

PROFESSIONAL F1 Manager

Presented by Home of the Underdogs
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.PIER.57.

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WELCOME TO THE EXCITING WORLD OF FORMULA ONE RACING!

With Formula One Professional Manager you will be your own team manager and be able to fight for the World Championship against your competitors. This handbook should be both a source of information and a means of helping you decide what to do. As well as describing all the usual functions, the handbook explains all the important terms and concepts.

If you have a problem, it is always best to be sitting at your computer or at least to have the boot sequences of your computer and the version number of the game in front of you. You will find the boot sequences in the files CONFIG.SYS and AUTOEXEC.BAT, which will come up when you start up your computer. The version number of the game will be shown at the start of the game.

Do not mistake the version number of DOS/4GW with that of Formula One Professional Manager.

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Installation

Before the game can be run, it must be installed on the hard drive. Put the Formula One Professional Manager CD in the CD-ROM drive.

A) WINDOWS 95

If AutoPlay is activated in Windows 95, a small program called F1-Run will be called up as soon as you put the CD in. With the help of this program you can install Formula One Professional Manager, read the Readme file and so on.

If AutoPlay is not activated, you can get started by using the Windows Explorer program „SETUP.EXE“ from the CD.

Click on the button „F1 PRO install“. The setup program will immediately install Formula One Professional manager in the directory you have chosen, and display an icon in the start menu of windows 95 with which you can start the game.

If you have problems selecting the drive on which you would like to install the program, specify the path you want directly in the application. You can do this if you have just come out of a directory in this drive.

Before you can run the game, you should install your sound card. For that you run F1 Run „Sound Configuration“. (See SETSOUND with MS-DOS installation).

RUNNING THE PROGRAM

Run the F-One Run in the menu with
„PROGRAMME/SOFTWARE 2000/FORMULA ONE PROFESSIONAL MANAGER.“

To start a game click on „Run F1 Pro“

If the program does not start in full screen mode, please change it yourself. Run the program in the window and then you can then change to full screen mode by using the keys ALT + ENTER. If after startup the program should be minimised (i.e. it appears only in the startup menu) then simply click on Formula One Professional Manager in the startup menu.

You can also start up by using the program „F1RUN.EXE“ in Windows Explorer. The program „F1.EXE“, in the directory in which you have installed Formula One Professional Manager, starts the program directly.

B) DOS or DOS-Box in Windows

Select the CD-ROM drive (e.g. with D: return where D represents the CD-ROM drive)

Then give the command

INSTALL <RETURN>

The installation program will then run.

First a selection screen is displayed.

Motor sport 2

To install the program, click on „install“ with the left mouse button.

On the Installation screen you will see the following data:

-Drive	(The hard drive on which F1 Professional is to be installed)
-Free memory space	(How much space remains on this drive and if it is enough for this installation)
-Path	(The pathway in which F1 Professional is to be installed)

If you click on the drive letter you can select a new hard drive directory. Simply type in the required letter on the keyboard. Press <return> to confirm your choice. With „Free memory“ you will see how much memory you need for F1 Professional and whether the drive you have chosen has enough memory available.

When you have found a suitable drive you can then change the program pathway. To do this, click on the field with the chosen path. You can erase with the backspace key and with the insert key switch between insert and overwrite. You can move backwards and forwards in the text using the cursor key. Confirm your request by pressing <Return>.

To start the installation, click once on „Install“.

The program will now be installed in the required directory on the chosen drive. After installation you will be returned to the main directory on the chosen drive.

STARTING THE PROGRAM

When you want to start up Formula one Professional Manager again later, it must be started from the directory into which it has been installed. You must therefore switch to the appropriate directory.

Start the game with the command **F1 <RETURN>**

C) INSTALLING THE SOUND CARD WITH SETSOUND

After the program is installed on the hard drive, if possible a sound card should be installed so that it can be used with Formula One Professional Manager.

To do this, click on „ Music/sound“ in the installation menu.

In the upper window you will be shown which sound drivers are installed for Digital-Audio. In the lower window you have the possibility of changing this setting. Select the required option with the up/down cursor button and press <return>.

In the following window you will be offered a selection of sound drivers. Use the up/down cursor key to select

the driver which suits your sound card. You will find information on this in the instructions for your sound card. Then press <return> again.

Now the parameters of the sound card must be set. You can leave the parameters set to automatic or you can put in the appropriate values manually. As not all sound cards support the automatic settings, in certain cases SETSOUND must be called up again so that you can put in the correct parameters manually.

When all these settings have been put in, come out of SETSOUND again. Your settings are confirmed and can be used with Formula One Professional Manager. If you don't install the sound card, the program will run without sound effects.

You then return to the installation menu again.

When you click on „Information“, you get a small text window containing a few more additions to the handbook.

With „End“ you leave the installation and start Formula One Professional Manager.

D) CONTROLS

The game is essentially controlled by the mouse. To call up a function, put the mouse pointer on the appropriate icon or button and press the left mouse key: you „click the button on“. This will open screens on which you can make settings. These are called „requesters“.

Instructions can be called up anywhere as long as you keep the left mouse button down. With the right mouse button you can either call up the online help or leave the current screen. If a small question mark appears on the mouse pointer, you can open a small text window by pressing the right mouse button. The function under the mouse pointer will be explained in this window. If no question mark appears on the cursor or the mouse pointer, then click on the right button to leave the current screen and return to the screen you were in before.

Use the keyboard for text applications. Each text insertion will be finished by pressing <return>.

Starting the game

Welcome to Formula One. Before you take over your team, you should make a few important specifications. At the start you specify how many new team bosses will be added in the coming season. Then these bosses choose their teams. When they have set their objectives, multi-player settings can be set up with several players.

After this the game startup menu appears. To start a new game, click once on the logo at the bottom on the right. If several players want to start, you must first put in the number of players.

The game start menu offers the following options:

NUMBER OF PLAYERS

If you do not click on this bar a single-player game is automatically installed. To start a new single-player game, click once on the logo at the bottom on the right.

The number of players can be set to variable. This is controlled by a sliding scale which doesn't appear until the respective bar has been clicked on with the left mouse button. Click on the triangular pointer and hold the left mouse button down. The pointer will then be moved along by the mouse. The set value will automatically appear on the right next to the bar in question.

During a game additional players can be added or taken away.

INTRO

After you have started up the game for the first time, only a short introduction will be shown at the beginning of the game. If you want the full introduction once more, click on this bar.

CREDITS

After you have clicked on this bar, information on the technical designers of Formula One Professional Manager will be displayed.

TO LOAD A GAME

To do this you go into the load screen. In order to continue a stored game, click once on the required game.

With the arrow at the bottom left, interrupt the loading procedure and return to the startup menu.

EDITOR

To get to edit, select the bar of the same name and click on the logo at the bottom right. When you leave edit again, you go back into the game startup menu. The changes you have made are then valid for a new game. For stored games only the changed pictures will be taken over.



Detailed instructions on the use of edit can be found in a separate chapter near the end of the handbook.

TO END THE GAME

After you have clicked on this bar you will leave Formula One Professional Manager. Confirm this with a click on the logo at the bottom right.

TO START A NEW GAME/ CONTINUE

To start a new game, click on the logo at the bottom right. For a multi-player game the number of players must of course be entered first.

Level of difficulty.

The teams are divided into three grades of difficulty. Beginners should opt for one of the top teams because these already have first class equipment. If you're looking for a challenge, choose a weak team. For a team like this a place in the points table is a great achievement. You must decide on one of the four bars by clicking on. As soon as a bar has been chosen, arrows appear at the lower edge. You go to the next screen by clicking on the logo.



MULTIPLAYER

If two or more players are chosen at the start, the menus for both level of difficulty and choice of team will be repeated one after the other for each player. Players should therefore agree beforehand about the allocation of teams because, of course, no team can be chosen twice.

TO DISCONTINUE

With the arrow at the bottom left, break off the game start and return to the game startup menu. If you have several players all the team settings that have been inserted up till then will be cancelled again.

The following levels of difficulty can be chosen:

TOP TEAM

These teams are equipped with everything your heart desires and theoretically could start and win the game without much input from the player. A top team has only one aim: the World Championship!

MEDIUM TEAM

These teams are somewhat weaker than the top teams. Their team strength is such that the drivers are regularly in the points (at least sixth place); however, they are not at the top of the points table for the season. A middle team will set itself the goal of regularly reaching third place at least.

WEAK TEAM

These teams represent a real challenge. Poor financial support, no top drivers and a small development centre make their progress ever more difficult. Here you should just try at first to collect the first World Championship points for your team.

OWN TEAM

Here you are allowed to combine whatever team characteristics you want. The level of difficulty is therefore dependent on the settings.

Team choice.

The setting up of this menu is the same whether you have decided upon a top, middle or weak team. The only difference is that other teams are offered. The operation is somewhat expanded for a „Own team“.

With the arrow at the bottom left you will again go into the choice of difficulty. You can browse through all the possible teams before you decide.



TEAMS

You choose the team on the left by clicking on the mouse on the relevant team logo. The team that has just been shown will be bordered in yellow. The chosen team will be put in four information blocks. As soon as a team is chosen, the triangle appears again below. Then you can end team selection with a click on the logo.

TEAMDATA

The four information blocks are divided into the areas logo, engine, driver and car. When you click on one of these fields, this field rotates. From the other side appear further details on the respective areas:

LOGO

As additional information for team logo, you receive here the complete team names as well as the name of the team manager.

ENGINES

On the front are the engines used and the manufacturer's logo. On the back you will see in addition the type of engine and engine data.

DRIVER

Behind the drivers in the team there are a few statistics about the team's successes until 1996 (races entered, pole positions, victories, driver world championships, constructor world championships).

CAR

The car on the front shows the team colour of this team. The back gives information on the quality of the development team. Each team has five possible engineer posts to allocate. For each appointed engineer, you are given his quality stars next to the section and to the right.

OWN TEAM

In principle, this menu is set up exactly like the team choice. It consists of the same elements. The difference from the team choice is that you must first click on an information field in order to choose it. The field is then highlighted and the choices



are specified on the left hand border.

As a rule there will be more than four choices. There is therefore a yellow line with a scale next to the readings and on the right. With this you can scroll through the variations. Click on one variation and this will be taken into the data field.

If you click once more onto a data field that has already been chosen, this will turn round. Default settings on the back are the settings for the chosen team logo.

The following characteristics for a team can be set up:

LOGO

Front

Here you can choose the logo of your new team. All the settings of the other data fields will then automatically be inserted into the basic settings of this team.

Back

As with a fixed team, the complete lists of team names are on the back and the name of the current team manager recorded.

ENGINE

Front

On the left appears a list of the possible engine manufacturers. You choose their engine by clicking on the one you want. You can scroll down the list of engines by using the yellow triangle.

Back

Here you can call up detailed information about the engine you have chosen.

DRIVERS

Front

Each of the two drivers can be chosen individually. You then receive the choice of the possible drivers. When you choose a driver who has already been allocated a team, then the new driver and the custom driver are exchanged.

(Take care in multiplayer: you must not poach another player's driver.)

Back

Behind the field with the two drivers, the race success statistics of the chosen teams are displayed.

CARS

Front

Here you choose your team colour. Formula One teams set great store by their external appearance. Your chosen team colour will then appear on your cars and your mechanics, and as decorative borders on your lorries etc.

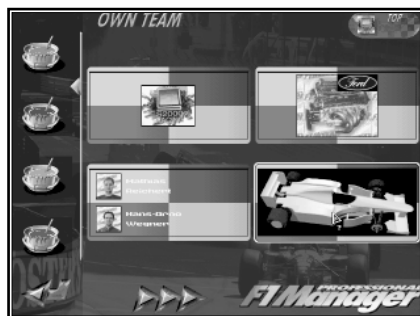
Back



Here you can see whether the different sections of your team are already under the control of an engineer. You can work out the quality of your engineers by the stars to the right of them.

TEAM STRENGTH

The strength of the team can be set with the small button at the top right. Click on it and scroll through until you reach the required level (top, middle, weak). The strength of the team has an effect on the sponsors' initial attitude and the quality of the cars already available.



You can also use the option „Own Team“ as a temporary measure. The settings of the opposing teams will be retained. To return to the default settings, switch back to the screen using the arrow at the bottom left.

If several players are lined up at the start, the team strength will be set later for everyone on the multi-player screen.

Aim of the game

When all players have chosen their teams, this menu appears. Here you can set your own target at the beginning of each game. For example, for a weak team the task could be to reach the victors' table once. A top team, on the other hand, might be thinking of a second World Championship.



The aim of the game will also be set once only for all players in multi-player mode. The team that reaches its goal first wins the game.

NO LIMIT

When this bar is activated no game target or time limit is set. The game finishes only when you finish it yourself or when you have the misfortune to go broke.

SEASON

If this bar is not activated, then the number of seasons to be played is unlimited. If no game target was set, the game ends automatically after the completion of the set season. If, on the other hand, a game target has been set, then the game normally ends as soon as a player has reached this target. If no player succeeds in his aim at the end of the season then the words „Mission Lost“ appear on the screen.

HOW DO YOU CONFIRM YOUR GAME TARGET?

A game plan can be made up by using the four lower bars. Each bar can be activated singly. As soon as the control bar is clicked on again, the bar in question is deactivated. A season that has begun will be clocked up until the last race. You will not know until it is checked at the end of the season whether the target has been achieved.

All aims can be made up with the exception of the „no limit“ bar.

The following aims can be specified:

DRIVERS' WORLD CHAMPIONSHIP

Here you enter which position in the drivers' World Championship table you want one of your drivers to achieve. As soon as you choose this option, two control bars appear. In the „Position“ bar you set which position you are striving for in the drivers' World Championship table. If you will be satisfied only with the World Champion title, put down position „1“. For a weak team, however, a less optimistic aim would be sensible.

With the „Number“ control bar you specify how often you will reach the position you have chosen. With the sliding scale it is possible to set, for example, winning the World Championship twice as an aim. As this is an aim for your team, it is not important which of your team drivers achieves this position.

CONSTRUCTORS' WORLD CHAMPIONSHIP

When you have decided to specify a certain place in the constructors' World Championship, you activate this bar. The controls are the same as those for the drivers' World Championship. For example, you could specify that your team has met its target only when it has reached at least second place in the constructors' table for five seasons. (Number =5, Position =2).

WORLD CHAMPIONSHIP POINTS

Here you will enter the number of World Championship points you hope your two drivers will obtain together. The maximum you can get is 272 World Championship points, which correspond to the number of points received if both drivers in a team, without exception, gain first and second place in a season. As with the placings, the set values always refer to the number of points gained in a season.

The performance of both drivers will be taken into account with this setting. With weak teams this can ease the load because both drivers collect the world Championship points you want together. Top teams can make their mission harder by saying that one of their drivers must win the World Championship and their second driver must be in the points in order to achieve their aim.

If, for example, you have specified as your game target that for six seasons you will have one world Championship driver and 170 World Championship points (in combination), your target is not achieved until your team has at least 170 World Championship points in all six seasons, even if you have already won the drivers' World Championship title four times. When you have no time limit and have set only World Championship points as your target, the game ends after one season.

PLACING

There are two values to set here: on one, the position which, as a minimum, you are aiming to reach (1-22); and on the other, how often this should happen in a season. This value refers equally to both drivers.

There is, for example, a difference between whether a team wants „only“ to win the drivers' World Championship in a season, and whether it wants to do this and have 17 first places. In the second case, after each race of the season one team driver must be on the winner's platform.

Setting the placings as a target is especially suitable for weak teams. For example, you can aim to reach at least sixth place three times in a season.

The placings are calculated for each season. The set number and lowest placing must be reached each season and are calculated as the World Championship points are.

AND/OR

With this you specify how the targets should be combined with each other. There are therefore two possible

settings:

„And“

When you have chosen this combination you must fulfill all the individual targets to complete your mission. The targets for „Placing“ and „World Championship Points“ must be reached for each season!

„Or“

With this combination you have already fulfilled your aim when you reach only one of your individual targets.

TO RUN THE GAME FOR A SINGLE PLAYER

Click on the logo at the bottom right to run a single-player game. You take your team over and join it in your organization office. It is the first of January 1997 and the '97 season is about to start...

If more than one player has started the game, the multi-player menu follows instead of this.

Multiplayer

This menu appears only when two or more players have started the game. The screen divides into two sections : lap times and team strength.

ROUND TIMES

When several players play a round-orientated game there is usually one fusspot there who won't finish his round: one fine adjustment here, another beat there.... To narrow these down, four different game areas are arranged which can be defined.

When a time limit is activated, a small racing car appears on the bottom edge of the corresponding screen. This drives slowly from left to right. As soon as its front bumper has touched the right screen edge the allotted time is up.

The following detailed settings are possible:

TIME BETWEEN RACES

This indicates the time in minutes the player has at his disposal at any given time until his next race. All the manager's business and car adjustments must be completed within this time. The time is automatically up when the player sets off for his race.

Should the time be up before a manager sets off for the next race weekend, then the Departure screen comes up automatically. The player has the opportunity here to load up the lorry in peace and then set off.

TRAINING DAYS EACH SEASON

This includes those test drives that the manager does himself on a test course. As such testing involves many adjustments, a test day can last a long time. While this is going on, however, the other players can only watch and do nothing. Therefore, the number of such test days per season can be limited.

A setting, „6“ for example, means that a maximum of six practice days maximum can be booked in a season. This means that only the test drives that a player can carry out on the test circuit itself are limited. Tests carried out by your engineers are limited only by your finances.



A test drive interrupts the „Time Between Races“. This means that the time picks up again after a test drive at exactly the same point where it stopped for you to set off for your test circuit.

TIME PER TRAINING DAY

In addition to limiting the number of testing days, you can limit the amount of time allowed for each test day. When the allotted time is up, the next day will automatically begin and the practice will be over. A practice day can also be ended at any time by going back to the race office.

TIME BEFORE THE START OF THE RACE.

This option limits the time available for adjustments to a race weekend. This period begins directly after your arrival in the race office and effects the amount of time at your disposal for preparations before the start of the next race stage (for example free practice). After each completed phase of a race the time allowance begins again. When the time is up only the next phase of the race can be started.

TEAM STRENGTH

In order to give all players an equal chance, or to even out differences in experience, a team strength can be fixed for each player. As before, with „Own Team“, this team strength has an effect on the attitude of sponsors to this team and the quality of the cars available.

Click once on the respective team logo and the different strengths will scroll through.

TO START THE MULTIPLAYER GAME

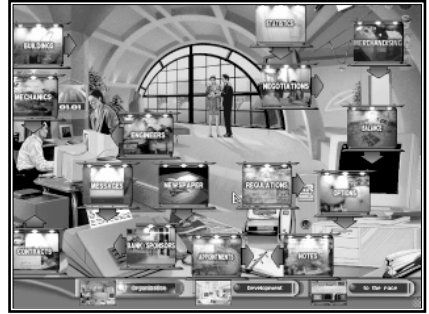
Click on the logo at the bottom right to start the game. It is the first of January 1997 and the '97 season is about to start...

The order of play for the players in each round is determined at random. Each player is represented by the team logo of his chosen team. As soon as the screen with the player number and team logo appears, that player has his turn. As with the start, this player begins his round by clicking on the logo.

Organisation Office

Welcome to your boss's office. From here you can carry out all the organisational duties of your new career. The management of your team encompasses three areas:

- Organisation of the enterprise
- Development of newer and better cars
- Development of race strategies



So you will be either in your race office in town, in your development centre elsewhere or actually at the race track. On the screen you see your office from your desk. In order to call up specific functions, click on the relevant objects on the screen. As soon as you have called up one of these „requesters“ a small window appears which shows you the function of the „requester“.

HOW IS THE GAME SET UP?

The operation is divided into three areas. In each of the areas you have at your disposal a specially equipped office:

ORGANISATION OFFICE

- A full complement of personnel
- Contracts with suppliers
- Sponsoring and merchandising
- Reports, newspapers
- Accounts and banking
- Buildings
- Statistics
- Regulations
- Notices
- Appointments
- Options

DEVELOPMENT CENTRE

- Several chosen functions from the organisation office
- Development (automatic)
- Telemetry
- Contact between the various departments
 - design
 - factory
 - wind tunnel
 - assembly shop
 - stores
 - departure

AT THE RACE TRACK

- race office with several selected office functions
- pits and command post
- race tactics

- telemetrie
- various information monitors
- pit stops

GENERAL OPERATION

OVERVIEW OF FUNCTIONS IN OFFICES

In all three offices you normally access the functions by running the mouse over the office screen. However, if you do not know where you must click, the search for the right place could possibly be quite nerve-wracking. (Though you may use this opportunity to discover a function that you have not noticed before...)To avoid this, simply hold the left mouse button down. All possible functions will then be highlighted at the same time for your guidance.

WARNING SYMBOLS

In most rooms, eight danger symbols are placed at the top right. Usually these are transparent. As soon as a warning becomes active, the respective symbol comes to the foreground. You can click on this symbol at any time in order to go direct to the suitable „requester“.

SYMBOL	MEANING	GOES TO
Fountain pen	Not all contracts have been settled. The time span of individual contracts has run out.	Contracts
Paper	A new fax has arrived. Some faxes have only a limited validity.	Messages
Wall	A section of the development centre is overcrowded.	Buildings
Dollar sign	The balance of your account is nil.	Ballance
Clock	Only a few more days until the next race departure.	Departure
§	Some assembled cars do not correspond to assembly shop regulations.	Assembly shop
Car	Not all cars are completely assembled.	Assembly shop
Helmet	The team does not have two drivers under contract. Driver contracts are running out.	Driver

BOTTOM BARS

Above the bottom bars you have almost everywhere the means of changing your present whereabouts quickly. There are three different types of bottom bars: offices, a development centre and the races. From the bottom bar in the organisation office you can change directly between this office and the development office. When you click on „To Tthe Race“, you jump directly to „Departure“. Then you can set off immediately for the next race.

ROUND TIMES

In a multiplayer game you can set the round times, which automatically end the player's turn when a set time has elapsed. When such a time limit has been included, a car travels slowly along the bottom from left to right. As soon as the front bumper of the car touches the right hand edge of the screen, the round is over.

ONLINE HELP

If you scan over icons with the mouse at certain places a small question mark appears. As a rule the mouse is

then just above an icon. If you now click the right mouse button, a small window appears with a short help text. The on-line help can also be switched off in the settings.

RIGHT CLICK

When the on-line help is switched off or if there is no question mark on the mouse pointer, you can close the current screen by clicking the right mouse button.

PUTTING THE DATE FORWARD

So that you do not waste too much time as manager, you will find in the main screens a data indicator. With the aid of these data indicators you can put the time forward. In order to go forward a day simply click on the day. The months can also be put forward with a click on the month number. So that you do not miss a race by putting the time forward you will of course be warned in time. After the warning you should, however, get off to the race without any delay.

HOW IS THE FIRST RACE STARTED, DIRECTLY AFTER THE BEGINNING OF THE GAME?

After you have taken over your team you arrive in the organisation office. At first you glance at the fax machine. There is already a fax here to greet you. In this are all the important things you have to do before your first race.

Then you make contact with the future suppliers of your team. After all four contracts are signed and sealed, it is time to get sponsors for your team. Try to get as much money as possible for your team - the team must exist on it for a whole season.

Now is a good time to take another look at the warning symbols. All the symbols should really be appearing as transparent in the background. If not, click on the relevant symbol and see what you have to do. When everything is alright, there is nothing to stop you setting off.

Click either „To The Race“ in the bottom bar or „Race“ in the requester „appointments“. In order to set the time to shortly before the race, change to „Loading“ and click on the date in the top right hand corner. As soon as you have sufficiently advanced the time, the icon under „Departure“ goes green. The technical director is packing all the important things, including the tyres, into the transporter. If he is not available or deactivated, a small red light will flash in „Departure“, which shows that you must choose the tyres (and other spares) yourself.

You are now ready for your first race. Click on the green departure button and you are already on the way to your first race weekend.

ARRIVING IN AUSTRALIA

At the race track you automatically find yourself first in your race office. After you have perhaps reminded yourself of the track with the track information, look at the deadlines for this weekend. To do this you can click on „Race Start „ in the bottom bar.

You have the greatest confidence in your engineer and simply want to evaluate the performance of your team. You therefore deactivate all free practice sessions. Now only the qualifying heat and the race itself remain. After you have scrolled through individual practices with „Start“, you begin the qualifying heat in the pits.

You might glance once more to check the settings in Setup before you start your drivers off on qualifying laps on the tactics screen. For each start you can immediately put the necessary amount of petrol in the records.

You should instruct your drivers to use the most aggressive driving tactics in their pursuit of pole position.

After qualifying you finally go over to the last practice. Before you jump to the race you confirm the race tactics with your technical director. (Of course, you mustn't have him deactivated in the automatic when you do this.) Then you specify the tyres for the pit stops and the amount of petrol - or you use automatic for both drivers each.

Finally you start the race and go to the command post directly between the pits and the home straight. From here you will experience your first real race

Messages

You will be informed by fax of important requests or happenings. Should faxes appear in the fax machine below left, click on the machine and you will be able to read them. As soon as a new fax arrives, the relevant warning symbol appears and remains there until the fax has been read.

Your first job after taking over should be to read the fax that is there to greet you. This will give you a little help by telling you what you must do before the start of your first race.



FAX MANAGEMENT.

Some faxes you can confidently get rid of after reading. Others are worth keeping. You have the following possibilities with regard to your faxes:

GET RID OF IT

The fax you have just read will find its way irretrievably into the waste paper basket.

Highlight it

So that you do not amass an unsightly mountain of paper, at the end of the season the faxes are automatically thrown away. However, should there be a fax there that you want to keep, click on highlight by the open fax. This button remains pressed. You can keep this fax until you decide to get rid of it.

SELECTION

Faxes are filed according to date of receipt. For each fax received there is a corresponding fax icon with date of receipt. When you click on this icon, you will open this fax. When there are too many faxes for this method of storage, a scroll bar appears.

DATE

You can put faxes here for re-submission. After you have set the month and the day with the arrow keys, you can confirm this date with „Memory“. The fax will then be remembered. This is sensible, for example, when the date is shortly before the time a deadline is up.

SHORT CUTS

When you have read a fax and want to reply to it, the fax content usually tells you automatically which screen you should go to. These screens are placed with the buttons top left to simplify matters and to make them accessible. If, for example, a sponsor wants you, you can go to the „Sponsoring“ icon which appears with the fax and this takes you immediately to this screen.

Press

Journalists watch closely what your team is doing. After each race or practice, new reports about your racing stable appear. You will find out the most important headlines by taking a quick look in the newspaper.

If you have won your stated mission, or if this aim has been pushed out of sight, you will read it here first.



Contracts

Before your team can take part in the opening race, you must first make four delivery contracts. Contracts will be needed for the following consumables: engines, tyres, fuel and raw materials. You are taking on important partnerships, especially where the choice of engine supplier is concerned.

ENGINE

This is the most important contract partnership of the team. It is one of the deciding factors for the performance of a team that the name of the engine manufacturer is a strong component of the team name. At the beginning of the game, each player already has an engine supplier. The quality stars or the engine manufacturer indicate the performance quality of their engines.



TYRES

From the 1997 season you have the agony of having to choose between two different tyre manufacturers.

FUEL

Formula One is an important image maker for the oil companies. The competition to produce the best-performing fuel is very keenly fought, like the competition between the engine manufacturers.

RAW MATERIALS

This includes the supplying of all necessary production materials. The quality of this material is also very important, because an accident in a race due to equipment failure can be very frustrating. The contract includes all the main materials used in the production of a formula one car: aluminium, carbon fibre, nomex, kevlar, glass fibre and resin. Aluminium and the somewhat more pliable nomex can be supplied in the especially light and stable honeycomb form.

HOW IS A CONTRACT CONCLUDED?

In order to conclude a contract, first choose one of the four contract areas and then the partner you want. If you are not satisfied with the suggested conditions, you can make more promises about your future performance, and perhaps that will endear you to the partner you are having talks with. Then, if necessary, you can offer a few more advertising slogans on the car and/or on the team outfits. If you are both satisfied then you can seal the contract with „Sign“.

CONTRACT AREAS

To switch between the four contract areas named above, you need only to click on the blue switch in the middle. If you change the contract area while you are still negotiating a contract, then you break off negotiations.

PARTNER

Now you can go through all the possible contract partners individually with the arrow keys above left. For each supplier you receive three pieces of information: logo, quality stars and disposition.

The quality stars indicate the basic performance capability of the assessed component of the game. Five stars signify the best. For engines and fuel, this clearly means better performance. Good raw materials mean greater reliability and sometimes less weight. The small head symbolizes the attitude of your intended partner towards you. The more he is looking forward to working with your team, the better the conditions he will offer you in the contract. If you have chosen a weak team you probably will not attract the top engine manufacturers to your team.

As you are a weaker team there will be limits to the amount of sponsorship you will receive. You shouldn't therefore try to attract the best manufacturers, even if they express interest, because there will not be enough money left for drivers, engineers and developing the car.

LENGTH OF CONTRACT

You can set the length of contract you want with the arrow keys. Usually the contracts last for one or two seasons. If your partner has not been in a good mood up to now, it would be better to make the contract for only one season.

PROMISES

The engine manufacturer holds out no great hopes for your team? He obviously doesn't know yet about the great ambitions that you as a new manager have for the coming seasons! Surely with some persuasion you can improve your supplier's belief in your team.

To do this, click on „Promises“. Here you can share with your supplier what aims you have and when you expect to achieve them. But be careful! If you have been over-ambitious, you could, in the worst case scenario, lose the supplier again: he will quickly lose all faith in your team.

ADVERTISING SPACE

In Formula One, advertising is everything. When a partner has contracted to work with your team, he wants to know that his logo will be on the car and the team outfits. But don't be too generous! You need these spaces to finance your team. How the advertising spaces are distributed will be dealt with later.

SIGNING

Read the terms of the contract through once more. As soon as the supplier has agreed with the contract „Sign“ will be lit up. If you are happy with everything, then you can conclude the contract. As soon as „Sign“ is clicked on your team has a new partner.

TO TERMINATE THE CONTRACT

To enter into new negotiations you must first terminate the existing contract. This is a sensible move when the performance of your team has clearly improved. Then you can win better partners or aim for better conditions. This is, however, only possible after the last race of the season.

Advertising space

Almost as important as the racing experience of a team is its outward appearance. Basically, everything must be sparkling clean and look like new. If a front bumper is slightly scratched then it would be better to replace it completely. The teams even employ a special decorator who equips each freshly painted part with the stickers.



Formula One is a significant opportunity for advertising, especially when you consider the strong presence of the media. Each contractual partner would therefore like to see his logo in the best possible advertising space.

As soon as you are ready to offer a future partner or a sponsor their advertising space, you get into this screen. On this can be seen the individual advertising spaces.

At the top left is the information about the sponsor or manufacturer with logo, quality stars and attitude. In addition, the value of the contract, around which this all revolves, is shown. With sponsorship, the height of the bar behind the contract value shows the importance of this sponsor. For example, if the bar is half full, then, if you have successfully negotiated the contract, half your sponsorship comes from this sponsor.

HOW ARE THE ADVERTISING SPACES ALLOCATED?

When you pass the mouse over the car, helmet, peaked cap or outfit, the individual advertising spaces react as soon as the mouse stops on them. The more valuable spaces are those that show up bigger and better on the television. The value of a space is also given in quality stars at the bottom left.

ARRANGING THE ADVERTISING OFFERS

To arrange the offers, simply click on a free advertising space. The sponsor's or the manufacturer's logo is temporarily placed on that space. Now you can click on other spaces to add to the offers. Spaces taken temporarily will be released by clicking on them once again.

You will see at the bottom left under the mouse pointer not only the value of the space, but also the number of spaces used for this offer and how much they represent as a percentage of the total advertising space. The yellow and black bar gives an estimate of the real value of the spaces shown. This estimated value is worked out from the previous results of your team and the quality of the arranged spaces. If the bar is half full then the value of the spaces is roughly equal to the value of the sponsorship or the manufacturer's offer.

Of course, you could make one manufacturer really happy if you plaster his logo all over the whole car. However, it is better to adopt the strategy of keeping the advertising space of one sponsor as low as possible so that you still have space for others.

HANDING OVER OFFERS

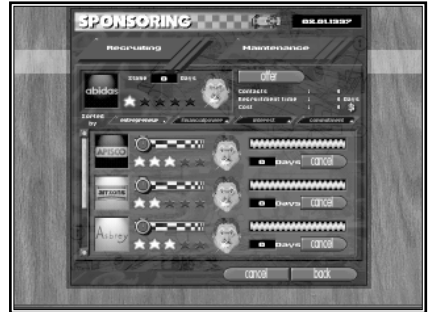
When you are happy with the distribution of offers, suggest these to your business partner with the „offer“ button. There are five little lamps above this. After the handing over of an offer, one of them becomes red. You always have exactly five tries for one offer. If no contract has been concluded after the fifth offer, the talks have broken down.

You will know the reaction of a business partner by the expression on his face, but, before that, on „OK” at the bottom right. When this goes green after an offer, then the sponsor or manufacturer agrees with your terms. Now you can confirm your offer or perhaps risk another offer.

Sponsoring

Without sponsorship Formula One would be nothing. In order to survive in Formula One a team must invest many millions. This money is raised mainly by sponsorship.

If you click on the right side of the fax/telephone in the organisation office a small requester appears. Here you can decide whether you prefer to call the bank or to contact sponsors. Click on the right side and you will reach „Sponsoring”.



Here you can recruit new sponsors and look after the sponsoring contacts you have already won. Using the blue shift key you can reach the corresponding side of the requester.

HOW DO YOU WIN SPONSORS?

RECRUITING

Using the arrow keys and the scroll bar at the bottom left you can scroll through all possible sponsors. Using the small buttons over the list you can sort the sponsor list according to different criteria.

On the left hand side of the list you will see each sponsor's logo, quality stars and attitude. The stars represent the sponsor's financial strength. A five-star sponsor has enough financial clout to be a main sponsor for a top team.

The face shows the present attitude of the sponsor to your team. Completely unsatisfied sponsors have no interest at all. The happier a sponsor is, the higher is the sum of money he will offer in the negotiations. You can give one of your colleagues the task to win a sponsor for your team. He will then try to improve the mood of this sponsor by persuasion and by his constant attentions. In this way, you may attract a wealthy sponsor or clinch an improved sponsorship deal.

To evaluate a sponsor, put the clock forward on the left hand side. The money pile on the right is at its largest at the beginning. Time is money - the pile becomes smaller with time. This represents the time and therefore the money that you have spent up till now for the improvement of this sponsor's attitude. Press „Commitment” and you will sort the sponsors according to the time that you have invested with individual sponsors. Over the course of time the pile will slowly disappear. The number of days you have already used is under the bar. If your efforts should be in vain, click on „Cancel”.

TO NEGOTIATE

To begin negotiations with a sponsor, click on his logo in the list. The logo, attitude and quality stars of this sponsor will then appear above left. You start negotiations with „Offer”.

The negotiations continue as described in „Advertising Space”. You do not know how much money a sponsor will offer you until the beginning of the negotiations. The total stays in the top left corner, with the other

sponsor information in the bar.

MAINTENANCE

Each sponsor that you have been able to win for your team through successful negotiations appears in this listing. The value of the sponsorship deal is given next to the usual pieces of. Below this amount the bar shows, just as it does with advertising space, the value of this sponsorship of your team as a percentage of the total sponsorship.

On the right hand side of the list you can read off how much longer the sponsorship deal will last. If the mood is favourable or your contract is about to expire, you can renew negotiations with „Offer“.

With „Look“, you reach the advertising space screen. Here you can look at the current design of your team at your leisure.



Merchandising

Another possibility of earning money for your team is by merchandising. The sales of various products should be increased by bringing in a well-known name.

Here your team has the opportunity to decorate all sorts of both useful and unnecessary articles with your team logo. In your merchandising expert's office you can see at a glance all the products that already carry your team logo. By clicking on „Merchandising“ you will open the corresponding table.



CHOOSING A PRODUCT.

First you choose from 21 different products the one you would like to put your logo on. Simply scroll through with the arrow keys until the product you want appears. Under each picture is a bar that shows the current demand for this product.

To choose a product to order, just click on it. From now on, the chosen product will be added as a new line in the list. You can then place an order for this line.



PLACING AN ORDER

An order is placed from left to right. First you put in the material costs. This decides the quality of the finished product. Then the selling price is decided. The difference between the cost of materials and the selling price is your profit per unit.

Apart from the quality of the materials and the selling price, you have to think about the demand. Obviously the demand for this special product will reflect the general demand for it. You then put in the size of the production run. You must be careful not to flood the market with products for which there will be low demand.

The relevant costs are immediately displayed at the top right. When you click on „start“, this order is confirmed. The full costs are immediately taken from your account. You cannot recover these costs until you have sold the products.

Sales show how many of these products have been sold up to now. Turnover shows how much money these articles have brought in. This is not the profit because you must deduct your costs from this figure.

You can re-order the same products. However, with each order, the overall demand for this product goes down. The market will slowly become saturated.

OVERALL SUCCESS

On the lowest line you get an overall view of your production. You are given the number of orders, the average demand for the products, the total costs and the total turnover of all orders. If you take the total costs from the total turnover, you get the profit or loss from your merchandising up to now.

Bank

A Formula One team has no spare money for any sort of financial speculation. Each dollar is invested in faster lap times. Therefore, the only time you contact your bank is when you want to take out a loan or negotiate one.

When you click on the right hand side of the fax in the organisation office, a small requester appears. Here you can decide whether you would like to call the bank or contact your sponsors. Click on the left hand side and you're through to the bank.



HOW ARE LOANS ALLOCATED?

To get into the bank, click on the revolving door. This opens the bank requester. On the top left is your bank balance. To the right you can see the debits and credits of the current season.



TO RAISE MONEY

In the lower third of the requester the attitude of the bank towards you is shown. This attitude is dependent on your team's success, the current debt and the relationship between income and expenditure.

The worse the attitude of the bank, the less likely it is to grant you a larger loan. Or else it will raise the interest rate considerably.

To apply for a loan, move the arrow keys to the sum you want. The double arrow in the middle will give you a rough idea of the amount deposited. Click on this, keep the left mouse button down and move the mouse up and down.

After you have decided how much you want, the term of the loan is displayed directly underneath. The bank

indicates the amount of credit and the term by the expression on its face. If these two values are high and the bank's opinion of you is low then the chances are that you will not get your loan. Unless the „Accept“ button is on, you can't take up the loan.

Each loan you take out appears individually in the listing of current loans. Here you have a good overview of your current debt. When a loan is completely repaid it disappears from the list.

Balance sheet

All income and expenditure appear in the balance sheet. The balance sheet always refers to the current season. All fixed costs for the whole season - for mechanics or buildings, for example - are already accounted for.

At the beginning of a new season the balance sheet needs to show a big plus because you must finance all test-drives, race transport, car development or wind tunnel tests with it.

You can call up additional details almost anywhere in the balance sheet. If, for example, you click on „buildings“, you receive an exact listing of the costs of each individual building.



Negotiations

A good race result is achieved only through team work. It is therefore your job to put together the best possible team.

Your policy on personnel includes deciding on the different mechanics, the leading engineers and, naturally, choosing drivers. If you click on the neon wall in the top right of the organisation office, you go into your conference room. There you can look at the personal files of all the drivers and engineers and can begin wage negotiations.



To access the drivers' files, click on the man with the peaked cap on the right. Clicking on the man to his left opens the engineers' file.

Drivers

Here you have, at a glance, all the important information about a driver. You use the header line to choose the driver. You can choose a driver by assessing his team spirit or other specified characteristics.



TEAM

With the blue switch „Team“, the logos of the active teams

appear on the right. These can be scrolled through using the arrow buttons. When you click on a team logo, information about the current driver of this team appears..

STATUS

When you activate „Status“, a row of choices appears to the right. Team spirit is of no importance here. The sorting sequence is confirmed by the red buttons in the header line. The other options serve to limit the search field.

With „Formula 1“, all available formula one drivers are shown at the beginning of the game. The button „Others“ lists all new drivers. Both groups are combined in „All“. If you are only interested in drivers without a firm contract, press „Free“.

DATA

Above is general information on the chosen driver. With the arrow keys and the scroll bar above the car number, you can switch to the individual drivers. Of course, you can only choose from the drivers that are in the header line. Under the general driver information is a resume of his Formula One career. The better these figures are, the more expensive he is, but - of course - the better driver he is too.

The third area gives information on the conditions of the current contract. Here you can see which team the driver is under contract to and his salary with all bonuses. To the right, next to the team logo, the car symbol shows whether the driver drives the number one or number 2 car, or whether he is the test driver.

Below, the driver's characteristics are set out. The fuller a bar is, the stronger those characteristics are. Next to the choice for an unknown driver is the view of the characteristics that are an important indication of his qualities.

THE FOLLOWING QUALITIES CHARACTERISE A DRIVER.

Character	Gives rough details about staying power, physical capabilities and driving style.
Experience	Rises with each test drive and each race. Experienced drivers drive to the best of their ability and safely.
Intelligence	Some drivers have good technical understanding. This is very important for the further development of the car. Drivers with good technical skills raise the number of experience points that are won with a drive.
Talent	You can get nowhere as a driver without talent. This is the basis for true champions.
Concentration	You must have a high level of concentration in order to complete each lap in a race without mistakes. If concentration drops then the risk of an accident is higher.
Motivation	A well motivated driver realises his potential better. Badly motivated or even over motivated drivers tend to make careless mistakes.
Fitness	As well as being able to concentrate, the driver must be able to contend with the physical demands of a race or else he is liable to have an accident.
Aggression	This has an effect on the driving style. An aggressive driver drives faster over the course and even faster on the straight.

DISMISS

When you have called up the data file of one of your drivers, the sign „Dismiss“ appears on the bottom left. With this you can release your driver immediately. But a penalty must be paid. The level of the penalty depends on the amount of time the contract has left to run. The longer a driver has been contracted to you, the more you will have to pay to get rid of him.

NEGOTIATIONS

With the sign „Negotiate“ you can start pay talks with the current driver. The way you go about this is described in the section „Pay Negotiations“.

Engineers

For each engineer you receive all the important information at a glance, just as you did with the drivers. The header line helps you look for an engineer. Here too you can look for an engineer according to his team spirit or other specified characteristics.



TEAM

The logos of the active teams appear on the right when you press the blue switch „Team“. You can scroll through with the arrow keys. When you click on a team logo, information about the current engineers in this team appears.

JOB

When the „Job“ switch is activated a list of choices appears to the right of it. Using the red buttons in the header line you can decide whether all engineers should be selected or only those without a firm contract. With the other buttons you can choose one of the five professional directions. Only those engineers qualified in this field will then be listed.

DATA

Above is all the general information about the chosen engineer. With the arrow keys and the scroll bar next to the name you can select individual engineers. Of course, you can only choose engineers from the header line.

Underneath are some further details about the person. It tells you about his Formula One experience and an assessment of his leadership qualities. The experience of an engineer is to be seen as one of the quality criteria. Also, a good engineer should have gained his experience under the special demands of Formula One. The character has an effect on the team motivation in the relevant department (see „Engineers“). The more motivated an engineer is, the better he can lead his team to the highest achievements. The third area gives information on the engineer’s contract ties. Here you can find out what team he’s working for, what he is paid and what bonuses he receives. Underneath there is information about the mechanics in his department. The number of mechanics and their total wage bill can be found out in „Mechanics“, as can their motivation.

DISMISS

When you have called up the data file of one of your engineers, the sign „Dismiss“ appears on the bottom left. With this you can release your engineer immediately. But a penalty must be paid. The level of the penalty depends on the amount of time the contract has left to run. The longer an engineer has been contracted to you, the more you will have to pay to get rid of him.

NEGOTIATIONS

With the sign „Negotiate“ you can start pay talks with the current engineer. The way you go about this is described in the next section „Pay Negotiations“.

Pay negotiations

Before each new appointment of a driver or an engineer come the pay talks. The pointer is on both the information field and the offer field.

INFORMATION FIELD

The upper board shows the names and the pictures of the negotiating partners. When you click on „I“ you reach the driver or engineer requester. Press „Back“ to continue the negotiations.



Above left you see the facial expressions of the negotiating partners. At the beginning these show the attitude these people have towards your team. You will know their reaction to each offer by the expressions on their faces. If he is totally unsatisfied with your offer (dribbling), the driver or engineer will break off talks. When he is happy with the offer (cheese), he accepts it immediately.

OFFER FIELDS

You put your offers on the lower board. To change a value, simply click on this. The corresponding scale comes out of the pit board. Modifications can now be made with the arrow keys. The green arrow inserts the new offers, the red button cancels the current offer.

An offer consists of the following parts (from top to bottom):

LEFT HAND SIDE

Year's salary
Bonus for each World championship point
Bonus for World championship title
Length of contract

RIGHT HAND SIDE

Shares in team (engineer only)
Driver status (driver only)

Shares in the team bins an engineer to your team and encourage higher motivation and are therefore quite an expensive business. The driver status determines which car a driver drives. Of course, car one can only be assigned if it has not already been allocated. Your team can take on up to three test drivers („T“).

Team motivation

Your development centre team is divided into five sections: Design, Production, Wind tunnel, Assembly shop and Race crew. You can either be in charge of these sections yourself or appoint an engineer.

Departments led by an engineer work more productively than those without such expert leadership. On the other hand, you can delegate tasks to the engineers. Then, for example, the cars in the assembly shop are automatically put together by the engineer. A top engineer will get top performance out of his mechanics, but the pressure to perform can



also become overwhelming. If the qualification level (stars) of the engineer and his mechanics are too far apart, then dissatisfaction results or demands may be too great. Good engineers and mechanics can also lose their motivation quickly if they do not achieve the expected race results.

The engineer's motivation also plays a part in the performance capability of the section. A poorly motivated section leader will hardly care about getting peak performance from his mechanics. On the other hand, too much motivation clearly increases the pressure on his mechanics to perform. In the course of time the mechanics will only respond if their efforts are rewarded with victory. The basic motivation of an engineer (see „Engineers“) is influenced by his satisfaction with your team.

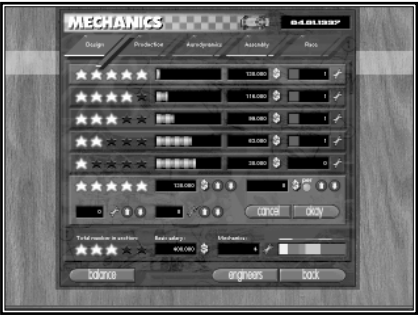
By clicking on the computer screen on the left of the organisation office you reach „Team Motivation“. In this you are given an overview of all the departments led by one engineer. Well motivated workers clearly achieve better results in a shorter time. Next to it on the right, you can see the pressure to perform in this department. The pointer should not be completely in the green area, for this shows that the routine has come to a halt. When the pointer is completely in the red, conflicts in this department are almost unavoidable.

Under the team motivation bar you can see the engineer's satisfaction with his team. Click on the right button next to it to start pay talks.

Mechanics

You appoint mechanics for your team from five different trade groups. The higher the mechanics are qualified (stars) and the bigger the department, the faster and quicker will the work be done in this department. Each section employs only mechanics with a particular speciality.

To appoint new mechanics or get rid of them, click on the seated man on the left of the organisation office. With the blue switches in the header line, switch to the individual departments. Each department is independent, but managed in the same way.



NUMBER AND EFFECTS

The more mechanics you have working in your team, the faster you can develop new cars and the more reliable these are. But your overhead costs rise all too quickly. What use are the best mechanics to you if you have no more money to buy good materials?

TRADE GROUP

Design
Production
Wind tunnel
Assembly
Race

EFFECT

Shorter development time for a design
Shorter production time
Better aerodynamics
More reliability
Faster pit stops, more reliability

Also, the number of mechanics that you can employ is limited by the size of your development centre. You will find the effect of the buildings on the mechanics' performance in the next section.

HOW ARE MECHANICS APPOINTED?

First, choose a trade group in the header line. In the five upper fields you can see the current market situation and make-up of your department. To appoint or dismiss mechanics, select one mechanic quality. Then put in the desired number of workers and their wages. Press „OK“ and the decision is made.

MARKET SITUATION

The mechanics are divided into five qualification grades with quality stars. The more stars a mechanic has, the more capable and committed he is. To the right of each qualification grade is a graduated bar to show how many of that type of mechanic are currently in the market. On this bar there is a smooth bar. This shows how many of the available mechanics are interested in your team, given your current conditions.

New mechanics are always coming onto the job market. But as a rule these newcomers have a quality grade of only one, or at the most three. They will not reach their maximum performance until they have gained work experience with teams.

WAGES

On the right of the market situation bar you can see the wages for your mechanics at each grade. Within each grade all mechanics (for reasons of justice) are paid the same.

DEPARTMENT

Over to the right is the information about the set-up of your department. You can see how many mechanics you have in each grade and what the average wage is.

You can get additional information from the requester below. There the average value about all the grades is shown: average quality, total wages and total size of the department. If a department is over- or under-staffed, then the mechanics cannot work efficiently. If this is the case the number of mechanics is written in red. If the department is overcrowded you can build new workrooms with „Buildings“.

You should have 16 race mechanics in your team or else the missing positions for pit stops will be filled with other mechanics from your team. As these are not pit stop specialists, the pit stops will obviously take longer. If you do not yet have enough mechanics in your team to fill the 16 places, the rest will be filled by external loan workers. Obviously, these are not attached to your team and even longer pit stops will result.

The bar pointers on the right show the size of the different departments relative to each other. When all five coloured sections are the same size (as in the small bar above it), exactly the same number of mechanics are working in each department. The header line shows which colour represents which department.

APPOINTING

To appoint a mechanic on, say, grade four, click above on the four stars. This field will be highlighted. At the same time four stars appear in the appointments field. With the arrow keys, put in a year's salary for a mechanic. As an added incentive you can add a bonus for each World Championship point won. The better the wages look, the greater is the market interest in your team.

When you now glance over the market situation you will see whether enough mechanics are interested in the salary. The figure by the spanner under the wages shows the number of mechanics you would like to appoint. As soon as you increase this number with the arrow keys, the market situation bars immediately react accordingly. Both columns go down by the same amount for each mechanic requested until the bar of those interested reaches nil.

Press „OK“ to appoint the relevant number on the appointed terms. Obviously, from now on those mechanics whom you have contracted are no longer available on the job market.

DISMISSING

As with appointing, you first choose the grade from which you want to dismiss the mechanic. The spanner with the red cross indicates dismissal. When you raise this value with the arrow keys, the column with mechanics at this grade available on the market rises. Press „OK“ to confirm the dismissal. These mechanics are then available again on the job market.

Buildings

The work place for your mechanics and engineers is the development centre outside the town. Here you have enough room and quiet to develop a high performance car. Each department is confined to its own special type of building. By building additional buildings you make more work room for the mechanics. With time and much money you can build your development centre exactly as you want it.



When you appoint new mechanics you should initially consider whether you have the necessary work space available. Over- or under-use of a building will reduce working conditions. The race crew have a special position. They are just for the cars on the race track and the pit stops and do not need their own building. You should employ at least 16 race mechanics in your race crew.

To reach „Buildings“, click on the column on the top left of the organisation office. You will then see an aerial photograph of your development centre. All the buildings available to your team are recognisable on it.

EXAMINING THE LAYOUT

Above right you can choose the five building types. On them there is information about the layout of the corresponding department. Except for the transport department, the number and average rating of the mechanics will be shown. A bar shows whether there is still enough space in the buildings for this department.

If a department is overcrowded then it can't be working to its full performance capabilities. So quality stars are lost. The quality stars lost through over crowding will be indicated by bordered stars.

CONSTRUCTION

At the bottom right are the costs for constructing a new building of the chosen type. Except for the transport department, the maximum capacity of this building is given underneath it. After you have had another look at your bank balance below, press „Build“ to enter the planning stage of the new building.

The building to be constructed then appears under the mouse pointer. You can now look for a construction site on the map with the mouse. In places where it is possible to construct new buildings, the framework around the building is green. When you click on the left mouse button you place the future building. To cancel the proceedings, click on the right mouse button. You have not started building yet. To the right in the middle is the required building time. When you click on „Set“, the building starts. If instead of this you click on the right mouse button or leave the requester, the building is cancelled.

The individual building types are:

TYPE	COSTS	TIME	SMALLEST	EFFECT
Design studio	\$5,000,000	6 months	2	Only one design per building can be developed at any one time
Factory	\$8,000,000	8 months	3	Only one module per building can be produced at any one time.
Wind tunnel	\$11,000,000	10 months	3	Improvement in aerodynamics
Assembly shop	\$4,000,000	5 months	5	Improvement in reliability
Loading bay	\$2,000,000	4 months	-	Additional storage and transport capacity

Statistics

Statistics are an indispensable source of information for each manager. We have put together all the important statistics in one place for you. When you click on the ceiling monitor in the organisation office you will access this.

With the blue switches you can change to one of three rubrics. Under these you can choose the individual sides with the small buttons. In several places you can also look back to previous seasons.



THE FOLLOWING STATISTICS ARE AVAILABLE TO YOU:

RUBRIC	SIDE	CONTENTS
Season	Driver	The world championship points for each track for each drive for a given season
	Constructors	Position of constructor values for any given season
	Pole positions	The best qualifying times for each track for any given season
	Fastest laps	The fastest lap times for each track
Driver profile	Race times	The whole race time, distance, number of laps etc. per track.
	Driver positions	The race results of each driver per track and season
	Team	The development of race results of a team's drivers in the current season
Overview	Name	Likewise driver development, only in alphabetical order and for previous seasons
	Team	Complete success statistics of a team
	Driver	Complete statistics for the whole of his driving career.

Regulations

By regularly changing the regulations, those in charge are trying to make Formula One safer, fairer but also slower. On the other hand, the constructors are trying to find ways of circumventing the new rules to make the cars even faster. When you click on the file on your desk you open up „Regulations“. Here you will find the rule changes for each season. With the blue switches you can open up the two sides „Flags“ and „Design“.



FLAGS

This is a pure information screen. You will find out the meaning of all the flags used in Formula One and all about the start procedure.

DESIGN

This screen is very important for the development of your car. Here you have the maximum dimensions of each module. At the end of each season the regulators change some of these values. None of the car modules that do not conform to these conditions can any longer take part in a race. If such parts are used in a race, the car will be disqualified.

HOW DO THE CHANGES IN REGULATIONS COME ABOUT?

At the end of a season a somewhat modified version of the requester appears. You will see on this the current regulations. At the same time, to the right, the changes are marked in red. These are valid as soon as you leave this field. In order to avoid a protracted search for designs and modules which no longer conform to regulations, you can remove them by pressing „Remove“ and all these designs and modules will be removed immediately. When you remove the modules, all the modules that have been produced and that no longer conform to the rules are thrown out. When you remove the designs, all the designs that no longer conform, including any modules produced from them, are done away with.

HOW IS A NON-REGULATION PART RECOGNISED?

If you have not got rid of any designs or modules immediately after confirmation of a new rule, there are two possibilities of recognising these. When you are in the design requester, all the dimensions that are not suitable are written in red. The same happens when you call up details of a module. You can also quickly recognise not suitable moduls by having the type name written in red.

Options

All the general game administration functions are called up in this field. Here you can put in basic game settings, load or store games, add or remove players and end the game.

PROPERTIES OF THE GAME

In the upper area of this field you can turn individual game properties on or off with the red buttons. The background sound is split up into sounds which can be heard by activating



a button, the race sounds (e.g. engine noises), and the CD music. You can control the volume with the bar. With some sound cards that don't have mixer chips it is not possible to control the volume.

The race control screen on which the cars are checked for regulatory dimensions can also be turned off. The checking, however, still takes place. Finally you can turn the On-line help on and off here.

On the right hand side you put in the texture quality of the 3D race scenes. You need good RAM for good texture. A fully textured track is therefore possible only with 16 MB of RAM. The higher this quality is set, the sooner the picture will appear on slower computers. You can fine-focus it in the race by using the keyboard. You cannot achieve this texturing on a 486 processor for performance reasons.

Some game properties can be put in at any time by using the function keys.

IN THE RACE:

- F1 High grade detail
- F2 Medium grade detail
- F3 Low grade detail
- F4 Overtaking animation on/off (only active when no animation is shown)
- the overtaking driver is always on the left and the one who is overtaken on the right
- F5 High resolution
- F6 Low resolution
- F9 Very short range of vision
- F10 Short range of vision
- F11 Wide range of vision
- F12 Very wide range of vision

GENERAL:

- F7 Game sounds on/off
- F8 Race sounds on/off

LOADING/ SAVING

To save the current game, click on the blue switch „Save“. If you then click on one of the ten save places you can give your game a name. To finish this, press „Return“ and then the game is saved. If the chosen save place is already occupied, the old game will be erased.

You can interrupt „Save“ by pressing ESC while putting the name in.

To load a game, press „Load“. Then simply click on the required game and it will load. The current game will of course be lost.

NEW PLAYERS

You can add new players to a game at any time. When you press the corresponding button you reach the Choice of Difficulty menu at the beginning of the game. The new player can then choose his team just as if starting a new game. The team strength can be set only for the new player on the multiplayer screen.

The new player starts his career immediately, even before the next race. If the new player has decided on a team that is taking an active part in the current season, he steps in directly as manager of this team in the current season.

REMOVING PLAYERS

A player can, at any time during his turn, leave the game. As soon as he has pressed „Delete Player“, this team will be taken over by the computer, which begins again with the standard settings for this team.

ROUND TIMES

The round times defined at the start on the multiplayer screen can be changed at any time. It may be that the time is somewhat short to measure all the activity or the number of possible practice drives is being used to excess...

MISSION

When you click on the red button on the bottom left, you open a small information window. Here all the targets that you set yourself at the beginning of the game are displayed. Behind each target you will see how far your team has got in achieving that aim. As soon as you have reached a target, the corresponding number will appear in green. To close the window, click once on the left mouse key.

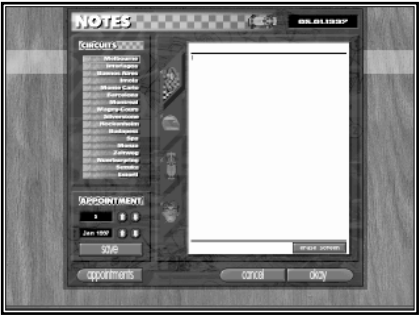
TO END

To finish the whole game click on the relevant button on the bottom right. You then get back into the operating system.

Notes

So that you do not need to make notes on a scrap of paper, you have your own requester for this task. Click on to the right hand side of your diary on your desk to get into this.

There are four categories under which you can put your notes: race tracks, driver, car and general. Switch between these headings with the blue switches. For each heading, different pages can be opened. These are set out on the top left. Click on a race track name and this page is opened. Now you can write in your text using the keyboard.

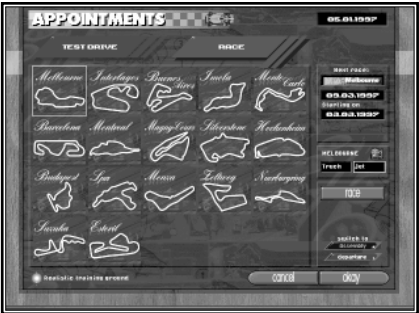


DATE

Here you can put a specific page for reminders. After you have set the month and day with the arrow keys you can confirm this day with „Save“. On this date this page will automatically be called up.

Appointments

This is one of the most important requesters, as you can start test drives only from here. With this you can choose which test drives take place under your own direction and which your technical director is going to oversee. You can also shorten the time until the next race. You can also see in this requester an overview of all the possible tracks. On the test drive page those tracks on which a test drive is allowed are highlighted. The next race track is highlighted on „Race“.



HOW IS THE TEST DRIVE SET UP?

A test drive is important for gathering information on the car design. It also increases the drivers' experience. Click on „Test Drive“ in the date requester. All tracks on which test drives are allowed are lit up. According to regulations, test drives are only allowed during a season on the team's home track and on the following tracks: Barcelona, Silverstone, Monza and Magny Cours.

To choose a test track, click on it. Above right you will receive as a reminder the date of the next race. Make sure that the test drive does not coincide with the race weekend. Just underneath you set the number of test days you want. You should also bear in mind the costs.

ENGINEER

Below you can switch between the two types of test drives. When the engineer button is activated the technical director goes off to the test track with the drivers and car but without you. Obviously this can only happen when your team has a technical director. In the meantime you can work unimpeded in the offices.

A test drive like this is useful for gathering data on all the equipment fitted on the car (see Design). When you have automatically activated your chief mechanic, he always sets up the newest modules for the test drive. So you can quickly learn about your new designs. Also, all the drivers, including the test driver, gain experience of the track. The technical director starts on the test track immediately by pressing „Training“.

MANAGER

When the manager button is activated you go to the track yourself. A test day is in principle like a practice on a race weekend. You can set up the car yourself and save the readings for later analysis. All the designs you have used can be tested and all the drivers gain experience, of course.

In multiplayer mode the number of test days under the control of the manager can be limited. Once you have activated „Manager“, you must start the test drive without delay in „Departure“. Using the buttons at the bottom right you set whether you would like to go direct to Departure as soon as you have clicked on Training, or whether you would like to take a look in the assembly shop, for example. In „Training“ you book the test track. You must then pay for this, whether you have tested in the set practice time or not.

HOW IS THE NEXT RACE STARTED?

In the top right is the next race date. Under that is the earliest date that you can travel to the track. In the field underneath you can see whether you can travel to the track by road or whether you will need to book an expensive flight.

When you click on „Race“, you go to the setup in the assembly or departure screen. You can still make arrangements to start the journey to the race track in „Departure“ in the development centre. Using the buttons underneath, you confirm which department of your development centre you want to go to after the time has been put forward. The most obvious route is directly to „Departure“.

Development office

The development area and the workshops of the Formula One team are guarded like a high security area. Here the cars for the next season are stored in the greatest secrecy.

You reach the development centre through the development office. Here you reach many functions that you already know from the organisation office. From here you can also reach the separate departments of your development. You can also meet with your engineers in this office in order to discuss future plans with them (automatic). You gain an overview of all the options of this office, as you do in the organisation office, by holding down the left mouse button. The different functions of the „Telemetry“ requesters are set out in the race office.



As soon as you have left the office in the development centre in order to go into the separate departments, the foot border changes. Simply by clicking on the mouse you can reach all departments immediately. To go back to the office, click on „Office“ on the left. Basically, you start off for each race or test track above the departure ramp in the development centre.

HOW IS A FORMULA ONE CAR MADE?

In its production a Formula One car goes through several definite development stages. In this case it involves all departments of your development centre.

DESIGN STUDIO

Planning for a new car always starts in the design studio. Here the full specifications of the car are decided. Mistakes made in the design of a car are very difficult to correct later. Design is therefore one of the most important factors in the success of a Formula One team.

Usually one designer develops the car in its entirety, because each part of a car has an influence on the others. The car is built out of easily separated modules so that, to repair one part of the car, it is not necessary to replace the whole chassis. To simplify matters in F1 Professional Manager, the separate modules can be developed independently of each other.

If you click on the top left on the design studio office, you go directly into your design department.

FACTORY/STORES

To test the drafted parts you must of course build them first. A new design is usually only built in small quantities, as it must prove its suitability in tests. The parts produced then remain automatically in the stores, ready for assembly.

From the development office you can go directly into the factory area by clicking on the mouse on the orange coloured oven in the background on the right.

ASSEMBLY

In the assembly shop or in the wind tunnel the parts made for the new designs are assembled on one or several test cars. When you click on the propped-up car on the left you go directly into the assembly shop.

WIND TUNNEL

The complete newly-assembled car is tested for optimum aerodynamics in the wind tunnel. It is important to have an equal distribution of air pressure over the front and rear axles. The wing setting must be tested for fast or twisting courses. You don't go directly to the wind tunnel from the development office. However, as soon as you have gone into one of the development departments, such as the assembly shop, you can choose the wind tunnel in the footer line.

APPOINTMENTS / DEPARTURE

In „Appointments“ in the organisation or development office a test drive can be arranged. After you have set the place and length of stay, you start the test drive in „Training“. For this you must of course load your transporter on the departure ramp with spare parts and tyres.

SETUP

You may have already entered your setup settings in the assembly shop. Otherwise it is set up in the pits for a test drive. All the fine tuning settings are put together in the setup screen. These can quickly be refined on a car while it is still on the track.

TELEMETRIE

You can record all the data for the completed laps in the telemetry monitor. In the race office and in the development office you can compare the recorded values with each other. It is sensible to compare the module combination that has actually been used for racing with the car that incorporates the new designs. However, the setup for these should be comparable.

IMPROVEMENTS / REDESIGN

Each time a car drives on the track, you gain knowledge about the designs of all its assembled modules. These are seen as experience points in Design. This experience serves to improve the designs used.

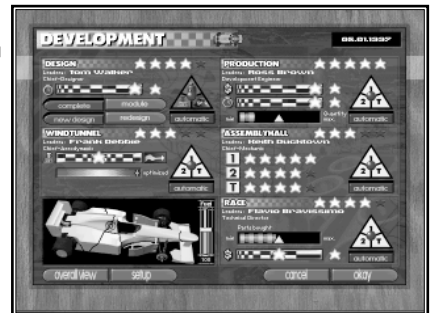
With that we have come full circle: using the information gathered, the design will be improved in the design studio, then built in the factory...

Development

You are managing a large specialist team for a high tech sport. There is not always enough time for you to worry about the whole development of all the cars, what with the organisational and financial tasks you have to attend to. However, your highly qualified engineers can help you with this.

You can have up to five engineers for your team, one for each area. These then undertake the management of the respective teams and their use their experience to improve the results of the work. You can then delegate the development tasks to your engineers.

You can go directly into the development requester only from the development office. Click on the column in the middle to do this. You discover where to click on in the development office by holding down the left mouse button. Beside the Car menu, the requester is divided into five areas, If you team in one area has no engineer, this area will be darkened.



HOW IS THE DEVELOPMENT OF THE CARS AUTOMATED?

Your engineers will not uncontrollably begin to develop something, but will hold talks with you first as their team boss. This happens in „Development“. One area of this field is reserved for each possible engineer. Of course you must have appointed an engineer for each area so that you can share your development ideas with him. Engineers are appointed in the organisation office in „Negotiations“.

ENGINEERS

Basically, each specialist area is built in a similar way. Under the area title is the name of your engineer and, underneath that, his trade sign. The quality of an engineer is important because (as well as that of the mechanics), it affects in a large way the quality of the results and the development time. The quality of an engineer is shown by the stars to the right at the top in each area.

PRIORITY TRIANGLE

On the right in each area is a priority triangle. The round button can be moved inside the triangle. What the development should concentrate on is specified with this. All the priority triangles except the design one cause a distribution of work between car number one, car number two and the test car. For example, if you push a triangle so that it only covers area 1 then the engineer of this area will concentrate only on car number one. When the button is positioned in the middle of a triangle, then all three cars are treated the same.

ACTIVATING AND DEACTIVATING

Under each priority triangle is a button with which the automatic functions can be turned on or off. Only when the „Automatic“ button goes green the right engineer carry out his work according to your instructions. Deactivating „Automatic“ means that you must deal with every small detail in each specialist area yourself. Nevertheless the faster production time caused by the engineer stays active.

SPECIALIST AREAS

Each of the five specialist areas has special responsibilities in which you can lead the work of the respective engineers. The yellow stars on the black and white bar and the small yellow triangles in production and races can be pushed along the bar. The car menu in this area is only connected to the specialist area Design.

QUALITY

Always remember that your engineers are working to your instructions. At the beginning of a game the settings are all set in the middle range. For a top team, however, you should ensure as soon as possible that only top quality is developed or bought.

Design

When you have appointed a chief designer you can hand over the development of the new car design to him. This is especially helpful in simplifying the ordinary design improvements after tests and races. But for you as team boss it may however be sensible to lend a hand too in especially advanced new designs.

Before you can enter settings in this area, you should confirm using the four buttons what values to give these settings. First you can switch between „Complete“ and „Module“. Then you have to decide between new design and redesign.

MODULE / COMPLETE

If you click on module, the settings of the bar and the triangle apply only to the module. The module is chosen using the Car menu. The module you have chosen is in your team colours on the car menu. When you choose „Complete“, the settings apply to all the modules of a car at the same time. All the individual settings for modules are therefore immediately erased. In this mode the car menu appears complete in team colours.

NEW DESIGN / REDESIGN

In „New design“ the points for new designs are defined. The chief designer always designs a new car module by module. Only on completion does he begin again with the next module set. The priorities in the development of a new module design can be completely different from those of an improvement in existing modules. For a new design, downforce and stability are the most important things. For improvements, on the other hand, the possibility of reducing the weight is more important.

PRIORITY TRIANGLES

Here you put in what aspect of design development seems to be most important to you. You can divide the priorities between weight, downforce and stability. Downforce is replaced by air inlet when you choose the cooling and side panel. The corresponding symbol only appears, however, when you choose these parts in „Module“ mode.

If for example the button is shifted at the top above Weight, the chief designer pays most attention to the weight of the parts in the new design and designs only light modules with the lowest weight. However, air intake, downforce and stability play no part in this. In Improvements, this setting indicates to the engineer that only the weight should be reduced. If the button is shifted to the right above stability, the engineer will improve only the stability. For this the modules in the new design are moved towards the maximum weight according to the regulations. On the other hand, in improvements this setting indicates that the chief designer should raise only stability.

With the triangle you set how heavy the module should become and whether the downforce/air intake or stability is more important.

BARS

With the black and white bars you set the estimated production time. The nearer the gold star is pushed to the clock, the greater is the time pressure for the design development. The setting to the far left means that the designs must be completed in the least possible development time. However, you then have no time left for improving the module. The module would therefore produce no downforce, allow minimal air intake and have no stability, even if the proportions (weight) would tolerate much more.

If the golden star is pushed right up to the quality star, then as much money and time as possible is put into improving the module. This means that the downforce, air intake and stability values will be raised to the maximum possible. As with the designs that you yourself create, the proportions of a module (weight) limit the maximum improvement possibilities of the values (red space bars).

Only the values that have been accounted for in the priority triangles are therefore optimised. Only if the setting is 50-50 between downforce/air intake and stability are both values equally strongly optimised.

TANK SIZE

On the right, next to the Car menu, the capacity of the tank can be set. Therefore only the bar must be moved up and down. The set number of litres is under the graphic. This doesn't set how much should be in the tank but rather the maximum amount that should go in the tank. Though be careful: large tanks are also very heavy.

Production

Hand over responsibility for production to your development engineer to ensure that you always have enough modules in store to assemble the car. He will replace missing parts, ensure that there are spare parts for the module and prepare modules with improved design.

PRIORITY TRIANGLES

Their main use is to define how many cars should be produced. If you indicate only one car, the engineer will produce only one of each module. If the button is in the middle of the triangle, each module is prepared for all cars. If the priority is raised from one to two cars, the amount of stores is divided optically because it now has to be enough for twice the number of cars.

STORES LEVEL

The bar on the bottom left shows the average amount of stores for all designs that are assembled on the car. For these you should normally keep spares in stock. This way you are prepared in case of damage in an accident. If the bar is completely empty, then you have no spare parts in stock for the module you are using on the car, but you may have modules of other designs. A completely full bar means that you have at least six completed modules in stock per car of each type that you are using.

AMOUNT

With the yellow arrow button you can define how many spare parts you want to have. The engineer in charge of the production amount will produce the parts. If the button is right over to the left on minimum, then only improvements are built and modules removed from the cars replaced. This also applies if the average amount of spare parts corresponds to the arrow you placed.

BARS

With the two black and white bars you define the quality of the production results. The more time you have available for a part, the better quality it will be. The production time is entered with the lower bar. The nearer the yellow star is to the quality stars, the better the production quality will be and the more time you will need.

The top bar defines the quality of the materials used. The nearer the setting is to the quality star, the better will be the materials used. Good material is lighter and more reliable than bad, but it is considerably more expensive. Normally, you should not stint on materials, as a module can cause an accident in a race because of damage to the materials.

Wind tunnel

An aerodynamics expert can help you to get the best out of your car. He will concentrate mainly on the angle of the wings. How successful he is at this depends on how good he is.

OPTIMISING LEVEL

The coloured bar shows how perfectly the wings were set at the start of the last race. When the pointer is in the green, the wing angles are set to achieve the maximum lap speed. Reduction in optimum performance could happen for two reasons: firstly, because your engineer, who has less than five stars, has made mistakes in his calculations; or, secondly, because you, perhaps for safety reasons, have set the angles differently.

BARS

For very aggressive or inexperienced drivers it may be sensible, for safety' sake, to increase the downforce. A very good driver could probably manage with less. Or you could have just one car with very good stability. With a design like this, the car can be driven with somewhat less downforce because the car itself is very safe. If such considerations play a part, the yellow star on the bar should be pushed.

The normal bar setting is in the middle. If you want to make the settings weaker or stronger, then simply push the arrow. The further it is pushed to the left, the more resistance is added. The settings become weaker the further it is pushed to the right. The car is still faster, but the danger of flying off at a bend is greater.

PRIORITY TRIANGLES

In your aerodynamics expert, you have appointed a highly qualified specialist. He gets the best possible wind resistance for your module. Depending on how good your engineer is, he will reduce to a greater or lesser degree the wind resistance of all your assembled modules. Depending on the settings of the priority triangle, the engineer will attend to either all or just selected cars. When he is concentrating on only one car then only the designs used on this car will be improved. Obviously, the improvements for this car will be better. Should the other cars be assembled with modules of the same design, all modules will naturally be improved automatically.

POINT OF TIME FOR OPTIMISATION

Your engineer sets the wing settings for a certain point of time. Even before your cars have arrived at the track the aerodynamics expert (already activated) has suggested gearing and wing settings in the setup. If you now want to modify the settings for, say, the wings the engineer's settings will be overwritten. If the automatic is deactivated, the aerodynamics engineer leaves his settings unchanged.

PRESETS

If you have put in definite presets for a track, these take precedence. As long as you do not turn off preset or save something new, all three cars will always have the preset settings on any given track. Of course, in the pits changes can be made. Preset does not include choice of tyres.

ASSEMBLY

Once you have appointed a chief mechanic, you need no longer worry about parts that need to be repaired or incompletely assembled cars. This only applies, of course, when you have enough parts for the cars in stock. The stars next to the car symbols show for each car the current average quality of each part.

The cars are assembled by the engineer directly after a race and before each departure. Should the cars be put together again automatically, for example after new parts have become available - simply turn off automatic and turn it on again.

When you yourself want to put the car together for the departure, you must turn off automatic. But be careful! You can't take incomplete cars with you! If your two main cars are not ready you could even miss a race.

Tip: If you want to know the exact condition of your cars after a race, leave the automatic assembly off. Back in the development centre your cars will be in exactly the same condition as they were after the race. You can then more easily tell which parts performed strongly or what caused an accident. (= Condition bars at minimum). You don't need to leave the automatic assembly : simply turn on and then immediately turn off automatic shortly before departure.

PRIORITY TRIANGLE

When you want to attend to one car, use the triangle. When the button is completely over the „1“, this doesn't mean that only car number one is put together. This only means that, when there is only one completed module in stock, car 1 has this part first.

RACES

The technical director discusses with you anything that directly concerns the race. He suggests race tactics on the race track and, with his race crew, is responsible for the speed of the pit stops. He also loads up the transporter for you with a selection of spare parts. Your team should therefore always have a technical director available.

BOUGHT-IN PARTS

The technical director buys, if he is activated, the parts to be bought in. These are those parts of the car that you yourself cannot make, such as engine, gears and suspension. The number of these parts is set in two ways.

PRIORITY TRIANGLE

You set here how many cars parts should be bought for. Normally the button stays in the middle of the triangle. Parts will then be bought for all three cars. As in the factory, the stock pile changes according to the number of cars to be bought for. It will be different according to whether six gear boxes have to do for one or for three cars.

STOCK PILE

The bar for the stock pile functions as it does in production. The bar itself shows the average amount of stock for all bought-in parts. An empty bar shows that there are no replacement parts. If the bar is completely full, your team has six replacement parts of each assembled bought-in part in stock. Using the arrow button, you put in the number (0-6) that this should be.

Essentially, the engineer always buys 18 tyres for each slick variety, so that you always have enough slicks from which to choose any slick combination you want for the next race.

QUALITY

Whether the best parts should be bought, and whether you have to be guided by price, is set using the lower bar. When financially possible, the yellow star should be pushed over to the right. Cheaper parts are, as a rule, heavier and not as reliable as more expensive ones. It is very annoying to be eliminated from a race because of a defective gear box....

TRANSPORT

The technical director helps you load your transporter. He automatically loads the replacement parts you need from the stores into the lorry. It is loaded the moment you switch into the departure requester, but not until the „Departure“ button is green. Loaded parts are of course only in stock again when they have been unloaded again. After a race weekend or a test drive, the transporter is automatically unloaded again.

FREE PRACTICE

You can miss out free practices in a race weekend. After each practice session, you only receive the results of the other teams. When you have a technical director, he sends your drivers out onto the track for the missed practices. Then you always have points of comparison with the other teams at the end of each practice.

TEST DRIVE

You can improve your design with experience points. You collect these in test drives or during a race weekend. The technical director can take charge of test drives for you. You don't need, therefore, to be on the race track and can get on with your work at the same time in the offices. The technical director usually tries out the latest module designs in the test drive. When such a design cannot collect any more experience points, the next best design is assembled to be tested.

TACTICS

Obviously, you should take care of the race tactics of your two drivers yourself. The technical director can help you in different ways. For departure he packs rain tyres and suitable slick variations in the lorry. He doesn't do this until the „Departure“ button is green. After this you can also select another choice of tyre type.

He suggests the number of pit stops in a race. By clicking on „Automatic“ in race tactics he suggests the amount of petrol for the pit stops. He also suggests the tyres for pit stops and what type of tyres should be used. He also fills your cars up at the start of the race. When you yourself choose the tyres, you must of course take care of it.

ENGINE

The technical director makes sure that the best engines are assembled in your cars automatically at the start of the race. An engine which has already gone through training drives and qualifying heats will not stand up to a race very well.

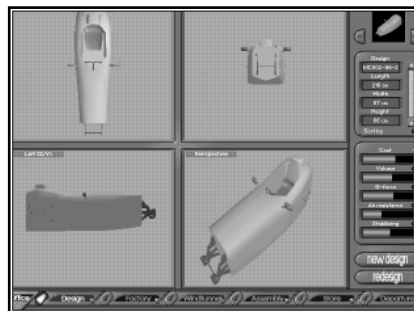
THE DEVELOPMENT DEPARTMENTS

Below are set out in detail the functions and specialities of the individual development centre departments.

Design

The completed design of a race car is the most important aspect for the success of a Formula One team. Even an averagely-talented driver can become world champion in a well-thought-out design. On the other hand, even the best driver has no chance in a bad car.

Each race car is a compromise. Depending on whether the sun burns the asphalt or driving rain impedes vision, or whether a track has sharp bends or long straights, different demands are placed on the design of the car.



The opportunities for getting the best out of the car are heavily restricted by the limitations of the regulations. Those who make the regulations overhaul them thoroughly at the beginning of each new season and this limits even further the amount you have to play with.

In the meantime a Formula One car is sketched out on computer using computer-aided design. When you go into the design studio of F1 Professional Manager, you will see your development program on the screen.

The coachwork of your car can be developed from a combination of 9 modules. The modules are

monocoque, (coachwork + driver seat), nose, rear, groundplate, air inlet, side parts, rear and front wings, and the tank.

FUNCTIONS OF THE DESIGN SCREENS

3D PICTURE

On the design screen you see the chosen module in three dimensions. The perspective can be changed by using the mouse. Put the mouse in the bottom right field and move it, keeping the left button pressed down.

TO CHOOSE A MODULE

To choose the type of module e.g. the front wing, scroll through the nine modules with the arrow buttons above right. The individual designs that belong to the chosen module at the time can be selected with the orange scroll bar and the corresponding arrows.

CLASSIFYING THE DESIGNS

The bars on the right show the values of the designs on the screen. To classify the designs according to one of these characteristics, simply click on the corresponding bar. The small red light shows what classifications have just been made. When you scroll through the available designs with the scroll bar, they are classified in descending order according to the set values.

With the two buttons on the bottom right, you can sketch designs yourself or improve existing ones.

WHAT MAKES A GOOD DESIGN?

A top quality design is as light as possible, has hardly any wind resistance and offers almost maximum downforce and extreme stability. Unfortunately, these factors depend on each other. Your designs are defined by the following characteristics and intertactions:

VOLUME

The length, breadth and height of a module. The regulations limit the reliable measurement of each module. The bigger the dimensions of a module are, the more scope a designer has to play with the downforce or cooling or stability (represented by the red bars). Unfortunately, the larger a module is, the heavier it is.

WEIGHT

The weight of a car is a deciding factor for its performance. The lighter a car is, the better it accelerates or brakes. Therefore, a minimum weight is laid down in the regulations. The best car is one which corresponds exactly to this regulation weight with all its parts in a race.

DOWNFORCE

The downforce shows the strength with which the air pushes the car onto the road. In Formula One the race car is aerodynamically optimized that a car could theoretically drive on the surface at upwards of 170 km/h. A higher downforce ensures good road holding and a stable position on the road. With higher downward pressure you can clearly drive faster round bends. But if you raise this downward downforce you increase the wind resistance. A large part of the downforce is produced through the base plate.

AIR INTAKE

Formula One engines are air cooled. The car should not therefore be left too long with the engine running or else it will overheat. On the side panels and air cooler, the air opening for the engine cooling can be set instead of the downforce. If you set the engine cooling too low, your engine will overheat. This reduces its life and can quickly lead to failures. Too much cooling can reduce performance and wind resistance.

STABILITY

By skilfully making sure that the air passes smoothly along a module, you can make the car easier to steer for the driver and therefore safer. When the driving state of the car is too unstable, the possibility of turning it over or having an even more serious accident is very high. Good stability means additional wind resistance.

WIND RESISTANCE.

The higher the CW values, the more the car must withstand the wind. A high wind resistance limits the acceleration and reduces the maximum speed.

HOW DO YOU CREATE A NEW DESIGN?

To do this simply switch to „New design“. The button for this is on the bottom right of the basic screen and on the requester above in the middle.

Only the top half is needed for a new design. Exception: the car menu. With this the module to be designed can be selected by clicking on it.



VOLUME

If a module is selected, the size of the new part should be specified first. The dimensions can be altered easily with the arrow buttons. The special arrow in the middle sets the values roughly (press the button, keep the mouse button pressed down and move the mouse up and down). If a weight goes red, then this dimension is not in the regulations. For comparison you have the regulation values to the right. You can use a non-regulation design but this will lead to disqualification in an official race!

The effect on the other characteristics of changing the capacity settings is shown. For stability and downforce or air intake only the field not barred in red is available for your design. If you have a very small capacity, you have very little scope to alter downforce in the module.

CHARACTERISTICS

When the measurements of the new design have been decided, the characteristics of downforce/air intake and stability are defined by you. With stability the highest value is the best. The optimum air intake depends on the cooling ability of the engine. A great deal of downforce is needed only on a track with many bends. You can not put in weight and wind resistance yourself as they are dependent on other settings.

DEVELOPMENT TIME

The higher the setting values for the characteristics, the higher are the development expenses. These can be examined in the right hand box. There you will find the necessary development time and the associated costs.

NAMING

Each design has its own name. It's on the left next to the „Start“ button. The name is automatically allocated after a design has been confirmed. The example NO02-97 means: the second (02) nose design (NO) of the 1997 season (97). You can of course give it your own name (click on name and confirm with Return). Automatic naming, however, is very realistic and makes the identification of the design easier.

STARTING

The design instructions are not confirmed until you have pressed the „Start“ button. All settings have no further effect until then.

HOW DO I IMPROVE MY DESIGN?

To improve a new design, simply go into „Redesign“. The button for this is on the basic screen at the bottom right and on the requester itself above in the middle.

The requester for improvements very much resembles that for new design. Only the upper part of the requester is used, and the Car menu for choice of modules.

In „Redesign“ all available designs can be viewed. Simply choose the required module e.g. front wing, and scroll through the individual designs with the scroll bar on the top right.



DELETING DESIGNS

Designs you don't want any more can be erased here. However, be careful because, if you delete a design, all the parts produced for this design are also erased. The bodywork design without the background information about the design is useless. To keep a general view of the car's design, you should erase unnecessary designs early.

HOW DO WE GAIN EXPERIENCE?

The most important pointer in redesign is the experience points bar on the right. It shows how many experience points you have already gained with parts of this design.

Even a theoretically very good design have prove this on the race track. Only after exhaustive tests are the teething troubles and small errors eradicated. If a car is based on fully tested parts, it ensures a high level of reliability.

Each time a car is driven on a test track or in a race, just as with wind tunnel, experience is gained for each design used on the car. To simplify matters, the produced modules bear the same name as the basic design (e.g. NO001-97-3). The experience gained will become active first when a design improvement can be developed from it and then a module built from the improved design.

The experience point bar rises whenever new experience is gained from this design. If the experience bar is full, you can gain no more experience from this design.

HOW IS THIS EXPERIENCE USED?

The black and yellow experience bar shows how many points you still are left to use. This is ready to be divided up. With the experience gained, you can improve the characteristics of downforce/air intake, stability, weight and wind resistance. Simply push the characteristics bar in the desired direction. Particularly worthwhile is a reduction in wind resistance and weight. The dimensions of a design can no longer be changed. They are characteristic for each design.

The set modifications and the number of experience points used up for them can be read off in the orange bars. The greater the improvement in the design, the more time and money it costs.

The experience bar in improvements is just as big after its completion as it was in the design from which the improvement was developed. If the experience points bar was half full for EN002-97 when the improvement was started, then it is still half full for EN002-97-01. However, the experience points expended on improvements are recorded on a red bar.

Each version gains there own experience points. When a car with the rear part RE03-97-03 is driven on the test track, then only the design of the same name gets the points and not RE-03-97 or RE03-97-02.

NAMING

Each design improvement produces a new design. A new name will be allocated for it. The first improvement for NO02-97 would be NO02-97-01. Further versions would be called 02, 03 etc.

STARTING

Just as with new design, design commissions are not begun until the start button is pressed. All settings up to then have no further effect. It can be varied at will.

HOW ARE THE INSTRUCTIONS CONTROLLED?

All incomplete design instructions can be examined in the lower area of the requester. It is therefore not important whether the top half of the requester remains in improvements or new design. By clicking on the switch in the middle, the car menu can be used here for choosing the module. All modules for which there are design instructions are in team colours.

The scroll bar on the bottom left serves as a scroll for individual instructions. For each instruction a great deal of information is given. The stars indicate the quality of a design. The more experience a design has, the better and therefore more reliable it is. With a click on the „Data“ button a small window is opened which shows the characteristics of the design. The window is closed by clicking on the mouse. Press „Cancel“ and an instruction can be erased. When an instruction that has already been started (the bar on the right is partly full) is interrupted, then the costs incurred up till then are wasted.

DEVELOPMENT TIME

The speed with which an instruction is carried out depends on the quality of the chief designer and on the number and quality of the mechanics in the design department. Also, for each additional design building, a similar commission can be developed.

Factory

The chassis of Formula One cars are made out of carbon fibre, aluminium, kevlar, nomex, glass fibre and resin. Nomex is simpler to mould and lighter than aluminium but not so firm.

To build the cockpit a combination of aluminium in honeycomb form together with a sheet of carbon fibre is used. After polymerisation in a vacuum oven heated to 350 C, the compound is half as heavy but twice as strong as aluminium.



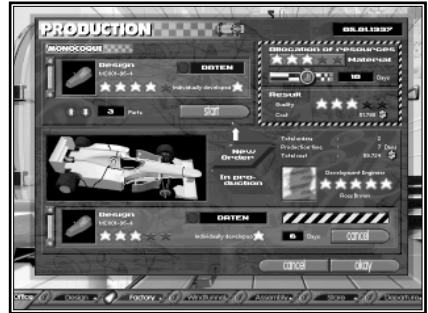
You need to be very exact when working with this material. The growing complexity of the task means that engineers are recruited from the best mechanical engineering, aircraft and space research schools.

If the milling machine on the picture is on, then the manufacturing of a new module is in progress.

WHAT DOES A MODULE CONSIST OF?

To build a module, open „Production“ with the button at the bottom right.

The requester corresponds basically to the design requester. Above are the building instructions and in the lower part of the screen the separate instructions can be supervised. Using the blue switch the car menu can be switched from the top to the bottom.



First, go to „New Order“ and then choose the desired module on the car menu. The chosen part is now bordered in white.

An instruction is determined by four settings: Design, Materials, Time and Amount.

DESIGN

The design that forms the basis for this module is specified top left. With the scroll bar you can go through the individual designs.

MATERIALS

Whether extremely expensive compounds should be used in production, or whether cheaper materials are viable, is determined by the stars on the right. A click on one of the stars activates the chosen stars and all those to its left. You should only stint on materials if you're in a really tight spot.

TIME

The more time that is invested into a production, the more value can be put on perfecting the parts. Of course, the production costs will rise. The quality (stars) of the prepared part is a direct result of the materials used and the time available.

AMOUNT

The amount can be put in on the left, next to the „Start“ button. If the module is only for testing, then it may only be necessary to build a single one. If it can be turned into a 5 star design, then it may be worth building enough for all three cars. A good module should always be in stock in case there is an accident on the race track.....

With „Start“ the production can begin.

HOW ARE THE INSTRUCTIONS CONTROLLED?

As in Design, all unfinished production instructions can be examined in the lower part of the requester. By clicking on the switch in the middle, „In Production“, the Car menu is linked to the lower part of the requester. As with instruction placing, the Car menu can be used for choosing the module. All modules for which there are production instructions are in team colours.

The scroll bar on the bottom left allows you to go through the individual instructions. For each instruction there is a great deal of information. The stars indicate the quality of a finished module. Click on the „Data“ button and a small window is opened which shows the properties of the design. With a simple mouse click the data window is closed again. With „Cancel“, an instruction can be erased again. When an instruction that has already begun (bar on the right is partly full) is interrupted, the costs up till then are wasted

DEVELOPMENT TIME

The speed with which an instruction is carried out depends on the quality of the development engineer and on the number and quality of the mechanics in the factory. Also, for each additional factory building, a similar commission can be developed.

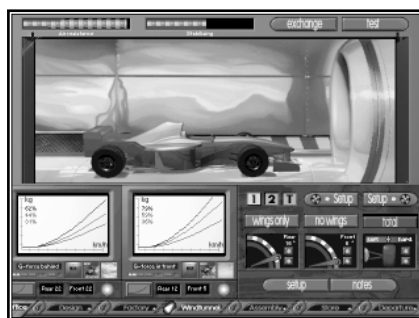
REGULATIONS

The type descriptions for designs and produced modules are sometimes written in red instead of white. This is a warning that this part does not currently conform to regulations.

Wind tunnel

Before building a car, models in the ratio of 1:4 to 1:1 are tested in the wind tunnel. There they are subjected to winds of up to 300 km/h. This is to test the aerodynamics up to top speed.

At high speeds in Formula One, the modules must withstand very strong forces. A back wing withstands negative lift forces of about 900 kg. at speeds of 320 km/h.



WHAT IS TESTED, AND HOW?

Three aerodynamic effects are tested and improved. The general aerodynamic quality of the chassis can be tested. It is important to establish the wing settings for track dependent setup. Also, the driving characteristics can be improved by leveling the pressure on the axles. If you can afford, it you should optimise your cars in the wind tunnel after every race.

When you press the „Test“ button on the top right, you start the turbines for a test run. A test run can't be interrupted. The result of a test run can be read on both bars above and on both monitors. Each time you test a car it will result in further costs.

The car to be tested will be decided by a small yellow square with „1“, „2“ and „T“. Simply click on the car symbol to put this car in the wind tunnel.

AERODYNAMICS OF THE CHASSIS

When the wing angle is set at 0 degrees or the button „No Wing“ is on, then only the effect of the car is measured. The wind resistance bars should be as small as possible and the stability, therefore, as high as possible. As the bodywork delivers about 60% of the total downforce, a car set up to suit the characteristics of the track is advisable. It is therefore better for high speed tracks like Monza or Hockenheim to drive with less downforce.

To swap a module for a test, click on „Exchange“. You go into the overview requester, from which you can exchange parts (see assembly). It makes sense to change only external parts during the wind tunnel test. When you leave the overview with OK, the modifications are undertaken in the wind tunnel; with „Cancel“ they are not. If you go into other rooms, e.g. into „Buying“ in stores, the wind tunnel test is stopped.

SETUPS DEPENDENT ON TRACKS

In the wind tunnel, angle settings for the front and back wings for the different tracks are tested and confirmed. If you wish, by pressing „Wing Only“, you can test just the influence of the angle settings. On most occasions it is more helpful to test the aerodynamics of the car in its complete form.

To start a test run, bring the wing angles into the required position and click on „Test“. Next to the values for wind resistance and stability are graphs on the screen for downforce back and front. Downforce grows from left to right, as the speed rises continually to the right. Under the monitors are three symbols. They give you some help in telling you which track conditions you have currently set the car up for. The symbols give rough information on the effect of the current settings with regard to speed, bends and suitability for the weather. (See assembly - setup).

The more bends a track has, the more downforce will be needed. Only with a great deal of road holding is it possible to gain high speeds round bends. For long straights a lot of downforce is a nuisance because the car has far too much wind resistance.

With the left of the two buttons on the right, next to Choice of Cars, the current wing settings in the setup of the tested cars are entered. (Wind tunnel -> Set up). This is sensible if an optimum wing setting for the next track has been found. The right button (Set up -> Wind tunnel) brings up the current wing setup settings in the wind tunnel.

DISTRIBUTION OF DOWNFORCE

For optimum driving conditions on a track it is best that the downforce on the front and rear axles is the same. This 50-50 distribution is reached when the graphs for back downforce and front downforce are the same. This can be reached by adjusting the wing angles or swapping car modules. In aerodynamic terms, there are three settings for maximum driving safety: equalisation of downforce, high stability and great downforce.

HOW CAN THEY BE COMPARED?

The results of two tests can be saved. Under each monitor you have a save facility. When you click on the button with the red or blue graph, you can save the following values: Both wing angles, wind resistance, stability and both downforce graphs. Both wing angles are immediately set on the right, next to the button.

To compare these data with the data of another wing angle, change the wing angle and test again. After the test, access the stored data with the round red button on the storage register you have used. Depending on whether you have chosen the memory register with the red or blue graph, a second graph showing wind resistance and stability will now appear in this colour both on a bar and on the monitors. It is then quite easy to compare the stored data with the actual.

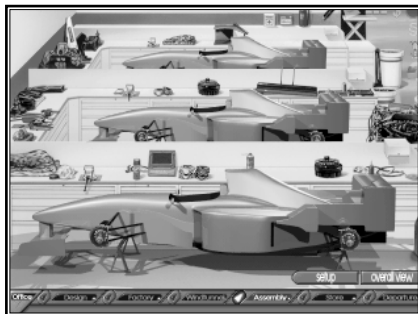
NOTES

When you want to retain results and change with the button on the bottom right into „Notes“, you will not be able to return directly to the wind tunnel. You will go back again into your development office.

Assembly shop

The cars are so constructed that they can be stripped into their component parts and reassembled in as short a time as possible. All parts are regularly examined for corrosion, metal fatigue and fractures.

No tyres are fitted during assembly. The cars are, as a rule, jacked up. For weighing, the weight of the tyres is simulated by wheels made out of pieces of aluminium. The cars that are assembled in the assembly shop are loaded just as they are into the transporter, ready for action on the race track.



Every little part of a car is important for victory. The better the chief mechanic and his crew are, the greater the chance of avoiding careless mistakes when assembling the car. One single technical mistake on the car can cost your team the world championship.

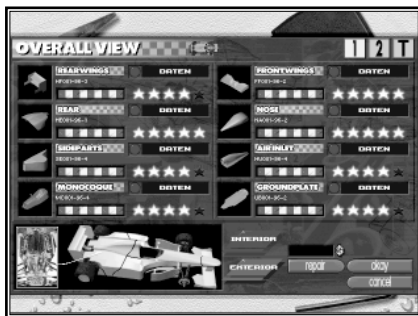
A look into the assembly shop shows your three cars in different states of completion. You can tell from the cars themselves only whether they are completely constructed or not. If parts are missing from a car, this will show up as a less than complete condition. The part that appears to be missing should not really be missing. When the cars are on the test track, the assembly shop is empty.

In your assembly shop you can do the following: control the weight, put cars together, test engines and set track setups.

HOW DO I FIND OUT THE STATUS OF THE CARS?

To put the cars together, control the condition of the parts or swap a part, switch to the Overview requester. You'll find the button for this at the bottom right.

The „Overall view“ shows all the parts of a car in two ways: either all eight external bodywork modules, or the remaining seven, which are mostly hidden inside the car. The car that is being viewed is highlighted in the top right. There you can also choose another car. You can switch between the two views using the blue switches. For all the assembled parts on the chosen car, you have the most important data: name, quality (stars), condition (bars) and the data windows for the design properties. If one area is empty, that part is not on this car. If the module name is in red, the module does not conform to current regulations.



The Overall view only applies, as the name suggests, to the overview of the condition of the cars. To change to a specific part or to repair it, you must switch to an individual requester for each part. If you want to repair the whole of the interior or the exterior, click on the „Repair“ button on the right, next to the blue switches. Only lightly-damaged parts should be used, as even the smallest mistakes can lead to failure.

HOW IS A CAR PUT TOGETHER?

You get to an assembly requester for a car part in one of two ways. First, you must switch to the right view in „Overall view“ with the blue switches. For a rear wing, press „Exterior“. Second, click either on the picture of the rear wing above (or else in the empty black field) or on the rear wing of the Car menu. In this example you reach the requester for rear wings.



Up to three car parts of the chosen sort are shown with data. The uppermost part is assembled on the car. The two lower fields contain those parts that are still in stock. When more than two parts are in stock, the whole of the stock can be viewed using the scroll bar on the left. Here too, the module descriptions highlighted in red show that the module does not conform to regulations. By using the blue switches above, you determine which of the three cars you would like to assemble. As usual, you can change directly to another car part by the Car menu. You switch from internal to external parts by using the blue switches on the bottom left of the Car menu.

WEIGHT CONTROL

When you have opened an assembly requester, a pair of scales appears outside on the right. On the scale appears the current total weight of the chosen car. Naturally, the weight relates only to the parts that have already been assembled (including the simulated tyres). If the weight falls below the regulation weight, (indicated on the small red bar), the weight pointer is coloured red.

TO ASSEMBLE A PART

It's child's play to assemble a new part (as long as it is in stock): simply click on the required part in the stores. A ready-prepared part goes back immediately into stock.

REPAIRS

The assembled part can be repaired with the button on the right. The smaller the red and white button is under the name of the part, the worse the part's condition is. The cost of a repair is directly under the „Repair“ button. If the part is too badly damaged or simply not needed any more, you can throw it away using the „Dispose“ button. If you have a delivery contract for a module, e.g. for engines, the supplier sponsors your team with a certain sum. Until the complete some is used up, repairs and purchases are settled by the supplier.

BUYING

Except for the tank, all internal parts are bought in, as these can't be made by yourself. If any such parts are missing from stock, you can jump directly into stores with „Buying“ (see Stores). You cannot buy either the external parts or the tank. These you must make yourself in your factory.

ANGLE SETTINGS/COOLING/ DRIVER SIZE

In some modules there is still more information in the relevant requester for the assembled part. For front and rear wings, the current setting is allocated from Setup. This can also be changed directly here.

When you choose the engine, you receive information about the condition of the engine cooling. A blue bar informs you about the need of cooling of the engine. A green bar shows how much cooling takes place through the side parts and the air inlet. If the green bar is smaller than the blue, then a module with a greater air intake must be developed and assembled urgently, otherwise you will not have much joy with your engine. The quality stars of your engine in Assembly indicate the general reliability of your type of

engine . To find out the performance capabilities of your engine, you look at the quality stars of your engine supplier in Contracts.

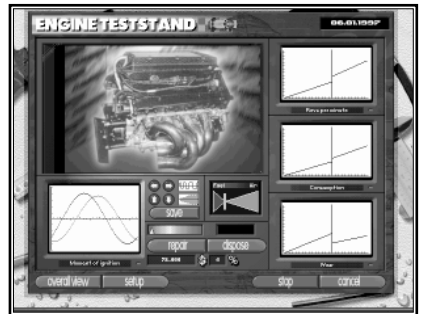
The cockpit should of course be fitted around the driver. Therefore, in Cockpit it will be shown with a picture whether or not the driver can get in without any trouble. If the cockpit on the right is coloured yellow, it is too big for the driver. This isn't really bad: it just means that the cockpit could be smaller and therefore lighter. When the driver's legs are coloured red, the module is too small for the driver. This has a negative effect on the driving performance.

DATA

In every module there is a „Data“ button. When you click on this a small info-window appears. Here you can find out the exact design data of this module. You close this by clicking with the mouse outside this window.

HOW DO YOU GET THE BEST OUT OF THE ENGINE?

Only the team with the traditional red design develops its engine itself. All other teams go into partnership with an engine manufacturer. Formula One engines are extremely high performance machines. They are built to cover only short distances as fast as possible. After a race of about 300km, a Formula One engine is no use. It needs about 100 litres per 100km. After each race or each test drive, all used engines are returned to the manufacturer. Here they are completely stripped and overhauled.



To test the condition of the engine, you go to the assembly requester for the engine. Click onto Overallview or another assembly requester on the engine picture on the left next to the Car menu.

The assembly requester for the engine corresponds basically to that of each other part. Engines remain available to you when you have concluded an engine contract (see „Contracts“).

To check the condition of an engine, go into „Teststand“ on the right, next to the data for the assembled engine. You can vary the ignition time and fuel/air mixture.

IGNITION TIME

Only through a perfect combination of injection, piston strokes and ignition does the engine deliver its full performance. Each type of engine has its own individual values for this. When you have acquired a new type of engine for your team, you should optimise it in Check condition.

To begin a test, start the engine with the green „Test“ button on the bottom right. On the monitor below left, a blue graph moves which shows the optimum as well as the actual settings of the engine.

With the four arrow buttons, the black graph that you can then see can be manipulated until it is the same as the blue one. You have then found the optimum settings. Press „Save“ and all engines of this type, as well as all those that will be bought in the future, are allocated these settings. Thus you have optimised the whole engine type. At the end of the test, you switch the engine off with the red „Stop“ button. If the test engine was already defective, it will stop immediately. In order to test further you must get back into Assembly to fetch another test engine from the stores.

Before you install a new engine type you should optimise it. Failure to do this will soon be noticed on the race track. The engine rattles, is more unreliable, and has a bad performance. Also, badly set engines threaten to overheat.

FUEL/ AIR MIX

Depending on whether the mixture in the carburettor is too rich or too weak, consumption and performance changes. The three monitors on the right give information on the effects of the current settings.

Start the engine for the test with the green button. Each time the mixture is changed, a new measurement follows. A line goes across all three monitors. On the left next to the line appear the new values. Thus, old and new values on the left and the right of the line can easily be compared.

A rich mixture consists of a lot of fuel and little air. Push the setting bar in the right field. The car accelerates even better, but doesn't reach such a high top speed. Also, the consumption of fuel and oil is considerably higher.

A weak mixture with a lot of air, on the other hand, means a higher top speed but reduced acceleration. With such a mixture, the distribution of oil can be disturbed, which could lead to engine damage.

It's your decision whether acceleration or highest speed is more important to you. If you think messing about with the engine is too risky, leave the settings bar in the middle, neutral area.

HOW IS SETUP CONFIRMED?

Each course makes different demands on the car. Different settings must be entered, depending on the weather and whether the track is full of bends.

The setup of a car is the total of these settings. It contains basic settings like the wing angles, down to the fine settings on the gears. It can also relate to the driving style of the driver.



The most important setup settings are those that have a direct effect on the driving properties of your cars. Settings can be decided and allocated on eight different parts of the car. It would be asking too much for you to know all the possible effects and to oversee all the settings without problems. Therefore, three small icons per car part show you roughly the effects of your settings. Thus, you quickly have an overview of the current alignment of your cars.

You can find out in the wind tunnel whether the body work of your cars suits your setup. Test the car without wings and compare the pictures underneath the monitors with those with the wings in Setup.

There are only three stages in the icons. They can therefore only be of limited help in deciding the settings. If one or more of the icons switches on when you make a small change to a setting, this does not mean that the driving conditions are completely changed in this value alone. The driving properties change in proportion to the settings, and the pictures only show which effects predominate.

Your setup settings only ever relate to one chosen car. You can change the car at the top right. If the setup settings also apply to another car, or even to them all, you can at these cars on the bottom right next to the picture of the driver. Normally only the red button of the chosen car is active there. When you switch

to another car, all the setup settings of the current car are immediately transferred to the other car. An optimum setup is usually established in test drives or practice. F1 Professional Manager offers you three possibilities for managing setup : Loading/Saving, Presets and Indirect settings.

LOADING/ SAVING

The settings for the eight car parts can be saved under any name you want. You click on „Save“ on the bottom right. On the requester that comes up, you can save the setup at game status. Click on the red button in the required memory location to save. Press return and the text input is finished and setup is saved.

Only the current settings in the setup screen will be saved. The setups of cars that you haven't just chosen will not be saved. Nor is information on which car the current setup belongs to saved.

By switching to the „Load“ requester or pressing the relevant button in the set up screen, you reach the load function in the requester. Click on the red button on Set Game Status and this setup will be loaded. All saved settings will then be transferred to the car currently chosen.



PRESETS

You can set presets for each track. As soon as you come to a race track for a race or practice, all cars are automatically allocated these settings.

When you have saved a preset for a track, setup settings in the assembly shop are no longer taken into account. As soon as the car is in the pits, the saved presets for this track are loaded. At the race track you can of course make any changes you want to the setup.



When you have found an optimum setup for a track, switch with the Preset button to the relevant requester where all the tracks are set out. A diagram of the track of the next race appears bottom right.

To save a preset, switch to „Save“ with the blue switches. It is also possible to save the preset for several similar tracks at the same time. For all tracks which have red buttons on, the current setup is saved as a preset by pressing OK. The track name of the next race is highlighted in yellow.

The preset of a track can also be loaded as Setup. Switch to the „Load“ requester. For each track for which there is a preset, there is the date when this preset was saved. Click on the desired track to load and confirm with OK. The preset applies to all three cars.

In „Load“, the preset of any chosen track can also be erased.

INDIRECT SETTINGS

When you change the wing setting or suspension strength in the assembly requester, this will be transferred directly into the setup of the chosen car.

At the race track, a modification of the brake balance in the recording monitor is transferred directly into

the setup of all cars. On the other hand, the tyre type can only be chosen in the pits. In the Setup when you click on the tyre picture, the tyre condition or tyre type, this switches you to the assembly requester for tyres.

The wing settings from the wind tunnel can be loaded directly into Setup with the button „Wind tunnel -> Setup“.

WHAT DO THE SETTINGS AFFECT?

FRONT AND REAR WINGS

The wings contribute about 40% of the total downforce. On a high speed track, you would usually drive it almost „without wings“, i.e. with the wing settings almost at 0. In this way the wind resistance will be at its lowest. The car accelerates more easily and reaches a greater maximum speed.

The more bends and the sharper they are on a track, the more important it is to be able to drive round them safely at high speed. For this, the wing angles are increased. However, you should not overdo this as otherwise the wind resistance would be so great that your car would hardly be able to move.

Your wing angles would be set in the wind tunnel and tested so that you can control the effects better. Also, you can make sure that there is equal pressure on both the front and back axles. The three icons describe the effects on acceleration/top speed, position of the bends, and suitability for the weather:

The steeper the red curve is at the beginning, the faster the car accelerates, as there is less wind resistance. The higher the red graph on the right climbs, the higher is the maximum speed.

The cornering characteristics is represented by a car driving round a bend. When the car tends to slide through the bend owing to lack of downforce, this is illustrated by two or four red lines, according to the strength.

The weather is divided into two categories: normal and rainy. When raindrops appear, the downforce should be high enough to mean sufficient road-holding, even in the rain.

SUSPENSION

The suspension has an influence on different driving properties: the speed through bends, the road holding, and even negative lift.

A softly-set suspension means good tyre contact with the road. Wear on the tyres is increased, but a correspondingly higher speed round the bends is possible. The settings should be soft in rain because, if they are too high, the car slides dangerously over the film of water.

When the suspension is hard, the tyres are protected. However, stability suffers through poor road holding. In bad road conditions the car could easily take off.

The height of the floor influences negative lift. The lower a car is, the higher the downward pressure. However, its balance is thereby reduced, and a harder setting is vital so that the car does not rise up. In rain and especially heavy rain, it is better to drive with a raised profile because the wear on the tyre pressure is stronger.

Next to the wing icons is an icon for tyre wear. The bigger the red line, the greater the wear.

TYRES

In Formula One there are basically two types of tyre: slicks and rain tyres. Rain tyres are suitable only for use in wet conditions. Slicks are dry tyres with no tread at all. These tyres almost stick to the road and allow extreme acceleration without wheel spin. There are four different types of slicks.

The combination of slicks you use is critical. The four different types differ in the hardness of the tyres. The types are labelled A, for very hard, to D, for very soft.

A hard tyre is very suitable for a high speed track with few bends. A hard tyre also wears more slowly. Naturally, its road-holding is worse. On tracks with many bends you need softer tyres, because these allow high speeds round bends.

According to 1997 regulations, each team can take 9 sets of slick tyres for a race weekend, but they are allowed only two different combinations. Moreover, the combination used in qualifying must also be used in the race. You can take as many rain tyres as you like. By the time you depart you should have thought of suitable tyre types according to the Setup.

Tyre pressure is similar in its effect to suspension. It influences road holding and length of wear. Rain tyres wear extremely quickly on a dry road because they are very soft.

In the assembly shop, the tyre type can be set. The choice of tyre (A- D or R) has no bearing on the choice of tyre at departure. You can however test the effect of the type you choose on the driving properties by using the three icons.

From the pits, click on Tyre Types to go directly into „Tyres“. There you can put in your nine sets of slick tyres or the rain tyres. You can also see the condition of the chosen tyres.

ENGINE

Here you set the fuel/air mixture. It is better, however, to do this in the „Teststand“, as you can control the effects of the transmission better. When you leave „Teststand“, the settings in the Mixture bar of Setup are taken on by all cars. Remember: the setup settings are lost if a preset for the next track exists.

As well as the acceleration and top speed graphs, in the middle of the icon you will find the fuel consumption and wear and tear. The larger the petrol container, the larger the consumption. The right icon shows an engine that is broken to a greater or lesser degree. When it is completely broken, you risk sustaining engine damage.

GEAR BOX

Obviously, the gear box in Formula One is also a high performance part. Very good gear shifts are especially resistant and light. It is advisable to change the gearing according to the type of track. Click on the yellow bars and push it in the desired direction. The standard setting of the gears is an equal distribution of gears.

As the gear shift in Formula One is half-automatic, and is only changed by a button on the steering wheel, frequent gear shifting are unproblematic for the driver. An engine reaches its maximum performance within a defined area of revs. The more gears that are available in a speed range, the better the engine revolutions are optimised. If a gear is „very long“, i.e. you don't change into second until you reach 100km/h, the engine will be turning at a very high rate of revolutions at the end of first gear. This damages the engine and reduces performance.

When many gears are placed in the lower regions (on the left), it is easier for the driver to drive at low speeds with the engine turning at its optimum level. As the cars usually drive slowly round bends, the left hand settings are best for tracks with many bends. On high speed tracks it would be an advantage to push the gears to the right. On the whole, there should not be too great a gap between the gears or at the edges, as the driving performance in the corresponding range is weakened.

The icons give you information on acceleration and top speed management. The icon in the middle represents the type of track for which the current settings are suitable. The tracks are separated into tracks with few, average or many bends. Wear and tear is represented by a picture of the gear box, which, as with the engine icon, is damaged to a greater or lesser extent.

When the aerodynamics expert is activated he sets at the departure for a track the gearing for the actual track. You can of course change this suggestion at any time.

BRAKES

The acceleration of a Formula One car has less impressiv than the braking ability. High lap times result from being able to brake as late as possible. The brakes are very light and have a wide surface area. A Formula One car needs about 18m to brake from 100 km/h to 0 km/h and is therefore twice as good as the best road sports car.

In braking, the weight is transferred to the front axle. You regulate the distribution of braking force on the axles with the brake balance. In normal conditions it is better to put the brake balance slightly towards the front because the front tyres have to bear the greater braking performance. This causes an equal distribution of braking performance over both axles.

Experienced drivers set the brake balance to the back on courses with many bends, so that they can go round the corners more easily. It is also an advantage to tip the brake balance slightly to the back in rain.

The icons show different types of cornering as well as weather suitability and track type. A red arrow on the corresponding part of the car shows whether the car is balanced to the front or back. Obviously, it is safer to choose a setting where there is no risk of breaking up.

TANK

According to the regulations, each car must make at least one pit stop during the race. Therefore, the amount of petrol does not need to last for the whole distance. The optimum amount of petrol for a race is when the car crosses the finish line with the last drops. You need to put in as little petrol as possible at the start because it is very heavy and this additional weight is not good for acceleration. Also, you should put in as little as possible at pit stops because filling up takes a lot of time. However, you should avoid an additional stop through lack of petrol or having to stop altogether on the track.

You can read off on the „Laps“ icon the approximate number of laps the fuel in the tank will last. Next to it is the total number of laps on the next track. For a race, the fuel level at the start is entered in Setup. The amount of fuel put in at pit stops is determined in Tactics. In qualifying, you should put in only enough for the set laps (plus reserve). If you put in enough petrol for 40 race laps when the race consists of only 5 flying laps (that is, 7 laps altogether, including the lead-in and lead-out laps), you shouldn't wonder at slow lap times.

Each car part that you make up in the factory ends up automatically in the stores. In the assembly shop and at departure, you take them out of this supply.

HOW ARE PARTS BOUGHT?

In the upper half of the requester you can see the current quotations for the chosen part. The individual quotations are chosen with the scroll bar under the title.

The quotations can be sorted according to different criteria. A reminder of these functions is on the upper right „Sort by“. Each criterion has a little lamp above it to the right. As soon as you click on the stars, for example, the lamp by the stars turns red and the parts are sorted in ascending order of quality.

To the left above the picture of the car on the Car menu is the number of a particular part that you have in stock. The average quality of these parts is shown by the stars. The most important consideration for a part that is bought in is the quality of its components. Expensive parts are more resistant and usually lighter than cheaper parts.

On the right of the amount in stock you can place the buying contract. Always the part that has been chosen above will be bought. You set the amount you want with the arrow keys. The purchase is made when you press the OK button. The best parts have five stars and are as light as possible.

When you're buying tyres and engines, the price depends on how satisfied your supplier is with you. You can buy only the ones your supplier makes. The more pleased the supplier is with the performance, the better the price he will quote you.



Departure

A Formula One team is always travelling. It travels about 160,000 km per year. This is equivalent to four times round the world. If the next race track can be reached overland, the teams transport their equipment to the track in specially designed lorries. If the track is not on the same continent as the team's base, the team must fly to the track. Each season a team sits for about 200 hours in a plane. To cross borders without a hitch, team members usually have to take about 10 kg of customs documents with them.



The transporters contain complete air-conditioned workshops for the cars. They are custom-made to meet the needs of the Formula One mechanics. The rear door is a hydraulic lift for loading. During transportation the cars stand on cupboards that serve afterwards as work benches. The transporters are nearly as well equipped as the assembly shop and as clean as an operating theatre.

HOW ARE THE TRANSPORTERS LOADED?

As usual, you can choose all the parts with the Car menu. Depending on whether they are interior or exterior parts, the corresponding parts are set once more as individual bars above the car menu. By clicking on one of these bars you can shift to the respective car part. If the bar is completely red, none of this part has been packed. If you have a technical director, he automatically packs spare parts for your cars.



After you have chosen the part you want, you will see the parts that you have already packed. on the right of the left area of your stores' status. Using the scroll bar you can go through the contents individually. To take a part from stores or put it back, click on the picture of that part. The part then changes sides immediately.

To load or unload parts quickly, use the buttons of the same name above. The parts can then be chosen according to their quality. When you click on one of the stars between the two buttons, this star and all those to its left are turned on. The stars you choose can be differentiated according to whether the part is to be packed or unpacked: If you choose three-star quality and click on Load, then all parts in the store with at least three stars are loaded into the transporter. If you choose four stars and Unload, then all parts with four stars or less are returned to the stores.

The capacity of your transporters is limited. While you are loading, the Load Volume bar rises. If the load capacity is exhausted then you must take parts out of the transporter in order to load other parts. The load capacity can be enlarged in Buildings by adding an additional store room. You will then automatically acquire new lorries.

TYRES

For a test drive you can take as many tyres as you want. Perhaps you should also leave room for other things, like the cars!

For a race weekend, the position is somewhat different. The regulations set out clearly the amount and type of tyres. For a whole race, including the free practice, you have exactly 9 sets of slick tyres. You can take as many rain tyres as you like.



Formula One tyres have the best grip - that is, their maximum road holding - is at about 100. Before a race, therefore, the tyres are heated with an electric blanket. The grip is also dependent on how many miles a tyre has done. A new tyre is at its best when it has already done a few miles. To reach this state more quickly, the cars zigzag round the track in the preliminary lap. The road holding is quickly reduced if the tyre has already done too many miles. The art of choosing tyres is to have enough tyres in optimum condition for qualifying and racing.

As already described in Setup, there are four grades of hardness for slicks. You can load tyres for any driver with the arrow buttons. The little lights above show how many of the nine tyres you have already packed. For a race all the lights, including rain tyre ones, should be green. When fewer are loaded, a red light flashes in the general departure requester and it is not possible to leave. You should, however, only take two types of slick tyres with you to the track. You must decide now which tyre hardness you will need for the race.

CARS

When a light for cars flashes in the normal departure requester, this is a warning that you have not loaded all three cars. You can do this for a test drive to save on transport costs. Click on the yellow car symbol and you will reach the special car requester.

Each car can be selected or de-selected by clicking on the respective yellow square. However you must take at least two cars for a race weekend. Your technical director will already have ensured that you take all three cars with you.

In this requester it is possible to look at the make-up of all three cars in detail. You need to click only on the part you want on one car. The information field below left shows you the exact data of this part.

Get back into the general departure requester with „Back“ or „Cancel“.

HOW DOES YOUR TEAM GET TO THE RACE TRACK?

Obviously, you can only set off with your team when you have a target location. If you go directly from the date requester into departure, either because you have jumped to a race or you have arranged a test drive, the travel aim you have chosen is immediately ready. Otherwise you can set off for the respective track from the Monday before a race date.

You can set off for a track any time after the „Departure“ button is green and the corresponding picture of the track is shown on the bottom right.

If you have specified „Testing“ or „Race“ for your journey in the appointment requester, you should pack all your things together and do as little else as possible. As you are close to the date of a race or a test, there is a danger that you will miss the date. A missed test drive means that you are simply throwing money away. By contrast, a missed race can cost you about \$500,000 in fines, a title or even sponsors, engineers and drivers.

You can also go to the next race while you are setting the date by clicking on it. You can switch the time directly into the departure time slot and go yourself into the departure requester. In doing this you still have enough time if need be to access forgotten settings. You can also easily set forward the date until the warning requester comes on that informs you that the race date is almost here. In this case, you only have to pack your things in the departure requester and set off.

Be careful: all cars that you would like to take to the track must be completely assembled.

If you have built too few cars, you can even miss a race weekend. As soon as you click on the green departure button, the journey begins. Depending on whether you are going by road or air, a relevant picture appears before you arrive at the track.

Race office

This is it. The race weekend is a test of whether your input in the organisation of your team and the development of the car has counted.

As soon as you have clicked on the green button in Departure, your transporters start the journey to the next track. It doesn't matter whether the aim is a test drive or a race weekend, you reach the track in the race office. As you are in an office again, you can call up several functions that you already know from other offices. Naturally, you can see all possible functions again by holding down the left mouse button.



New functions are the pits, tactics, track information and an altered appointment requester on the race weekend. You can switch to the pits at top right. This is the assembly shop at the track. Here you can rebuild your cars in a free practice or on a test day. You can also start the test laps from here. In your tactics talk, you confirm the number and content of pit stops in the race. On the appointments requester you can start the next stage of the race. Using track information, you start the information film of the track.

When you are at the race track with your team, there are four possible situations in which you can be: A test-drive day; and a race weekend with a free practice, qualifying heats, or racing.

WHAT HAPPENS DURING A TEST DRIVE?

When you have designed a new car you should test this immediately on a test drive before you drive it in a race, as you'll want to know beforehand whether the new design achieves the desired performance. Test drives are therefore very important in collecting experience points with the new design. When parts have collected too little experience, these mostly have a low value and are not reliable.

The number of test days have been booked before the departure on the appointment requester. You can't go to the test track yourself until you have selected the option Manager rather than Engineer. Otherwise, the technical director conducts the tests himself. Each test day begins in the race office. Here you can carry out various office duties. When you shift to the pits the tests can start. But be careful in multiplayer mode, because the office work takes time and can cost you a whole test day.

Above right you switch from the race office to the pits. Not until now can you start the real tests. The cars can be assembled in the pits exactly as they can in the assembly shop. Obviously, you only have at your disposal the parts you have taken with you. The fine details can finally be put into Setup. To reach this requester, click on the screwdriver in the footer line.

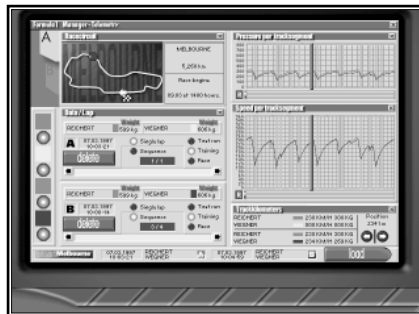
The cars are sent onto the track in the tactics requester. The laps covered can also be recorded in the telemetry monitor (see below). This enables you to run a detailed analysis of your test drives. When you want to put your test driver at the wheel, indicate the cars in Team tactics (see below).

To go back to the race office, click on the middle area of the left hand border of the pits. As in Offices, a small picture of the race office appears. As soon as you are back in the race office, the current test day is over. If it was already the last test day, you go back to the development centre immediately.

Telemetrie

While a Formula One driver is going round his laps, online computer data is sent from the car. Each driver has his own technician with a separate computer system in the pits and he follows the data carefully.

All parameters that may be important for the functioning of the car are transmitted and recorded. There emerges a „glass car“ which enables an exact analysis to be made of the laps covered.



At the race track you can examine the data of the car on the track on the telemetry monitor (see below). You can also store the data, including the current lap data, for future analysis. Evaluation of the stored data can be made in the race office or in the development office.

LOADING DATA

The recorded data are always stored according to track, so that comparisons can be made between them. When you have clicked below right in „Load“ in the telemetry requester, the load requester appears with the stored data on a track.

The track can be chosen in the lower field in which data is available only for the highlighted track names. If the track is changed, the stored data highlighted for loading is automatically deselected again.



The upper field shows a bar for each available memory store with the most important information of the stored drive. As well as data such as date, driver name and number of laps, you see a blue R when it has rained on the track.

Two stored memory banks can be loaded at the same time. You then have the possibility of comparing the two. When you have recorded the data over several laps, you can load the same data twice. You can therefore directly compare two laps of the same drive. Select the two laps you want with buttons A and B.

DATA SHEET A

Perhaps you have let a driver on a practice drive drive a lap with the preset settings and then tried some new settings. Both test laps will have been saved in the recording monitor. To find out which was the stronger or weaker setup, you can load up both of them at the same time.

The course of the drive is represented by two graphs. The top one shows the downforce, the lower one the speed at any time during the lap. Directly under each graph is a line for each driver which is coloured blue if it has rained at that time. As the graphs relate to the track and not to a specific time, you can note the effect of the rain on the two drivers in different parts of the track.

To look at a certain part of the track more closely, simply click on that place on the graph or on the track overview. The green bar in the graphics and the blue button on the race track jump to this spot. The exact

values of this spot can be read off on the bottom right. The bar can also be moved or finely adjusted with the arrow buttons bottom right.

To the left you can switch the two drivers per memory bank on and off. Each will be represented by one of four colours according to the stored information. To the right are the two data sheets for A and B. Here you can see which drives have just been loaded. With the scroll bar and the arrows you can choose individual laps in turn.

„Delete“ removes all the stored data! If you want to keep data A and want to load another set of data for B, then simply overwrite it. Of course, only button B should be activated to do this. Then only B will be loaded and A will be kept. This is only possible if you haven't changed the track. As soon as you want to load data from another track, the data from the other track that you have already loaded is removed from the data sheet.

DATA SHEET B

Above left you can switch between the two data sheets. On the second side the lap times and the car settings are set out.

On the left is a short extract from the ranking table (see below). Three measurements are given: time for each lap, average speed of the current lap, and that of the best lap. All data relates only to the stored laps and the drivers concerned.



Above right you can call up the individual setup settings. The car to be watched can be selected by clicking on the red buttons. With „Info“ you can recall exact driver data once more.

Appointments

A race weekend always follows a set pattern. The first day contains two free practice runs. On the second day a practice run is completed first, and after that qualifying starts. On the Sunday you can have another practice run before the race.

The Start button is always next to the stage that is about to begin. As soon as you click on this button, this stage begins.



MONITORS

Above, you'll see monitors for weather, ranking and track overview (see below Monitors). The ranking monitor always shows the results of the last race stage. Right at the beginning of a weekend there are none available, of course.

WHAT HAPPENS IN A RACE WEEKEND?

FREE PRACTICE

Free practice is the best possible preparation for qualifying and the race. From the race office you get to the pits above right. There you can rebuild your cars during testing, and start practice drives.

When you want to skip a free practice, click on the button with the small green tick. As soon as you click on „Star“ the next time all the following stages marked with a red cross can be overjumped. Only the end results of all missed stages are shown.

QUALIFYING

The results of qualifying can be critical for the whole race. Here the start positions are decided. Also, the 107% rule applies. The lap times of pole position are multiplied by 1.07. The cars whose final results in qualifying are slower than the lap time so calculated do not qualify for the race!

Qualifying is just like a normal practice. But you should, with the twelve laps at your disposal, reach the fastest possible flying laps. Only flying laps count in the chase for the start positions. Flying laps are those that do not start or end in the pits.

For qualifying laps you should take on as little fuel as possible. Each litre too much slows your cars down and prevents your achieving a good starting position. Don't forget to send your cars onto the track, otherwise it will be a short race for your drivers.

Take care over your choice of tyres. The combination (A-D) that you use in qualifying must be used in the race.

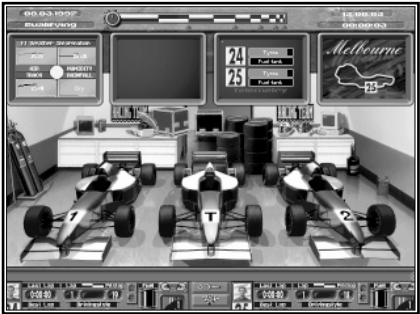
RACE

By this stage, all preparations must be over. When you click on the start button for the race, you go directly to the command post (see below). There you will see whether it has been worth your trouble or not. In the pits you can set an infinite variety of speeds at which the race will be presented (see below).

During a race you can't set any more settings on the cars. You can influence the race only by your team tactics and by your tactics in the pits.

Pits

The pits are your assembly shop directly at the race track. Here you can provide your car with all the parts you have loaded in the transporters. Different monitors show you what is happening on the track and let you share the laps with your driver.



CARS

In the middle you see your three cars. Obviously, you can see only three cars if you have brought them all with you and there is not one on the track. Click on one of these cars to see the overall view of this car. From this you can assemble as usual. Of course, only the cars in the pits can be worked on.

TIME BARS

In the middle right at the top is the time bar. The time can be set to infinitely variable amounts. Far left means that the time runs normally. When you are watching one of your cars, it needs exactly the same time for a lap as is recorded on the ranking monitor. If the time is pushed over to the right, the events take place as fast as possible. The laps go at a cracking pace. In qualifying you would be careful with the time so that it is not suddenly too late to start your own cars.

WHAT'S IN THE BOTTOM BAR ?

This line mainly shows the current information about the two drivers who are in cars 1 and 2. From left to right you have: time of the last lap and best lap up till then, number of laps completed, number of laps until the next pit stop, contents of tank, and speed.

DRIVING STYLE

Underneath the indicator for the next pit stop, the driver can be told what driving style he should adopt. The further the helmet is pushed to the left, the more carefully he should drive. When it is right over to the right he should adopt an aggressive style. The driver should drive as fast as possible and take every opportunity to overtake. This can lead to accidents and high wear and tear, of course.

Tip: During qualifying, set aggression to the maximum in any case. You thereby motivate your drivers to achieving high performance in pursuit of pole position. However, during a race you should lower the aggression again if you don't want to find your cars back on the safety rails.

ARROW BUTTONS

With the grey buttons, the next pit stop can be accessed directly. The arrow buttons in the middle area of the footer bar tell you during which lap the pits should be made ready.

TACTICS / SETUP

There are three different requesters included that can be called up with the buttons in the footer bar. The race time is stopped when in the requester. The buttons with the two helmets open team tactics. With the spanner you reach this setup (except in a race). You call up the tactics with the chess-piece button. Only in the race is race tactics opened like this.

Tip: A car and engine specially tuned for speed in qualifying can often work wonders.

WHAT DO THE MONITORS SHOW?

On four monitors you are shown the most important information. From left to right, the monitors contain information about the weather, the ranking, the telemetry, and the position of your car on the track.

The monitors show only a selection of the data, however. To get full information on all four areas, click on the relevant monitor. The screen zooms then to the chosen monitor. Click on the right mouse button and you return to the pits.

You can call up the following information on the individual screens:

Weather monitor

The left monitor shows you the weather development in graph form. When you switch to the whole monitor, you receive in addition the wind direction, a picture of the track and special characteristics of the track.



Above left you can read off the wind speed and direction. A strong wind makes higher demands on the stability of the cars. Also, a strong wind increases wind resistance. The weather conditions are shown by the four values below. For each value, a trend is given. A circle means that a similar tendency is expected. In other cases, a corresponding arrow appears. The individual values have the following meanings:

AIR

Above left is the air temperature. High temperatures put greater demands on the materials. In very hot climates the tyres wear out considerably more quickly. A sudden drop in temperature can presage a rain shower.

HUMIDITY

This shows the humidity. The higher it is, the greater is the possibility of rain. When it rains, the humidity lowers and it eventually stops raining. High humidity puts greater burdens on man and machine.

TRACK

This is the temperature of the road surface. It is naturally dependent on the air temperature. The ground temperature is important when you are choosing your tyres. The colder the asphalt, the less the tyres adhere to it. But tyre wear is lower on cold asphalt.

RAINFALL

This graph shows the how hard the rain is. If it is not raining, the graph is at minimum. As soon as it goes up, you should seriously think about using rain tyres.

HOW CAN A CHANGE OF WEATHER BE RECOGNIZE?

The change from dry to wet weather and vice versa is important. In the command post, on the race track and on the small weather monitor, this can be seen at any time.

Weather monitor	It is not raining when the text says „Dry“. In all other cases, rain tyres are recommended.
Command post up. back to normal time.	The stands become darker when it rains and the spectators have umbrellas If you have speeded up the time it will automatically go
3-D races	The scenery seems darker when it rains and the sky is full of black rain clouds.

Ranking monitor

This monitor shows you the complete current results with all positions. In each lap there are three measuring points at which you can take the time of a car. You can then find out whether your car has lost time in the bendy first part of the race. All three times are always measured starting from the start line.

The information on a table always relates to one of the three points. With the red buttons beneath, you can switch the monitor to the individual measuring points. The most important time information is that at the finish line.



Since other information in a race is as significant as in practice or qualifying, there are two different variations of this screen. The individual columns of the table have the following meanings:

PRACTICE

No.	- number of the car
Name	- name of the driver
Points	- number of world championship points up to now
Team	- team logo
Lap	- lap in which this car is driving
Last Lap	- last lap time
Speed	- average speed of last lap
Best Lap	- time of best lap up to now
Speed	- average speed of best lap
Distance	- distance behind the leader
Previous	- distance behind the leader on the previous lap
Stop	- number of pit stops completed
Last	- duration of last pit stop
Best	- duration of the shortest pit stop

RACES

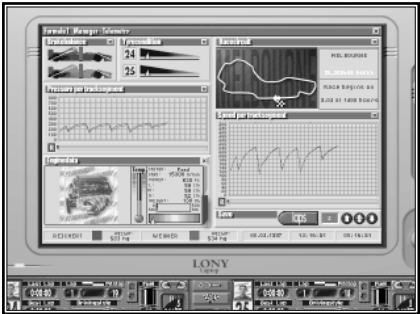
Rank	- actual placing
No.	- number of the car
Name	- name of the driver
Points	- number of world championship points up to now
Team	- team logo
Engine	- engine supplier
Last Lap	- last lap time
Speed	- average speed of last lap
Best Lap	- time of best lap up to now
Speed	- average speed of best lap
Starts	- total number of starts from the pits
Flying	- number of flying laps (see dates)
Left	- number of laps left to drive

Press on the right mouse button here to leave this monitor

Telemetrie monitor

On the small recording monitor you can tell the condition of the tyres and the amount of petrol in the tank at any time. However, by clicking on this monitor, you receive much more information.

As well as the information you already have, there are two areas of the monitor that are especially important: the engine information and saving.



ENGINE

Below left is the area in which engine data is shown. It's always the data of only one car that is represented at the time. With the coloured riders on the right border of the area, you can switch between the two cars. Apart from the wear and tear bars on the current engine, the engine temperature is important. When the cooling system for this engine is not sufficient or the engine is set wrongly, it overheats. Once the temperature bar goes into the red, the engine wears out more quickly and threatens to fail.

SAVING

To evaluate the recording data in the race office or development office, it must first be saved in this monitor. As soon as at least one of your cars is in a flying lap, you can indicate the round in which to click on the button „Laps“ in the „Save“ area. On the right, next to the button, is the number of laps that should be saved. This number can be changed at any time during a recording.

All cars in your team are always recorded . If, for example, while you are recording your first car, your second car also drives on to the track, the data of the second car will also be recorded.

You leave this monitor again with the right mouse button.

Race track

As soon as you click on the monitor on the far right, you can have a direct transmission of the race. Just as you would in a TV broadcast, you see the practice and the race from all the different camera angles. Here you yourself decide which camera angle you want.

VIEWING ANGLES

On the lower left screen edge the different camera angles are displayed. From top to bottom they are:

Television shot	The active car is followed by cameras placed right on the edge of the track.
Aerial view	The active car is shown directly from above. By moving the keyboard arrow keys up and down you can set the height.
Driver's view	Here you can see the track directly from the cockpit of the active car. By clicking on the button again you can even see out of the back of the car.
Camera angle	Different camera angles can be selected. Cameras are placed all along the track for your use. Use the arrow keys to choose one.

TIME

When you watch the race on this monitor, the time is automatically set at normal time. If you have speeded the time up and then switch to this monitor, the time will automatically return to normal. As soon as you leave this monitor, you can speed up the time again.



TO DECIDE ON ACTIVE CARS

The active cars can be selected by a simple mouse click. For this you can use the various areas. Your own two drivers are selected in the footer bar by their portraits or their car number. You can change to the driver who has just been leading directly with the flag buttons above left. Below this is the number of the last driver selected. In this way you can switch back and forth between this driver and another. Each driver can be selected with a click of the mouse on the name in the placings.

You can even click on a car directly in 3-D by pressing the left mouse button. The chosen one becomes the active car. This function takes place in all views.

PLACING

In this line the current placings can be seen. With the bat and the arrow keys on the right of it, you can scroll through the information line.

POSITION

With the button above right, an information line with the position of the active car can be turned on and off. When on (the lower half of the button), it gives information on the position of the car on the track above right. On the left of it, the distances to the next-best-placed driver and your own chasing car is shown. The distances, like the placings, are calculated again each time they go past the winning post. When the pursued and the pursuer are known, you can switch from one to another.

Press the right mouse button to bring you back into the pits or the command post.

HOW CAN YOU SPEED UP THE 3-D SHOTS?

The more detailed the 3-D representation is on the track, the higher are the demands placed on the computer. You can set your own personal compromise between flowing movement and the quality of the graphic details.

The quality of the textures is determined before the race in the organisation or development office. In the requester „Options“, there are three buttons on the top right which control the texture quality. The top button deactivates all the surrounding textures. This speeds up the picture but the effect is not particularly attractive.

In a multiplayer game there can be problems with top texture quality with 16 Mb RAM. In this case you should lower the texture quality.

During the 3-D representation of the race, the picture can be improved with the keyboard. You set the 3-D with the following keys.

F1	High grade detail
F2	Medium grade detail
F3	Low grade detail

F5	High resolution
F6	Low resolution

F9	Very short range of vision
F10	Short range of vision
F11	Wide range of vision

F12 Very wide range of vision

Should the settings prove too much for the capabilities of your computer, problems can crop up in the transfer of information.

The remaining function keys are set up as follows:

- F4 Overtaking animation on/off (only active when no animation is shown) When on, all overtaking activities of your own drivers are shown.
(The overtaking driver is always on the left and the one who is overtaken on the right.)
- F7 Game sounds on/off
- F8 Race sounds on/off

Team tactics

The button with the two helmets in the footer bar opens this requester. Here you see the data of the two active drivers. During practice, this data can contribute to the growing experience of a test driver. During a race, this information can be interesting in the event of both your cars following each other over the finishing line. When the one with the most world championship points is behind the second driver this time, a small position change can ensure the world title.



DRIVER COMMUNICATION

Team tactics are shared with the drivers using any of the four buttons under the data. A command lasts as long as the button is pressed. Communication with your drivers is possible only during a race.

DIRECT CAR ALLOCATION

When both active drivers are in the pits, they can in each case be given re-allocated cars, below left next to the illustration of the car. Click simply on the yellow car symbol of the car into which the driver should change. If the car is already occupied the drivers change cars.

ALLOCATING CARS

When you change to Allocating cars with the blue switches, you can allocate a car to each of your drivers. On the left your head drivers are illustrated, on the right are up to three test drivers. Cars which are on the track are highlighted in orange. Only cars which are also in the pits can be allocated.

TEST DRIVERS

To let the second test driver drive car One, click the black and yellow symbol for car One by this driver. This car is then marked for this test driver. When you change back to the active drivers, the data of the chosen test driver remains on the left hand side. When you now send car One onto the track, it will be driven by this test driver. When you let a test driver practise a lot, the driving experience of this driver rises. If the driver shows real talent you could perhaps train him to be your future race driver.

Practice tactics

In practice, qualifying and test drives you send your cars onto the track with this requester. To do this you must click on the button with the chessboard pattern in the footer bar of the pits. Race tactics appear here only during a race.

In a test drive you can send your cars on to the track as often as you like (OK - a maximum of 99 times!). At a race weekend, however, the number of possible laps is strictly limited. In a free practice and qualifying heat you can have twelve laps at the most.



INFORMATION

For each driver you receive the following information. In the header bar are shown the car number and driver names, the wing angle settings and the types of tyres used. The actual position is given in detail below. The individual columns give information on:

Rank	- actual position sorted according to fastest lap time
No.	- number of the car
Name	- name of the driver
Points	- number of world championship points up to now for this driver
Speed	- average speed of best lap
Best Lap	- time of best lap in the current practice or test day
Speed	- average speed of best lap
Leader	- lap time of the best lap of the fastest driver up to now
Ahead	- time difference between your own best lap and the leader
Starts	- total number of starts from the pits
Flying	- number of flying laps
Left	- number of laps left to drive

OTHER TEAMS

In changeable weather a look at the competitors can be interesting. Is the rival driving with slicks or rain tyres? If a wet track dries out shortly after the start, the teams who have opted for slicks have an almost unassailable advantage in the race. If it stays wet, they've been unlucky.

In the lower part of the requester, under the team logo, it shows whether this team is driving with slicks or rain tyres. If the tyre is blue, then at least one car of the team has rain tyres. However, it always shows the type of tyres that were used the last time out of the pits.

A small light near each team shows the status of the pits:

Practice / Qualifying

Each team whose lamp is red has at least one car on the track. This information is especially important in qualifying because, for high lap speeds, the track should be as empty as possible.

Races

Red shows that there is a pit stop in progress

PIT STOPS

Bottom left, three different options can be set for pit stops. As these are only significant for the race, they will not be described until race tactics.

AUTOMATIC TANK

So that you don't always have to jump to the tank requester or Setup to fill up for the next flying lap, you can do this directly from the tactic requester. Click on the number of the required driver on the bottom left. Then you set the required amount with the arrow buttons to the right of it. You only give the number of laps for which the fuel has to last. This lap number is then represented in red. The set amount is not put into the tank until the „Automatic“ button has been pressed. The number of laps then appears in white writing.

Be careful: you must always allow for at least two more laps than you have flying laps: the fuel must last for the lead-in and lead-out laps. A bad technical director can make a mistake even in calculations using automatic fill.

To calculate the amount of fuel needed for a lap, the current Setup and aggression settings are specified, e.g. a very aggressive driver uses a lot more fuel.

HOW IS THE CAR STARTED?

Underneath the results table of each car are the buttons with which you start the car. To let a number Two car drive flying laps you will give the following commands:

NUMBER OF LAPS

With the two arrow buttons the number of flying laps to be covered is set. The total number of laps additionally includes two further laps - the lead-in and lead-out laps.

START

With the start button you send your driver out onto the track for the determined number of laps. The button remains pressed for the duration.

GARAGE

As soon as the car is on the track, this button can be pressed. With it you call your driver back into the pits before all the laps are completed.

WHY ARE THERE TWO DIFFERENT TACTICS?

Practice and qualifying are very similar: the team cars are started from the pits for a limited number of laps. In the pits it is sometimes necessary to deal with settings on the car. The aim is to do the fastest lap possible. The start positions for the race gained in qualifying can be critical on tracks where there are few possibilities for overtaking.

In a race, on the other hand, all that counts is the speed over the whole length of the race. The cars are not modified any more and each pit stop increases the race time. Here, the whole race strategy that you have planned could mean the difference between victory and defeat.

Command post

Between the pits and the finishing post, each team has a small covered stand. Several monitors are set up here on which all the information on the race can be called up. Also, the drivers are shown the famous small boards from this command post. Usually these show the driver only his position and the distance from another car.



You follow the race directly from the command post. Using the bottom bar and the monitors is just the same as in the pits. All important information can be received here at a glance. For full details just click on the relevant monitor in the command post.

DIFFERENCES FROM THE PITS

You reach race tactics with the tactics button. You can make changes to the pit strategy even for the current race. The possibilities for changing the car or the driver are of course deactivated. The setup screen cannot be accessed from here since you can no longer alter settings.

The bottom right monitor offers two different modes. With one, you can press the button on the top right of the monitor to get an overview of the course on which you can see the position of your cars. With the black and white button below you can switch to the leader for comparison. You can also choose a 3-D shot of the track with the lower button on the top right. This will always be the camera shot that is currently being shown on the large 3-D monitor. Also, here you can switch to your own drivers by clicking on the relevant picture in the footer bar with the mouse. When you click on the position number in the ranking monitor to the left of it, the shot will be changed to this driver. The 3-D shot is of course only active when the clock in the time bar on the far left is set to normal time

Race tactics

Each race weekend, pit stop strategy is a particularly important factor for Formula One teams. Often it is not decided until the last minute and is a closely-guarded secret. The race tactics relate exclusively to the race. To call up this requester, click on the button with the chessboard pattern in Races.



The basic principle for race tactics is simple: the more fuel a car has, the heavier it is. A heavy car accelerates more slowly and must brake earlier. A light car does faster lap times but must come in to the pits sooner for re-fuelling. Each pit stop takes about 30 seconds from start to finish and affords a perfect opportunity for others to overtake. According to the regulations, each driver must have at least one pit stop.

One advantage of pit stops is the new tyres that are put on. After a short run, new tyres have a much better grip than tyres that have already been in use. This allows a higher cornering speed. On tracks like Monaco, on which it is almost impossible to overtake, minimum pit stops are sensible. The deciding factor in race tactics is whether the loss of time and position during a pit stop can be compensated for by the speed advantage.

SETTINGS

Above the tactics table, the wing angles and tyres to be used are given for both drivers . During the race the current lap of both drivers can be read off under their names. Underneath, the following settings can be dealt with:

WHAT DOES THE PIT STOP STRATEGY DEPENDS ON?

PIT STOP

Here you set the exact lap for your pit stop. According to regulations, the maximum amount of petrol is so clearly set out that you have to have a pit stop. You set the number of pit stops above; they are not limited, but more than three would mean that you would not be able to catch up the time.

Rain tyres wear out more quickly. If the road is dry in places, the rain tyres only last a few laps. Therefore in wet weather the number of pit stops should not be set too low. A change in the weather between dry and wet will normally lead quite quickly to a pit stop put-in at the last minute.

In the setup screen and tank requester, you are shown how long the set amount of fuel will last. In any case, the first pit stop should take place before this time. If you have inadvertently sent both drivers to the pits at the same time the second driver must wait until the first is finished.

PITS READY

Before a driver can come into the pits the pit crew must prepare for the stop. For this, it stands ready for action at the entrance to the pits. Usually, the pit crew prepares in the lap before the stop. Sometimes it can be useful to prepare the pits before this, so that you can arrange a pit stop at short notice.

The pits are prepared separately for each driver, and different tyres and amounts of fuel must be prepared for each. It is, however, possible to prepare the pit stop for the second driver during the pit stop lap of the first.

TYRE TYPES

Each driver has available his nine sets of slick tyres for the whole weekend. The individual slick tyres will be numbered from one to nine. If, for example, you want slicks number 6 to be put on at the first pit stop, then simply choose B6 in the first line. In this example, the slick number 6 has the hardness grade B. The R stands for a new set of rain tyres. The current condition of the chosen tyres is also shown. If a value of 100 is shown, this set of tyres has not been used.

AMOUNT OF FUEL

The amount of fuel depends on what lap the next pit stop or the finishing post is. A little extra can do no harm. It could mean the race tactics are more flexible and could be changed during the race. It also means that the car is not running completely dry if an unexpected extra consumption accrues on the track. As a rough guide, a hundred litres of fuel lasts 30 laps.

OTHER TEAMS

Just as with practice tactics, here you can find out important information about the tyre and pit stop tactics of other teams.

PIT STOP OPTIONS

You can either decide to lead the pit stops yourself or leave it to the automatic. How much you see of a pit stop can be set at the bottom left. You can turn on or off three possibilities with the red buttons:

Seeing the pit stop
Seeing information

When this is on you can see a bird's eye view of your pit stops in detail. A picture appears as soon as the pits are ready. You will also see the entrance and exit to the pits.

Automatic

When this function is on, the whole pit stop is in the background. The speed of the stop then depends only on your race crew.

AUTOMATIC

When you have a technical director in your team and he is activated, he can help you by setting the race tactics. Simply click on the automatic button right at the bottom in the requester.

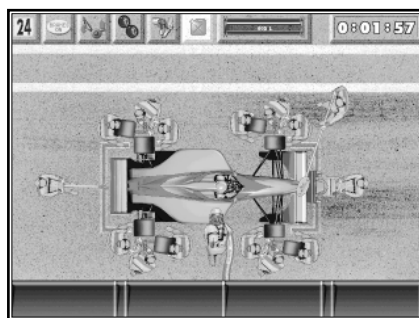
The necessary amount of fuel will be put in automatically for the set pit stops. Automatic also makes sure that your cars have enough fuel before the race starts. When you have packed only one type of tyre, the technical director sets the tyres for the pit stops immediately. If you have taken different types of slick tyres, you must decide which tyre beforehand.

The automatically-set amount of fuel relates always to the current settings. However, if after you have decided on race tactics you change the settings of the car, consumption can change drastically. Also, the weather can change shortly before the race. The most sensible time to decide on race tactics, whether automatically or manually, is shortly before the start of the race.

Pit stops

A perfect pit stop can be critical for a driver. If, in a duel for the lead, your pit stop lasts a little too long it could cost you the lead.

You can only follow the pit stop when the „Seeing the pit stop“ option is on in the tactics requester. Otherwise, the pit stop is carried out automatically by your race crew in the background.



The most important thing about a pit stop is the speed with which it is carried out. Only a short pit stop is a good one. Normally, re-fuelling is the time-critical aspect. The speed with which the petrol is put in is laid down in the regulations. Therefore you should not put in too much at pit stops. A normal pit stop lasts about 9 seconds unless you have to put in a lot of petrol.

AUTOMATIC SPEED

The speed with which the tyres are changed depends on the quality of your race mechanics and the technical director. With a team that is not particularly good, your stops will not make a good impression. In this case, it would be worth it for you to take the direction of the pit stops in hand yourself. By doing this you can clearly have faster stops.

MANUAL PIT STOPS

When the automatic option for pit stops is off in the tactics requester, you take charge of the pit stop yourself. With the top left buttons you can give orders directly to your pit crew. Two things you must look out for at pit stops are re-fuelling and tyre changing.

These actions must follow a set pattern. Each stop begins with the round sign that is shown to the driver at the beginning of the activities. Then the car is jacked up. When all the work is completed, the car must be lowered with the same button. When the sign is clicked on again, this tells the driver that he can set off. Refuelling is quite simple. To start and stop putting in the fuel, you need only to click on the button on the can. The bar on the right next to the button shows how much has been put in. With manual pit stops you do not have to keep to the set amount of petrol. You should note beforehand how much fuel you want.

The tyre change is somewhat more complicated. The commands are given at the same time for all four tyres. Tyres are changed in the following order: with the spanner you loosen the wheel nuts and take off the old tyres, put the new tyres on and tighten the nuts. All four actions are started with the two buttons for spanner and tyres. The commands should not follow each other too quickly as the individual team members will get in each other's way. In race tactics you decide which type of tyre is prepared for the pit stop.

Control

The cars must adhere exactly to the conditions of the regulations, or else they will be disqualified. The technical representatives of the Motor Racing Federation give the cars a thorough check on two occasions during a race weekend: during qualifying and after the race.



QUALIFYING

Each time a driver returns to the pits in qualifying he has a 50-50 chance of being checked. Perhaps he has driven too light a car to qualify faster. If he is not found out he has been lucky. If he is checked he will be disqualified!

RACE

All cars are checked immediately after a race. As soon as one thing is found that does not conform to regulations, the car is taken out of the ratings.

COMPLETION

When a check is taking place, a picture of scales appears. Above this there is a paragraph with the items checked for each driver who has been checked. The three areas engine/gears, bodywork and weight are checked one after the other. If a contravention of the rules is discovered, this is marked with a red cross.

You can switch off the presentation of this screen in the „Options“, but the check takes place just the same.

Multiplayer

The foregoing game descriptions relate to single player games. In principle, a race weekend with several players is just the same. However, there are some special items to take notice of:

ORDER

Each player takes turns to arrive at the race track and to go through free practice. The order is randomized. As soon as a player has started the next phase in „Appointments“, the next



player starts on the current phase. Obviously, players who have decided not to have a practice phase are left out of the corresponding phase. Qualifying and racing take place for all players at the same time.

MULTIPLAYER TIME

When a time has been set for the „Time before the start of the race“, this time expires for each player for each phase. This time continues whether you are in the race office or the pits. When the time is up, the „Appointments“ requester will automatically be opened. Only here can the next phase be started.

RESULTS OF OTHER TEAMS

The practice stages of a race weekend are repeated individually for each player. The practice results of the non-playing teams are however an important reference point in the rating of your own lap times. Therefore, in multiplayer the practice times of all teams not controlled by one player are determined right at the beginning of each stage. Thus, each player has this data to compare on the ranking monitor. The last player of a stage naturally has an advantage, because he knows the results of all the other players.

QUALIFYING

All players are on the screen at the same time in qualifying and racing. Even qualifying is watched from the command post. This means that no assembly work can take place on the cars. On the other hand, Setup can from now on be called up for each player separately. Time is kept in the background during this. All settings for the cars in the pits can be dealt with. The tyre requester can also be accessed by clicking on tyre type.

BOTTOM BAR

The footer bar in qualifying and in racing is replaced by a special multiplayer bar. This still contains the most important functions: driving style, team tactics, tactics and setup. Setup is not available during a race.

Also, in multiplayer the individual drivers can be activated in 3-D by clicking on their picture. The players must naturally agree amongst themselves which driver should be shown.

RECORDING / TELEMETRIE

In multiplayer, the telemetry monitor cannot be switched to full screen mode. It is not therefore possible to make a note of data from qualifying or racing.

NEW PLAYER

A new player takes over one of the currently active teams. He therefore takes on the statistics of this team and also all drivers and the development centre. However, the successes for his team up to now are not included in his mission successes! That means that the new player starts with no mission points, no matter how much of the season has gone by. It is therefore recommended that new players be added at the start of a season.

When a player wants to leave, this team is taken over by the computer.

MISSION WON / LOST

Players who have not completed their mission automatically end their career as team manager at the end of the season (see the corresponding animation). The team is taken over by a computer manager.

If a player has completed his mission, a small requester appears containing a „won“ animation and the question whether he wants to continue playing. The game is continued by pressing OK. The successful player no longer has a mission to complete. Naturally, the missions remain the same for the other teams. If you decide to quit now, the game is definitely over for all participants. Another requester offers you the chance to go back to the start menu. „Cancel“ ends Formula One Professional Manager.

Editor

Formula One is always on the move. New drivers, new teams, new stars. With this editor you have the possibility of Formula One Manager Professional showing Formula One as if you were at the track or as if you were watching it on television.

Driver, Engineer and Team data can be easily altered. You can also include photos and team logos if you have these available in PCX picture format.



To access this editor, select this on the start menu bar and click on the logo bottom right. When you leave editor again, you get back into the game start menu. The changes you have entered are already valid for a new game. With saved games, only the changed pictures will be overwritten.

The following elements are used for Editor:

DATA FIELDS

These are the hollow black fields in which most of the data are. When you browse over a field like this with the mouse, the field turns blue. When you click on with the left mouse button, you can set a new value with the keyboard. A cursor appears with which you can move the arrow keys. When you put these settings in, the characters to the right of the cursor will be overwritten.

The following keys are available for inserting data:

- | | |
|--------------------------|------------------------------------|
| - Arrow keys left/ right | Move the cursor |
| - Home key | Cursor back to the beginning |
| - End | Cursor to end |
| - Backspace | Erase character to left of cursor |
| - Delete | Erase character to right of cursor |

When you press the return key the changed settings will be taken over. Interrupt the input by clicking the mouse. Only data fields which can be edited react to the mouse pointer by turning blue.

Tip: If several drivers have the same surname, confusion can be avoided most easily if the surname is prepared suitably. The program always takes the last word as the name right up to the space. Therefore, there are two ways of differentiating. If you have two drivers with the surname Wegner, you could write the names as follows:

- a) Hans-Arno Wegner = H-A. Wegner
- b) Hans-Arno Wegner = Wegner1

SELECTION WINDOWS

Some data cannot be given a free value. In these cases, a list of all possible variations is offered. A red button is placed next to the relevant data. As soon as you click on this button, a small window opens with all the possible choices. To select a value, simply click on this with the left mouse button. A click with the right button stops the selection.

On the team page you can assign the drivers and the engineers to a team. Behind the name in the list is, in brackets, the team logo to which this person has been assigned. If he has no contract, „Free“ appears behind the name. When you make modifications, the positions are changed. If, for example, you want to make driver

one from team A your number 2 driver, then the former number 2 driver is transferred to position one on team A. If the new driver formerly did not have a contract, then after the swap your former driver is free.

PICTURE SEARCH REQUESTER

To swap the driver's picture with your own, click on the driver's picture above left. A window appears on which you can look for a picture on your hard disk. Your picture must be available in the same section of the hard disk and in PCX picture format (256 colours or 24 bit truecolour). If your picture is smaller than the 75 x 75 pixels smallest size, it can't be loaded. Larger pictures will automatically be reduced to the necessary size.

By clicking on the file with the arrow top right, you reach the next unlit directory. To swap from one file to another, click on the file or its symbol. Only files and PCX pictures will be shown. As soon as you click on the name of a PCX picture, it will be reduced to the right size and shown on the left in the preview window. Select the picture with OK and leave the requester.

When you click on the button „New Load“, the original picture of this driver will be loaded. It then appears directly on the editor page above left. The preview window in the requester is then empty again.

To change the team logo, click on the team page on the small logo. The smallest size for a team logo is 60 x 60 pixels.

CHARACTERISTICS BAR

Some values are shown with a bar. To change this bar, click on the required bar length on the bar. When you press the left mouse key, the bar can be moved with the mouse.

QUALITY STARS.

On the engineers' page you can set the quality of the engineer by clicking on the required number of stars.

BUILDINGS/MECHANICS

On the team page on the bottom half, you can set how many buildings a team has at the beginning and how many mechanics already occupy the departments. To change a value, click on the relevant place. Arrows appear with which you can alter the values. A maximum of three buildings per department can be set. Also, the maximum number of mechanics per department is limited above.

The department buildings have different minimum and maximum capacity. If you have taken on too many or too few mechanics, considering the current number of buildings in a department, you will be warned about this in a text line below the table. This warning only appears when you have turned on a data field in the corresponding department.

SCROLL BAR „SEARCH“

The current data items are changed in two different ways: You can scroll through the drivers with the arrow keys or the scroll bar. With the „Search „ button bottom right, it is also possible to select a required piece of data out of a complete list (see select window).

SAVING

Your changes to the database of Formula One Professional Manager will be set only when you click on the relevant button at the bottom.

NEW LOAD

With this button you can recreate the original data and pictures. Everything then reverts to the same position as when you started the game for the first time.

CANCEL

You can only select this button when you have changed data. When you press this button, all changes not yet saved are cancelled.

FINISH

With this button you go back to the start menu again.

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QUESTIONS

Some areas of the handbook are set up so that certain practical questions can be dealt with. If you have basic questions about how to use Formula One Professional Manager, it would be worth looking at this list.

START

How do you confirm your game target? _____ **13**

ORGANISATION

How is the game set up? _____ **17**

General operation _____ **18**

How is the first race started, directly after the beginning of the game? _____ **19**

How is a contract concluded? _____ **21**

How are the advertising spaces allocated? _____ **23**

How do you win sponsors? _____ **24**

How are loans allocated? _____ **26**

How are mechanics appointed? _____ **32**

How do the chances in regulations come about? _____ **35**

How is a non-regulatory part recognised? _____ **35**

How is a test drive set up? _____ **38**

How is the next race started? _____ **38**

DEVELOPMENT

How is formula one car made? _____ **39**

How is the development of the cars automated? _____ **41**

What makes a good design? _____ **47**

How do you create a new design? _____ **48**

How do I improve my design? _____ **49**

How do we gain experience? _____ **49**

How is this experience used? _____ **49**

How are the instructions controlled? _____ **50, 51**

What does a module consist of? _____ **51**

What is tested in the wind tunnel and how? _____ **52**

How can the aerodynamics be compared? _____ **53**

How do I find out the status of the cars? _____ **54**

How is a car put together? _____ **55**

How do you get the best out of the engine? _____ **56**

How is setup confirmed? _____ **57**

What do the setup settings effect? _____ **59**

How are parts bought? _____ **62**

How are the transporters loaded? _____ **63**

How does your team get to the race track? _____ **64**

RACES

<i>What happens during a test drive?</i>	<i>66</i>
<i>What happens in a race weekend?</i>	<i>68</i>
<i>What's in the bottom bar?</i>	<i>70</i>
<i>What do the monitors show?</i>	<i>70</i>
<i>How can a change in the weather be recognised?</i>	<i>71</i>
<i>How can you speed up the 3-D shots?</i>	<i>74</i>
<i>How are the cars started in practice or qualifying?</i>	<i>77</i>
<i>Why are there two different tactics?</i>	<i>77</i>
<i>What does the pit stop strategy depend on?</i>	<i>79</i>

TECHNICAL SPECIFICATIONS AND PROBLEM SOLVING

The lowest specifications for Formula One Professional Manager are

- MS-DOS compatible PC with 486 processor or compatible . Pentium 90 MHz recommended
- 16 MB RAM working memory
- 1MB graphics card with VESA driver installed for picture resolution of 640 x 480 pixels 256 colours
- CD ROM drive with at least double-speed and installed with CD driver such as MSCDEX version 2.23 onwards
- At least 80 MB hard drive space
- Mouse with 100% compatible Microsoft mouse driver installed for MS-DOS
- MS-DOS from version 5.0

The game runs satisfactorily on a 486dx33, or a little slower. A 486dx2-66 or a pentium processor speeds up the game quite a lot. More memory is also very useful so that you can load additional data. For high texture resolution in a race in multiplay, it is advisable to have more than 16 MB RAM. A four speed CD-ROM speeds up the data transfer from the CD - or, in short, the faster the better...

The program has been tested exclusively on an Intel processor.

Satisfactory operation cannot be guaranteed on other manufacturers' machines.

If you have a Univbe driver on your computer, you should load this before the game. This speeds up the screen construction.

Scitech Software's current display doctor can be found on the Internet at our address:

<http://www.scitechsoft.com>

1. WINDOWS 95

If you should have difficulty starting the program under Windows 95, you can also start it in DOS mode. Re-boot your computer. Call up the Windows 95 start menu while pressing F8 on the keyboard at the start of Windows. Choose from the menu the item „Only Input requests“. The effect is the same as with our small batch file. Certainly, you should not miss the right point when booting. For details on this you should look in the instructions for Windows 95.

2. MS-DOS CONFIGURATION

You should install only the drivers that you actually need under MS-DOS. These are for Formula One Professional Manager, as for most modern games:

In the file CONFIG.SYS:

HIMEM.SYS

DOS=HIGH

DOS=UMB

CD-DRIVER

If your computer is fitted with an SCSI-interface for the CD drive or hard disk, the SCSI-driver must be installed as well.

In the AUTOEXEC.BAT file

MSCDEX.EXE

MOUSE DRIVER

SET BLASTER=Axxx Dx Ix Hx Pxxx Tx

Leave all other drivers and settings alone. This is especially the case for the drivers:

EMM386.EXE

SMARTDRV.EXE

SHARE.EXE

DISPLAY.SYS

and for MS-DOS up to version 6.22

SETVER.EXE

A whole range of errors can be caused by even the smallest use of these in the game.

Set the necessary parameters for the CD driver (driver and MSCDEX), for the mouse driver and for the set blaster from the relevant instructions.

The program was tested exclusively in Microsoft MS-DOS and Windows. A satisfactory operation cannot be guaranteed with other manufacturers' operating systems. If you have problems with these operating systems, either contact the manufacturer or check the instructions.

Further details on the files CONFIG.SYS and AUTOEXEC.BAT, as well as on how to access and edit them with the DOS editors ED or EDIT, can be found in the relevant chapter of your MS-DOS handbook.

3. THE CD IS NOT RECOGNISED AT THE START

There are a number of CD drivers that do not allow direct access to the CD if it has been newly installed. If you see at the beginning of the program Not ready to read from drive D, or CD not found, or something similar, call up the content directory of the CD before the start of the game (e.g. DIR D:). Now pressing the start command F1 should lead to success. If necessary, you should ask your hardware dealer or the manufacturer of the CD drive whether there is already a more recent version of the CD driver available that is compatible with CONFIG.SYS.

4. PROBLEMS WITH THE SOUND

The music runs as an audio track direct from the CD. This means that you can hear the music only through the sound card if an audio cable is installed between the sound card and the CD drive, and the CD audio volume is set above zero. With some sound cards, the mixer must be called up too, but with most modern sound cards an average volume is set.

Unfortunately, not all sound cards give a useful response to the automatic query of the set parameter of SETSOUND. The result is that the introduction to the game can't get started because your sound card „hangs up“.

Call up SETSOUND again and set both NO MIDI MUSIC and NO DIGITAL AUDIO to turn off the sound routine. If the program now starts satisfactorily, the problem is with your sound card. In this case, you must set your sound card manually.

Click on SETSOUND after selecting the sound card, then MANUAL CONFIGURATION OF SOUND CARD, and put in the correct values for the different parameters. The values that are already there cannot be right!

Sometimes we have a small problem with PnP cards, which are often no longer installed with the usual standard parameters Address A220, Interrupt 15, DMA channel D1 and High DMA H5. If it is set for card I10 and D0, it may be that the sound card under DOS is conflicting with other components of your computer. Set

the preceding values with the corresponding routine according to the instructions for your sound card and change the values of the set blaster variable in AUTOEXEC.BAT (SET BLASTER = A.....)

5.PROBLEMS WITH GRAPHICS

Some graphics cards, in spite of the fact that a VESA driver is already available, are not able to represent the VESA modes that are used in the game. Usually, the program breaks off after the introduction and the music often carries on. Your graphics card has „hung up“.

For reasons of compatibility, standard modes are used that are no longer supported by some of the more modern and more powerful graphics cards. In this case, you must either call up a universal VESA driver (e.g. UNIVESA, UNIVBE or DISPLAY DOCTOR) before the start of your game, or ask your hardware dealer or the manufacturer of your graphics card for a special VESA driver.

If the introduction runs wrongly, this is usually to do with the Cache drivers that are installed, such as SMARTDRV.EXE or a slow VESA driver. Assume that the problem is with the VESA drive and install one of the aforementioned universal drivers. Turn off all cache drivers that you have installed, and set up with MSCDEX or no buffer with your CD driver.

In some cases, especially with older CD-ROM drives with double speed, there is a combination of clumsy data flow from the CD and old fashioned CD drivers. You can get new drivers from your hardware supplier or the manufacturer of the CD drive.

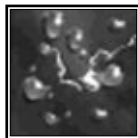
The announcement „No linear frame buffer“ is not an error but a confirmation that your VESA driver does not offer this buffer. It is installed only from version 2.0 onwards. The program runs satisfactorily without it.

SETUP

In the setup screen, small icons represent the basic effects of the current settings. On these two pages you have an overview of the different icons and their meanings.

BACK AND FRONT WINGS:

Weather:



suitable for :

Sunny/hot

Normal

Rainy

Bend layout:



Safe



Slippery



Dangerous

Less „wing“ means less downforce and therefore less roadholding on bends.

Speed

Maximum:



Low end speed



Medium end speed



High end speed

The more downforce the wings produce, the greater is the wind resistance. As the speed increases, the effect of wind resistance increases too. Therefore, you will not reach high end speeds with steep wing settings.

SUSPENSION:

Weather look at wings

Bend layout look at wings

The firmer the suspension, the harder it is for it to deal with uneven ground. This can lead to the car lifting off the ground.

Tyre wear



High



Medium



Low

The softer the suspension is, the better the roadholding, therefore the wear on the tyres is greater.

TYRES:

Weather look at wings

Bend layout look at wings

The harder the tyres are, the less roadholding they have.

Tyre wear look at suspension

Soft tyres adhere more closely to the track and so wear out more quickly.

ENGINE:

Speed

Performance:



Faster start, lower end speed

Slower start, higher end speed

The higher the fuel component is, the stronger the acceleration. Therefore, performance is lost when the engine is operating at high revolutions.

Fuel:



High consumption

Medium consumption

Low consumption

The higher the fuel component, the higher the consumption.

Wear and tear:



Normal

Increased danger of failure

Danger of engine damage

Extreme settings for the fuel/air mixture are not advisable for the engine. A high fuel component means more oil is used, and a high air setting can split the oil film.

GEAR BOX:

Speed

Starting



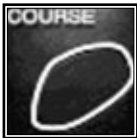
Faster start, lower end speed

Continuous acceleration

Slower start, higher end speed

Example: When the gears are all pushed over to the right, this is the optimum change setting for the driver even in the lower speed ranges; however, the top gear is then very long. Performance at high speeds is therefore reduced - just as in an ordinary car when it is driven in too low a gear.

Track type:



High speed track



Average



Large number of bends

The more bends a track has, the more the gear settings should be in the lower speed ranges (to the left).

Wear and tear:



Normal



Increased danger
of failure



Danger of gearbox damage

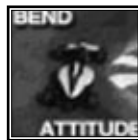
The gears should be divided relatively evenly. Extreme settings put a greater burden on the gearbox.

BRAKES:

Cornering:



Deflection at
the back



Normal



Deflection at the front

According to how the brake balance is set, the car will tend to under- or over-steer.

Track type look at gearbox

Brakes balanced slightly towards the back make taking bends easier. The opposite makes the car handling more stable on braking and is more suitable, therefore, for fast tracks.

Weather look at wings

Brakes balanced towards the back are especially suitable for rain because of the slightly delayed braking action.

TANK:
Speed
Acceleration



High



Medium



Slow

The heavier the tank is, the more slowly the car accelerates.

Laps:
Length of track



Enough for X laps
of the next track



Total laps of next race
\\15/10/97\F1Motor.010

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DMV, Brainstorm Ltd., Bochum

MSS, Miles System

Installshield III, Installshield Corp.