

PPC versus CarPC

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CARTFT.COM
Power up Your Car

Thanks to **CarTFT.com**'s precious cooperation we got the chance to test GPS navigation (con **ARKON Mobi Navigator**) using a **PPC** and a **CarPC**.

The outcomes were vast, some obvious, some less....

The story started months ago, when a trading agent, with whom I have various business relationships, came to see me, equipped with a PPC.

It was a fairly old model (of which I won't mention the name) and I immediately started asking questions about it. After a while, GPS subject came up, and I told the agent I used my x50v mainly for GPS navigation, and that my PPC became a real need for my journeys (I'd prefer forgetting home my mother-in-law).

Suddenly the man says::

« I never use my PPC in the car, because I have a CAR PC ».

The statement simply stunned me... A CAR PC...? I didn't even know what it was.

« Yeah, here in Italy it isn't very popular yet, but it's much more convenient than a PPC, especially for GPS navigation».

Curios, and somehow embarassed, I followed the agent, who directed me in his car.

A kind of car-radio and a 7" touch screen monitor were visible amongst the driving gear.

After a very quick startup (a few seconds) Windows XP was loaded; CD, DVD, Radio, Internet, Email, GPS YOU NAME IT.

« Damn! » I said, while I desperately looked for a dead pixel on the screen, so I would be able to say:

« Nice... Shame about the dead pixel» but nothing... not a flaw... so I had nothing else to say but::

« No dead pixels either! »

« The company guarantees the absence of dead pixels » said he, with that very annoying voice.

I was so impressed and curios about what I had just saw, when I got back home I immediately started researching.

With my italian-poisoned english I immediately contacted one of the companies that sells these Car PCs through **X50v.it**::

CarTFT (www.CarTFT.com).

Soon, someone answered all my questions.

I then had the idea to COMPARE GPS navigation using both a PPC and a CARPC but I would obviously need **CarTFT's cooperation**.

The company immediately showed interest, and provided us ALL the material we needed to realize this project.

We therefore would like to thank **CarTFT** and carry on with our review...

Devices

As we said before, the aim of this review is to compare and find differences between the two devices, mainly in relation to GPS navigation.

The PPC we used, is one of the best, currently available on the market: **X50v** matched by a **Fortuna Slim** Bluetooth GPS and a universal car holder.

The X50v is produced by **Dell**; It features a Intel® PXA270 at 624 Mhz, 64 Mb di Ram and 128 Mb Rom, an in-built 3D graphic accelerator Intel® 2700g and a high resolution 3.7" display (640X480); these specs guarantee great performance, and make the x50v a great working tool.

The **Fortuna Slim** GPS uses Bluetooth technology and it features the new **Sirf Xtrac V3** chip; great performance and battery life, awesome sensitivity and fix time.



You can see the internal circuits of the x50v in [THIS](#) famous article
[HERE](#) you can find Fortuna Slim's GPS review review (in Italian only).

The CAR PC is produced by **CarTFT** (Autocan) and it's size is perfectly compatible with any Car Radio slot.
 It features a VIA C3 Nehemiah 1 Ghz processor, 256 Mb Ram, 30 Gbb HDD, in-built DVD Drive and three USB 2.0 ports (2 at the back and 1 in the frong).





There is also a TV S-Video output, a 2X20 lines LCD on the main unit, a USB GPS, a 7" VGA touch screen 16:9, IR port, multifunction remote control (monitor and PC) and a headphone socket.
Thanks to BIOS PLAY NOW we can use DVD MP3 player, CD and SVCD after only 2 seconds from start-up!



Installation

Both systems were installed in a family car.
No problems were found with X50v; simply fixed the universal holder, placed the PDA inside and moved it around to get a decent visibility, while we simply placed the FORTUNA SLIM GPS receiver on its own magnetic bottom.

Finally, all we had to do was plug in the power adaptor in both units.
CAR PC installation was surely longer, but not any more complicated; the operation is also definitive, and the CAR PC is made to stay in your car even when you're not in it.
I got rid of the old radio, redundant now, and got the power cables through the slot.



The power connection was very simple; one wire goes to ground, one goes to power supply and one on the ignition power supply.
If you already have a car radio installed in your car, the wires are most likely already installed.
Once we got the power going, we can move on to the screen.
With the loom provided we fix the display bracket where we would the monitor to be (alternatively we can fix the display with screws or we can even insert the display in the command sections thanks to the tool provided, see [HERE](#) for some examples).



We now move on to the hardest part of the installation: We now need to get the monitor cables from the back of the unit to the display.
One cable provides power (this will be connected to the ignition power supply), one cable carries the video signal (connect this to the VGA output of the unit) and one will provide the TOUCH SCREEN functions (this will be connected to one of the USB ports on the back of the main unit).



We can now connect our CAR PC: connect the multi-polarity power supply to the socket (can't go wrong), the display cables as described above, and the car speakers to the audio output.
We then insert the CAR PC in the slot, and fix it with its shoe.
We connected the GPS receiver to the external USB port, so that we can eventually easily take it off, and use it with other devices.
If everything goes well, the installation shouldn't take more than an hour.



Software

We used **Arkon Mobi Navigator Europe** laptop and PPC versions.

Mobi Navigator uses Netropa engine, as a GPS navigation engine (v2.0) and as maps, the ones provided by NavTeq.



We installed the software in Italian, and Italy's complete map, in both devices.
 In both cases, the software installation went smoothly and the GPS recognition process was quick and painless.
 The Navigator gave great performance in both devices; the instructions in Italian however can definitely be improved



PPC



PPC



CAR PC



CAR PC

Comparison during travel

We decided to test the performance on a special day.

Departure from X50v.it's headquarter at 18.20 towards Reggio Emilia where a concert was awaiting. As soon as we step into the car we notice the first obvious difference; The CAR PC's display is much bigger than the PDA, the screen is brighter and

much more visible even with lots of light.

We do notice however, than the x50v, matched by the FORTUAN SLIM GPS acquires signal much quicker because of its better chip. This is very useful when coming out of tunnels.



Since we connected the CAR PC to our car's speaker, the instructions are much clearer and powerful. No competition here. Also, on the CAR PC we can mix the vocal instructions with our background music – very important feature.

The bigger monitor also makes it easier to type in addresses (it is possible to connect normal or Bluetooth keyboards on the CAR PC as well).



We set the same destination in both navigators... and off we go.

The vocal instructions are output at almost the same time, and they take us to the highway.

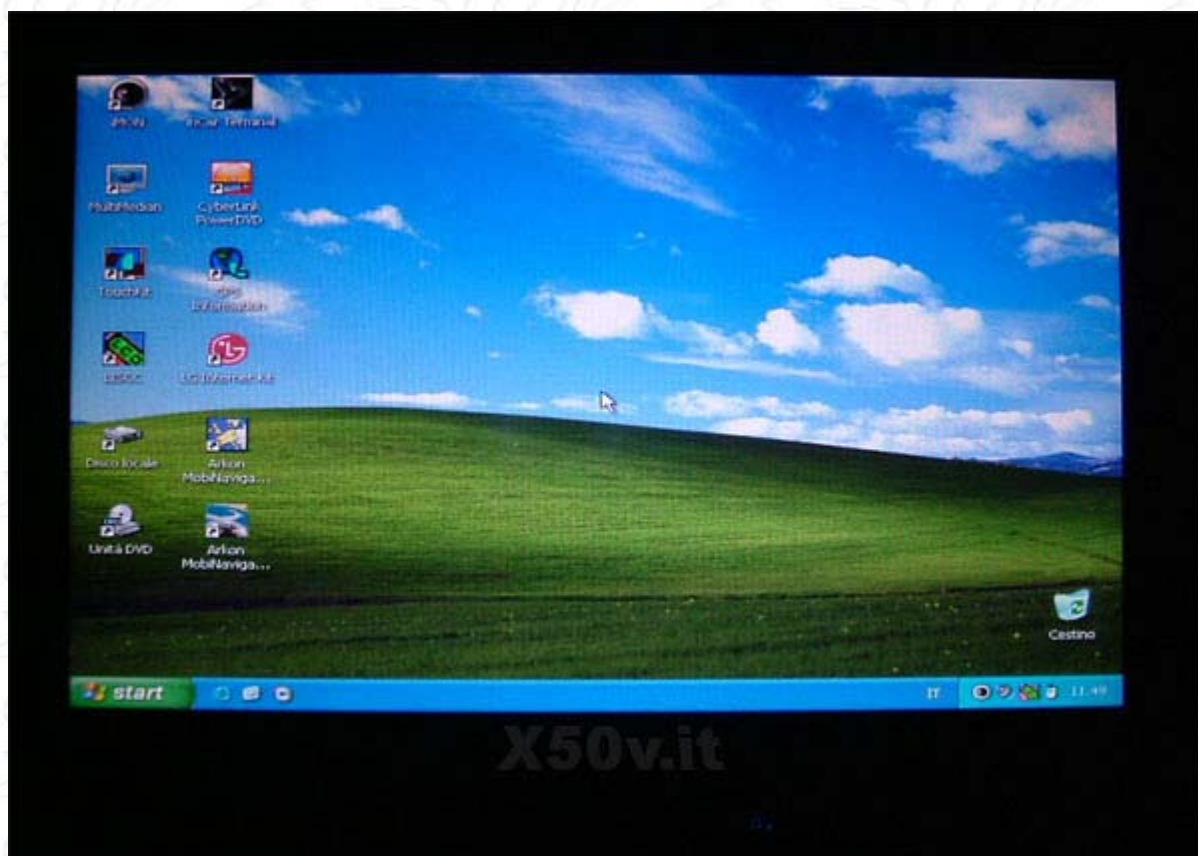
Both systems are working wonderfully, the monitor size and the GPS performances remain the main differences.

The traffic forces us to chose an alternative highway exit.

We go out at North Modena and we communicate our intentions to the navigators.



Of course, with CAR PC we can simply operate with our fingers (quick and convenient), with the PPC we are almost always forced to use the stylus because of the display size. Finally after a 3 hours and 20 minutes journey (we would normally only need an hour and a half) we reached our destination... where the concert had already started...



Car PC, not just GPS

During the journey, the traffic forced us to stay in the car for a while, and we therefore got the chance to test many of the functions of the CAR PC. Before our departures we downloaded some MP3 music on our CAR PC using a wireless network connection. With two USB

WIFI cards (one in the CAR PC and one in our laptop), we sent some music to our car pc while sitting comfortably on our house sofa.



During the journey we listened to some music, which was a great background to the vocal instructions. We watched a little movie in 16:9 format and my girlfriend played some tennis simulation. Since we had already downloaded my mobile phone drivers, we were able to browse the internet, check our mail, and chat on MSN with no trouble at all.



Using the software (provided with the unit, of which X50v.it took care of the italian translation) **inCar Terminal** we had all the main features of the CAR PC on the main screen.

The system worked very well, we couldn't spot any flaws.



Conclusions

As we've seen, both solutions offer great GPS navigation.

The choice very much depends on our taste.

Of course the PPC may seem less interesting, but it has a very important feature: PORTABILITY. It is not easy to put a car PC

in your shirt pocket!

This means that after we've used our PDA as a GPS navigator, we can then take it off the car to use it in hundreds of other

occasions, like finding spots as we walk through a city, restaurants, stations etc...

The CAR PC on the other hand, is a real multimedia station, which is able to do anything that our home desktop does!



The inbuilt LCD display is programmable; we can chose to view any info regarding the hardware, as well as software or music titles and artists, or simply input our own text.

The 7" display can also receive video signal from two different cameras.

We can therefore setup one camera at the back and one at the front: a small tool connected to the REAR GEAR will work as a switch between the two signals.

The CAR PC features all the main ports we find on a desktop PC, 3 USB ports, one of which in the front, LAN, PS2, parallel, audio In-Out, VGA, etc.

The screen can be easily removed thanks to the hook system. This is useful to avoid theft or making alternative uses of the monitor (in this case we can use the POWER ADAPTOR provided in the box)



We also find two IR remote controls: one for the unit and one for the monitor. This allows for maximum system control.

The CAR PC, wil surely attract your passenger's attention as well as providing you with all the functions you need.

If you love technology and you can afford one, **then go for this CAR PC.**

On [CarTFT](#) 's you'll find interesting solutions and prices.



PRO CAR PC

Big sized- touch screen monitor
Good vocal instructions and audio

Multimedia features
Not excessively expensive

CONS CAR PC

Main front unit can't be ejected
Gps provided not one of the best

PRO PPC

Portability
Great GPS performance
About half the price of CAR PC

CONS PPC

Small screen
Weak sound

Final judgement

We believe that the best solution in terms of GPS navigation is probably the CAR PC, perhaps matched by a better GPS receiver.

We'd like to thank:

CarTFT for providing the Car PC,

Arkon for the software Mobi Navigator Europe,

Infovi for providing Fortuna Slim Bluetooth GPS.



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