



King Air 350 2D Panel
(For FS 2002 Pro and FS2004)
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Table of Contents

- 1. Introduction**
- 2. Installing the panel**
- 3. Panel**
- 4. Gauges**

Switches
Clock
RMI
Radio Altimeter
OAT
Autopilot

Nav Gauge
Com Gauge
ADF
XPNDER
GPS & NAV Info gauge
Panel Annunciator

- 5. Remarks**
- 6. Support**

1. Introduction

Thank you for downloading this manual. Here you will find the installing instructions, description and user instructions of customized gauges for the King Air 350 2D panel for FS2002 Pro or FS2004 Editions.

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.

The idea that leads us to develop this panel is very simple: a panel 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 and where you can open any new window clicking somewhere in the panel, with no need of using keyboard (also available, of course), making easier to use the panel. With this King Air 350 2D panel you will use just one view of the panel most (or even all) of the time.

Please, read this document entirely, specially section 5 (remarks).

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2. Installing the panel

This panel requires a screen resolution of 1024 x 768 or higher (1240 x 1024 recommended).

1. Run the installation program.
2. When prompted for the directory where you want to extract the files, enter the path to the directory where the files will be extracted or browse to it. We recommend to create a temporary folder and extract the files there.
3. When finish extraction go to that folder.
4. There, you'll find these folders: Gauges, Panel and Sounds, and the files aircraft.cfg, aircraft_FS02.cfg, Readme.txt and KingEn.pdf.
5. Copy Gauge folder contents to your FS2002 or FS2004 Gauge folder, normally:

[your disk letter]:\ [your folder name for FS2002 or FS2004] \ Gauges

6. Copy Sounds folder contents to your FS2002 or FS2004 Sound folder, normally:

[your disk letter]:\ [your folder name for FS2002 or FS2004] \ Sound

7. The Panel folder contains just the new bitmaps and the ones that has been changed. Under FS2004, copy Panel folder contents (Kingair_6.bmp and Panel.cfg) to the panel folder of the plane which you intend to use this panel with, for this plane it would be:

[your disk letter]:\ [your folder name for FS2004] \ Aircraft \ beech_king_air_350 \ panel

Under FS2002, copy Panel folder contents (Kingair_6.bmp and Panel_FS02.cfg) to the panel folder of the plane which you intend to use this panel with, for this plane it would be:

[your disk letter]:\ [your folder name for FS2002] \ Aircraft \ beech_king_air_350 \ panel

then **rename Panel_FS02.cfg to Panel.cfg**

In most cases you need to keep in the original folders the rest of the files found there. **Care to backup any file there you want to keep.**

8. Copy Readme.txt and BaronEn.pdf wherever you like and you can refer to them if you need it.

Your panel will be ready to load when you choose the aircraft you attached it to under FS2004, but first please read carefully section 5 (Remarks) at the end of this document, you'll see what the aircraft.cfg and aircraft_FS02.cfg files are for.

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3. Panel



Real Panel

The FriendlyPanels Panel Views



Normal view: Everything you need for simming, in sight.



Showing GPS. Perfect integration with the rest of the panel. No window spoil your landscape view.

4. Gauges

It is **highly recommended** to open and/or close windows clicking on simicons, instead of using SHIFT+# to preserve the views layout.

Many gauges are FP design for better visibility, although they work exactly like the ones in FS2004. Here follows how to handle gauges which may have some differences with the ones included in FS2004.

NEW SET OF SWITCHES



CLOCK



RMI



RADIO ALTIMETER

LED: off above 2500 ft,
yellow between 2500 ft
and decision height,
amber below DH

Set decision
height



Decision
height bug

OUTSIDE AIR TEMPERATURE

TOGGLES
°C / °F



AUTOPILOT CONCERNED GAUGES

PROGRAM
SWITCHES

SELECTED
IAS

YAW SWITCH

AP SWITCH

SET IAS

DISPLAY IAS
ON/OFF

TEST
BUTTON

FLIGHT
DIRECTOR
SWITCH

SET VSPEED



TEST
PUSHED



INC – DEC
FUNCTION
VALUE

SWICTH
ON / OFF

RESET
ALT, BP & VSP
VALUES



SWICTH ALTITUD
SELECTOR



SWICTH BAROMETRIC
PRESSURE SELECTOR
(IN MM or INCH HG)



SWICTH V SPEED
SELECTOR



SWICTH DECISION
HEIGHT SELECTOR
(meters)

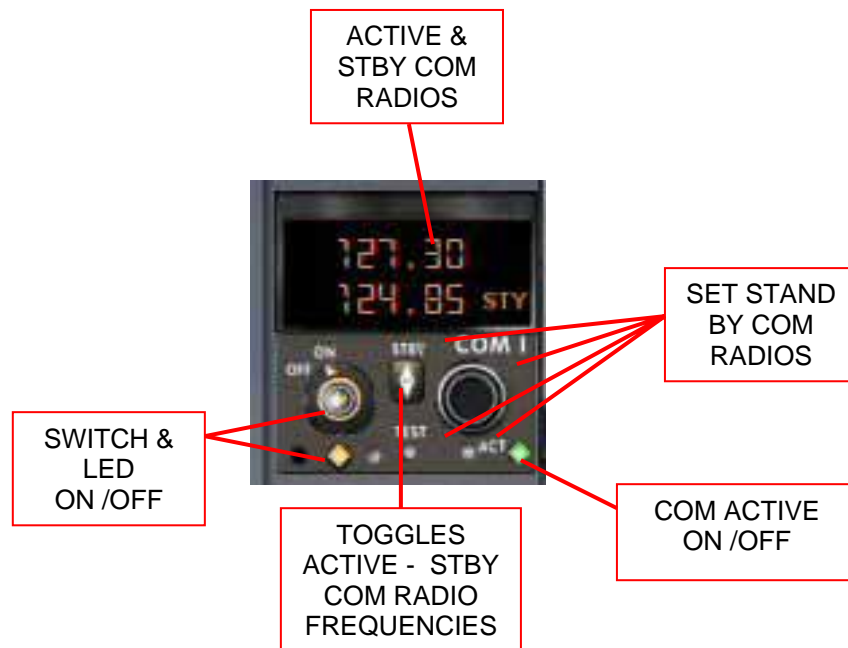


SWICTH FUEL
LEFT DISPLAY



SWICTH RAD
HEIGHT DISPLAY

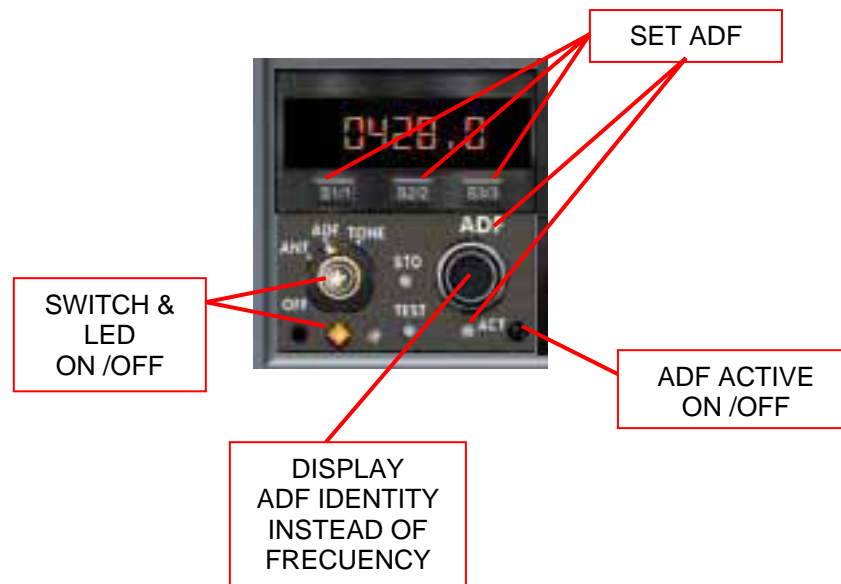
COM GAUGE



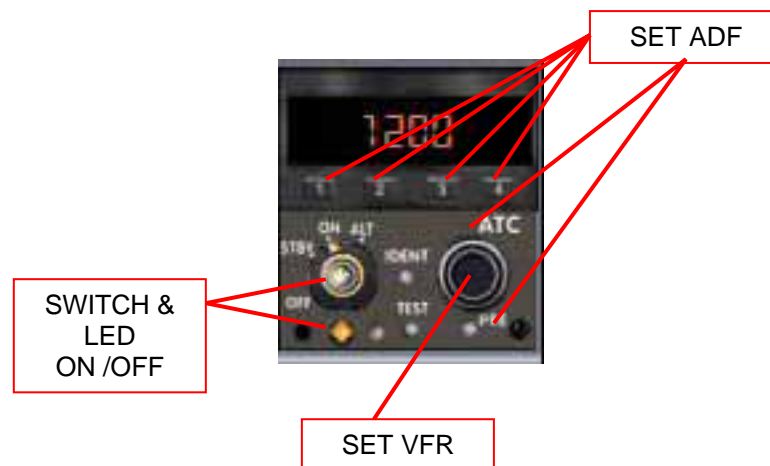
NAV GAUGE



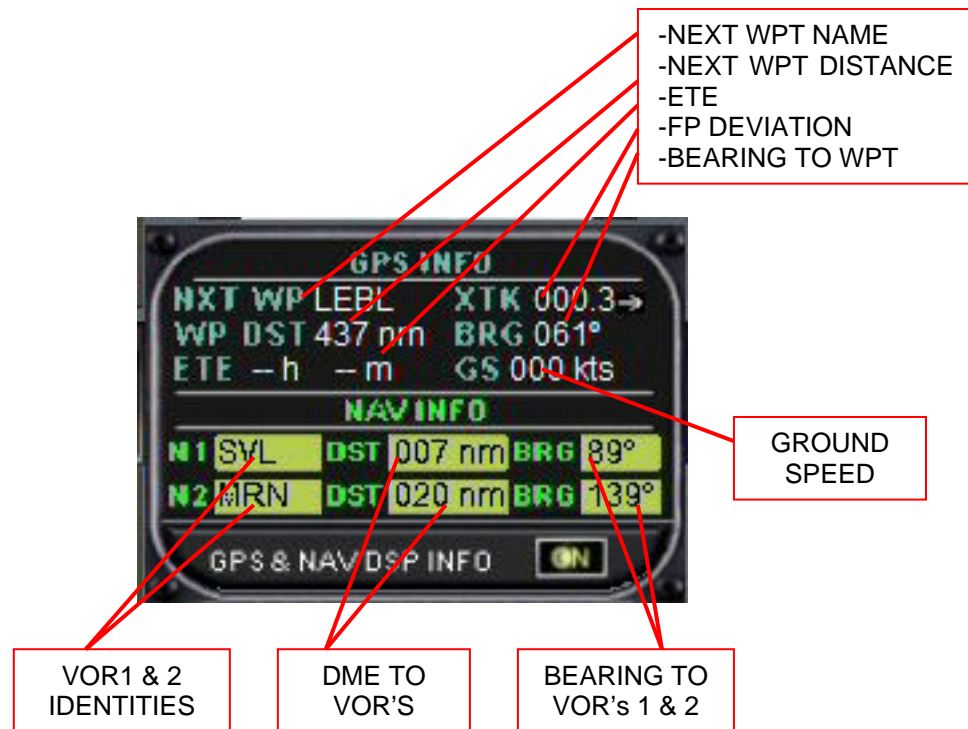
ADF GAUGE



XPNDER GAUGE



GPS & NAV INFO GAUGE



PANEL ANNUNCIATOR



5. Remarks

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

You have to take into account that some functions of the panel could not work properly (or not work at all) depending on others aircraft files you're using with this panel. In this case you have to make some changes in the Air King 350 aircraft.cfg file (if it is not clear for you how to make the changes that follow, two aircraft.cfg files are included. Make a backup of the existing one in your system and copy the included here, see at the end of this section):

- For NAV & COM standby frequencies to work, you've got to edit the aircraft.cfg file located in:

[your disk letter]:\[your folder name for FS2002 or FS2004] \ Aircraft \ beech_king_air_350

make a backup of the file first, go to [Radios] section of the file: it has to look like this:

```
[Radios]
// Radio Type = available, standby frequency, has glide
slope
Audio.1      = 1
Com.1         = 1, 1
Com.2         = 1, 1
Nav.1         = 1, 1, 1
Nav.2         = 1, 1, 0
Adf.1         = 1
Transponder.1 = 1
Marker.1      = 1
```

If it is not, correct it and save the file.

- Another correction must be made to the aircraft.cfg file. This one concerns to the new IAS hold function available with this panel. If you want this function working, this is the [autopilot] section you have to paste in that file replacing the existing one:

For FS2004:

[autopilot]
autopilot_available= 1
flight_director_available= 1
default_vertical_speed= 1800.0
autothrottle_available=1
autothrottle_arming_required=0
autothrottle_takeoff_ga=1
autothrottle_max_rpm=160.0
pitch_takeoff_ga=8.0
max_pitch=10.0
max_pitch_acceleration=1.0
max_pitch_velocity_lo_alt=2.0
max_pitch_velocity_hi_alt=1.5
max_pitch_velocity_lo_alt_breakpoint=20000.0
max_pitch_velocity_hi_alt_breakpoint=28000.0
max_bank=25.0
max_bank_acceleration=1.8
max_bank_velocity=3.00
max_throttle_rate=0.10
nav_proportional_control=9.00
nav_integrator_control=0.25
nav_derivative_control=0.00
nav_integrator_boundary=2.50
nav_derivative_boundary=0.00
gs_proportional_control=9.52
gs_integrator_control=0.26
gs_derivative_control=0.00
gs_integrator_boundary=0.70
gs_derivative_boundary=0.00
yaw_damper_gain = 1.0

For FS2002:

[autopilot]
autopilot_available= 1
flight_director_available= 1
default_vertical_speed= 1800.0
autothrottle_available= 1
autothrottle_arming_required=0
autothrottle_takeoff_ga=1
autothrottle_max_rpm=160.000000
pitch_takeoff_ga=8.000000

If you prefer to copy the aircraft.cfg files included, follow these steps:

Go to:

[your disk letter]:\[your folder name for FS2002 or FS2004] \ Aircraft \ beech_king_air_350

Here you find the aircraft.cfg. Make a backup copy of it (or rename it, for example "aircraft.bak"). Copy the aircraft.cfg file included in this pack. Aircraft.cfg file is for FS2004 and Aircraft_FS02.cfg is for FS2002 (in this case you have to rename it to Aircraft.cfg file after copying the file to its location). That's all !!.

If you want to use this panel with an aircraft that has a Virtual Cockpit, backup the original panel.cfg of that plane, install this one, then copy the VC section of the original panel.cfg file and paste it at the end of your new panel.cfg.

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 (Our 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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6. Technical support

If you have any question, please contact FrienlyPanels at:

fpanels@arrakis.es

Web page:

www.friendlypanels.arrakis.es