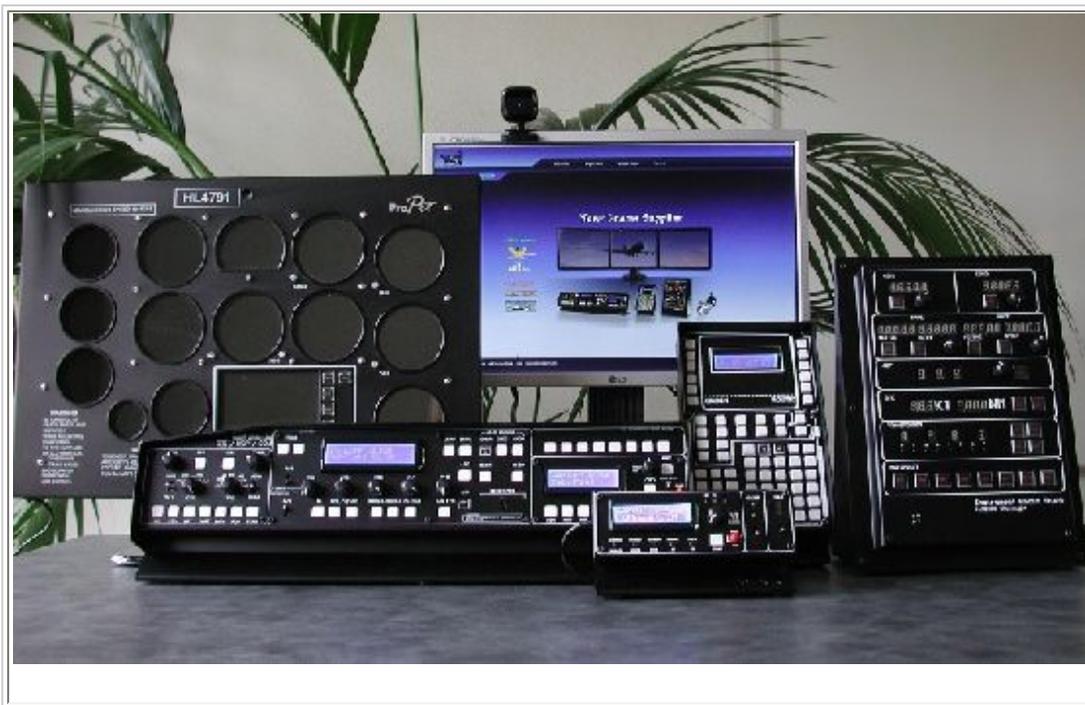


AVSIM Commercial Hardware Package Review

Wilco Publishing (VR Insight) Combo MCP /CDU /M Panel /Radio Stack ProPit and HAT track



Product Information

Publishers: Wilco Publishing		
Description: The complete VR Insight arsenal (Almost).		
Download Size: NA	Format: Software - Download & CD-ROM	Simulation Type: FS9 (tested) and FSX
Reviewed by: Angelique van Campen AVSIM Senior Staff Reviewer - June 25, 2009		

Table of Contents

Due to the length of the review, I've decided to add a table of contents so here we go

Introduction

Installation and documentation

- Installation
- Documentation

VR insight Combo MCP panel

- Hardware Overview
- Software Integration
- In between conclusion

VR insight (M)CDU

- Hardware Overview
- Software Integration

VR insight M panel

- Hardware Overview
- Software Integration
- M panel conclusion

VR insight Instrument Radio Stack

- Hardware Overview
- Software Integration
- Radio Stack conclusion

VR insight ProPit

- General and Hardware Overview
- Software Integration
- ProPit conclusion

VR insight HAT-Track

- Software Integration and calibration
- In between conclusion

Summary / Closing Remarks

Introduction

26th of February - was one of those days great days that UPS brought two boxes while I was thinking late Christmas or Sinterklaas – sorry, I can't translate this since it's a

typical Dutch feast – packages or was it something of a good friend. When unpacking it I found out that it had to do with my new review assignment, **Wilco Publishing hardware** from **VR Insight**. No, not one product to review, but as you can see in the header **6 VR Insight** items. While some items are closely related to each other, the ProPit is something different and oops, another 20" Dell monitor. That's something I didn't expect.

Ok, the unpacking is done and it's all parked on my desk and no more space available to test it thus I need to buy another desk. Rubbish, there's enough space in my MSFS office so let's move on.



Since I don't own any MSFS hardware components except for some Saitek products, I'm not able to compare this VR Insight stuff with other brands like GoFlight or CP Flight. Hopely, I'll get an opportunity to review that equipment. Anyway, for now it's a huge review related to the Korean hardware component manufacture VR Insight.

Something about VR Insight: *"Founded in 2008, the company that comes closest to its customers with passion for utmost virtual reality, put satisfaction first with state-of-the-art technology. With its motto "Culture Technology", VRi co., Ltd has endeavored to realizes customer satisfaction and dream that is based on the customer's expectation. VRi co.,Ltd is always evolving to ensure enjoyable and comfortable game environment. Moving forward - As a global leader and faithful partner of our customers, VRi is poised to have the competitive edge on others with expertise in the virtual reality industry".*

Apart from the standard black instrument front panel of the ProPit hardware, which gives me a realistic GA cockpit impression, all the other VR Insight hardware components - Combo MCP and M panel, CDU and Radio Stack – are not 100% representing a real Boeing, Airbus, Douglas, Fokker or GA (where applicable) cockpit look. Compared to the previous mentioned GoFlight and especially the CP Flight hardware, these VR Insight madules are not as realistic looking, but you could ask yourself if this is what the VR Insight Sales team has in mind and do they want to compete with GoFlight or CP Flight hardware?

Asking them will not give me the answer I'm looking for, so looking at the VR Insight stuff, you accept that it's not highly realistic looking hardware however it can be used with many aircraft types. If it's a Boeing, an Airbus, an older Douglas model or even a Fokker, you can use it and you're even able to create your own files with the key mapping software.

Depending on what you want, there's something affordable for everyone. However, when you're looking for highly realistic panels, painted in brown or grey, a 100% lookalike 737NG MCP or Airbus A320/A330/A340 AFS panel, than there's no need reading this review or is there?

That's up to you, but it could be eye-opening reading about this new MSFS hardware company, offering well designed, awesome integration software and very well priced components. Whatever you have or are planning to buy, just take the time to read this review. It could help in making the final decision. Have fun!

Oops, one last remark. The hardware or I should say the VR Insight **Serial FP2** and **HAT-Track software** is compatible with **Windows XP** and **Windows Vista (32- and 64 bits)** and can be used in combination with **FS9** and/or **FSX SP2** or the **Acceleration Pack**. Because of my "tempermental" computer, I'm not able to test this software with FSX thus all of what's coming is related to FS9. As far as I can judge, I hardly believe it will give any FSX problems but as said, I'm not sure and was not able to check it.

Ok, it's time to start with the first part; the installation and documentation of the Serial FP2 software and associated

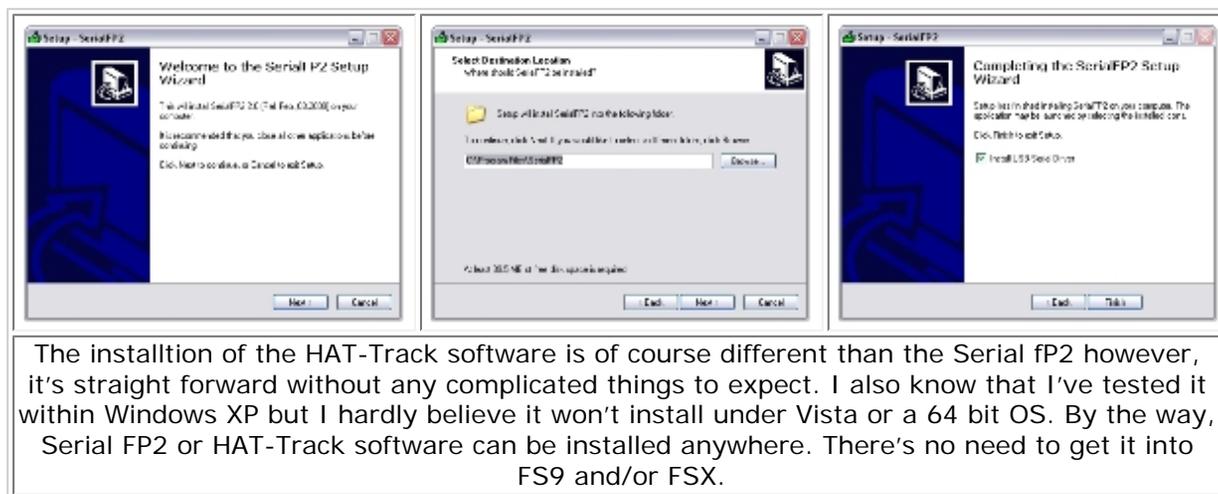
manuals. The HAT-Track software and manual will be discussed at the end as a separate part. The main reason to do so is because all the other hardware components use the same Serial FP2 software, thus it's easier to combine those hardware components together.

Installation and documentation

Installation

Each of these products comes with their own CD-ROM and SerialIFS2 software. As with many other products, and not only from this vendor, the best way is to download the latest driver from the vendor's website.

The driver/software - SerialFP2 – is the main operating software VR Insight used for all VR Insight flight panels thus sees it as a step in the right direction. Based on this single file installation, which was without any problems, you need to check "Install USB-Serial Driver" at the end. After this, you're done. No, I haven't forgotten anything. Although we're dealing with different VR Insight components, they all use the same Serial FP2 software.



After you've installed the VR Insight software, you've got a Serial FP2 shortcut on your desktop and via the Start menu, a SerialFP folder with shortcuts to the documentation, key mappers, aircraft support files and configuration files. There's also a link to X-plane support, but this will not be a part of this review since I don't own X-Plane. Most of the previous mentioned mappers, folders and other items will be discussed later during the explanation of the hardware components.



A mixture of the installed shortcuts.
The two pictures on the left are related to the HAT-Track ones (discussed at the end of this review) while the right one tells you all about – is it? – the installed Serial FP2 software.

VR Insight DVD

Some words about the DVD. I had different DVD's due to the amount of product but all are offering not only the Serial FP2, but also the HAT-Track software and many other things. I will not bother you with all the stuff on the DVD but a few things are nice to explain.

The CD comes with the Serial FP2 and the HAT-Track software. Furthermore, via the start page it offers you the following programs from Microsoft; FSX SP1, SP2 and SimConnect 10.0.61259. Then there's Microsoft Speech and from Peter Dowson FSUIPC for FS9 (version 3.80) and FSX (version 4.26). So there's no need to download anything from the web since it's all included on this DVD. The DVD also offers GlovePIE, which stands for Glove Programmable Input Emulator. I'll leave this untouched since it's not related to the hardware review. There's much more on the DVD which is not mentioned on the start-up page.

The DVD offers 458 Mb of movies and pictures related to all the VR Insight products and it's really disappointing that there's no link on the start page of the CD telling you about these valuable informative data. Ok, now you know!

Documentation

Let's start with the Documentation folder and, by the way, all the manuals are available for download so while you're waiting for your VR Insight panel order to arrive, you can look around and try to understand how that hardware works. The VR Insight manuals are available at the [Wilco Publishing website](#) and of course at the [VR Insight website](#).

As said before, the documentation folder holds several hardware related documents, so let's have a look at these in more detail.

Manual-MCP combo panel(MEA2.520-5JAN09).pdf

This is the English manual (there's also a Korean one (Manual-MCP combo panel (K8.8.pdf)). Lucky for us that the manual is not too long nor complicated, later when testing the hardware we had hoped for a more comprehensive version. There's no table of contents, which is not really a problem but there's not enough information when it comes to configuration of the different add-on supported models.

Apart from standard paragraphs, there are 9 pages explaining every button or key, selector, display etc. This is at least enough to understand what everything means. The pages after this explain how to connect the MCP panel via the Serial FP2 software to the default MSFS or add-on aircraft, which for me was enough but perhaps not for everybody. It seems to me that this was written by a developer or salesperson and not by someone who knows what is really needed for the beginner/average flight simmer. The last 3 pages are only for trouble shooting and honestly if this is enough, I don't know since I had no problems at all. Before I forget; the panel overview drawings are very useful. They tell you which buttons (keys) and selectors have what functions.

Manual-M panel(MEF1.000-5JAN09).ppt.pdf

In general, the M panel manual looks similar to the previous one. All of the functions of the buttons are well explained, as are the selectors, display and the "red" switch. This switch allows you to give the M panel 4 different functions. What kind of functions and does it work? That's all for later when I discuss this tiny but impressive panel. One last note regarding the manual; it seems to me that the manual is not really finished. Basically it consists of an introduction – features – part, a Serial FP2 software installation and the previous discussed M panel description and operation. There's no configuration and no trouble shooting manual part available.

Is it needed? No, not at all but suppose this is the only hardware component you buy, then I can tell you that you will run into trouble. Oops, there was no trouble shooting manual!

- Manual-CDU panel(MEB2.520-5JAN09).ppt.pdf

Basically this manual offers the same setup and contents as the previously discussed Combo MCP panel manual. Personally, I found this manual not enough and compared to the high quality Serial FP2 software, I'm wondering why this is. It seems difficult to write a manual which covers enough information that may be needed for every type of flight simmer. During one of my emails with Steve from VR Insight, I was informed that they are busy rewriting the manual. I sincerely hope that it will become better than it is right now.

Ok, the manual is similar to the others; it contains a feature section, Serial FP2 Installation part, CDU Controls explanation, CDU preparation to get linked to your favorite FS9/FSX model and a trouble shooting part. One last note regarding its name; CDU.

It's, as you know, an FMS CDU (Flight Management System Control Display Unit) but due to the universal idea/character, it could be also a MCDU, where the M stands for Multi-purpose. This is typically used by the modern Airbus models and when you connect the hardware CDU to the ATR 72, then suddenly it's a differently controlled CDU. Ok, the CDU name stays the same but the buttons/keys get different functions. This could give you some problems when you place stickers on it, but at the same time it makes this hardware unit different than its competitors, who make it only for "a" typical aircraft.

- Manual-Instrument RadioStack panel(MEC2.520-5JAN09).pdf

In general, this manual looks "again" very similar to the M panel version. Of course it's not the same, and of course it deals with the radio stack and Auto Pilot modes. Yes, that's right; at the lower part you will find the Auto Pilot functions. The Serial FP2 software, which is also used to get this hardware working, is explained at an average knowledge base in this manual, but it should be enough. The unit is uncomplicated and once the software link is activated, it works straight away. The manual doesn't offer a trouble shooting part and it seems again that something is missing.

- Manual-ProPit(MEE1.000-5JAN09).pdf

How and where shall I start telling you what this manual offers? Very similar to the previous ones; a feature list, the Serial FP2 software installation, controls and displays on the ProPit screen and "the before use" part. This last part is very important since it tries to explain to the flight simmer how to connect the 2nd monitor to your PC and how to adjust it. It's a pity, in my personal opinion, that the screenshots on pages 9 and 10 are so small and partly taken from a Korean version of Windows, which is not used by the majority of flight simmers. Taking screenshots from an English version makes it universal, but ok, that's what I think. I hope this manual is enough to get it active and aligned on your second screen. By the way, all the screenshots are based on Windows XP, but the Serial FP2 software fully supports any Vista 32 and 64 bit version. I couldn't test that, but this is what I got from the VR Insight team. This manual should be enough to help you. Personally, I found the manual of a much lower quality than the Serial FP2 software and the ProPit

panel itself.

- Panel interface(11th.Nov).pdf

The panel interface manual explains things in general and with the help of a tutorial, explains how the key mapper works. I think the following extraction will explain a lot "To control the aircrafts that SDK is NOT available, key-command programming to panel hardware is required. Key-mapping softwares are available to program VRinsight's panel hardwares (CDU and MCP-Combo) to assign combination of keyboard strokes and/or mouse-control, moving mouse pointer and clicking button or rolling wheel".

Ok, the last sentence is probably the best description of what this manual is all about, "This document explains how to use VRinsight's key-mapping software to program "a panel" hardware to emulate as keyboard or mouse". When you've got the intention to try and make your own MCP and/or CDU key mapping files, this document is needed to create it. I've tried to follow it but it seems to me it's a rather complicated procedure and I strongly advise you to print the manual and follow the step-by-step tutorial.

- KeyCap_Decal.pdf

When you need more stickers for the keys (buttons) of the Combo MCP or CDU, then this is the right sheet. It's a complete sticker list which allows you to print out and have a fresh sheet in case of you need new stickers for your hardware components.

VR Insight Combo MCP panel

Hardware Overview

I must say that the combination of having an EFIS, MCP and Communication panel all together, is very nice and within a slim format, but on the other hand, it doesn't look like the real Boeing, Airbus or Douglas panels. Ok, it doesn't look like a real aircraft panel since it's completely black with white buttons and a dual blue display. However, you can use it for many aircraft types, so it's universal.

Telling me that you don't like the panel "look", that's something you can see and find out before buying it. When you want to go for the realistic look, then this VR Insight product is not what you're looking for, but when you go for thoroughness, then I think this is what you're looking for and worth reading the complete review. Later we will see that the SerialFP2 software, which comes with most of the models, works really great and without any complicated procedures.

That said, the whole panel is made out of metal; it's positioned on a bracket which gives the controls and displays a good view. The buttons or keys are made out of white plastic, while for more reality labeled stickers can be placed on it. The knobs don't look at all like the real ones but that doesn't make any difference to me, as long as it works. One small note here is that you're able to turn every knob 360 degrees. This is something which is not possible with the real system. Below or above almost every button/key there's an inscription on the panel telling you its function. On the communication sub-panel upper row there's nothing and gives the user the ability to add user-programming functions to these. The switches on the panel for the A/T (Auto Throttle), F/D (Flight Director) and AP DISENGAGE/ENGAGE are ordinary switches so not a Boeing, Airbus or Douglas look but again, when it works then it's ok for me.

On the right side of the combo MCP panel, we will find the RX and TX LED, illuminating whenever there's a data

exchange between FS9/FSX and the panel itself and finally, there's a POWER switch. The panel comes with a USB cable of around 1.6 meters, which I think is long enough. Either you stick this USB connector directly into your computer or into a USB hub. Keep in mind that it should be USB 2.0 compatible, otherwise problems could appear.



As said before, the panel casing is made of metal thus it's heavy and with its anti-slip buttons on the bottom, it won't move anywhere when you push a key. Another important thing is that the panel itself is positioned on a bracket. This tilts the panel slightly which gives the user a good overview of the front panel. The back side of the combo panel is not spectacular except that there's a large opening for the USB wire. That this is open and not covered with a small panel, I don't know why. The disadvantage of this is that dust can enter the interior.

Anyways, apart from it not looking 100% like a real EFIS, MCP and communication sub-panels, the hardware looks great and is multi-functional for most FS9/FSX default airplanes. Furthermore, add-on airplanes using the default MSFS Auto Flight software, like for example the CLS 747-200/300, DC-10 and Airbus A330/A340, these work perfectly with it and last but not least, some additional add-on airplanes. All of this is related to the Serial FP2 software, so let's move on to the next sub-chapter; the VR Insight homemade Serial FP2 software versus FS9/FSX planes.

Software Integration

Before doing anything, please look at the VR Insight website and check for the latest SerialFP2 software and manuals. Why; as usual with many other vendors, each VR Insight product comes with a CD-ROM with software and manuals but those are generally not the latest versions. It's not just correct to have the latest software installed but for the Serial FP2 software it's an absolute necessity otherwise it could be that some add-on aircraft like the Level-D 767-300 will not connect to the Serial FP2 software. This is the same for the manuals; always download the latest manuals, which reflect the same contents as the Serial FP2 software.

After you've installed the Serial FP2 software - while writing this review this is version 2.5.20 February 2009 (file name SerialFP2_090203RC.exe) - you're done. No complicated configurations!

Since this is the first hardware component and it's the first unit that will be connected to the universal Serial FP2 software, we'll take some time to discuss this. Indeed, you're right; the Serial FP2 software is "the" software that is used as an interface between not only the MCP combo panel, but also for the CDU, M panel, Radio Stack, ProPit and JetPit hardware. The HAT track device (competitor of the TrackIR Pro) has its own software so this will be discussed later on. As said, once the Serial FP2 software is installed, you need to verify to yourself that you've got FSUIP installed in FS9 and/or FSX. There's no need to have a registered version, but you do need to have it installed otherwise you will have lots of problems since the VR Insight Serial FP2 software needs FSUIPC.

Now its time to check the link between the hardware and a default FS9 aircraft. If you haven't done so yet, connect the Combo MCP panel USB connector to a USB 2.0 port and start FS9 or FSX. Oops, by the way, you need to power-up the MCP panel via the POWER Select switch on the RH side of the panel. Once FS9 is running and I started the default flight configuration – KSEA at the runway with my default Cessna 172, it's time to check out a few things. Although the aircraft doesn't have EFIS or a complicated Auto Flight system, it still has a simple AP and communication panel, thus this combo panel can be used also in combination with this simple default aircraft.

Ok, we start either from the desktop or via the Start menu with launching the SerialFP2.exe shortcut. According to the manual we need to select the aircraft type, followed by a tick in the Re-Try box and then the **Load FS Module** button. Press the MODE key (button) on the Combo MCP panel, which results in a powered LH display that shows certain values while the RH display shows, in my case, nothing except "Radio Panel Select Function". It seems that the initial contact works but now it's time to go for the real work.

I press the COM key at the COM sub-panel and the RH display shows COM1 122.95 and 118.00, which matches the Cessna 172 frequencies. It seems like it's working. When pressing the COM key for a second time, the indication on the VR Insight panel changes to 119.90 and 121.70. This is again the same as the FS9 Cessna. This continues for the NAV, ADF and TRN (transponder) keys.

My conclusion so far tells me that there's a needless integration between the Combo MCP panel –Serial FP2 software – and the FS9 default Cessna 172 and without doing anything except installing the Serial FP21 software and the unregistered FSUIPC software. Lets' see if the mid-section of the panel - MCP part – works in combination with the Cessna Auto Pilot. Although there's no complicated Auto Flight, you're still able to use some functions of the combo panel. The SPD, HDG, ALT and V/S knobs work, as well as some of the keys like the HDGSEL, HDGHLD, ALTHLD and the (AP) DISENGAGE switch. Ok, many keys do not work but it's a simplified aircraft. On the EFIS sub-panel the only knob I found working with this aircraft is the BARO knob and again, not surprisingly, nothing more. So far I'm impressed.

Time to move on to a more complicated default FS9 aircraft; the 747-400! Although this aircraft is, compared to a PMDG 747-400, very limited in its functions and possibilities, the VR Insight panel can still handle it very well except for the

EFIS sub-panel, but that's not strange. The default 747-400 doesn't have an EFIS CP, so there's not that much here.

For the rest of the MCP and COM parts of the VR Insight, some keys and selectors work and some do not because the VR Insight panel offers many more keys/buttons of which many are not integrated into the default FS9 aircraft. Making a short flight with the panel in control is great – remember that I don't own any other brands of hardware panels, so I've got no other experience with these things. Now it's time for the real stuff, the supported add-on aircraft by VR Insight. I've told you already, I can't and will not check all the supported add-on aircraft in combination with the VR panel but I'll do my best to give you a thorough overview of what's possible and what's not possible or not supported.

Time for the first supported add-on, the **PMDG 737NG**. Before doing anything, we need to check page 20 of the manual (version MEA2.520-5JAN09). Following these steps will allow you to use the VR Insight Combo MCP panel in combination with the 737NG and the 744(X) and before asking; development for the MD-11 is in progress!

OK, we need to copy a modified VR Insight 737Kdb.ini file into C:\Program Files\Microsoft Games\Flight Simulator 9\PMDC. Since the Combo MCP buttons (keys) are reorganized to work with the PMDC 737NG, it's very handy to print out page 22, which gives you all the assigned buttons in relation to the PMDC aircraft. Very useful! After copying and pasting this file, it's time to start FS9, followed by the Serial FP2 software. The same as we did with the previous default FS9 aircraft, select from the dropdown list the **PMDG-B737 Only(FS9)**, tick the Re-Try box and click the **Load FS Module** button. Et voila, you done!

The LH display now shows the actual 737NG values and turning one of the knobs – SPD, HDG, ALT – will change the value in the display and at the same time, in the aircraft. This is the same for some buttons on the mid-section (MCP) and it will also work for the EFIS panel section. Selecting a different range on your EHSI or a rose or plan image, just do it and the PMDC EHSI shows you what you want. Selecting the A/T, F/D or AP switch to ON, is replicated in your PMDC cockpit.

The COM panel seems to work with every button (key), which are found below the display. The buttons on the top of the COM panel are reprogrammed to control the different cockpit views like the APPROACH, TAXI, OVERHEAD, PEDESTAL, and THROTTLE, FMS CDU and the enlarged EFIS and EICAS displays. As said before, you absolutely need to print out the panel overview from page 22. Altogether without doing anything except copy and paste the correct 737Kdb.ini file, it works great and uncomplicated. Well done!

Ok, let's go for another example, the **Level-D 767 for FS9**. Doing the necessary preparations – copy and paste the LVLDSK.dll – is done in the same way as we did with the 737NG however, it would be a good idea if the manual told you where you need to copy this modified VR Insight file into. Ok, with a search command you will find it but is it too much trouble to add this in the manual?

When you've copied this file, you're ready to go. That means: start FS9, select the Level-D 767 in your favorite livery and start the Serial FP2 software (select from the pull down menu **Level-D B763-SP3(FS9)**, tick the Re-Try box and click the **Load FS Module** button) and believe it or not, it's working again. The VR Insight Combo MCP panel is successfully connected to your FS9 Level-D. To find out which buttons, selectors or knobs are working, print out page 24 which gives you the total overview of what's working.

We'll go for one other aircraft and that's the **Wilco Publishing Airbus Volume 2**. The only problem is that there's nothing in the manual that tells me what to do. Ok, I could have a look for myself in the C:\Program Files\SerialFP2\Aircraft\MCP_CDU\Wilco_Airbus_1_2 folder and indeed, I do find here some files. I think that - Prefs_Keys.cfg – is the one I need. Via a search command it seems there's no such file in FS9 except for the Prefs.cfg one, located in C:\Program Files\Microsoft Games\Flight Simulator 9\FeelThere\Airbus. I think it's this one, so I copy our modified one into

this folder and rename it to Perfs.cfg and let's hope it works.

It works although some Combo MCP buttons/keys are assigned to not always have very logical actions. Is that a negative? No, it isn't as long as you print out the Combo MCP panel overview (SerialFP2_MCP_Setting_Wilco_Airbus_1_2.pdf), which is found in the C:\Program Files\SerialFP2\Aircraft\MCP_CDU\Wilco_Airbus_1_2 folder. I only have the idea that there's something wrong when you select the ALT knob on the MCP panel, but when you avoid that selector it all works fine and don't forget to monitor the VR Insight website regularly for updated files.

I could continue with many more supported add-on aircraft but my general impression of this hardware component in relation to the Serial FP2 software is really great. Ok, it's probably not working perfectly for all aircraft, like the ALT knob of the Wilco Airbus A330, but that's a peanut compared to all the things that work straightaway.

Ok, one last add-on model however, this one uses the MSFS default auto pilot; the **Commercial Level Simulations DC-10 Series**. There's no need to look for a specific ini or cfg file. First of all because it's not a supported model but on the other hand and as written before, it uses the FS9/FSX default Auto Flight stuff as well as the radio stack.

One way to find out is by starting FS9, load a CLS DC-10 Series and finally start the Serial FP2 software. I'll start with the 2D cockpit and see what's possible. Not all the buttons (keys) on the Combo MCP panel work but that doesn't surprise me. Any other default FS9 model doesn't support it either. What I can tell you is that you're able to use the speed, heading, altitude, vertical speed, use some AP or AT buttons.

The A/T, F/D and AP switches work as well as some buttons on the COM panel. Although it's not as complicated or thorough like with the PMDG, Level-D or Wilco models, without any special VR Insight files even these types of add-on models work. Thus another advantage of this universal MCP panel. Changing to the Virtual Cockpit seems ok for me. All the previous 2D cockpit settings work as well for the VC, including the necessary changes on the radio panel.



Close-up of the PMDG 737NG versus MCP	Close-up of the default 737 versus MCP	Close-up of the default 737 versus COM sub-panel
It's just to give you an impression although it's hardly impossible to make nice pictures helping you understanding how it all works.		

In between conclusion.

I'm pleased with the integration and I'm very happy with the SerialFP2 software which reduces the programming complicity to a peanut. I'm less enthusiastic of the user's manual. Not everything is well described or explained except the panel identification of keys (buttons), displays, switches and selectors. Page 17 starts with preparing the panel for MSFS, including the needles integration, with a default MSFS plane or an add-on aircraft like the PMDG 737NG, PSS Airbus planes and the Level-D 767-300. All the other supported add-on planes are not mentioned nor described as to how to do this. For me and many others it could be no problem but there's a group of interested flight simmers who have problems with the integration.

VR Insight (M)CDU

Hardware Overview

With the previous hardware discussion this will not be much different. Of course, there are some differences but the general construction is similar. This means; a metal housing, placed on a bracket and tilted slightly aft, which gives the user a good and pleasant overview. The white keys are the same but there are more of them because of the full size keypad and by the way, there's no backlight.

Depending to which add-on aircraft it is connected to, the keys are reorganized and thus have a different function. These keys are all made in a way that allows you to not only add stickers on it, there's a plastic cap as well (see one of the photos). The only problem is; you need to position/align the sticker correctly because once the plastic cap is installed, you can hardly remove it. I tried it but stopped because I was worried a key would pop out. This means, the transparent plastic caps over the keys (buttons) fits great but it's not designed to be remove afterwards.

Turning the CDU and looking at the backside offers me the same thing as we saw on the MCP; a large hole for the wire and... what else? I'm not interested in a part of the printed circuit board and it allows the ingress of dust.





A few notes related to the LH- and RH lower photos.

The LH shows you - on the keys (buttons) A, B and C – the stickers and transparent plastic caps. Once you've installed the plastic cap, it's very difficult to remove it without demolishing anything.

The RH photo shows you the small display. It has only two lines of which the lower one during CDU operation offers you a scratchpad and nothing more. The interaction with the MSFS CDU is therefore very important and not always handy.

Some words related to the power supply and display. As can be seen in the photos, the VR insight (M)CDU doesn't offer a full size display, which is probably one of the reasons enabling them to keep the price of this unit low. If it's handy to work with, that's something we will see later. By the way, it's the same display as on the MCP and not really impressive.

Just below the display there is a yellow and green LED mounted for the RX (receive function) and TX (transmit function) function. Not really important when everything works fine but important when testing it. Unlike the MCP, the CDU doesn't offer a switch. This means, USB connector in either an USB 2.0 hub or directly in the PC and the unit is powered. Time to go to the software integration.

One last note related to this unit. When you intend to buy both the Combo MCP and the CDU, remember that each component needs a separate Serial FP2 activation. What I mean is that when you've connected both units, the Serial FP2 software detects first – in my case – the FMER component, which is the MCP panel. You tick the Re-Try box and click the Load the FS Module button. The window disappears and now we need to start again for the Serial FP2 software. This second version automatically detects the CDU. It all ends up having two Serial FP2 software programs running; one supporting and providing a link between the Combo MCP panel and FS and the second Serial FP2 is doing the same but now for the CDU. Is it somewhere in the manual? It is somewhere but not very well pointed out that this has to be done.

Software Integration

I could duplicate my previous combo MCP panel text and place it here, but nobody wants that so I need to start from the beginning. The panel is, of course, different than the MCP and is only related to aircraft having a kind of FMS (M)CDU, otherwise it's useless. On the other hand, the software interface is the same, thus the same Serial FP2 is used and I can tell you, that's great and it works straight away. But the CDU can do more; with FS and the Serial FP2 software running, the CDU display shows **"Press "FUNC" [Radio -or- CDU]"**. It looks like the CDU can be used as an FMS CDU or as a radio, whatever radio means!

Let's give it a try: I press the FUNC key on the CDU and the display shows **>>Radio Stack<< -> Select Panel**. I will not write a complete tutorial here since that's not my job, but some information is needed because the current manual is far from complete. With this done, I can use the right LSK (Line Select Keys) to toggle between the COM, NAV, ADF, TRN

and even AP functions. With the numerical keypad I'm able to enter any frequency or transponder code or even AP values and via the EXEC key (just below the FUNC key), you can execute these values.

The only problem is that – I mentioned it before –the CDU manual (version MEB2.520-5JAN09) doesn't cover this correctly and that disappoints me since you're able to use this CDU as a communication panel with AP control possibilities, and that altogether makes it a nice add-on.

That tells me that the CDU can be used in combination with any default aircraft not having a FMS CDU. You can use the CDU as a radio control panel with limited AP functions and now it's time to go for the real work, the FMS (M)CDU function. For this we need an add-on aircraft, which was installed before. Let's start with the **Wilco Publishing Airbus Volume 2**.

With FS9 running and Serial FP2 active, it's more or less the same procedure as above with the Combo MCP panel and once this is done, it works in the same way. We need to press the FUNC key on the CDU – in this case it's now known as the MCDU – till the display shows >>> **FMC/CDU** <<< and automatically the CDU pops up. Not only that, many keys work and although the VR Insight CDU doesn't have a real "feedback" display, it still works.

Key commands or alphanumerical values can be seen on the Wilco's Airbus MCDU. Most important is the stream less integration between the VR Insight panel – Serial FP2 software – FS9/FSX Wilco Publishing Airbus Volume 2.



Shall we have a look at how this panel and software work in combination with a **PMDG 747-400**? I initially planned finding and copy/paste the respective PMDG 744.ini file to its MSFS directory, but decided not to do this and see what's happening. Since this is only a FS9 test, I thought I needed the 74700kbd.ini file, located in the C:\Program Files \SerialFP2\Aircraft\MCP_CDU\PMDG-737_744\FS9 folder.

Anyway, I didn't copy/paste the necessary file, started FS9 and after that the Serial FP2 software. I was surprised. I selected PMDG 744(FS9) from the drop-down menu and all the buttons/keys on the VR Insight hardware were recognized and shown exactly in the PMDG FS9 aircraft. Amazing, it works again straight away and I remind you again; I didn't copy the 747400kbd.ini to its directory.

According to VR Insight you need to do this once and then it's OK, but I didn't do anything before. Ok, I previously copied a PMDG file, but that one was purely related to the PMDG 737 only. Whatever, it works and even if you need to copy/paste this file, it's still great to see how accurate this Serial FP2 software works. Is there something more to add to this? No, I don't think so.

I only checked two complicated add-on aircraft but tested many more with the Combo MCP panel, and that worked great as well. Looking at this, there's not really a need to test anymore add-on aircraft and I hope you're not disappointed that your favorite aircraft has not been checked. As said before; you can have your doubts about the black panel front with white buttons, which doesn't look like a real Boeing or Airbus panel. On the other hand, you get a universal panel with perfect – ok, almost perfect (99.99%) - interacting software that finally makes the VR Insight simulation complete.

Is there a need for an in-between conclusion? No, not really. I think reading between the lines of the last paragraph should tell you enough. Now it's time to move on to the next more or less same VR Insight component, the M panel.

VR Insight M panel

Not a copy of the previous hardware components but I'm sorry, there will be some similarities. Not strange because the M panel looks very similar to the MCP panel except that it's much smaller with fewer functions. Also not surprising since the component itself is much cheaper. Ok, those details are not so important. More important is the hardware itself and what you can do with it.

Hardware Overview

The M panel is very compact but as we will see in a minute it has lots of built-in functions. It's also made of metal, slightly tilted aft via a bracket, which offer me a nice view of the front panel. Let's first start with the backside; it's the same as we've seen before; a small hole for the USB cable – with USB 2.0 connection – and no cover to protect it from dust. It could be that this is done on purpose since I see two buttons, but unfortunately there's nothing in the manual which tells me what to do with these.

Ok, the front looks a little unorganized but it isn't. As said before, it offers many double functions thus making this M panel again a universal hardware component and at the same time "value for your money". How much value, that's what we will see later when discussing the software integration, but for now we'll look only at the hardware.

The front is divided into a main section with a 4-position "red" switch, some small buttons and a white key and again the same type of display. The only thing that doesn't look that nice is the visible printed circuit board above the display. Next of this main section, you will find the GEAR section with two LED's and a switch and last but not least, a FLAP section with switch and a 5 LED position indication. For the GEAR and FLAP section I can already tell you without testing it that it's a straightforward design stripped of all its frills. The main panel with display needs more explanation although this is the job of the manual.





The M panel looks ...no it is very compact and the first impression could be that it hardly offers anything but this is not true. It offers lots of functionalities. The tiny "red" switch has four different positions and offers you with many interesting functions, so there's no reason to complain.

Since the 4-position (function) switch could be complicated, the manual offers a detailed description and operation of the "red" switch position. With the "red" switch selected UP, the buttons and display represent a radio stack. Selecting the "red" switch to the RIGHT, the buttons, display, selector knob and white key represent the Auto Pilot Control Mode. This allows you to enter HDG, SPD, BARO, ALT and V/S data and related to this, moving the "red" switch DOWN (the Auto Pilot Mode), you're now able to engage/disengage the AP, AT (if applicable), F/D (Flight Director) but also via the buttons activating the NAV, APR (Approach) or BCTRS (Back Course).

Finally, moving the "red" switch to the left brings you in the USER mode. This allows you to control the aircraft trim, GEAR and FLAP positions. Altogether a compact design with many options. Oops, by the way, the main part of the panel also provides the user with Marker Beacon indication lights. Not the blue/amber/white lights as we are used to, but a red (OMB), green (MMB) and yellow (IMB) LED.

Software Integration

Its starting to become "standard text" because the same Serial FP2 software is used and this is partly true except for the panel options. With FS9 running - and for the moment no other VR Insight panel connected - and Serial FP2 software active, it seems the M panel is detected since the display shows "Host Connected". Ok, that's fine, next step; using it in combination with a default FS9 aircraft, I chose for the **MSFS Original Aircrafts(FSUIPC)** and click the Load FS Module.

The M panel is booted or should I say configured and finally after some time - sorry, just a few seconds - the display shows "**MSFS Original Aircraft Loaded**". Since this original aircraft is a Cessna 172, I can't do much with the GEAR position. Anyway, the green GEAR LED illuminates, the FLAP upper LED is ON. What do you think, shall it work? Oh yes, it works again.

Selecting the FLAP switch on the M panel DOWN, does move the flaps on my Cessna 172 down as well as the simulated FLAP lever in the cockpit. Ok, let's go for the red switch. When moving it UP, the display shows as long as I hold the switch "Flight Simulator Instrument Radio" and after releasing the red switch, it shows in my case COM1 with the active and standby frequencies and guess what, it shows exactly the same frequencies as on the Cessna 172 radio stack. Pressing the COM/HDG-NAV/LOC button just below the display, changes it to the COM2 settings. Wow, that works again and without any complicated things. When there's a need to change to the NAV settings, just press the small button right of it - NAV/SPD-APR/GS - and the display changes to NAV1 and when you press it again, you're right, NAV2. How simple it is, it's the reality.

Ok, let's go and move the red switch to the RIGHT position. The display shows as long as we hold the switch "Flight Simulator Autopilot CTRL" and after releasing it, the current – if applicable for the default aircraft – heading, speed, altitude and barometric values. You want to change them, no problem! Press the COM/HDG-NAV/LOC button below the display, and with the selector knob you're able to change the HDG bug. It doesn't change only on the M panel display, but also the Cessna 172 bug is moving.

The same steps must be followed for the altitude, barometric setting, and vertical speed. And remember, although this is the third VR Insight panel I'm doing, it's a very simple, straightforward, uncomplicated procedure and it all works without any programming or many steps. The same will happen when moving the red switch to the LEFT and DOWN position.

What do you think; the same uncomplicated procedure when selecting an add-on aircraft? Let's give it a try; let's choose the **Wilco 737 PIC**.

My current configuration is now; M panel and CDU connected. I did this on purpose to show you the seamless integration of those two VR Insight products with the Serial FP2 software. Remember what I wrote before; because the Serial FP2 software detects two components, you need to start a second Serial FP2 session, to get both units connected and thus using them both in relation with the Wilco 737 PIC.

Ok, here we go. Start FS9, followed by your favorite Wilco 737 PIC airline livery and than start the Serial FP2 software. The Serial FP2 software first detects the CDU, so just look for the Wilco 737PIC and click the Load FS Module button. Surprised what is coming? No, I wasn't at all. Twice clicking the FUNC button while connect the VR Insight CDU via their software to the Wilco 737.

Time to get the M panel connected, thus start the Serial FP2 software for a second time. The type ident shows Mpanl so that seems ok for me. I'll find the Wilco 737PIC from the dropdown list and continue with Load FS Module. By doing this, the M panel comes alive, it's booting and it ends with the promising words "Wilco B737 PIC Aircraft Loaded". WOW! But is it really WOW?

Remember, red switch UP is Radio Stack function. Every change on the M panel gives a direct response in the Wilco 2D 737PIC cockpit and not only in the 2D, also the VC works great. All the hardware panel changes are transferred to the FS9 Wilco. Even with the red switch in the other positions as earlier described, it doesn't make any difference for the Serial FP2 software. It seems a very short story but I couldn't find anything that didn't work. All the selections on the M panel where immediately transferred to the aircraft and again, I forgot to copy the special VR Insight kbd.ini file (C:\Program Files\SerialFP2\Aircraft\MPanel\Wilco_B737PIC), but it seems it works.



Some examples of the M panel connected to the Wilco Publishing Airbus Volume 2 2D cockpit. Ok, this is the 2D but the 3D or VC works great as well and all because of the nice Serial FP2 software.

M panel conclusion

It starts becoming a little standard without any glitch at all. I won't say this hardware and Serial FP2 software is perfect since nothing is perfect but I must admit, I haven't found anything and while writing this, you can't hardly do anything wrong. Although this manual is not a very detailed one and in my personal opinion things are missing, it's still so simple to get this hardware in combination with the VR Insight software working, that you can't do it wrong.

Reviewing the VR Insight products so far and with the Radio Stack and ProPit panel to go, they are all working according to the same principle with the same software. Of course, this is really a short description and of course, you need to read the manual but apart from that, it's really so simple to get it connected and working with your favorite FS plane.

VR Insight Instrument Radio Stack

Hardware Overview

It seems to me that the overall construction or idea is different than the previously tested hardware. The radio stack is an open construction, which is again slightly tilted to give you a better control and overview. The panel doesn't have any blue displays as we saw previously but instead, all the digital indications are made of red LED's. Not really my favorite color but that's not important. More important if it's again working or not?

Ok, apart from the standard USB cable, the panel comes with a separate power supply to feed the whole thing. Probably the power supply which is normally done via the USB cable is in relation to all the LED's and other things too much, so therefore a separate power supply is needed.

The front side is divided into two parts; one part that deals with the radio stack items – COM, NAV, ADF and Transponder – and at the bottom the Auto Pilot buttons and again, the green/yellow LED's for testing purposes although these also work when data is send or transmitted to MSFS. What's a little strange is the COM section and in particular when comparing it with the NAV indications and settings.

The NAV1 (2) indications and settings are like in the real aircraft; a window for the ACTIVE and STANDBY frequencies however, this is not the case with the COM1 (2) section. Here you only have one window for the COM frequency and not like with the NAV a STANDBY and ACTIVE one. It's not really a problem but I'm surprised that this is different. Furthermore, the ADF also comes with one window and not with ADF1 (2).



My review product already had all the stickers and plastic caps installed but I've got no idea if this is standard with a brand new one. While writing this, it seems when digging into the manual, that all the buttons (keys) come standard with the stickers in place. The buttons do have backlight but this is not applicable for the panel text. Looking at the overall panel it's again made of metal and painted gloss black. Turning the unit shows an empty back with a small open square for the USB wire and to attach the power supply cable. Ok, let's connect both the USB to a USB 2.0 port and the power supply and let's see what's happening.

Software Integration

What's happening is not much. My USB hub is telling me that the radio stack is connected and momentarily the RX and TX LED's are ON. Furthermore, the panel "seems" dead and doing nothing since there's no display showing you what it is, which software it is or whatever. Ok, it's time to start FS9 (FSX) and after that the Serial FP2 software. Oops, again the same VR Insight software. That's great, no other software needed for this radio stack.

The moment the Serial FP2 software is running, the radio stack is immediately powered and all the LED's illuminate and show default frequencies and a default squawk code. Since this is the only connected VR Insight hardware component, the SerialFP2 software is detecting the COM type and thus it's our turn to click the Load FS Module button after I selected from the pull-down menu "Radios for MSFS2004/FSX with FSUIPC". The moment I've done this, immediately all the actual frequencies and transponder code are copied from my default Cessna 172 into the Radio Stack panel. Weird, but it works!



While playing around, I can tell you that you can't use the STANDBY COM(munication) frequency or at least, I couldn't do. When you dial another frequency this is directly done from within the ACTIVE window. This is not the same for the NAV frequencies. Here it works like in the real aircraft; you select a new NAV(igation) frequency and via the transfer button you move it to the ACTIVE window. This is – of course – seen on the VR Insight panel and in the MSFS aircraft radio stack. Changing our ADF frequency is more or less the same. With the knob you select the frequency you want and swapping to the next digit is done by pressing the selector knob. This is I must say, well explained in the manual.

It's time to check view things in flight. I'm ready for takeoff and selected 116.80, which is the SEA VOR. The DME section shows 000 KT (knots), which is not strange since I'm standing still and 000.1 NM. Flaps position 1, full throttle and there we go. After lift off I maneuver my aircraft to a slight PITCH UP to get a V/S (Vertical Speed) of approximately 700 feet/min. The aircraft speed and NM indications are changing and copied from the flight sim into the VR Insight panel, via the SerialFP2 software or is it the other way around?

It's easy to connect the AP via the VR Insight panel and the ALT and/or HDG knob. Those buttons I've pressed are actively illuminated, and those who don't do anything are not illuminated. This makes life a lot easier for us. So far it all seems to work without any problems, but again it's time to check it with an add-on aircraft.

This time I'll go for the Level-D 767. Since this is not the first component, I'll skip more or less the FS and Serial FP2 start. That's all the same but what's coming up is funny. Funny in relation to the power supply of the radio stack. When you've connected the radio stack to a free USB port and powered it with the separate power supply, the radio stack stays dead. It isn't because you've launched the Serial FP2 software, the radio stack becomes alive. All the LED's illuminate although it seems to me that it shows just default values. Don't forget what I wrote; I only started the software but I didn't use the VR Insight Load FS Module button.

The moment you've activated the software, all the actual Level-D COM, NAV, ADF, DME, TRANSPONDER data is transferred to the panel and thus synchronized. Any VR Insight panel change is automatically sent via the Serial FP2 software to the FS Level-D as I've said many times. You don't have to do anything for that except start FS, load the

SerialFP2 software and if applicable, copy and paste the respective ini, cfg or dll file.

According to the manual this panel can be used in combination with the basic add-on aircraft list as well as all the default MSFS planes. If your favorite aircraft is not listed, I suggest you give it a try. It seems to me that the software is covering much more than I think. With all the previous hardware panels discussed, including the different aircraft, you should now have a good idea what is supported and what's not. This is also the case with this radio stack and software. Since the VR Insight software is the same, it makes connecting hardware very easy and almost made for dummies. That sounds unfriendly but what I mean is that the software is awesome. Can I use that word? Yes, I think so. Although the manual for this radio stack is not impressive, the way to get these hardware components working is very simple and straightforward. Therefore no other aircraft were tested in relation to the radio stack.

Ok, I can't stop so here is one more aircraft on the test bench, the default Cessna 182. Once you're flying, you can use the panel as with a real aircraft. Every button, selector and display works or corresponds to your FS model. One thing is odd but not a problem; the panel shows at the DME section from left to right KT followed by NM. In normal English; first your IAS (Indicated Air Speed) and then the distance to the tuned VOR/DME beacon however, the FS9 radio stack shows first the NM and than the KT. In other words, the VR Insight shows it in a different order. What does it matter? What matters is that it works seamless!

Radio Stack conclusion

Although it's a Radio Stack panel, it also offers Auto Pilot Modes without any input possibilities. What I mean is you are not able to enter any speeds, a certain heading, or a new assigned altitude. All of that can't be done with the panel, but you're only able to connect the AP or a HDG HOLD mode or ALT HLD etc.

That's not a problem since it covers those things related to its name. Together with the Serial FP2 software it works straight away. I know, these are the same words I'm constantly using but I can't write anything else since it's the truth. Even this Radio Stack has needles connected via the Serial FP2 software to your favorite add-on aircraft – limited by the current list of add-on vendors – or to default aircraft or even add-on planes using default MSFS AP and communication software. This is already the fourth VR Insight component which works just by clicking your fingers. I'll leave it with this comment, nothing more needed!

VR Insight ProPit

General and Hardware Overview

This will probably be a little bit longer and not something which is easy to duplicate except for the Serial FP2 software. No, this time it's a combination of a front panel with a Dell 20" monitor – type SP2008WFP - and because the ProPit package comes with that monitor, you need a graphics card which has two connections either VGA or DVI.

If you don't own a graphics card with two connections then you need to add an additional card or you should buy a new card with two graphics connections.

Since the ProPit package comes with a Dell SP2008WFP TFT monitor, you get a bunch of cables with it. It holds a USB cable since the monitor has a built in USB hub, a power supply cable (of course), VGA to VGA and DVI-D to DVI-D cable.

You're interested in the Dell SP2008WFP specifications?; no problem! Find here a direct link to the Dell USA website.

While you're reading the monitor specifications, I'll continue with the front panel. It's positioned in front of the Dell or I should say hinged over the Dell monitor. Once in position, it looks great. By the way: on the inside edges of the ProPit panel there are mounted rubber strips. This keeps the panel in position and prevents scratches on the Dell monitor.

The panel simulates a typical prop cockpit instrument layout. In fact, it's compatible with the default FS9/FSX Cessna 172 and Mooney Bravo aircrafts and the add-on Carenado Skylane 182 RG II.

The ProPit manual – just 15 pages - describes more or less in detail all the ProPit panel functions except for a few things. All the buttons of the GPS500 have integral lights and a small metal selector knob, but nothing is said about this. Some instrument gauges like the ADF, VOR, horizon, HDG indicators have adjustable knobs on the front to adjust for example, the aircraft symbol on the horizon. This is unfortunately not mentioned in the manual. I sincerely hope that this manual will also be updated. For the rest: the panel offers nothing except a very realistic representation of a real GA cockpit.



The "included Dell 20" TFT monitor with the ProPit front panel. The panel is not just "a" panel, it's much more. It offers some adjustment for the heading, barometric and OBS. Then you've got a fully operational GPS, which is linked to the MSFS GPS and shown on the Dell monitor. Very nice and highly realistic look to fly with. Since the front panel is "realistic" looking painted black, it gave me a good feeling.

Front face looking on the right hand lower side is a small hole which allows you to control the monitor and on top in the middle of the ProPit panel is another hole giving access to the Dell built-in webcam. Altogether, a nice add-on with a fully integrated GPS500 and thus the need for an USB cable to exchange this information.

The whole idea of this ProPit unit is to shift the previously mentioned aircraft 2D cockpits to this monitor, giving you a free monitor and thus a free outside look. The way to create the best setup would be when you place this instrument panel in front of your face and position the second "external view" monitor above it and. My monitor setup was not really handy; straight in front of me was the external view (my own 19" widescreen monitor) and to the right of me, the ProPit setup. Anyway, it's just a suggestion but that doesn't change the working of it so let's move on.

Software Integration

I've connected all the hardware and ready to start with the – let's keep it simple for the moment – default **FS9 Cessna 172**. First you need to copy the modified VR Insight panel.cfg file and paste it into the default Cessna 172 panel folder and remember, not the panel.ifr folder!

This is, according to the manual, the correct procedure however it will result in some missing flight instruments. After consulting VR Insight we're informed that the modified bitmap must also be copied into the panel directory. When you've copied the modified files – bitmap and cfg – into it then you're Cessna 2D cockpit looks as it should be; all instruments are included.

One important piece of advice; make a copy of the original panel.cfg before you replace it with the VR Insight file. Once this is done, you're ready to go. Oops, I forget something important; we need to re-configure our computer for a two monitor setup. I don't go too deep into this since it's a basic Windows XP/Vista procedure and the manual also explains this.

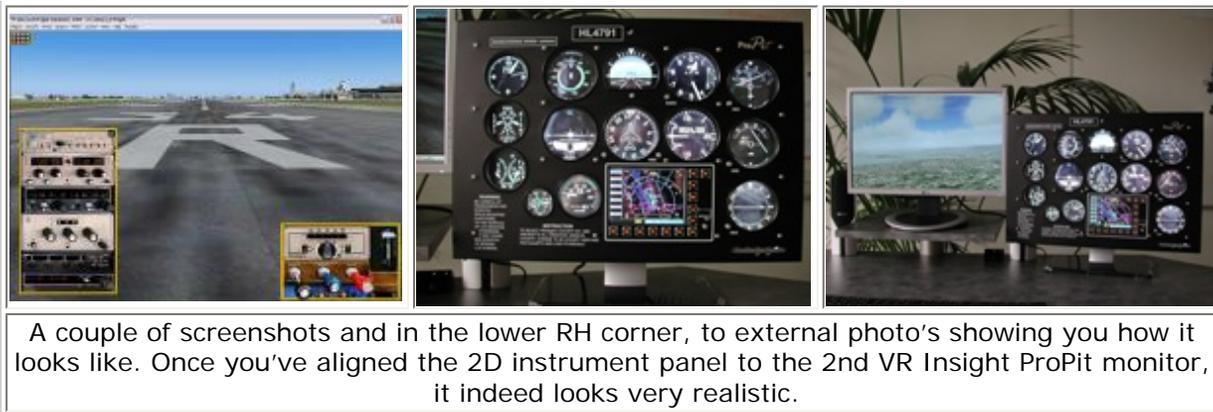
Regarding the manual and in relation to the ProPit hardware; I'm not happy at all. The hardware looks great, the Serial FP2 software works again without any problems, but the manual for this hardware is far from finished and thus not complete at all. I know, critical words but it's my personal opinion!

What said before, setting up this dual configuration as well as undocking the 2D instrument panel is not very clear. The screenshots in the manual for the dual monitor setup are too small and partly in Korean. Maybe you can read and/or understand this, but I can't which makes it difficult to understand what has to be done.

Since this review is not a tutorial, I will not go into detail, but what I can tell you is that when FS9 is running and you've loaded the default Cessna 172, including the Serial FP2 software, undocking according to the manual brings the instrument panel "enlarged" to the other monitor. Working with hardware and making screenshots that help explain what I'm writing is not that easy.

Let's go for one other plane; the add-on **Carenado Cessna 182 RG II**.





Since we've configured our dual monitor setup, I can skip this part and start right away with the software. Find here as an example the steps to perform:

- Copy/paste the modified VR Insight panel.cfg file to the Carenado aircraft panel folder,
- Start FS9 (FSX),
- Ones FS9 (FSX) is running, select from the aircraft list the Carenado Cessna 182 RG II,
- Get the 2D cockpit view and be aware that this looks totally different than the original 2D bitmap,
- Start the Serial FP2 software,
- Select from the dropdown menu the Carenado, followed by Load FS Module,
- Either the undocked panel will move to the other monitor or you have to move it by yourself,
- or you simple enter in the VR Insight panel config window Position section, the X and Y value (in my case this is X=1440 and Y=0)
- The X and Y value could differ from your monitor setup. When you've entered the X and Y, click the Redraw button,
- This will reposition the undocked 2D panel to the 2nd monitor and leaves the main monitor with an external view.

After this – it looks like a very short step by step procedure – you can still request the additional 2D sub-panels or you can have a look at the VC, tower view or external aircraft view. Good, let's have a look at the following screenshots and hopefully they help a little bit in understanding this previously explained step by step procedure.



ProPit conclusion

Compared to the previous tested VR Insight components, this ProPit hardware will cost you a little more and is it up to me to tell you if it's worth the money? That's very difficult since it's over €1000.00 (~ 1200 US\$) and that's a lot of

money. On the other hand, for this you get a 20" Dell widescreen monitor, a ProPit instrument cover, awesome Serial FP2 software and some supported aircraft. At the same time its fair telling you that I sincerely hope additional "add-on" Carenado or other vendor aircraft are added to the list and I also hope the manual will be improved.

Although my review is not finished after reviewing 5x VR Insight components, I think all the manuals are of an average quality. It could be that you are one of the flight simmers who understands these manuals based on a lot of experience, but when you don't have much experience with hardware components, then it could lead to lots of problems. Anyway, I again enjoyed reviewing this hardware so far and I do believe that the JetPit will function more or less in the same way. Apart from some differences which I don't know about, the main difference is the jet aircraft related instruments are like having a PFD/EADI, ND/EHSI, MCP (Mode Control Panel), EFIS CP and a FMS CDU.

Last but not least .. VR Insight HAT-Track

Since I don't own any of the previous tested VR Insight hardware and not having any other vendor components, I can't compare it with something. This is different with the VR Insight HAT-track. I do own the NaturalPoint TrackIR 4 Pro. Oops, this means that NaturalPoint is no longer the only one offering a tracker unit for flight simmers. It's my job to offer you an objective impression of this HAT-Track. Ok, where shall I start; software, movies or the hardware itself. Let's start where it all comes from, the VR Insight website.



The VR Insight website offers some background information what the HAT-Track is, what it can do, how to use it, where to download the latest software and two movies. Before moving on with the instructional movies, the website 6DOF (Degrees Of Freedom) menu option gives the user a very good idea of what this DOF means in relation to the HAT-Track and your favorite aircraft. Furthermore, you will find downloadable "instruction" movies. The first one deals with setting up the HAT-Track and the other tells you everything about the calibration process.

The setup of the HAT-track movie doesn't offer any valuable information in my opinion. It shows you a little "how to position the hardware components" and that you need to check the CD-ROM to see if all the files are there. I think that the offered leaflet that comes with the HAT-Track offers enough and there's no need for this free movie.

The second calibration movie tells you everything from positioning the hardware components – receiver and transmitter – to the installation and configuration of the software. The movie is of an average level, and instead of spoken words there's sound playing. Ok, I'm not a young person anymore and I don't like that music and it's not classical, nor the Beatles, nor UB40, nor whatever but with a movie like this it was much better having the necessary spoken assistance. On the other hand, the movie does explain or shows you the 6DOF functions. Time for us to move on to the hardware components.

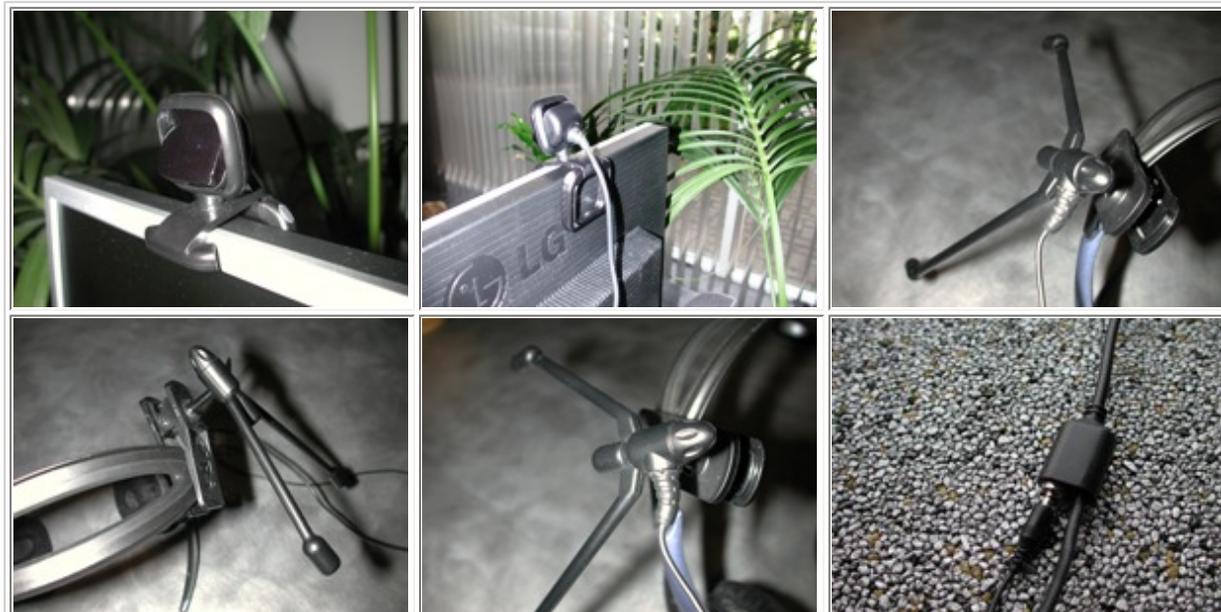
At the Wilco Publishing store this HAT-Track cost you €70.00 or approximately US\$ 75.00, but what do you get for this since it seems a lot cheaper than the NaturalPoint TrackIR unit. Spending money for this HAT-Track leaves you with the following hardware components:

- A **receiver**, which should be positioned on your monitor. When opening the clip, you can hook it on top of your TFT, but there's no rubber on the inside which should protect your monitor frame from scratches. Mounted to the actual sensor is a 1 meter cable (approximately 3.3 feet) with a connection for the transmitter almost at the end. The transmitter is, when you compare it with the NaturalPoint device, an active unit.

Back to the receiver; personally I find the attached receiver cable too thick or let's put it like this "not very flexible". This means when you position the receiver on top of your TFT (clamping it on the edges), moving the cable also moves the receiver unit. Either the receiver clamp should be tighter or the cable should be thinner and thus more flexible, having no influence on the receiver when the cable is moved.

- An **extension USB cable** of another 1 meter or 3.28 feet or ... 39.4 inch. I should say with newer models; please fit a cable of 2 meters (approximately 6½ feet).

- The **transmitter** looks very similar to the NaturalPoint unit, which is not strange since they do the same thing; they both offer the receiver the same information – head movements. The actual transmitter comes with a clip, which allows you to hook up the unit to any headset. It's of a different principle than the TrackIR clip but it works. Nothing wrong with this. There is, however, one difference with the VR Insight sensor arm compared to the TrackIR Clip. The VR Insight sensor arm offers full movement from its hinge point, while the TrackIR Clip main arm can only move in one direction, which is UP-DOWN. The idea is that the VR Insight main arm – a very short one – is hinged in a ball and socket joint. This is better than what the TrackIR Clip offers, in my opinion. By the way, the transmitter cable - approximately 2.30 meters (7.55 feet) is connected to the receiver cable (see one of the screenshots).



These should give you an idea how the HAT-Track hardware looks like. The transmitter – clipped on your headset – looks very similar to the NaturalPoint but the receiver – on your monitor – is except for the sensing unit, totally different and not as handy as the NaturalPoint unit.

Furthermore, the VR Insight HAT-Track comes with a CD-ROM with software and a paper guide. Some words about the CD. It tells me that the product CD is from August 11th 2008. You could decide installing this HAT-track software or you go to the VR Insight website and download the latest version. I would advise you to go straight to the VR Insight website and download it from there. Then you're sure you've got the "best and most compatible" software ... I hope!

Software installation and calibration

After downloading the latest HAT-Track software version (version 1.51 June 25th 2008), it's time to install it. Not a complicated job and before you know, you're done and you've got a valuable collection of shortcuts. One can be found on the desktop while the others are found via the Start Menu – Hat-Track. Unfortunately the shortcuts to the English and Korean manuals are not working, but let's hope this will be solved during an updated version.

Regarding the program shortcuts, the following; the main program can be started with the HAT-Track 1.51 shortcut. There is a second shortcut named HAT-Track Mouse Follow 1.51. This shortcut is only accessible via Start menu – HAT-Track. Anyway, I didn't test this additional freeware software since the HAT-Track manual tells me that "HAT-Track Mouse Follow 1.5 is freeware and this manual does not offer the usage of it". Then there's another problem for me to start this additional freeware software. It seems that it's only working with FSX and because of my computer performance; I'm not able to install and run FSX as mentioned earlier.

Now it's time to connect the USB cable from the receiver to our USB 2.0 compatible hub. In the center of the receiver housing a blue LED glows and Windows XP automatically detects and installs the necessary software. I think not even 30 seconds and it was done. Now it's time to calibrate it and let's be clever, let's have a look at the calibration movie. After seeing this one, I'm surprised that most of the parts of the movie are not the same as the current software.

There's no HAT-track.exe file, only the setup.exe file. Also the part of the IR LED while calibration is in progress, could be better and since the movie only offers music, I've got no idea what is really necessary. Ok, there's some text but it was much better when there was a narrator explaining what and how to do it. Then at time frame 01:00, the movie continues showing you that it's time to launch a HAT-Track Launcher shortcut on the desktop, but there's nothing on the desktop except for the HAT-Track 1.51.

So, the previous shortcut - HAT-Track 1.51 – is used for the calibration process while via the "Start Menu – HAT-Track – Games" files can be found to use the HAT-track device. In our case, we need the MSFS FSUIPC (+ speech) or MSFSX SimConnect (+ speech). Oops, that's not easy for a beginner or inexperienced users. Why not simply Flight Simulator 9 or Flight Simulator X like the movie is telling you? Very complicated and I really don't know why it's done like this. Anyway, a small glitch compared to the previous Serial FP2 software, which worked more or less without any problems.

One small note; remember that the free download calibration movie from the VR Insight website – as per end of March '09 – is not the best to use. Therefore the VR Insight CD-ROM offers more and better instructional movies.

Ok, it's time to see how it works with FS9. As said before; launch FS9 first, take you favorite aircraft and switch to the Virtual Cockpit mode, than via the "Start menu – HAT-track – Games" find the MSFS FSUIPC shortcut. This will fire the HAT-Track software and via Settings, you're able to make the necessary modifications or adjustments, but first we need

to find the manual. If you haven't changed the directory during the installation, then the manuals can be found here -> C:\Program Files\HAT-Track\Doc. The English or Korean Acrobat file tells you more or less everything about the HAT-Track software and hardware.

I tried the HAT-Track device with several FS9 – default and add-on - aircraft and without too many changes/modifications/adjustments it works straightaway although there's something which is rather odd. When moving your head in either direction, it's not a fluid motion most of the time. It's rather jerky and very unpleasant to work with. It tried to modify several options via the settings menu, but it stays the same.

It's time to contact Wilco to find an answer for this strange behavior. The answer from Wilco Publishing is "This phenomenon occurs only in FS9. FS9 supports 6 movements X, Y, Z, however movements aren't perfectly supported compared to those in FSX".

In-between conclusion

My overall impression of this HAT-Track hardware and software is good and that's also because of the price. I only hope that the connected cable to the receiver could become twice the length and thus there's no need to add the extension to it. Furthermore, I also hope that this cable will be thinner or more flexible. Last but not least that the receiver bracket get's a rubber wrap-around, which allows it to position better in place on a standalone TFT or notebook screen.

The transmitter is ok as well as the clip to connect it to many headsets. The cable is flexible and long enough to include the adjustments of the transmitter itself due to the special ball joint construction. The VR Insight software work good, and without too many adjustments. My only remark is the website movies versus the current HAT-Track software. It's no longer 1:1 and therefore it could be confusing for beginners.

Summary / Closing Remarks

Is there a need to write a comprehensive summary or what do you think; did I forgot something? Normally I should write something here but the whole review is already an in-depth story about almost every VR Insight hardware component. I'll do my best to find some words to finish this summary in a proper way.

Did I cover everything? I know for sure I've forgotten something, but in general the review should give you a good idea how these products are, how the VR Insight software works and if it really works in combination with the add-on models. The supported add-on aircraft list is not very long and I hope that within a short time frame more and more add-on planes will be added to it.

On the other hand, when a freeware and even payware models use basic MSFS programming, those models are seen as "default MSFS" planes. I used the CLS DC-10 model a few times as an example but many more can be added to the list. The supported aircraft list for the ProPit hardware is also very limited. Reading the lines it seems to me that only the Carenado Cessna 182 is supported and the other two models are default MSFS versions. Also for this I hope more planes are added to this ProPit support. Oops, by the way. The following Fs9/FSX add-on aircrafts are currently – March '09 – supported:

- Wilco Publishing Airbus Volume 1 and 2, 737 PIC, 777ER, A380 Version 2.0, Embraer Legacy and ERJ, Cessna Citation X,
- PMDG 737NG and 747-400,

Test System

Dell Precision Workstation 450
 Single Intel P4-Xeon 2.4Ghz
 4Gb RAM DDR 533Mhz
 nVidia 128Mb XGL900
 Dual WD 80Gb E-IDE ATA-100
 Windows XP Professional SP2
 Flight Simulator FS9.1
 Saitek Pro Flight Rudder Pedals
 Saitek ProFlight Yoke System
 TrackerIR Pro 4
 TrackerClip Pro

Flying Time:
 84 hours

- PSS (Phoenix Simulation Software) Airbus A320 and A330/a340,
- Flight1/Coolsky Super 80 Professional (only FSX) and the ATR-72,
- Level-D 767-300 (FS9 SP3 and for FSX SP2a).

I mentioned it already; you either like the black color of the panels or do don't. That's a personal choice but one thing is for sure, the awesome Serial FP2 software. I won't say it's perfect but I hardly had any problems with it and it's so easy to connect a panel via this software to the MSFS aircraft. Since I only tested it with FS9, I hardly believe there will be problems under Vista and/or FSX. Apart of the black paint and the small unrealistic CDU display, the models look nice, have stable construction and slightly tilted backwards for a better view.

Keeping the price in mind – for accurate pricing have a look in the Wilco Publishing website – I think, no I'm sure it's worth your money. Ok, my favorite hardware is the Combo MCP panel since it offers a universal panel for either a Boeing, Airbus, Douglas, Fokker or whatever model but remember, the MCP panel doesn't look as realistic as, for example, the CP Flight hardware.

The MCP comes with an EFIS, MCP (or AFS panel) and Communication part. The CDU is nice but to be honest, I didn't find it handy to work with the display. When you work you're way through the CDU pages, you need to look constantly at the MSFS CDU to see what's happening. Ok, the VR Insight CDU offers a scratchpad but nothing more.

The M panel is not as complicated as the Combo MCP panel but it still offers a lot of additional functions due to the "red" switch positions. The Radio Stack is, apart from the red LED's, nice but when you're interested in the MCP panel, you've got this already built in.

The tested **ProPit** is a different story. First of all because it comes with a 20" Dell Wide Screen and secondly, it cost you €1050.00 (~US\$1270.00 VAT excl.), which is much more than the Combo MCP panel (€339.00 or ~US\$375.00 VAT excl.). The ProPit is pretty impressive on your desk. Impressive or not, the Serial FP2 makes it all possible but as I said, only three aircraft are supported. Anyway, the ProPit manual is in my opinion not enough and should be rewritten quickly, but who am I? By the way, the other manuals – Combo MCP- and M panel, CDU and radio stack – are also of an average quality and should be positioned to a higher didactical level. Let's put it like this; the hardware product and software deserves to my opinion a better manual!

Last but not least, the **HAT-Track**. In short; the HAT-Track uses different software which works but the offered calibration movie on the VR Insight website is not the same as the v1.51 software used, so please do not use this. It could only lead to confusion. The HAT-Track components are very competitive compared to the NaturalPoint TrackIR Pro and Clip. The VR Insight hardware – receiver and "active" transmitter - cost you altogether €70.00 (~US\$75.00 VAT excl.) compared to the NaturalPoint package (US\$149.95 or approximately €105.00).

Oops, that's not a short summary. Ok, I'm almost done and I sincerely hope this review helps you a little more in making the right decision when it's time for you to spend some money for VR Insight hardware. As usual, I enjoyed it very much trying these hardware components and for sure, competitors are not happy with this great VR Insight hardware.

I end with these last words "VR Insight, Your Dream Supplier"!

What I Like About The VR Insight Hardware

- Looking at the Combo MCP and M panel as well as the CDU and Radio Stack; you either like the black coating or you don't, which is my personal opinion, but it's nice looking hardware, it offers a stable construction and price/quality very competitive with other hardware vendors.
- Awesome Serial FP2 software; easy to install, easy to use and once – if applicable – the ini, cfg or dll file is installed for the respective add-on model, it works right away!
- Connecting one, two or three VR Insight components is no problem with the Serial FP2 software. The software detects automatically which unit should be interfaced with the MSFS.
- The Serial FP2 software can be used with Windows XP or Vista version (32- and 64 bits) and in combination with FS9 and FSX plus SP2 and/or the Acceleration Pack.
- The ProPit, CDU, Combo MCP and M panel have standard a 1.65 meter (5.41 feet) USB cable except for the HAT-track receiver, which has standard a 1 meter (3.28 feet) with another 1 meter extension. The HAT-Track transmitter comes with a 2 meter (6.6 feet) cable, and to be connected to the receiver cable.

What I Don't Like About The VR Insight Hardware

VR Insight general:

- Personally I found the offered manuals of an average quality.
- I've been informed by VR Insight that they are busy writing new manuals.

CDU related:

- Not really something I dislike but worth mentioning it. Although you know before buying the CDU, the mounted display is very small (only 2 rows of 16 characters). Therefore when using it as an FMS CDU it's a rather simple display and offers only a scratchpad. Any button/key pressed on the CDU must be confirmed on the simulated MSFS CDU, which is not very handy.

Printing

If you wish to print this review or read it offline at your leisure, right click on the link below, and select "save as"

[VR Insight Hardware](#)

[\(adobe acrobat required\)](#)

[Comments?](#)

Standard Disclaimer

The review above is a subjective assessment of the product by the author. There is no connection between the product producer and the reviewer, and we feel this review is unbiased and truly reflects the performance of the product in the simming environment as experienced by the reviewer. This disclaimer is posted here in order to provide you with background information on the reviewer and any presumed connections that may exist between him/her and the contributing party.

[Tell A Friend About this Review!](#)

**© 2009 - AVSIM Online
All Rights Reserved**

[Powered by AVSIM SimWords](#)

[Flight Simulator Links](#)

Discover the world wide Flight Simulator Community. Enter your FS related website in the largest links database online.

www.avsim.com

[AVSIM Reviews](#)

Want to stay on top of the most recent ad ons? See our Reviews!

www.avsim.com

[Plane Mad](#)

Aviation photos, blogs, airport guides, airport weather, plus your own personalised aviation page.

www.plane-mad.com

[The Flight Simulator Network](#)

The Social Network for Flight Sim Users and Developers.

Competitions, screenshots, videos, forums, live chat and more.

<http://flightsimulator.ning.com/>

[Become a SimWord Publisher!](#)

[Advertise Here!](#)

Want your advertising to count? Advertise in this slot for pennies a day!

www.avsim.com