Stratoware/Miltech Simulations Bo105

Navigation & Communication Systems

Modern and legacy avionics fits, plus the GTN750.

The Bo 105 is equipped with a full suite of avionics supporting both VFR and IFR operations. Two equipment configurations are available, based on the variant selected: a modern fit centred on Bendix/King and Jupiter Avionics units, and a legacy fit using older Becker controls. Please see Center Console for more information. A GTN750 glass avionics instrument is installed in both configurations and serves as the primary glass navigation unit. All radios operate on standard MSFS VHF COM and VHF NAV bands. HF, military UHF and encrypted channels are not supported, due to SDK limitations.

The avionics stack is located in the centre console, between the pilot and copilot seats. The HSI on the main instrument panel is driven by the NAV side of the installed equipment (either the KX155 in the modern fit or the dedicated KFS564 NAV head in the legacy fit).

Tuning and Operation

All radios in the Bo 105 use the standard MSFS active/standby model. Frequencies are entered into the standby field and then swapped to the active field with a dedicated swap button on each unit. Active frequencies are immediately live for transmission and reception, while standby frequencies are held ready until swapped.

Frequencies can be tuned in three ways. The first is directly on the radio stack itself, by clicking the relevant unit and using its knobs and swap button. The second is through the standard MSFS ATC and radio panel popups, which write to the active radio automatically. The third is through flight plans loaded from the MSFS World Map or the FS24 EFB, which will populate NAV frequencies along the route when the flight is started.

GTN750

The GTN750 is a modern touchscreen glass avionics unit developed by PMS50 and present in both equipment configurations. It provides flight planning, moving map, GPS navigation, radio tuning, traffic and weather pages, and procedure loading. Because the GTN750 is a third-party product, operating instructions are maintained by PMS50 at https://pms50.com/msfs/

In the Bo 105, the GTN750 functions as the primary flight planning and situational awareness display. Flight plans can be entered manually on the unit, imported from the MSFS World Map, or synced from the FS24 EFB.

Modern Equipment

The modern fit comprises a Bendix/King KX155 NAV/COMM unit, a KR87 ADF receiver, a KFS564 acting as the transponder, and a JA95 audio controller. This configuration is recommended for users familiar with general aviation Bendix/King stacks or who want a more conventional cockpit layout.



KX155 NAV/COMM Transceiver

Combined COMM and NAV unit providing VHF voice communications and VOR/ILS navigation. Displays active and standby frequencies simultaneously. The COMM and NAV sides are tuned independently using their respective knobs, and the swap button switches active and standby within each side with a single press. The NAV side of the KX155 drives the HSI for lateral course guidance.

KR87 ADF Receiver

Tunes Non-Directional Beacons (NDBs) for bearing information. Works in conjunction with the ADF indicator on the main instrument panel, which displays the relative bearing to the selected station. Active and standby frequencies are shown on the display and can be swapped with the ↔ button.

KFS564 (Transponder Role)

Bendix/King frequency control head configured as the transponder in this fit. Transmits a four-digit squawk code in response to ATC radar interrogations. The large dial controls the last two digits, and the small dial controls the first two digits. Mode is selected by the dedicated mode rotary dial.

JA95 Audio Controller

Manages the routing of radio transmissions and intercom audio. Selects which radios are monitored on the headset and which is selected for transmission. To activate a radio, first rotate the primary dial in the centre to the desired source, then move the relevant switch forward; a green LED illuminates to confirm the selection. The JA95 is NOT fully simulated to real-world fidelity; for additional context, refer to the real-world manual.

Legacy Equipment

The legacy fit uses three KFS564 frequency control heads, each configured for a different radio role, alongside a Becker B3401 transponder and a Becker audio controller. This configuration is recommended for users wanting a more period-accurate cockpit, or who prefer the consistent KFS564 control layout across all radios.



KFS564 (COMM)

Frequency control unit configured for VHF voice communications. Used to tune active and standby COMM frequencies. The large dial controls the last two digits, the small dial controls the first two digits, and the swap button (↔) exchanges active and standby with a single press.

KFS564 (NAV)

Frequency control unit configured for VOR/ILS navigation. Operation is identical to the COMM unit. The NAV side drives the HSI on the instrument panel.

KFS564 (ADF)

Frequency control unit configured for ADF operation, used to tune Non-Directional Beacons. Operation is identical to the COMM and NAV units. Works in conjunction with the ADF indicator on the main instrument panel.

Becker B3401 Transponder

Transponder unit transmitting a four-digit squawk code in response to ATC interrogations. The large dial controls the last two digits; the small dial controls the first two digits. Four mode positions are available: OFF, STDBY, ON, and ALT.

Becker Audio Controller

Manages routing of radio audio to the headset. The main mode dial on the left selects which radio is monitored and active. The smaller dial on the right controls audio volume. The Becker controller handles audio routing only and does not affect transmission keying outside of source selection.

Navigation Aids

The Bo 105 supports standard radio navigation aids as modelled by MSFS. DME information, where available, is displayed on the GTN750 and on the relevant radio heads. For full GPS, RNAV and procedure-based navigation, the GTN750 is the primary unit.