SimCheck Airbus A300B4-200

Panel overview

For use with Microsoft Flight Simulator X

CONTENTS

ABOUT THIS MANUAL

This manual explains how to easily navigate through the 2D panel and Virtual Cockpit (VC). It highlights the hidden click areas to open subpanels, how to

change some general settings of the panel and it gives an overview of all the subpanels that are available to the pilot.
In part 2 all the subsections in the panel are discussed and explained.

WIDESCREEN VERSUS 4:3 SCREEN

This manual contains screenshots made on a widescreen monitor. This is the default panel setting for the A300. If you are using a classic 4:3 monitor however you should rename the "*panel1280.cfg*" file, found in the "Panel" or the "panel.pax" directory to "*panel.cfg*", remember to back-up the original "panel.cfg" first so you can still use the widescreen panel settings in case you buy a new monitor!

HIDDEN CLICKZONES

CAPTAINS MAIN PANEL

Figure 1: CPT main panel

1. Open first officers main panel view
2. Show pop-up containing N1 computer – gear handle...
3. Turn off "Throttle off" warning on the Master Warning Panel (MWP) and the Failure and Performance Indicator (FPI)
4. Open overhead panel
5. Open the FPI as a pop-up window
6. Click and drag the minimum descend altitude bug
7. Open sub-panels as indicated by name
8. Open kneeboard
9. Automatically set V-bugs on the captains' airspeed indicator

10. Drag V-bugs manually on airspeed indicator
11. Three click zones on the IVSI/TCAS indicator:
    a) Left top: switch between display modes, by left or right clicking this area
       BLW (below): show traffic between 8700feet below and 2700feet above
       Blank (standard): show traffic between 2700feet below 2700feet above
       ABV (above): show traffic between 2700 feet below and 8700 feet above
       ALL: show all traffic
    b) Right top: switch between range modes by left (decrease) or right (increase) clicking this area
    c) Left bottom: press to enter TEST mode
12. Open the fire handle pop-up window

First Officers main Panel

Figure 2: FO main panel

1. Open captains panel view
2. Open overhead panel
3. Open the FPI as pop-up
4. Click and drag the minimum descend altitude bug
5. Open sub-panels as indicated by name
6. Open kneeboard
7. Automatically set V-bugs on the first officers' airspeed indicator
8. Drag V-bugs manually on airspeed indicator
9. Three click zones on the IVSI/TCAS indicator:
   1. Left top: switch between display modes, by left or right clicking this area
      BLW (below): show traffic between 8700feet below and 2700feet above

Blank (standard): show traffic between 2700feet below 2700feet above
ABV (above): show traffic between 2700 feet below and 8700 feet above
ALL: show all traffic

2. Right top: switch between range modes by left (decrease) or right (increase) clicking this area
3. Left bottom: press to enter TEST mode

OVERHEAD PANEL 2D

Figure 3: Hidden click zone to close overhead panel

OVERHEAD PANEL VC

Figure 4: Click zone will open the "Set-up" pop-up

MAIN PANEL POP-UP

Figure 5: Hidden clickzone to close pop-up window

COMMUNICATIONS PANEL

Figure 6: Hidden click zone to close COMM panel

SETTINGS PANEL

The settings panel is used to perform some actions whilst on the ground, to show performance data and to show/hide the yokes and window reflections in the VC. Hiding the window reflections in the VC can help increase performance loading and showing the VC.

Main menu

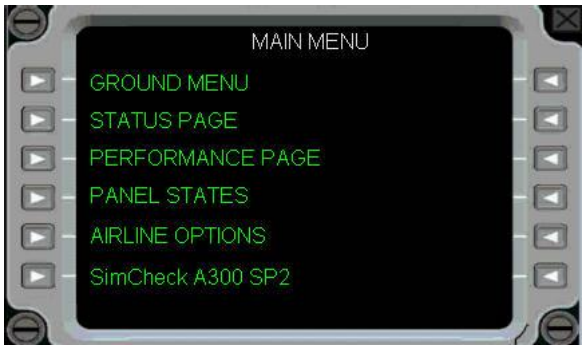


Figure 7: Settings panel, "Main menu" page

The main page has 5 menu options, the GROUND MENU page is disabled when the aircraft is airborne.

Ground page

Figure 8: Settings panel, "Ground" page

The ground page is only enabled when the aircraft is not airborne. Most menu options only work when the engines are off.

CALL FUELTRUCK: calls the FSX fuel truck if available on the current airport

CONNECT/DISCONNECT JETWAY: if the aircraft is parked at an FSX jetway position this option will connect and disconnect the jetway

CONNECT CSD's/CSD's ARE CONNECTED: use this option to reconnect the Constant Speed Drive in case it was disconnected during the flight

TOP OFF HYDRAULICS: the SimCheck A300 uses hydraulic fluid, use this option to top off the hydraulics

CONN./DISC.EXT.PWR/AIR: connects or disconnects the Ground Power Init (GPU) which supplies pressurised air and AC power to the aircraft

FIRE BOTTLES: reloads the fire bottles if they where used

Status page

Figure 9: Settings panel, "Status" page

This page gives current flight status information.

GROSS WGHT: The current total weight of the aircraft, value is expressed in pounds or kilograms depending on the setting in the "PERFORMANCE" section of the aircraft settings

OPT: ... MAX: ...: Optimum and maximum flight level at the current gross weight and cruising speed setting (M.78, M.80 or M.82)

HYD LVL: Percentage hydraulic fluid in each of the systems

CABIN ALTITUDE: The current cabin altitude

CoG: Center of gravity percentage

Performance page

Figure 10: Settings panel, "Performance" page

The performance page effects settings in the panel and model, these settings are saved for all flights with the A300.

SHOW/HIDE YOKES IN VC: Shows/hides the pilot and F/O yoke in the virtual cockpit
SHOW/HIDE WINDOW REFLECTIONS IN VC: shows or hides the reflections in the virtual cockpit windows and on the gauges in the virtual cockpit
SHOW/HIDE GROUND ANIMATIONS: this option was added for people using scenery enhancement add-on software like AES. The stairs and the cargo loader are hidden by this option. The GPU is not hidden.
SHOW WEIGHT IN KG/LBS: Show all the weights (also fuel and gross weight) either in kilograms or pounds. Note that the default value is pounds and that gauges that contain the print "lbs" will still show "lbs" even though the value is shown in kg
SET INS REAL ALIGN TIME/SET INS FAST ALIGN: When real time is selected the INS alignment takes approximately 10 minutes, fast align will align the INS in a matter of seconds !

Panel states page

Figure 11: Settings panel, "Panel states" page

The "panel states" allows the user to set all the cockpit switches directly into the correct configuration. "COLD AND DARK" and "READY FOR PUSH & START" will switch off the engines when pressed, "READY FOR TAXI" and "READY FOR DEPARTURE" can only be used when the engines are running.

Airline options

Figure 12: Settings panel, "Airliner option" page

In SP2 2 two real life airliner options have been added.
TURN SWITCH-TO-SPD ON/OFF: When this option is turned IAS autothrottle mode will switch to SPD autothrottle mode when ALT ACQ turns green (when the altitude set in the autopilot altitude window is intercepted during a climb)
TURN VSPD FOLLOW ON/OFF: The VSPD tape follows the actual aircraft vertical speed when not in VSPD autopilot mode

INTERFACE PARTICULARS

CLICK-AND-DRAG BUGS

For maximum realism, we have made the MDA bug and the 4 speed bugs click and drag with the mouse. The tooltip text will change when dragging the bugs.

Altimeter click-and-drag

Click and hold the left mouse button within ±5 feet indicated of the MDA bug to select the bug. Keep the mouse button depressed and drag the MDA bug to the desired MDA.

The tooltip text will show the current bug altitude.[1]

Airspeed indicator click-and-drag

Click and hold the left mouse within ±4 knots indicated of the speed bug to select the bug. Keep the mouse button depress and drag the speed bug to the desired speed.

The tooltip text will show the number of the speed bug and the current set speed.

Hidden airspeed clickzone

Left click on the zone indicated by the yellow circle to automatically move the speed bugs and the A/T set speed to the correct speeds for take-off (while on the ground) or approach (while in the air).

SWITCH TYPES AND HOW TO USE THEM

Standard two-way switch

Click the switch with the left mouse button to move it up and down

Three-way switch

Click the left mouse button to move the switch down, the right mouse button moves the switch up.

1 To turn on tooltip text, open the "Options" menu, next select "Settings", "Display" and click on the "Aircraft" tab. In the "Aircraft" menu, turn on the "Show tooltip text" select box.

Rotary switch

Move the switch clockwise by clicking the left mouse button, to move the switch counter clockwise use the right mouse button.

SUBPANEL DETAILS

The A300B4-200 is a classic, analogue panel that contains more than 500 indicators, dials and switches, most of which have been simulated in this panel. Navigating through this vast array of information and controls can seem a daunting task at first. In the following page we have tried to show which gauge is where and does what.

CAPTAINS PANEL

The captains panel section contains 43 separate gauges indicating and controlling some of the major operational aircraft functions:

1. Pushbutton to start chronometer	18. Altimeter with click and drag orange bug for minimum descent altitude (MDA)
2. MMO switch: Sets the barber pole to M.82 or M.86	19. Inner, middle and outer marker lights
3. Captains clock and chronometer	20. Taxi speed indicator (only works with wheels on ground)
4. Ground proximity warning system (GPWS) control switch	21. INS selector to select which source send heading information to the autopilot (normally set to 1)
5. Airspeed indicator	22. Course selector for NAV1
6. GPWS indicators	23. Auto throttle controls and setting
7. RMI	24. Automatic Flight Control System (AFCS) used to control the autopilot (see below)
8. Attitude director indicator (ADI) with Flight Director (FD) bars, speed circle, decision height warning light, slip indicator, glide slope and localizer indicator	25. Standby instruments: * Attitude indicator * Independent standby altimeter * Airspeed indicator
9. Horizontal Situation Indicator (HSI) with course display, distance to	26. Take-off power and go around (TOGA) power push button

waypoint, time to waypoint, ground speed, omnibearings indicator (OBI), to/from flag, heading bug and glide slope indicator	
10. FD source indicator: GPS display information coming from the INS, V/L display information from NAV1	27. Brake pressure indicator for the yellow system. Used for the parking brakes or when the normal – green – system is INOP
11. Main switch turning on/off the flight director bars on the captains ADI	28. Master warning panel (MWP)
12. Autopilot OFF warning light	29. True Airspeed indicator (minimum reading is 122kts)
13. ALT light goes on when between 750 and 250 feet from set altitude. NOTE: The light going on doesn't mean that the aircraft will level off !	30. Total weight and total fuel indicator
14. Radio altimeter + decision height (DH) selector and indicator	31. Navigation radio 2 used to set VOR frequency 2
15. Immediate Vertical Speed Indicator (IVSI) + TCAS	32. Engine reversers indication
16. Navigation radio 1 used to set VOR frequency 1	33/34. Primary engine indication
17. Failure and Performance Indicator (FPI) shows the current autopilot and auto throttle mode	35. Autobrake system pushbuttons and indication

CAPTAINS POP-UP PANEL

1. N1 computer
2. Slats/Flaps Position Indicator, also contains the "CONFIG" warning flag
3. Flight Control Position Indicator
4. Saturated Air Temperature (SAT) indicator, shows the current ambient temperature
5. Landing Gear Position Indicator
6. Landing gear control

AUTO FLIGHT CONTROL SYSTEM (AFCS)

The AFCS is used to select and set and select autopilot modes and auto throttle modes. We have created a number of left and right clickable mouse and scroll button areas to make setting the autopilot as easy as possible.

<a> areas are set by left or right clicking, or by moving the mouse scroll knob up or down. Left click/down scroll will reduce the indicated number by 1 unit, right click/up scroll will increase the indicated number by 1 unit. For the altitude window 1 unit equals 100 feet, for all other numbers 1 unit equals 1 degree or 1 knot.

<b> areas are set by left or right clicking, or by moving the mouse scroll knob up or down. Left click will DECREASE the number by 1 unit, right click will DECREASE the number in steps of 10 units. Up or down scroll work like in <a> areas

<c> areas are set by left or right clicking, or by moving the mouse scroll knob up or down. Left click will INCREASE the number by 1 unit, right click will INCREASE the number in steps of 10 units. Up or down scroll work like in <a> areas

<d> area is used to set the vertical speed. Left click reduces the vertical speed by 100 feet, right click increases vertical speed by 100 feet. The scroll wheel works like in the <a> areas

CLOCK

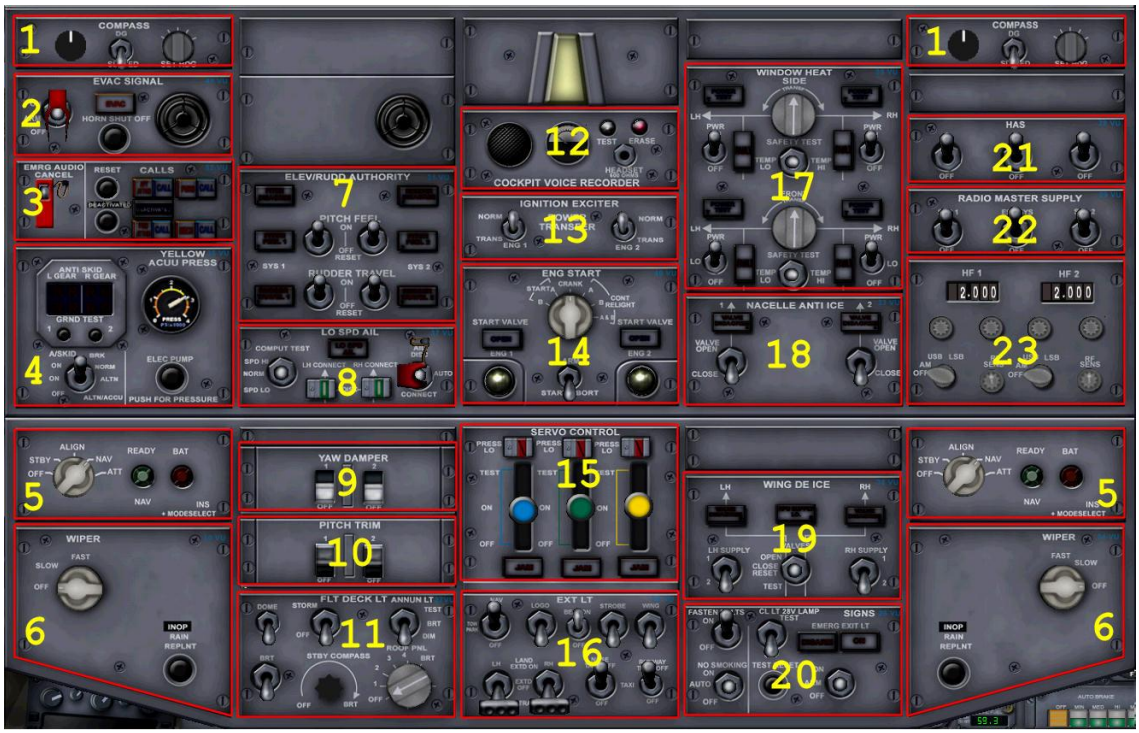
The clock in the A300 can be a bit counter intuitive, so here's a short explanation of what you see and how to control it.

1. Click this pushbutton (on the glare shield) to activate the stop watch. Hand <d> will show the elapsed seconds, the number <a> is the number of elapsed chronometer minutes. Press the pushbutton again to stop the chronometer, press a third time to reset the chronometer.
2. Same function as pushbutton 1.
3. Elapsed time switch, left or right click to move switch from "OFF" to "ON" to "RESET" (spring loaded position). The minutes and hours elapsed since the elapsed time switch was set to ON are displayed by the numbers shown in <c>

b. Current UTC time. Left or right clicking on the hour display will move the time back or forward in steps of 1 hour, left/right clicking the minutes will move the time back or forward in 1 minute steps.

c. Elapsed hour and minutes display. Left or right clicking on the hour display will move the elapsed time back or forward in steps of 1 hour, left/right clicking the minutes will move the elapsed time back or forward in 1 minute steps.

OVERHEAD PANEL



The overhead section contains 24 separate gauges controlling some of the major aircraft systems:

1. Compass slaving switch	13.Ignition exciter switches
2. Evacuation signal test and control	14.Engine start panel
3. Emergency audio and internal communications controls	15.Pneumatic controls panel
4. Anti-skid controls + yellow accu pressure indicator and control (used for the parking brake)	16.External lights switches
5. Left and right MSU	17.Cockpit window heat control switches
6. Left and right side windshield wiper control switches	18.Nacelle anti-ice control switches
7. Pitch feel and rudder travel control switches	19.Wing de ice control switches
8. Low speed aileron control	20.Seatbelt and No Smoking switches, emergency lighting switches
9. Yaw damper switches (have to "ON" for the autopilot to work)	21.Heading and Attitude System (HAS) control switches
10. Pitch trim control switches (have to be "ON" for autopilot to work)	22.Radio master supply control switches
11.Flight deck lights switches	23.High frequency radios
12.Cockpit voice recorder control panel	

BLEED AIR, PACKS, PRESSURIZATION

1. Pack discharge temperature, turbine inlet temperature and valve position indicators	**9. Cabin temperature controls**
2. Pack valve main switches	10. Cabin differential pressure indicator
3. Bleed air temperature and pressure indicator for the left and right system	11. Cabin vertical speed
4. Cross bleed valve selector and indicator (goes on when the cross bleed valve is moving)	12. Cabin altitude in thousands of feet
5. Engine 1 and 2 high pressure bleed switches and APU bleed air switch	13. Outflow valve position indicators
6-7. Ventilation switches and cargo temperature controls	14. System 1 and 2 cruising altitude settings
8. Cabin temperature and duct temperature indicators	15. System selector

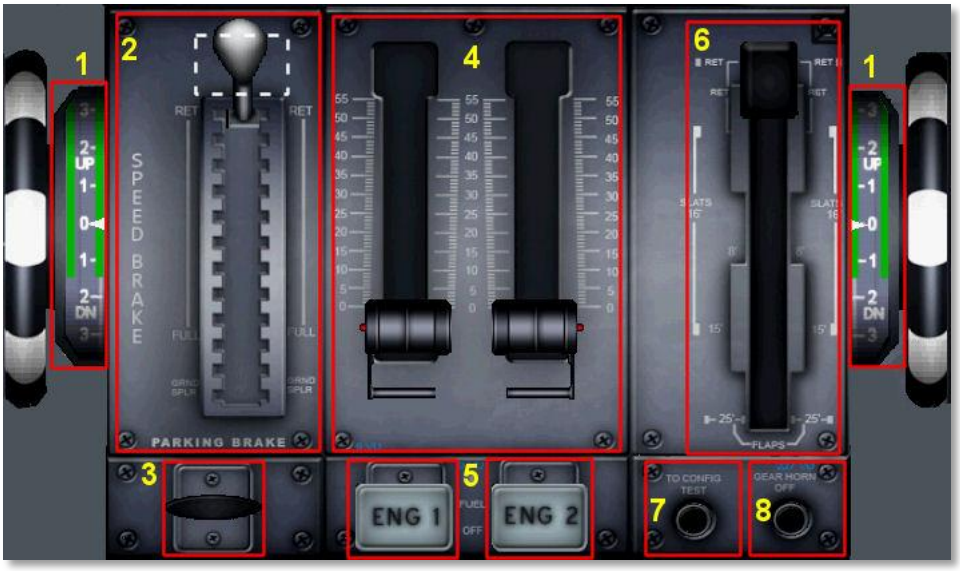
HYDRAULICS PANEL

1. Landing gear position indicator and brake fan switch
2. Brake temperature indicator
3. Hydraulic pressure indictors
4. Hydraulic pump switches and indicators
5. Hydraulic level indicators
6. Secondary engine instruments and engine vibration indicators

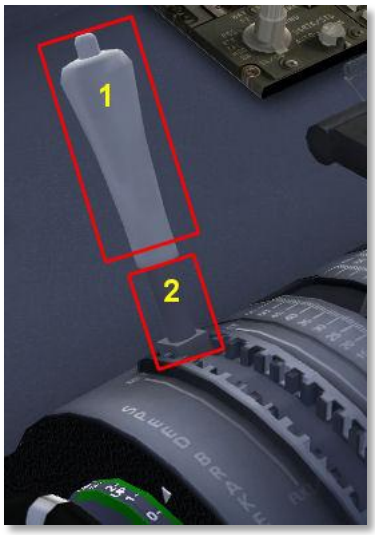
ELECTRICS PANEL

1. Battery control switches and fault indicators	7. AC to DC transformer rectifier (TR) unit switches
2. DC voltage and AMP indicators	8. AC power selector switches and indicators
3. External power switch	9. AC load indicators for the engine AC generators and APU generator
4. Smoke isolation switches (not simulated)	10. Engine and APU generator switches
5. AC voltage and frequency indicators	11. Constant speed drive disconnect switches (better not touch those in flight ! Can only be reset on the ground from the set-up panel)
6. Galley shed switch, will remove galley load from electrical circuits	

THROTTLE PANEL



1. Pitch trim indicators
2. Speed brake (spoiler) handle ➔ click white area to ARM the speed brake
3. Parking brake handle
4. Throttle handles
5. Fuel cut-off switches
6. Slats and flaps handle
7. Take-off configuration test button
8. Landing gear horn shut off button



VC speed brake handle

1. Click and drag this part to move the speed brake handle in the VC
2. Click this area to ARM the speed brakes

COMMS PANEL

4. Number 1 VHF radio. Left or right click the white zones to de/increase the radio frequency and click the XFR button to switch the active frequency
5. Transponder and TCAS control, left and right click the white zones to de/increase the transponder code
6. Number 2 VHF radio. Left or right click the white zones to de/increase the radio frequency and click the XFR button to switch the active frequency
7. Radio selector box, clicking on ADF or NAV buttons turns on identification sound
8. ADF1 and 2 frequency control. Left or right click the white zones to de/increase the frequency
9. Click left or right from center ("0") to set rudder trim. Clicking on the center "0" area sets rudder trim to the center position
10. Click left or right from center ("0") to set aileron trim. Clicking on the center "0" area sets aileron trim to the center position

FUEL PANEL

1. Press this button to open the Refuel/Defuel subpanel
2. PUMPS PRESS LO light goes on when any of the center or main wing tank fuel pumps is turned on while the tank is empty
3. FUEL USED indicators
4. FUEL USED rest button
5. Fuel tank shut off valve and fuel pump switches and indicators
6. Fuel quantity indicators per tank
7. Fuel quantity indicator test button
8. APU control and indicator subpanel
9. Probe heat switches and indicators
10. Fuel Jettison subpanel, click on the area circled in white to open the fuel jettison panel

➔ The Refuel/Defuel subpanel allows to load or unload fuel. The red numbers indicate the set volume, the yellow numbers show the current total volume on board