



**VIPER**  
*Racing*

MGI



---

# VIPER RACING

---

## TABLE OF CONTENTS

---

### Chapter 1

#### *GETTING STARTED*

<b>System Specifications</b>	<b>4</b>
<b>Installation</b>	<b>5</b>
<b>Hopping In</b>	<b>6</b>
<b>On the Track</b>	<b>12</b>

### Chapter 2

#### *GAME MENUS AND FUNCTIONS*

<b>The Main Menu</b>	<b>14</b>
<b>The Quick Race Menu</b>	<b>16</b>
<b>Career Overview</b>	<b>29</b>
<b>The Multiplayer Menu</b>	<b>31</b>
<b>The Replay Menu</b>	<b>35</b>
<b>The Options Menu</b>	<b>40</b>

### Chapter 3

#### *THE TRACKS OF VIPER RACING*

<b>Bemidji</b>	<b>46</b>
<b>Castlegreen</b>	<b>50</b>
<b>Dayton</b>	<b>56</b>

### Chapter 3 (continued)

<b>Dundas</b>	<b>61</b>
<b>Ridge Valley</b>	<b>66</b>
<b>Rock Island</b>	<b>71</b>
<b>Silverdale</b>	<b>79</b>
<b>Sunset Mesa</b>	<b>83</b>

### Chapter 4

#### *THE GARAGE*

<b>Chassis</b>	<b>88</b>
<b>Align</b>	<b>93</b>
<b>Aero</b>	<b>97</b>
<b>Drivetrain</b>	<b>99</b>

### Chapter 5

#### *HISTORY OF THE DODGE VIPER*

#### Appendices

<b>Troubleshooting</b>	<b>104</b>
<b>Racing Terms</b>	<b>110</b>
<b>Viper Credits</b>	<b>116</b>
<b>Contacting Sierra</b>	<b>118</b>
<b>Technical Support</b>	<b>120</b>

---

## GETTING STARTED

### Introduction

Welcome to the first true sports car simulation. VIPER RACING puts you in a sleek-bodied racing machine with 450 horses packed under its hood. It's powerful, it's fast, and now it's yours. As you round turns at 100+ speeds, you will need plenty of bite to go sidwinding down the venues MGI has specially designed for you. In fact, your job is to become a "snake charmer" of sorts, straightening out the courses and taming that monster you have for a car. Of course, with VIPER RACING life in the fast lane is at the same time both challenging and exciting; you'll never have so much fun in the driver's seat again.

### System Specifications

<b>Minimum Configuration:</b>	<b>Recommended Configuration:</b>
Windows 95/98	Pentium 200 MHz with a 3DFX or second-generation video card
Pentium 133 MHz with any 2 Mb 3D card	32 Mb RAM
32 Mb RAM	80 Mb hard disk space
15 Mb hard disk space	DirectX 6.0
DirectX 6.0	16-bit sound card
16-bit sound card	4X CD-ROM drive
4X CD-ROM drive	

#### *Important Notice!*

**VIPER RACING uses DIRECTX 6.0. This is important for drawing graphics and sound playback. Make sure your graphics and sound drivers are compatible with DIRECTX 6 or upgrade them to current versions.**




---

### Installation

Install the software using these easy steps:

1. Launch Windows '95 or '98.
2. Insert the VIPER RACING CD in your CD-ROM drive.
3. The installation program should appear onscreen automatically. If it doesn't, double-click on the "Viper" Icon on the CD-ROM.
4. Choose the right configuration for your system and click OK. The higher the installation level, the greater the space the game will take up on your hard disk. However, this also gives you quicker access to game menus.

When installation is complete, click "Play." You may need to reboot after installation. Next, you need only select VIPER RACING in the WINDOWS '95 or '98 Start Menu to launch Viper Racing.

**Note: You need a minimum of 10 Mb free space on your hard disk after installation to play VIPER RACING.**



## Hopping In

You're eager to step into one of these high-horsepowered Dodge Vipers, so let's just get to it. How about a lap at Bemidji, a simple course overall — but with a twist.

**Ready to start those engines?**



**Get set. Go!**

The main menu (the screen that comes up after the introduction) displays five rectangular buttons on the right. Click on the **Options** button to bring up four folders. Only the last two are relevant here.

Left click on the **Controls** tab. This screen allows you



to set each control in accord with your keyboard, steering device, or joystick. (You can use any of the default setups by simply clicking on the icon to the right that matches your steering device.)

**Note:** Remember, you must calibrate your joystick or steering wheel using the WINDOWS DirectX setup. To do this, you first must return to the Windows START menu. Click on it and choose the SETTINGS option. From there, select CONTROL PANEL. Now choose the GAME CONTROLLER option. Follow the directions to calibrate your joystick or steering wheel appropriately.



Now left click on the **Driving Aids** tab. You will find that **Auto Shifting**, **Auto Clutch**, and **ABS Braking** are the default settings. These features enable you to drive your car without pushing keys/functions to clutch and shift. In effect, this turns your Viper into an “automatic,” and it makes your first trip around the lot quite a bit easier. Of course, you can deactivate these if you like.

Now click **Traction Control** and **Yaw Control** and set them all to “Low.” These are driving aids which will make your first turn about the track a little easier. For a complete description of what they do check out the controls section of chapter 2 (page 45).

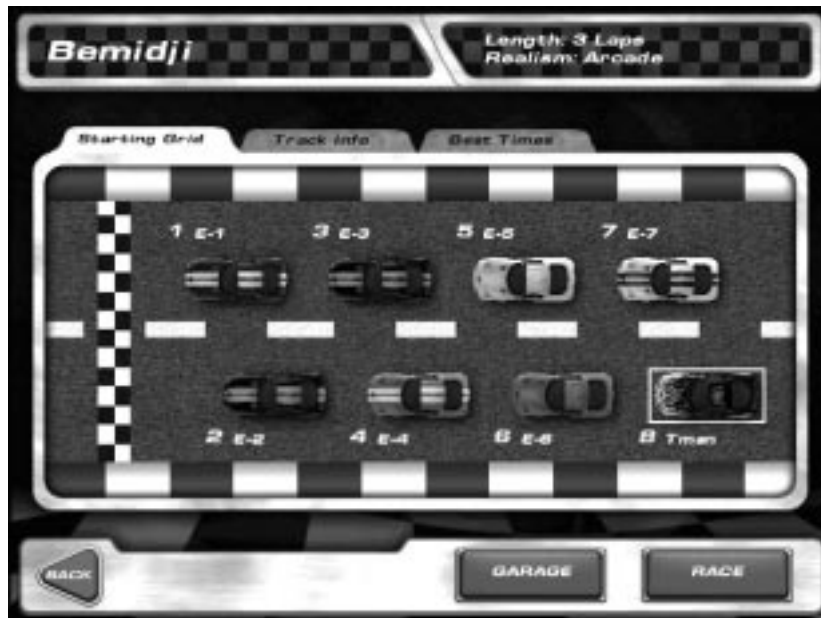
Click **Back** to return to the main menu. Now click on the **Quick Race** button. The next screen displays three windows. In the left window (with the Dodge Viper image), select **Arcade**, the easiest setting. In the middle window (with track images), click one of the arrows next to the **Scores** button until Bemidji appears in the small screen. Below that, click on **Sprint**. Make sure **Reversed** isn’t activated. You’re almost ready to go. In the right-hand window, adjust the image by clicking on the arrows, as you did in the second window. Stop when you get the **Pack** image. Make sure the Easy mode for AI Skill is activated. If one of the other modes is highlighted, just click on the dot



next to Easy. It's unnecessary to tinker with the other features right now.

All right. Left-click on the **Enter** button in the lower-right corner of the screen, and you're set. On the next screen press the **Race** button. You're on your way.

Before you speed off, you may choose a racing view from 12 different perspectives.



The 12 perspectives vary from cockpit (in-car) camera to blimp overview. To activate each perspective, press one of the function keys at the top of your keyboard. Here's a list of these features:



<b>F1:</b> COCKPIT CAM	<b>F7:</b> FAR CHASE VIEW
<b>F2:</b> BUMPER CAM	<b>F8:</b> REAR CHASE VIEW
<b>F3:</b> X-RAY CHASSIS VIEW	<b>F9:</b> OVERHEAD VIEW
<b>F4:</b> REAR VIEW	<b>F10:</b> AERIAL VIEW
<b>F5:</b> NEAR CHASE VIEW	<b>F11:</b> TV CAMS
<b>F6:</b> CHASE VIEW	

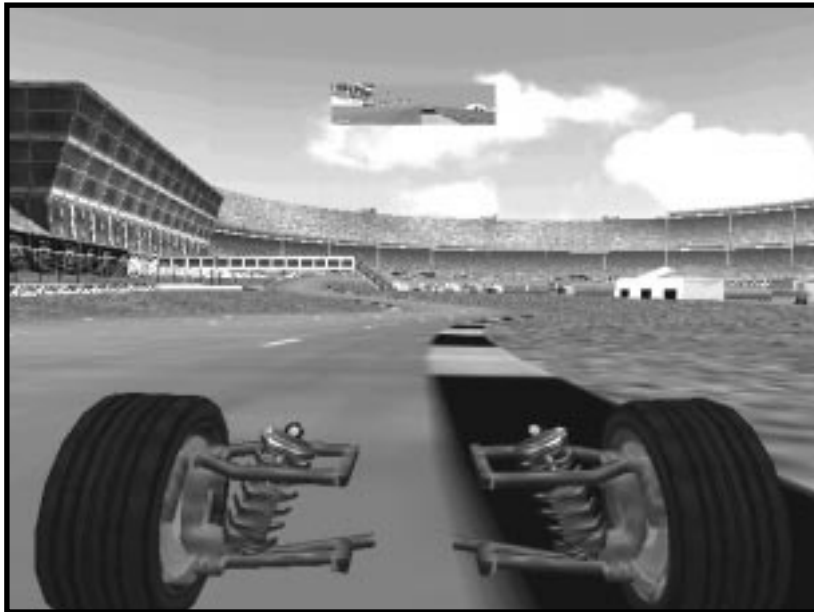
If you wreck on your first try, no need to get all bent out of shape. Just press the spacebar to reset your car. This puts your Viper back on its course. You'll accelerate from zero, but you won't have to quit the race.



---

## On The Track

Hit the throttle when the green light turns on. Start at the outer wall and move gradually toward the inside of the track as you head into the turn. Coming out of the corner, begin unwinding the steering to the middle of the course. Go full-throttle down this short straightaway—but beware, a chicane lies ahead.



Here's the tricky part. As you approach this twist in the road, touch the initial bit of yellow-and-black striped curb with your right tires. Ease left, placing your left front tire on the last third of the curb. Straighten things up as you head out of the last curve, drifting to the middle. In the final straightaway, snug up to the wall until you cross the finish line.

You've done it. You've completed your first lap in a Viper. After two more laps of similar maneuvering you will cross the finish line.

Next, a screen displays your race results. Click on the **Replay** button in the lower-right corner. At the next screen, press **Save**. In the Replay File window, type the name you want to save the race as (for instance, "Bemidji"). Then click **OK**. Press **Exit** to leave the screen. It may seem meaningless now, but this part comes in handy later when I discuss the **Replay** key on the main menu.

Speaking of the main menu, keep clicking **Back** until you find that initial page. In the next chapter we will go step by step through all the important screens of VIPER RACING.

## GAME MENUS AND FUNCTIONS

### The Main Menu



The main menu offers the following features:

**Quick Race:** This button allows you to choose the track you want to race on and what kind of race you want to compete in. There are three different race modes to choose from: Pack, which lets you race against up to seven opponents, Clock in which you are just competing for fast race and lap times, and Ghost Car which allows you to race on a lap by lap basis against a “ghost” of either your current races fastest lap, or against the fastest lap ever

completed in your currently selected driving mode (arcade, simulation etc.). Basically, this screen controls four vital aspects of your general racing experience: WHAT you race, HOW you race, WHERE you race, and AGAINST WHOM you race.

**Career:** Everything you need for life in the fast lane is packaged here. The career mode in VIPER RACING lets you compete in four different classes of the VIPER RACING League. By winning races you earn money which you can then use to upgrade your car and move up through the ranks in your ultimate quest, to win the VIPER RACING League GT cup. A

**Multiplayer:** This button controls multiplayer aspects of VR. You can race against your friends by Direct Connection, TCP/IP Internet, by LAN, or by modem.

**Replay:** This feature allows you to view saved replays of your previous races.

**Options:** The last button in the main menu allows you to adapt VIPER RACING to your personal liking and needs. Using this feature, you can adjust graphics and sound effects and set driving features for your joystick, keyboard, or steering wheel.



## Viper Racing

Before checking these features out, though, you may want to personalize your game. Just click the “Player” dialog box on the main menu to change your name to anything you like. This is the first way to customize VIPER RACING. Others follow.

### The Quick Race Menu

The three windows on the **Quick Race** screen allow you to select from a number of options, from the car you'll drive to the type of track you want to burn rubber on.



## Chapter 2 The Quick Race Menu

















The **Car Window** allows you to do two things. First, you can customize your Viper's appearance. The arrows next to the **Paint** button under the picture allow you to choose a Viper in almost any color your heart desires. As usual, you need only point and left-click with the mouse to make your selection.

### The Paint Kit Menu

Clicking the **Paint** button sends you to a Paint Kit page, where you may illustrate your car. Many features here work like most “paint” software programs. Just left-click on each icon, and then place it on your car.



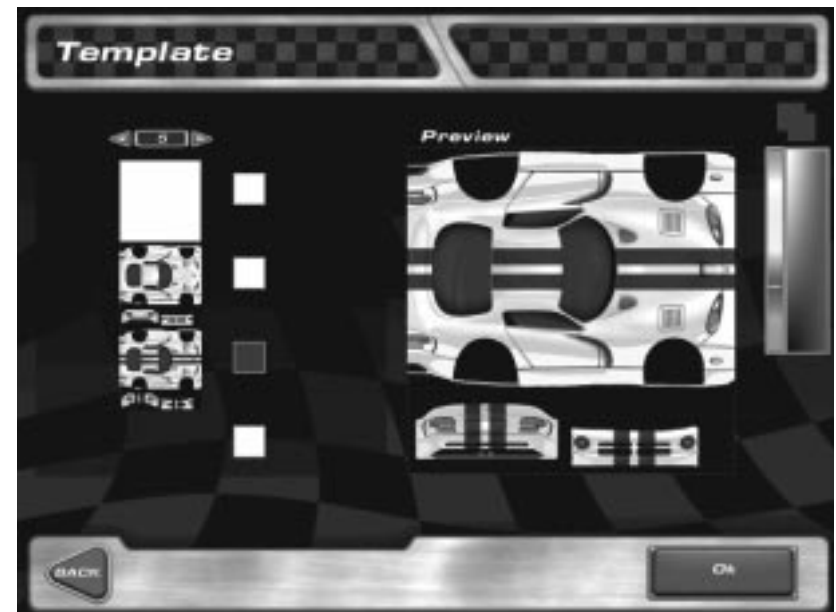
### Icons & Functions

-  **Brush:** Draws freehand using the current brush
-  **Line:** Draws straight lines
-  **Rectangle:** Applies rectangles
-  **Dropper:** Dip into palette to change paint color
-  **Perforated Rectangle:** Copies images for pasting with the brush
-  **Magnifying Glass:** Mouse clicks get you close-up on body work
-  **Dot:** Adjusts width of paintbrush stroke (narrow)
-  **Circle:** Adjusts width of paintbrush stroke (medium)
-  **Large Circle:** Adjust width of paintbrush stroke (large, rounded)
-  **Faded Circle:** Applies large but light paintbrush strokes
-  **Number Label:** Allows you to pastes number labels and decals on car using the brush
-  **Horizontal Arrow Line:** Flips images left to right
-  **Vertical Arrow Line:** Flips images top to bottom.
-  **Counterclockwise Spin:** Rotates images counterclockwise
-  **Clockwise Spin:** Rotates images clockwise
-  **Undo:** Goes back to any previous Paint Kit action

To manipulate colors, simply click on a hue in the rainbow palette in the upper-right corner. The box above the palette displays the color active currently.

The **Template** button allows you to choose from twenty car-design templates. Click the one you want and press **OK** to activate it. The **Default** button clears everything and returns you to the Viper you began with. To vary the template colors use the dropper (or arrow) to activate a color on the palette.

After painting your car, hit **Back**; a box will prompt you to save your changes before returning you to the **Quick Race** menu.



---

## Realism

You also can adjust the realism of your racing experience from this window. You have three options here. **Arcade** is easiest and **Simulation** hardest. **Simulation** gives you a car that reacts to the laws of physics as any real Viper would. **Arcade** mode portrays racing at a much simpler level. **Intermediate**, naturally, is a level halfway between the two.

You may also select your car's damage potential. **Enable Damage** allows your Viper to be malformed by a wall or another car, while not going out of commission — not completely, anyway. After a hit or a tailspin, just hit the spacebar to “reset” your car. This will place your Dodge Viper (spanking new, paint job and all) on that spot at speed zero.

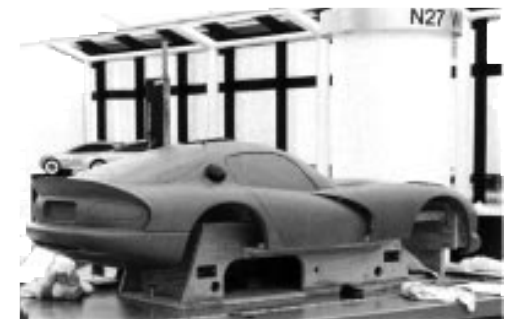
If you don't check this box, your Viper will be immune to fender benders and the like. You may hit objects on the track, but you'll take no damage. However, you may want to use the spacebar to “reset” from time to time and save yourself the hassle of steering to get your vehicle back on course.

The **Track** window provides a miniview of the course you're about to embark on. In this area you may select the venue that best suits your racing needs and the number of laps in the race. The **Times** button under the window image gives you access to statistics

recorded from previous races at this particular track and lap length.

There are eight courses designed for your racing pleasure, comprising an assortment of fictional racing sites: the lush countryside of Silverdale, Castlegreen's hills and moors, the American Southwestern landscape of Sunset Mesa, and the inner-city feel of urban racing at Dundas.

After selecting your track, you may choose the length of the race from three options. **Sprint** consists of three laps; **Medium**, eight; and **Long**, 20 laps.



Check the **Reversed** box, included under these features, to reverse the course of your chosen track. In other words, you'll race the course in the opposite direction (moving forward, of course).

The **Competition** window, to the right of the Track window, controls whom you race against: a number of opponents on the course, the clock, or the “ghost car.” A left-pointing arrow and a right-pointing arrow near the

top of this window allow you to customize your competition. Point and left-click on the arrows to choose from three options: The **Pack** is a group of cars on the Viper circuit, **The Clock** involves no opponents and no ghost car, finally, the **Ghost** feature pits you against a replica of your own car—that is, a phantom-like version of yourself from an earlier run. You may choose from Normal or Best Ever. With the Ghost car mode set to normal you will race against a ghost car of your fastest lap attained in your current race, while with best ever you will be racing against the fastest lap EVER attained on that track with your current driving realism (arcade, intermediate, simulation).



The **AI Skill Adjuster**, the first option under the window and arrows, lets you configure the ability level of the Artificial Intelligence (the other drivers) on the track. Left-click on the level you desire.

Under this feature you'll find the **Pack** option. This controls the number of cars you'll race against, from as many as seven to as few as one. Starting out, you may want to cut down on the congestion and select only three to five competitors. Selecting a lower number of opponents will also significantly increase frame rate.

The **Ghost** button offers you the same options as the preceding feature, but if you leave the **Pack** image in the window above and switch this button out of Off mode, you can race not only against yourself (your selected phantom car mode) but against other Vipers.

You've set up the configuration you want. Now prepare to rev up those engines. After you press **Enter**, you'll view three folders. To access each, left-click on the respective tab. The Starting Grid folder displays an image of the line-up waiting for the green flag. The Track Info tab displays a map of the track. Best Times includes statistics and records for that track, including best lap times, highest speed, and best race times.

Note the two buttons in the lower-right corner. The **Garage** button allows you to tinker with and revamp your Viper. (We'll take a detailed look at features involving this function later.) Click the **Race** button to go for a spin on your chosen track.

After finishing a round with the big boys, you'll view a screen that displays information on the completed race. The sheet on the left shows the standings and personal statistics, such as your max speed, best lap time, and race time.

Race Results				Bemidji	
Viper Racing 9/22/98 Bemidji				Lap Time	
Driver	Race Time	Best Lap	Max Speed	Lap Time	Speed
Dean	5:10.72	0:35.76	153.6	1 0:46.89	148
B-1	5:29.61	0:39.27	151.0	2 0:36.91	153
B-2	5:29.09	0:40.25	149.3	3 0:35.75	153
B-3	5:34.73	0:41.19	149.6	4 0:36.03	153
B-4	5:47.52	0:42.75	137.9	5 0:35.76	153
B-5	6:06.30	0:44.33	133.8	6 0:47.21	153
B-6	6:20.12	0:45.99	138.6	7 0:35.96	153
B-7	6:49.65	0:50.25	136.2	8 0:36.17	153

### The Career Menu

A stock Viper not fast enough for you? Ready for a longer commitment than just an 8 lap race? Then race on over to the Career portion of VIPER RACING where you can compete in four different racing leagues, winning money and upgrading your car in the hopes of attaining the ultimate victory, the VIPER RACING League GT Championship!

After you click on the **Career** button, you'll view a blank card ready for your registration. Simply hit **Create** at the bottom. A small pop up box will appear asking you what kind of realism you would like to compete under in your career and if you want damage to be active.

*Tip: It is recommended that you not have damage on your first time in Career.*

*Note: Once you have made these choices and started your career you will not be able to change them.*

Click the **OK** button once you have made your choices. You're now a member of the Dodge Viper racing circuit. You'll begin your racing career in the Amateur class, with no money.



The **Create** button is your passport to the big leagues. After you register, you'll receive a logbook with the following list of options on the right: **Events**, **Ranking**, **Testing**, **Upgrades**, and **Save**. Using these buttons, making decisions affecting your VIPER RACING career is easy. You start as an amateur, but your earnings and points will increase, and your car and racing status will advance as a result.

**Events:** This key informs you of the different events you must compete in, listed by track, length, and purse. Your placing in each will also be logged. Press **Enter** to get the show on the road. On the next screen, press **Qualify** to complete time trials for the upcoming event.

**Ranking:** Click this button to view your standing in the points race.

**Testing:** To take your revamped car for a test spin on any of the eight tracks, highlight the course and click on the **Test** button in the lower-right corner.

**Upgrades:** This is a read-out on elements of your drivetrain (engine, exhaust, transmission) and chassis.

The menu on the left allows you to make upgrades for the following: **Engine**, **Drive-train**, **Chassis**, **Body**, **Wheels**, and **Paint**.



**Engine:** You may use your winnings to purchase a variety of car parts here, from air induction systems to fuel injectors.

**Drivetrain:** Purchase gear boxes and axles here.

**Chassis:** This section offers shocks, springs, and the like—things that improve your car's balance and handling.

**Body:** You can improve your car's aerodynamics and weight using items from this section.

**Wheels:** Choose from four tire types.

**Paint:** This button takes you to the Paint Kit page.

Refer to the **Quick Race** section for more information on Painting.

Use the arrows and box controls on the right to select supplies from the first four sections: When you find the part you need, click on it. Some items may not be available for your racing class. You'll find an explanation of each part's function on the right, along with its cost and availability.

**Save:** Saves your current player.

### Career Overview

When racing in career mode, you start as an amateur and slowly move up the ranks to more experienced competition licenses. Racing and winning garners points and money. You may use the money to upgrade your Viper in the Upgrade screen, and the points may lead to a season championship. To advance to the next class, you first must win at your current level.

*Tip: Money is awarded not only for race wins, but also for season standings. Sometimes discretion will be the better part of valor. It may be best to sacrifice a position and save the race.*

*Tip: Don't always go for the horsepower upgrades first. Remember that higher quality tires and weight reduction can do wonders.*

Don't get discouraged too quickly. It can take many seasons to win the higher level racing classes. One thing that may help is to buy the wing upgrade as soon as possible when you're in Club class. This will be an invaluable tool for the twister road courses.

## Viper Racing

Initially, you'll lack the equipment on your Viper to tweak the chassis, but progress brings access to modifications. The races get tougher each season. By the same token, your driving will improve, and so will the upgrades available to you. To win the entire career, you must not only drive well, but manage your money astutely, buying only the upgrades that suit your driving style and drop your lap times.



## Chapter 2 The Multiplayer Menu

### The Multiplayer Menu

VIPER RACING allows you to compete not only against yourself and the computer, but also against your friends (or enemies). You can go against your buddies via **LAN**, **Modem**, or **Direct**. Click on the appropriate tab to choose one.

The **LAN** section lets you race against a group of your friends on a Local Area Network or via the Internet. You can choose IPX or TCP/IP. One thing to remember, though, is that everyone has to choose the same one – or they can't play together. Games on the local network or recognized Internet games show up in the Local Games box on the right.





## Viper Racing

Of course, until someone creates a new game, there won't be any games to click on at all. So you might want to get the ball rolling, by simply pressing **Create**. You'll be invited to name your game, and you can supply a password if you want to keep out troublemakers.

The **Find** button is only useful if you already know that a game is running on a remote TCP/IP machine. For example, let's say your cousin Betty is on the Internet, and she created a game on her machine at home (by using **Create**, as described above). Once you find out what her machine's IP address is, you can just type it in at the **Find** dialog and, as if by magic, her game shows up in the list! **Connect** to it as you would to a local game, and then trade some paint with cousin Betty!

**Direct** allows you to play against one opponent, whose computer is connected to yours with a null-modem cable.

To use the **Modem** section, select the **Modem** tab and choose **Call** or **Answer**. Callers need type the number they wish to phone (i.e. their opponent/victim) in the **Phone Number** block. People who answer just wait for the phone to ring and tap the **Answer** button. Once you have connected with an opponent VIPER

## Chapter 2

## The Multiplayer Menu



RACING defaults to the **Multiplayer Scheduler** screen. It is here that the person that created the race may set its defaults. Each change made will also be reflected in every other racer's menu.

The right hand panel allows the creator to choose the race venue. The center panel allows the creator to set the realism —be it **Arcade**, **Intermediate**, or **Simulation**, whether or not the damage switch is on, and the direction in which the cars will race. The identical cars button allows the creator to make it so that all of the players use the creators car setup. This allows you to play games where every car has exactly the same performance characteristics.

In the right-hand panel, the creator can set the number of AI (computer controlled car) that will race and their skill (Easy, Normal, Hard). These cars will enter in addition to any gamers in the contest. Eight is the maximum number of cars that may race.

The bottom third of the screen is comprised of two windows: The **Chat Window** and the **Participants** window. Player may type messages in the lower half of the chat window. Pressing Enter sends the message. The lower right window shows the players in the game. A red box next to their name means that they have not yet accepted the proposed race. A yellow box means that they have.

Gamers may signal their agreement with the host's racing choices by clicking on **Approve**. This changes their colored block to yellow. The creator may now click the **Close Entry** button to proceed to the Pre-Race Menu.

From the **Pre-Race Menu** each player may choose a different color car, access the **Garage Menu**, or chat. Additionally, the creator can choose to **Cancel Track**. This will return all gamers to the previous menu. Pressing the **Race** button will turn gamer's squares green, signifying their willingness to race. When the creator clicks **Race** the race begins.

### The Replay Menu

Using this feature, you may view “reruns” of your previous exploits at VIPER RACING venues. Want to study your performance at Silverdale to see what aspects of your racing you can improve? That's what this gizmo is for. With options from slow-motion view to an analysis of G force effects, the **Replay Menu** offers invaluable assistance in advancing your career in VIPER RACING.



When you click on the **Replay** button, a small window appears in the center of your screen. The box under **Replay File** lists races you've saved on your hard drive. At this point, it should list at least one file—the one you saved from your initial spin





around Bemidji. To access it, click on it and press **OK**.



A still shot of your car at the starting line will appear. At the top of the screen, a gray control panel offers an array of capabilities. Everything a true student of the game could ever need is here, at your fingertips.



Let's start with the dialog boxes at the bottom. The one in the lower-left corner tells you which car you're looking at. Your name should be in the box. Clicking on the arrows allows you to move from car to car to see how your opponents are viewing the race. That's right—this feature lets you sit in any car you want, even the winner's, which makes learning that much easier.

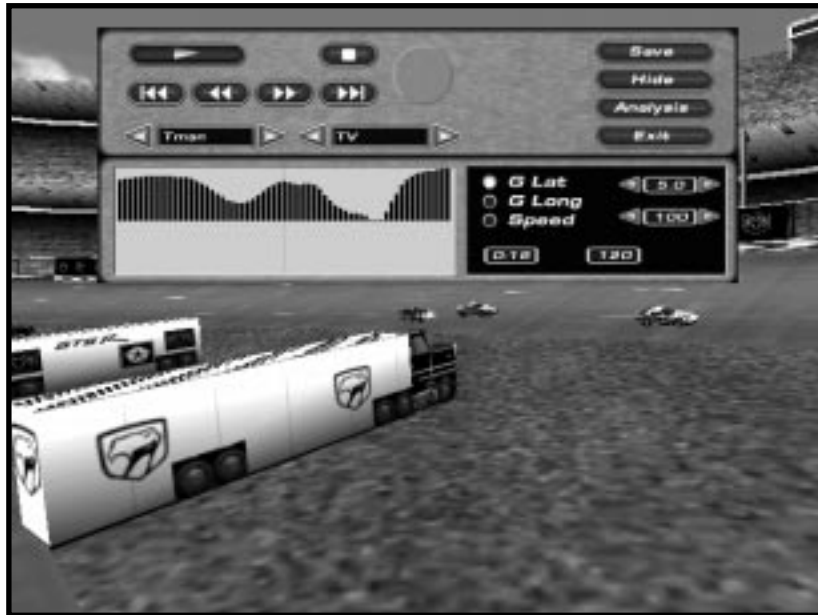
The dialog box to the right allows you to view the race from various angles. Clicking on the arrows takes you to any of 12 perspectives. (These are the views mentioned in the "Hopping In" section.) The Page Up and Page Down keys adjust which car the camera is focussed on. The circular button called a shuttle wheel above the right-hand dialog box allows extremely fine, frame by frame manipulation.

The motion controls lie above the dialog boxes and to the left of the circular button. These keys are similar to those on a VCR. The  button replays the race at normal speed. The  button stops the action. The  button returns you to the starting line, and the  button places you at the last frame, after your finish.

The other two buttons act like fast-forward and rewind buttons:  moves the action forward. Simply click on it to do this one frame at a time, or hold it down to move things consistently, without pausing. The same applies to , which moves everything backward. You can use some shortcut keys as well. The arrow buttons to the right of the main keyboard also control the VCR. The center button is for play/pause, the left for rewinding, and the right for fast forwarding.

## Viper Racing

To the far right on the control panel you'll find **Load**, **Hide**, **Analysis**, and **Exit** functions. The **Load** key allows you to finish looking at one replay file and load another for viewing. The **Hide** key removes the control panel to give you a fuller view of the replays. Press the Esc key or click on the mouse to call the panel up again.



The **Analysis** button gives you access to the most helpful of features. Click on it and a new screen appears below the control panel that allows you to analyze the effects on your car of latitudinal and longitudinal G forces and speed. Accompanying these

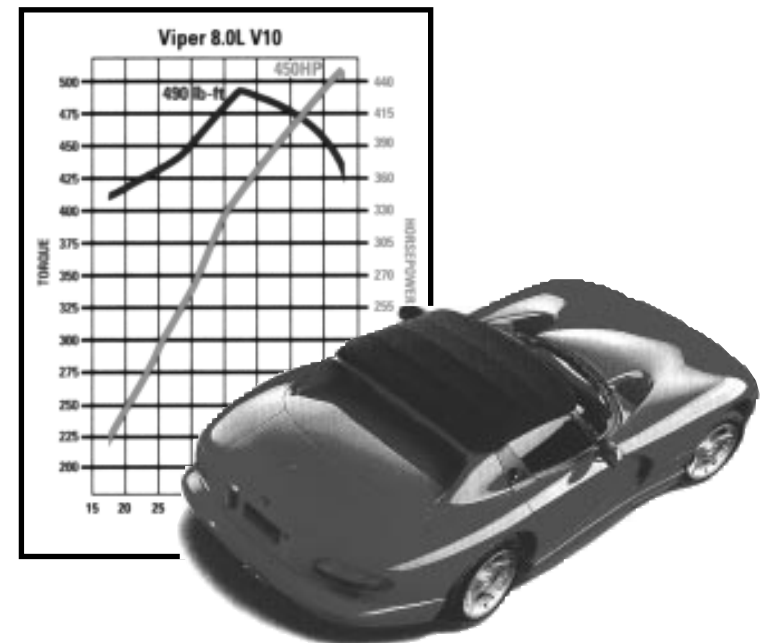
## Chapter 2

## The Replay Menu

features are digital read-outs of your time (in the lower-left area of the black box) and your speed in miles per hour. The one at the upper-right correlates with the **G Lat**, and the one below it measures the **G Long**.

A graph to the left of the black box displays numbers for each feature you choose. Let's say you clicked the **Speed** button, highlighting the dot next to it. The graph will display your velocity (in mph) in black bars.

To leave the **Replay** menu, click **Exit**. This takes you to the **Quick Start** menu again.



## The Options Menu

Something not quite right, yet? Click this button for access to anything else you might need to make your Viper experience more appealing and comfortable. The four folders on this page let you adjust everything from shadows and skid marks to brake and steering sensitivity:



**Graphics:** You can fine-tune a multitude of visuals in this section. Choose either 512x384, 640x480, 800x600, or 1024x768 resolution (*note: resolutions higher than 640 x 480 will only be available on some video cards*) by clicking on the appropriate space. To

control “rendering quality,” click on the red-boxed levels next to “Detail Level” and “Draw Distance.” The more red boxes, the greater the detail and/or distance. You can activate other graphics features here, as well, including skid marks, smoke, and sky details.

A **Benchmark** button allows you to view what your chosen features will look like, and how many Frames Per Second (FPS) your computer will draw them.

**Screen Resolution:** Screen resolution is just that –your screen pixel resolution. A higher resolution is better, but it also eats up more memory. Only players with high end, large memory video cards will be able to run the game in the higher resolutions.

**Rendering Quality:** The **Detail Level** sets the gross level of screen details. For instance reducing the level from three bars to two blacks out the Viper’s windows (among other things). In other words, you can no longer see the driver’s helmet. **Draw Distance**



dictates at what distance the computer renders a given detail level. The greater the draw distance, the further away you will be able to see (allowing you to spot wrecks way up the track), but the slower the FPS.

**Hardware Features:** **Bilinear Filtering**, **Shading**, **Fog**, and **Mipmap** are all features of hardware rendering that improve the coloring and graphic detail of the picture. Each eats up a little bit of frame rate. Some video cards perform certain features while do not. If you are having trouble getting the game to run well, try experimenting with the benchmark test and turning different features on and off to see which ones really affect your frame rate.

**Textures:** Flick off **Sky** textures to get that uniformly blue computer sky and a couple more FPS. **Reflections** covers the various levels of car shininess. **Mirror**. Hey, the mirror is the mirror. Turn it on to see who's behind you. There are three levels of mirror. Low displays only the cars behind you; Medium displays both the cars and the terrain behind you (minus effects like smoke and skids), and High shows you everything. The mirror is a VERY expensive feature to have on, especially at High. If you are having trouble getting the game to run smoothly, this should be one of the first features you deactivate.

**Game Effects:** These do what they indicate. Smoke makes smoke (like from the rear tires). Shadow renders the car's shadows. Skids lay down the appropriate skid marks.

*Note: Besides practice, FPS might be the most important thing in driving well. To go fast, you need to have constant sensory input. If your frame rate is low (17 FPS or lower) you may want to reduce the Graphic options. The equation is simple: Less graphical clarity equals more FPS.*



**Sound:** This is your audio-control center, where you can manipulate volume levels and sound effects. You also have the option of muting the whole game. The quality slider is the most important thing to consider when tweaking performance. The higher the quality, the more sounds are audible. The volume control adjusts the "volume" or decibel level of the effects in the game. If you prefer total silence when you race, choose **No Sound**.

**Controls:** Everything related to direct player interaction with VIPER RACING exists here. You can set features such as throttle and steering, depending on whether you'll "drive" by keyboard, wheel, or joystick. This can be set by default by clicking on the appropriate icon in the lower right-hand corner. If you do not like the default settings you can place your cursor at each empty gray box and click. Then hit the key or control to produce this action, and click on **OK**. This sets/resets each feature.

The diagram under **Force Feedback** allows you to test your steering device to see if it's calibrated properly. As you steer your wheel or joystick, the white circle in the box should correspond to its movement. If you have problems, you may need to recalibrate your steering device through the Windows CONTROL PANEL.

After programming the functions, click on the **Tune** button to adjust the dead spot and range of your throttle, steering, and brakes. Click on the red boxes to adjust the dead spot and range for each. By reducing the throttle range, the gamer is less likely to provide too much input (and perhaps spinning the tires). Beginners may want to do this to decrease their tendency to overdrive the car. When you're satisfied, click **Back**.

**Driving Aids:** You can turn your car into an "automatic" by clicking Auto Shifting and Auto Clutch boxes. You may adjust ABS Braking, Traction Control, and Yaw Control here as well.

**ABS Braking:** ABS braking prevents your wheels from locking up when you brake. The higher the setting, the more the computer will control your wheel lockup.

**Traction:** Traction Control maximizes your car's grip by limiting the rear-wheel spin under heavy acceleration. The higher the setting, the more stable the car will be but you do sacrifice some speed.

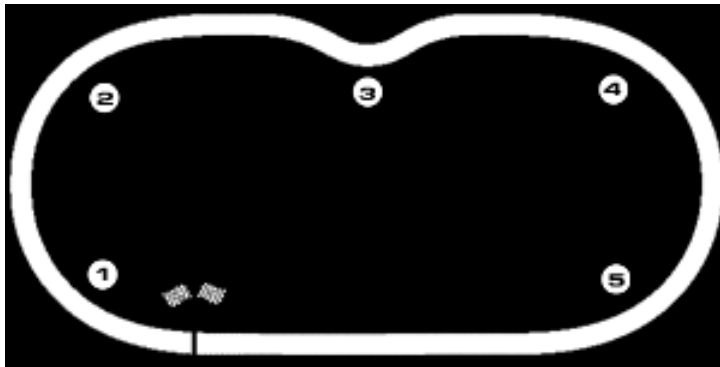


**Yaw Control:** Yaw control inhibits your car's tendency to spin under heavy and unequal lateral acceleration (cornering).

*Note: Although using driver aids will make your Viper easier to drive, they also inhibit its raw power and racecar handling. They're good for beginners, but experienced drivers will be faster with them off.*

## THE TRACKS OF VIPER RACING

The tracks lie at the heart of VIPER RACING. From high-speed ovals to country roads, MGI has included every bump, twist, and turn imaginable to push your Viper to its limits.



### Bemidji

This track is an oval with a twist (or rather, a kink) that we've always wanted to see. Bemidji is a good beginner's track. It's fairly easy to drive, yet rewards smoothness. Snug up to the outer wall as you cross the Start/Finish line. Turn into Turn One as you pass the last Start/Finish check. Be gentle; wish the car to the inside of the track as you reach the first 40-foot trailer.

As you exit, smoothly unwind the steering to the middle of the track. The chicane lies ahead. Keep the pedal to the metal, joystick to the rubber, or whatever. Touch the initial piece of yellow-and-black-striped curb about a third of the way into it. Ease to the left and put your left front tire on the last third of the next (left-hand) curb.

*Tip: Catching the back third of the left curb is critical. If you apex too early, you'll be way off line for the chicane's exit, and forced to either (1) back off the throttle, or (2) crash horribly.*

Straighten the remainder of the corner, just nicking the last bit of the right-hand curb, and drift to the middle of the track. Bend your line into Turn Two, holding the car next to the grass until the small MGI sign centers on your windshield. Drift to the wall, blast down the straight, and end the lap. Repeat as needed.

### Reversed

Stay on the right-hand wall down the Start/Finish straight. Keep your wheels aimed dead ahead as you crest the bump. Your car gets light here. If you dart left to pass a competitor you may finish the straight sideways.



The word "Viper" is stenciled three times on the wall entering Turn One. Turn in when you reach the first. Depending on your setup, you may need to breathe the throttle. Let the car drift out as you pass the next slew of Viper stencils (about two-thirds of the way through the corner). Don't go to the wall; hold what you have at the outermost dotted line. Turn over toward the inside of the track as you approach the pedestrian bridge (again, the start of the Viper stencils is a good reference point). Almost touch the midpoint of the first line of black-and-yellow curb; then come back right, running your right-front tire over the right-hand curb. Stay two or three feet off the second left set of curbs, drift to mid-track, and get ready for Turn Two.

Once more, the Viper stencils lead the way. Gradually turn in as you pass the last stencil before the turn. Keep your steed next to the grass until you can see the Start/Finish line, and then slowly unwind.

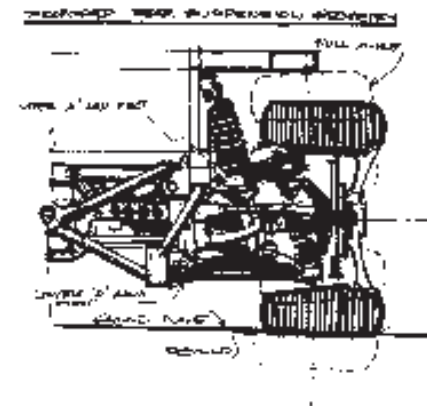
*Tip: Don't stomp the throttle when the race begins. You're on banking; if the tires break traction they will slide down the banking and you will spin out. You have to hate it when that happens.*

### Setup Tips:

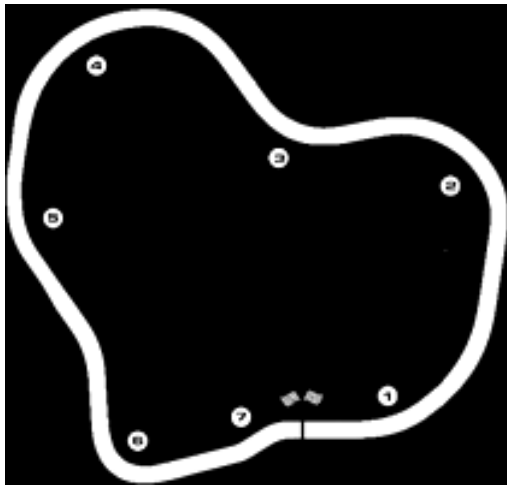
**Aerodynamics:** Moderation is the key here. Start your wing setup at 50-50 and slowly lower it until your lap times stop dropping. This will give you a good configuration.

**Chassis:** This track demands that you drive on the edge to win. Make sure your setup is even and stiff. There will be some understeer. You can cure this in one of two ways. First, simply set the rear wing lower than that of the front. The other alternative is to set the rear suspension a little stiffer than the front.

**Gearing:** A proper configuration is necessary for victory at Bemidji. The goal is to coordinate the sixth gear with your highest speed, keeping the tachometer in the 5100-5600 range if possible.



## Castlegreen



You gotta be smooth. Late apexing is the name of the game here. Anticipating each crook and curve is crucial for racing competitively at Castlegreen. Overall, it's a relatively easy course if you have the right feel for the track. The lure of its cool, medieval atmosphere is not bad either.

As you spin out of the starting bin, head left, mashing the throttle. Hug the bank, and then wind right as you reach the green hillside. Begin heading left again as you near the first yellow sign marked with a "<." Ease up on the throttle; depending on the mode you're playing in, you may even have to brake. Close in on the blue-and-white-tiled curb, brushing it with your left-front tire. Stay near the tile until you sight the last yellow sign for that turn.

Loosen up to the middle of the track and roll on the throttle. Stay mid-track as you pass the red-and-black road markers. As you near the little cottage, make your way right again. You're approaching Turn Three. Keep right until you pass the last yellow sign marking this curve. Keep rolling on the throttle.

At sight of Turn Four, unwind gradually to the left again: Keep it smooth. By the time you reach the first sign for that curve, you should be cruising on the blue-and-white tiles to your right. Loosen up to the left as you round out this turn—an almost-loop, if you will. Stay mid-track at full throttle.

The yellow-and-black barred signs ahead indicate trouble. This is the infamous dip. Slow down a tad and remain to the left of the ridge. A crook in this dip is trouble for the unsuspecting. Stay to the left of the turn if you can, slowing down if you must. Just before heading out of the dip, go back mid-track and give the throttle a squeeze. Keep going until you reach the numbered boards on the right side of the course.

Turn Six is a toughie. In fact, it's almost a 90-degree bend. Ease off the throttle and brake a little. As you approach the guardrail, maintain your position at mid-track. From there, slowly drift onto the blue-and-white tile, letting your left

tires caress the curb. Begin unwinding right as you see the end of the guardrails up ahead. Exit with full speed.

The last turn isn't bad, but it can be tricky. Go into the curve as straight as you can; this is another of those late-apexing jobs. Just pretend you're straightening out the curve. Swing to the middle before launching from the bend with full speed. Nudge the wall, but don't hit it. The finish line is just ahead.

### Reversed

The action on Castlegreen is somewhat tougher the other way round. Still, smooth driving on the turns is the essence of racing success at the hills and moors of this regal site.

You begin on a knoll that's a little steeper than in the regular mode. Gradually push on the throttle as you ease out of the starting bin. Going into that first little crook, just touch the white line on the left and make your way mid-track. As you pass the metal bridge overlay, take your car slowly to the left of the track. You're preparing for the big turn.

When you enter the bend, let off of the throttle. Start turning near where the guardrail begins. Gradually tighten

up toward the right, but remember to late-apex. As you touch the tile, push more on the throttle, rewing it up for a clean exit out. Move out toward mid-track again.

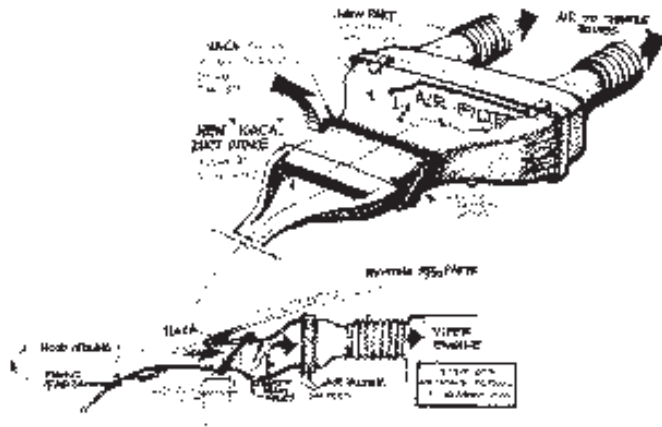
Breathe the throttle as you get ready to head down the dip, gliding to the left a tad. Wish yourself to the right ridge as you round the turn. Now slowly unwind to the left side of the track, exiting the dip.

Go into the next curve by trying to straighten it out. Stay in the middle of the track as you pull right. You'll apex near the tile—still quite a few feet from the curb, though. If you do it right, you won't have to let up on the gas.

Remain in the middle of the next curve, apexing late just as you did with the last one. You may want to breathe the throttle as you pass by the cottage. Overall, this curve is nothing compared to the one at the castle.

As you sight the stone edifice ahead, get ready. When you pass the red-and-black road markers, let up on the gas and nudge the brakes. Unwind to the outside for a moment, bringing your Viper back in as you go by the gray stone near the castle. Stay close to mid-track as you take the wheel to the right. Now drift back left as you exit the turn.

Two more curves to go, at the ridge and near the Start/Finish line. Enter the ridge, wishing yourself to the right side of the bank. You'll apex early and wind out to the middle of the track as you exit into the green. Apex late into that mild twist near the end, hugging the left wall briefly. Shift slightly to the middle again as you make your way across the Start/Finish line. There is a jump at the end of the lap. You will catch air (unless you are using too much wing), so you need to be moving left for the first bend before you really get control of the car again.



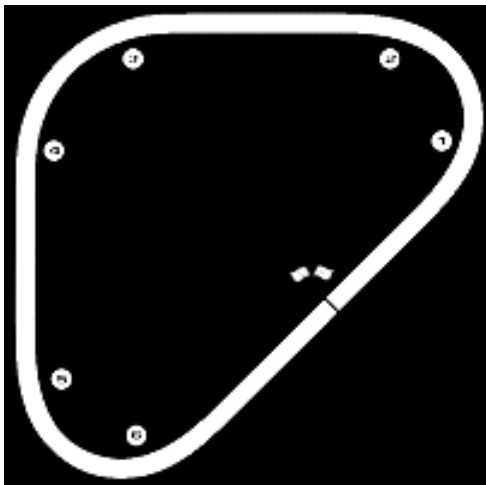
### Setup Tips:

**Aerodynamics:** Keep your wings low on this track — darn close to zero. You may want a little in the front (i.e. 5-15 degrees) to cure the understeer, but nothing more than that.

**Chassis:** There are three objectives for this course: 1) prevent oversteer, 2) maximize your grip, and 3) have enough grip in Turn Six. To complete this run, you need stiff springs and shocks that are even for both the front and back. For example, bump (70,70), rebound (80,80), and springs (80,80) are good. Finally, set your rear roll bar at least 5 points higher than in the front. Increase toe-in to 0.3-0.8 and run camber at -4.0, -4.0.

**Gearing:** With the proper gear ratio, you should be able to turn well over 170 mph. The trick is to setup fourth, fifth, and sixth gear each for a different portion of the track. Fourth gear should be set for accelerating out of Turn Six (about 123-130 mph). Fifth gear should be set for the climbing the rise once out of the ditch. And sixth gear should be set for the high speeds obtained when going down the first hill after the Start/Finish line as well as Turns Two, Three, and Four.

## Dayton



A high-speed track. Of all the venues in VIPER RACING, Dayton is the most NASCAR-like. The track's sweeping turns and long straightaways reward consistency and smoothness. The Start/Finish line lies in the middle of a straightaway. When setting off, push the throttle hard, but not too hard; breathe it a tad. Once you get going, surge full-steam-ahead down the straight, hugging the wall.

As you approach the bend, get ready to breathe the throttle. Begin drifting toward the white line at the end of the grandstands, where you started. By the beginning of the first grandstand tents on Turn One you should be apexing near the white line. Loosen up as you come to the second red-and-white-striped tent on the curve, pressing the pedal to the metal.

Coming out of the bend, you should be drifting toward the wall. You'll see a black-and-red marker on the fence. As you pass it, begin closing in on the white concrete barrier.

When the first black trailer is in detailed sight, begin closing in on Turn Two. Keep creeping toward the white line. As you pass under the overlay or bridge at this bend, climax at the apex point. Snug the line as you exit. Loosen things up as you come to the blue-and-gray-striped tent. As you pass the red-and-black marker on the fence, hug the wall. Continue rolling on the throttle, launching your Viper down the straightaway.

Turn Three is Dayton's most critical bend. Even though all the turns are similar, this one's a bit tighter than the others. Because you'll be closing in on the finish line after this bend, everything you do here is of utmost importance. Also, if you're doing more than just qualifying, you want to get as much power here as possible. After all, this is the longest straight on the track. The faster you get out, the better.

Your turning-in point is at the last red-and-white tent to your right on the straightaway. Apex early here so a consequential early exit will give you greater acceleration down the stretch. Let up on the throttle a bit as you round in on the white line. Gradually gravitate toward the

wall when passing the last grandstand tent on that curve, pressing the gas. All that's left is to greet the checkered flag as quickly as your wheels will take you.

### Reversed

We'll take the toughest turn first when racing this version of the track. Breathe the throttle as you speed from the Start/Finish line, nudging the wall. As you approach the first grandstand tent, begin choking up on the gas as you wind down to the white line. Your right tires should be touching the line when you pass the second grandstand tent.

Gravitate out as you pass the third grandstand tent, picking up on the throttle. Close in on the wall. You should be snug up against it as you pass the red-and-black marker on the fence. From the point of the marker, dive down to the line. Your right tires should be touching it as you head under the bridge. As you cross below the overlay, gradually begin shifting your car into the straightaway.

The last grandstand tent on that straight is your cue to begin turning in again. You should be in the middle of the track as you pass the red-and-black marker. Now drift below. Hug the line for a second or two. Loosen up as you pass the last grandstand tent in the turn, pressing on the

throttle. Keep unwinding, but slowly. Lean into the middle of the track until you're on the clear straightaway. Now you can kiss the wall on your down to the Start/Finish line.

### Setup Tips:

**Aerodynamics:** Dayton is won or lost in the garage. With the proper setup you should be able to drive — and drive fast— with your foot on the gas for the whole race. There's only one way to set your wing for this track and that is 0,0. After all, speed is the name of the game.



**Chassis:** Like Bemidji, this track is all about setting up your car to drive right on the edge. Note that this is the only track where the rear springs, shocks, and roll bar are often set stiffer than the front. You need the stiffer rear to rid your Viper of the inherent under

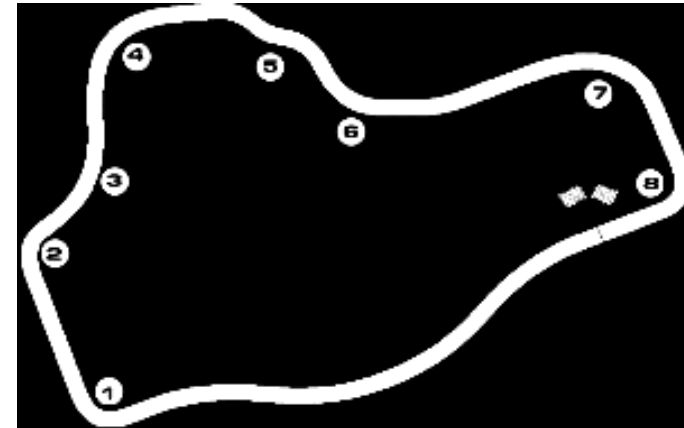
steer caused by the car's larger rear wing.

In fact, when set to zero the rear wing creates twice as much downforce as the front. Try to keep your toe-in close to zero as well; if you don't you scrub off speed down the long straights.

**Gearing:** Having the proper gear ratio set for this track is a must if you plan on winning. You want the sixth gear set at your slowest point, around 165-170, so that you are running 5000-5100 rpm.

You also want to make sure that the fourth, fifth, and sixth gears are tight and even.

### Dundas



The Start/Finish straight is a long one. If you get the throttle down early out of the last turn, you may reach 160 before you brake for the sharp, straight-ending right-hander. Pull left before this turn and brake just in front of the red-black markers. Beginners should slow (about 85 mph) before turning in. More advanced drivers can trail the throttle into the turn.

Accelerate hard down the ensuing chute. Cling to the left side of the road as you approach. Turn Two is much faster than you might think. Just tap your brakes, turn in, and hit the gas. Keep accelerating through the following left- and right-hand bends. After the right-hander come the Ss. Lift slightly on approach to the first—right-hand—corner. Tap a very late apex, about three-quarters of the way through the corner.

Drift to the other side of the track and apex the second part of the Ss at the bus stop. Come back across once again and nearly clip the water fountain.

Exit the Ss and drift left, keep left as you run the sweeper, and come out of it at full song. Hurry down the straight, and then feather your throttle as you hug the right side of the upcoming “playground” corner. Drift left and set up for the final turn. Brake as you pass the Armco barrier. Again, experienced drivers can trail some brake as they turn in. Get the car settled, and then accelerate out of the corner, down the straight, and across the Start/Finish.

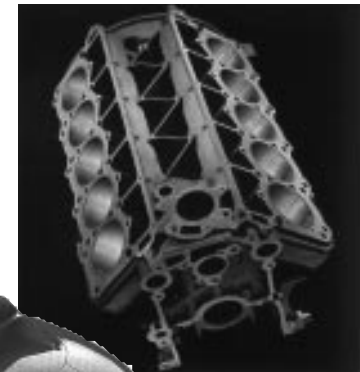
### Reversed

Approach the Start/Finish line on the right side of the track. Brake just after; turn in to the sharp right-hander, and get on the power as soon as possible. Accelerate down the straight and through the playground turn, clinging to the left side of the track.

Take the right-hand bend leading into the Ss on the right side of the track. Drift left as you pass under the red-and-black signs. Apex the first Ss corner just past the water fountain, drift right and catch the next apex adjacent to the bus stop, return left, apexing the final

S corner just before the second bus stop. Accelerate out of the Ss and through the approaching left-hander. You may have to feather the throttle through the next right-hander. Make sure to keep your charge on the right side of the track: You’ll need the positioning for the next corner. Brake 10 feet before the Armco barriers and start your turn in at the beginning of the barrier. Hug the inside of the track, only drifting out once you pass the red Armco.

Stay right as you speed down the straight, braking about ONE-THOUSAND-ONE, ONE-THOUSAND-TWO after flashing under the “VIPER RACING” sign. This corner is critical. Your exit speed will determine your terminal velocity on the next straight—the longest on the course. It won’t hurt to sacrifice a little speed going in, then, to be under





full throttle as you exit. Accelerate down the Start/Finish straight, cross the line, and your lap is over.

### Setup Tips:

**Aerodynamics:** You have two options: you can go high wing and win it in the curves or you can go low wing and win it in the straits. With a low wing setup you'll top at least 10 mph faster than your high wing competition. The goal here is to win on the long opening strait by pushing your baby as fast as she'll go. Unfortunately, curves are a lot more difficult with the low wings. On the other hand, the high wing setup will make cornering easier but slow you in the straights. For starters, begin with a 60 degree front wing and a 50 degree rear. Now run the course, trying to not to touch the brake, and only breathing the throttle before the final right turn.

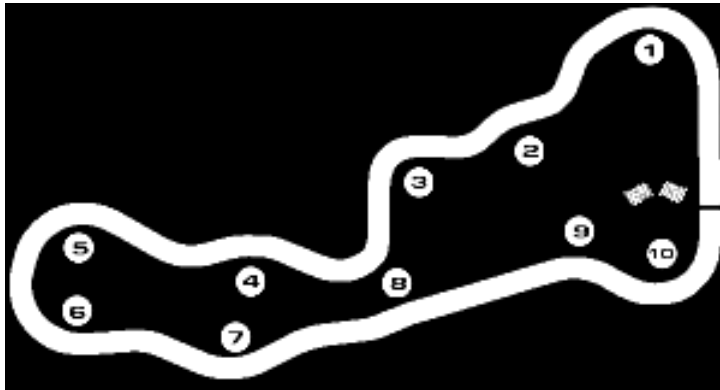
Keep raising your front wing until you can do it. This raising will probably cause some over steer; but you can solve this by softening your rear roll bar. Once you get it right, your Viper will go 135 mph through the "S" curves.

**Chassis:** Vipers with a low wing setup spin frequently in the two turns bookending the front straight. Keep your shock and springs well balanced will help. High camber helps in the sweepers (i.e. -4.0, -4.0).

**Gearing:** For the strait away you want to have a nice tight ratio between the fifth and sixth gears. Since you will only be using the sixth for the strait, you want to make sure it runs at about 5500 to 5600 at top speed.



## Ridge Valley



You'll notice two things about the Ridge Valley track. First, it's reminiscent of the American Northwest, with awesome scenery from rivers and waterfalls to rolling hills and rock formations. Second, it's full of curves. You'll race a substantial amount of the course under 100 mph. That means every swerve, every turn-in point, every apex, and every proper exit counts.

The race begins at the bridge. Rev up, breathing the throttle to head down this small straightaway. You should definitely be going past 100 here. But beware, the kinks lie just ahead. Slow down a tad entering Turn One from the right. Drift left, touching the curb midway through the curve. From there, gravitate to the opposite side, stepping on the gas. You should exit with some boost from Turn One.

Turn Two is next, but it's not that bad. Groove back to the right lane as you approach the yellow curve signs marked ">". As you exit the turn, straighten out, navigating left to

right to do so. For Turn 3, keep navigating until you hug the rocky banks to your left. From there, launch back right, straightening out the road. This is how you get rid of kinks. Don't relax; the next curve requires some sweat. Start braking at the numbered signs near the roadside, and gravitate left. Keep off the throttle until you break from the last of the yellow curve signs. Speed up; gradually begin riding the broken yellow lines momentarily. Shift back left as you move past the small bridge.

Slow down as you approach the next turn. Late-apexing is the key to handling this twist. As you pass the first curve sign, start winding left. At the end of the sign series, slip back to the right. You should be in the right lane at a steady but cautious speed when you pass the red-and-black road markers.

Maintain this velocity (around 90 mph) as you get ready to iron out the next kink. Gradually move left as you pass the first yellow curve sign. You should be in the right lane as you exit past the last curve sign. Press on the throttle some more.

As you enter the next curve, start navigating left as you pass the first curve sign for that turn. Make sure you weave to the left lane quickly and smoothly. You should be in it at least by the time you pass the third curve sign for that turn. An early apex here will set you up for a strong finish.

Stay in the left lane for the most part until you pass the red-and-black road markers. They're your signal to switch to the right side of the road. It's OK to pick up speed as you head uphill. This twist and the next are nothing. Just stay within the inside of the bend and things will look good.

As you approach the rock formations on your right, slip to the right, and then create a straight racing line within the nest of curves. Step on the throttle. This is one of the few areas in Ridge Valley where you'll be able to go at almost full speed, so take advantage of it.

The snake-like curves ahead look worse than they really are. Make sure you slip to the right as you pass the "3" sign alongside the road. At 1, gravitate back left. Stay on the inside of the upcoming curve, unwinding to the right only as you exit. Be sure to brake slightly on this exit, but push the pedal to the metal on the straightaway with the bridge.

### Reversed

You won't be able to begin your race as fast this way. Unlike the regular version, the reversed form starts with loads of curvy terrain instead of a straightaway. Of course, that means you can't start as fast as you

did going the other way.

Going into the first turn, keep to the inside for the most part. Glide left as you pass the bank of that hill. Exit from the guard-rails with your foot heavy on the gas. The next turn is easy. Just remain on the left until you pass the guardrail, and then shift right.

Step on the throttle as you head over the knoll ahead, gravitating back left as you descend. Make a straight racing line through the little kinks, taking the inside of the track on the guardrail turn. You should slip to the left groove by the time you pass the red-and-black markers. As you pass the next guardrail, begin cruising right. As you exit from the turn, shuffle right (at the end of the rail).

Stay to the inside of the next curve, going outside as you begin your exit. You should be in the right lane, but now the outside of one curve has quickly become the inside of another. Remain in that lane until you spot those black-and-red markers. Now shift left, taking the curve from its inside—and be sure to step on the brakes. This is the most critical curve on the reversed course. Keep to the left until you sight the black-and-yellow markings of the bridge ahead. Now you can switch lanes.

As you go into the bridge, navigate your car back to the left smoothly. Don't squeeze too heavily on the throttle. Take the inside track for the next few curves. It's somewhat curvy down this stretch, but it's not too bad. Just straighten out the curves and you'll be all right. As you approach the bridge, and the Start/Finish point, step on the throttle.

### Setup Tips:

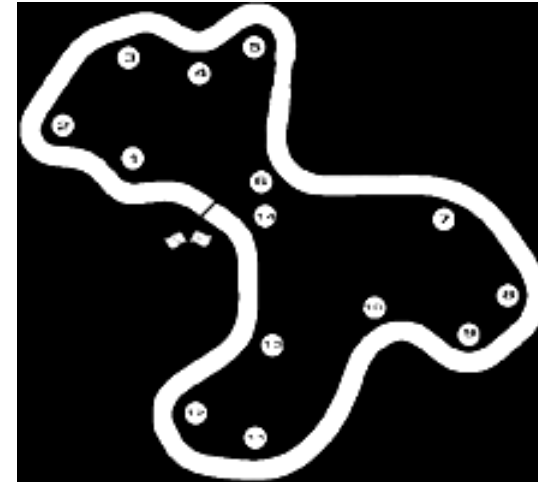
**Aerodynamics:** You need a high wing setup at Ridge Valley. A successful front and back configuration is around 100, 100.

**Chassis:** The hairpin turns here require a good deal of stability. You need the springs and shocks for both the front and rear set at about the same numbers. Leave your rear roll bar about 10 points lower than in the front.

**Gearing:** This is not very important for this track. Just find your top speed on the course, and then set your sixth gear accordingly. Evenly divide the gears below it. You may even want to tune gears 4 and 5 for the big up-hill sweeper in Turns Five and Six.



### Rock Island



You may be on an island in this scenario, but anyone who's ever raced on it can attest that this venue is no vacation. Precision and skill are musts. Danger lurks all around. Rocky cliffs, the shoreline near much of the course, and curves, curves, and more curves—about 14 in all.

From the Start/Finish line you can see already the kind of track Rock Island is. The chicanes just ahead, though, are the least of your worries. From the green light, just press the throttle, breathing it. You need a good take-off from the line, but remember to be cautious. Drift to mid-track as you take Turn One. This will help you get set to ride the inside of the next curve (the right lane).



After Turn Two, wind back to the left. Apex at the small bank, but start exiting right again as you pass the steep, rocky bank. There are numbered signs on the opposite side. Begin letting off the throttle and gently touching your brakes—you don't want to tailspin here. Stay in the right lane. The farther you can stay from the rock on your left, the better. Drift to the outside of the curve as it straightens out. By the time you spot the ocean, you should be completely in the left lane, squeezing on the throttle.

The next turn is a cakewalk. Just keep on the gas, apexing on the sandy shore to your right. You'll know when you're taking the ideal racing line: The lighthouse will pop up in the distant right corner at the apex point. From there, gravitate left. You want to take this next curve from as far inside as you can, apexing early. Be sure to let off the throttle and start braking. This kink can be rough.

As you begin exiting this turn (at the last yellow curve sign), wind your car back to the right. Don't speed up; you should be taking this bend somewhere in the neighborhood of 70 mph. There are cliffs on both sides, so be careful! Stay to the inside of the track until you pass all the turn signs marked ">".

Drift to the middle of the track as soon as you pass the yellow-and-black barred signs. A one-lane bridge lies straight ahead, and it only accommodates the middle lane. Only begin pressing the throttle again till you've gone onto the bridge. Now you can floor it—at least for a second or two.

As you exit the bridge and descend the knoll, you'll notice another bend is in store for you and your Dodge Viper. Stay mid-track. Drift left as you pass the first turn sign. Take this bend from the inside until you start exiting to the middle lane, doing this as you pass the last turn sign. Mash the throttle here as hard as you can. This hill provides a straight course, ever so briefly, for some speed.

Another tricky curve lies ahead. Begin slowing a tad, but try to stay mid-track. Unwind to the left only when you pass the last curve sign. Hug the wall briefly before drifting back right. Start doing this a couple of feet before you reach the next curve sign for the turn ahead.

Take this corner from the inside, at least until you pass the last curve sign. Now drift a little toward the wall, but only briefly. At sight of the next corner and the curve signs ahead, gravitate toward the inside of the track. Stay to the inside until the wall on the opposite side stops. You're coming to another bend—a big one!

This turn is one of the most difficult on the course. The key to handling this thing is to slow down and apex early. Shift to the inside of this turn as soon as you pass the signs, letting off the throttle. Drift to the outside when you're in sight of the last three or four curve signs. After you pass the final sign on this turn, floor it.

The curve near the stone edifice ahead is pretty easy to tame. Take it primarily from the middle of the track, not letting off the throttle. You're almost there; just three more turns to go. The others won't be quite as easy.

Turn Twelve is sharp at first, so you must apex early. In fact, you should be hugging the cliff where you pass the third curve sign. >From there, exit the turn by drifting to the outside. This "outside" quickly becomes the inside of the next bend. Number Thirteen has never been so lucky: This turn is easy to take. Just speed through on the inside.

Exit Thirteen by going outside. You should see the Start/Finish banner below—and one more curve. Drift back left as you pass the curve signs, mashing the pedal to the metal. Unwind from there to the finish line. You've just survived one kinky experience!

### Reversed

Get ready for more curves than a case of Slinkies. The reversed course for Rock Island is as tricky as ever. Make sure you have new brake pads, and get ready to trade a little paint: This won't be any easier than the first way round, and it maybe even a little harder.

You can tame the beginning of the island venue easily. Just push the pedal to the metal and take the inside of the first two curves. These two are about the tamest in the bunch.

When turning into Turn Three, let off the throttle some as you approach from the outside. From the right lane, migrate left. You should be in the middle lane by the time you pass the first sign. Apex when you have sight of only three more signs. Unwind from there to mid-track, stepping on the throttle. Take Turn Four to the inside, picking up speed.

Now you're ready for the test. Turn Five up ahead is a toughie. Start braking at the first glimpse of the curve signs, and swing right. You should enter the curve (at the first sign) in mid-track. When the lighthouse appears on your right, begin navigating your Viper to the inside of the corner. Your apex point is at the fourth sign in front of the lighthouse.

If you thought that curve was bad, wait 'til you see this one. Begin by setting yourself up right. Exit Turn Five by winding left, making sure you're in the left lane as you pass the final sign. Slow down. You should be going somewhere in the neighborhood of 70 mph. Stay to the inside of the curve or you may skid into the wall.

Begin unwinding to the outside as the lighthouse looms before you. Unwind as if you're heading straight toward it. When you pass the sign to your right at the wall, begin gravitating back, holding yourself like glue to the middle lane. You should be going 80–85 mph when you're doing all this.

Your trouble isn't over. The wall still lingers to your right, as does another curve. Stay mid-track. You're going to apex by the time you pass the eighth or ninth sign. Start speeding past 80, now. Launch yourself from here into the next curve. It's a cakewalk. Take it full speed ahead to the inside.

The next turn, however, will be a little tricky. Begin letting off the throttle as you pass the first boulder to your left. By the time you pass the second boulder, you should be braking. Take this curve from the inside. You should be cruising under 100 mph here.

As you exit this crook, start unwinding left as you pass the final curve sign, but stay in the center lane. That one-lane bridge is just ahead. Begin slowing as you enter it. A sidewinder lies ahead. Push down on the brakes as you leave the bridge.

Begin tightening your car to the left as you pass the first curve sign. You should be in the far-left lane as you exit the turn (at the last sign). Maintain your speed somewhere near 80 mph as you approach the next bend. As you pass the fence, gradually move into the track's far-right groove, hugging the bank. An early apex will set you up into the middle lane for your exit.

You can squeeze on the throttle—briefly. One more killer turn ahead, and it's a doozy! Start braking as you top the knoll. Keep braking. As you approach the fence, start tightening up. Apex early, still braking. Start unwinding to the outside, but not too close to the bank. Only when you see sand and grass to your right should you be completely in the right lane.

From there on out, things are easy. Speed up down this little stretch, but be aware of the sand on the track. This is a chicane, but considering what you've been through, it's nothing to sweat over. Just touch the inside of the two curves, kind of like you did with the chicane at Bemidji, and you're home free.

### Setup Tips:

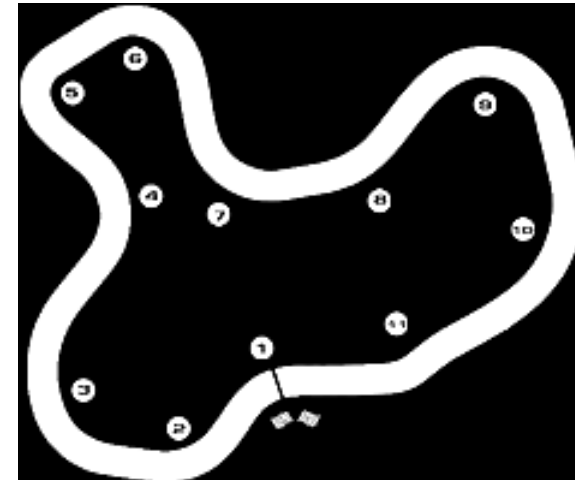
**Aerodynamics:** If you are a racing novice you will probably want the maximum amount of wing you can get. This will help add stability to your Viper by creating downforce.

**Chassis:** Stability and control are the name of the game for racing on this venue. Tight turns and rapid elevation changes will make both of these difficult, but there is a way to make things happen. First, soften up the suspension some.

Set the bump around 30 in the front and slightly lower in the back (say 27 or 28). Make sure that you set the rear roll bar at least 15-25 points softer than the front. Another way to add stability and push to your Viper is by having slightly more negative camber in the rear than in the front.

**Gearing:** The steep hills on Rock Island make proper gearing an imperative. The trick is to set the fourth gear to almost 5200 rpm while running up the hill. You may need to adjust some of the other gears as well to allow the 5200 or above.

### Silverdale



Silverdale demands precision. Missing one apex will mess up an entire lap. Break through the Start/Finish line on the left side of the track. Head to the inside of the road and apex the right-handed Turn Two near the boulder. Drift out a little past mid-track, and turn into the ensuing right-hand sweeper just before the telephone pole on the Start/Finish side of the next clump of granite. Put the beast's right-front tire on the inside line and keep it there until you flash past the corner sign. Turn in slightly before the "3" braking marker, using enough brake to get your nose pointed toward the apex. Then accelerate out of the corner, drifting a little past the course's dotted line.



Move left as you approach Turn Five, brake lightly, and turn in toward a mid-corner apex. Accelerate out the edge of the track between Turns Five and Six. Tap the brakes again, and turn in to Turn Six. Use a slightly late apex, and roll on the gas as you head for Turn Seven. Breathe the throttle as you bend into this gradual left-hander. As you exit, let the car have its head and slide toward the outside of the track. Bring it back left as you sweep through the kink called Turn Eight and keep it there on approach to Turn Nine.

Gently brush the brakes to help your turn in and hit a late apex in Nine. Unwind your steering as early as you can: remember, the sooner you unwind the steering the faster you'll travel down the straight. Smoothly nudge your Viper to the right side of the track for Turn Ten, drifting to the track's center on exit. Then clip the grass on the right side of Turn Eleven, before drifting to the opposite side of the track for Turn One and the end of a lap.

### Reversed

Cross the Start/Finish line and head left, touching the white line on the inside of the first kink with your left-front tire. Drift back into the middle of the road. Then, once again, ease left after you crest the hill, staying on the inside of the downhill bend.

After the bend, let centrifugal force carry your chassis to the outside of the track. Breathe the throttle and turn into the left-hand turn. The next corner is an even sharper left-hander. Brake, and then turn in as you pass the solitary tree before the telephone poles. Accelerate through the corner and drift to about mid-track as you scream through the ensuing gentle bend.

Trail-brake into the first pond turn—a serious right-hander just after the gentle bend—and drift to the left edge of the road on exit. Stay there as you approach the large, U-shaped turns cradling the pond's far end. Brake and turn into the first of the two corners, allowing your car to slide out to the outside (right) portion of the track as you exit. Keep on the outside as you approach the second turn or “exit” from these U-shaped turns.

Again, drag the brake as you enter. Then put the pedal to the metal on exit. Keep on the right side of the road as you approach the following sweeper and maintain an even three-quarter throttle as you cruise through it.

Blast down the middle of the road until you approach the sharp downhill left-hander, tap your brakes to settle the car, turn in smoothly, and then get on the throttle.

Cut a graceful arc as you drift to the outside of the track; then bend it back toward the boulder marking the apex of the soon-to-be-complete left-hander. Apex late, and then mosey across the road to catch a late apex on the right-hand kink. Drift left and pass the Start/Finish on the left side of the track at full throttle.

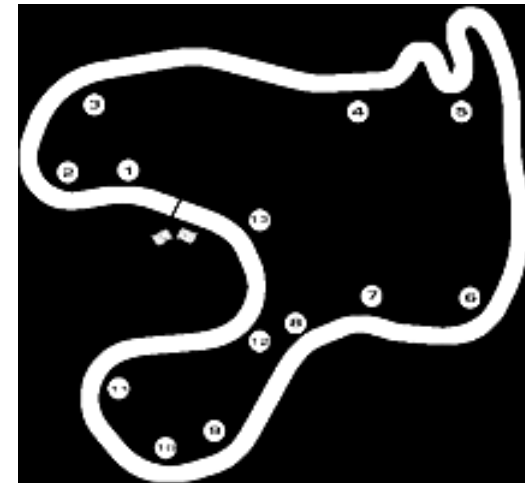
### Setup Tips:

**Aerodynamics:** If there is any track that you will need plenty of down force, it's at Silverdale. With all those curves, you want your tires to stay planted on the road. To be competitive run about a 100, 100 wing here.

**Chassis:** Grip and traction are a must. Therefore, you will need a balanced suspension. Do this by setting your rear springs and shocks 1 or 2 points less than in the front. Also place the roll bar 10 points less than in the front. To get rid of the understeer, use about a 0.5 toe-in in the front and none in the rear. Also due to the many banked turns at this venue you should run with a max negative camber in the back with the same or slightly less amount than in the front.

**Gearing:** This is not that important on this track. Just make sure there is an even, tight distribution between 80-130 mph with a red line of about 150 for sixth gear.

### Sunset Mesa



A challenging track, Sunset Mesa is as quick as it is tricky. You must be fast, but you also must know how and when to brake, and know the best way through the slow-to- intermediate corners. Here's one way.

Blast across the Start/Finish line and through the first gentle left-hand bend. Brake gently before the first right—actually Turn Two—and roll on an even throttle and turn in. Mash the gas (smoothly) about three-quarters of the way through the turn and drift to the outside of the track. You'll get about 100 yards of running room before you need to breathe the throttle and angle to the inside of Turn Three. Floor it out of the turn and down the ensuing straight.

If you're alone, drift to the outside of the track as you approach Turn Four (the sharp left-hander with the three braking markers in front of it). Lift just before the number 3 marker, brake firmly until the number 1, and then turn in smoothly. Accelerate out of the corner; then hurry to the left side of the track to set up for the Turn Five switchbacks. These are slick corners. Take them with a tank full of respect. Approach each from the outside, brake in a straight line (unless you're comfortable with trail-braking), keep an even throttle through the turn, and accelerate as if there's an egg under your throttle pedal on exit.

***Tip: The last switchback is most important. The sooner you get on the gas at the turn's exit, the faster you'll move down the following straight.***

Thunder down the straight following the switchbacks. Keep it on the floor as you sweep through Turn Six, brake lightly for Turn Seven (trail-braking works great here), and head for the outside of the track as you enter the right/left combination called Turn Eight. Slow before the right-hand portion, dive to the inside (right side) of the track, and hold it there as you enter the left-hander. Trail-brake on entrance; then accelerate out and up the hill.

Keep getting it as you climb the mountain. Turns Nine through Eleven are a series of corners of decreasing radii: In other words, they get slower as you go. Keep your Viper to the mid-inside of the track and give it as much power as it will take without producing undue tire squeal.

Exit Turn Eleven and scream back down the hill. Trail-brake into Turn Twelve, accelerate toward the Start/Finish line, and you're done. Another perfect lap.

### Reversed

If you thought Sunset Mesa was hard the first time, wait until you try it reversed. The lap speeds are a little slower, the top end a little less top-endy, but the dreaded switchbacks are far more dreaded.

Move to the inside (left side) of the track as you cross the Start/Finish. Stay there as you enter what's normally known as Turn Twelve. Lift slightly, and then floor it as you cruise up the hill. Keep the pedal on the floorboard as you break into Turn Eleven. Ease toward the inside (left side) as you circumnavigate the mountain, feathering the throttle as necessary. Make sure to exit the last mountainside at full song. The straight that follows is a long one, and any speed you carry into it helps.

Breathe the throttle just before turning into the right-hander at the end of the straight. Clip the apex halfway through (about 25 feet in front of the black-and-yellow-striped signs). Then scoot across to kiss the left side of the track as you hop over the hill. Flow right again, and then come left to apex the “barn” turn. Repeat the procedure for the upcoming “bed-and-breakfast” right-hander (known as Turn Six when we were headed the other way) and rocket onto the back straight.

The red/black and black/yellow markers warn of the approaching switchbacks. Glide to the left-center side of the track, ease off the throttle well before the crest of the hill, and begin braking as you approach the red-and-black bubbas (or bubbettes). Press the brakes firmly but gently. As when your Viper was headed the other direction, approach each from the outside, brake in a straight line (unless you’re comfortable with trail-braking), keep an even throttle through the turn, and accelerate smoothly away from the corner. Once you’re away from the switchbacks, nail it through Turn Four and up the hill. Clip the first bend on the inside and keep on keepin’ on.

Lift for a fraction before entering Turn Three. Then give your steed about 80 percent throttle (maybe more), trail-brake as you roll into the shadow, and then accelerate hard down the hill. Cross the Start/Finish, and, yes, repeat.

### Setup Tips

**Aerodynamics:** Like Dundas, you can go high and try to win it in the curves or you can go low and try to vault down the straits. A low wing setup might look like 40-30 whereas a high wing setup would be 70-60.

**Chassis:** Don’t emphasize stability so much at Sunset Mesa; go for a grippy-edge setup. However, you do need to have a forgiving enough setup to make it through the switch backs without spinning out.

**Gearing:** This track’s sections are so diverse that you cannot prepare for just one hill and neglect all of the others. The best you can do is just tune your sixth for your top speed, spreading things out tight and even among the top gears.

## THE GARAGE

Ah, this is where the rubber meets the road—or, to be precise, where the wrench meets the nut. Once you've learned to drive, this is where you come to pull the last couple of seconds out of your Viper.

*Tip: New drivers often believe they can cure every ill in the garage. They're wrong. Staying on the track and out of the garage is the quickest way to go fast.*



The Garage menu pops after you click on the Garage button on the at track screen. The menu has four tabs: **Chassis**, **Align**, **Aero**, and **Drivetrain**. There are two

additional buttons in the lower-right screen area—**File** and **Test**. Tapping the **File** button pops a new window where you may choose to **Load** an existing (previously saved) car setup, **Save** your current setup, or load the **Default** setup for the current track. Clicking **Test** allows you to do a test run on the currently selected track.

## Chassis



From the **Chassis** menu you may adjust your Viper's chassis. There are four adjustable settings on this screen: **Bump**, **Rebound**, **Springs**, and **Anti-Roll**.

When motionless, the Viper's weight is semi-equally

divided between the four wheels, or “corners.” There’s slightly more weight over the front wheels, but the amount of disparity is constant. That all changes once you start the engine and roll out onto the track. The amount of weight on each corner shifts constantly as the car traverses the course. When you brake, the weight shifts to the front; when you accelerate, the weight shifts to the rear. When you blast through a left-hand sweeper, the weight shifts to the right side of the car, and when you’re engaged in a combination of these, the weight travels accordingly. For example, a Viper braking as it enters a left-hand hairpin will transfer most of its weight to the right-front wheel.

Chassis adjustments try to equalize this dynamic inequality. Too much—or, for that matter, too little—weight on a wheel can cause it to slide, and that’s bad news.

*Note: The following data is conveniently summarized at the right of the screen. The shocks—one compressed and one open—represent bump and rebound. The “ideal” curve should transcribe a 45-degree angle through the rebound section of the X/Y axis and flatten somewhat through the bump portion.*



*Below the Bump/Rebound display is a depiction of the effect each change has on the car. There are four bars—from top to bottom, Shocks, Align, Aero, and Total. On either side of the small split screen is a Viper. The car on the left side of the split screen is oversteering. When a change draws the bar to the left side of the line, the bar turns red, indicating that the change will tend to make the car oversteer.*

*Conversely, The car on the right side of the split screen is understeering. When a change draws the bar to the left side of the line, the bar turns blue, indicating that the change will tend to make the car understeer.*

*Note that, although your alteration might change that category’s input to the car’s total handling, it may not change the total handling from oversteer to understeer (or vice versa).*

**Bump:** “Bump” is the shock absorbers’ resistance to compression. The higher the Bump setting, the less likely the affected end of the car will be to bottom out (after a jump, for instance), and the more likely it will be to lose traction. For example, setting your front bump settings higher decreases your chance of smacking the car’s nose into the pavement after a jump, but increases the car’s tendency to push.



**Rebound:** Rebound is how quickly a compressed shock will extend. High rebound settings stiffen the car's suspension and reduce traction. Low settings make the car "wallow" because it's slow to reset after each spring/shock compression.

**Springs:** The springs control the overall stiffness of a car's corner. The higher the spring rate, the stiffer the corner—and the greater the share of the chassis' overall weight the corner bears. As with the other settings here, a simple rule applies—the stiffer the corner, the less traction it will have.

**Anti-Roll:** The anti-roll bar is a quick way to "stiffen" your Viper's suspension. There's a bar at both the front and rear of your car. Stiffening the bar (increasing the number) increases the amount of weight transfer to that end of the car and makes it feel a bit more "skittish." Softening the anti-roll bar, on the other hand, adds some grip at the affected end.

If your car pushes (understeers), you may soften the front anti-roll bar or stiffen the rear. If your car is oversteering, you may soften the rear anti-roll bar or stiffen the front.

## Align

From here, you may adjust the wheel alignment, the chassis-ride height, brake bias, and wheel lock.

*Note: The Align menu's interface is similar to that of the Chassis menu. The bars and split screen at the lower right are identical, while a picture of your Viper, depicting a wheel's camber, toe-in, brake bias, or wheel lock, replaces the Chassis menu's bump/rebound screen.*



**Toe-In:** Toe-in is the angle of your wheels relative to the direction of chassis travel. The toe-in is positive when the front of the wheel points toward the chassis, and negative when the front of the tire points away from the chassis. Negative front toe-in makes the Viper stable under braking, and tend to push on turn-in. Positive toe-in at the front make the car turn in better, although a bit darty under braking. Rear toe-in always should be negative; otherwise the rear of the car will tend to drive around the front. Not pretty.

**Camber:** Camber is the vertical angle of your wheels relative to the chassis. If the top is closer to the chassis than the bottom, the tire has negative camber; if the bottom of the tire is closer than the top, the tire has positive camber. Makes sense, in a reciprocal kind of way, doesn't it? Negative camber is almost always a good thing. Positive camber rarely is. Here's why.

As the Viper sails through a corner, centrifugal force pushes the chassis to the outside of the corner. For example, if it's a left turn, the chassis is pushed to the right. The chassis is pushed through its center of gravity, which makes the car "roll" on its vertical axis. This rolling pushes the top of the tire toward the outside of the corner, while the bottom remains anchored on the road (more or less).

If the tire originally was mounted 0 degrees relative to the chassis, the foregoing tire torquing would pull the inside of the tire off the pavement, lessening the chassis-cornering capability. Of course, negative camber only benefits the outside tires, but in road racing this corner's inside tire is next corner's outside tire, so it's best to set both front and back tires to some degree of negative camber.

*Tip: Occasionally, stock car racers crank a little positive camber into the car's left side. This makes the inside tire—remember, in oval racing, once an inside tire, always an inside tire—actually stand straight as it pounds through the corners.*

**Height:** Height is the ride height of the car. In general (and this is a big generalization), lower is better. Sometimes it helps to raise the tail slightly. This increases drag and slows straight-line speed, but it also gives the chassis a little more grip in the high-speed bends.



**Brake Bias:** Brake bias determines which set of the Viper's disc brakes, front or rear, do the lion's share of stopping. Under braking, the car's weight transfers to the front, so it's a good idea to place most of the braking emphasis here. On the other hand, too much front-brake bias not only causes the front wheels to lock up (stop turning), but it under-utilizes the rear brakes. Conversely, too much emphasis on the rear brakes causes them to lock up before the fronts, causing the car to spin.

*Tip: Occasionally you can cure corner-entry understeer by slapping more bias on the front brakes. In a car so biased, staying on the brakes as you turn in allows the rear of the car to drift toward the outside of the corner, curing your understeer.*

**Wheel Lock:** Wheel lock is the measure (in degrees) that the front wheels turn to either side of dead center.

The greater the number (that is, degrees), the sharper the Viper will turn. There's a downside, however. More wheel lock increases a car's steering sensitivity. In other words, cars with a lot of wheel lock are difficult to drive straight.



## Aero

Use this menu to adjust the Viper's front or rear spoiler.

*Note: The Aero menu's interface resembles the Chassis menu's. The bars and split screen in the lower right are identical, and an image of your Viper depicting spoiler drag and overall drag coefficient replaces the bump/rebound screen. Arrows pointing to the front and rear of the car denote the drag each spoiler imparts. The higher the number,*



*the more drag. The vertical arrows show downforce, or at least a coefficient of downforce that is coupled with speed to get total downforce, and the horizontal arrow shows drag. So the display sort of shows what you are getting (down force) and how you are paying for it (drag).*

**Spoiler Size:** The bigger the spoiler, the more downforce it generates. The more downforce it generates, the better the Viper sticks to the road. The better you stick to the road, the faster you move. Kinda.

There are two drawbacks. First, more downforce means more drag, more drag means less speed, less speed means slower lap times. Second, excessive downforce at one end of the chassis will “unstick” the other end.

For example, too much rear spoiler creates push.

Of course, the opposite also is true; that is, too little rear spoiler produces oversteer. A rule of thumb is to use the least spoiler possible on the fast tracks (Dayton and Castlegreen, for instance), and more on the twistier fare, such as Silverdale.

## Drivetrain

At the **Drivetrain** menu you can adjust your Viper's gearing. In general, the higher the gear ratio, the quicker the acceleration in that gear and the lower its maximum speed.

*Note: The Drivetrain menu's interface resembles the Chassis menu's. The bars and split screen in the lower right are identical, and an image of your Viper's shift pattern, depicting the maximum speed in each gear, replaces the bump/rebound screen.*



## Viper Racing

---

**The Gears:** The left side of the **Drivetrain** menu displays a list of the Viper's six gears. You may change each individually. Remember, the higher the gear ratio, the quicker the acceleration, but the lower the maximum speed. The final gear ratio is determined by considering both the final drive and the gear ratios listed here.

*Note: As you change the ratio, the new speed for that gear displays in the Viper shift pattern on the right. Vipers have a peak power of 5200 rpm, so the key to proper gearbox tuning is staying within one's power band (5000-5800).*

**Final Drive:** The final drive is a simple way to adjust a car's overall drive gear ratio. Because the final ratio is determined using both the individual gear ratios and the final drive, adjusting the final drive affects acceleration and top speed in each gear.

## Chapter Five

---

### *HISTORY OF THE DODGE VIPER*

In 1989, the first Dodge Viper was unveiled at the North American International Auto Show. The RT/10 roadster was a sensation. The media were talking. Car-lovers everywhere longed to take one out for a test drive.

The eager had to wait until its public introduction in 1992, but the Viper did not disappoint. Automotive writers were so impressed with its sleek design and power performance that they compared it to such legendary American sports cars as the Cunningham Coupes of the 1950s and the Shelby Cobra Daytonas of the '60s.



## Viper Racing



Of course, it wasn't just hype. The Dodge Viper was equipped with a 488ci V-10 engine that hammered out 415 horsepower. It could run from 0 to 60 mph in 4.8 seconds—sheer power at an amazing speed. An American sports car that could rival its European competitors had finally arrived.

Four years later Chrysler redesigned the Viper for the mainstream public, including air conditioning, airbags, and real door handles. Increasing the horsepower to 450, they released this latest incarnation as the Dodge Viper GTS Coupe. Although it was made for the public, the Coupe still featured full-body racing stripes. Dodge wanted everyone to remember Viper's heritage. Everyone would. The Dodge Viper GTS-R racecar would make sure of that.

## Chapter 5

## History

The GTS-R was a further souped-up version of the Viper series that could maintain top speeds of up to 203 mph. During 1997, this model made history, winning both the FIA GT-2 Drivers' Championship and the Manufacturers' World Championship. With a \$250,000 base pricetag, the GTS-R had climbed into a class all its own.



---

## TROUBLESHOOTING

### System Requirements

Before installing Viper Racing, please check to make sure your computer meets the minimum requirements for running the game:

**Windows 95 or Windows 98**

**Intel Pentium 133 MHz**

**32 MB RAM**

**10 MB Disk Space**

**Direct3D compatible video card**

**(see separate section below)**

**DirectX supported sound card**

**4x CD-ROM**

Failure to meet the minimum requirements may cause the game to not run at all or to run very poorly.



### Video Card Requirements

Other than the speed of your system, your video card will probably make the biggest difference in how well the game performs. The video cards available today have a 10x performance difference. Where your card fits on this spectrum will greatly determine how fast the game runs. In addition, the video cards today vary greatly in the quality of the graphics and the special effects that they can perform.

To help you identify how your video card rates, we have roughly divided the video cards into these categories:

#### 1st Generation

Early cards that are missing features and/or run slowly.

***ATI Rage II***

***Matrox Mystique/Millennium II***

***Rendition V1000***

***S3 ViRGE***

(Found in many machines under different names)



### 2nd Generation

Decent cards that are fairly full featured

**3Dfx Voodoo**

**3DLabs Permedia 2**

**ATI Rage Pro**

**Intel i740**

**NVidia RIVA 128**

**PowerVR**

(needs to be in a fast machine to run well)

**Rendition V2000**

### 3rd Generation

Excellent Speed and Features

**3Dfx Voodoo 2/Banshee**

**3DLabs Permedia 3**

**ATI Rage 128**

**Matrox G200**

**NVidia RIVA TNT**

**Rendition V3000**

If you want to improve the speed of the game, you should be able to upgrade your video card at a fairly low cost and receive a significant performance/quality boost. This is especially true if you own any of the 1st generation video cards. On slower machines (200 Mhz or less), your CPU may be the bottleneck and a faster video card may not help at all.

If your video card has less than 4 Megs of RAM, the game will run, but with diminished visual quality. More than 4 Megs will be used to both improve the visual quality, speed up the game and offer higher resolution modes.

Note that if your system supports AGP graphics, Viper Racing will use AGP to effectively increase the available video memory in your system.

### Before you install

Before you install, it is critical that your machine is in proper working order. If you currently have problems with your video card or sound, you should fix these problems first before installing Viper Racing.

In addition, we recommend that you run ScanDisk to verify that your hard disk is operating correctly. ScanDisk checks your hard disk for problems that might interfere with the installation of Viper Racing. ScanDisk can be found from the Windows Start Menu at Programs...Accesories...System Tools...ScanDisk.

### DirectX Installation Notes

In order to install Viper Racing, the install program may be required to DirectX 6.0 or DirectX Media from Microsoft.

If you don't already have these components installed on your computer, the install program will prompt you to install them. Microsoft has provided a setup program that we use to upgrade your computer. If you encounter any problems installing DirectX 6.0 or you have problems with your computer after installing DirectX 6.0, you should contact Microsoft directly for technical support.

### Video Drivers

Viper Racing relies on software called "video drivers" for the correct operation of the program. The manufacturer of your video card develops these drivers for use by Windows95. The quality of these drivers varies greatly between the manufacturers. Some companies are notorious for delivering "buggy" drivers that cause Windows95 to be slow, unstable, or glitchy. Computer games, like Viper Racing, seem especially good at locating bugs in drivers.

Before running the program, please make sure that your video card has the most up-to-date driver available. These can be found at the web site for most computer manufacturers or at the web site for the video card manufacturers. In many cases, problems in the game are entirely due to problems in the video drivers. If the problem exists with the driver, the game cannot function correctly until the driver is fixed.

---

## RACING TERMS

### Apex

This is the transition point between your entrance and exit in every turn. The apex is the area on the bend where your car touches the most inside part of the curve it is rounding. There are two common modes of apexing in racing. The early apex comes before the geometric apex (the symmetrical point where a curve can be divided), while the late apex comes after.

### Braking Point

Before you enter most curves, there is a critical point where you usually use your brakes -- sometimes all you have to do is ease up on the throttle. This is what racers commonly call the braking point.

### Contact Patch

When you are cruising down the track, a small part of each tire is grabbing the road. The small area of rubber touching the asphalt is called the contact patch. As common sense goes, the more tire you have hugging the road, the better your car will handle.

---

### Corner

The corner is simply the bend in the road. In the world of racing lingo, it can also refer to the wheel, tire, and suspension parts at each corner of the car.

### Downforce

Downforce is the amount of exertion air pressure has on specific areas of your car. It is measured in pounds.

### Exit Point

The point at the exit point of a corner (usually a way down the ensuing straight) where the lateral G-forces on the chassis reach zero. In other words the point where the corner is no longer affecting the chassis.

### G-Force

Gravitational forces are constantly being exerted upon you and the world you live in. At this very instant, gravity is holding you to the earth. But



let's forget about the complexities of Newton and Einstein for a minute here. Things, after all, are really simple.

For starters, we measure gravitational forces in a convenient manner. For instance, you are living in a 1 G world, the G-Forces upon this planet. However, on some other celestial object, forces could be many times that. What does all this mean? Well, if you weigh 185 pounds here on earth, you would weigh three times that on a planet with 3 Gs of gravitational force. No need to call Richard Simmons; this is just how the universe works!

Like your body, racecars are affected by G-Forces. Although you will be racing in 1 G conditions, high speeds create tremendous effects upon cars. One primary cause is responsible for the centripetal and centrifugal forces that affect your car's performance: inertia. This is the tendency of an object to remain in its given path. When cruising through corners, it is this principle that creates the critical G-Forces that racecar drivers are concerned about.

### Line

This is a racing term that refers to the ideal path around a track. It is an imaginary line (not the one on the road) that represents the most efficient and fastest way around the course. Every venue has a line. It is the job of the driver to find this ideal path and to utilize it.

### Loading

I'm not talking about the installation of your software here. Loading is part of the racing jargon that refers to the G-Forces (and downforce) exerted upon your car in each turn. For example, when the right front tire of your Viper is carrying most of your car's weight as it enters a left-hand bend, the corner is said to be loaded.

### Oversteering

If a car's rear tires are sliding toward the outside of a corner at a quicker rate than the front tires, the car is oversteering. It can be caused by a number of things -from tight rear shocks to just plain ol' driving inexperience.

### Slip Angle

Another reference to phenomena in the corners. The difference between the direction you are steering and the actual direction your car is traveling is calculated as the slip angle. When racing, high speeds will cause the tires to slip some in the curves. This is illustrated in life and in racing sims with the squealing tires and skid marks. Of course, if you are going to be competitive some sliding is unavoidable. As the great Parnelli Jones once said, "If your car is under control, you're too slow."

### Throttle

The throttle is just another word for the accelerator; they are one and the same thing. A popular phrase within the world of racing is "to breathe the throttle." This is, simply, letting off the throttle momentarily, only to press it again. The motion between your foot and the throttle is called this because of its obvious similarity to the pressing in and out of air by the lungs.

### Turn-In Point

Part of the three-step process of taking a curve, the turn-in point is the place where you begin turning the wheel into the bend. Think of it as the very opposite of the exit point. Here, you will begin slowing down and entering the curve, whereas with the exit point you step on the gas and enter the straightway. Often the braking point and turn-in point overlap.

### Trail Braking

Most pre-corner braking takes place in a straight line. It's just easier to control a Viper that way. Many experienced drivers, however, will brake a tad too late to slow before they turn into the corner. In this instance they will keep a light pressure on the brake (called trail braking) as they enter the corner.

### Understeer

If a car's front tires are sliding toward the outside of a corner at a quicker rate than the rear tires, the car is oversteering. It can be caused by a number of things -- from soft rear shocks to insufficient downforce at the front of the car.

---

## CREDITS

Technical Lead  
Graphics  
Biz

*RICHARD GARCIA*

"AI"  
Multiplayer  
Kernel

*DAVE BROSKE*

Physics  
User Interface  
Foley

*DAVID POLLATSEK*

Producer  
Designer

*OWEN JUSTICE*

Car Artist  
User Interface Art

*TROY HARDER*



Track Art  
Intro

*BRIAN McCABE*

Music

*PAUL ROBB*

Documentation

*MARK WALKER*

Special Thanks

*CATHERINE JOHNSON*

*BRUCE SCHMITT*

*NICK O'DONNELL*

*NATHAN GAMS*

*RYAN CLAXTON*

*SHAWN FARRELL*

*GOODBYE BLUE MONDAYS*

*DAN ROGERS*

*THE QB CLUB*

*TINY'S SMOKE SHOP*

*BLIND MICE STUDIO*

Extra Special Thanks

*EXTREME COMPETITION CONTROLS: Makers  
of the Finest Racing Controllers in the  
World*



## CUSTOMER SERVICES

---

**Technical Support Tel: (0118) 920 9111**

---

**Fax: (0118) 987 5603**

**Lines open 24 hrs, 365 days a year**, using our automated technical support attendant. This system includes answers to all commonly posed questions and problems with our new and major titles. It is set up in a friendly and easy to use menu system that you navigate through using a touch tone telephone. If the answer to your question is not in our automated system, then you will be transferred to a technician between the hours of **9am and 5.30pm Monday to Friday**.

Here are some key-presses that will allow you to navigate through our automated attendant. Note that these are the standard letter assignments that are given to UK telephones so if your phone has letters on the keypad, please use them instead:

<b>2:</b> A, B, C	<b>3:</b> D, E, F	<b>4:</b> G, H, I	<b>5:</b> J, K, L	<b>6:</b> M, N, O	<b>7:</b> P, R, S	<b>8:</b> T, U, V	<b>9:</b> W, X, Y	<b>0:</b> Q, Z
----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	-------------------

Before you call our technical support lines, please check that you have read the Readme file included on the game disk #1. You may well find a very quick answer to the problem that you are facing as these files contain answers to most common problems. If the answer is not here, make sure you have precise details of any error message that you receive, and details regarding the specifications of your computer before you call us, as this will help us in giving you a faster and more efficient service.

If you would prefer to write to us, please send your mail to the following address:

### **HAVAS INTERACTIVE UK Ltd.**

*Customer Services / Mail Order / Tech Support Department*

2 Beacontree Plaza

Gillette Way

Reading • Berkshire

RG2 OBS

United Kingdom

---

**Sierra UK Web site**

---

**<http://www.sierra-online.co.uk>**

UK Website includes technical support, mail order, chat rooms, product information, game demos and much, much more.

---

**Hintline (UK callers only)**

---

**(0891) 660 660**

24 hrs. Automated service requires a touch tone phone. Calls cost 50p/min. at all times. Max call length 7.5 minutes. Max call charge at £3.75 at all times.

## WARRANTY

Each company of the HAVAS INTERACTIVE group is named "HAVAS INTERACTIVE" in the paragraphs below:

Havas Interactive warrants for a period of ninety (90) days from the date of purchase that the software title contained in this package shall be free from defects in material and workmanship. In the event that this software title proves defective during that time period, Havas Interactive will provide the customer with a functionally equivalent disk upon receipt by Havas Interactive of proof of purchase and the defective product.

REPAIR, REPLACEMENT, OR REFUND AS PROVIDED IN THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. CUC SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some countries do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so above limitations or exclusion may not apply to you.

## COPYRIGHT NOTICE

The software title and the manual are copyrighted. All rights reserved. They may not, in whole or part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form without prior consent, in writing, from Havas Interactive. The user of this product shall be entitled to use the product for his or her own use, any commercial use being excluded, but shall not be entitled to sell or transfer the reproductions of the software or manual to other parties in any way, nor to rent or lease the product to others without written permission of Havas Interactive.

[You are entitled to use this software title on a single computer in a single location and on only one terminal at any given time. Any further use is prohibited.]