

Pro Pilot

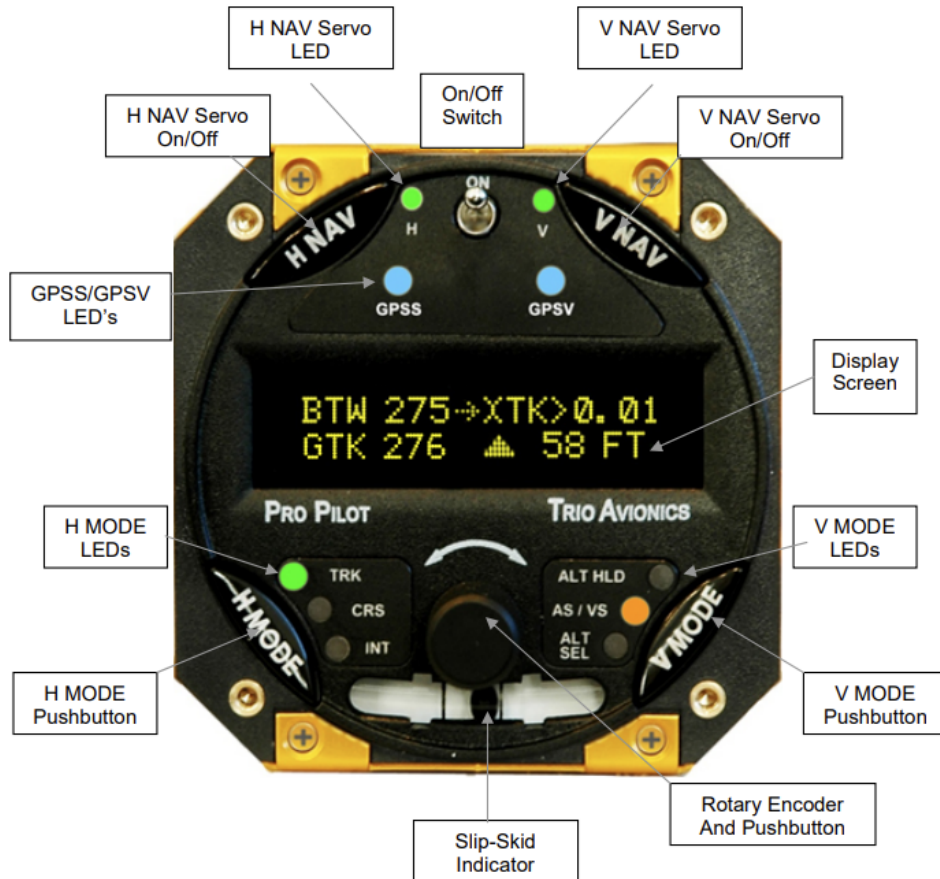


Operation Manual

Trio Avionics Corporation

Manual Part Number 13200008

Pro Pilot Control Head Diagram



Pushbuttons

H NAV - Horizontal Navigation (Activates/Deactivates Roll Servo)
V NAV - Vertical Navigation (Activates/Deactivates Pitch Servo)
H MODE - Sequences through Horizontal Navigation Modes
V MODE - Sequences through Vertical Navigation Modes

the offset distance to track, (either to the left or the right of the **DTK** centerline). The arrow indicator denotes the direction of the offset and the numeric field indicates the offset selected (measured in miles and tenths of a mile). Changes to the offset may be made in 1/10th mile increments up to 3 miles.

To **disable** the **TOP** function, do one of the following:

In the **TRK** mode (only) **press and rotate** the **ROTARY ENCODER** switch counterclockwise or clockwise to change the offset distance to 0.0, or by changing modes, or by simply cycling power to the Pro Pilot using the **POWER** switch.

When activated, the arrow on the **XTK** changes from an outline arrow (➤) to a fully filled arrow (▶). The **TOP** setting will also be flashed in the upper right display field periodically. These indicators alert you that the **TOP** feature is active.

NOTE: It is important to remember that the final waypoint will also be offset unless the **TOP** offset is set to "0.0" prior to arrival at the waypoint.

Initiating the Recover Mode

Should a pilot inadvertently enter a cloud and become obscured and disoriented they may invoke the "Recover Mode" by pressing a **RECOVER** button on the instrument panel. This will immediately cause the aircraft to seek a wings-level attitude and the autopilot will enter the **ALT HLD** (altitude hold) mode.

NOTE: It is important to realize that the autopilot must be turned on for proper operation.. This mode will work in the absence of the GPS signal as long as the autopilot was active with either the GPS or the wing leveling mode prior to engaging the **RECOVER** mode

The following scenario assumes that the pilot is hand flying, the GPS is on and locked to the satellites. The aircraft and the servos are not engaged.

When the **RECOVER** button is pressed, the autopilot will "snapshot" the current direction the nose of the aircraft is pointing and turn on the servos. It will first roll the aircraft toward a wings level attitude. (If the aircraft was in a steep spiral, pulling on the elevator would only tighten the spiral and aggravate the situation). Once a reasonable bank attitude is achieved it enables the altitude hold functions to recover the aircraft to the altitude it was at when the button was pushed. It will also return to the course being flown when the button was pushed.

The autopilot will now be flying in the CRS (Course) mode and holding altitude. Once the pilot regains orientation he/she may rotate the encoder to change the course if so desired.

Initiating an Automatic Course Reversal

In an effort to increase safety and save lives, this mode may be initiated as an emergency aid to the VFR pilot who inadvertently enters IMC conditions and needs to execute an immediate course reversal.

NOTE: It is important to realize that the autopilot must be turned on and receiving a good GPS data signal for proper operation.

You may be tracking a flight plan but a sudden IMC encounter may not leave you with an opportunity to reprogram your GPS to invert the flight plan. **This procedure does not require you to adjust your GPS receiver.**

If you are manually flying your aircraft, this procedure will also work because *the servo does not have to be engaged* to initiate this emergency procedure so long as the power is on and the GPS has lock on the satellite data.