

# Fifty Five X

## full-function two-axis flight control system

The System Fifty Five X is a high-performance, 2-axis (roll & pitch) autopilot in an avionics stack-mounted case, containing the mode selector/programmer, annunciator, roll & pitch computers, and servo amplifiers.

### HDG (heading) mode & heading pre-select and hold\*

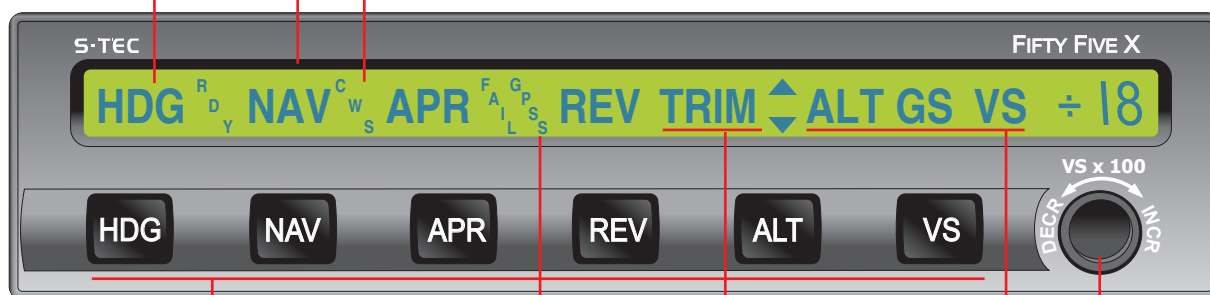
when HDG & NAV are activated simultaneously, enables dual mode Intercept. Autopilot operates in heading mode to automatically intercept and track selected course or localizer; at which point HDG extinguishes.

### NAV mode (coupled navigation)

automatically intercepts and tracks enroute NAV signals (VOR/GPS), or LOC (REV for backcourse). 3-level gain selection for NAV mode is automatic. When APR is lit (simultaneous with NAV), indicates high gain localizer mode for high sensitivity coupled approach. Flashing NAV or REV annunciates course deviation by a needle deflection of 50% or more. Selecting APR increases gain sensitivity for VOR or GPS approaches.

### control wheel steering (CWS)

allows you to hand-fly the aircraft and then let the autopilot takeover to hold the existing turn rate and vertical speed.



### mode selector buttons

**HDG** (heading hold and heading pre-select\*)  
**NAV** (tracking VOR enroute),  
**APR** (higher gain for GPS enroute & LOC, VOR & GPS approaches)  
**REV** (LOC backcourse)  
**ALT** (altitude hold)  
**VS** (vertical speed command)

### TRIM and up/down arrows

annunciate motion of auto trim or manual electric trim, if equipped; if not equipped, annunciates out-of-pitch-trim condition.

**VS knob** dials digital vertical speed in 100' increments.

### GPSS<sup>by S-TEC</sup> (GPS Steering)

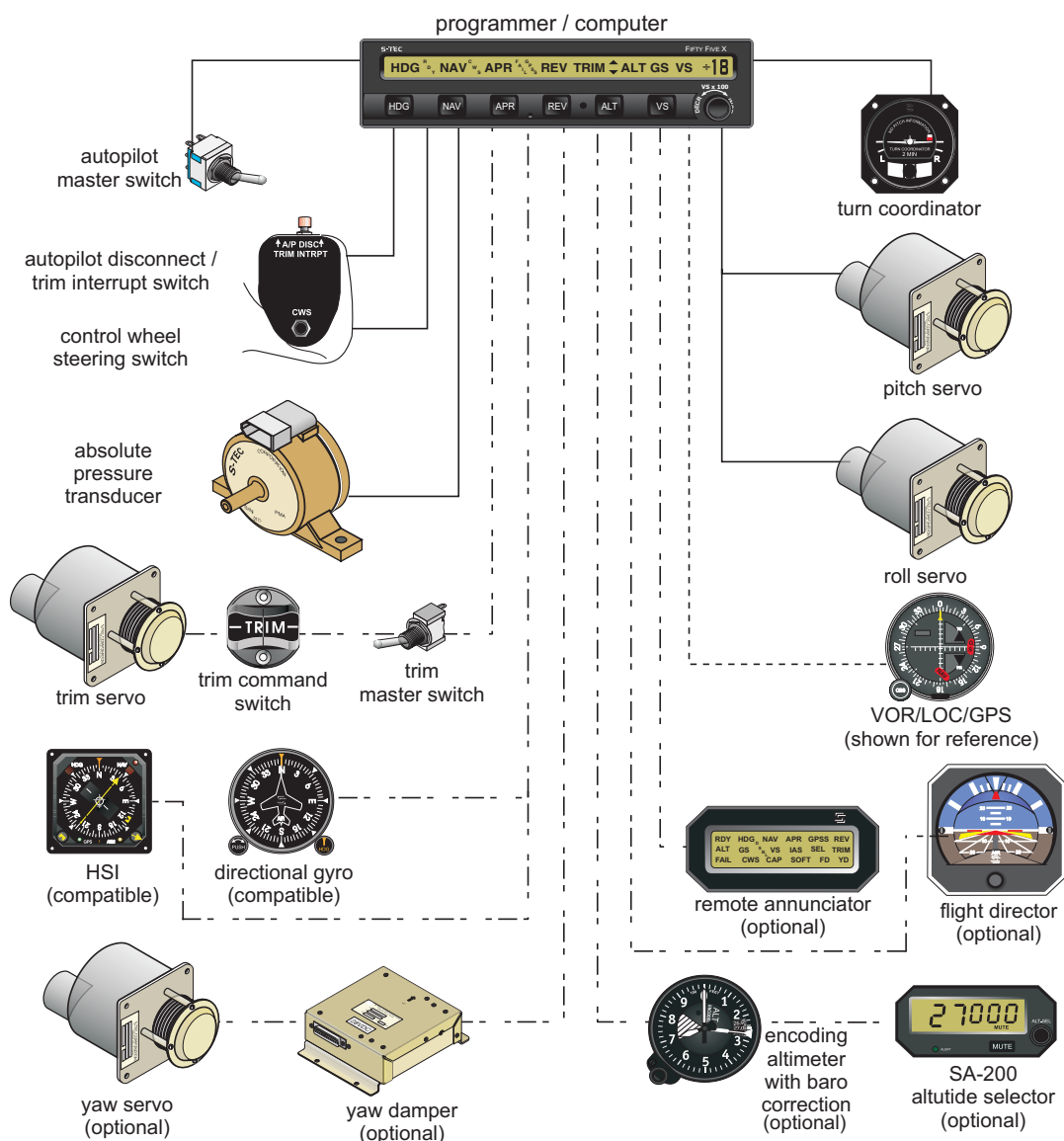
integrates A/P with GPS Navigator function, which outputs roll steering commands. GPSS does not follow a CDI needle movement; it acts on direct roll steering commands from the Navigator for extremely accurate, hands-off GPS navigation. See separate GPSS data sheet for details.

### pitch mode

includes; VS, indicating vertical speed control has been selected; ALT indicating altitude hold is engaged, capturing existing altitude when activated; and GS, indicating glide slope coupling is armed and/or active. In altitude hold mode, altitude can be adjusted (trimmed) in 20' increments using VS knob.

\* Operational if compatible heading system (e.g. DG or HSI with heading bug) is installed and active.

# Fifty Five X



## features / functions

- ▣ case contained, radio stack mount
- ▣ GPSS by S-TEC (GPS roll steering)
- ▣ heading preselect & hold
- ▣ altitude hold with optional altitude trim
- ▣ course intercept capability
  - NAV mode
  - dual mode - HDG/NAV & HDG/APR
- ▣ VOR/LOC/GS/REV/GPS coupling
  - with 3 gain levels
  - selectable coupling gain
- ▣ VOR/LOC/GS/REV/GPS course deviation and NAV flag warning
- ▣ digital vertical speed command
- ▣ pitch trim annunciation
- ▣ control wheel steering

## options

- ▣ DG / HSI compatible
- ▣ single cue flight director interface compatible
- ▣ SA 200 Altitude Selector w/encoding altimeter
- ▣ ST-360 Altitude Selector/Alerter
- ▣ remote annunciator
- ▣ automatic or manual electric trim (where STC'd)
- ▣ Yaw Damper (where STC'd)

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