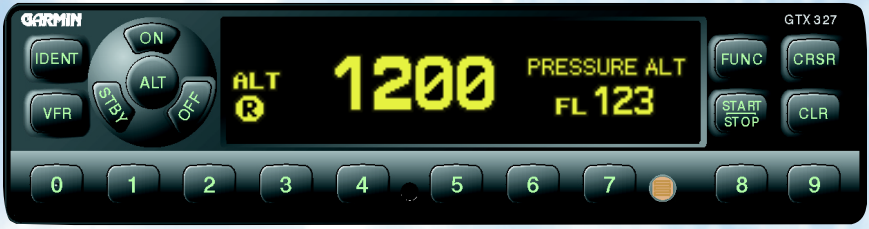
GARMIN

GTX 327

Mode A/C Transponder

pilot's guide



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Limited Warranty

GARMIN Corporation warrants this product to be free from defects in materials and workmanship for one year from the date of purchase. GARMIN will, at its sole option, repair or replace any components which fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor. The customer is, however, responsible for any transportation costs. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs.

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To obtain warranty service, call the GARMIN Customer Service department (913/397.8200) for a returned merchandise tracking number. The unit should be securely packaged with the tracking number clearly marked on the outside of the package, and sent freight prepaid and insured to a GARMIN warranty service station. A copy of the original sales receipt is required as the proof of purchase for warranty repairs. GARMIN retains the exclusive right to repair or replace the unit or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

NOTE: *The GTX 327 owner accepts all responsibility for obtaining the proper licensing before using the transponder.*

NOTE: *The coverage you can expect from the GTX 327 is limited to "line of sight". Low altitude or aircraft antenna shielding by the aircraft itself may result in reduced range. Range can be improved by climbing to a higher altitude. It may be possible to minimize antenna shielding by locating the antenna where dead spots are only noticed during abnormal flight attitudes.*

CAUTION: *The GTX 327 should be turned off before starting or shutting down aircraft engine(s).*

*The GTX 327 transponder is powered on by pressing the **STBY**, **ALT** or **ON** keys, or by a remote avionics master switch (if applicable). After power on a start-up page will be displayed while the unit performs a self test.*

Mode Selection Keys

OFF— Powers off the GTX 327.

STBY— Powers on the transponder in standby mode. At power on the last active identification code will be selected. When in standby mode, the transponder will not reply to any interrogations.

ON— Powers on the transponder in Mode A. At power on the last active identification code will be selected. In this mode, the transponder replies to interrogations, as indicated by the Reply Symbol (R). Replies do not include altitude information.

ALT— Powers on the transponder in Mode A and Mode C. At power on the last active identification code will be selected. In ALT mode, the transponder replies to identification and altitude interrogations, as indicated by the Reply Symbol (R). Replies to altitude interrogations include the standard pressure altitude received from an external altitude source, which is not adjusted for barometric pressure. The ALT mode may be used in aircraft not equipped with the optional altitude encoder; however, the reply signal will not include altitude information.

GTX 327 Configuration Mode

The GTX 327's configuration, which is normally done at time of installation, influences many of the unit's functions described in this manual. If you wish to view or change any of the GTX 327 configuration parameters, you may access the GTX 327 Configuration Mode. Use caution when changing configuration. When in doubt, contact your authorized GARMIN Aviation Service Center. The Configuration Mode should not be used while the aircraft is airborne.

To use the GTX 327 Configuration Mode:

1. Press and hold the **FUNC** key while powering on the unit using the **STBY**, **ON**, or **ALT** key (or using an avionics master switch).
2. Press the **FUNC** key to sequence through the configuration pages.
3. Use the **CRSR** key to highlight selectable fields on each page.
4. When a field is highlighted, enter numeric data using the **0** - **9** keys, and select items from a list using the **8** or **9** keys.
5. Press the **CRSR** key to confirm list selections.

Code Selection

Code selection is done with eight keys (**0 – 7**) that provide 4,096 active identification codes. Pushing one of these keys begins the code selection sequence. The new code will not be activated until the fourth digit is entered. Pressing the **CLR** key will move the cursor back to the previous digit. Pressing the **CLR** key when the cursor is on the first digit of the code, or pressing the **CRSR** key during code entry, will remove the cursor and cancel data entry, restoring the previous code. The numbers 8 and 9 are not used for code entry, only for entering a Count Down time, and in the Configuration Mode.

Important Codes:

1200— The VFR code for any altitude in the US (Refer to ICAO standards elsewhere)

7000— The VFR code commonly used in Europe (Refer to ICAO standards)

7500— Hijack code (Aircraft is subject to unlawful interference)

7600— Loss of communications

7700— Emergency

7777— Military interceptor operations (Never squawk this code)

0000— Military use (Not enterable)

Care should be taken not to select the code 7500 and all codes in the 7600-7777 range, which trigger special indicators in automated facilities. Only the code 7500 will be decoded as the hijack code. An aircraft's transponder code (when available) is utilized to enhance the tracking capabilities of the ATC facility, therefore care should be taken when making routine code changes.

Keys for Other GTX 327 Functions

IDENT— Pressing the **IDENT** key activates the Special Position Identification (SPI) Pulse for 18 seconds, identifying your transponder return from others on the air traffic controller's screen. The word 'IDENT' will appear in the upper left corner of the display while the IDENT mode is active.

VFR— Sets the transponder code to the pre-programmed VFR code selected in Configuration Mode (this is set to 1200 at the factory). Pressing the **VFR** key again will restore the previous identification code.

FUNC— Changes the page shown on the right side of the display. Displayed data includes Pressure Altitude, Flight Time, Count Up timer, Count Down timer, and may include Contrast and Display Brightness, depending on configuration (as shown in the screens below):

PRESSURE ALT: Displays the altitude data supplied to the GTX 327 in feet, hundreds of feet (i.e., flight level), or meters, depending on configuration.

FLIGHT TIME: Displays the Flight Time, which is controlled by the **START/STOP** key or by a squat switch as configured during installation. With squat switch control, the timer begins when lift off is sensed and pauses when landing is sensed.

COUNT UP TIMER: Controlled by **START/STOP** and **CLR** keys.

COUNT DOWN TIMER: Controlled by **START/STOP**, **CLR**, and **CRSR** keys. The initial Count Down time is entered with the **0 – 9** keys.

CONTRAST: This page is only displayed if manual contrast mode is selected in Configuration Mode. Contrast is controlled by the **8** and **9** keys .

DISPLAY: This page is only displayed if manual backlighting mode is selected in Configuration Mode. Backlighting is controlled by the **8** and **9** keys.

START/STOP— Starts and stops the Count Up and Count Down timers.

CRSR— Initiates entry of the starting time for the Count Down timer and cancels transponder code entry.

CLR— Resets the Count Up and Count Down timers and cancels the previous keypress during code selection.

8— Reduces Contrast and Display Brightness when the respective pages are displayed. Also enters the number eight into the Count Down timer.

9— Increases Contrast and Display Brightness when the respective pages are displayed. Also enters the number nine into the Count Down timer.

Altitude Trend Indicator

When the 'PRESSURE ALT' page is displayed, an arrow may be displayed to the right of the altitude, indicating that the altitude is increasing or decreasing. Of of two sizes of arrows may be displayed depending on the rate of climb/descent. The sensitivity of these arrows is set using the GTX 327 Configuration Mode.

Timer Operation

To operate the Flight Timer:

1. Press the **FUNC** key until 'FLIGHT TIME' is displayed.
2. If the GTX 327 is configured as having a squat switch installed, the timer will begin counting automatically when the squat switch senses that the aircraft has become airborne.
3. If desired, you may press **START/STOP** to pause or restart the timer.
4. Press **CLR** to reset the timer to zero.
5. If the GTX 327 is configured as having a squat switch installed, the timer will pause automatically when the squat switch senses that the aircraft has touched down.

To operate the Count Up timer:

1. Press the **FUNC** key until 'COUNT UP' is displayed.
2. If necessary, press **CLR** to reset the Count Up timer to zero.
3. Press **START/STOP** to count up.
4. Press **START/STOP** again to pause the timer.
5. Press **CLR** to reset the timer to zero.

To operate the Count Down timer:

1. Press the **FUNC** key until 'COUNT DOWN' is displayed.
2. Press **CRSR** and use the **0** - **9** keys to set the initial time. All digits must be entered (use the **0** key to enter leading zeros).
3. Press **START/STOP** to count down.
4. Press **START/STOP** again to pause the timer.
5. When the Count Down timer expires, the words 'COUNT DOWN' are replaced with 'EXPIRED', and the time begins counting up and flashing.
6. Press **CLR** to reset the timer to the initial time value.

Automatic ALT/STBY Mode Switching

If the GTX 327 is configured for automatic standby switching, the mode will automatically change to ALT when a squat switch senses that the aircraft has become airborne. Also, the mode will change to STBY automatically when a squat switch senses that the aircraft has touched down. Additionally, a delay time can be set in the Configuration Mode, causing the GTX 327 to wait a specified length of time after landing before automatically changing to STBY mode.

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