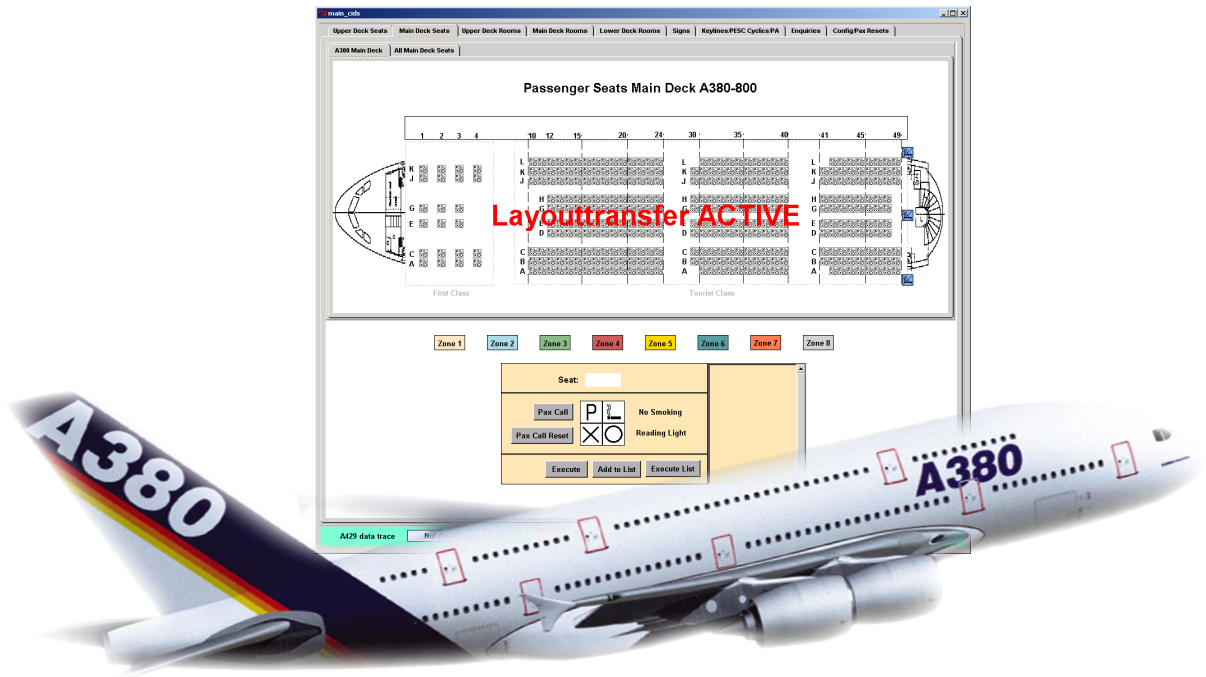




# CIDS380

## Airbus A380 CIDS Director Simulation



- Flexible configuration
- Accurate simulation of the ARINC 429 data traffic
- Optional recording of the ARINC 429 data traffic
- Optional hardware emulation of the keylines



## CIDS380 Airbus A380 CIDS Director Simulation

### Application Scope

The **CIDS380** simulation program, which simulates the behavior of a Cabin Intercommunication Data System (CIDS) head end equipment, is used to test and validate the data exchange to and from the In-flight Entertainment System (IFE) serving as UUT.

The CIDS380 simulation supports the following main functions:

- > Configuration using stand-alone panels
- > Loading of configuration data from files
- > Exchange of cabin layout data
- > Transmission of update requests to IFE
- > Reception of service requests from IFE
- > Monitoring of cyclic labels and protocol
- > Optional full ARINC 429 data logging
- > Optional hardware emulation of the keylines
- > Protocol error stimulation

The simulation is implemented in the platform-independent TCL/Tk script language. Presently, there are versions for the following software and hardware platforms:

- > Windows 10
- > ARINC 429 interface from TechSAT: 2 Tx/4Rx or 4 Tx/8 Rx channels A429-USB device

### GUI Overview

The CIDS380 simulation application is comprised of a set of control, configuration, and display panels – all integrated in a single container window. Due to the large amount of data required for the A380, some of the panels use lower-level container windows. The bottom section contains controls to terminate the CIDS simulation and to start and stop the CIDS recording file. In the following each of the panel types is presented in brief.

**Cabin layouts** – These interactive panels consist of both of the following layouts (each for the Upper Deck and Main Deck):

- > Typical A380-800 passenger cabin layouts, comprising up to 63 rows with up to 8 seats each, arranged in 8 color-coded zones
- > All theoretical passenger seats comprising 63 rows with 15 seats each arranged in 8 zones

Non-smoking zones are indicated by blue bars. At startup the header and zoning data is retrieved from the data defined by the user in the configuration panels. All these panels have an interactive area allowing interchange of seat data with the IFE.

**Room layouts** – Each of these panels displays 8 of the 64 A380 rooms, each room has a block of 15x15 seats. These panels have the same interactive features as the Cabin Layouts panels.

**Signs panels** – Each of these panels displays the current states of the Signs, Alerts, Illumination Modes, and Compartment Status as set by the CIDS Director for the various zones and rooms, 8 rooms or zones per panel. The associated data can be interactively changed and communicated to the IFE.

**Config/PAX resets** – This panel is used to:

- > set protocol characteristics
- > select the equipment ID
- > define the protocol timing
- > submit PAXCALL RESET commands
- > load a new set of configuration data

**Keylines/IFE cyclics/ PAsources** – This panel is used to:

- > display the current values and timing data for the IFE periodic labels
- > display and manipulate the keyline data (only if the optional hardware is available)
- > interactively change the IFE Theme Music Scenarios and PA sources

**Enquiries** – This panel is used to:

- > request a complete data update (UPDATE request from IFE)
- > display the timing of the data exchanges – not only during the complete UPDATE request sequence, but also during single IFE data requests

### Technical Data

#### Hardware Requirements

- ARINC 429 interface - the options are:
  - 2 Tx/4 Rx A429-USB device (PN 403557)
  - 4 Tx/8 Rx A429-USB device (PN 403568)

#### Optional Hardware

- Module for keyline support (PN 1010809)

#### Operating System Options

- Windows 10 32/64 bit

#### Part Number

- 202007