

CarX/A (for Audi)

Frequently Asked Questions

Version 3.1



## 1) Is there a User Manual available?

Is there anyone out there who really reads print media full of screenshots? I never do ©

Seriously: no - just install the software on your desktop PC – use the mouse wheel, play with the keys SPACE, ENTER, CTRL and ALT and you will see how it works pretty soon.

On the main screen press SPACE and follow the instructions in the options dialogs regarding settings (MP3 directory, COM ports etc.)

## 2) How does the GPS POI stuff work?

If you want speed trap warning (POI) you will need the radar.bin file (for Germany you can get it from <a href="http://www.radarfalle.de/software/carx.php">http://www.radarfalle.de/software/carx.php</a>) and a USB GPS mouse (NMEA standard).

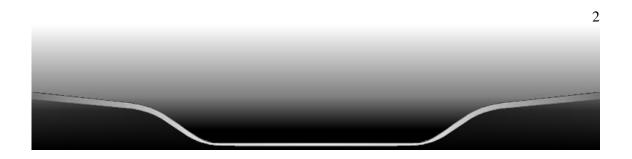
In case you want to be sure: CarXA preocesses the standard NMEA gsv, rmc, gga, and rmb sentences. Pls note that typically with a USB-GPS mouse you will have to install a virtual COM port and tell CarX which one it is. In most cases it ships with all needed drivers.

If you want to make your own POI's: send me a mail, I can provide a tool to create your own bins, or tell me where a list with GPS coordinates of speetraps in your country is, and I will send you the bin-file

Additional radar.bin files for other countries are available at <a href="http://www.bmwpc.de/portal/dload.php?action=viewall">http://www.bmwpc.de/portal/dload.php?action=viewall</a>

#### 3) What do I get from CarX24?

Today CarX24 can only offer you the software CarX/A that will run smoothly on your CarPuter. We are sorry to not be able to provide an entire solution (yet!). We are currently working with partners to develop a total turn-key solution that you will be able to purchase in a Car Audio Garage, but some more work needs to be done before we are ready to go to market. So you will have to either do the assembly or have it done under your supervision by knowledgeable people. My Audi dealer supported me big time with it, but they needed me to tell them what to do. They knew very well how to do it.





# 4) How much does the license cost and what does it include?

The price for the Software is 199€. It includes free updates as they become available on our website. Updates include bug fixes as well as new functionality as we explore new features and functions.

## 5) What are the System requirements?

PC: Windows 98, 2000, XP or Server 2003 have been tested. USB2.0,

12V PC - small - recommend one with Pentium 1,4 Ghz or more - NOT a "VIA Eden" or so CPU!! -

Make sure it has good sound (on board or USB-sound card) and USB 2.0 and min 512 MB and Windows  $\mathsf{XP}$ 

USB Cables and Hub

Disk Drive (either only the one in the small PC - but if you want to refresh your MP3, you may want to connect an external USB drive (cause you can easily take it out of the car and load it on your home desktop)

Mouse in the glove box during the first days when you set up the PC is a good idea too

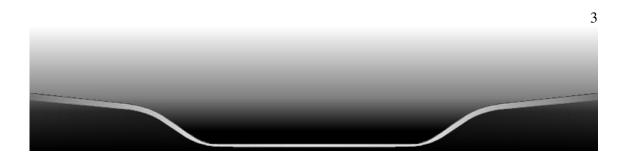
VideoLanClient (VLC) needs to be installed on the system http://www.videolan.org/vlc/

If you want drivers log, you will also need **Microsoft MapPoint for Europe** (that is what I use to resolve a GPS position into town and street info) and a USB Mouse (magnet below it is good) - can be placed under the windshield, cable hidden in the side fissure

For use of **Google Earth** you will have to have that installed on the PC as well. Download here: http://earth.google.de/download-earth.html

In order to have GE collect the right images and store them in the GE cache there is a tool available called **GEVoyager.exe** that you will find on the web if you search for it.

**CAR:** that's a different story and we will answer in detail later – most important: you will need to double check with your Audi-dealer that you get a **TV-module** that allows for external audio and video source. Currently Audi A8 TV-module comes with 2 External slots (AV1 and AV2).





# 6) Does CarX24 recommend any PC?

No - I am using a Lex Barebone 12V PC with a CarTFT PC with a Pentioum 1.4 Ghz CPU - it works pretty nicely, but there other systems out there. Make sure your PC can either run on car power (12V), or you install an inverter (Wechselrichter) in the car, that turns 12V DC into 240V or 120V AC, to use the original power supply that may come with the PC, especially if it is a laptop. The nice thing about the laptop is its battery that keeps the PC alive during power drains (e.g. engine start).

# 7) What is the overall cost?

We can only give a rough estimate of what you will pay - here is our best guess:

Audi TV module with external AV connection	800€
CarX software	199 €
Car PC	600 €
Audi doing the cabling for you	500 €
USB Soundcard	30 €
VGA to PAL converter (like Trust Televiewer)	40 €
Griffin Powermate	50€
TV-Enable while driving	200 €
USB Cables and hubs	50€
TOTAL	2.420 €

All prices are rough estimates and do not mean anything related to prices that any shop may or may not offer. Also you may have to buy a Windows Operating System license in addition. You may also already own some of the needed stuff, or try to build the kit in yourself. So: your price will vary.

#### 8) How about the MMI Connection?

As of today the MMI interface is a prototype from

http://wcs.minibarebones.de/KFZ-Zubehoer/Audi-mit-MMI/Audi-MMI-A6-A8-Q7-CarX-Steuerinterfacefuer-CarPCs::1654.html

It is not generally available yet and I can not comment about the price. Stay tuned and check our website or theirs on a regular base. It should not take more than a couple of weeks before we move forward.





# 9) When I have the MMI Interface - How do I install it?

Today the prototype needs to be placed directly under the MMI button. Removing the wood in the car is rather simple, all you need is the right screwdriver with a TORX and start with the ash tray. The next version of interface will come with network cable. All Audi original plugs are included and no wires need to be cut.

# 10) Will tampering with the MMI lead to losing my Audi guarantee?

I do not know - but I would not be surprised if that is the case. CarX24 takes no responsibility for any situations of that kind. If you do not want to risk it: use the Griffin Powermate instead.

# 11) Will an install without attaching to the MMI lead to losing my Audi guarantee

CarX24 takes no responsibility for that either. But: as my Audi-dealer was very supportive installing the kit in my car, helping to attach video and audio into the external plugs of the TV module I doubt it.

# 12) Will unlocking the TV (allow screen content while car in motion) lead to losing my Audi guarantee?

CarX24 takes no responsibility for that either. Honestly I never asked – and will not

#### 13) Is unlocking the TV illegal?

CarX24 takes no responsibility for that either. I am not sure. In case of an accident there may be discussions. I recommend not watching movies while driving. On the other hand, it is possible to select a CD track or a radio station using the original Audi screens. Doing the same with MP3 while driving appears to be the same thing to me. Use common sense. If you owned a Jaguar you would have to stop the car even to enter a new address into the Navigation system. That can not be right either.







# 14) Will my harddisk(s) survive in the car?

I have driven with a car PC for 3 years now, and never lost my 2.5 " Disk, once lost a 3.5" disk in a USB enclosure – lost more on the home machine in the same time. We are no longer in IBM 3380 days – so: No problem today!



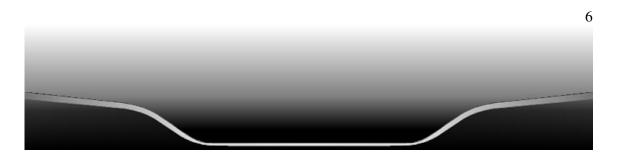
# 15) Will temperature be an issue?

Things worked out well in both German summers (up to 35 Celsius) and winters down to -12 or so. No problems seen with my PC, only the BIOS battery seems to get empty quicker in cold days – had to replace it every winter. That's all.

# 16) Is using a speed trap warning mechanism illegal?

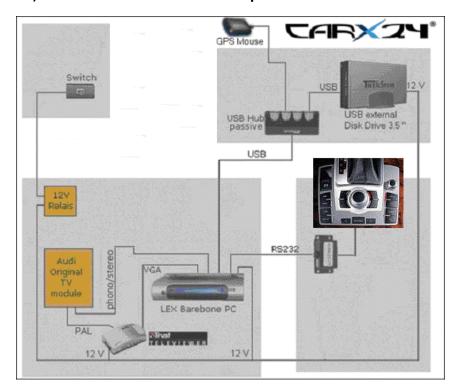
CarX24 takes no responsibility for that either. There are other tools out there (Tom Tom navigator with radarfalle.de plug-in etc.) that do the same. In Germany I am afraid it is. Common sense tells me that it should be in other countries as well. For myself I can say, that I simply do not care and take the risk of being caught. You decide on your own if you do ©







# 17) How do I connect all the components?



# 18) What components do I need and where do I get them?

CarX24 will not recommend any, but I am ready to outline what I have:

#### PC - for example

http://wcs.minibarebones.de/

http://www.lex.com.tw:8080/index1.htm

http://www.cartft.de





# **Video LAN Client software**

http://www.videolan.org/vlc/

#### **VGA to PAL: Trust Televiewer**

http://www.trust.com/products/product.aspx?artnr=11672

#### **MMI Interface**

http://wcs.minibarebones.de/KFZ-Zubehoer/Audi-mit-MMI/Audi-MMI-A6-A8-Q7-CarX-Steuerinterfacefuer-CarPCs::1654.html

#### GPS mouse:

Recommend any USB model with a driver that emulates a Virtual COM port.

#### 12V Power:

Recommend to built in a switch that gives you control over the boot process (manual reboot possible). Also do not connect directly to the battery, but ask the garage to connect to the Audi power management

#### **Connection to the TV-module:**

http://www.autohifi.net/shop3/p285.html





# 19) Are there any Windows guidelines?



**Some**! If you know your way around a Window PC, you can do this on your own – otherwise ask a friend. Install the PC on your home desktop once and configure it completely!

## **BIOS setting: State after Power failure: BOOT**



(makes sure the PC boots automatically as soon as it has power ! No need to tamper with an extra switch just to boot the PC)

#### **Windows Start:**

Setup Windows to boot without any passwords to be entered, make sure it wakes up from Standby or Hibernate without password too - Play with Boot screens and desktop wallpaper at will

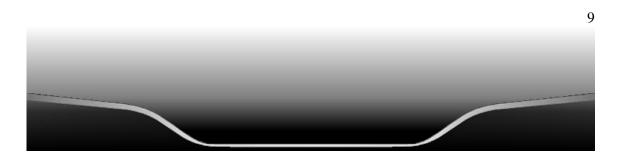
You will have to install the GPS USB mouse driver and assign it a virtual COM-port in its settings (e.g. COM4) or so - it can happen that windows thinks it is a MSFT Speedball - that device needs t be disabled in the windows hardware settings, otherwise you can get mad behavior of the mouse pointer.

#### CarX Start:

Make sure CarX start automatically as well – autostart folder or registry [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run]

#### Codecs:

Do not install extra codecs, just install Video Lan Client (http://www.videolan.org/vlc/)





#### Other windows issues

You may want to look into anything that allows fast boot and shutdown; you may also want to disable unneccessary services. This is an art of its own, ask a friend or read PC magazines for details

#### **GPS Mouse**

Most mouses come with a driver that sets up a virtual com port. Make sure you pick the right one and make sure you know its number, e.g. COM3 or COM7....

#### **Griffin Powermate**

No longer supported

#### **CarX Setup**

Pressing the SPACE key on the keyboard will bring you to a menue table with detail information as to what to enter there. Things like "MP3 directory" or "movie directory" are pretty self explanatory.

You will also have to enter the COM ports under which MMI Interface or a GPS mouse can be found. You will be able to enable or disable them here as well.

# 20) How do I get the full version?



#### **Registering CarX:**

By default CarX is unregistered and will stop running after 15 minutes. If you want to purchase a license, go to the HELP/REGISTER tab. You will find a number like this "00000F33-007CAF50-0000041D".

Send it to faltinek andreas@gmx.de, and we get the license and payment process going. I accept cash or PayPal payments.

Good luck - and please send mail if I can be of any further help. Check the website for additional support.

http://www.carx24.de





# 21) Other more or less usefull links

http://www.digi-tec.de (to enable screen content while driving)

http://www.cartft.de (a good point to start looking for 12V CarPCs)

http://www.tragant.de (another dealer of VIA Eden CPU based small PC)

http://www.casetronic.com (another manufacturer of small PC)

http://www.travla.com (another manufacturer of small PC)

http://www.mini-itx.com (general information on small form factor board related stuff)