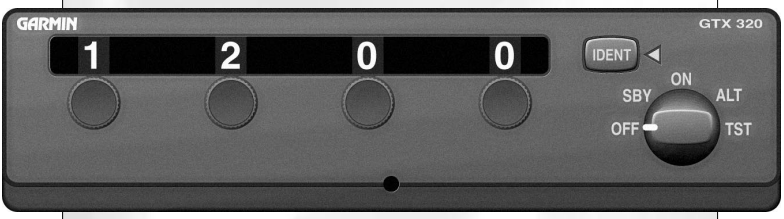
GTX 320
TRANSPONDER



PILOT'S GUIDE

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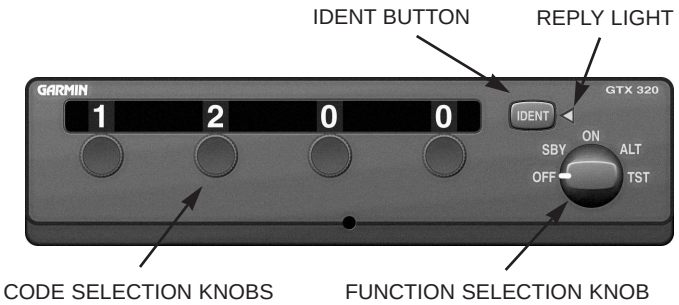

NOTES

The GTX 320 owner accepts all responsibility for obtaining the proper license before using the transponder.

The coverage you can expect from the GTX 320 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.

Function Selector Switch

The function selector switch is a five position rotary switch. The five positions are:

- **OFF—**Turns off all power to the GTX 320 (the GTX 320 should be turned off before starting aircraft engine(s).
- **SBY—**Turns the transponder on, but when in SBY the GTX 320 will not reply to any interrogations from the ground radar system.
- **ON—**Places the transponder in Mode A, the identification mode. In addition to the aircraft's identification code, the GTX 320 will also reply to altitude interrogations (Mode C) with signals that do not contain altitude information.
- **ALT—**Activates all of the necessary circuitry (transponder to optional altitude digitizer and return) to respond to ATC altitude interrogations and aircraft identification interrogations with standard pressure altitude (29.92 inches Hg). The ALT position may be used in aircraft that are not equipped with the optional altitude digitizer, however, the only response will be discreet signals that do not contain altitude information.
- **TST—**Turning the switch to the TST position tests the reply indicator. The TST position is spring loaded and must be held momentarily. When released, it will automatically return to the ALT position.

Any time the function switch is in the ON or ALT position the transponder becomes an active part of the beacon system. Select ON or ALT as late as practical prior to takeoff and switch to OFF or SBY as soon as practical after completing landing roll unless the change to SBY has been accomplished previously at the request of ATC.

Code Selector

The code selector consists of four, eight position switches that provide 4,096 active identification codes. Attention should be paid to the selected identification code. The selected code should be in accordance with instructions for IFR flight or rules applicable to transponder utilization for VFR flight.

When making routine code changes, you should avoid inadvertent selection of codes 7500, 7600, or 7700 thereby causing momentary false alarms at automated ground facilities. For example when switching from code 2700 to code 7200, switch first to 2200 then 7200, NOT to 7700 and then 7200.

This procedure applies to nondiscrete code 7500 and all discrete codes in the 7600 and 7700 series (i.e., 7600-7677, 7700-7777) which trigger special indicators in automated facilities. Only nondiscrete 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 you should not turn the GTX 320 to SBY when making routine code changes.

Important Codes

- **1200**—The VFR Code for any altitude.
- **7600**—Loss of Communications.
- **7500**—Hijacking (Never assigned by ATC without prior notification of the pilot that his or her aircraft is subject to unlawful interference).
- **7700**—Emergency (All secondary surveillance radar sites are ready to receive this code at all times).

See the Airman's Information Manual (AIM) for a detailed explanation of identification codes.

IDENT Button

On occasion, the controller will request "SQUAWK IDENT". Respond by momentarily pressing and releasing the IDENT button. Pressing the IDENT button activates the Special Position Identification Pulse (SPI) for approximately 20 seconds identifying your transponder return from other aircraft on the controller's scope.

Reply Light

The reply light will blink each time the transponder replies to ground interrogation. The reply light remains lit up during the IDENT time interval.

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