



Dreamcast™

© 2001 Ubi Soft Entertainment. "MONACO GRAND PRIX" and "GRAND PRIX DE MONACO" are trademarks of A.C.M., Automobile Club de Monaco. All rights reserved.

Copying or transmission of this game is strictly prohibited. Unauthorised rental or public performance of this game is a violation of applicable laws.

Jegliche Vervielfältigung oder Übertragung dieses Spiels ist streng verboten. Unauthorisierter Verleih oder öffentliche Vorführung dieses Spiels stellen einen Verstoß gegen geltendes Recht dar.

Copier ou diffuser ce jeu est strictement interdit. Toute location ou représentation publique de ce jeu constitue une violation de la loi.

La copia o transmisión de este juego está terminantemente prohibida. El alquiler o utilización pública de este juego es delito y está penado por la ley.

La duplicazione o la trasmissione di questo gioco sono severamente proibite. Il noleggio non autorizzato o dimostrazioni in pubblico di questo gioco costituiscono una violazione alle leggi vigenti.

Kopiering eller överföring av detta spel är strängt förbjudet. Otillåten uthyrning eller offentlig visning av detta spel innebär lagbrott.

Het kopiëren of anderszins overbrengen van dit spel is ten strengste verboden. Het onrechtmatig verhuren of openbaar vertonen van dit spel is bij wet verboden.

This product is exempt from classification under UK Law. In accordance with The Video Standards Council Code of Practice it is considered suitable for viewing by the age range(s) indicated.

Product covered under one or more of U.S. Patents 5,460,374; 5,627,895; 5,688,173; 4,442,486; 4,454,594; 4,462,076; and Re. 35,839 and Japanese Patent 2870538

(Patents pending in U.S. and other countries) and Canada Patent 1,183,276 and European Patents 0682341, 80244; Publication 0671730, 0553545; Application 98938918.4, 98919599.5

SEGA and Dreamcast are either registered trademarks or trademarks of Sega Enterprises, Ltd.

810-0310-50

Dreamcast™



Dreamcast

**Racing 2**  
SIMULATION

ON-LINE

MONACO GRAND PRIX



**EPILEPSY WARNING**

Please read the instruction manual and in particular this section before playing this video game or permitting your children to play it. A parent should study the instruction manual with a minor before it playing the game for the first time. Certain persons may suffer epileptic attacks or a disturbance of consciousness if exposed to specific flashes or light effects in routine situations. Such persons may suffer an attack viewing certain TV images or playing certain video games. Even persons might be affected whose medical history so far did not account for epilepsy. If you or a member of your family suffer from symptoms linked to epilepsy (attacks or disturbance of consciousness) when exposed to flashes please consult a physician before playing the game. Parents should monitor their children when playing video games. Should you or your children experience symptoms such as dizziness, impaired vision, eye or muscle twitching, loss of consciousness, disorientation, any kind of involuntary movement or cramps, terminate the game IMMEDIATELY and consult your physician.

**For your health:**

- Position yourself as far as possible from the TV screen as the cable and console permit (c. 2 meters).
- The game should preferably be played on a small screen.
- Do not play if tired or if you have not had sufficient rest.
- Ensure that the room in which you are playing is well lit.
- When playing, observe a minimum break of 10 minutes per hour.

**Start Dreamcast:**

This GD-ROM can only be played on a Dreamcast system. Do not try playing it on any CD player other than a GD-ROM drive. Otherwise the headphones and loudspeakers may be damaged.

1. Connect your Dreamcast system and follow the instructions of your Dreamcast manual. When playing with two or several players connect Controller 2 to 4 (available as a option).
2. Insert the Dreamcast GD-ROM into the CD tray with the label pointing upward and close it.
3. Press Power to load the game. The game starts after the Dreamcast logo appeared on the screen. If nothing is visible switch off the system and check if it is correctly hooked up.
4. If you wish to interrupt the game or if it ends and you wish to restart, press A, B, X, Y and Start simultaneously to return to the cover. Press A, B, X, Y and Start again to return to the Dreamcast system screen.
5. When connecting the power supply without inserting a GD the Dreamcast system screen appears. If you wish to start a game place the Dreamcast GD-ROM into the unit. The game is automatically loaded.

**IMPORTANT:** Your Dreamcast GD-ROM contains a security code which enables reading of the GD. Keep the GD as clean as possible and treat it with care. If your Dreamcast system experiences problems reading the GD, remove the GD and carefully clean it. To do so, wipe the GD with a soft, dry cloth, starting always from the center to the outer edge of the GD.

**How to handle the Dreamcast GD-ROM**

- The Dreamcast GD-ROM is exclusively intended for use with Dreamcast systems.
- Keep the GD-ROM surface free from dirt. Do not scratch.
- Never expose the GD-ROM to direct sunlight or heating installations or any other source of heat.

**TABLE OF CONTENTS**

INTRODUCTION	2
CONTROLLERS	3
STARTING UP	5
MONACO RACE SIMULATION LOCAL	6
GAME SERVICE	13
ENGINEER'S GUIDE	18

ENGLISH.....	1
DEUTSCH.....	25
FRANÇAIS.....	50
ESPAÑOL.....	75
ITALIANO.....	100



# INTRODUCTION

## THE MONACO GRAND PRIX: THE LEGENDARY RACE



Monaco is the most legendary race of all. It's a challenge taken up every year by the best racing drivers in the world. The Automobile Club of Monaco has masterfully organized the race since it was formed in 1929. Maximum speed: 270 km/h. An average speed of more than 140 km/h to cover just over 3 kilometers between manhole covers, pavements, barriers and walls. And there are no escape routes! Only the best drivers win at Monaco to earn a page in the history of this legendary race.

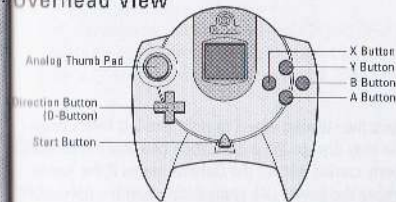
### A circuit full of danger

Less tortuous than it is today, the circuit used to form a loop that linked Monte Carlo, the harbour and Monaco. The track was 3.18 km long and more or less stayed that way until 1952. After this date, new chicanes and hairpin bends appeared, resulting in the circuit that we know today, the total length of which is 3.367 km, the drivers doing 78 laps in just under 2 hours. But the streets are no wider now – in fact, they're narrower. The walls are still there, as hard as ever, and the engines have 700 horsepower and more. One thing is certain: it's an exceptional driver he who counts the Monaco Grand Prix amongst his list of achievements – one of the greatest!

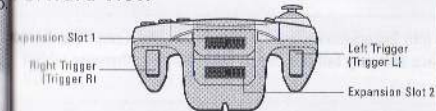
# CONTROLLERS

## Game controls – Dreamcast Controller

### Overhead View



### Forward View



### Controls in the menus

Up/Down Left/Right	Directional cross
Validate	Button «A»
Cancel	Button «B»

### Vehicle Control

You can choose from 6 different configurations (including the Race Controller) on the OPTIONS/CONTROLLER page.

Never touch the Analogue Thumb Pad or L/R Triggers while turning the Dreamcast power ON. Doing so may interrupt the controller initialization procedure and result in malfunction. Operation with incompatible controllers is not guaranteed.



## Visual Memory (VM)



While saving a game file, never turn OFF the Dreamcast power, remove the memory card or disconnect the controller.

## Peripheral Equipment



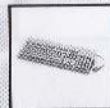
### Race Controller

When using the Race Controller, never touch the steering wheel or right and left levers when turning the Dreamcast power ON. Doing so may disrupt the initialization procedure and result in malfunction if readjustment is not properly carried out via the Options menu. If the handle or levers are accidentally moved while turning the power ON, immediately turn the power OFF and ON again ensuring that you do not touch the Race Controller.



### Vibration Pack

When the Vibration Pack is inserted into Expansion socket 1 of the Dreamcast Controller, the Vibration Pack does not lock into place and may fall out during gameplay or otherwise inhibit game operation.



### Keyboard

You can connect a keyboard to your Dreamcast especially if you want to chat in Network mode.

## STARTING UP

### Installing

Install your Dreamcast by following the instruction manual. Make sure that the console is off before inserting or removing a CD.

Insert the Monaco Simulation On-line CD and close the cover of the CD compartment.

Connect the controllers and switch on the Dreamcast.

Follow the instructions that appear on the screen to start a game.

### Main menu

From the Main Menu, you can select from four different race modes, access the Game Service, the Hall of Fame and Options menus.



Up/Down

A

Start

highlight a different selection

Enter your selection

Enter your selection

### Single race

Enjoy arcade style gameplay with the currently available cars and tracks.

### Championship

Live through the unique experience of an entire season by fighting for victory in the 17 Grand Prix races, which take place on as many different circuits.

### Time attack

Put used with your own driving style by racing on the 17 available circuits against the best lap times saved on VM.



## Two Players

You and your opponent select your cars, the track and play the race in a horizontal split-screen mode.

## Game service

After developing your skills and getting accustomed with the 6 tracks, prepare yourself to face the challenge of human opponents. Players throughout the world will compete in an incredible race having as ultimate goal the dream of any competitor: the highest position in the top of the best drivers!

## Hall of Fame

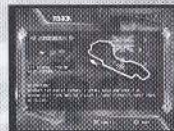
View the lap and race records saved on the VM for each track and each game mode (arcade/simulation).

## Options

Customize game options and sound, controller and screen configurations. You can also access Credits page.

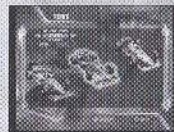
# MONACO RACE SIMULATION LOCAL

## Menu navigation



### Choosing a circuit

You can play on 17 different circuits. The Track page lets you choose your circuit for single races, 2 players and time attack. Use your directional device to scroll to the left and right among the 17 circuits. On the Track page you can also choose the weather – sunny, cloudy or rainy (simulation only).



### Choosing a team

You have 11 teams at your disposal. The same concept of scrolling circularly to the left or right is used in the Team page. Thus, you can cycle through the 11 teams until you make your pick. Also on the Team page, you can select the gear-box type:

- Auto – gears change automatically whenever you brake or accelerate
- Manual – you have to change the gears by yourself

## Setting-up your car (Simulation only)

After you choose your team, you are taken to the Garage page. Here you can make changes to the way your car behaves on a certain track. You can adjust the following features:

- down force
- camber
- toe
- anti-roll
- steering
- ride height
- brakes
- gearbox ratios



## Editing your name

At the beginning of a new championship you will go the "Edit Name" page, where you can enter your name using your controlling device to select the letters from the keyboard layout. This name will be used during the whole championship and will also be the name of the saved championship. In case you have a new record for a certain circuit, you are also taken to the "Edit Name" page. Your record will then be saved in the Hall of Fame. After editing for the first time your name, it will be used for all off-line games until you reset or plug off the console.





## Setting options for the game

In the Options page, you can adjust the following:



- **Game** – this refers to racing conditions:
- **Sound** – you can set the volume for menu effects, music, car engine and in-race messages by using the sliders associated to each option.
- **Controller** – you can choose between 6 different configuration for joy-pad.



### DEFAULT CONFIGURATION PAD (Config. 1)

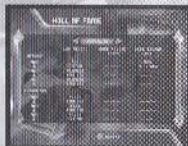
Analog Thumb Pad	steering	Key A	gear down
D-Pad	opponents view	Key B	gear up
Trigger R	accelerate	Key X	rear view
Trigger L	brake (reverse, auto only)	Key Y	change views
		Key Start	Pause - menu



- **Screen** – you can center the image on your television screen.

## Hall of Fame

This is a special page where all the records are saved for each track: lap record, short race record and long race record, both for arcade and simulation. You will see this page either every time you have a new record or from the Options Menu.



## Game modes

### Arcade

This is the simplest mode to select a car and circuit and go straight out onto the track. The cars are easier to maneuver and you don't risk damaging them, though they still behave in a realistic way.

You have a choice between:

- **Single race**
- **Championship**
- **Time attack**
- **2 players**

In "Single race" and "2 players" modes, you not only have to beat the other competitors but also the clock. Each circuit includes several control points which can help you gain time, provided you reach them. If you don't pass these checkpoints in time your race will be terminated.

### Simulation

This mode allows you to drive under real racing conditions on one of 17 suggested circuits. Don't forget that the behavior and technical specifications of the car are at their most realistic, so this mode requires the greatest skill. As in real life, you'll be able to set your car up for your own driving style and for the different circuits, then pit yourself against opponents. You have a choice between:

- **Single race**
- **Championship**
- **Time attack**
- **2 players**



## Suggested races

### Single race

All you have to do is choose your circuit and team and you'll find yourself instantly at the steering wheel and ready for the start of the race. You don't need to qualify and your position on the starting grid depends on the chosen game mode: the last on the arcade mode and the first on the simulation mode.

On the arcade mode you have to reach the check points in time, otherwise you will be disqualified from race.

### Championship

Live through the unique experience of an entire season by fighting for victory in the 17 Grand Prix races, which take place on as many different circuits. In simulation mode there are three stages that await for you:

- **Try (simulation only):** will help you get acquainted with your car and the layout of the circuit. You can make some adjustments in the Garage and in the Settings display during the race. You can access this feature in one of these two ways: just before begin the race or by pressing the "start" button and selecting the "settings" option during the race.
- **Qualification (simulation only):** your position on the starting grid depends on your time in this session.
- **Race:** the competition begins... The points allocated in the championship depend on the final position at the end of each race. Only the first six drivers score points on the following scale:

1st: 10 points	4th: 3 points
2nd: 6 points	5th: 2 points
3rd: 4 points	6th: 1 point

The points acquired in a Grand Prix are accumulated from one Grand Prix to the next; the driver who becomes World Champion is the one who has accumulated the most points at the end of the 17th Grand Prix. In "Arcade" mode, your position on the starting grid is the last one, in order to increase the difficulty and the competition.

The weather in simulation mode will be sunny for Try and random for Qualification and Race.

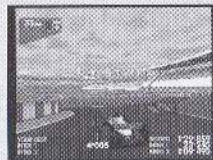
### The meaning of the flags in the race

- The Yellow Flag means that there is a danger on the track.
- The Blue Flag means a competitor is about to lap you – must let him pass.
- The Chequered Flag means the finish of the race.

Participating in a complete championship takes a long time, but you can save your points and ranking after each Grand Prix.

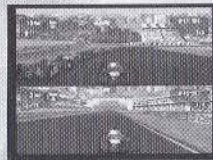
### Time Attack

This mode is intended particularly for players who are trying to brake lap records. You can do as many laps as you like, improving your time each time you pass the finish line. The goal is to get the best possible time, but this mode is also very useful for learning how to handle the car or get to know a new circuit without being bothered by other competitors. You will always compete against the best time that you have previously obtained on that circuit. On the first lap you'll race alone, but from the second onwards, you race against the ghost (which represents your best lap record) and the ghost races forward as soon as you cross the starting line. But don't forget that the ghost is only an image and it is impossible to collide with it. Since the ghost's time is recorded for one lap, the procedure begins again for each lap. You can go on indefinitely like this, until you press the START key and choose "Quit". Once you are back in the menus, you will be prompted to save the ghost. The weather on this mode will be always sunny.



### Two Players

This is the perfect opportunity to compete against your best friend and at the same time against other 9 computer opponents. In this mode, you and your opponent select your teams and play the race in a horizontal split-screen mode.



**Accessible modes:** Arcade / Simulation

**Accessible races:** Single Race

**Number of competitors:** 11

- You need to have two controllers connected for the "2 Players" option to be selectable.



## Saving and loading

### Saving

- **Options file:** All the modifications you made in the options menu can be saved on a valid VM inserted in the first slot of your primary controller. When exit from the OPTIONS menu, if you changed any option, you will be prompted to save the options file.
- **Hall of Fame file:** The file will be saved on the first VM from your primary controller after each best time recorded in the Hall of Fame page.
- **The Ghost file:** Making a record on a track in Time Attack mode, you will be prompted to save the ghost file and to choose the VM for the saving. There is one ghost file for each mode arcade/simulation for each track on the same VM.
- **Championship file:** When you enter in Championship mode, you will choose the VM for saving the championship file. After each Grand Prix, the championship file, including the season page will be saved automatically on the chosen VM.
- **Garage file (simulation only):** If you make any changes in the Garage page, you will be prompted to save the Garage file. There is one garage file for each track on a VM.
- **Network file:** This file contains the nickname and the banned players list and will be saved on the first VM on your primary controller.

### Loading

- **Options and Hall of Fame files:** There is one options and Hall of Fame file recorded on a VM, which will be automatically loaded with the game if your VM is correctly connected in the first slot of your primary controller. If several VMs are connected, the loaded options will be from the first VM.
- **Ghost file:** If there is a ghost file for a chosen track saved on an inserted VM, you will be prompted to load the ghost file.
- **Championship file:** When you enter in Championship mode, if there is any championship saving on any inserted VM, you will choose the VM and a championship saving to load.
- **Garage file (simulation only):** When you enter in the Garage page, you will be prompted to load the Garage file.
- **Network file:** this file will be automatically loaded with the game if your VM is correctly connected in the first slot of your primary controller. If several VMs are connected, the loaded network file will be from the first VM.

## Game Service

As its name suggests, the main purpose of Monaco Grand Prix On-line is to bring together as many players as possible, into a challenging competition over the Internet. After developing your skills and getting accustomed with the 17 tracks and the two playing modes, arcade and simulation, prepare yourself to face the challenge of human opponents. Players throughout the world will compete in championships having as ultimate goal the dream of any competitor: the highest position in the top of the best drivers!

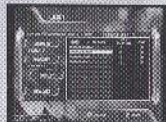
### On line menu navigation

The GS menu pages contain multiple page frames, each frame having a certain function. The navigation will be through these frames on a certain window, the activation of a frame is made with the A button. According to the player selection, the border of the frame will be highlighted – when the selection is on this frame – or the border of the frame will be highlighted and the background color of the frame will be changed – when this frame is validated. Once the frame is validated (with the A button), the player will have access to the buttons and functions in this frame.

### Connecting to the Monaco on-line servers

By choosing the GAME SERVICE option from the MAIN MENU, you will be taken in the LOGIN page. Here you can create an account for playing MGP RS2 ON-LINE or, if you already have an account previously created, you can just connect to one of the several UBISOFT servers, which will host you for playing the on-line games of your life. To create an account, just fill in the requested fields, push the "DONE" button and wait for recording your data on the server.

If you already have an account, just type in the recorded nickname and password, push the "CONNECT" button and wait for the data to be checked. After the connection is successful will receive the list of arenas. An arena is a virtual room where people that want to play with each other may enter and establish competition partners.





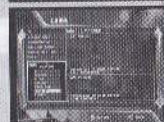
## Lobby

Choosing an arena takes you to the "Lobby" page, which is in fact the "virtual room" earlier mentioned. Here you are presented with a list of the users that are at that given time in the same arena as you, and you can choose to chat "publicly" (every user in the room can see your messages) or "privately" (only the selected user may see your messages). There is also the menu, where you can:

- **Select the type of race you want to take part in:** Single Race, for practice against human opponents, but with no points accumulating in your account, or Championship, that gives you points and helps you go up the rankings.
- **View the Hall of Fame**
- **View the Classification**
- **Exit the Game Service**

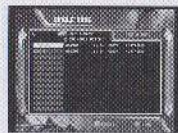
The LOBBY page contains four areas: the area that contains buttons, the area that contains the players list, the public chat area and the private chat area.

- When entering at the first time in the window the buttons area is highlighted (the border of this area is highlighted, but you will have no access to buttons until will press the A button). If the A button is pressed, the window becomes active (the background color changes) and the you can move with up/down arrows on the buttons.
- From within the buttons area with B button will go back in the main page (the background color will become as before and the navigation will be trough areas).
- By pressing the A button on the players list area, the background color of this area will change and you will have the possibility to scroll the players list. By pressing the A button on a player you will be prompted if you want to ban him. In this way you will not receive any private messages from him.
- By pressing the A button on the public chat area, the background color of this area will change and the you will have the possibility to scroll the messages in this window. If push the A button again, the message bar from below becomes available and the you can write the message.
- By pressing the A button on the private chat area, the background color of this area will change and you will have the possibility to scroll the messages in this window. Also you will have access (with left arrow) to the players list to choose a name on the list. If a player from the list will be validate with A button, the message bar becomes available and a message can be sent in private mode).



## Single race

In the Single Race page you see a list of available games that you can join, with a short description: length, number of players in, maximum number of players allowed, the game type: arcade or simulation and a lock icon (for password protected only). Should none of the games satisfy you, or should no game be in the list, you can simply create your own game by selecting "Host a game".



## Championship

In the Championship page you see a list of available games that you can join, with a short description: game type (arcade or simulation), number of players in. You can join to a session on the list or you can create another one by choosing the "host" option.



## Waiting room – Single race

If you are the host, you have to configure your race:

**Track:** select one of the 17 tracks you've been playing locally

**Collisions:** on/off

**Players:** choose maximum number of players - any number between 2 and 8

**Laps:** choose between short distance and long distance

**Behavior:** choose between arcade and simulation

When you finally press the "Validate" button to make your session visible to other players in the Single Race page. After all the necessary players have joined your game you can press the "Start" button in order to acknowledge to all the players that the game is on and the session is closed. After this, everybody can choose their team according to their preferences, and then press the "Ready" button to signal that they are ready to race. At all times, players can also use the public chat window to communicate with each other. When all the players in the "Waiting room" have pressed the "Ready" button, the game will start! Also, the host has the ability to kick out players from the session.

## Waiting room – Championship

The championship session will be created automatically when a player chooses to host a championship game. This player is the host and will be able to close the session by pressing the START button. After the session is closed, a countdown will start for starting the game. In this time, each player can choose a track, a team and press the "ready" button. If all players will press the READY button the game will begin. Also in this page will be a chat area.







### Hall of Fame

In this page all time records are saved for all 17 circuits, for both modes of racing (arcade and simulation) and for both circuit lengths.



### Classification

Here you can see at any time what your exact position in the rankings is and who the top 10 players are.

## On-line game modes

### Single race mode

Between two and six players can join in a one-race game. Since the race is over, you can leave the session or you can return in "waiting room" to start another one. The host can choose the same track or another one for playing. There will be no points awarding in this game mode.

### Championship

The championship mode can be played only if there are at least 2 players in the session. The players will race consecutively on the chosen tracks. Each race will begin with a quick qualification session.

In the championship mode, the players can win points that will be recorded in the classification database. There are five basic point awards modes used for calculations, according with the number of players in the championship session:

#### If there are 6 players:

- 1st place: 10 pts
- 2nd place: 6 pts
- 3rd place: 4 pts
- 4th place: 3 pts
- 5th place: 2 pts
- 6th place: 1 pt

#### If there are 5 players:

- 1st place: 8 pts
- 2nd place: 5 pts
- 3rd place: 3 pts
- 4th place: 2 pts
- 5th place: 1 pt

#### If there are 4 players:

- 1st place: 6 pts
- 2nd place: 4 pts
- 3rd place: 2 pts
- 4th place: 1 pt

#### If there are 3 players:

- 1st place: 4 pts
- 2nd place: 2 pts
- 3rd place: 1 pt

#### If there are 2 players:

- 1st place: 4 pts
- 2nd place: 2 pts

According to the total number of points each player will be awarded with rating stars :

- over 100 pts: one star
- over 800 pts: two stars
- over 2000 pts: three stars
- over 5000 pts: four stars
- over 10000 pts: five stars



# ENGINEER'S GUIDE

## The secrets of simulation mode

You have decided to play in simulation mode. To be truly competitive, in addition to a lot of skill, you will need to be able to set up your car for the different championship circuits and your driving style. So this guide tells you all about the set-up techniques for single-seaters – from the simplest set-ups (driver set-ups) to the most complex (engineer set-ups), and lastly, how to configure your car correctly.

## THE TEAMS – Technical data

### TEAM 1

CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 3000 mm  
Front wheel gauge: 1650 mm  
Rear wheel gauge: 1600 mm  
Total length: 4700 mm

ENGINE:

10-cylinder V engine, 72°, 700 hp at 14000 revs/min  
Maximum running speed: 14400 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: 105 kg

### TEAM 2

CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2890 mm  
Front wheel gauge: 1670 mm  
Rear wheel gauge: 1600 mm  
Total length: 4150 mm

ENGINE:

10-cylinder V engine, 71°, 755 hp at 14600 revs/min  
Maximum running speed: 15300 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: 132 kg

### TEAM 3

CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2935 mm  
Front wheel gauge: 1690 mm  
Rear wheel gauge: 1605 mm  
Total length: 4348 mm

ENGINE:

10-cylinder V engine, 75°, 760 hp at 14800 revs/min  
Maximum running speed: 15300 revs/min  
Material: cast iron  
Valves: 4 per cylinder  
Weight: 140 kg

### TEAM 4

CHASSIS:

Tare: 550 kg, without driver  
Wheelbase: 2880 mm  
Front wheel gauge: 1700 mm  
Rear wheel gauge: 1600 mm  
Total length: unknown

ENGINE:

10-cylinder V engine, 71°, 760 hp at 14600 revs/min  
Maximum running speed: 15300 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: 132 kg

### TEAM 5

CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 3000 mm  
Front wheel gauge: undisclosed  
Rear wheel gauge: undisclosed  
Total length: undisclosed

ENGINE:

10-cylinder V engine, 75°, 760 hp at 15800 revs/min  
Maximum running speed: 16600 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: undisclosed



# TEAM 6

## CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2950 mm  
Front wheel gauge: 1700 mm  
Rear wheel gauge: 1618 mm  
Total length: unknown

## ENGINE:

10-cylinder V engine, 72°, 740 hp at 13900 revs/min  
Maximum running speed: 14400 revs/min  
Material: cast iron block  
Valves: 4 per cylinder  
Weight: 133 kg

# TEAM 7

## CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2995 mm  
Front wheel gauge: 1693 mm  
Rear wheel gauge: 1608 mm  
Total length: 4335 mm

## ENGINE:

10-cylinder V engine, 72°, 710 hp at 13900 revs/min  
Maximum running speed: 14500 revs/min  
Material: cast iron block  
Valves: 4 per cylinder  
Weight: 140 kg

# TEAM 8

## CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2940 mm  
Front wheel gauge: 1660 mm  
Rear wheel gauge: 1610 mm  
Total length: unknown

## ENGINE:

10-cylinder V engine, 75°, 760 hp at 14500 revs/min  
Maximum running speed: 15200 revs/min  
Material: cast iron block  
Valves: 4 per cylinder  
Weight: 140 kg

# TEAM 9

## CHASSIS:

Tare: 600 kg  
Wheelbase: 2990 mm  
Front wheel gauge: 1700 mm  
Rear wheel gauge: 1610 mm  
Total length: 4330 mm

## ENGINE:

8-cylinder V engine, 75°, 765 hp at 13700 revs/min  
Maximum running speed: 14200 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: 130 kg

# TEAM 10

## CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2900 mm  
Front wheel gauge: 1680 mm  
Rear wheel gauge: 1620 mm  
Total length: unknown

## ENGINE:

8-cylinder V engine, 78°, 680 hp at 13100 revs/min  
Maximum running speed: 13600 revs/min  
Material: aluminum block  
Valves: 4 per cylinder  
Weight: 115 kg

# TEAM 11

## CHASSIS:

Tare: 600 kg, driver aboard  
Wheelbase: 2950 mm  
Front wheel gauge: 1690 mm  
Rear wheel gauge: 1585 mm  
Total length: unknown

## ENGINE:

10-cylinder V engine, 72°, 720 hp at 15100 revs/min  
Maximum running speed: 16000 revs/min  
Material: cast iron, aluminum and titanium block  
Valves: 4 per cylinder  
Weight: 120 kg



## "Driver" set-ups

- **Transmission:** choose between manual and automatic gearbox. In automatic, the computer will make the optimal gear change for the player – i.e. with maximum torque. If you are a beginner, you will find it easier to go for the automatic option.
- **Gear box ratios:** the gearbox ratios must be adjusted and adapted to the style of each circuit. Adjusting the 6th gear ratio sets the car's maximum speed: a long ratio will mean a faster straight line speed – but will also take longer to reach it. A short ratio gives significantly sharper acceleration, but a weaker top speed. After setting the 6th gear ratio, adjust first gear for the slowest band. Only then start spacing the other ratios between 6th and 1st.
- **Long – short:** a gear ratio is the quotient of the teeth in the two gearwheels of the gearbox. The 6th gear ratio is generally near to 1 (this could be 62/64, 71/72 or 46/48 for example). The ratio of 1st is the smallest, or the shortest, the ratio of 6th, the longest. Lengthen the ratio by increasing its value, shorten it by reducing it.
- **Brake balance front/rear:** brake balance is the ratio between front and rear braking force. If brake balance is badly set, the 4 wheels will not brake at their maximum potential. Since brake balance also influences the approach to a band, the more that the balance is set to the rear, the more the rear brakes are likely to jam first, making the car over-steer. In all cases, a car that locks its front wheels first is easier to steer than one that locks its rear wheels first. Because inertia is applied to the car's center of gravity, under deceleration, braking is accompanied by a transfer of vertical load, which tends to remove the burden from the rear axle, loading it onto the front. An axle's tire-to-ground adhesion limit is relative to the vertical load: the higher the load, the greater the grip and vice versa. The drag can then exceed the tire-to-ground adhesion limit, forcing the rear wheels to lock and lose their grip. Brake balance, therefore, is an adjustment of front and rear drags, so as to either prevent the rear wheels from locking or make them easier to lock.
- **Under-steer (car under-steering):** a car under-steers in a bend when the front tires lose their grip (slip) before the rear tires do. The front wheels then no longer respond to the steering; the driver, no matter how much he turns the wheel, finds that the car continues on a path that tends to make it leave the road by the outside. In order to regain control of a car that's under-steering, it is important to immediately increase vertical load on the front by lifting the foot off the acceleration, perhaps even braking lightly. A car that under-steers remains stable, contrary to one that over-steers.
- **Over-steer (car over-steering):** a car over-steers in a bend when the rear tires lose grip (slip) before the front ones do: the car then goes into a rear skid which, most of the times, results in a tête-a-queue, with the car facing in the opposite direction. To avoid this awkward situation, you must lightly steer into the skid, by gently lifting the foot off the acceleration, in order to try to reestablish rear wheel grip. Don't lift the foot too suddenly though, or, even worse, brake too sharply because vertical load will then shift to the front, further reducing rear

wheel grip. The best drivers manage to maintain the car's skid by playing on the counter lock and accelerating very lightly. A car that over-steers is unstable, contrary to one that under-steers.

**Stable/Unstable behavior:** a car is said to be stable if, when the speed drops sharply, it returns to its initial trajectory. A car that under-steers is as stable as a car that behaves neutrally. A car that over-steers is, by definition, unstable, because dropping the speed sharply makes the car suddenly spin, forcing it into the opposite direction.

**Downforce:** The wings are like inverted airplane wings. For the same reason that a plane flies, a wing placed in a relative wind (i.e. a wind generated by the car's displacement against its environment) will create a downward force that increases the vertical load, pushing the vehicle more firmly to the ground. The higher the speed, the greater the downward force. The downforce is relative to the car's speed squared and this force can be 3 to 4 times the car's weight.

## The "Engineer" set-ups

**Anti-roll bars:** anti-roll bars are a part of the suspension in that they help to control roll. They help out in corners and stiffen the suspension. The anti-roll set-up has a major effect on how the car will behave in a corner: if it under-steers, soften the front anti-roll bar. If the car over-steers, soften the rear anti-roll bar.

**Ride height:** ride height is the height between the body of the car and the ground and it is measured from the front and rear axles. The height is given while the car is stationary, and varies when the car is moving, due to downforce, wheel travel, pitch and roll. Ride height affects the car's behavior by lowering the center of gravity, making the car pitch and roll less. Lowering ride height also raises downforce.

**Plate:** the front ride height must always be less or equal with the rear ride height, otherwise the downforce will be zero. Minimum ride height is when the bodywork touches the ground.

**Camber:** this is the angle formed between the wheel and the vertical. It is positive when the wheels, at ground level, 'come in' towards the inside of the car and negative when they splay out. The camber setup is used to place the tires in a position where they can provide the best performance: it must allow for the full width of the tires in corners.

**Toe (Wheel alignment):** wheel alignment adjusts the angle that a set of wheels has with respect to the longitudinal axis of the car. It is called 'toe-in' if the wheels form a V open towards the rear of the car, or 'opening' if the wheels form a V open towards the front of the car. The toe-in or opening basically modifies the response time of each set of tires because it affects the drift of each tire when the car takes a corner. The wider the opening on the front set, the less responsive the car is. The bigger the rear toe-in, the more stable the car is.



•**Pitch and roll:** the pitch and roll angle affects a car's position in relation to the road. Roll describes the angle between the body and a longitudinal horizontal axis. Centrifugal force in corners creates this angle, as does a wheel going over an obstacle or banking a slope. Roll has some annoying repercussion for road holding: the tires can slip more easily and vertical load transfer is greater. Pitch is the relationship between the body and a transversal horizontal axis, which depends not only on the inertia that occurs under braking or acceleration, but also when a wheel goes over an obstacle or an uphill road. Pitch has the same consequences as roll.

#### EPILEPSIE WARNUNG

Lesen Sie die Gebrauchsanweisung und insbesondere diesen Abschnitt, bevor Sie dieses Videospielsystem benutzen oder Ihren Kindern erlauben, es zu benutzen. Ein Erziehungsberechtigter sollte mit Minderjährigen die Bedienungsanleitung durchgehen, bevor sie zu spielen anfangen. Bei manchen Personen kann es zu epileptischen Anfällen oder Bewusstseinsstörungen kommen, wenn sie bestimmten Lichtblitzen oder Lichteffekten im täglichen Leben ausgesetzt sind. Diese Personen können einen Anfall erleiden, während bestimmten Fernsehbildern ausgesetzt sind oder bestimmte Videospiele benutzen. Es können auch Personen davon betroffen sein, deren Krankengeschichte bislang keine Epilepsie aufweist und die nie zuvor epileptische Anfälle gehabt haben. Falls bei Ihnen oder einem Ihrer Familienmitglieder unter Einwirkung von Lichtblitzen mit Epilepsie zusammenhängende Symptome (Anfälle oder Bewusstseinsstörungen) aufgetreten sind, wenden Sie sich an Ihren Arzt, bevor Sie das Spiel benutzen. Eltern sollten ihre Kinder bei der Benutzung von Videospielen beaufsichtigen. Sollten bei Ihnen oder Ihrem Kind während der Benutzung eines Videospiels Symptome wie Schwindelgefühl, Sehstörungen, Augen- oder Muskelzuckungen, Bewusstseinsverlust, Desorientiertheit, jegliche Art von unfreiwilligen Bewegungen oder Krämpfen auftreten, so beenden Sie SOFORT das Spiel und konsultieren Sie Ihren Arzt.

#### Ihre Gesundheit

Halten Sie sich so weit vom Fernsehbildschirm weg, wie es die Kabel der Konsole gestatten (etwa 2 Meter). Das Spiel sollte bevorzugt auf einem kleinen Bildschirm gespielt werden. Spielen Sie möglichst nicht, wenn Sie müde sind oder nicht ausreichend geschlafen haben. Stellen Sie sicher, dass der Raum, in dem Sie gerade spielen, gut beleuchtet ist. Machen Sie beim Spielen mindestens eine Pause von 10 Minuten pro Stunde ein.

#### Dreamcast starten:

Die GD-ROM kann nur mit einem Dreamcast-System abgespielt werden. Versuchen Sie nicht, die GD-ROM auf einem anderen CD-Gerät abzuspielen – Kopfhörer und Lautsprecher können dabei beschädigt werden.

Schließen Sie Ihr Dreamcast-System an und folgen Sie dabei der Anleitung in Ihrem Dreamcast-Handbuch. Bei Spielen für zwei oder mehr Spieler schließen Sie zusätzlich Controller 2 bis 4 (optional erhältlich) an.

Legen Sie die Dreamcast-GD-ROM mit dem Aufdruck nach oben in die Vertiefung der CD-Schublade und schließen Sie den Deckel. Drücken Sie den Power-Knopf, um das Spiel zu laden. Das Spiel startet, nachdem das Dreamcast-Logo auf dem Bildschirm erschienen ist. Wenn nichts erscheint, schalten Sie das System ab und überprüfen Sie, ob es korrekt angeschlossen ist.

Wenn Sie das Spiel zwischendurch anhalten wollen oder wenn das Spiel endet und Sie neu starten möchten, drücken Sie A, B, X und Start gleichzeitig, um zum Titelbild zurückzukehren. Drücken Sie erneut A, B, X, Y und Start gleichzeitig, um zum Dreamcast-Fernsehbildschirm zurückzukehren.

Wenn Sie den Strom einschalten, ohne eine GD einzulegen, erscheint der Dreamcast Systembildschirm. Wenn Sie ein Spiel beginnen möchten, legen Sie die Dreamcast-GD-ROM in die Konsole ein; das Spiel wird automatisch geladen.

**WICHTIG:** Ihre Dreamcast GD-ROM enthält einen Sicherheitscode, der es möglich macht, dass die GD gelesen wird. Halten Sie die GD möglichst sauber und behandeln Sie sie vorsichtig. Wenn Ihr Dreamcast-System Schwierigkeiten beim Lesen der GD hat, nehmen Sie diese heraus und reinigen Sie sie vorsichtig. Beginnen Sie dabei in der Mitte der GD und wischen Sie direkt von der Mitte aus zur Kante.