















Model AP-100C

Autopilot Trainer is an excellent resource for teaching the principles of automatic flight controls by demonstration using a complete system that encompasses all the aspects of three(3) axis autopilot and automatic flight controls.

Differences from AP-100B Model

- · Automatic/Motorized Yoke System
- · Automatic/Motorized Rudder Pedal System
- · Automatic/Motorized Throttle Lever
- · Pitch Trim Servo System
- · Heading Feed Back
- · Altitude Feed Back
- · Active Remote Gyro HSI System
- Flux Detector(The Magnetic Azimuth Transmitter)
- Slaving Accessory
- · Remote Control Panel
- · Vacuum Pump

Specifications

Features

- Indicators operate in sync with auto-pilot system
- Aircraft position controlled by yoke.
- Automatic/Motorized Yoke System
 - · Yoke automatically/motorized moves in two axis with data from autopilot computer. It performs automatic positioning according to the position of the airplane.
- Automatic/Motorized Rudder Pedal System
 - Rudder Pedal automatically/motorized moves in one axis with data from autopilot computer. It performs automatic positioning according to the position of the airplane.
- Automatic/Motorized Throttle Lever
- Yoke and rudder pedal can move the control surfaces of the aircraft.
- Servos operate in sync with auto-pilot and yoke/rudder pedal.
- 2 axis DOF + 1 DOF system
- Pitch Trim Servo System
- Heading Feed Back
- Altitude Feed Back
- Active Remote Gyro HSI System
- Remote Control Panel









Model AP-100C

- Vacuum Pump
- Remote Altitude control & feedback
- Remote Heading control & feedback
- Remote side wing control
- Remote head wing control
- The aircraft automatically calibrated to runway position when the trainer is turned on.
- Instructor's panel for Fault Insertion
- The system mounted on a metal/aluminum mobile stand.
- Metal/aluminum frame with 4 wheels. 2 of 4 wheels are lockable.

Components

15-inch PFD-MFD screen

- Attitude Directional Indicator(ADI)
- Directional Gyro(HSI)
- Airspeed Indicator(ASI)
- Altimeter(ALT)
- Vertical Speed Indicator(VSI)
- Turn and Slip Indicator
- · Course deviation bar(CDI)
- Course Pointer
- RPM indicator
- Manifold Pressure indicator
- Engine instruments(Oil, Fuel system)
- Yoke (Automatic/Motorized)
- Rudder Pedal (Automatic/Motorized)
- Throttle Control (Automatic/Motorized)
- Pitch / Yaw / Roll / Pitch Trim servos
- The trainer should have auto-pilot panel.
 - · Active AP(auto-pilot) function button,
 - · Active Pitch function button,
 - · Active Roll function button.
 - · Active ALT(altitude) function button,
 - Active V/S(vertical speed)function button,
 - Active FLC function button,





Autopilot / Automatic Flight Controls Trainer

Model AP-100C

- Active HDG(heading) function button,
- · Active FEET function Knob.
- · Active FPM function Knob.
- · Active HDG function Knob,
- · All function buttons should be illuminated.

Master Power and Switch panel.

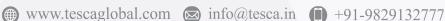
- DC master power switch,
- Master power lamp,
- · Beacon switch,
- · Engine Start.
- · PFD circuit breaker,
- · Auto-Pilot circuit breaker,
- · Beacon circuit breaker.
- · Gyro circuit breaker,
- · Circuit breaker lockout,
- · Aural warning horn,
- · Resettable master caution

Model Metal Aircraft

- Aircraft size should be minimum 1400mmx1300mm
- · Aircraft color should be white
- · Moveable Aileron/Elevator/Trim & Rudder
- · Aileron/elevator/trim and rudder are different color
- DOF system should operate in sync with auto-pilot(aileron/elevator/rudder) and yoke&rudder pedal.
- · The trainer should have a beacon.

Remote Directional Gyro

- Remote mounted
- Drive signal for heading loop drive motor
- · Slaving meter drive signal
- Original Mounted Tray
- Shock mounted
- Internal power supply
- Provide's a gyro-stabilized magnetic heading
- Used in conjuction with the Magnetic Azimuth Transmitter.
- Power: 14 or 28 volt dc
- 300 degree free turnable system for testing









Model AP-100C

Flux Detector(The Magnetic Azimuth Transmitter)

· Senses the direction of the earth's magnetic field and transmits information to gyro.

Slaving Accessory

- · Slave/Free Gyro Switch
- · Slaving Meter indicator
- · CW/CCW Adjusment

Remote Control Panel

- Heading Control
- · Altitude Control
- · Speed Control
- · Side Wings Control

Documentation

- User's Manual
- Study Guide
- Instructor's Guide
- 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

