Installing the Vacron CDR-E07

Now that you have acquired the wonderful Vacron CDR-E07-WiFi full HD 1080p Full HD dual camera GPS-equipped black box recorder, you may be wondering as to the neatest way to install it. Once you insert the data card, you can use the Vacron straight out of the box with the supplied cigarette lighter power cord, but if you don't like wires dangling around your vehicle, here is the CARR method. If you are adept at this, you can easily do it yourself, but any competent auto electrician can install it for you.

In most vehicles, the best place to mount the Vacron is in the centre of your windscreen just below the rear-vision mirror so that the front-facing camera gets an excellent view out the windscreen. Make sure that the rear camera gets an unobstructed view of the driver, passengers and hopefully out the rear window as well.

There is nothing more unsightly in a vehicle than power cables hanging all over the place. There is a far more elegant way to provide power to the Vacron and that is to use a power cable that goes from the device to the car fuse box.

You will need these parts - information on them and suppliers is on the second page:

1. USB male to down-angle miniUSB male power cable of suitable length
2. 12 volt to 5 volt DC-DC converter with two USB sockets
3. Double fuse wiretap adaptor to suit the fuse size in your vehicle
4. 5 ampere fuse to suit the wiretap adaptor

NOTE: If you cannot obtain a down-angle mini-USB male power cable, you can use a regular mini-USB male power cable if there is enough clearance between where you mount the Vacron and the windscreen. This cable is very easy to obtain in many suitable lengths.

1. Plug the cable's miniUSB connector into the power socket on the Vacron. Tuck the cable into the roof lining, down behind the windscreen pillar lining and eventually to near or inside your vehicle fuse box. Plug it into one of the USB sockets on the DC-DC converter.

2. Connect the red wire on the DC-DC converter to the red wire on the double fuse wiretap adaptor and the black wire to a convenient earth point on the car body near the fuse box.

3. Take out the cigarette lighter fuse from the fuse box socket and insert it into the socket on the wiretap adaptor that is opposite the prongs. Insert the 5 ampere fuse into the socket on the wiretap adaptor nearest to the red wire. Plug the wiretap adaptor into the cigarette lighter fuse socket in the fuse box.

The Vacron should receive power when the ignition is switched on. If you go somewhere, for instance on a vacation and you intend to rent a vehicle, just unplug the Vacron from the power lead and take it and the cigarette lighter power cable that came with it and use it in your rental vehicle to give you the same protection as you will get in your own vehicle.

The second socket on the DC-DC converter can be used to power a mobile phone charging cradle or GPS receiver, thus completely freeing up the cigarette lighter socket.

VACRON INSTALLATION COMPONENTS

USB to Male down-angle miniUSB Cable of suitable length

Startech - 2 metre cable
https://www.startech.com/Cables/USB-2.0/Mini/2m-USB-A-Down-Angle-Mini-B-Cable~USBAMB2MD

L-Com - 3 Metre cable
http://www.l-com.com/tabbeditem_mobi.aspx?id=41316

12 Volt to 5 Volt 3 Ampere DC-DC Converter with 2 USB Female Sockets

Direct Imports 1899
http://www.ebay.com.au/itm/262571126701

Double Blade Fuse Socket Wire Tap and 5 Ampere Fuse

Jaycar Electronics
https://www.jaycar.com.au/double-mini-blade-fuse-socket-wire-tap/p/SF5125

VACRON CARBOX PLAYER

The wonderful Vacron black box recorders are used in conjunction with the supplied Vacron CarBox Player software. Here is a guide that may be helpful.

The panel of icons on the left side of the window control various functions and from top to bottom, they are:

- **Exit - Close the application**
- **Minimise - Minimise the application**
- **Playback - Playback files, either from data card or backup**
- **Calendar - Select the date and time to see what has been recorded**
- **Backup - Back up files from the data card to the computer**
- **Snapshot - Take a screenshot**
- **Configuration - Set the parameters of the Vacron**
- **Format - Clear and format the data card - and set the language**
- **G-Sensor - Set the G-Sensor sensitivity**
- **Compass - Displays the direction of travel and geographic coordinates.**

When you first launch CarBox Player, the language will be in Chinese. The language setting is in the Format dialogue box. Click on the Format icon and the language setting is in the bottom left. Select English, close the dialogue box and close CarBox Player. When you launch the program the next time, everything will be in English and should stay that way in subsequent use.

BACKING UP DATA

The Vacron records its data in RAW format, so you will not see them in a file window on your Windows computer, but only in the CarBox Player. The Vacron records in a loop and when the data card is full, it overwrites the oldest files.

It is vital to back up the files before they are overwritten. So if you receive a penalty notice some weeks after a camera booking of which you were not aware, you can look at the relevant backup file, play it back and see exactly what happened and at what speed you were driving and use the file as evidence in court to fight a wrongful booking.

The Vacron records impact data from its G-Sensor and these files are locked and will not be overwritten. Depending on the settings of the Vacron, even speed humps are recorded if they are severe enough. The data card will eventually become full of these locked files and no other files will be written to it. So you need to back up the data card and then format it to clean off those locked files.

Backing up and cleaning up the Vacron's data card may mean the difference between you being heavily penalised for an offence that you did not commit, or having the evidence to prove beyond doubt that you did not commit the offence.

HOW TO BACK UP AND CONFIGURE YOUR VACRON DATA CARD

Take the data card out of your Vacron and insert it into your computer via a USB card adaptor. Launch the CarBox Player. Click on the BACKUP (floppy disk) icon at the left. Select the disk letter of the data card in Removable Software.

A file window will pop up. Tick the checkboxes of the files you wish to back up. Select the backup path in the box on the right and then click the Backup button. If the data card is full, this could take well over an hour, but you can work on your computer while the backup takes place in the background. When the backup has finished, close the file window.

NOTE: If the computer rejects the backup, try backing up your files 30 or 40 at a time. It seems that the number of files that can be backed up in one go depends on the amount of RAM in your computer.

Click on the FORMAT icon at the bottom right and the Format window will open. Select REMOVABLE STORAGE and the drive letter of the data card. Click FORMAT and OK to the Windows Format dialogue box. When the format is complete, close the FORMAT window. You will be asked to remove the data card from the computer and re-insert it.
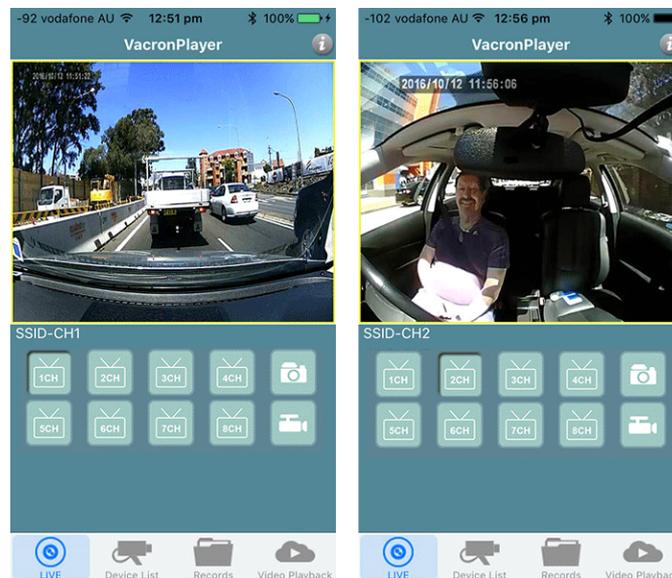
But before you do that, click on the CONFIGURATION icon and the window will open. Select the drive letter of your data card in the top left box. Set the Video Frame Rate settings to High. Check that the time zone is correct and that the unit of speed is KPH. Adjust other settings to suit. Click SAVE and if successful, close the Configuration window. Remove the data card and insert it into your Vacron.

NOTE: If for some reason you cannot access the CONFIGURATION, don't worry. Take the card out of the computer and put it back in the Vacron and it will configure itself. You should repeat this procedure every week or two, depending on how much you drive. You should keep the backup files for around two months, as it is highly unlikely that you will receive a traffic penalty notice after that period.

PLAYING BACK YOUR VACRON DATA

The same software is used to play data files for all Vacron models and the software senses which version to load, depending what is on the data card. So before playing back any backup data, you need to insert the data card into your computer with the USB adaptor, then start the CarBox Player and it should load the right version. Then you can play back either the data on the card or you can select the backup data and play it.

VACRON PLAYER FOR SMARTPHONES

The Vacron Player is a free smartphone download from the Apple App Store or the Google Play Store. This application allows you to see the video from both cameras and record video and audio from the Vacron and also take snapshots. The Vacron Player will verify the correct operation of the two cameras.

IMPORTANT - When setting up the Vacron Player up for the first time, make sure that you are out of range of your home WiFi or disable the connection. When the Vacron is switched on, you should see SSID in the list of available connections. Select it and use this password - 12345678 - and select Join. That will memorise the settings.

Switch on Vacron Player on your smartphone and click on Device List. Select SSID. Then click on Add To This Device Only. Then click on Go To Live View and it will bring up the main window. You can select the appropriate channel - 1CH for the front camera and 2CH for the rear camera.

VACRON NOTES

There are some important things that I have discovered about the latest model Vacron CDR-E07-WiFi (1080p) that probably even applies to the previous 720p model and the Vacron MDE-31B motorcycle black box recorder. Please read these notes and be aware of the issues and how to get around them.

INSERTING THE DATA CARD INTO A COMPUTER

According to Vacron Taiwan, the current CarBox Player software looks at the settings on the data card that is inserted into the computer in order to determine which version of the Player will be loaded. The card has to go via an adaptor into a USB port. It cannot go directly into a card reader port that is found on many notebook computers.

You can use any USB adaptor that will take the data card. But you cannot for instance put the card into a SD adaptor card or directly into an SD card reader slot on your computer, because that will simply send the CarBox Player into a loop between the new and the old interface until that data card is removed.

BACKING UP DATA WITH CARBOX PLAYER

I have found that when I try to back up all the files on my 128GB data card at once, the CarBox Player doesn't like it and it crashes. So what I have been doing is highlighting and ticking 30 files at a time and backing them up. Yes, it's more tedious, but those backups might save you from a very expensive wrongful penalty. You should keep at least two months rolling backup of Vacron data.

FORMATTING THE DATA CARD

The Vacron writes data to the data card in a loop, overwriting the oldest files as new data is recorded. That is why it is vitally important to back up data frequently before the file that you will ultimately need to exonerate yourself from a wrongful penalty is overwritten and is unrecoverable.

The Vacron also writes G-Sensor files that record bumps and impacts. These files are locked and are not overwritten. So if you don't take the data card out at regular intervals and format it, eventually the card will be filled with these uneraseable files and the Vacron will not record any more data. So after you have backed up the data from the card, you need to format it with CarBox Player. Select Format from the menu and just go through the formatting routine. When it is complete, CarBox Player will ask you to remove and re-insert the card.

But before you remove the data card, go to the Configuration menu and ensure that all the settings are how you need them to be. Save the settings and then remove the data card.

SETTING UP VACRON PLAYER FOR SMARTPHONES

When you download Vacron Player on your iPhone or Android Phone, you may wonder why it is not working when you go to set it up. This is usually the reason. The Vacron Player uses WiFi to communicate with the Vacron black box recorder. But if you are trying to set it up while your smartphone is connected to your home WiFi system, that takes priority and the Vacron Player will not connect to the Vacron while you are logged onto your home WiFi.

So if you want to set up Vacron Player at your home, disconnect your smartphone from your home WiFi network. Then switch on the Vacron. Go to Settings on your smartphone and you should see "SSID" as one of the WiFi networks. Connect to this and use the passcode "12345678".

If the smartphone says that it is now connected to the Vacron's network, open Vacron Player. Click the "Device List" icon and you should see "[Wi-Fi] SSID in the list. Click on this and click on "Go to LiveView" and it will open the video view window and menu. Click on "1CH" for the front camera and "2CH" for the rear camera. If it has been set up correctly, you should get video from both cameras and audio. You can also take snapshots and videos from the cameras that are stored on your smartphone.

MOBILE PHONE DOES NOT CONNECT TO INTERNET

Most smartphones default to a WiFi connection over that of a 4G or 3G connection for network services. So when you have your smartphone connecting automatically to the Vacron's WiFi, this takes priority and will prevent your phone service Internet from connecting.

If you want to get the Internet on your smartphone while driving, you need to disconnect the Vacron's WiFi in your phone's settings or pull out the WiFi dongle from the Vacron and your phone's Internet connection will become available.

VACRON PLAYER ANOMALY

This note is for people who have their smartphones connecting by Bluetooth to their car sound systems. My iPhone automatically connects to my car's audio system and I found that the Vacron Player would hang, stutter and sometimes not even show any video. Then I discovered the reason.

It seems that Vacron Player needs to receive the audio stream from the Vacron black box recorder as well as the video. If the smartphone is sending its audio stream to the vehicle via Bluetooth, then the Vacron Player will hang and stutter. If you are in that situation, just ensure that your smartphone's audio is selected to stay with the smartphone and not be connected to Bluetooth and you should get a nice steady video and audio stream from your Vacron to Vacron Player.

Of course you don't have to run Vacron Player all the time. It is useful for setting up or checking the Vacron black box recorder, but I find that I only run it occasionally just to keep an eye on the system and make sure that everything is working. But I have found that even when my iPhone's audio is switched from Bluetooth to the iPhone, I can still make and receive phone calls via the car's Bluetooth hands-free system and that is important.