TWIN-ENGINE AIRCRAFT HYDRAULIC SYSTEM

Mod. AQ-2/EV

INTRODUCTION

The aircraft hydraulic system simulator mod. AQ-2/EV, is included in a complete set of educational equipment for the basic training on aircraft systems.

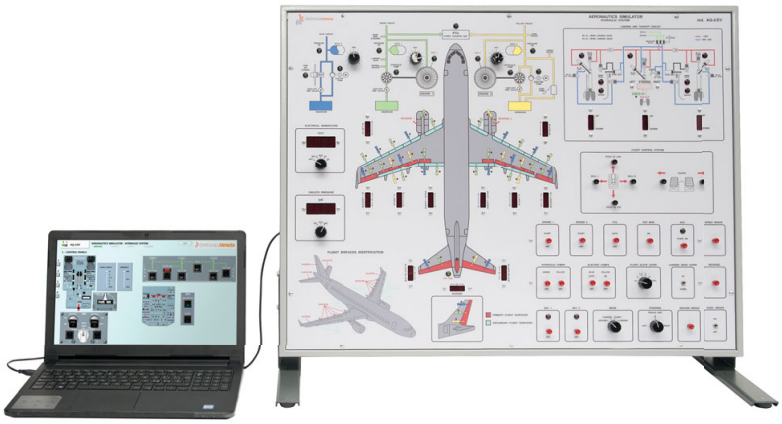
The simulator consists of a computer-assisted panel, with silk-screen mimic diagram for a clear location of its components.

Various zones of the mimic diagram are represented with different colours to emphasize peculiar aspects of the system.

Light and displays indicators, installed in the mimic diagram enable to assess the evolutions of the control.

The graphic display of the information available at the control input, such as aircraft status (park, APU ...) on the computer screen enables the permanent monitoring of the system.

The operational conditions are set by students according to the educational path indicated in the courseware, carried out by the PC.



- PTU automatic
- Wheel pedal disc angle control
- 5 Flaps/Slats position selection
- 6 Flight control pushbuttons
- Speed and Park brake
- Hydraulic emergency situations (PTU, RAT ...)

TRAINING PROGRAM:

- **PRESSURE GENERATION**
  - Engine Driven Pump (green hydraulic circuit)
  - Engine Driven Pump (yellow hydraulic circuit)
  - Electric pump (blue hydraulic circuit)
  - Power Transfer Unit (PTU)
- **PRESSURE ACCUMULATOR**
  - Circuit 1 accumulator
  - Circuit 2 accumulator
  - Circuit 3 accumulator
- **HYDRAULIC ACTUATORS**

  Green circuit
  - Flaps, Rudder, Spoilers, Nose wheel steering

  Blue circuit
  - Spoilers, Rudder, Elevator

  Yellow circuit
  - Elevator, Spoiler, Landing gear
- **SYSTEM SUPERVISION SIMULATIONS**
- **MODE**
  - Ground
  - Takeoff
  - Flight
  - Landing
- **CONFIGURATIONS**
  - APU start
  - Hydraulic pumps ON
  - Electric pumps ON

TECHNICAL SPECIFICATIONS:

The system is arranged on a silk-screen, panel provided with:

- Color silk screen panel
- Selection of the operational conditions with switches and pushbuttons
- Displays and LED visualisation
- Dynamic display of the parameters, on the computer screen, with high graphic performance software (LabVIEW)
- USB connexion with the computer

Power supply:	230 Vca 50 Hz single-phase - 50 VA (Other voltage and frequency on request)
Dimensions:	835 x 455 x 650 mm
Weight:	19 kg

REQUIRED

PERSONAL COMPUTER
- NOT INCLUDED -

SUPPLIED WITH

SOFTWARE:
SIMULATOR CONTROL MANAGEMENT WITH GRAPHICAL DISPLAY ON THE PC SCREEN

THEORETICAL-EXPERIMENTAL HANDBOOK