If configured for dual-COM radios, you may toggle the active COM transmitter and/or related COM receiver(s) at any time using the associated audio controls.

FEATURE REQUIREMENTS

- *GTR 205 software v2.30 or later*
- *Purchased Audio Panel feature enabled on unit*

Selecting **MIC 1** or **MIC 2** sets the COM #1 or COM #2 transmitter and related COM receiver (MON 1 or MON 2), allowing received audio to be heard over the headset.



The mic-selected transmitter (MIC 1 or MIC 2) appears in the icon bar.

Selecting **MON** allows you to monitor the other COM receiver. The mic-selected COM receiver is always monitored.

To switch the COM transmitter and/or receiver:

1. Select the input using the outer control knob.
   - *For transmitter selection:* Select **MIC**.
   - *For active COM receiver:* Select **MON**.
2. Toggle the active selection by pushing the inner knob.
   - *Transmitter options:* MIC 1 or MIC 2.
   - *Receiver options:* MON 1 and/or MON 2.

For convenience, the unit provides soft key shortcuts for dual-COM radio commands.

MENU > **Setup** > **Softkey Settings**, and select **MIC** and/or **MON** for the top and/or bottom key(s).

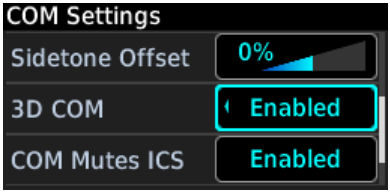
Read more about available shortcut options in *Assign Soft Key Shortcuts*.

Enable 3D Audio

3D audio is useful when multiple audio sources are present. When enabled, this feature creates the illusion that each audio source is coming from a unique location or seat position, allowing you to focus on and understand one source at a time.

3D audio settings reside in the Setup tab.

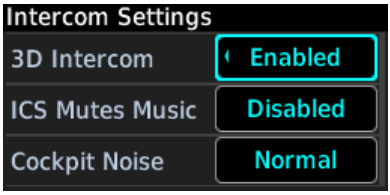
ENABLE 3D COM



1. **Menu** > **Setup** > **COM Settings**.
2. Enable the 3D COM setting.

During normal operation, active frequency is at the 12 o'clock position. When monitor mode is active, the active frequency changes to the 11 o'clock position and the standby frequency is at the 1 o'clock position.

ENABLE 3D INTERCOM



1. **Menu** > **Setup** > **ICS Settings**.
2. Enable the 3D Intercom setting.

GTR 205 processes intercom positions according to relative seat location (pilot or copilot). By default, the unit assumes that the pilot is in the left seat. This position is configurable.

How Does 3D Audio Work?

Advanced digital audio processing helps locate the inputs coming into your headset, providing a spatial dimension to the sound that more closely reflects how the human ear naturally hears and responds to directional sources. When 3D audio is enabled, active and standby frequencies will seem to come from different locations. Likewise, intercom audio is also separated relative to where each individual sits.

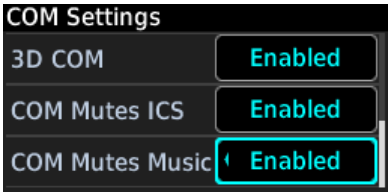
To hear 3D audio, set stereo/mono headphones to the stereo position.

Mute Audio Sources

Set the intercom and/or media player to mute during certain conditions. Mute settings reside in the Setup tab.

COM MUTES ICS/MUSIC

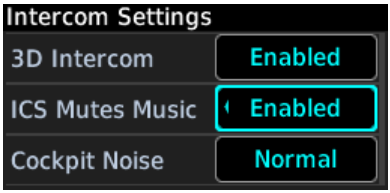
Mute intercom and/or media audio when the COM radio is receiving a transmission on the active frequency or transmitting sidetone audio.



1. **Menu** > **Setup** > **COM Settings**.
2. Enable one or both of the following settings based on preference.
   - COM Mutes ICS
   - COM Mutes Music

ICS MUTES MUSIC

Enabling ICS Mutes Music mutes media audio in the headset while someone is speaking on the intercom.



1. **Menu** > **Setup** > **ICS Settings**.
2. Enable ICS Mutes Music.

Understand Fail-safe Operation

FAIL-SAFE MODE CONNECTIONS	
DEVICE	**INPUT[1]**
Pilot headset (left)[1]	AUX 1[2]
Pilot microphone	COM Audio Out[3]
COM TX key	Mic 1 key

If the unit experiences a failure or loss of power, a fail-safe circuit connects the pilot's headset and microphone directly to a second COM transceiver.

Connections automatically re-route to their previous designations once unit operation is restored.

Audio is not available on the speaker during fail-safe operation.

[1] Actual input labels dependent upon installer configuration.
[2] Connection not used if the unit is configured for an external audio panel (i.e., the AUX 1 input will not be heard).
[3] Connection not used if the unit is configured as an internal audio panel (i.e.,the pilot microphone will not be heard).

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7 Intercom

VIEW INTERCOM 7-2
ADJUST ICS VOLUME 7-3
ADJUST ICS MUSIC VOLUME 7-3
ENABLE NAV AUDIO 7-4
ENABLE PILOT ISOLATION 7-4
ENHANCE INTERCOM AUDIO 7-5

View Intercom

WHERE TO FIND IT

MENU
- Display
  - Intercom

Allow the copilot to hear what the pilot hears. Intercom is accessible from the Display tab.

MENU > **Display** > **Intercom**

FEATURE REQUIREMENTS

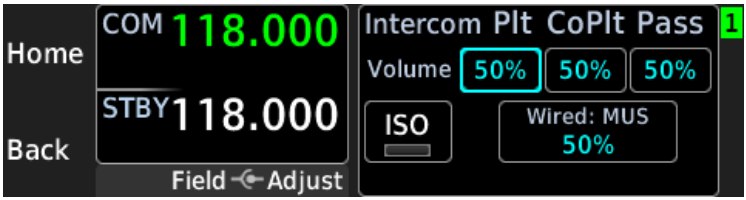
- *GTR 205 software v2.22 or later*

FEATURE LIMITATIONS

- *Availability dependent upon configuration*

Controls for pilot, copilot, and passenger[1] intercoms appear to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to Intercom.

GTR 205 with Audio Panel Enablement



Select control options by turning the outer control knob. The volume control for the pilot's intercom is selected by default. An additional volume control is available for installations wired for intercom music audio.

[1] Passenger intercom available with GTR 205 v2.30 and later. Requires Audio Panel feature enablement.

Adjust ICS Volume

Volume may be set separately for pilot, copilot, and passenger intercoms. The unit retains volume settings over power cycles.

Adjust intercom volume using the inner and outer control knobs. Turn the outer knob to select the recipient (pilot, copilot, or passenger). Turn the inner knob to set the volume level according to your preference.

Adjust ICS Music Volume

Select the volume control to set wired intercom music volume to a preferred level.

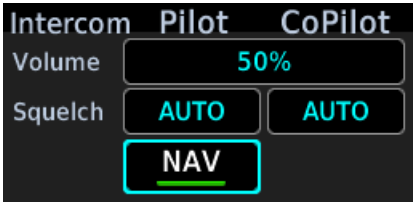
Volume displays as a percentage of the maximum volume, with 0% being muted and 100% being maximum volume.

Turn the outer knob to select **Wired: MUS**. Turn the inner knob to set the volume level according to your preference. This control is available only when the unit is hardwired to a music audio source.

The unit retains music volume settings over power cycles.

Enable NAV Audio

AVAILABLE WITH: GNC 215

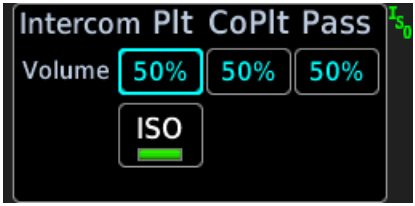


Enable NAV audio to hear Morse code identifier tones over the intercom.

Select **NAV** by turning the outer control knob. Push the inner knob to enable NAV audio.

Enable Pilot Isolation

AVAILABLE WITH: GTR 205



"ISO" icon indicates when Isolation mode is active.

Isolate pilot communication from the copilot and passengers.

Select **ISO** by turning the outer control knob. Push the inner knob to enable pilot isolation mode.

Enhance Intercom Audio

WHERE TO FIND IT

MENU
- Setup
  - ICS Settings

Intercom customization options are accessible from the Setup tab.

MENU > **Setup** > **ICS Settings**

INTERCOM SETTINGS	
3D Intercom	Enable 3D audio for intercom communication.
ICS Mutes Music	Set intercom to automatically mute media playback when active.
Cockpit Noise	Set mic audio filter according to the cockpit noise level. Options: • Normal (default) • High

Read more about 3D audio and mute functions in section 6.

Adjust ICS for Cockpit Noise

Select High for high noise cockpit environments. Normal is the default noise setting.

Both settings remove low and high frequency sound. The High setting more aggressively removes high frequency sound.

Keyed ICS Operations

The unit may be configured for keyed ICS operations. Keyed ICS is typically used in extremely noisy environments, such as an open cockpit.

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GTR 205 ONLY

8 Media

VIEW MEDIA PLAYER.....8-2

ADJUST MEDIA VOLUME.....8-3

PLAY MEDIA.....8-3

ENHANCE MEDIA AUDIO.....8-4

View Media Player

WHERE TO FIND IT

MENU
- Display
  - Media

The Media function provides playback controls for your connected Bluetooth enabled device. Open the media player by selecting the Media option on the Display tab.

MENU > **Display** > **Media**

FEATURE REQUIREMENTS

- *GTR 205 software v2.22 or later*

FEATURE LIMITATIONS

- *Availability dependent upon configuration*

Playback controls appear to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to Media.

Select control options by turning the outer control knob. An icon at the right of the display indicates when the media player is active.

Media Features

1	Artist & Title Track	**3**	Media Player Active Icon
2	Playback Controls	**4**	Volume Control

Adjust Media Volume

Select the volume control to set the media player volume to a preferred level.

Volume displays as a percentage of the maximum volume, with 0% being muted and 100% being maximum volume.

The volume control is available only when the media player is connected to an audio source.

Play Media

PLAYBACK CONTROLS	
	Play/Pause
	Previous Track
	Next Track

Basic media functions are accessible via dual concentric knob push.

Control options change according to the current playback state.

Enhance Media Audio

WHERE TO FIND IT

MENU
- Setup
  - Media Settings

Media audio customization options are accessible from the Setup tab.

MENU > **Setup** > **Media Settings**

MEDIA SETTINGS	
Equalizer	Choose an equalization setting. Options: • Off (default) • Rock • Classic • Pop
Bass Boost	Adjust the current bass level. Options: • Off (default) • Medium • High

Media settings display the default or previously selected value. By default, all settings are set to Off.

Choose an Equalizer Setting

Set the media input audio response using equalizer presets. Selections are based on music type: • Rock • Classic • Pop • Off (no change)

Add Bass

Boost the base level of the media input. Options: • Medium • High • Off (no boost)

GTR 205 ONLY

9 Phone

VIEW PHONE 9-2
ADJUST PHONE VOLUME 9-4
SILENCE RINGER 9-4
MAKE A CALL 9-5
ACCEPT A CALL 9-5
IGNORE A CALL 9-6

View Phone

WHERE TO FIND IT

MENU
- Display
  - Phone

Make and receive telephone calls using Bluetooth wireless connectivity and your portable electronic device. Phone is accessible from the Display tab.

MENU > **Display** > **Phone**

FEATURE REQUIREMENTS

- *GTR 205 software v2.22 or later*

FEATURE LIMITATIONS

- *Availability dependent upon configuration*

Controls appear to the right of the COM display. Pushing the dual concentric knob once sets the knob focus to Phone.

Select control options by turning the outer control knob. The ringer is set to On by default.

Phone Features

1	Phone Status Window	**4**	Ringer Status Icon
2	Ringer On/Off Control	**5**	Battery Charge Icon
3	Volume Control	**6**	Cellular Connection Strength

Phone Status Icons

Ringer is on

Ringer is off

Battery charge status

Cellular connection strength

Phone Status Annunciations

Refer to the status window for current operating status.

ANNUNCIATION	MEANING
Not Connected	Phone is not connected via Bluetooth wireless technology. Pair the device via the Bluetooth setup option (**Menu** > **Setup** > **Bluetooth**).
Bluetooth Disabled	The Bluetooth setup option is not enabled.
Ready	Phone is connected to the device via Bluetooth wireless technology.
Incoming Call	The connected Bluetooth device is receiving a call.
Active Call	The device is either dialing the number or connected to the dialed number.

Adjust Phone Volume

Select the volume control to set phone volume to a preferred level.

Volume displays as a percentage of the maximum volume, with 0 being muted and 15 being maximum volume.

The volume control is available only when the phone is connected to a Bluetooth enabled device.

Silence Ringer

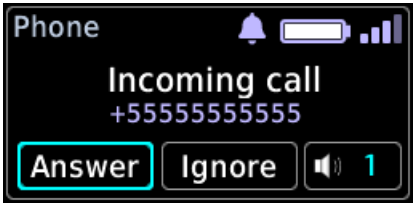
You may silence the ringer at any time. Select **Ringer** using the outer control knob. Toggle the ringer off by turning the inner control knob.

Make a Call

Make a call using your portable electronic device. Phone displays the number as you dial.

"Active Call" annunciates in the status window when you make or accept a call.

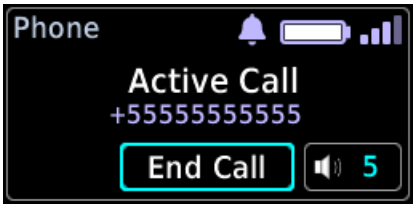
Accept a Call



A call will remain incoming if you navigate away from the Phone page.

Incoming calls generate a status message. Caller ID displays if available.

Options allow you to accept or ignore the call. To accept, select **Answer**.



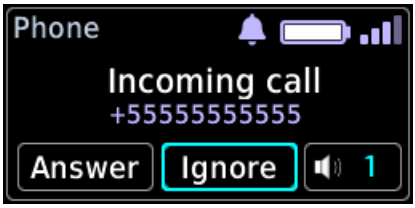
Upon accepting a call, you have the following options:

- *Adjust call volume:* Use the volume control to set the level according to preference.
- *Hang up:* Select **End Call**.

Answering & Ending Calls from Another Page

You may accept or end a call from any page by selecting the **Bluetooth** soft key (if configured). For more about customizable soft key options, read *Assign Soft Key Shortcuts* in section 2.

Ignore a Call



Select **Ignore**. This disconnects the call.

10 Messages

VIEW SYSTEM MESSAGES 10-2

View System Messages

WHERE TO FIND IT

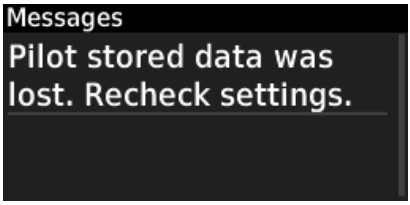
Menu
- System
  - Messages

Advisories are system-related messages relative to the display. A list of active advisories is viewable from the System tab:

MENU > **System** > **Messages**

You can open the list directly by pushing the **MSG** soft key when an active message is present.

Message List



- Most recent advisories appear at the top of the message list
- View-once advisories remain in queue until viewed by the pilot
- Persistent (or conditional) advisories remain active until the indicated condition is resolved

Active Message Indication

Flashing “MSG” icon appears adjacent to the bottom soft key when a new advisory is present.

Selecting **MSG** displays the advisory list. Selecting it again acknowledges all active advisories and closes the list.

The icon turns solid once all active advisories are acknowledged. It no longer displays after all active advisories are cleared.

Bluetooth Connectivity Advisories

AVAILABLE WITH: GTR 205

ADVISORY	CONDITION	CORRECTIVE ACTION
Bluetooth is inoperative.	The unit is not communicating with the Bluetooth module.	Service required. Contact dealer for support.

COM Radio Advisories

ADVISORY	CONDITION	CORRECTIVE ACTION
COM radio needs service.	COM radio is reporting that it requires service. Functionality may be unavailable.	Cycle radio power. Contact dealer for service.
COM over temperature. Reducing transmit power.	COM radio is in overtemp mode. Transmitting power automatically reduces to prevent damage to the COM radio. Radio range is reduced as a result.	• Decrease length of COM transmissions. • Decrease cabin temperature and increase cabin airflow, especially near the unit. • Contact dealer for service if message persists.
COM under voltage. Reducing transmit power.	COM radio is in undervoltage mode. Transmitting power automatically reduces to prevent damage to the COM radio. Radio range is reduced as a result.	• Decrease length of COM transmissions. • Check aircraft voltage and reduce electrical load as necessary. • Contact dealer for service if message persists.
TX Interlock discrete input is stuck active.	Unit detects the TX Interlock discrete input has been active for 60 seconds.	Contact dealer for service.

ADVISORY	CONDITION	CORRECTIVE ACTION
COM MIC <1/2> key is stuck.	Unit detects the specified key in the pressed position for 30 seconds. The input is ignored as a result. Radio stops transmitting.	Verify that the key is not stuck. Contact dealer for service if message persists.
COM <name> switch is stuck.	Unit detects the specified switch is active for 30 seconds. The input is ignored as a result. Radio stops transmitting. Includes: • Standby monitor remote switch • Remote transfer switch • Remote tune up switch • Remote tune down switch	Verify that the switch is not stuck. Contact dealer for service if message persists.

Database Advisories

ADVISORY	CONDITION	CORRECTIVE ACTION
Active DB corrupt. Remove or replace.	The active database is unavailable or corrupt.	Re-download and install database. Contact a Garmin dealer for support.
Database card ignored. External DB configured.	The unit is configured for external databases and a database is detected on the installed microSD card.	Power off the unit and remove the card.
Database will update on next power cycle.	The standby database completed transfer and is ready for activation at the next power cycle.	No action necessary.
Database updated successfully.	The database successfully activated upon system start-up.	

Navigation Advisories

AVAILABLE WITH: GNC 215

ADVISORY	CONDITION	CORRECTIVE ACTION
Navigation receiver needs service.	NAV radio is reporting that it requires service. Functionality may be unavailable.	Service required. Contact dealer for support.
OBS source lost. Select CDI from Display Menu.	Loss of OBS source data.	Verify that the interfaced CDI/HSI is powered on. Contact dealer for service.
Unit needs service.	The system reports one of the following conditions. • CDI interface failure • Internal failure	

Pilot Specified Advisories

These advisories display when the associated timer expires or reaches a preset value. They are informational only. Other than acknowledging the message, no action is necessary.

ADVISORY	CONDITION
Timer has expired.	Countdown timer is reaching zero.

System Hardware Advisories

ADVISORY	CONDITION	CORRECTIVE ACTION
Configuration module needs service.	The unit cannot communicate with its configuration module. Unit configuration may still be valid.	Contact dealer for service.
Unit over temperature. Limit Backlight.	Unit temperature exceeds the over temperature threshold. Backlight dims to reduce power and heat.	Decrease cabin temperature and increase cabin airflow near the unit. If the problem persists, contact dealer for service.
Unit under temperature.	The system reports that its internal temperature is below the normal operating threshold.	If the problem persists, contact dealer for service.
Pilot stored data was lost. Recheck settings.	An error occurred in the pilot stored data. The following user settings may be lost.	Recheck settings. Contact dealer for service.
MicroSD card is invalid or failed.	The microSD card has an error and is unreadable.	1. Reformat the microSD card using an external computer. 2. Re-insert the SD card in the slot. 3. Contact dealer if the problem persists.
Unit needs service.	The system reports one of the following conditions. • Volume knob failure • Light sensor failure • Invalid display calibration • Invalid main board calibration	Contact dealer for service.

ADVISORY	CONDITION	CORRECTIVE ACTION
<Name> key is stuck.	System detects the indicated bezel key is depressed for at least 30 seconds. It will now ignore this input. Includes: • Bottom soft key • COM MIC Swap key • COM Playback key • Flip-flop key • Menu key • MON key • Top soft key	Push the indicated key again. If it remains stuck, contact dealer for service.
<Dual concentric inner/Volume> knob push is stuck.	System detects the indicated knob is depressed for at least 30 seconds. It will now ignore this input.	Push the knob again. If it remains stuck, contact dealer for service.

VLOC/GS Advisories

AVAILABLE WITH: GNC 215

ADVISORY	CONDITION	CORRECTIVE ACTION
Glideslope receiver needs service.	Glideslope board is reporting that it requires service. Functionality may be unavailable.	Verify glideslope deviation indications with another source and cross-check final approach fix crossing altitude. If another source is not available, fly a GPS based approach. Contact dealer for service.
VLOC remote transfer switch is stuck.	System detects the indicated remote switch is active for at least 30 seconds. It will now ignore this input.	Push the remote key again. If it remains stuck, contact dealer for service.

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11 Glossary

A

AFMS	Aircraft Flight Manual Supplement
ARTCC	Air Route Traffic Control Center
ATIS	Automatic Terminal Information Service

C

CDI	Course Deviation Indicator

D

DB	Database
DME	Distance Measuring Equipment

F

FCC	Federal Communication Commission
FR	From
FSS	Flight Service Station

G

GFC	Garmin Flight Controller
GNC	Garmin NAV/COM
GPS	Global Positioning System
GS	Glideslope
GTR	Garmin Transceiver Radio

H

HSI	Horizontal Situation Indicator

I

ICS	Intercom System
IFR	Instrument Flight Rules
ILS	Instrument Landing System
ISO	Isolation

L

LCD	Liquid Crystal Display
LOC	Localizer
LRU	Line Replaceable Unit

M

MSG	Message

N

NAV	Navigation
NAVAID	Navigation Aid
NVIS	Night Vision Imaging System

O

OBS	Omni Bearing Selector

R

RF	Radius to Fix
RX	Receive, Receiver

S

SD	Secure Digital
SQ	Squelch Open
STBY	Standby

T

T	True
TX	Transmit

V

VFR	Visual Flight Rules
VHF	Very High Frequency
VLOC	VOR/Localizer
VOR	Very High Frequency Omnidirectional Range

W

WX	Weather

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12 Regulatory Information

COMPLIANCE 12-2

SOFTWARE LICENSE AGREEMENT 12-3

Compliance

FCC Compliance Statement

This device complies with Part 15 of the FCC limits for Class B digital devices. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Furthermore, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference, the user is encouraged to try to correct the interference by relocating the equipment or connecting the equipment to a different circuit than the affected equipment. Consult an authorized dealer or other qualified avionics technician for additional help if these remedies do not correct the problem.

Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Declarations of Conformity

Declaration of Conformity

Hereby, Garmin declares that this product is in compliance with the Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.garmin.com/en-US/legal/compliance/

UK Declaration of Conformity

Hereby, Garmin declares that this product is in compliance with the relevant statutory requirements. The full text of the declaration of conformity is available at the following internet address: https://www.garmin.com/en-GB/legal/compliance/

Radio Frequency/Output Power

2.4 GHz @ 11 dBm nominal.

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