



Friendly Panels



Boeing 2D Panel Pack (For FS 2004)

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**TWO NEW 2D REPLACEMENT PANELS FOR YOUR FS 2004
DEFAULT BOEING 737-400 AND 777-300 AIRCRAFTS !!!**

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1. Introduction

Thank you for purchasing this Pack or just downloading this manual. Here you will find the installing instructions, description and user instructions of the customized gauges for the panels included in the Boeing 2D Panels Pack for FS2004.

This pack includes two panels, for the Boeing 737-400 and Boeing 777-300. They are the definitive 2D panels substitutes for your default FS2004 Boeing Aircrafts.

There are very good and complex panels you can acquire in the market but, often, most of them require to open and close a lot of windows all the time, some of them covering others without any kind of integration with the rest of the panel elements.

We have develop these panel under a simple philosophy: panels in which you can see, read and handle as many gauges as a medium quality monitor screen allows, using the minimum number of windows, with a gauges layout as real as possible. In this case **all you need is in one window**, just the default GPS need to be opened apart. **The Virtual cockpit has been also modified** to include most of the new gauges.

That simple, that comfortable to flight with these panels, no need of complementary windows spoiling your maneuvering or views. See the screenshots ahead to have a look of every view.

Please, read this document entirely.

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2. Requirements

This panel requires Windows XP and a screen resolution of 1024 x 768 or higher (1240 x 1024 recommended). No other special requirements are needed, if your PC can handle the default planes, it can handle these ones.

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3. Installing the panel

1.- Run the installation program and follow the indicated steps.

2.- The panels will be installed in:

"Your FS2004\Aircraft\b737_400"

"Your FS2004\Aircraft\b777_300"

3. When finish installation , please, read this manual for instructions.

4. Run FS2004. You'll find your new panels as the variation FP for both types of panels included in this pack: Boeing 737-400 and Boeing 777-300. Go to **Aircraft menu**, **Select Airacraf**, **Aircraft manufacturer:** Boeing, **Aircraft model:** B737-400 or B777-300, **Variation:** whatever preceded by FP.

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4. Panels screenshots Boeing 777-300



MFD screen mode 1, EICAS 1



MFD screen mode 3, EICAS 2



Panel lights on



Virtual Cockpit

5. Panels screenshots Boeing 737-400



HSI screen mode 1



HSI screen mode 2



Panel lights on



Virtual Cockpit

6. B 737-400 Gauges

This section shows, explains and describe (when necessary) the new FP gauges features included in this pack.

6.1 ADI



1. Displays the program selected in autopilot. If a GPS flight plan is active shows GPS (magenta), when NAV is on or NAV (white) if flight plan is not active but NAV is on. MCH (yellow) is replaced by SPD (white) depending on the button pressed in AP (MACH or SPD)
2. Radio altimeter. Lights under 2500 feet above terrain.

6.2 HSI





FLIGHT PLAN

Note.- The active flight plan list is an independent window inside the main B_737.gau.

If you save a flight with this window open, when you load the flight previously saved, the switch 7 couldn't work right till you hide this window pressing Shift + 2 keys.

So, it is recommended not to save a flight with this window open.

- 1.- If there is not an active flight plan shows VOR1 info: type, distance and name, if there is signal. If an active flight plan exists, shows GPS, distance to next waypoint and its name.
- 2.- If there is not an active flight plan shows VOR1 relative speed and minutes to VOR1, if there is signal. If an active flight plan exists, shows ground speed and time to next waypoint.
- 3.- If there is not an active flight plan shows course. If an active flight plan exists, shows desire track.
- 4.- Toggles between ROSE or ARC screen mode.
- 5.- Controls range scale in ARC mode.
- 6.- In ARC mode, shows / hide the VOR1, VOR2 and ADF needles.
- 7.- Show / hide Flight Plan waypoints list. If there is not flight plan the screen will show blank
- 8.- In ARC mode shows / hide the next waypoint information.
- 9.- If GPS is ON in AP shows GPS, if not, if there is an ADF station tuned and there's signal shows ADF otherwise shows NAV.
- 10 and 11.- Scrolls flight plan list.



1.- Shows ground speed, true airspeed, flighttime (this is automatic, starts when the aircraft leaves the ground and stops when touch it again) and course or desire track if it is in GPS mode.

2.- Shows wind direction and speed.

3.- Shows the next waypoint information if 9 is pushed.

4.- Flight plan route and waypoints names.

5 and 10.- Shows VOR1 and VOR2 info: type, name and distance, if there is signal.

11.- Shows ADF info: name, if there is signal.

12.- Scale range, controlled by 7.

13.- Needles: VOR1 (yellow), VOR2 (green) and ADF (sky blue)

6.3 AUTOPILOT

Much more like what you see in the Virtual Cockpit view. The clicking areas are shown below.



6.4 UPPER PANEL

New bitmap. No much more to say.



6.5 RADIOS



New ADF with stand by frequency.

6.6 FUEL

New fuel quantity indicators.



6.7 CLOCK

START/STOP STOPWATCH

SIM RATE



1. One click: start stopwatch.
2. The second click stops the chrono.
3. The third click reset chrono.
4. Clicking again starts the counting again.

7. B 777-300 Gauges

7.1 PFD



1.- Autopilot program selected.

2.- Angle of attack. analog and digital readout.

3.- Barometric pressure. Can display IN HG or mBars depending on selction in MCP.

4.- Decision height, selected in MCP.

5.- Radio altimeter. It is displayed below 2500 feet above ground.

6.- Ground speed.

7.- VOR1 name, bearing and DME.

7.2 MFD



1.- Course or desire track if GPS is active. (see picture below)

2 and 3.- VOR1 and VOR2 info: frequency, name, distance, bearing and relative speed. If GPS follows an active flight plan then area 3 shows GPS, next waypoint name, distance to it, time to it and ground speed. (see picture below).

4.- In GPS mode the blue arrow indicates the bearing to the next waypoint, while 5 keeps on maintaining ADF tuned info.

5.- ADF info: frequency, name and bearing (-180 to +180).





- 1.- Shows wind direction and speed.
- 2.- Flight plan route and waypoints names.
- 3.- Shows the next waypoint information depending on MCP.
- 4 and 5.- Shows VOR1 and VOR2 info: type, name and distance, if there is signal.
- 6.- Shows ADF info: name and bearing, if there is signal.
- 7.- Scale range controlled in MCP.
- 8.- Needles: VOR1 (white), VOR2 (green) and ADF (sky blue, not in picture)
- 9.- Shows ground speed, true airspeed, flighttime (this is automatic, starts when the aircraft leaves the ground and stops when touch it again) and course or desire track if it is in GPS mode.

ACTIVE FLIGHT PLAN
LEZL --> LEZL

WPT	DTK	DIST	CUM
Fix07	96 M	6 n	59 n
Fix08	91 M	7 n	66 n
Fix09	61 M	7 n	72 n
Fix10	30 M	6 n	78 n
Fix11	8 M	9 n	87 n
Fix12	347 M	3 n	90 n
Fix13	291 M	5 n	95 n
CI27	293 M	4 n	99 n
SVL03	278 M	5 n	104 n
LEZL	271 M	4 n	107 n

SCR WPT

FLIGHT PLAN

Note.- The active flight plan list is an independent window inside the main B_777.gau.

If you save a flight with this window open, when you load the flight previously saved, the switch CTR in MCP couldn't work right till you hide this window pressing Shift + 2 keys.

So, it is recommended not to save a flight with this window open.

- 1
- 2

- 1.- Scroll up waypoints list.
- 2.- Scroll down waypoints list.

7.3 EICAS

AUTOBRAKE INDICATOR

TRIM INDICATOR

TAT 14°C AUTOBRAKE DISARM

1.02 EPR 1.02 TRIM 10.0

56.72 N1 56.72 UP

470.8 EGT 470.8 FLAPS

TOTAL FUEL 291.1 LBS x 1000

76.00 N2 76.00 TRIM 9.9

13558 FF 13558 UP

187 OIL PRESS 187

087 OIL TEMP 087

15 OIL QTY 15

1.9 VIB 1.9

EICAS EICAS 2

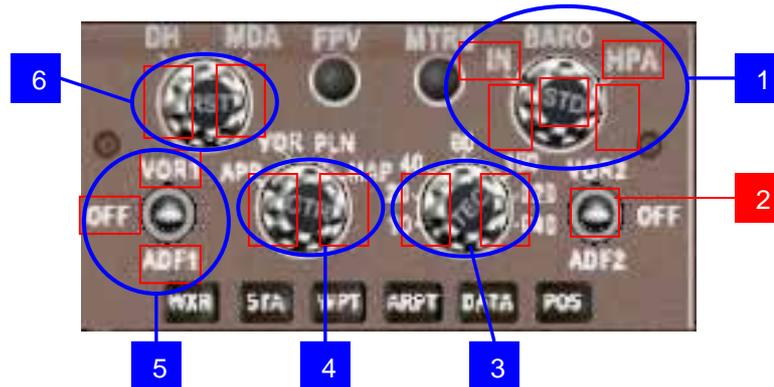
EICAS SCREEN 1 or TWO

7.4 AUTOPILOT / MCP

Clicking areas, right side:



Clicking areas, left side:



- 1.- From left to right and up to down:
 - Mbars units shown in PFD
 - in Hg. units shown in PFD
 - Dec. baro press
 - Standard baro press
 - Inc. Baro press
- 2.- Show / hide VOR 2 needle in MFD
- 3.- Dec. / Inc. range scale in MFD
- 4.- Change MFD screen modes: rose, arc, arc with next wpt info and flight plan waypoints list. If there is not flight plan that MFD screen will show blank
- 5.- From up to down:
 - Shows VOR 1 needle in MFD
 - VOR 1 and ADF needles hidden in MFD
 - Shows ADF needle in MFD
- 6.- Inc. / Dec. decision high shown in PFD

7.5 RMI



- 1.- Needle 1 driven by VOR1 or ADF signal
- 2.- Needle 2 driven by VOR2 or ADF signal

7.6 HYDRALICS BRAKE PRESSURE

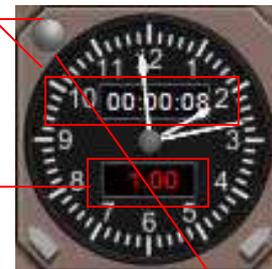


HYDRALICS
BRAKE PRESS

START/STOP
STOPWATCH

SIM RATE

7.7 CLOCK



7.8 RADIOS



New ADF with stand by frequency.

1. One click: start stopwatch.
2. The second click stops the chrono.
3. The third click reset chrono.
4. Clicking again starts the counting again.

8. Remarks

THESE PANELS MUST BE LOADED FROM 2D COCKPIT FOR THE FIRST TIME. FLIGHTS MUST BE SAVED FROM THIS VIEW AS WELL.

1. As you probably know a plane's Virtual Cockpit is defined when the aircraft model is designed. Therefore, is very difficult to make "good-looking" changes in it editing its panel.cfg file. In spite of it, we have included the new gauges in the Boeing VC panels. You could find some strange things in them. So, if you don't like the changes, the only thing you have to do is to edit the plane.cfg of the aircraft and replace all sections [Vcockpit0x] with the original ones in the original panel.cfg of the plane. Don't forget make a backup of everything you're going to play with.
2. If you don't like to use VC, you can pan around in the 2D cockpit view with this trick. Edit fs9.cfg (make a backup first) with notepad located in:

(your drive):\Documents and Settings(administrator or user name)\Program data\Microsoft\FS9\fs9.CFG

If you cannot see that folder and file go to menu bar, Tools, Folder Options, See Tab and click on See Hidden Folders and Files. Then you should see the file you're looking for (My Windows is XP Pro Spanish Version, so I don't know the exact names in the menus, but they will be more or less like that).

Look for a line like this "pan_rate=400" and add a new line "pan_in_cockpit_mode=1" (without the quotes) after the pan_rate line. Save fs9.cfg. Now, when you start FS2004 you should be able to pan around from 2D cockpit view.

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9. Technical support

If you have any question, please contact FriendlyPanels at:

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Web page:

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