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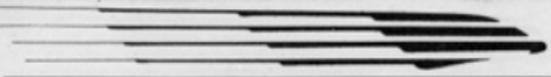
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MANUAL

POWERDRONE



ELECTRONIC ARTS



POWERDROME

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About the Powerdrome Championship and this Simulation

Powerdrome, the simulation, gives you the chance to enter the lightning fast world of a Typhoon pilot competing in Powerdrome XXIV against four of the galaxy's meanest and most determined pilots to win the coveted Cyberneufe trophy.

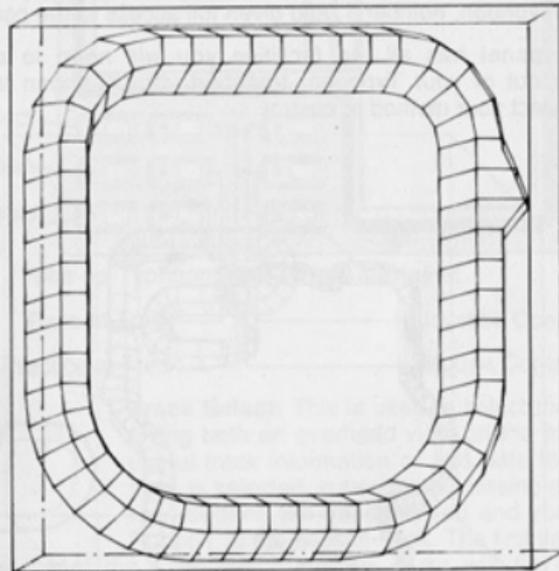
A Powerdrome race season consists of piloting a highly tuned Typhoon through a series of six races. All but one of these races are situated on a different planet, thus giving a wide range of atmospheric compositions, gravitational pulls and weather conditions in addition to the challenge of completing a single lap of the tortuous, tortile tracks!

Each race in the series consists of

* **Practice.** This is where you get acquainted with the track and adjust your Quad boosted turbo-rapide Typhoon in an attempt to find the optimum balance of handling, performance and fuel economy within the planetary conditions. You can practice on the track for as long as you require.

* **Qualifying.** In qualifying, you are competing with the other pilots for the best suspensor position for the start of the race. Your starting position is based upon your best lap time during qualifying. You will need to use the most radical, all out speed configuration and push your Typhoon to the limit in order to place well in the suspensor .

* **Race.** With your racer tuned to the best balance of speed and endurance, this is where you will engage in battle for the race trophy. A Powerdrome race normally lasts for between 20 and 50 laps or between 40 and 180 kilometres depending on which track you are racing. You may enter the Robopits to repair damage or refuel as many times as you wish, although the other pilots will still be racing while you waste precious time. You may pull out of a race at any time, though you will probably place last unless someone else retired before you.



Track Number 0: Test Oval

Location: Terra

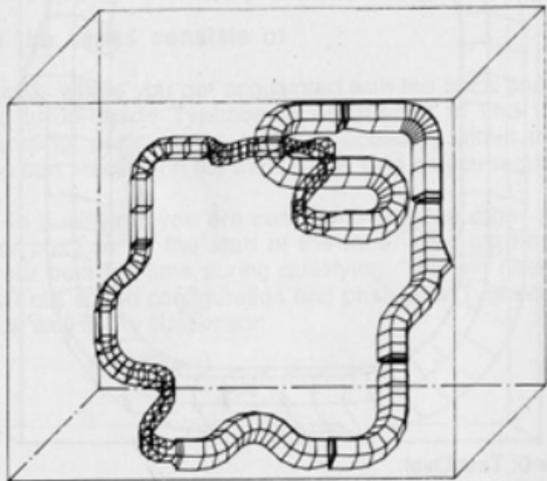
Atmosphere: Oxygen

Length: 1.95 km

How does one become a pilot?

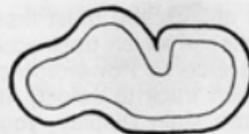
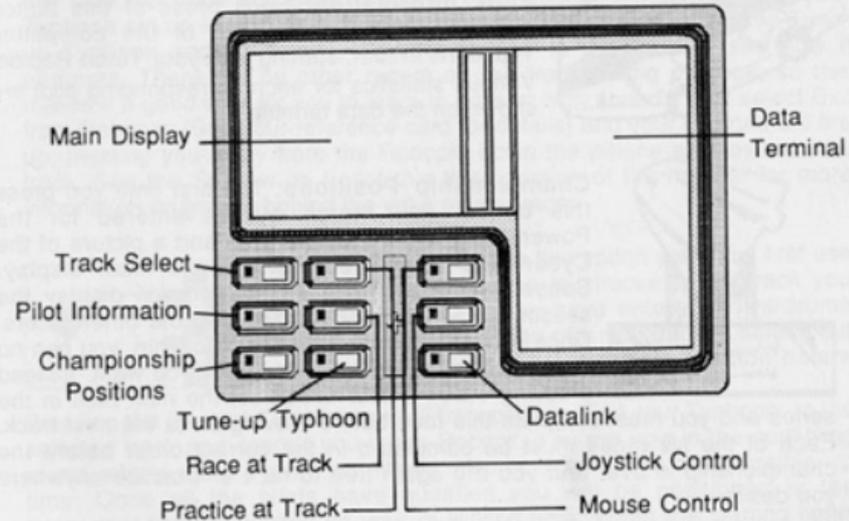
Once Powerdrome has loaded, the title screen will fade and move on to the race control panel. Now enter your name into the Powerdrome log (you can type a maximum of nine characters, use the delete key to correct mistakes and enter your name by pressing return). Then once you have passed the security check (see your reference card for details), you are then allocated the red turbo rapide Typhoon, number 1, and given full access to the control panel.

The control panel has all the facilities you will need to coax the best performance out of your Typhoon, transport your Typhoon to the different tracks and select your method of control.



Track Number 1: ANTARCORP
Location: Terra
Atmosphere: Oxygen
Length: 2.67 km

Race Control Panel



Track Select: This is used to select the various tracks giving both an overhead view on the main display and useful track information on the data terminal. When a track is selected, subsequent pressing of the practice or race buttons will transport you and your racer to your Robopit at the chosen track. The first time you enter the Race Control Panel the Oval test track on Terra will be displayed, with subsequent presses of the Track Select button cycling through each of the six available tracks (unless the Championship Positions button has been pressed, see later).

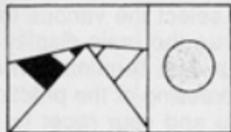


Pilot Information: Each press of this button displays a picture of each of the competing Typhoons in turn, starting with your Turbo Rapide. Various statistics for each corresponding pilot are shown on the data terminal.



Championship Positions: The first time you press this button, your name will be entered for the Powerdrome XXIV championship and a picture of the Cyberneufe trophy is shown in the main display. Subsequent presses of this button will display the season's standings for yourself and the other racers. Once you have entered the championship, you can no longer race or practice on any track you want. Instead pressing Track Select will select the next race in the series and you must complete this race before moving on to the next track.

Each of the six races must be completed in the correct order before the championship is over and you are again free to race or practice anywhere you desire.



Practice at Track: To use this option, you must first use the Track Select button to choose which track you wish to practice on. (If you have entered Powerdrome XXIV you have no option of which track to select). If there is no track displayed in the Main Display, you

must press the Track Select button before using the Practice at Track button even if you had previously selected a track.



Pressing the Practice at Track button will transport you and your Typhoon to the selected track and deposit you in the Robopit. When you have your Typhoon set up in what you think will be a winning configuration (See Tune-up Typhoon section below), it's time to take to the track to see how it performs. There are no other racers on the track during practice, so this makes it a good time for you to learn to drive at high speeds. Just select Exit from Robopits (See your reference card for details) and your engines will fire up, blasting you away from the Robopit, down the pitlane and towards the track. See the So how do I pilot this thing section of the manual for more information on getting behind the yoke of your racer.



Race at Track: To use this option you must first use the Track Select button to choose which track you wish to race on. (If you have entered Powerdrome XXIV you have no option of which track to select, but you must still press the Track Select button before using the Race at Track button.)

Pressing the Race at Track button will transport you and your Typhoon to the selected track and deposit you in the Robopit. You are now in the qualifying round, where you are given just fifteen minutes to put in the best possible lap time. Once all the pilots have qualified you will be positioned in the suspensor field depending on your qualifying time. When the starting lights are removed just start your engines and race.

If you have entered Powerdrome XXIV and you finish in the first five places, you score points which are accumulated towards the championship trophy.

Position.....	Points
1	9
2	6
3	4
4	3
5	2





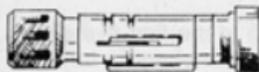
Mouse Control: Press this button to select mouse control of your Typhoon. If this option has been selected, the red light on the button will glow.



Joystick Control: Press this button to select Joystick control of your Typhoon. If this option has been selected, the red light on the Joystick Select button will glow.



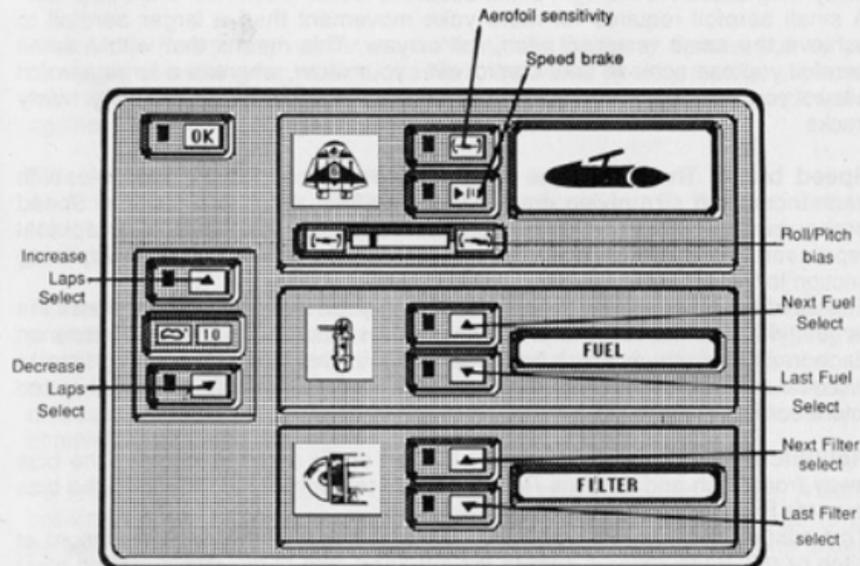
Datalink: This option offers the opportunity to race against a friend. See the Datalink section at the end of this manual for a complete description of how to implement the Datalink.



Tune-up Typhoon: This is the key to successfully winning races in Powerdrome, giving access to the various modifications you can make to your racer.

When you press this button the Race Control Panel is replaced by the Tune-up screen.

Tune-up Typhoon





Aerofoil sensitivity: You have three different sizes of aerofoil which you can step through and select using this button. Corresponding to each selection a graphical representation of the different aerofoils will be shown on the cut-away wing section to the right of the button.

A small aerofoil requires far more yoke movement than a larger aerofoil to achieve the same resulting pitch, roll or yaw. This means that with a small aerofoil you can achieve finer control over your racer, whereas a large aerofoil allows you to make very rapid direction changes, useful on the very twisty tracks.

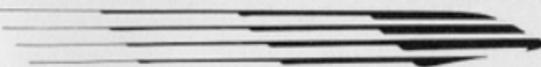
Speed brake: There are three different sizes of speed brake available, with each increasing size giving greater braking effect. Each press of the Speed brake button will step through the three options, and a graphical representation of the different brakes will be shown on the cut-away wing section to the right of the button.

The smallest brake allows delicate control of your racer's speed, whereas the largest will stop the racer in just a few metres. Use the practice sessions on each track to discover which brake suits them. The race is the wrong time to discover that your brakes are too weak, and find yourself ploughing full speed into a corner, engines still glowing white hot from the afterburners.

Roll/Pitch Bias: Press the button to the left of the slider to increase the bias away from Pitch and towards Roll and press the right button to move the bias towards Pitch and away from Roll.

This control effects how much yoke is required to give the desired amount of pitch or roll. If the slider is over to the left hand side of the display (a roll bias) then small movements of the yoke side to side will result in large amounts of roll, whereas large forward and back movements will only give small amounts of pitch.

Use pitch/roll bias in conjunction with the Aerofoil sensitivity control to tailor the handling response to your taste.



Fuel Select: There are three different types of fuel available:

A) Nitra-Mono Premium, B) Mono Standard and C) Economy Special. Use the Next/last Fuel Select buttons to step forwards/backwards through the available fuel types and make your selection.

Nitra-Mono Premium gives far more thrust than Economy Special but, as you rarely get something for nothing, the Nitra fuel burns up very rapidly, especially with afterburners blazing. Therefore you must weigh up increased speed against frequent refuelling visits to the Robopits.

Filter Select: There are five different engine filters available:

A) Ammonia, B) Sulphur, C) Oxygen, D) Methane and E) Particle. Use the Next/Last Filter Select buttons to step forwards/backwards through the available filter types and make your selection.

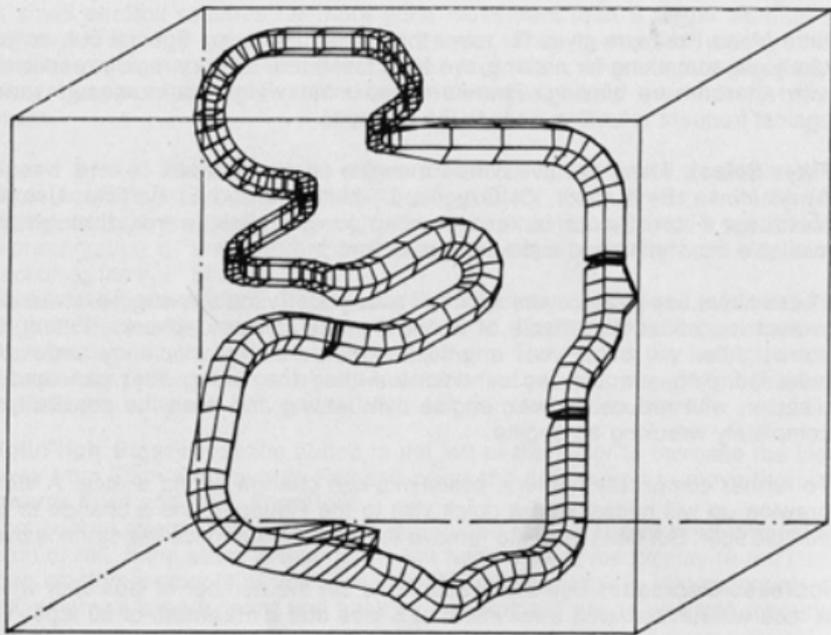
These filters are large covers which fit over your Typhoon's engine intake and protect it against the effects of differing planetary atmospheres. Fitting the correct filter will allow your engine to operate at full efficiency under the corresponding atmospheric conditions. Fitting the wrong filter can lead to disaster, with reduced power, engine overheating and even the possibility of completely wrecking an engine.

To further complicate matters, conditions can change during a race. A storm brewing up will necessitate a quick visit to the Robopits and a change to the particle filter. But don't forget to remove the Particle filter once the storm is over.

Increase/Decrease: Use these buttons to set the number of laps over which a race will run between a minimum of 5 laps and a maximum of 50 laps. You can only alter a number of laps in a race from the Robopits in practice or before a qualifying session from the Race Control Panel. If you have entered Powerdrome XXIV, then the minimum of laps you can set is 20.



OK: Press this button once you are satisfied with the tune-up alterations you have made to your Typhoon and wish to return to the Race Control Panel (or return to the Robotits if you entered the Tune-up screen from there.)

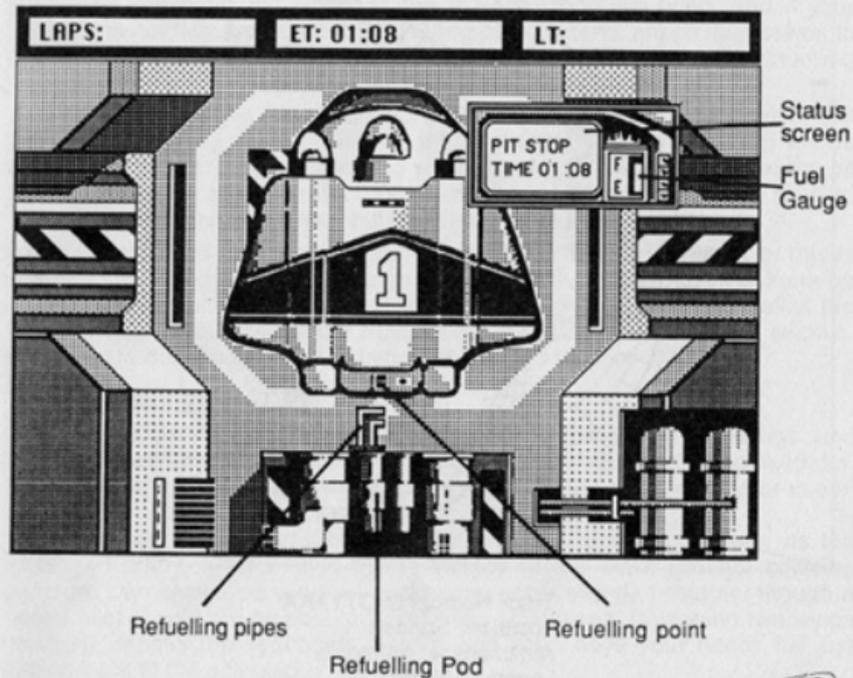


Track Number 2: CLOROTEK
Location: Greenhouse
Atmosphere: Methane
Length: 3.07 km

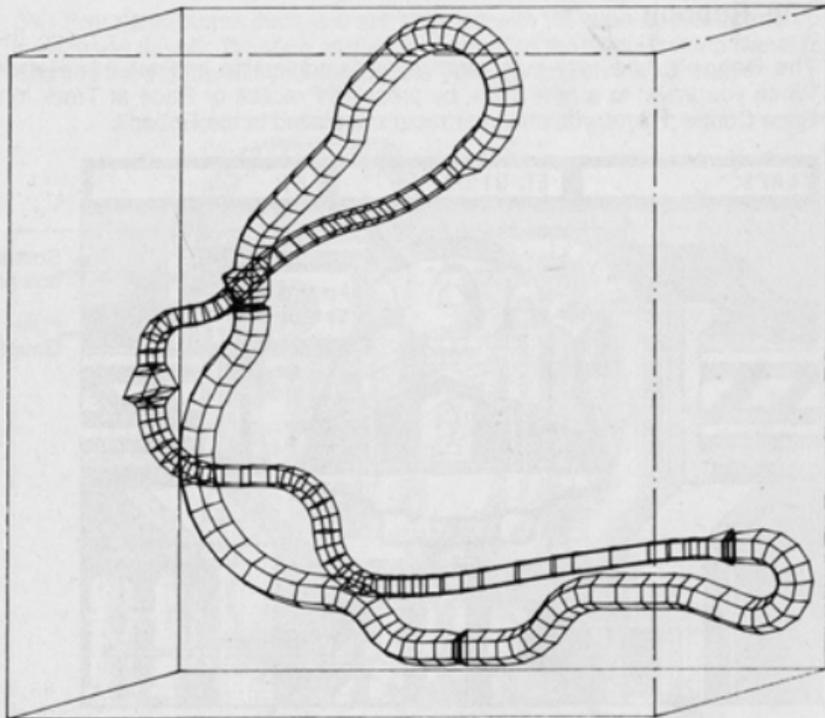
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The Robotit

The Robotit: Is a fully automatic repair, modification and refuelling station. When you travel to a new track, by pressing Practice or Race at Track in the Race Control Panel, you and your racer are placed in the Robotit.



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Track Number 3: OTYAKA
Location: Sunrise
Atmosphere: Ammonia
Length: 3.52 km

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Refuelling:

If all is going well, refuelling should be the only reason for entering the Robopits. Therefore you should practice getting your pit stops as fast as possible, as every second lost in the pits fumbling around may well cost you valuable championship points, or even the championship itself.

Whenever you enter the Robopits the refuelling pod will open, and if your Typhoon is not fully fuelled up the refuelling pipes extend, attach themselves to your racer's refuelling point and refuel the racer. You can monitor the refuelling process with the fuel gauge, situated beside the status screen.

Also you can leave the Robopits before you are fully refuelled. Just select Exit from Robopits (See your reference card for details) and the refuelling will be terminated, your engines ignited and you'll lift off and blast away down the pit lane. This can be a very useful time saving device if you are running short of fuel towards the end of the race but don't require a full tank.

If you feel that you have chosen the wrong type of fuel for the race, or this is part of your strategy, you can change the grade of fuel in use. Select Tune-up mode from Robopits (See your reference card for details) and then select the new fuel type as outlined under Fuel Select in the Tune-up Typhoon section. When you're done, press the OK button to return to the Robopits.

Repairing Damage to the Typhoon:

During the race, your Typhoon can sustain damage to the wings and nosecone due to collisions with the walls, force ceiling or other competitors. You can also burn out the engines due to incorrect use of filters or over-use of the after-burners.

Note: During practice sessions you can only damage the engines, as the increased strength forcefields in the vicinity of the walls prevent collision damage. Damaging one wing will make your racer slightly unstable, though a skilled pilot should still be able to fly relatively unaffected. Damaging two wings seriously impairs the Typhoon's stability and you'll have your hands full just getting back to the pits quickly.

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Many of the racer's electronics are housed in the nosecone, so if you damage it you will lose the rear view, braking effect, damage indicator and the Data Terminal.

When an engine's temperature gauge goes into the red, a warning sounds and you should kill the afterburners immediately! If you do not, then an engine will burn out and be useless. If you lose the other engine you will coast to a stop and your only hope of getting back to the Robopits is to select Call up Rescue Craft (See your reference card for details) for a tow. If the rescue craft acknowledges your request, it may take some time to get to your position on the track, so be patient. If your request is denied or ignored you will have to quit (and ditch) that race.

To repair a damaged section of your racer, press the appropriate Repair Activation Key, (as given in your reference card). This will activate the required automatic repair module of the Robopit, which will extend, remove the requested section (whether damaged or not) and replace it with a new unit.

Pitch Lock: With pitch lock enabled (See your reference card for details), your racer is held at a constant height above the track and you can only control roll and thrust. This makes piloting the racer considerably easier and allows you to master the basic controls.

You can only select the Pitch Lock function while in the Test Oval Robopits. Selecting the Pitch Lock function a second time will restore normal handling and, in both cases, a message reflecting the pitch lock status will be displayed in the status screen.

Status Screen: As well as showing refuelling and pitch lock messages, you can bring up the following information by selecting the appropriate function. (See your reference card for details):

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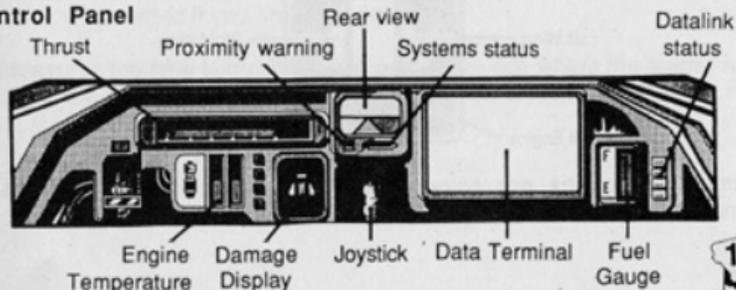
Lap Time: This shows your last four lap times around the current track in this session. This information is vital for assessing the relative merits of various tuning options and how they affect your performance. When trying out the tuning options be sure to change only one thing at a time, otherwise a good choice may be cancelled out by a bad one giving you the impression of no net effect! Also do at least 3 laps with a new modification to reduce the impact of pilot error in your observations.

Race/Qualifying positions: This tells you what position all the other competitors are lying in. If you have qualified in pole position you can sit back in the Robopit and relax, watching how the others are shaping up (Quite difficult to do while zooming round the track). If someone takes your position you can fire up the engines and try to regain the lost position. During a race you can see what effect your pitstop has made to your overall placing. If you haven't lost a place you can probably take it a little easier and therefore reduce fuel consumption and the risk of a crash.

So how do I pilot this thing?

Selecting Exit from Robopits (See your reference card for details) will ignite your engines and you'll lift off and blast away down the pit lane past the other competitor's Robopits.

Control Panel



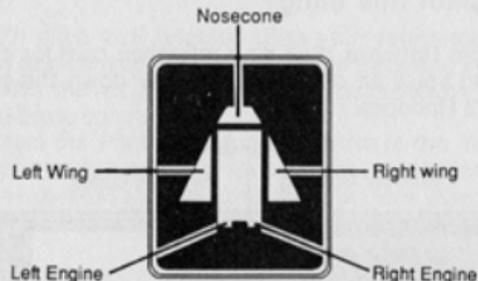
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Proximity warning: The closer you are to the walls, roof or floor, the faster this warning light will blink. You can also engage an audible warning (See your reference card for details), which will bleep in time with the light.

Thrust: Shows the power output of your Typhoon. Using the afterburners will take this gauge off the scale!

Engine Temperature: These two gauges show how hot each of your engines is running. If the bar charts are green then the engines are within their normal operating parameters, but once a bar moves into the red you may be damaging an engine and an audible warning will sound. Once a bar goes off the top of the red section that engine will burn out and will be useless. Keep a careful eye on these gauges while using the afterburners, as engine temperatures rise rapidly when they are lit.

Damage Display: This gives you a visual display of any reparable damage that your Typhoon may have sustained.



Undamaged sections are coloured green, while damaged sections are coloured red and should be replaced with a new unit in the Robotips.

Joystick: Gives a visual display of the position of your yoke relative to centre. If it's pushed forward your Typhoon is nosing down. When pulled back the racer is nosing up. Pulled to the left or the right indicates that the racer is banking to the left or right respectively.

Fuel Gauge: Indicates how much fuel you have remaining in your tanks. The bar graph runs from (F)ull to (E)mpty. When fuel is very low, a warning will be displayed on the Data Terminal and you should ease off the throttle and head for the Robotips as you only have enough fuel for about one lap.

Data Terminal: This is used to display a variety of race information and warning messages. You can also request specific information by selecting the appropriate function (See your reference card for details) as follows:

Lap Time: Displays your last four lap times.

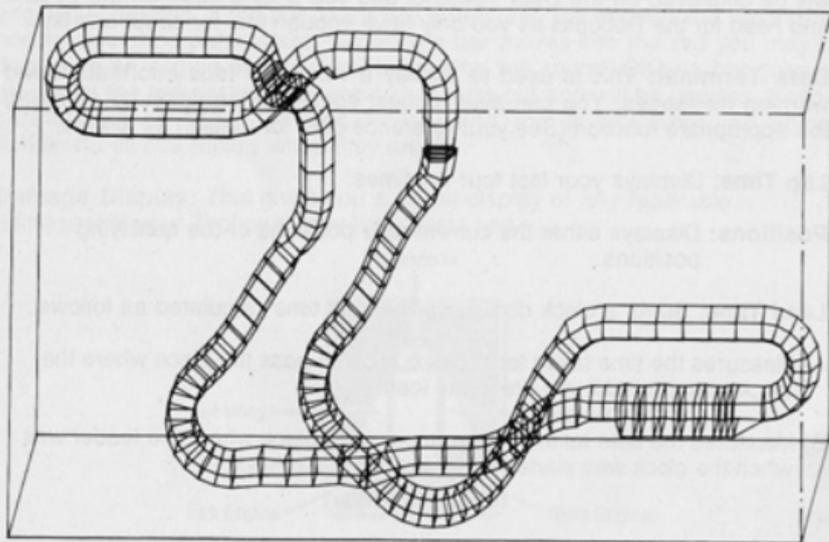
Positions: Displays either the current race positions or the qualifying positions.

Lead Time: Starts a clock displaying the lead time calculated as follows:

- A) Measures the time taken for the next racer to pass the place where the clock was started if you are in the lead.
- B) Measures the time taken for you to pass the place where the leader was when the clock was started if you are not in the lead.

Systems status: The red light should move smoothly back and forth in this display, indicating that all systems are fully operational. If the light's movement becomes irregular then a system is either damaged or failing, though it's up to you to trace the fault.

Rear view: This monitor displays everything within the view of your rear mounted camera. Use it to spot racers coming up from behind you.



Track Number 4: BANZAI
Location: Brisbania
Atmosphere: Oxygen
Length: 3.66 km

Going for a lap

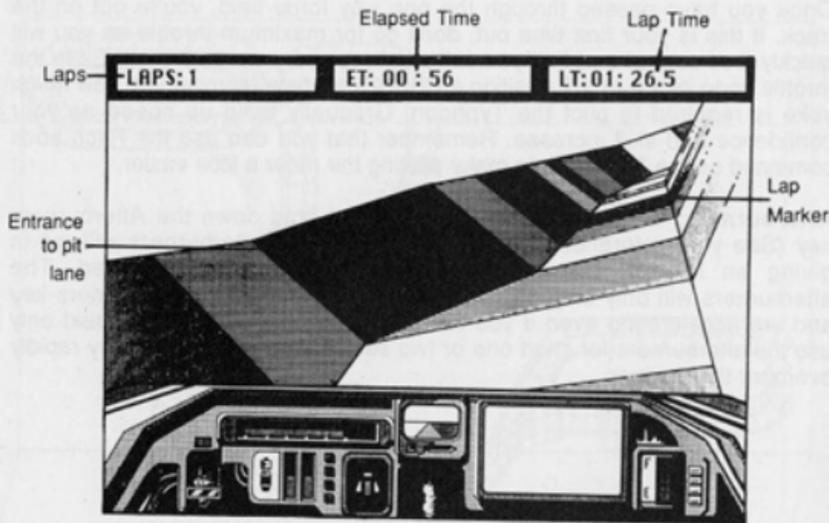
At the end of the pit lane is what appears to be a black wall blocking your path. It's actually not a wall, but a one way force field designed to stop pilots entering the pit lane the wrong way. Don't worry, it's not as solid as it looks and you should just fly straight through it to enter the track.

Once you have passed through the one way force field, you're out on the track. If this is your first time out, don't go for maximum throttle as you will quickly lose control and find yourself crashing every second or so. Ease the throttle up to its 1/4 or 1/2 position and take your time learning just how much yoke is required to pilot the Typhoon. Gradually build up speed as your confidence and skill increase. Remember that you can use the Pitch Lock command on the Test track to make piloting the racer a little easier.

Afterburners: While accelerating, press and hold down the Afterburners key (See your reference card for details) and the afterburners will cut in giving an instant, massive acceleration and additional speed. The afterburners will only stay alight while you hold down the Afterburners key and are accelerating even if you are at normal full thrust. You should only use the afterburners for short one or two second bursts because they rapidly overheat the engines.

Completing a lap

The lap marker is indicated by a red strip painted along the floor and up the sides of the track. (Several tracks also have a red bridge crossing the track at this position)



Laps: This is incremented each time you pass over the lap marker and is reset to zero when you arrive at a new track, start a qualifying session or start a race. Obviously you use this to estimate how much of a race remains to run and to coordinate your fuel stops.

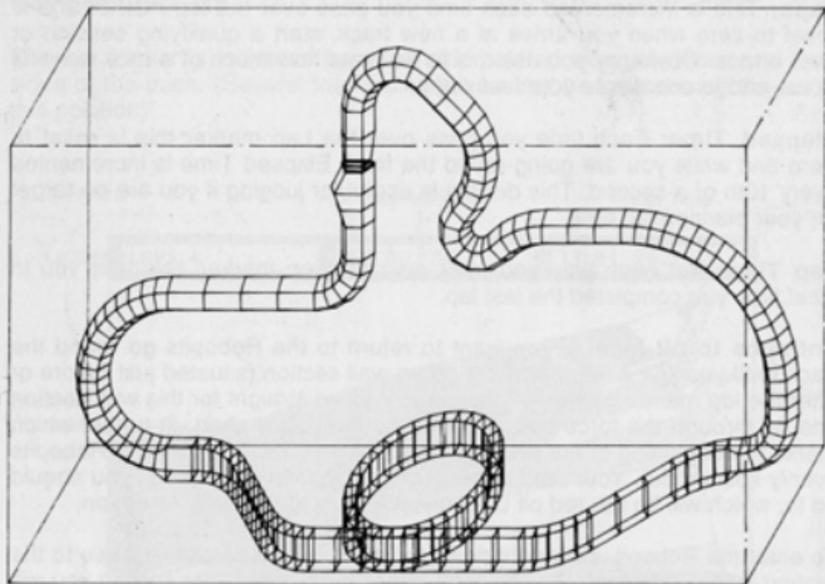
Elapsed Time: Each time you pass over the Lap marker this is reset to Zero and while you are going round the track Elapsed Time is incremented every 10th of a second. This display is useful for judging if you are on target for your planned lap time.

Lap Time: Set each time you pass over the Lap marker, this tells you in what time you completed the last lap.

Entrance to pit lane: If you want to return to the Robopits go round the track until you see a large flashing green wall section (situated just before or after the lap marker on the left hand side). Head straight for this wall section and fly through the force-field. You will fly through a short, lit tunnel which marks the beginning of the pit lane, after which you will see the six Robopits evenly spaced out. Your data terminal will tell you which Robopit you should go to, which will be the red pit unless you are using the datalink option.

To enter the Robopit, slow right down to below 1/4 thrust and fly close to the ground on the approach. As you pass over the coloured floor section you will be grabbed by the Robopit's forcefield and docked automatically. If you were not pulled into the Robopit then you were either too high, going too fast or attempting to enter the wrong one.

You should practice docking with the Robopit over and over in order to minimize time loss during races. Once you can go from full thrust to docked in under 3 seconds you can call yourself proficient!



Track Number 5: APOCALYT
Location: Vaagner
Atmosphere: Sulphur
Length: 3.46 km

The Race Start

Once you have familiarized yourself with a track, worked out the best set-up for your racer, got your lap times down and qualified for a suspensor position, the race starts.

All the racers start a race with their engines turned off, in front of the starting lights, which are all red, held floating in a suspensor field in qualifying order. The five starting lights then turn yellow one by one from left to right. There is then a small random delay before all the lights are removed, the suspensor field deactivated and you start to sink to the floor.

You must start your engines as quickly as possible by selecting Engine on/off, then increase throttle as much as you safely can (See your reference card for details). Remember to only press the Engine on/off button once, otherwise you may start your engines only to turn them off again, achieving very little and losing a great deal of time.

Datalink

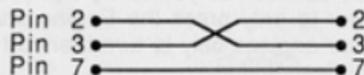
The Datalink option enables two players using separate machines to race one on one against each other. Communication between machines is through the ST's modem port and the Amiga's serial port using a null modem cable.

Pressing the Datalink button will bring up a picture of two racers facing each other in the Main Display and the message "Attempting connection" will appear in the Data Terminal.

Datalink Pin Connectors

Computer 1

Computer 2



Note: Amiga 1000 owners: Use male DB25 plug
Atari ST, Amiga 500 and 2000 owners: Use female DB25 plug.

First you must turn off both machines and connect them together with your cable. Then turn on both machines and boot Powerdrome on each. (You can copy the disk twice and use your original as a key disk for both machines.) The game will access the disk throughout play, therefore it is important that the disk is kept in the drive whilst playing.

Once the race control panel appears, one of you should press the Datalink button. This person is the Race Controller and will be allocated the red Typhoon (#1). The other racer will be allocated the green Typhoon (#2) and must use the green Robopits.

The Race Controller selects which track the race will take place on and the other player's machine will mirror his selection. The Race Controller has the option to use all the features except the 'Enter Trophy' option, the other player can then only View Pilot information, Tune-up Typhoon, alter the mouse or joystick option and practice at the chosen track independently of the controller. The race controller has the option to Shift Q to quit the current race.

When the datalink is in operation the two players will be the only people on the track, and they alone will be racing for the suspensor positions and for victory in the final race. When the two machines are correctly communicating they will both have small flickering lights in their Data link status panels.

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