



Aircraft Glass Cockpit Trainer (GSC-100A) is a complete and fully functional simulation of typical aircraft cockpit. It includes essential flight, engine, auto-pilot and pitot-static instruments.

This trainer is designed to teach trainees operation of glass cockpit panel.

The trainer is developed to model Garmin 1000 system.

The trainer is suitable for avionics technician and pilot trainees .

All functions of panel is available.

## Specifications

### Components

- Two PFD/MFD
- Switch Panel
- Audio Panel
- Standby gauges
- Throttle
- Mixture lever
- Engine start key
- Full scale yoke(2 unit)
- Full Scale Rudder Pedal(2 Unit)
- Two adjustable seats with belts in the trainer.
- Openable front surface to service the electronic parts and computer.
  
- Navigation and Avionics
  - There are There should be PFD and MFD which is communicate with one Audio panel.
  - The buttons and their backlight on the Audio Panel is active and work.
  - Audio panel is connected to the PFD
  
- Bezels:
  - All buttons, switches and knobs can operate
  - For example, dual COMM rotary knob have three functions, outer ring should tune UHF/VHF frequency in MHZ, inner ring should tune the frequency in KHz and pressing this knob toggles the tuning cursor between the COM1 and COM2 fields.
  - Bezels have backlight function for night flights.
  - Screens are 2048x1536 resolution touch screens.

- Auto-Pilot.
- Flight director.
- Pitch modes.
- Pitch Hold.
- Altitude Hold.
- Vertical Speed.
- Flight Level Change.
- Vertical Path Tracking.
- VNV Target Altitude Capture.
- Glidepath.
- Glideslope: Yes.
- Roll modes.
- Roll Hold.
- Heading Select.
- Navigation.
- Backcourse.
- Approach
- Flight plan
- Invert Flight Plan
- Parallel Track
- Create ATK Offset Waypoint
- Direct-to
- Terminal Procedures
- User defined holding patterns
- Navigation database
- Inset map: Zoom in/out, browsing, partly de-clutter, topo and terrain. No traffic, storm scope, NEXRAD radar
- Synthetic Vision as an In-App-Purchase item
- VOR/ILS course select, ADF/VOR/Waypoint bearing indicator, CDI indicator, etc.
- Wind, Bearing1/2, HSI format, Alt unit, Standard baro
- DME source selection.
- Transponder settings.
- Timer and references (V speeds and minimums).
- Advisory and alerts.
- ADF dip.
- Automatic Magnetic variation.

- PFD
  - Global navigation database and topo data
  - Engine status
  - Functional “Map Setup”
  - Flight plans storing/editing.
  - Terminal procedures
  - User waypoint creating/editing.
  - User defined holding patterns
- Standby gauges
  - Gauges is digital with analog look.
  - Followings are included on standby gauges.
    - ALT
    - ADI
    - Customizable ASI
- Dual Controlled Yoke
  - Sectorized two yoke
  - Auto-center position
  - Yoke rods 20 mm diameter chrome metal.
  - Yoke mechanism are manufactured from metal for durability.
  - Yokes are manufactured with fiberglass.
- Dual controlled RUDDER and BRAKE mechanism
  - Sectorized two rudder pedals
  - Brake functions
  - Rudder mechanism is manufactured from metal for durability.
  - Rudder mechanism is finish paint for long life.
  - Rudder yaw, steering and brake pedal position angles are provided from absolute encoder or potentiometer which is located inside the yoke mechanism.
  - Rudder brake function is dual controlled and operates just like the real aircraft brake pedals.
- Switch panel.
  - Active STBYBATT switch with ARM/TEST/OFF positions.
  - Active STBYBATT switch with green TEST light.
  - Active MASTER switch with BATT and ALT positions.
  - Active AVIONIC switch with BUS1 and BUS2 positions.

- Active BEACON, LAND, TAXI, NAV, STROBE, FUEL PUMP, PITOT HEAT, CABIN PWR 12V switches.
- Active PANELS, STBY IND, PEDASTAL and AVIONIC rotary knobs.
- Adjustable backlight brightness.
  
- Throttle
  - Friction adjustment for throttle control
  - 60mm full range for throttle lever
  
- Mixture lever
  - Vernier control for mixture control
  - 60mm full range for throttle lever
  
- Engine start key
  - Five positions OFF, R, L, BOTH, START
  - 30 degrees between each notch
  - Spring loaded to BOTH position between BOTH and START positions.
  
- Rotary knobs to change view.
  - One rotary knob is used to change the pilots view for left and right direction.
  - One rotary knob is used to change the pilots view for up and down direction.

## Documentation

- User's Manual
- Study Guide
- Instructor's Guide
- Device's original Manual
- Device's original Wiring Diagrams
- Components Diagrams

## Power Specs

- Electrical box
- Residual current device
- Emergency Button
- Energy Signal Lamp
- 110 VAC 60 Hz or 220-240 VAC 50 Hz

## Others

- GPS receiver / antenna
- Aircraft circuit breakers.
- Throttle lever.