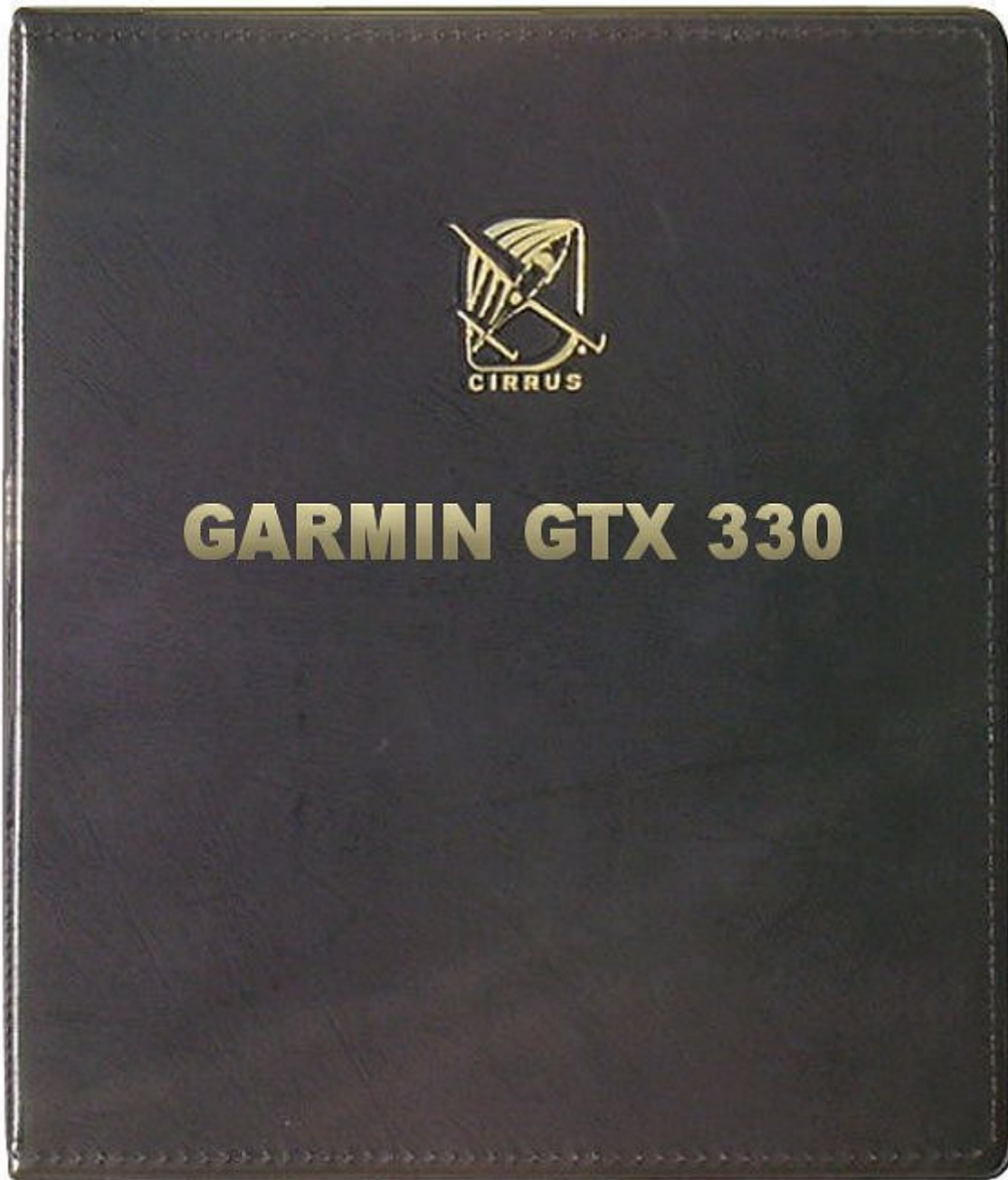


## GTX 330 TRANSPONDER MANUAL



### Standard Disclaimer

This manual is intended for recreational use in Microsoft Flight Simulation 2004 ONLY and may NOT be used in any Real World Aviation application. The authors are not responsible for errors or omissions.

**GTX 330 TRANSPONDER MANUAL**

The Eaglesoft Development Group Garmin GTX 330 Manual is designed to quickly orient the novice or experienced flight simulation pilot with an overview of the various controls of the Garmin GTX 330 available in the Cirrus SR20 G2 model.

The following pages will help you become familiar with the operation of Garmin GNS 430.

**Note:** For Real World information and free Real World PDF Documents please visit the Cirrus Site from the following URL. <http://www.cirrusdesign.com/>

**Note:** For Real World information and free Real World PDF Documents please visit the Avidyne Site from the following URL. <http://www.avidyne.com/techpubs.shtm>

**Note:** For Eaglesoft Development Group Product Support: Please Register and Login to our Support Forums for product support at the following URL. <http://www.eaglesoftdg.com/forum>

**Note:** See **Avidyne Flightmax PFD and MFD Manuals** for detailed operation of **PFD and MFD**

## GTX 330 TRANSPONDER MANUAL





The GTX 330 is powered on by pressing the STBY, ALT or ON keys. After power on a start-up page will be displayed while the unit performs a self-test. The Eaglesoft GTX 330 is fully compatible with both VATSIM and FS Inn ATC control.

### GTX 330 Mode Selection Keys

**OFF** Powers off the GTX 330.

**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 interrogation.

**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 . 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 . Replies to altitude interrogations include the standard pressure altitude received from an external altitude source, which is not adjusted for barometric pressure.

### GTX 330 Code Selection



Code selection is done with eight keys (0 – 7) that provide 4,096 active identification codes. Pushing one of the 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.

## GTX 330 TRANSPONDER MANUAL

*NOTE: When using the VATSIM network, NEVER attempt to squawk any emergency codes, unless you enjoy being auto-booted off the server and risk being reprimanded!*

**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.

## GTX 330 Other Function Keys



**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.



**FUNC-** Changes the page shown on the right side of the display. Displayed data includes Pressure Altitude, Flight Time, Altitude Monitor, OAT/Density Altitude, Count Up timer and Count Down timer.



**START/STOP-** Starts and stops the Altitude Monitor, Count Up, Count Down and Flight timers.



**CRSR-** Initiates starting time entry for the Count Down timer, and cancels transponder code entry.



**CLR-** Resets the Count Up, Count Down and Flight timers. Cancels the previous key press during code selection and Count Down entry.



**8-** Reduces Display brightness and enters the number eight into the Count Down timer.



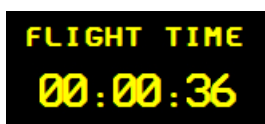
**9-** Increases Display brightness and enters the number nine into the Count Down timer.

## GTX 330 TRANSPONDER MANUAL

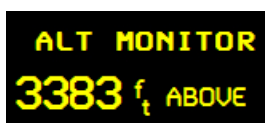
## Function Display



**Pressure ALT:** Displays the altitude data supplied to the GTX 330 in hundreds of feet (i.e., flight level).



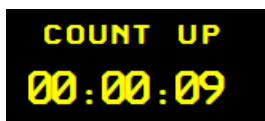
**FLIGHT TIME:** Displays the Flight Time, which is controlled by a squat switch. With squat switch control, the timer begins when lift off is sensed and pauses when landing is sensed. While in flight, the timer may be paused and restarted with the **START/STOP** button, and may be reset by pressing the **CLR** button.



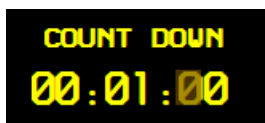
**ALT MONITOR:** Displays the altitude deviation **above** or **below** the assigned altitude, as set by the altitude pre-selector on the autopilot (if so equipped). This display is toggled on/off by pressing the **START/STOP** button.



**OAT/DALT:** Displays Outside Air Temperature and Density Altitude.



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



**COUNT DOWN TIMER:** Controlled by **START/STOP**, **CLR** and **CRSR** buttons. The initial Count Down time is entered with the **0 – 9** buttons. **Timer Expired** will sound when the Count Down time is reached, and the text "EXPIRED" replaces the "COUNT DOWN" on the display. The timer will continue to accumulate time until the **START/STOP** button is pressed.

**GTX 330 TRANSPONDER MANUAL****Timer Operation****To operate the Flight Timer:**

1. Press the **FUNC** key until "FLIGHT TIME" is displayed
2. This GTX 330 is configured with Automated Airborne Determination, so the timer begins automatically when the unit senses that the aircraft has become airborne. The timer may be reset to zero at every take off, continue accumulating time at take off, or may be reset manually.
3. If desired, you may press **START/STOP** to pause or restart the timer.
4. Press **CLR** to reset the timer to zero.
5. The timer will automatically stop accumulating time when the Automated Airborne Determination senses that the aircraft is on the ground.

**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 begin count up.
4. Press **START/STOP** 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.
3. Press **START/STOP** to begin count down.
4. Press **START/STOP** again to pause the timer.
5. When the Count Down timer expires, the "COUNT DOWN" banner is replaced with an "Expired" banner, **Timer Expired** sounds, and the counter begins counting up.
6. Press **CLR** to reset the timer to the initial time value.

**GTX 330 TRANSPONDER MANUAL****GTX 330 Mode S Transponder Features****Audio Alerts**

**"Leaving Altitude"** Altitude deviation plus/minus 100' of assigned altitude exceeded.

*NOTE: This alert will only sound if Altitude Monitor is selected.*

**"Timer Expired"** for Count Down timer expiration

**Traffic Information Service**

*NOTE: This feature is not enabled in this version of the GTX 330*

The GTX 330 Mode S transponder provides a data link for Traffic Information Service (TIS). TIS is derived through a Mode S transponder data link and viewed on a multifunction display. ATC radar sends a traffic picture within a radius of 55 miles from select sites. The TIC protected area is a cylinder of 7-mile radius, extending 3500' above and 3000' below your aircraft.

TIS provides a graphic display of traffic information in the cockpit for non-TCAS equipped aircraft. Transponder-equipped aircraft can be displayed within the coverage volume within range of your position on indicators such as a Garmin 430 or 530, GNS 480 and MX20. Aircraft without an operating transponder are invisible to TIS Refer to 400/500 series, GNS 480 or MX20 pilot literature for details.