

GTA V Autodrive V8.0.x Guide

Table of contents

1. Terms of use
2. Description
3. Installation
 1. Installation guide for dummies
4. How to use this mod
 1. The driving styles explained
 2. Fine tuning the speed
 3. How to use the helicopter autopilot and autoland
 1. Special helipads
 4. How to use the gun/turret on the Karin Technical, the Insurgent pickup and the Valkyrie helicopter.
 5. Using VAutodrive with airplanes
 1. Supported airports/airfields and runways
 2. Blip map with final approach points and helipads
 6. Using VAutodrive with Blimps
 7. Using VAutodrive with VTOL aircrafts
 8. Using VAutodrive with boats and submersibles
 9. Using VAutodrive on foot
 10. Special vehicles (Deluxo, Stromberg)
5. Configuration
 1. The key bindings sub-menu
 1. How to change a key binding
6. What car types got to do with driving behavior and route calculation
7. Nav mesh? What it is and why you should know about it
 1. Known flaws in the Nav-mesh
8. FAQ
9. Troubleshooting
10. Keyboard quick reference
11. Credits

1. Terms of use

This mod is provided as is. Use it, share it among your friends but do not repost it as your own work! Modifications to the code need my approval.

2. Description

This mod has a long development history already as it all began with GTA IV. The GTA V version is a migration and has undergone several improvements.

VAutodrive (say “Five Autodrive”) equips vehicles with an autopilot. No need to press and hold keys for minutes in order to drive. Enjoy the view and your dinner with your hands free.

- Simply set a waypoint, enter a vehicle and press J. This mod does the rest for you. You can change the waypoint at any time. VAutodrive will recognize it immediately. Note: USING VAUTODRIVE WITH AN AIRPLANE IS A BIT MORE COMPLEX! Please read the section “How to use VAutodrive with airplanes” and also the sub-sections.
- Set no waypoint and you will be cruising around aimlessly (does not count towards airplanes and helicopters!)
- Works with cars, motorbikes, bicycles, boats, helicopters, Blimps, airplanes, VTOL aircrafts and on foot.
- Select any of several speed presets with a simple keystroke
- fine tune the speed up and down
- Select from 4 different driving styles, from obeying all traffic laws to reckless and change them anytime during the ride.
- Let your character do the driving or have a driver spawned.
- You can work the gun of the Insurgent, the Karin technical or the Valkyrie helicopter while a driver gets you to a waypoint.
- You can make other vehicles (with drivers in them) flee from you. That way you can resolve traffic jams. This also works when the autopilot is off.
- Automatically let VAutodrive kill enemies around you because you can't shoot while your character has the driving task. This feature can be turned off and your character can shoot if he is a passenger anyway (driver spawned).
- Call vehicle movers who drive abandoned vehicles away (for example when you drive a big vehicle through a narrow street with a lot of parked cars). This also works if the autopilot is off.
- All configurable parameters can be changed via an in-game menu (Press Ctrl+Shift+M to open the menu. **Don't forget to install NativeUI.dll!**).
- All key bindings are completely customizable.

3. Installation

This mod gets updated as soon as the game gets updated and a new version of the Scripthook is released (if necessary).

1. If not already installed you must install the following components:

- [ScriptHookVDotNet](#) (please follow his installation instructions)
- Alexander Blade's [Scripthook V](#)
- Guad's [NativeUI](#) (also contained in this download)
- [Microsoft .net Framework 4.5.2](#) (or above)
- [Visual C++ Redistributable Packages for Visual Studio 2015](#)

Please make sure you always use the latest versions or you may encounter bugs due to incompatibility with my mod.

2. Copy Alexander Blade's ScriptHookV into the main folder of your GTA V installation.

3. Copy **VAutodrive.dll**, **VCommonFunctions.dll** and **NativeUI.dll** into the Scripts folder of your GTA V installation. In case there is no Scripts folder then simply create it.

3.1 Installation guide for dummies

I won't explain how to install the other components. They come along with their own instructions, so read them.

1. Unpack the rar file.

2. Open the installation path of GTA V.

C:\Program Files\Rockstar Games\Grand Theft Auto V (probably different if you installed via Steam, I don't know).

3. Look for a folder called "scripts". Create it if it's not there (do you need help in creating a folder? Please refer to the Windows Help).

4. Open the scripts folder

6. Copy **VAutodrive.dll**, **VCommonFunctions.dll** and **NativeUI.dll** into the scripts folder.

3.2. Note for users updating from a previous version

The configuration files get automatically updated with new parameters but your modified settings will be reset to the default values. Please reconfigure.

Please continue on the next page.

4. How to use this mod

Just set a waypoint as usual, be in any vehicle and press **J**. VAutodrive will now get you to the desired destination.

Or set no waypoint and either press **J**. VAutodrive randomly cruises around in this case.

In both modes you can switch between 8 different speed settings (0, 15, 25, 35, 50, 60, 95, 120 mph (150 mph in helicopters) by just pressing either the **arrow right** key to accelerate or the **arrow left** key to decelerate. Some people asked me why the max speed preset for ground vehicles is 120mph. The simple answer is that this mod utilizes the AI vehicle handling and this has a limit at 120mph (for some supercars, others go up to 95mph only) no matter if you can manually drive even with 250mph.

NOTE: The keys mentioned here are the default keys. You can change them in the menu (see section "Configuration" for further information).

NOTES:

The ride starts at 25Mph target speed in a car, bike, Blimp or boat and at 60mph in a helicopter if the vehicle is not moving. However, the autopilot will choose the speed preset which is closest to the current speed if the vehicle moves when you start the autopilot. Example: You drive manually with 48mph and kick in the autopilot. It will take the 50mph preset then. If you drive with 200mph and start the autopilot, it will choose the 120mph (in a ground vehicle, 150mph in a helicopter) as this is the maximum AI speed.

Once you have reached the destination in either a ground vehicle or a boat, the driver will stop and leave and you are warped back onto the driver seat (if you have chosen to set "always drive yourself" to false, that is). In case your character drives himself, the ground vehicle will stop and you see a message "Autopilot disengaged". You have full control over the vehicle again.

The maximum speed preset of 120mph is a limit of the AI code of the game. Even that speed can only be reached by some supercars (even though you can drive faster with others. With most vehicles you will face an engine cut at about 95mph. This is not a bug of VAutodrive but a limit set by the game.

A helicopter will stop mid-air and hover over the destination. You can then decide whether

- to land (press the TriggerLanding key (default is L)
- choose a new waypoint (the chopper will automatically start flying again)
- or to take over control (press the ToggleAutopilot key in this case, default is J)

An airplane will fly circles around the destination. Please read the section “*How to use VAutodrive with airplanes*” for further instructions.

4.1 The driving styles explained

VAutodrive provides four different driving styles for ground vehicles. The default keys for changing the driving style are **Shift+Arrow left** (less aggressive) and **Shift+Arrow right** (more aggressive). Here is what they do.

- **Normal:** Stops at traffic lights, peds and vehicles. Avoids dirt roads if no off-roader.
- **Rushed:** Ignores traffic lights, tries to avoid peds and vehicles but stops if there is not enough space to get passed. Takes shortcuts on dirt roads.
- **AvoidTrafficExtremely:** Ignores traffic lights, tries to avoid peds and vehicles but does not stop. Will crash in case of insufficient space (what else? No magic here). Takes shortcuts on dirt roads.
Note: This driving style does not work on all motorbikes and bicycles. I haven't tested each one, so here are just some examples: Works on Vindicator and Thrust. Does not work on Police bike and Western Sovereign. I have yet to find out what causes this misbehavior but I guess I'll find the answer in the handling.meta. Please contact me if you know the solution.
- **Reckless:** This is a special mode and recommended only for tanks and other heavy vehicles because this driving style ignores everything and everyone. You will run over peds and other vehicles with no mercy.

4.2 Fine tuning the speed

You are not bound to those few speed presets. You can fine tune the desired speed up and down in steps of 5mph by either pressing the SpeedUpFine key (default is **Ctrl+Arrow right**) or the SlowDownFine key (default is **Ctrl+Arrow left**). You can use the fine tuning on ground vehicles and on boats.

4.3 How to use the helicopter autopilot and auto-landing

Just sit in a helicopter, set a waypoint at a decent location and press J. That's all! Now you can lean back and enjoy the flight (but you can also change the speed presets). Once you reached the target you will see a message and you can press L to trigger the auto-landing. NOTE: The optimal approach speed preset is 60MPH. You can now also autoland a helicopter at the current position (if appropriate) with no waypoint set. If, however, the helicopter just hovers after you pressed the Autoland key, it is because of an inappropriate place. Make sure the spot under your chopper is suitable.

Special note regarding helicopters with retractable gears: Gears get retracted automatically shortly after takeoff. You cannot work them as long as the autopilot is active but they get automatically deployed once you trigger autoland.

What to do once on a helipad high up on the rooftop of Lombank west (for example)? Get Teleportals: <https://www.gta5-mods.com/scripts/teleportals>

4.3.1 Special helipads

You can toggle a blip map with some suitable helipads by pressing the ToggleBlipMap key (default is **Ctrl+Shift+A**). Set a waypoint on any of those blips and you can make, for example, a safe landing on the roof top of the Maze Bank tower. Please note that these special helipad blips contain additional information for the autoland feature, like the heading. That means, if you press the Autoland key, the helicopter will turn towards a predefined heading before the descent. This is most important on the yacht. You may arrive from any direction and the helicopter will turn to a heading alongside the yacht, which makes for the best placement.

Please read for proper usage: The special information is taken whenever you engage the autopilot or when you changed the waypoint onto any of those helipads. So in order to make these data available the helipad blip map must be on in these cases but it can be turned off right after that.

New since V6.10: The helipads are now persisted in an XML file which you can edit. This file is automatically generated in Documents\Rockstar Games\GTA V\ModSettings when you activate the helipad blip map for the first time. On the next page is an excerpt of this file.

This is how the file looks like. It is far bigger than what you see here but this should be sufficient to explain. Each helipad consists of a `BlipDecoratorPersistableData` container. In order to add a new helipad, go to the bottom of this file and copy any `BlipDecoratorPersistableData` container and paste it at the bottom **above** the `</ArrayOfBlipDecoratorPersistableData>` line. The `Heading` item tells autoland in which direction to turn the helicopter before the decent onto the helipad. This is important in narrow spaces (i.e. the Yacht). All other items are pretty self-explanatory.

```
<ArrayOfBlipDecoratorPersistableData xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.datacontract.org/2004/07/VAutodrive">
  <BlipDecoratorPersistableData>
    <Heading>73</Heading>
    <Name>Helipad Yacht</Name>
    <X>-2043.92627</X>
    <Y>-1031.57312</Y>
    <Z>11.9807119</Z>
  </BlipDecoratorPersistableData>
  <BlipDecoratorPersistableData>
    <Heading>103</Heading>
    <Name>Helipad Aircraft carrier</Name>
    <X>3057.335</X>
    <Y>-4647.868</Y>
    <Z>15.2614336</Z>
  </BlipDecoratorPersistableData>
  ...
</ArrayOfBlipDecoratorPersistableData>
```


4.4 How to use the gun/turret on the Karin Technical, the Insurgent pickup and the Valkyrie helicopter.

- Open the menu by pressing **Ctrl+Shift+M**
- Change AlwaysDriveYourself to false. This will spawn a driver when you activate the autopilot.
- You can change WarpPlayerBack to false but that's not a must. Having this on false just prevents that your character is warped back to the driver seat once you dismiss the driver. So you can keep standing at the gun.
- Set a waypoint (or not if you want to get cruised randomly) and press J. You can't cruise aimlessly with a helicopter though.
- Press **Shift+J** to change from the passenger seat to the gun. However, Shift+J cycles through the seats, so you need to repeat that until you are on the desired one.

4.5 Using VAutodrive with airplanes (except VTOL aircrafts, see the VTOL aircrafts section for further information)

First off, you can't just sit in an airplane and press the ToggleAutopilot key. Well you can actually but as long as you are on the ground, this mod considers you want to taxi. Taxiing is a word from the avionics jargon and means "rolling on ground". Pilots taxi their aircraft from a hangar or terminal to a designated runway and vice versa. So how does flying an airplane with VAutodrive actually work?

1. Set a waypoint to a runway start point.
2. Taxi from your current position to a runway start point. You can use VAutodrive for this task.
3. Once arrived at the runway, toggle the approach points blip map by pressing the ToggleBlipMap key (default is **Ctrl+Shift+A**).
4. Switch to map view. You will see blue crosshairs at certain points. Those are approach points. Each approach point is for a certain runway. The blip list at the right shows you which runway is designated for each approach point by its name.



5. Now comes a tricky part. It's not recommended to set a waypoint at any of these approach points at this point in time (you will need it later though), because you need to approach in a decent angle. However, seeing where your desired approach point is, helps you with the following decision. Let's say you want to land at Sandy Shores Rwy 08R. 08 means the heading, so this runway points from west to east. If you come from the east though, autoland would need several attempts to get your plane into the right position and heading.
6. Here is what to do: First set a waypoint WEST of this approach point, so you will end up with your airplane, the approach point and the runway in a more or less straight line.

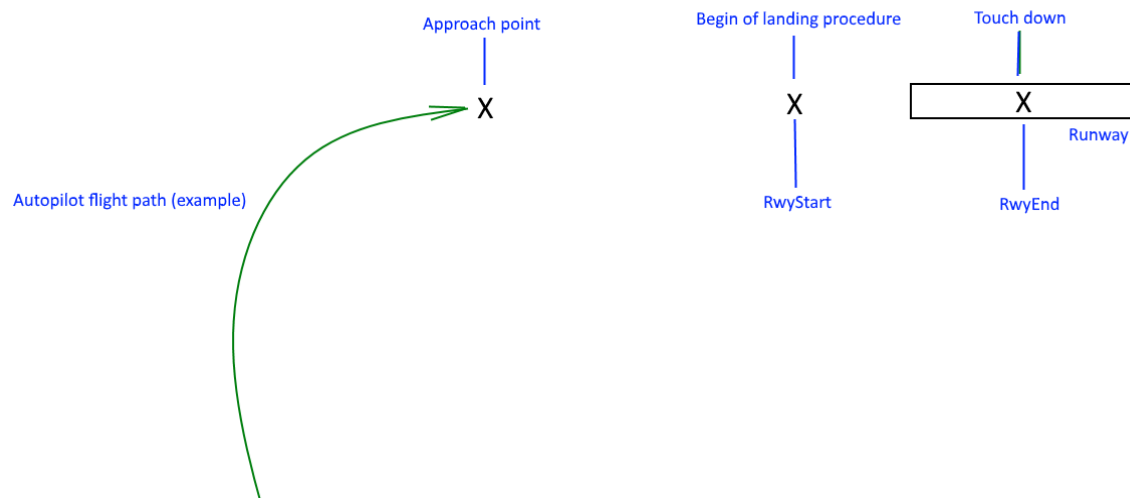


7. Take off **manually**!
8. Once you reached a safe distance from the ground, retract the gears and press the ToggleAutopilot key.
9. Next comes the landing procedure. Do NOT set a waypoint at the beginning of a runway. You must think like a real aircraft pilot here. You need a point for your final approach because the airplane needs some space for the landing procedure.
 - a. Activate the approach point blip map by pressing the ToggleBlipMap key (default is Ctrl+Shift+A).
 - b. Set a waypoint on the approach point for the runway you wish to land on. An autoland request without having a waypoint set on any of the approach points will be rejected and you will see a message *"No approach point selected!"* instead.
 - c. Once you are near the final approach point, press the autoland key (default is L).

Here is a video which demonstrates this procedure:

<https://www.youtube.com/watch?v=f2xoZqSoy9I>

And here is a little drawing because a picture tells more than 1000 words.

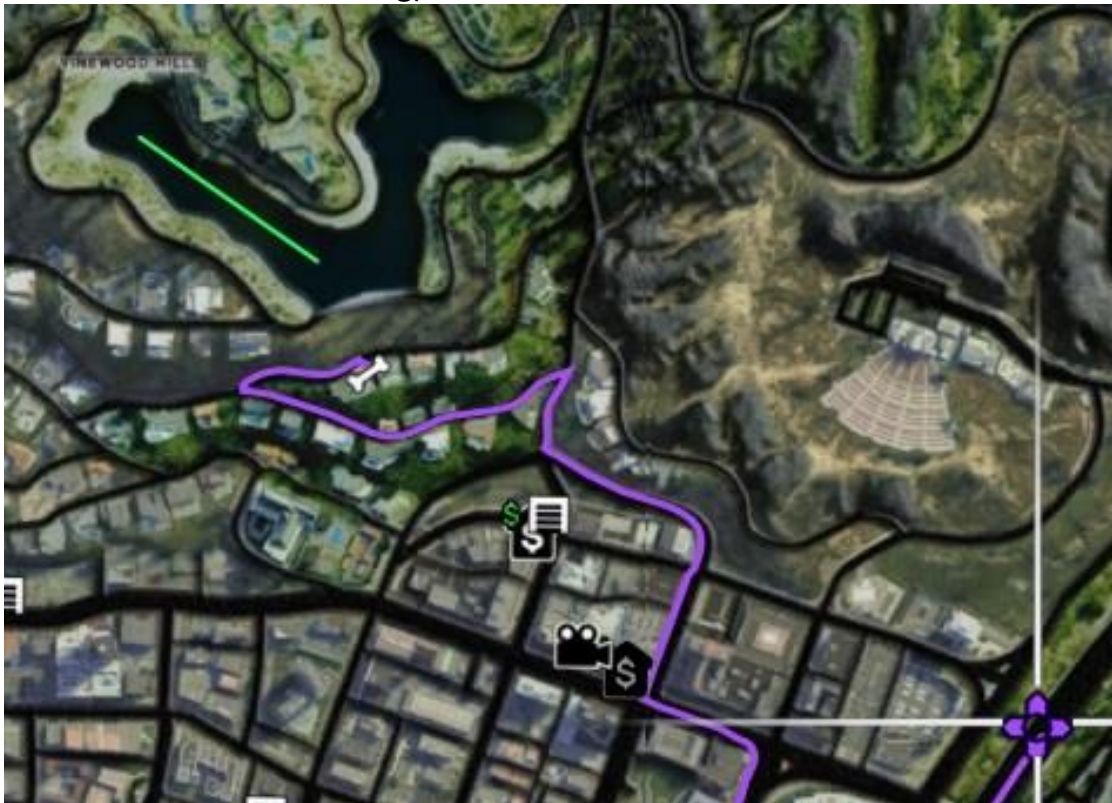


Keep in mind: The bigger and faster the plane is, the wider the green curve gets. Take this into account when you plan your approach.

4.5.1 Supported airports/airfields and runways

NOTE: V6.9.0 introduced approach point for all Runways, even the aircraft carrier (you need the OpenAllInteriors mod for the aircraft carrier). Additionally I have implemented one invisible extra runway.

Lake Vinewood water landing strip (the waypoint is on the final approach point even though the approach points blip map is deactivated in this picture). Note: You can land from the southeast only because the topography in the northwest is not suited for a safe landing)



4.5.2 Blip map with final approach points and helipads

As you can see, there are two different kinds of blips. The upper one is a final approach point for aircrafts and the lower one is a suggested helicopter landing spot. They differ visually, so you can see immediately which is a final approach point and which is a helipad. Note, the text boxes you see in this picture have been added for better understanding. They do not appear in the game.

You can toggle this blip map by pressing Ctrl+Shift+A (can be configured in the mod menu).

Important note: You can activate the helipads blip map only if you are currently sitting in any helicopter!

You can activate the approach points blip map only if you are currently sitting in any airplane!

However, both are triggered with the same key.



4.6. Using VAutodrive with Blimps

The autopilot for Blimps works in the very same way as for helicopters, except it has no Autoland feature. This feature is not yet implemented simply due to the fact that no native function for this has been found yet.

You can change the speed presets in the very same way as in cars.

NOTE: Optimal approach speed preset is 50MPH.

4.7. Using VAutodrive with VTOL aircrafts

VTOL aircrafts are a very special kind of vehicle and no appropriate native function for this has yet been found. So VAutodrive can provide only very basic functionality, which is you take off manually and press J. The VTOL will fly in terrain following mode to the target. Please disengage the autopilot shortly before you arrive and press E to turn the exhaust nozzles to the vertical position.

You can change the speed presets in the very same way as in cars.

4.8. Using VAutodrive with Boats and submersibles

Simply set a waypoint, press J and off you go. You can change the speed presets in the very same way as in cars.

New since V8.0.0: While in a submersible you can change whether to swim at surface level or to a target depth. The maximum depth is -150 meters to prevent hull breach.

4.9. Using VAutodrive on foot

You can either just walk around aimlessly (don't set a waypoint), go to a waypoint or to your last vehicle. If you don't set a waypoint you will be asked if you want to wander around or go to your vehicle (if you had one). You will see a textbox popping up in the upper left corner of the screen, asking you if you want to wander around (w-key) or go to your vehicle (c-key). Of course you will not see this option if your vehicle doesn't exist.

This option is new since V6.14.0. I have added this feature for two reasons.

The vehicle might be too close for a waypoint. For example you are down at a subway station and your vehicle is right above you on a parking place.

You don't know where your vehicle is (no blip). VAutodrive finds it for you.

4.10. Special vehicles (Deluxo, Stromberg)

The Deluxo and the Stromberg are very special vehicles and since these are not driven by NPCs while in their special state, there seems to be no native function for doing so. Of course you can use the autopilot while they are in the car state but VAutodrive provide only very basic functionality while the Deluxo is in glide mode or the Stromberg is in submersible mode.

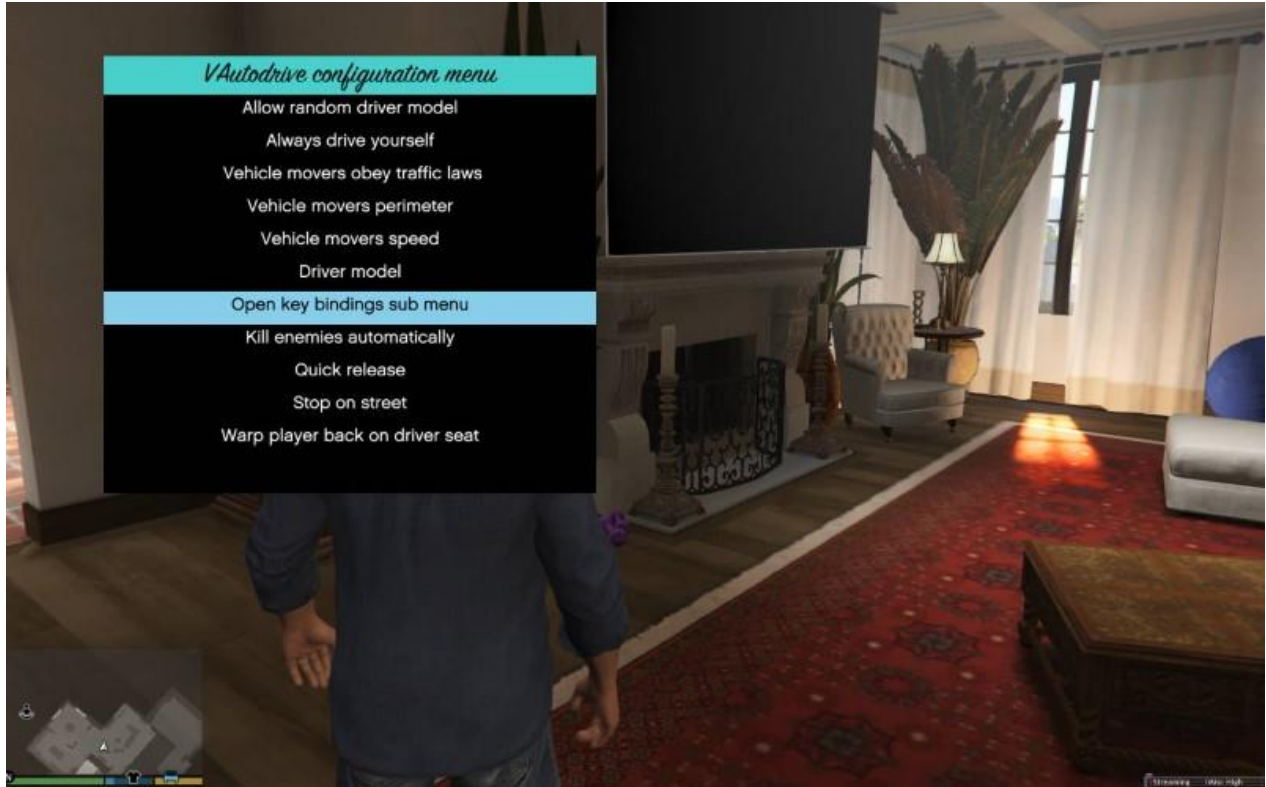
What you can do: In either vehicle do not use a driver because in the Deluxo you need to do the steering and pitch control by yourself.

The Stromberg auto-steers but you have no pitch control. So I would recommend the autopilot only with lots of space beneath.

Please continue on the next page.

5. Configuration

Open the configuration menu by pressing Ctrl+Shift+M and you will see this (this screenshot is from an older version which looks slightly different):



You can scroll down with the arrow down key, scroll up with arrow up key and change a value by hitting Return or Enter. The change will be displayed at the bottom of the screen. In case of a boolean value (**true** or **false**) this change will happen immediately and also being saved right away. In case you need to enter a number or a string (like the driver model) an input line will appear where you enter the desired value.

You can close the menu by either pressing BACKSPACE or ESCAPE.

The various settings explained:

AllowRandomDriverModel: The default is a random driver model. However, you will get a police officer spawned when you are in a police vehicle, a bus driver when you are in a bus and so on. Setting this option to false will spawn a static driver model which is defined in the **DriverModel** setting. Default is **true**.

AlwaysDriveYourself: You can choose to either let your character drive himself (**true**) or have a driver spawned (**false**). Default is **true**.

DriverModel: This is the model that gets spawned as a driver. Default is **ig_tonya** but you can change this to any valid ped model name.

NOTE: Changing the driver model is not allowed while the autopilot is engaged.

Here is a list of all model names: <http://www.nextgenupdate.com/forums/gta-5-mods/725735-full-npcs-ped-models-characters-list-case-you-need-p.html>

Thanks to Krank for making this list and to MStefan99 for finding it for me.

Invisible Driver: Set this to true if you want the illusion of a driverless car. You will be placed on a passenger seat though. This option works only with a random driver model because I think if you set a specific driver model, you want to see it.

Kill enemies automatically: Alas it's not possible to shoot while your character has the driving task (but you can with a driver spawned). This is simply because the game allows only one task at a time to be executed. So your character can either drive or shoot but not both at the same time. Default is **true**.



The picture above is taken from a presentation video I made. You can watch it here:

<https://www.youtube.com/watch?v=XKLLt9h0c9o>

Open key bindings sub menu: This opens another menu where you can set any of the key bindings, even the one for opening the menu. I will come back to this later but first let's continue with the remaining settings.

Quick release: This defines whether you are able to can disengage the autopilot immediately by pressing any of the movement keys (W, A, S, D, Q, Space) or not. It's a matter of taste what's better so I made this optional. Set this option to **true** if you want quick release to be enabled. Default is **false**.

StopOnStreet: Determines whether the vehicle chooses the next position on street for a stop or the exact waypoint location (if this is somewhere off the street). Be aware that having this option on false may cause undesired behavior if the waypoint is set on an inaccessible location. You may face driving in a straight line or no driving at all. This indicates a bad waypoint location. Choose another location and try again. Default is false.

Vehicle movers obey traffic laws: You can call vehicle movers by pressing Shift+M. They spawn on the driver seat of every abandoned vehicle inside the vehicle movers perimeter and drive them away. No worries, the last vehicle you have been in is excluded. Default is **true**.

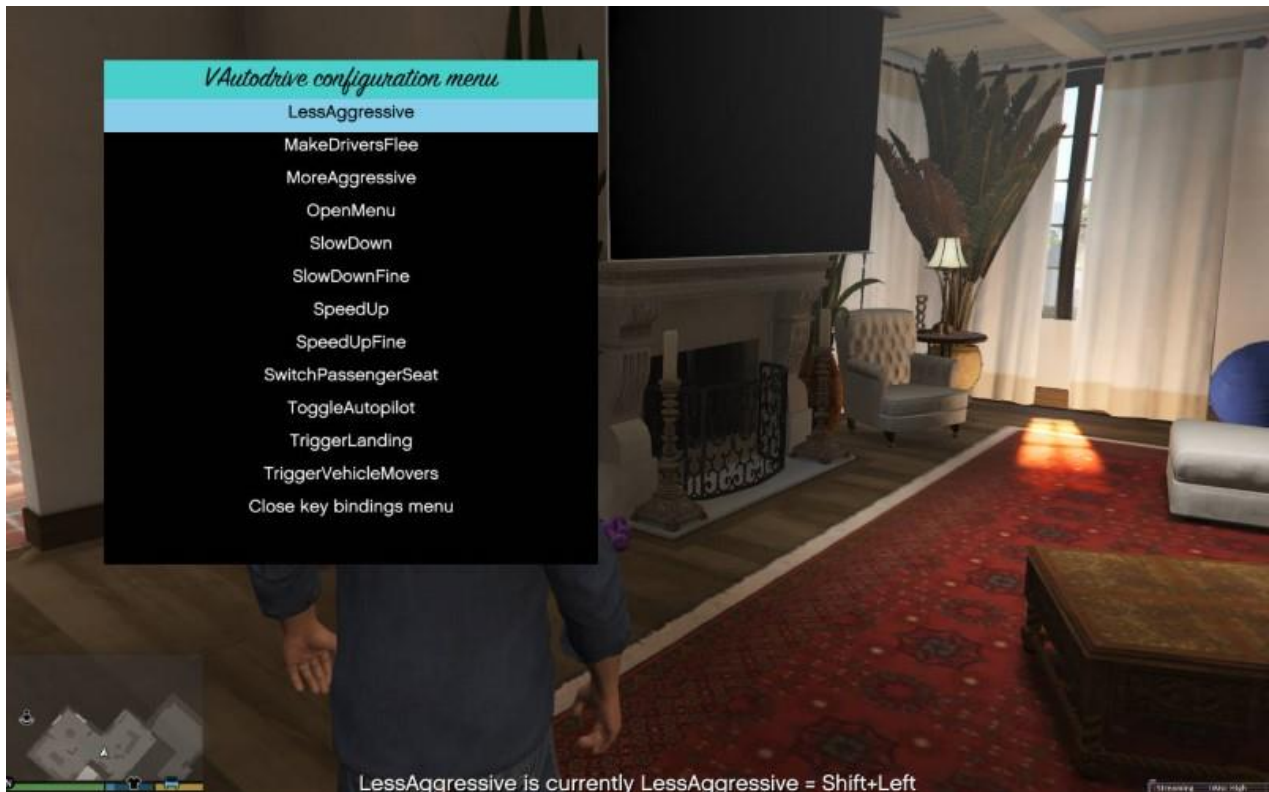
Vehicle moves perimeter: This is the radius in meter in which vehicle movers will spawn. Default is 50.

Vehicle movers speed: This setting defines how fast the vehicle movers will drive. Default is 30.

Warp player back on driver seat: Usually, when you have chosen to get a driver spawned, your character will be warped back onto the driver seta once the driver has left. Setting this option to **false** keeps your character where he currently is. This is useful if you are standing at the gun of the Karin Technical, the insurgent or the Valkyrie helicopter. Default is **true**.



5.1 The key bindings sub-menu



ChangeSubLevel1: This is key is for submersibles only and lets you set whether to swim at surface level or to a target depth. Note: The maximum depth is -150 meters to prevent hull breach.

LessAggressive: This is the key definition for a more obeying driving style. Default is Shift+ArrowLeft.

MakeDriversFlee: This is the key definition that causes other drivers to flee from you. Default is M.

MoreAggressive: This is the key definition for a more aggressive driving style. Default is Shift+ArrowRight.

OpenMenu: Opens the configuration menu. Default is Ctrl+Shift+M.

SlowDown: Key definition for a slower speed preset. Default is ArrowLeft.

SlowDownFine: Key definition for fine tuning to a slower speed. Default is Ctrl+ArrowLeft.

SpeedUp: Key definition for a higher speed preset. Default is ArrowRight.

SpeedUpFine: Key definition for fine tuning to a higher speed. Default is Ctrl+ArrowRight.

SwitchPassengerSeat: Key definition for switching onto another passenger seat while someone else drives you around. Default is Shift+J.

ToggleAutopilot: Key definition for starting and stopping autodrive. Default is J.

ToggleBlipMap: Key definition for toggling the blip map with final approach points and helipads. Default is Ctrl+Shift+A.

TriggerLanding: Key definition for autoland of Helicopters and airplanes. Default is L.

TriggerVehicleMovers: Key definition for calling vehicle movers. Default is Shift+M.

Close key bindings menu: This closes the key bindings sub-menu and gets you back to the main menu. You can also press the BACKSPACE key. It has the very same effect.

5.1.1. How to change a key binding

1. Open the menu by pressing Ctrl+Shift+M
2. Scroll down to "Key bindings sub menu" and press enter.
3. Scroll down to "ToggleAutopilot" and press enter.
4. Look at the very bottom of the screen. A message asks you to enter the new desired key now.
5. Enter the desired key or key combination (like any key combined with shift, alt and/or Ctrl, except for Escape, Backspace, Insert and Return/Enter).
6. Done

NOTE: In case you accidentally assign a key which is already used for a different function, you will get a notification telling you which function it conflicts with and the change gets rejected.

This feature is new since V6.8.0, so it is possible you have conflicting key bindings from prior versions. VAutodrive checks for the key bindings integrity with each start of the game or restart of ScriptHookVDotNet. You will be notified in case of a key bindings conflict.

6. What car types got to do with driving behavior and route calculation

So you have set a waypoint and start the autopilot but your car follows a route different from the drawn one. This is no bug but a feature which the developers at Rockstar Games implemented. Have you ever seen a truck or a bus driving through the steep and narrow roads of Vinewood? At least in an unmodded (is that a valid word?) game you wouldn't. The same goes for off-road tracks. Only off-road vehicles will take that way. All others will prefer asphalt streets if possible. So this happens by design.

Another remarkable fact to know is that motorbike is not equals motorbike. With some of them you will find the AvoidTrafficExtremely driving style is unbearable because the driver will mostly bump into other cars in front of you. Not so with the Police bike. Maybe there are other motorbikes with the same behavior as well. I haven't tested them all.

7. Nav mesh? What it is and why you should know about it

This section is important for a better understanding why you possibly face some undesired driving behavior sometimes and what to do against it.

There is an invisible mesh all over the map of San Andreas. It has myriads of knots and lines connecting these knots. This is used by the game to calculate the route from your current location to the target.

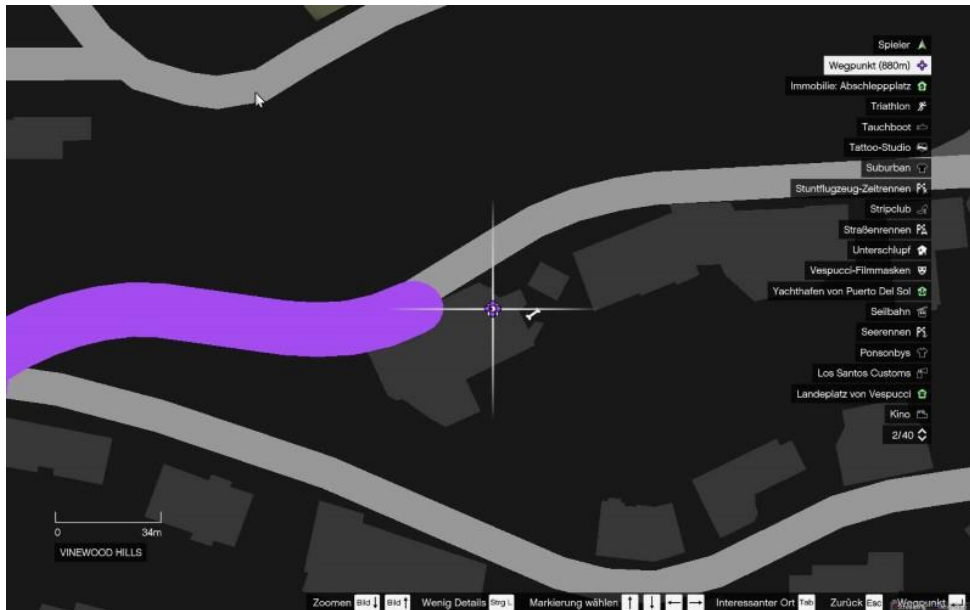
All over the map? No, unfortunately it has some holes and flaws. Take the trekking path around Mount Gordo for instance. The whole Mount Gordo area down to the camp site in the southeast is not covered by the nav mesh. So what happens if you either are there and want to get to somewhere else or if you set a waypoint somewhere on the trekking path, the autopilot refuses to do anything. This is because no route can be calculated.

Another example is right in front of Franklin's house. Be anywhere and set a waypoint to that location. Now either of three possible things can happen.

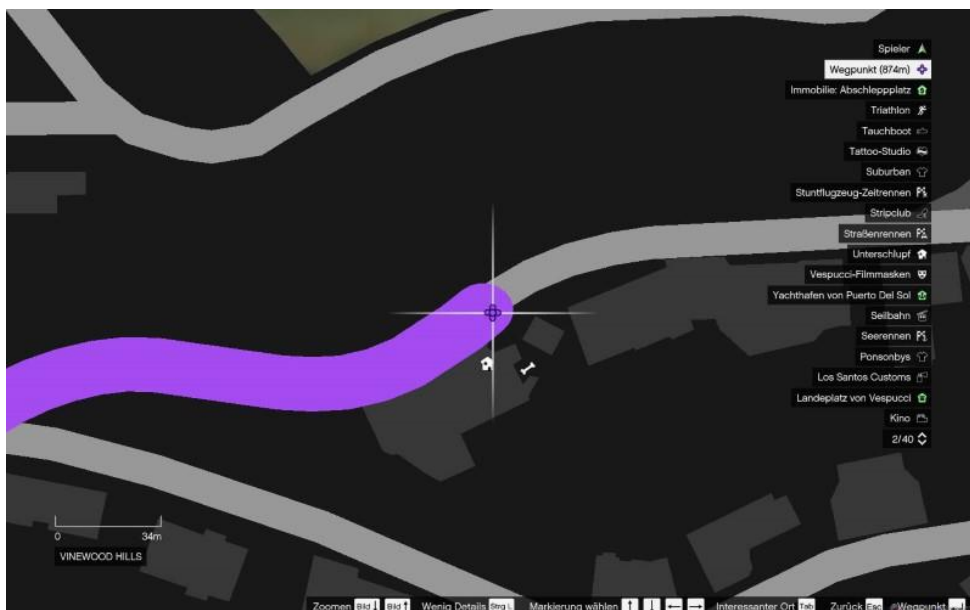
1. You get there as expected.
2. The autopilot takes the parallel street below and then heads on further to the target.
3. You end up on the parallel street below and then the autopilot tries to drive uphill to the waypoint in a straight line.

Small changes to the waypoint can have a great effect though.

In the picture below the route cannot be calculated because the waypoint is inside a building.



This one may cause the aforementioned issues.



The solution is shown on the next page.

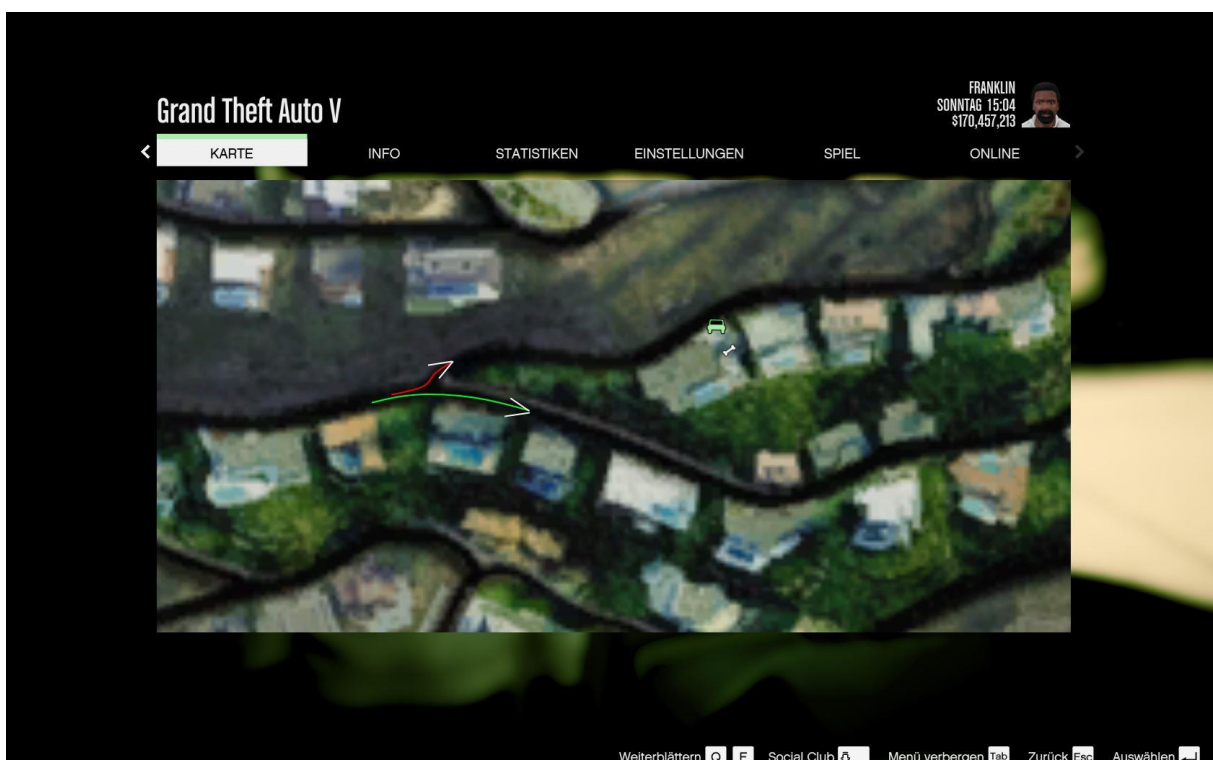
Here I made just a small change (moved the waypoint to the opposite side of the street) but it gets you to the target.



7.1 Known flaws in the Nav-mesh

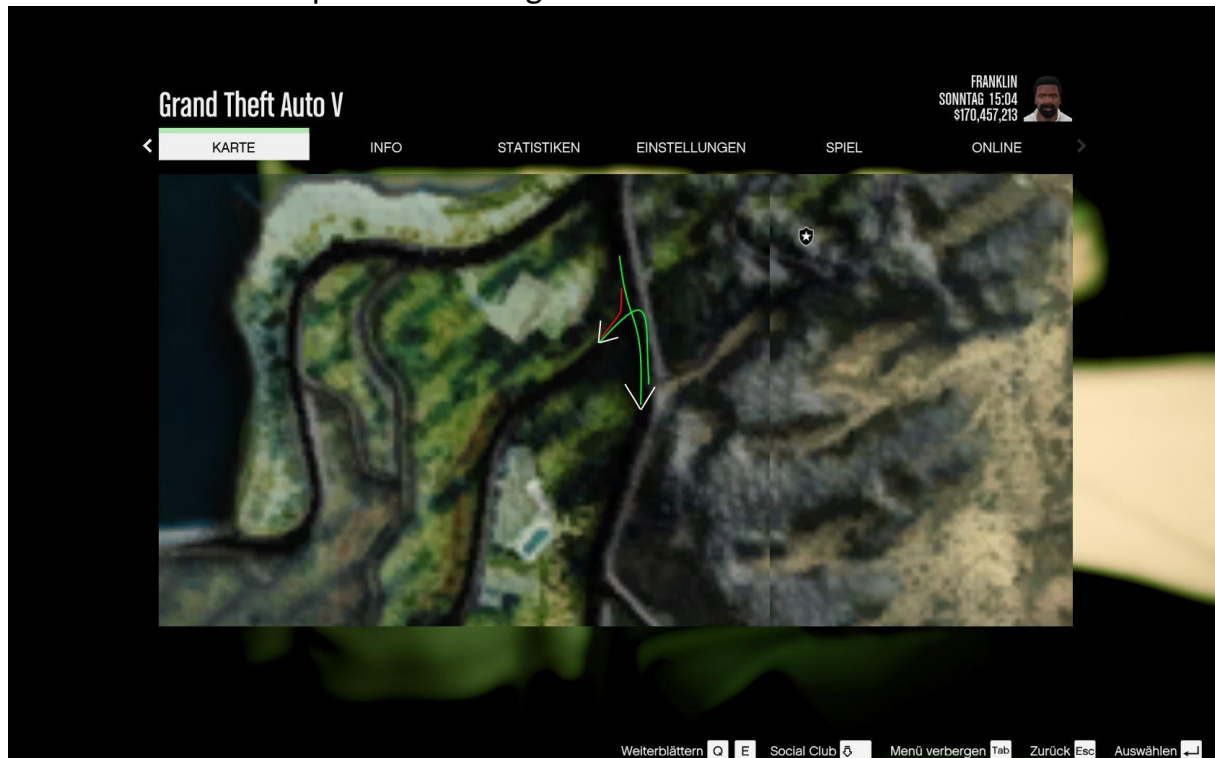
West entry of Franklin's road

In case you want to drive to Franklin's home, I suggest you shut down the autopilot shortly before this, turn left to Franklin's road and kick in the autopilot again.



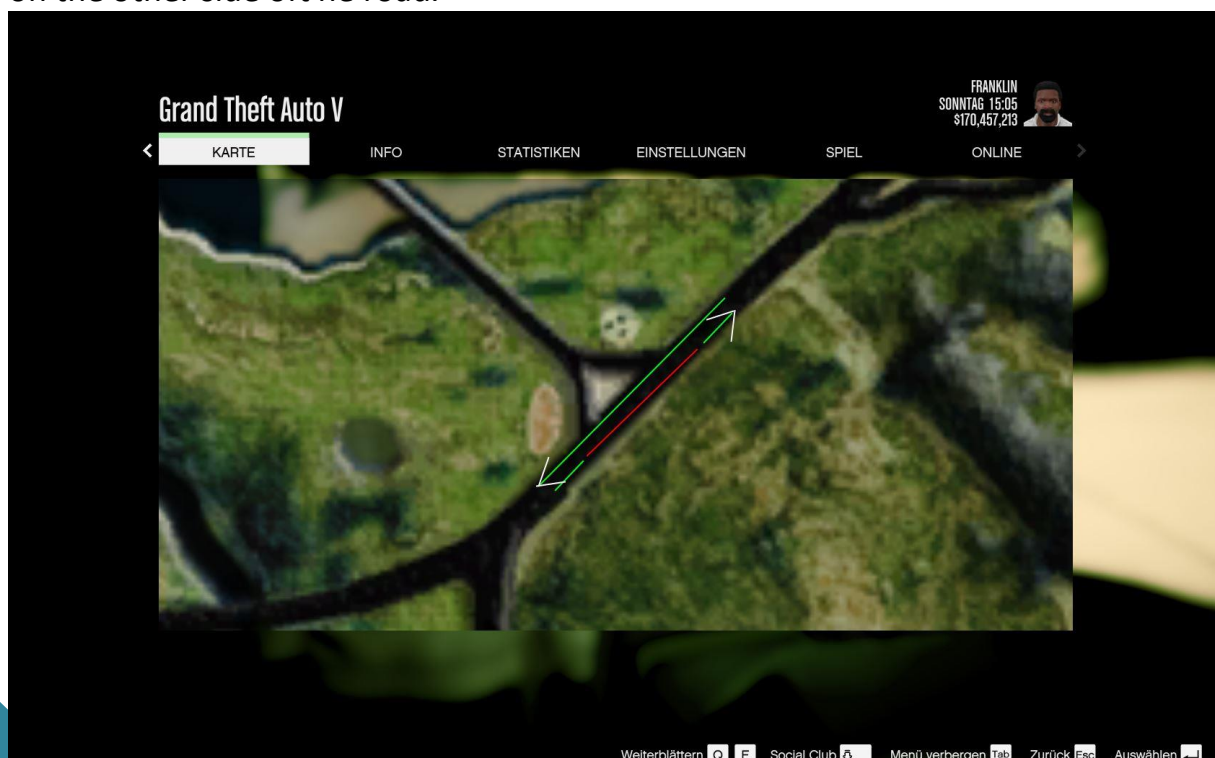
East entry of Franklin's road

No problem if you arrive from the south but if you come downhill, the autopilot will most likely not turn into Franklin's road. Again, make the turn manually and then switch the autopilot back on again.



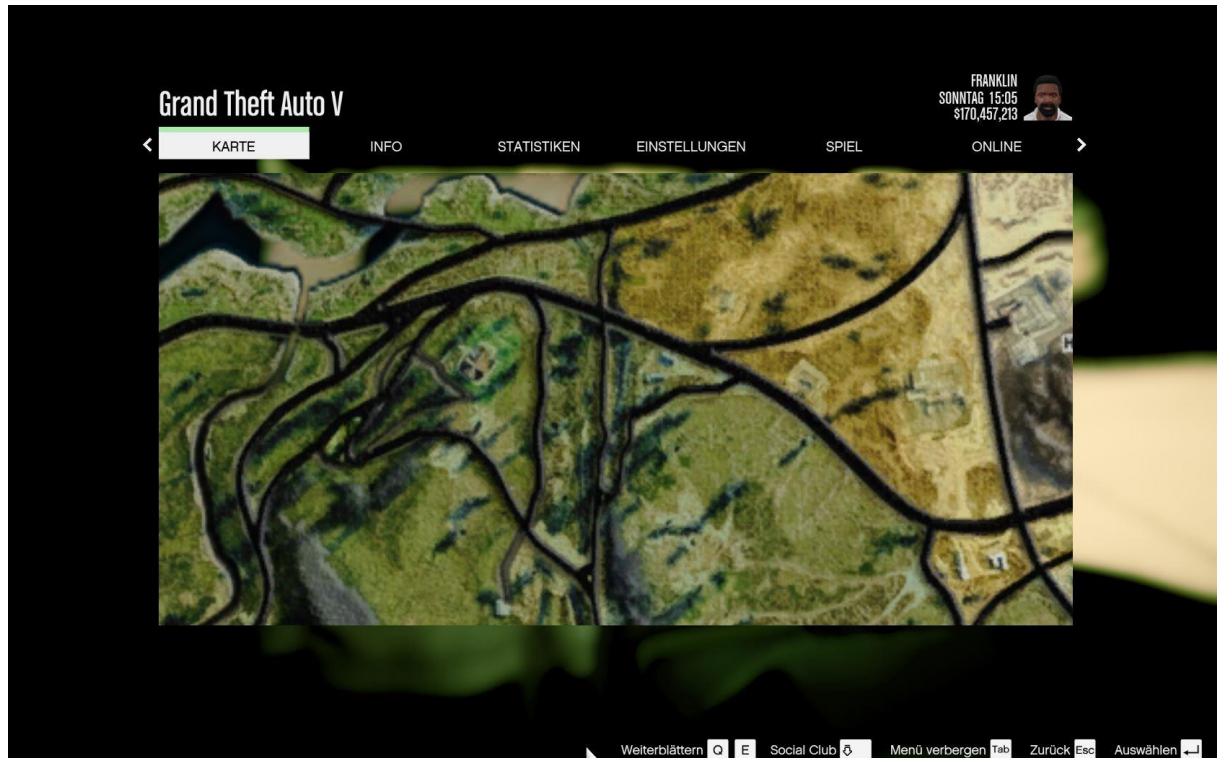
Gap at Fort Zancudo entry

All is well if you come from the east but there seems to be a gap in the Nav mesh on the other side of the road.



This whole **area west of Sandy shores**

A whole bunch of intersections seems to be the issue here.



8. FAQ

Q: What's the difference between driving and cruising?

A: Driving means you drive to a waypoint. Cruising means you drive around with no destination.

Q: why is the max speed preset for ground vehicles 120mph? I have a modded handling.meta and I can drive the Adder up to 250mph!

A: The simple answer is that this mod utilizes the AI vehicle handling and this has a limit at 120mph no matter if you can manually drive much faster.

Q: The driver almost always crashes into something when he drives on high speed!

A: Of course he does! This is no magic spell. VAutodrive follows the laws of physics and uses the game's AI. You can't expect to race through the rush hour with 100mph without a single scratch.

Q: My player character will be warped onto a free passenger seat when the driver gets spawned but what if there is no free passenger seat?

A: Your character gets the driving task.

Q: Can my personal driver ride a boat?

A: Yes but the nav mesh on water is full of flaws. You will eventually get to your target but don't wonder if it's not in a smooth way.

Q: What happens if I change the waypoint during a ride?

A: The mod recognizes it and sets it as the new destination.

Q: How can I get rid of the driver in the middle of the ride?

A: Just press the ToggleAutopilot key and you will immediately get back the control over the vehicle if a waypoint is set. In case no waypoint is set the driver will immediately stop the vehicle and leave. Your player character will be teleported back onto the driver seat (if warp player back is set to true).

Q: What happens if I leave the vehicle in the middle of a ride?

A: The driver stops immediately and leaves.

Q: I am in a helicopter and press the TriggerLanding key but the chopper doesn't land. It just hovers for a while and then I get the message "Autopilot disengaged".

A: The place you try to land at is unsuitable. The autoland feature tries its best but gives up after a while.

Q: I found a bug! When I fly with an airplane and I reach the final approach point, the plane does not land and circles around the waypoint instead.

A: That's not a bug! You need to press the Autoland key to trigger autoland!

Q: Can I use VAutodrive with a 1-seater like the police bike or with a vehicle which has no seats free?

A: VAutodrive recognizes this special case and causes your player character to take the driving task all by himself regardless of the "Always drive yourself" setting.

Q: Where does VAutodrive save its configuration?

A: The configuration file for VAutodrive will automatically be created in Documents\Rockstar Games\GTA V\ModSettings and its name is VAutodriveConfig.xml (just in case you are wondering).

Q: What happens if the configuration file gets corrupted or lost?

A: A new configuration file with default values will be created. So all your previous changes will be lost!

Q: You released a new version and suddenly all my settings are lost and I am back at the default settings!

A: This happens with so called "breaking changes". You recognize them at the major build number. That's the most left number of the version. So an update from 6.2.x to 6.3.x will not have that effect but an update from 6.x.y to 7.0.0 will. This is because the old configuration file is not compatible with the new version anymore and gets automatically replaced by a new compatible configuration file with default values.

Q: The driver suddenly leaves the vehicle while the autopilot is engaged.

A: This issue is caused by other mods which change the relationship to the player (for example any riot mod). There is no safe way to lock a relationship. The only thing I could do is to refresh the relationship every few milliseconds and additionally check whether the driver still has its task and if not, renew it. However, this would cause a remarkable performance issue. On top of this, I don't see this as my problem. It's the duty of all mod creators to take care that such problems don't arise.

There is a way to resolve this issue and that's where YOU come into play. Please ask the creator of the mod which changes relationships to skip all peds which have a player relationship of type "Respect", "Like" or "companion". Not only VAutodrive is affected by this but also very likely any bodyguard mods.

Q: When landing with an airplane I sometimes collide with AI traffic. Can you do something about it?

A: **You** can. Just press M and other AI airplanes will fly away.

9. Troubleshooting

Note: This section is subject to change and will get expanded as necessary.

Problem: I have a vehicle handling mod installed and now the engine power of several cars breaks down for a second and then they re-accelerate.

Cause: When you open the handling.meta (*you should know how to do it, you installed it*) you see that each vehicle has an <AIHandling> tag. Killatamate changed the AI handling of over 100 vehicles to CRAP for a reason unknown to me. CRAP, however, means a crap motor. Other modders might have done something similar.

Solution: Open the handling.meta with any Editor (I suggest you use one with XML syntax highlighting, you will see better.). Now open the Replace feature and replace all <AIHandling>CRAP</AIHandling> with <AIHandling>AVERAGE</AIHandling>. **IMPORTANT!** Do NOT just replace CRAP with AVERAGE because there is a vehicle named Scrap and you would rename it to SAVERAGE by doing so.

Problem: I had to press the insert key to reload scripts but I was in the middle of an autodriven ride. Now the driver keeps driving.

Cause: All scripts have been restarted and the driver got decoupled from the mod's control.

Solution: Just press the ToggleAutopilot key again. The old driver will leave and a new one will get spawned which you have full control over.

Problem: I get a warning message "Configuration could not be read. Please read the troubleshooting section in the guide." and the mod does nothing.

Cause: There is something messed up with the configuration.

Solution: Go to "Documents\Rockstar Games\GTA V\Modsettings" and delete the file VAutodriveConfig.xml.

Go back into the game and hit the INSERT key to restart the mod. This should generate a new configuration file.

Attention: This procedure resets all options to their default values.

Problem: I get a warning message "Helipads could not be read. Please read the troubleshooting section in the guide."

Cause: There is something messed up with the helipads file.

Solution: Go to "Documents\Rockstar Games\GTA V\Modsettings" and delete the file VAutodriveHelipads.xml.

Go back into the game, enter a helicopter and press the ToggleBlipMap key. This should generate a new helipads file.

Attention: You will lose all changes you have made to this file!

Problem: Cops don't drive, neither as driver in my own car nor any other police cars. The cop vehicles just stand and cannot move. Thanks to Keirona for bringing this to my attention.

Cause: a trainer mod like TrainerV or EnhancedNativeTrainer provide a "Police ignore Player" feature, which is turned on in your game.

Solution: Turn off this feature, so the police does NOT ignore you. Note, this issue has nothing to do with VAutodrive, as you can see.

Problem: I changed the ped model of the driver and now the autopilot cannot be disengaged.

Cause: Changing the ped model of the driver while the autopilot is on leads to data corruption.

Solution: Do not change the ped model of the driver while the autopilot is engaged!

10. Keyboard Quick Reference

Action	Default key
Start/stop static target navigation or cruising	J
Switch passenger seat (when a driver is spawned)	Shift+J
Switch to the next higher speed preset	Arrow right
Switch to the next lower speed preset	Arrow left
Fine-tune speed lower (- 5Mph) (only for ground vehicles)	Ctrl + Arrow left
Fine-tune speed higher (+ 5Mph) (only for ground vehicles)	Ctrl + Arrow right
Less aggressive driving style	Shift + Arrow left
More aggressive driving style	Shift + Arrow right
Call vehicle movers	Shift + M
Make other drivers flee	M
Open configuration menu	Ctrl + Shift + M
Initiate automatic helicopter/aircraft landing	L
Toggle final approach and helipad blip map	Ctrl + Shift + A
Change sub level (submersibles only)	Arrow down

11. Credits

I like to say thank you to several people who helped to make this mod real.

- Alexander Blade for his ScriptHookV,
- The developer team of ScriptHookVDotnet,
- Guad for the NativeUI framework (responsible for the menu rendering)
- Holger Piontek for testing the heck out of this mod and for helping with the revision of this guide,
- Graphicscore for helping me with some stubborn programming issues,
- Eddlm for showing me the secrets of the TASK_HELI_MISSION native function,
- All the people who were kind and helpful to me. That always gives me a motivation boost. :-)

If you feel left out then please tell me. I have become very forgetful and it has been a long way until here.

Thank you for reading this manual.

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