

UPDATED TO 25/SEPTEMBER/2000

GRAND PRIX EVOLUTION 1.62 MANUAL

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*** INSTALLATION.**

- Before installing GPE close all running applications.

Put the GPE CD in the CD-Rom drive, double-click on your CD-Rom drive icon and install the game manually by double-clicking on the setup program icon and follow the installation instructions. GPE cannot run directly from the CD, but you must have the CD correctly inserted in order to run the game. Remember also to check your DirectX7 installation!

*** CREDITS.**

Publisher *Brightstar Entertainment*

Developer *N-Side Software*

Licensed through *IncaGold do Brasil*

Programming *Fabio Canestrari*
Marco Marconi

3D Engine *3DGE by Twilight3D*

Graphics *Giacomo Borghese*
Claudio Lodi
Ranieri Panchetti
Giovanni Stilo

Music *Alex Silvi*

*** THE GAME.**

- Year 2100.

The latest Grand Prix World Championship is something different now and you are one of the drivers. You'll have the chance to drive incredibly powered vehicles, up to 200k HP. These last generation "cars" are equipped with twin turbines that can push you up to 1200 Km/h, floating on a magnetic surfaced track with sudden turns, ups and downs and tunnels. The 2100 Grand Prix Evolution Championship are located on various different locations on Earth and Moon, since the vehicles are completely closed and the pilots wear pressurized suits to sustain the incredible acceleration and g-forces during the race. Choose a team and lead it to the very top, gaining credits to buy new, more powerful engines and magnetic pods to improve your vehicle's performance. Race against the CPU driven cars with no mercy strategy making them smashing against the outer bounds of the race line and wisely choose the timings for refuelling at the automated pitstop system. Learn how to drive with the Single Race mode and then embrace the real GPE World Championship challenge against your friends!

*** DIRECTX 7.X CONFIGURATION.**

- The DirectX installation program will automatically check the DirectX7 system compatibility, if the result is positive it will ask you if you want to install the DirectX7 runtime components.

If you have the latest DirectX7 version already installed choose "NO".

If otherwise you don't have them or are unsure about this, please choose "YES"

*** DIRECTX INFORMATIONS.**

- Many programs and games under Windows95 and Windows98 uses the DirectX components, a standard runtime tool group that allow the system hardware interfacing and control. The DirectX based program utilizes the DX runtime components (the drivers) to accomplish numerous functions, from image display to audio and effects reproduction. When correctly installed and configured, these components allow the use of a single

standard interface for all these functions. If these runtime components are not correctly installed some problems may occur when executing a program.

*** REQUIREMENTS.**

- The application runs under Win95/98 and Win2000, in both full-screen and windowed mode with DirectX7.0 or greater version installed in your system.

It is necessary at least a Pentium 233Mhz or equivalent processor.

- The game runs also in software mode if a 3d graphic card is not present, but we consider a 3d graphics card mandatory since in this game is important a smooth frame rate. The graphic card, when available, must have at least 8 Mb of memory.

- The installation requires about 55 Mb of hard disk space.

*** OPTIMAL CONFIGURATION.**

- A Pentium II 400Mhz is advised and the presence of a 2nd generation 3d graphic card strongly improves the graphics quality and speed. 16 Mb of graphic card memory can dramatically speed up the game rendering performance.

*** OPTIMAL GAME SETTINGS.**

- It is recommended to set the game resolution at 1024x768, otherwise some options in the menu could be poorly displayed. A higher resolution is obviously welcome and the menu graphics will benefit from this.

- The game is optimised to run fast at high resolutions and the clipping distance should be also set at least to 800 or 1100 m.

- The default settings do not provide the best quality since they've been chosen for a minimal hardware configuration.

- At a resolution of 640x480 some text cannot be clearly read.

*** MULTIPLAYER MODE - OPTIMAL GAME SETTINGS FOR A SERVER PC.**

- With a 450Mhz processor as a server set no more than 7 vehicles and no more than 800m of clip distance. Choose the far crash camera unless you have a very fast graphics card otherwise during the explosion the frame rate will be slowed down by an intensive alpha calculation to display a big explosion; client pc will be influenced by this frame rate reduction.

- The resolution depends on the graphic card, anyway consider that the frame rate of the server strongly influences the clients performance. Tune the server so the frame rate is averagely 35 and never under 27 fps.

- For this purpose, the frame rate is displayed in the race panel in the upper left corner of the screen, below the player times.

*** MULTIPLAYER MODE - OPTIMAL GAME SETTINGS FOR A CLIENT PC.**

- The client pc settings just partially affect the network speed so chose the balance smoothness/graphics quality following your taste, since the client takes advantage from the server computing power. Note that the CD is not required for client mode, so multiplayer game can be played with only one Gpe CD.

*** MULTIPLAYER DESIGN NOTE.**

- This game is designed to run in a LAN environment with no powerful client pc. This design is called *pure client-server architecture*. Due to this design the most of the elaboration is done by the server that must be powerful and smooth enough.

*** KEY MAPPING.**

Use the **arrow keys** to move the vehicle.

Use the **'space bar'** to request pit stop and to stop the refuelling procedure.

Use the **'enter'** or **'backspace'** keys to invert direction.

Use also **'shift'** to brake if you find that **'arrow down'** is not comfortable. The effect is the same.

Secondary keys to drive the ships are:

'a/d' roll left/right

'w/s' pitch up/down.

'keypad 0' thrust down without braking.

These secondary keys are added just for completeness since it is possible to play also without them.

Press 'p' to save a screenshot into the GPe installation directory.
Use 'F2' to frame another ship.
'F1' frames your own ship.
USE 'F4' TO PAUSE THE GAME.
USE 'F9' TO SWITCH FROM FULL SCREEN TO WINDOWED MODE.
Use the keys from '1' to '8' to switch between the possible cameras.

*** OTHER INPUT DEVICES**

- The game run with all the joysticks compatible with Microsoft DirectInput™.

Here is the list of the axes meaning:

X	turn
Y	thrust/brake
Z rotation	roll

- The product has been tested and tuned with the Logitech "Wingman Formula Force" wheel. The mapping is the same as in a car. We remind to get used to release the accelerator when braking or the brake will not be valid. The buttons are the same as for the joystick. You can use the buttons instead of the pedal to accelerate/brake and in this case it is not necessary to release the accelerator before braking. This should make the drive more comfortable.

Here is the list of the buttons function for both the joystick and the wheel:

Buttons 1-2	thrust/brake
Button 3	inverts direction
Button 4	pitstop toggle

*** HOW TO KNOW WHAT POD AND ENGINE OTHER PLAYERS ARE USING.**

In every moment of the race you can know the pod and the engine each opponent is using by following the instruction below. This is very useful after the shop.

As first thing pause the game by pressing F4. After that, press F2 to change the framed ship and repeat this operation until you choose the proper ship. At the bottom of the race panel the number of the pod and the engine is displayed. '1' is used for the worst pod/engine, '10' is the best one.

Press F1 to frame your ship again and then restart playing by pressing F4.

*** DRIVING SUGGESTIONS FROM NELSON PIQUET.**

- This game has a completely new driving style so a pair of days to get used to the new style are required. The suggested driving style consists in never going out from the magnetic walls, especially in the tracks with many curves and when the skill is hard. Achieve this goal by resolutely braking immediately before a curve. In the straight parts of the track, try to be as much parallel as possible to the magnetic walls. This makes the vehicle to have more aerodynamics and run much more faster. This technique is important especially when the first skill levels.

- When overtaking an opponent, make sure your manoeuvre take place inside the track, leaving your opponent as near as possible to the magnetic wall. The vehicle invisible shield will push your opponent towards the magnetic wall, slowing him down and thus making your manoeuvre easier. When there are many vehicles immediately before you, it is better you don't try to pass through the group. A wiser choice is to wait until they take a constant position in the current race and then overtake them one by one, even if you are forced to slow down a bit. There are many different chances to be pushed out of the track. For example, if three vehicles are very near and aligned horizontally, one of the external pilots can manoeuvre to detach the middle pilot from the race line surface that will be pushed up in the air by the magnetic fields surrounding the ships. This kind of manoeuvre is easier to accomplish if you have a heavy weighted vehicle.

- It is also important to know that some vehicles performs better on certain tracks while on other tracks they could be the last in the final ranking. Another good reason to experiment a lot before taking the real Championship challenge. It is suggested you try out many single race sessions on the various tracks and with different vehicles to discover which one better fits your driving style.

*** NELSON PIQUET, A GRAND PRIX LIVING LEGEND.**

- Nelson Piquet was born in August 17, 1952 in Rio de Janeiro.

The son of a government official he spent much of his childhood in the Brazilian capital, Brasilia. At the age of 14 he was participating in kart races and was crowned Brazilian kart champion in 1971 and 1972. In order to keep his racing activities a secret from his family he initially raced under the name of Piquet but his continued success meant that he could not keep the secret for much longer. In 1976 Piquet was crowned Brazilian Formula Super Vee Champion. For 1978, he graduated to British F3, where he became BP champion and was offered a test session with McLaren. McLaren declined to hire the young Brazilian but Bernie Ecclestone, owner of the Brabham team, did not hesitate. Partner to two-time World Champion Niki Lauda he inherited the team leadership upon the Austrian's retirement. In 1980, he scored his first victory at the United States GP West on the streets of Long Beach, California. Losing a hard fought battle with Alan Jones for the title he reached that goal the following year. The 1982 season was a development season for Brabham and new turbo-engine supplier BMW, but when the car came right Nelson was the man to bring it home, claiming his second World Championship in 1983. Piquet has often been criticized for only winning when his car was the best on the grid. But the fact remains that much of it was due to countless miles of testing and the bottom line is that he won when he was expected to. He was not overly concerned with gaining poles but rather choose to concentrate on the race itself. When he won his second World Championship in 1983, Piquet became the first champion using a *turbo engine*. In total he was three times Formula 1 World Champion, a record which is still unbeaten to date: **1981, driving a Brabham Ford BT49C - 1983 , driving a Brabham BMW BT 52 and 1987 , with a Williams Honda FW11B**. He drove 13 seasons in Formula 1, started in 204 Grand Prix Races, 24 times from the pole position. He finished 60 Races among the Top 3 on the podium, 23 of them as the winner. One of his passions was to set up cars. He was a very good mechanic and some of his invention are still used in Formula 1 Racing today. An example are the electric blankets that cover the tires before the race. These blankets are warming up the tires to the optimised temperature. This provides the perfect grip and stabilises the car from the very beginning. His second invention is the pitstop and the refuelling process during the race. He worked out this idea together with his engineer in Brabham, Mr. Gordon Murray .The concept was that a smaller and therefore lighter tank would make the car faster and would in the end compensate the time that was lost during the pit stop. We all know today that they were right.

*** THE GPE TRACKS.**

Level 1 – Moon Colony (nocturnal)

The first and more simple track of the World championship, but this doesn't mean it's easy! Being this the first track you'll have low-powered engines and magpods so the best racing tactic is wide curve and strong oversteering.

Level 2 – Desert (daytime)

Here you can relax yourself a bit, but not too much of course. A smooth and long up and down and one tight chicane with a burning sun over your head, then a couple curves just to keep your attention up!

Level 3 – Underwater (daytime)

A mid-difficulty race line with long curves and a tight coil will make you learn how to steer faster. Pay attention to the signals!

Level 4 – Antarctica (daytime)

The race line is not so complex but the strong inclination of the track and the high magnetism make it one of the most difficult of the championship, it is luckily a very wide track so you should have anyway good chances of winning this race.

Level 5 – Military Plant (nocturnal)

Something more to prove your driving skills. Sudden curves and high inclinations will make you sweat a bit more, but if you win here you could be a serious candidate.

Level 6 – Moon Underground (nocturnal)

Not so difficult after all, but the race line is tight and the speed is always very high so keep your eyes open when approaching the many curves! Set under the moon surface, it is one of the more unusual track of the Championship.

Level 7 – Industrial Plant (daytime)

A classic track for all the drivers set in a dismissed industrial plant with a series of curves with strong inclination. Very fun to drive if you are a smart pilot. But are you?

Level 8 – Skyscraper City (nocturnal)

A more complex race line set right in the upper part of the city between the high skyscrapers. Smooth and long inclinations and strong curves and chicanes.

Level 9 – Lunar Mining Plant (nocturnal)

This track has not strong curves but there are two characteristic that make it unexpectedly insidious. There are stretches of the race line where the curvature is low, progressively and stealthy the curvature gets stronger thus confusing the driver about the need of braking...

Level 10 – Sunny Lake (daytime)

One of the more technical tracks of the whole Championship. It is commonly considered the real test to see who's in and who's out from the competition. The brake rules!

Level 11 – Moon Craters (nocturnal)

The more complex track of the Championship, long ups and downs, tight curves and strong inclinations make this track the final challenge for the title. Set in a huge crater with small rocky hills.

Level 12 – Moon Dark Side (nocturnal)

Set into the Deep Space Transmission plant, some very fast straight stretches and a sequence of tight curves to give proof of your driving skills on the very last track of the Championship...

***DRIVING SKILL LEVELS.**

You can chose one of the following driving skills in the Single player or Multiplayer menu page:

Easy, Rookie, Medium, Advanced, Hard, Piquet.

The driving skill represents the ability of the CPU players. Despite the driving skill is an independent choice, if in the Options page is chosen "Magnetic walls intensity = Auto", the walls magnetism and raceline outbound friction are influenced by the driving skill in the following way:

- Strong magnetic walls, soft outbound friction -

EASY – a kind of training level, good to learn and understand the driving basics and to learn the 12 tracks morphology.

ROOKIE - a bit more difficult, the opponents drive in a slightly clearer manner.

- Medium magnetic walls, medium outbound friction -

MEDIUM - the standard difficult level, a very good class to achieve more driving skills and learn to manage your cashflow.

ADVANCED - the first real challenging level, credits management is fundamental and good driving skills are mandatory to stay high in the race rankings.

- Soft magnetic walls, strong outbound friction -

HARD - very difficult, but if you have passed all the previous levels you should be quite expert in both tracks knowledge and driving capabilities as well as in smart cashflow management and technical know-how.

PIQUET - No words are needed, just think you are running against the most advanced pilots in the World Championship challenge!!!

- You can also force a wall/friction choice independently from the Driving skill. This can be done in the Options page, with the "Magnetic wall intensity" setting. Remember that your opponents will take advantaged by your choice in the same way.

- The high scores storage is splitted for each magnetic wall selection. In other words there is a separated top ten for each one of the three walls/friction possibility. This will be done independently if you selected explicitly a wall setting or if it has been set to 'Auto'.

*** THE RANKING SYSTEM.**

- Only 27 men have won the F1 world championship in the 50 seasons since the modern era began in 1950, while seven — Fangio, Brabham, Stewart, Lauda, Prost, Piquet and Senna — have topped the season leader board three or more times, making the F1 crown the most elusive title in the world. Much like in the contemporary Grand Prix racing, the drivers receive credits (once called points) for the gained position. History reports that Nelson Piquet won his three Championships with 50 points, 59 points and 76 points, but don't get complacent if you are leading the Championship, it can still all change in the last race. As you know from watching Grand Prix on TV, a clever pit-stop can win you a race, but a badly timed one can cost you the whole Championship, so the challenge isn't over until the last second!

***POINT SYSTEM.**

- The point system in GPe is credits-based, this means that the credits you gain are equal to the points you have in the competitions. For instance, if you gain 1500 credits/points in the first three races and then 800 in the fourth one, you'll have a total of 5300 credits/points in your current data; if you buy some parts and spend 3100 credits/points you'll have 2200 usable credits/points left for shopping purposes, but still have 5300 credits/points in the overall ranking.

First place:	1500 credits/points
Second place:	1375 credits/points
Third place:	1250 credits/points
Fourth:	1125 credits/points
Fifth place:	1000 credits/points
Sixth to last place:	_800 credits/points

No selling is possible since it would influence the competition development.

SHOPPING.

- It is one of the most important choices you'll make during a Championship, as it similarly happens in the Grand Prix reality also. A wrong engine or magpod model choice in the wrong moment can be your worst one and you could be the last one in all the following competitions. There are lots of combinations you can try, depending on the vehicle model you have chosen for your team: some models have "natural" characteristics such as a greater steering performance or a greater penetration coefficient, so it is strongly recommended you remember these factors when choosing the team's vehicle at the beginning of the game in the "Driver setup" page.

- A good shopping policy can be to wait two or three races before buying a new part for the vehicle, so make sure to carefully read the spare parts technical description and check the performance graphs at the bottom of the page, before spending your credits.

*** TROUBLESHOOTING.**

- In order to run GPe it is necessary to have the original CD correctly inserted in the CD-Rom drive, however remember that in multiplayer mode the CD is required for the server only. In the upper left corner of the main menu the application will show whether the CD is present or not. If the CD is inserted but the application doesn't become aware of it, try to restart the application or ignore the problem until the message "insert CD" appears. At that time extract and re-insert the CD in the CD-Rom drive.
- If in multiplayer mode the client animation is not realistic even if it is smooth, the server must be customized to run faster. For instance, on the server configure a lower number of ships or a shorter clip distance. Anyway, the network speed has been strongly optimised so you shouldn't encounter such big network problems. You can use both IPX and TCP/IP. Another reason for the server pc could run slowly could be a slow force-feedback device. In some configuration we noticed that enabling the force feedback can take a large amount of the CPU usage. In the Options page you can customize the force-feedback as well as many other parameters.
- If not all the textures are displayed while running, maybe the graphic card has less than 8 Mb of on-board memory. We have also encountered this problem with some unusual hardware configurations with a primary graphics adapter and two graphics accelerators (i.e. two Voodoo2 in SLI mode). In such cases

try to disable all the cards but one to be sure Direct-X doesn't read uncorrectly the pc-graphics capabilities.

- Installing GPe over a previous GPe installation will keep the records and the pilot customisations. In the directory *GPe\storage* there are the files that the game saves to store the player and games information. This files can be copied from a pc to another one to move the pilot or video customisation. Multiplayer saved games cannot be moved. In case of corruption of these files it is possible to delete the entire directory content and the game will create new correct files, but the saved information will obviously be lost.
- 3d sound is fully supported via the Microsoft DirectSound interface. Unfortunately, some audio cards on the market don't actually provide the features they claim to support. The audio card drivers often return that some capabilities are supported in hardware while it is not true. A defensive programming style has been adopted in this case, so when this hardware is used the application simply will not enable the features the hardware doesn't support. It is possible that some sounds are not played in this case. No Creative Labs audio cards we tested are subject to this problems. If the game sometimes slow down this could be due to the music playing. Some CD-Rom drives make the application to stop or to slow down when the music track restarts or even in some rare cases the game stops many times in the middle of a track. If this problem affects the playability the music can be disabled with the same selection that sets the music volume (just set it to 0/off). Do the same for the sound effects if your sound card doesn't perform a meaningful hardware acceleration.
- In the bottom right corner of the main menu the version and language of the application are reported.
- If the game doesn't recognize a driving peripheral such as a Joystick or a wheel this could depend on the fact that there are more than one installed. We found out that in most cases the Microsoft Sidewinder™ joystick doesn't let the operating system to find other input peripherals. In such cases just disable the unused peripheral from the operating system control panel, under the game peripherals settings.

*** Misc.**

- In the GPe installation directory there is a subdirectory named "icons" where alternative icons for the game are placed; these icons can be used freely to customize the link application appearance.

*** SOME WORDS FROM THE DEVELOPERS.**

What makes this game something different?

The nice looking graphics provided by the Twilight3d engine cannot obviously be enough to make a game funny and this has been our primary concern. So we focused on the playability and the physics simulation reaching a very close approximation level to simulate the behaviour of the vehicles in the most believable way. We've spent a lot of time in testing and developing the physics engine and we really hope you will appreciate it for his fidelity in reproducing the natural forces such as gravity, friction and acceleration. Many factors are involved in these calculation and in order to make them the most realistic as possible we included the mass and penetration coefficient so that when choosing a vehicle you will read reliable data and characteristics in each technical resume. We sincerely hope you'll enjoy the race against the CPU pilots and even more the network mode that is obviously the more interesting. A flexible database system has been added to give you the chance to easily save, load and move your data at any time. Remember to visit us at www.n-side.com for updates and patches!

Thanks for purchasing our game! The N-Side Team