FriendlyPanels Software

Boeing 2D Panel Pack v3.0

For Microsoft® Flight Simulator 2004
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THREE NEW 2D REPLACEMENT PANELS FOR YOUR FS 2004 DEFAULT BOEING 737-400, 747-400 AND 777-300 AIRCRAFTS

User's manual

Table of Contents

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 three panels, for the Boeing 737-400, Boeing 747-400 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 (you won't often need it as long as the news HSI and MFD gauges shows you the main part of that information). **The Virtual cockpit has been also modified** to include most of the new gauges.

What's new in v3.0:

- **This version 3.0 includes a completly new panel for Boeing 747-400, demanded by many of our former customers.**

- **The HSI and MFD gauges included a much more complete set of displays, including map view of nav aids, airspaces and terrain views. See pictures below.**

- **Much more navigational features and improved vectorial antialiasing graphics in gauges.**

- **A new GPS FMC style, to replace the default FS2004 GPS gauge.**

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.

---oOo---

2. Requirements

This panel requires Windows XP and a screen resolution of <u>1024 x 768 or higher (1240 x 1024 recommended)</u>. 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\b747_300"
"Your FS2004\Aircraft\b777_300"

Your old aircraft.cfg files will be saved as aircraft_b737_backup.cfg and aircraft_b777_backup.cfg.

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

4. Run FS2004. You'll find your new panels as the variation FP for three types of panels included in this pack: Boeing 737-400, Boeing 747-400 and Boeing 777-300. Go to **Aircraft menu**, **Select Aircraf**, **Aircraft manufacturer**: Boeing, **Aircraft model**: B737-400, Boeing 737-400 or B777-300, **Variation**: whatever preceded by FP.

<div align="center">---oOo---</div>

4. Some screenshots

Boeing 777-300

MFD screen mode rose APP, EICAS 1

MFD screen mode arc APP ARC, EICAS 2

MFD screen mode MAP

New GPS FMC style.

Panel lights on

Virtual Cockpit

Boeing 737-400

HSI screen mode 1

HSI screen mode 2

HSI screen mode 3

New GPS FMC style.

Panel lights on

Virtual Cockpit

Boeing 747-400

MFD screen mode APP rose, EICAS 1

MFD screen mode VOR ARC, EICAS 2

MFD screen mode MAP. New GPS FMC style.

MFD screen mode Flight Plan list

Panel lights on

Virtual Cockpit

5. B 737-400 Gauges

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

5.1 ADI


All these functions have been added:

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 replace by SPD (white) depending on the button pressed in AP (MACH or SPD)
2. Radio altimeter. Lights under 2500 feet above terrain.
3. IAS selected indicator.
4. Overspeed indicator

5.2 MCP and HSI

The HSI has four display modes, selected with the MCP.
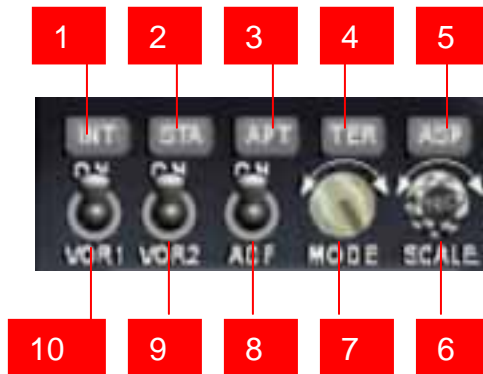
1. When HSI is in MAP mode shows/hide intersections.
2. When HSI is in MAP mode shows/hide VOR's and NBD's.
3. When HSI is in MAP mode shows/hide airports.
4. When HSI is in MAP mode cicles shows/hide terrain.
5. When HSI is in MAP mode shows/hide airspaces.
6. Change scale range
7. Change mode: ROSE, ARC, MAP, FLIGHT PLAN LIST
8. Shows/hide ADF needle in ROSE/ARC modes
9. Shows/hide VOR2 needle in ROSE/ARC modes
10. Shows/hide VOR1 needle in ROSE/ARC modes

ROSE MODE   **FLIGHT PLAN**
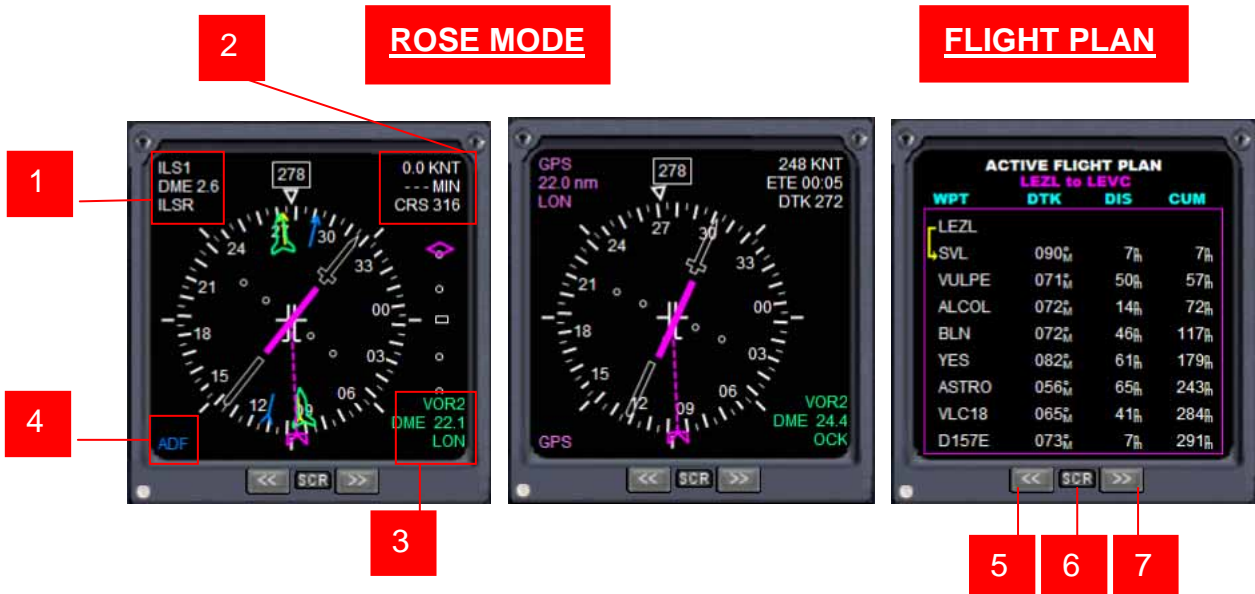
1. If GPS switch is in NAV mode shows VOR1 info: type, distance and name, if there is signal. If an active flight plan exists and GPS switch is in GPS mode, shows GPS, distance to next waypoint and its name.
2. If GPS switch is in NAV mode shows VOR1 relative speed and minutes to VOR1and course. If an active flight plan exists and GPS switch is in GPS mode, shows ground speed, time to next waypoint and DTK.
3. Shows VOR2 info: type, distance and name, if there is signal.
4. 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.
5. Scrolls flight plan list. Click on 6 and then 5 or 7.

ROSE MODE
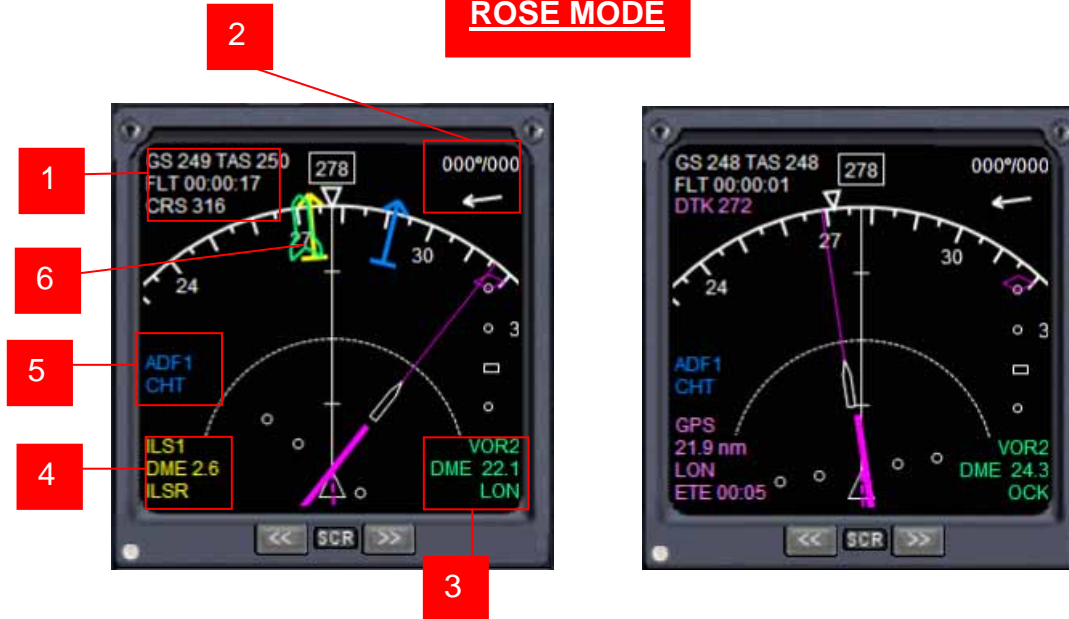
1. Shows ground speed, true airspeed, flightime (this is automatic, starts when the aircraft leaves the ground and stops when touch it again) and course or desire track if it is in GPS mode.
2. Shows wind direction and speed.
3. Shows VOR2 info: type, name and distance, if there is signal.
4. Shows VOR1 info: type, name and distance, if there is signal or GPS next waypoint info
5. Shows ADF info: name, if there is signal.
6. Needles: VOR1 (yellow), VOR2 (green) and ADF (sky blue)

MAP MODE VIEWS

In MCP you can select if you want to see terrain (colored or not), airspaces etc...

5.3 GPS

New FMC style GPS: a remake of the default FS2004 GPS with a more airliner look.

Buttons with same letters have the same functions than in the default FS2004 GPS gauge.

1.- Same functions than lower white arrows in the bottom right knob of the default FS2004 GPS.

2.- Same functions than ENT button of the default FS2004 GPS.

3.- Same functions than upper white arrows in the bottom right knob of the default FS2004 GPS.

4.- Same functions than DIRECT TO button of the default FS2004 GPS.

5.- Same functions than range buttons in the right top switch of the default FS2004 GPS.

5.4 AUTOPILOT

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

5.5 UPPER PANEL

New bitmap. No much more to say.

5.6 RADIOS

New ADF with stand by frequency.

5.7 FUEL
New fuel quantity indicators.

FUEL
14978
LBS
CENTER

FUEL
09455
LBS
LEFT

FUEL
09455
LBS
RIGHT

5.8 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.

6. B747 and B777-300 Gauges

Here, we explain together B747 and B777 as long as they are very alike.

6.1 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. Heading.
7. Mach and Ground speed.
8. VOR1 name, bearing and DME.

6.2 MCP
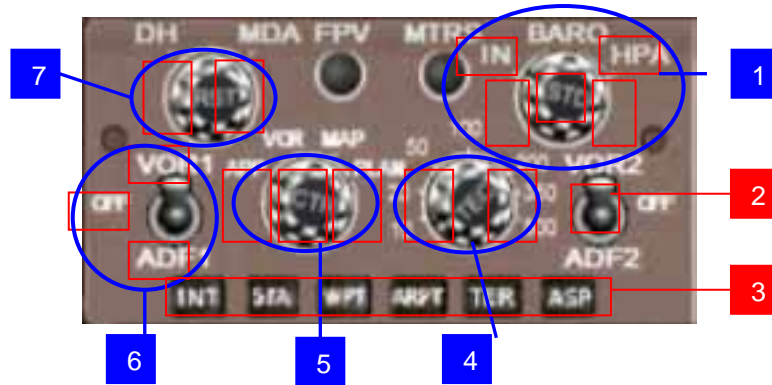
1.-From left to right and up to down:
-Mbars units shown in PFD
-in Hg. units shown in PFD
-Dec. baro press
-Standard baro press
-Inc. Baro press

2.- Show / hide VOR 2 needle in MFD

3.- Hide/show diferent elements in MAP screen

INT shows/hide intersections.
STA shows/hide VOR's and NBD's.
WPT shows/hide route.
ARPT shows/hide airports.
TER shows/hide terrain.
ASP shows/hide airspaces.

4.- Dec. / Inc. range scale in MFD

5.- Change MFD screen modes: Approach, Vor, Map and flight plan waypoints list. Clicking in the center area toggles modes Rose y Arc if in APP or VOR modes.
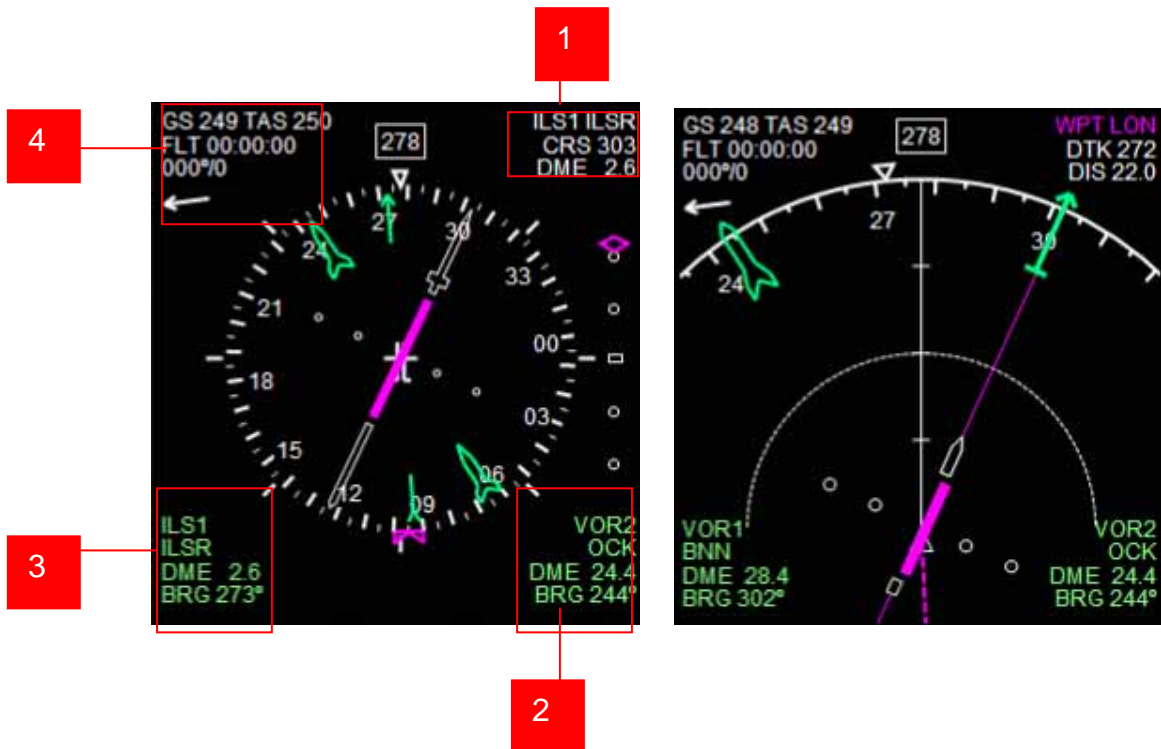
6.- From up to down:
-Shows VOR 1 needle in MFD
-VOR 1 and ADF needles hidden in MFD
-Shows ADF needle in MFD

7.- Inc. / Dec. decision high shown in PFD

6.3 MFD

1. VOR1 or GPS nextwaypoint info depending on GPS switch position
2. VOR2 info: frequency, name, distance, bearing.
3. VOR1 info: frequency, name, distance, bearing.
4. Shows ground speed, true airspeed, flightime (this is automatic, starts when the aircraft leaves the ground and stops when touch it again) and wind direction and speed.

FLIGHT PLAN

Scrolls flight plan list. Click on 2 and then 1 or 3.

22
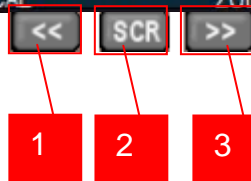
In MCP you can select if you want to see terrain (colored or not), airspaces etc...

6.4 GPS

New FMS style GPS: a remake of the default FS2004 GPS with a more
airliner look.

Buttons with same letters have the same functions than in the default
FS2004 GPS gauge.

1.- Same functions than lower white arrows in the bottom right knob of the default FS2004
GPS.

2.- Same functions than ENT button of the default FS2004 GPS.

3.- Same functions than upper white arrows in the bottom right knob of the default FS2004
GPS.

4.- Same functions than DIRECT TO button of the default FS2004 GPS.

5.- Same functions than range buttons in the right top switch of the default FS2004 GPS.

6.5 EICAS

B 777

AUTOBRAKE INDICATOR

TRIM INDICATOR
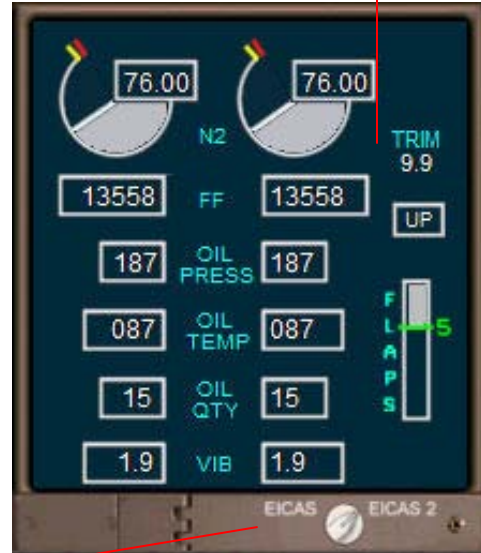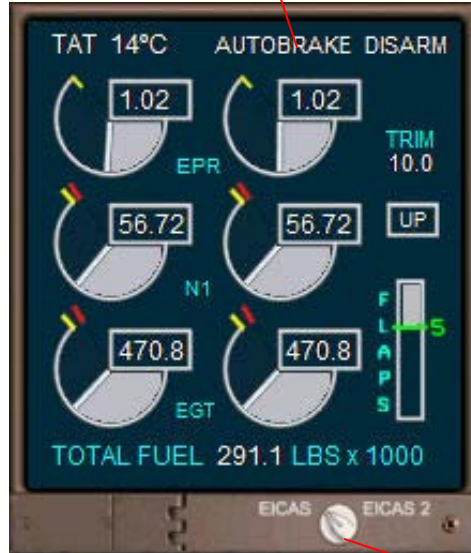
EICAS SCREEN 1 or TWO

B 747

6.6 AUTOPILOT

Clicking areas, right side: Clicking in the center of the CRS knob aligns the course selected to the current **CDI** bearing source for the **VOR and c**licking in the center of the HDG knob aligns the selected heading to the current aircraft heading.

6.7 RMI

DISTANCES TO VOR's

8.2   3.0
DME-1   DME-2

VOR VOR

1

2

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

6.8 HYDRALICS BRAKE PRESSURE

6.9 CLOCK

HYDRAULICS
BRAKE PRESS

START/STOP
STOPWATCH

00:00:08

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.

6.10 RADIOS

ACTIVE COMM1 STBY
122.95   118.00
COMM
TEST

ACTIVE NAV1 STBY
110.10   113.70

ACTIVE ADF STBY
0353.0   0100.7

CLICK AREAS

New ADF with stand by frequency.

7. Remarks

THESE PANELS MUST BE LOADED FROM 2D COCKPIT FOR THE FIRST TIME. FLIGHTS MUST BE SAVED FROM THIS VIEW AS WELL AND THE MFD OR HSI MODE MUST BE IN ROSE OR ARC MODE. NEVER SAVE A FLIGHT WITH HSI OR MFD IN MAP OR FLIGHT PLAN LIST MODE.

1. As you probably know a plane's Virtual Cockpit is defined when the aircraft model is designed. Therefore, is very dificult 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 sometimes (rarely I'd say) stranges 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 goin 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.

3. This is a general trick, not just for these panels: If you notice a FPS fall down when you change from 2D panel to VC or in some other circumstances try to press ALT key twice, many times you'll get a significative increase of FPS.

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8. Technical support

If you have any question, please contact FrienlyPanels at:

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Web page:

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