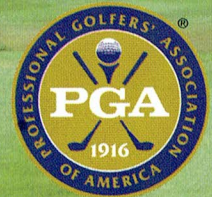
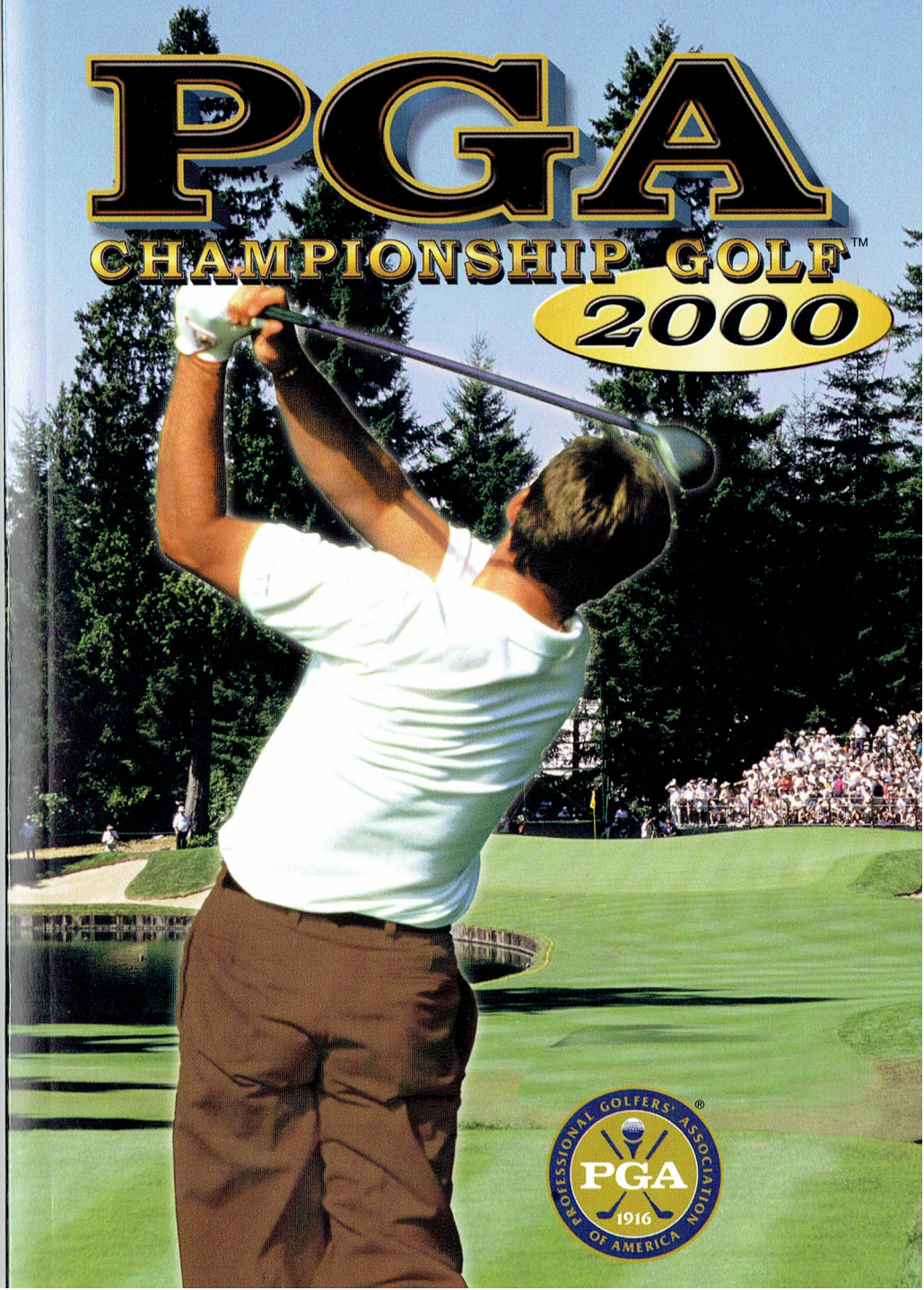


PGA

CHAMPIONSHIP GOLF™
2000



PGA CHAMPIONSHIP GOLF™ 2000

Instruction Manual

We hope that you find *PGA Championship Golf™ 2000* both challenging and rewarding. Don't expect to hit 10 under par your first round, but as you develop the skills on some of the world's best golf courses, you'll soon develop a feel for the game. We hope you enjoy many great rounds!



Table of Contents

Welcome to PGA Championship Golf™ 2000	4
Getting Started	6
Playing Golf	6
Main Menu	7
Play Golf	8
Remote Game	10
Remote (LAN/Modem)	11
Remote (Internet)	12
Remote Message	14
Game Settings	15
Courses	16
Course Conditions	19
Game Options	21
Handicap	23
Mulligans	23
Gimmies	24
Types of Play	24
Side Games	28
Who's Playing	29
Player Settings	30
Player Options	30
Tees	32
Player Ability	32
Player Editor	32
Computer Player	33
List Editor	34
Create Teams	35
Resume (Game/Shot)	36
Season Play	37
Season Selection	37
Season Schedule	38
Event Settings	38
Machine Options	41
General Options	41
Sound Options	42
Course Options	43
Golfer Options	43
Menu Options	44
Game Menu	45
Action Menu	46
View Menu (Game)	47
Window Menu (Game)	48
Button Bar (Game)	48

Camera Editor	49
Swing Camera	50
Analyze the Shot	52
Choosing a Club	53
Changing the Club	55
Drop Ball	55
Grid	56
Shot Setup	57
Swing (Tri-Click)	58
Swing (TrueSwing)	59
Putting and Chipping	61
Scores	62
Statistics	63
Using the Course Architect	64
Menu Options (Architect)	65
File Menu	65
Edit Menu	66
View Menu (Architect)	67
Librarian	68
Tools Menu	69
Land Tools	71
Optimize Detail	73
Window Menu (Architect)	73
Button Bar (Architect)	74
Status Bar	75
New Course	76
Land Shapes	79
Path Shapes	81
Object Placement	81
Hole Information	85
Course Perimeter	86
Work Window	87
Camera Window	87
Course Manager	88
Trouble Shooting	90
Trouble Shooting (Game)	90
Trouble Shooting (Architect)	92
Technical Support	93
Direct Sales	94
International Support	96
Credits	96

Welcome to PGA Championship Golf™ 2000

Thank you for purchasing PGA Championship Golf™ 2000. We are very pleased to bring you this third addition in a great series of golf games from Sierra Sports. We appreciate the continued support of our customers and all of the feedback that has helped us mold the game into its current state. PGA Championship Golf™ 2000 offers many great new features that I'm sure you will enjoy, but it has also undergone a great deal of refinement and polishing.

Those of you who are familiar with the PGA Championship Golf™ series will be happy to find that we have stayed true to our philosophy of making solid gameplay a priority. The golfers are still made of polygons and still controlled in real-time as an extension of your mouse movements. The ball physics have received significant attention, particularly in the collisions with turf, and you'll notice a more realistic backup, check, or release of the ball.

You'll also notice on your very first drive that TrueSwing™ has been modified. Fluid movements with good pace and tempo are rewarded. The new mouse motion captures the exhilarating feeling of a smooth golf swing, but also the frustration of a rushed golf shot. Even with the most intimidating forced-carry, a steady, confident swing will serve you best.

Because we realize that not everyone plays golf over the Internet, PGA Championship Golf™ 2000 now provides enjoyable off-line play through comprehensive seasons. You can set up and play in a series of tournaments throughout a season against a hundred other players and work your way to the top of the money list.

Many of the most significant improvements to the Course Architect are under the hood. You are freer than ever to create any course you can imagine. Better still, key improvements to the detail management and terrain engine have made it faster and more efficient to use.

While we believe that enjoyable game play is the highest priority, realistic and stunning graphics make the game fun. Accordingly, we've upgraded our rendering techniques significantly and improved all of the course and golfer graphics.

This latest addition to the series is definitely a PGA Championship Golf™ product. When you play PGA Championship Golf™ 2000, you play as a virtual golfer in a three-dimensional world that models the laws of physics and the game of golf without cheating. If you master the skill of the golf shot and learn to work that skill against the course, you'll become a better golfer and have a lot of fun in the process.



Vance Cook
President, Headgate Studios

Getting Started

If *PGA Championship Golf™ 2000* has been successfully installed, an opening screen will automatically appear when the CD is put into the drive. The opening screen will contain selections that enable the game or the *Course Architect* to be run.

If a full install has been done, *PGA Championship Golf™ 2000* can be started without putting in the CD. To begin, just click on the shortcut icon in the Start Menu. Select **Programs | Sierra | PGA Championship Golf™ 2000** and then:

- **Course Architect:** to create or edit a custom course.
- **Course Manager:** to run the course manager and install, move, and delete courses.
- **Playing Golf:** to run the game.

Context-Sensitive Help is available within the interface throughout *PGA Championship Golf™ 2000*. This feature can be accessed by the following methods, depending on the current mode of operation.

- From the Help Menu by selecting **On Item**
- By pressing the hot key **[F1]**
- By clicking the **[?]** button in the upper right corner of some windows
- By clicking the **Help** button in the lower right corner of some windows

After selecting context-sensitive help, click on the area of the screen in question.

Tool Tips are available. Simply place the cursor over an icon to see the tool tip message. They can be turned off using the *Window Menu*.

Playing Golf

Once the game application has started, press any key or click on the screen to dismiss the introductory movie. The interface is in Wizard format and will lead you through the process of starting a game. The general process is as follows:

Main Menu - This is the first screen to appear. This is the starting point to the interface and used to start a game.

Play Golf - Select between local, season, and remote games.

Game Settings - Choose the course conditions and rules to play by.

Create Players - Create a player to add to the game. Choose name, clothing, ability and other attributes for your player.

Who's Playing - Select the players who will be playing in the game.

Note: You can navigate past this entire area by selecting *Quick Start* from the *Main Menu*.

At the end of the interface Wizard, the game will begin. Other players might take their turns before your player but eventually you will be at the tee. The general game play will go as follows:

Menu Options - Use these options to make selections and customize the game.

Create Cameras - Put cameras on your competitors, make multiple views of the course, or change existing views of yourself.

Swing Camera - The Swing Camera contains the control interface for playing the game.

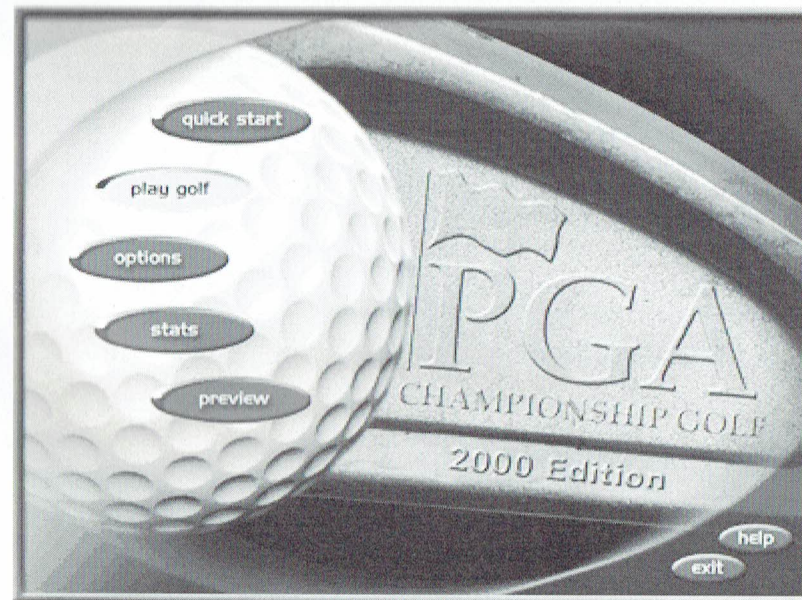
Analyze The Shot - Check the conditions and distance to the area you want your ball to land, and adjust the aim, club and golfer's stance.

Swinging the Golfer (Tri-Click or TrueSwing™) - Take the shot using the player's control method.

PGA Championship Golf™ 2000 (Philosophy) - In the game of golf, professional golfers are separated from the rest of us by their ability to evaluate a shot and execute it. Evaluating a shot includes judging wind speed and direction, analyzing the distance and elevation of the pin, considering the lie, and calculating the break of the green. Executing that shot includes motor coordination, which can be the most difficult part. With *PGA Championship Golf™ 2000*, we have created a simulator that allows you to control both of these characteristics. How well your player does depends directly on your ability to evaluate a shot and master the swing. Whether you are using Tri-Click or TrueSwing™, your knowledge of golf and the accuracy of your swing is what will ultimately win the round.

Main Menu

The *Main Menu* is the starting point for each game. To get back to the *Main Menu* during a game, just select *Main Menu* (**Ctrl + M**) from the *Game Menu*.



Select an option by clicking on the text.

Quick Start - The *Quick Start* option will allow you to skip the setup screens and begin playing immediately. It starts a new round using the setup options from the last game that was played. Default players are shipped with *PGA Championship Golf™ 2000* so you can utilize *Quick Start* the very first time you load the game.

Play Golf - Opens the *Play Golf* screen to choose between local, season, or remote games. This begins a new game.

Options - Opens the machine *Options* screen to customize the settings for rendering and sounds.

Stats - View the stats of current players and currently installed courses.

Preview - Opens the tutorial on *PGA Championship Golf™ 2000*. You will need the installation disk to run the preview.

Help - Starts context sensitive help.

Exit - Terminate the application.

Play Golf

You can play alone at home, with co-workers over a LAN (local area network), join up with friends across the country via modem, or using the *World Opponent Network (WON)* and establish golfing buddies around the world. If you have the desire to play golf, *PGA Championship Golf™ 2000* provides you the opportunity to get connected.



Click on the type of game you wish to play.

Local Play (single computer) - One or more users playing from the same machine. Each user can control one or more players/golfers, or play against groups of computer players.

Create Game - Brings up the *Game Settings* screen to begin the process of starting a new game.

Practice Game - Brings up the *Game Settings* screen. Trying to gain some experience without being forced to follow the fairway. Only one person will be allowed to play. Using the entire course as a practice area or just hitting some balls at the driving range. Practice is recommended for those just starting out. No score is kept, and you have a bunch of practice balls. Just swing away and hope no one is watching.

Resume Game - Brings up the *Resume Game* screen to resume a previously saved game or shot.

Season play (single computer) - One or more users playing on the same machine. Each user can control one or more players/golfers and play against groups of computer players. This option will bring up the *Season Selection* screen to select or create a new season.

Play Season - Select a season to play. The next round in the current event will be played. Once a season is created, use *Play Season* to access the next round. If the round was saved before completing it, use the *Resume Game* screen to finish playing.

Create Season - Create a new season by typing the name of the season to create. This screen is followed by the *Season Settings* screen where the season can be customized.

Edit Season - Select a season to edit. This screen is followed by the *Season Settings* screen where unplayed events can be changed.

Delete Season - Select a season to delete and confirm the deletion. The season will be permanently removed.

Remote Play (multi-computer) - Remotely connect with friends using an Internet connection, direct modem connection, or with co-workers across a LAN.

Internet - Allows you to play with people all over the world via this *free* Internet gaming system. This option will bring up the *WON* interface for logging into the server, meeting up with people, and starting games or tournaments.

IPX/LAN - Remotely connect with co-workers across a LAN (local area network) using IPX via Microsoft's *Direct Play™*.

Modem - Remotely connect with friends using a direct modem connection via Microsoft's *Direct Play™*.

Note: *Hosting and Joining a Remote Game are similar for all connection methods.*

- **Cancel** - to go to the *Main Menu* screen without saving the changes.
- **Back** - to return to the *Main Menu* screen after saving the changes.
- **Next** - to advance to the *Game Settings*, *Season Selection*, or *Remote Game* screen.

Remote Game

Remote games play much like local games, except that you must first establish a connection with the other computers involved. *PGA Championship Golf™ 2000* uses the concept of a *PGA Championship Golf™ 2000* in order to start a remote game. The Game Host is the player who starts the remote game, chooses the game parameters, and waits for the other players to join.

The general outline for setting up a remote game is as follows:

1. Establish a connection.
2. The Game Host starts a game.
3. Other players wishing to compete in the game can then join.
4. Those who are joining then select which golfer(s) they want to use in the game.
5. The host then selects the golfers who will actually play in the game, then starts the game.

There are two types of remote connections available in *PGA Championship Golf™ 2000*:

Internet - The World Opponent Network (WON) option allows you to play with people all over the world via this free Internet gaming system.

Direct Play (LAN/Modem) - Remotely connect with co-workers across a LAN (local area network), or with friends using a direct modem connection.

Hosting a Game - Choose to host the game using one of the connection methods provided. The *Game Settings* screen will be displayed followed by the *Who's Playing* screen. After selecting the game settings, the game is started and other players may begin to join. The host may then monitor the players joining on the *Who's Playing* screen and start the game whenever desired. Players who have not been selected to play will be removed from the game. Leaving a game at certain times can make it impossible for the game to continue. For example, if you quit while waiting for other players to join the game, the remote game will end and any players who have joined up to that point will be removed. On the other hand, if you leave a game that you are hosting after all players have joined and the game has started, most types of play will allow the remaining players to continue without you. You will always be informed if leaving a game will cause the game to end.

Joining a Game - Choose to join a game using one of the connection methods provided. Once you have joined a game, you will be taken to the *Game Settings* screen. You will not be allowed to change the settings and will not be allowed to continue from this screen if you do not have the course being played. If you have the course and joined the game when prompted, you will then be able to select player(s) from the *Who's Playing* screen, however, if a game is using *handicaps* or you will only be allowed to select player(s) who have established handicaps or have enough points. The host will not see the player(s) you have selected until you are finished with the *Who's Playing* screen. At that point, the host may elect to remove some or all of your players from the list. The game will begin when the host is finished with the *Who's Playing* screen. If all of your players have been removed, you may join the game in progress but you will not be playing with the initial group.

Watching a Game - Choose to join a game using one of the connection methods provided. Once you have joined a game, you will be taken to the *Game Settings* screen. You will not be allowed to change the settings and will not be allowed to continue from this screen if you do not have the course being played. If you joined the game after it was started, then you will be asked if you want to watch or join the game already in progress. Choose to watch the game.

In the Game - On-screen messages allow players to communicate with each other during game play. Players can send text, motions, and sounds to everyone, or specific players. This is perfect for those moments when you simply must comment on your opponent's most recent slice into the bushes, and to give the thumbs up to your teammates.

Rejoining A Game - If you are disconnected from your current game, you may rejoin that same game as long as there is at least one player still in the game. However, if you voluntarily shut down the game by clicking on **Exit**, then you will not be allowed to rejoin.

To rejoin a game:

- If the game was terminated, you must restart it. You will then be asked if you wish to resume your previous game. Selecting **Yes** will lead you through the process of rejoining. Selecting **No** will not permit you to rejoin.
- If your remote connection was disconnected, reconnect without exiting the game. Find the game you were playing and double-click on it.

Note: To avoid long waits between turns, players should be placed in groups no larger than four. For example, if eight friends organized a remote game, the players should be organized into two groups of four or four groups of two. The scores for all players in the remote game are posted on the Leaderboard and players can be viewed by creating a custom camera to follow that player.

Remote (LAN/Modem)

Select *Remote (LAN or Modem)* from the *Play Golf* screen. The connection will be made via Microsoft's DirectPlay™, a family of connection technologies that allow you to play over various connection types (DirectPlay is part of DirectX, which is provided for you if your system doesn't already have it installed).

Connection Methods - If your system has the necessary components for the DirectPlay option, the connection will be made. For example, if your system doesn't have a modem installed, the *Modem Connection* option will not work.

LAN Connection - Select this to play across a network that supports the communications protocol, then start or join games on the Local Area Network. When DirectPlay searches for available games on your network, only games that have been started by users on your same subnet will be found. These games will be displayed on the *IPX/LAN Play* screen.

Modem Connection - Enter the phone number of a machine to connect and configure the modem you will use.

IPX/LAN Play Screen - Displays the games that are available to join and allows a host to start a new game. The available game list will refresh periodically.

Start Game - Type the name of the new game into the edit box in the upper left portion of the screen, then click the **Create** button. Other players will see the newly created game and will be able to join it.

Join Game - Double-click the name of a game to join. If the game has already started, then choose to join the game when prompted.

Watch Game - Double-click the name of a game that has already started, and then choose the game to watch when prompted.

Note: *Hosting and Joining a Remote Game are similar for all connection methods.*

LAN Installation - You can install the game on a server connected to the LAN. This will reduce the disk space required on your machine and increase the performance compared to running from the CD.

Requirements - Make sure you have at least 650 MB available on the server.

Copy Courses - Copy the contents of the **Courses CD** to a directory on the server.

Installation - Install the game using the Compact installation from the **Installation CD**. When you are prompted to put in the second CD, edit the directory path to point at the directory on the server where the contents of the **Courses CD** have been copied.

Note: *If you have a course installed on a LAN, you can use the Course Manager to install that course for all machines intending to use it. Use the Course Properties to change the location of the course.*

Remote (Internet)

The Internet is a great resource for gamers looking for a good round of golf against an opponent across town or across the globe. To play over the World Opponent Network (WON), you will need Internet access through an online service or through an Internet service provider (often referred to as an "ISP"). You will need to have a working Internet SLIP/PPP connection that supports WinSock32 to play PGA Championship Golf™ over the Internet. You should also have at least a 28K modem, although a 56K modem is strongly recommended. Contact your ISP or online service if you are unsure whether they provide this type of Internet access or if you have questions regarding how to connect to the Internet. Some Internet connections can be initiated automatically by the World Opponent Network (WON) through Windows; if you have problems using this method, connect to the Internet through your ISP before attempting to play PGA Championship Golf™ over the Internet.

Note: *For current up to date Internet information, go to:
<http://www.sierra.com/sierrasports/golf2000/>*

The WON Validation Screen -

When you select Internet from the Play Golf screen, you will see your computer begin connecting to WON. When your machine is connected to WON, you will see the WON login screen. Here you should enter a user name and password, which you will use when you play PGA Championship Golf™ and other games over WON. (If you have already played another game over WON, you can use the same user name and password that you used for that game.)

- Click **Login** from the WON validation screen to begin.
- Select **New Account** if you have never logged on before.
- Enter a **Member Name** and **Password**.
- **Exit** to return to the *Play Golf* screen.

The WON Gathering Place -

In the WON Gathering Place, you can send messages to other players and host or join a game. The Gathering Place is divided into rooms and you can enter the rooms by double clicking on them or selecting the **Join Room** button.

The WON Rooms - There is a room for each available course, and many other user created rooms.

Course Rooms - There is a room dedicated to each of the provided courses. You can enter rooms which are using a course that you do not have installed on your machine, but you will not be able to play a game on that course without first installing it.

Available Games -

When you have entered a room, you will see all of the players who are in the room with you, as well as any games that have been started. The room will refresh periodically.

Start Game - Click the **Create Game** button, then choose a name and select details about the game, such as how many players you will allow to join. Once the game has been created, you can either wait for players to join your game or invite other players in the room to join. When at least one other player has joined your game, click **Start Game** to begin the game. The game will start automatically if the maximum number of players that you chose to allow to play have joined your game.

Join Game - Select the one you want to join and click the **Join Game** button. The Game Host can then accept or decline your request to join the game, or if you are a late comer, you will be able to join the

game already in progress but will not be playing with other players. If the game has already started, then choose to join the game when prompted.

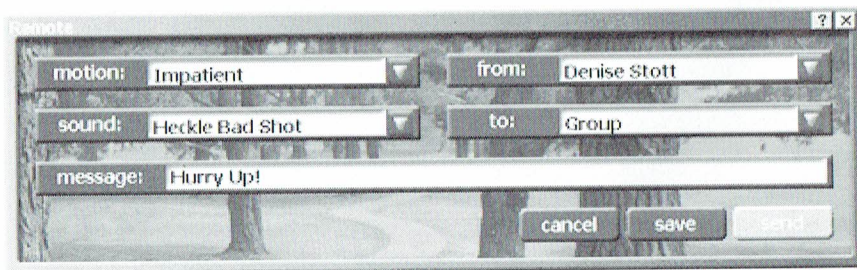
Watch Game - Select a game that has already started and click the **Join Game** button. Choose to watch the game when prompted.

Hosting and joining a remote game are similar for all connection methods.

Note: More details about WON and the Gathering Place are available through the WON online help feature (requires a Web browser to view) or the WON web site (www.won.net). If you encounter problems connecting to WON or playing a game, try the suggestions in the online WON help or contact technical support.

Remote Message

PGA Championship Golf™ 2000 provides on-screen messages for remote games, which allow you to communicate with other players in the game without cluttering up your screen with a message window.



To send a message, press either **F5**, **F6**, **F7**, **F8**, **F9**, **F10**, or **F11** keys, type your message in the space provided, select a motion and sound you want your golfer to perform, then click Send. Each of these function keys saves the last message so you can easily resend the same message later. You can choose an individual player to send to, or broadcast your message to everyone in the game. If multiple players are

playing from the same computer, you can select which of the players will respond. The message you send will appear on your screen and the screen of every player who receives the message.

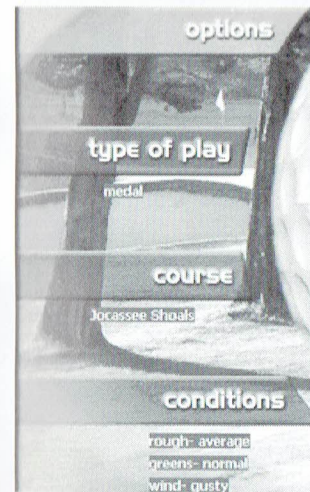
You can pre-select messages for your function keys by pressing **Save** instead of **Send**. The next time you open the message, it will default to the last saved message. For example, you could setup the **F8** key to broadcast an excited sound and motion, and then always use the **F8** key when responding to excellent shots.

You may send a “Hurry up” message to all players by pressing the **F12** key. This sends the message “Hurry up” to all players in the game and plays one of the heckler comments.

All of the function key messages are available through the *Remote Menu* in the *Menu Options*. It has entries for all seven regular message keys **F5-F11**, **F12** (Hurry Up), and Clear Messages (**Delete**).

Game Settings

PGA Championship Golf™ 2000 allows you to customize a game in several ways. You will get to choose a course and its conditions, number of holes to play, the rules for the round, and what type of play to use. To adjust settings for the round, select *Play Golf* from the *Main Menu* screen, and then create a local game from the *Play Golf* screen.



Click on the tabs to view the selected settings.

- **Game Options** - Set the rules to follow for this round.
- **Type of Play** - Select a type of play for this round.
- **Course** - Select a course to play, if the course name is *Unknown*, you do not have the selected course and cannot continue from this screen.
- **Conditions** - Choose the course conditions to play in. If *Vary Conditions* is selected from the *General Options* screen, the conditions will be automatically varied per round.
- **Cancel** - to go to the *Main Menu* screen without saving the changes.
- **Back** - to return to the *Play Golf* screen.
- **Next** - to advance to the *Who's Playing* screen.

Courses

Select a course to play from the course list on the *Game Settings* screen under the *Course* tab.

Select Course - Shows a list of installed courses. Select a course to play on the next round.

Course Manager - Brings up the *Course Manager* to install, move, or delete courses.

Course Text - Displays a written description of the course and the special features it includes.

Course Tour - Displays a short video that provides a look at the course, highlighting its special characteristics.

You can create your own courses using the *Course Architect* or download courses that have been made by other players.

Note: Add-on courses are available through software retailers and the *Course Architect*. The name of the add-on course will appear in this screen once the *Course Manager* installs it.

PGA Championship Golf™ 2000 comes with thirteen ready-made courses.

1. Royal Birkdale (in northwest England) - Since its founding in 1889 near Liverpool in northwest England, the Royal Birkdale Golf club has become one of golf's truly legendary courses. Steeped in tradition, Royal Birkdale has hosted every major golf event in the United Kingdom: eight Open championships, including the most recent in 1998, two Ryder Cup Matches, the Walker Cup, the Curtis Cup, and numerous amateur tournaments. Repeatedly ranked one of the top two courses in the entire British Isles by *Golf World*, Royal Birkdale is also consistently rated among the top ten courses on earth by many of golf's greatest players. Royal Birkdale's present course was created in 1931, and fine-tuned in succeeding years to incorporate advances in equipment, course design and talent. Currently, the links provide a "challenging, but fair" test. Each hole of the 6,940 yard, par 70 course essentially runs in a valley between majestic sandhills. Staying on the fairway is demanding; but stray off it, and Royal Birkdale's rugged terrain, towering sandhills, buckthorn and scrub will quickly turn severely punitive. Granted Royal patronage in 1951, the Royal Birkdale Golf club today proudly maintains its tradition of rigorous perfection. After 100 years, Royal Birkdale still delivers unsurpassed golf to players from around the world: a premier course in the land where golf was invented.

2. Sahalee (in Northwest Washington) - Rated one of America's 100 greatest golf courses by *Golf Digest* every year since 1979, the renowned Sahalee Country Club lies in the shadow of mighty Mt. Rainier on the Sammamish Plateau of Northwest Washington. Sahalee, meaning "High Heavenly Ground" in the Chinook language, combines the scenic wonders of the Great Northwest, with the athletic rigors of world-class golf. Extremely demanding, both mentally and physically, the club has

hosted numerous tournaments over the years, including the 1998 PGA Championship. Offering snug fairways, artful trapping, and 6,955 yards of annual bluegrass and bentgrass perfection, Sahalee challenges even the best of golfers with rolling hills, seven lakes, and over seventy-five sand bunkers in a par 70 course. Created by master designer Ted Robinson, past president of the Society of Golf Architects, the Club first opened in 1969. Today, Sahalee continues to provide its brand of superlative golf amidst the rugged beauty of the Pacific Northwest.

3. Pasatiempo (in Santa Cruse, California) - Nestled in the hills of Santa Cruse on the rugged California coast, Pasatiempo escapes from the rising crags and the crashing surf to reveal the majesty recognized as one of the great courses designed by Alister Mackenzie. Well Augusta may be Mackenzie's most famous course, Pasatiempo, Spanish for passing of time, was his most beloved, with the sixteenth hole his favorite in all of golf. Opened in 1929, this 6,483-yard par 71 links style course, offers eighteen of golf's most challenging holes. True to the rugged terrain of the Monte Ray peninsula, Pasatiempo is not for the faint hearted. With its numerous sand traps and complicated rolling greens, the berankas or deep ravines, cut across the back nine and force the choice between heroic shots or conservative routes, the true signature of Mackenzie's course. Neither the competitive golfer, nor the computer golf enthusiasts should miss the challenge of Pasatiempo.

4. Black Diamond Ranch (in Lecanto, Florida) - Set in the rolling countryside of Florida's Natural Coast, Black Diamond Ranch offers 27 holes of championship golf. Designer Tom Fazio's famed 18-hole "Quarry" course is ranked #1 in the state by *Florida Golfer Magazine* and one of the top 45 nationwide by *Golf Magazine* and 65th in the world! Opened in 1987, this 7,159 yard, par 72 course is carved out of a limestone quarry. A mix of extreme elevation changes, rolling tree-lined fairways, native sand dunes and exceptional design features compliment Black Diamond's Signature holes, #13 through #17. These five challenging holes run over and around the jagged and rocky cliffs of two retired quarries. Vertical drops of 100 feet, large boulders, wild flowers, cliffs, and the crystal clear Black Diamond Lake make these holes some of the most exciting to be found. A mere 15 minutes from the Gulf of Mexico, this lush private golf course is a must for any serious computer golfer.

5. Pete Dye Golf Club (in Bridgeport, West Virginia) - Located in a majestic, private valley, the legendary Pete Dye Golf Club combines the spectacular terrain of the West Virginia hills with the design genius of Pete Dye to create one of the most exciting and memorable courses any golfer could ever hope to play. The Club -built on the site of a 19th century mine run by the world's largest coal company -has preserved the remnants of that earlier era with museum-like quality, and integrated them into its design. Of course, there's all the Pete Dye trademarks in the layout as well -such as deep, pot bunkers, wide fairways, and unobstructed green approaches. Since 1993, the private Club's 7,166 yard, par 72 course has presented a unique, uninterrupted experience between architect, game, and nature. The Pete Dye Club is a premier target course, sure to challenge even the most ambitious and proficient of golfers.

6. The Prince Course (in Kauai, Hawaii) - Welcome to Hawaii, and eighteen of the most magnificent holes of golf on earth. Located on the island of Kauai, the internationally renowned Prince Course straddles the striking bluffs that lead from the shores of the blue Pacific up to the island's central headlands. Overlooking the scenic glories of Hanalei Bay... at one with nature... the Prince climbs uphill, leaps ravines, fords waterfalls, and then careens headlong back down towards the sea. Integrated with the elements, challenging in the extreme, this 7,309 yard, par 72 signature course was designed by Robert Trent Jones, Jr., and opened in 1990. Now ranked the Number One course in the entire State of Hawaii, The Prince - with its stunning views and superlative play - is truly the golf world's reigning tropical paradise.

7. Coeur d'Alene Resort (in northern Idaho) - America's most beautiful resort golf course hugs the shore of Idaho's scenic Lake Coeur d'Alene in the rolling foothills of the Rocky Mountains. It does more than hug the lake; the Coeur d'Alene course actually extends *into* the lake, to provide one of the truly unique challenges of the entire golf world: the planet's only floating, moveable green. As well as its famous man-made floating green, the 6,309 yard, par 71 Coeur d'Alene Resort Golf Course features bent grass fairways, an over-the-water driving range, and manicured greens. Designed by Scott Miller - for years the chief designer of courses "by Jack Nicklaus" - and opened in 1991, The Coeur d'Alene provides topnotch golf amid the splendor and tranquility of the rugged, untouched West.

8. Jocassee Shoals (in northwestern South Carolina) - This course was designed by Jim Dickson and created using the *PGA Championship Golf™ 2000* Course Architect. Nestled above Lake Jocassee in the foothills of the Appalachian Mountains, Jocassee Shoals is a nature lover's paradise. Rock and brush outcroppings serve as natural hazards, and the layout is routed with great care around two small mountain lakes. The crowning jewel is majestic Lake Jocassee, which frames several holes as a scenic backdrop. Despite its relatively short length from tee to green, Jocassee Shoals offers a variety of strategic and shot-making challenges in a beautiful setting.

9. Canaveral Dunes - This course was designed by Brian Silvernail and created using the *PGA Championship Golf™ 2000* Course Architect. Canaveral Dunes is an original design set in east Florida between the Banana River and Atlantic Ocean. The course winds through tree-lined inland holes to rolling dunes along the beach. Accuracy and strategic shot placement are keys to success at Canaveral Dunes due to the ample number of water hazards, native trees, and palm scrub that border the course. Enjoy the warm sun and cool ocean breezes.

10. Cabo del Diablo - This course was designed by Brian Copfer and created using the *PGA Championship Golf™ 2000* Course Architect. Located in Baja California Sur, 5km outside the town of La Paz near the Sea of Cortez, this course is a private 18-hole Championship course. Laid out at over 7,000 yards, the course provides a real challenge for low handicap golfers but is still great fun for beginners with its numerous sand traps and colinas. Pin placement is a key to club selection as the distance into greens may vary as much as 20-40 yards. Most greens slope from back to

front, thus flying the pin will result in tricky downhill putts. Occasionally, prevailing winds tend to circle the course as they come off the mountains, forcing the golfer to think twice before making a club selection. In an effort to protect its beautiful natural surroundings, motorized carts are forbidden and numerous out-of-bounds markers line every fairway.

11. Gloucester Golf and Hunt Club - This course was designed by Steve Opfer and created using the *PGA Championship Golf™ 2000* Course Architect. Gloucester Golf and Hunt Club is a fictional design by Steve Opfer created especially for PGA 2000. The course simulates golfing in the pastoral British countryside and emulates Nick Faldo's "Americanized" style of course design. It features plenty of rolling hills as well as heavy brush, deep grass, firm fairways, and fast greens... each a tradition of British golf that can bring out the hacker in even the best of champions.

12. Monterey Shores Country Club - This course was designed by Ken McHale and created using the *PGA Championship Golf™ 2000* Course Architect. Set along the scenic shores of the Monterey Peninsula, the spectacular Monterey Shores Country Club offers a unique challenge in golf. This 7,227-yard Par 72 course accommodates some of the PGA Tours best and most prolific golfers. The course supports seven of its eighteen holes running perilously along the rugged peninsula coastline. Hole number seven's higher second green offers exquisite views over its sister green, as well as the Monterey Bay, on the double green Par 3, staged in the string of shore line holes. The Championship Course ranks among one of the longest in the PGA Tour and is sure to challenge even the best golfers.

13. Whisperwood Golf Club - This course was designed by Jim Dickson and created using the *PGA Championship Golf™ 2000* Course Architect. Whisperwood Golf Club is tucked away amid the peaceful sand hills of the North Carolina piedmont. The course was constructed in 1955 on a gently rolling, pine-covered plot of land. Golfers will enjoy the scenic beauty of the Lumber River as it winds through the course on its way to the Atlantic. Whisperwood offers a variety of shot-making challenges for players of all ages and abilities. Better bring your "A" game for the sixth and fifteenth holes, though; miss these island greens and your ball will be swimming.

Note: *The courses created using the Course Architect can give you an idea of what can be built using it.*

Course Conditions

Select the *Course Conditions* tab from the *Game Settings* screen. The default course and weather conditions provide a normal day on the course. Changing these conditions allows you to change the difficulty of the game. You can view the conditions during the game by looking in the upper left corner of the *Scores* screen or by right-clicking on the sky from any view.

There are three course conditions that are customizable:

Rough Length - Adjust the length of the rough grass. Changing the length of the rough will affect a swing out of the rough and the ball speed as it comes in contact with the rough.

Short (freshly cut) - It is easy to hit the ball out of short rough. The ball tends to travel longer distances because the club and ball are not slowed by impact with the rough. It is easy to make good contact with the ball.

Average (an average course on an average day) - The ball tends to travel shorter distances than what would be expected because the club and ball are slowed by impact with the rough. Miss hits can be caused by the grass interfering with a club's alignment with the ball.

Long (moments before the mowers are started) - It is difficult to hit the ball out of long rough. The ball tends to travel shorter distances because the club and ball are drastically slowed by impact with the longer grass. Using one club longer ("clubbing up") would be a good idea in long rough. Miss hits are frequent because the long grass exaggerates a misaligned club face.

Green Conditions - Adjust the moisture on the green. Moisture has the greatest effect on the green.

Wet (shortly after a rain shower) - When the ball is hit onto the green, it will lose most of its momentum on impact. The green tends to act as a wet sponge and will cushion the ball as it lands. Putts tend to be short because of increased friction.

Moist (early morning dew) - The ball will lose some momentum on impact with the green. The green will cushion some of the momentum as it gives a little. Putts tend to be slightly shorter because of increased friction.

Normal (average green on an average day) - The ball will be slowed somewhat by the grass. Learning to putt on normal green conditions will help your ability to adjust for other green conditions.

Dry (a summer afternoon) - It is more difficult to keep approach shots on a dry green because of the tendency for a ball with momentum to bounce when it hits. Putts tend to roll longer than usual because of reduced friction.

Very Dry (summer in the desert) - The ball will ricochet off the green at first impact. The ground is hard and does not give at all. You'll need to roll approach shots onto the green. It will seem impossible, at times, to hit a short putt because of decreased friction.

Wind Conditions - Adjust the strength of the wind. The wind will affect the ball while in the air. A gusty wind can be unpredictable, which makes it hard to play in higher winds.

Still (zero wind) - This option is good for testing swings. Turning off the wind can help you concentrate on the swing, not the weather. This is a rare condition in the real world.

Calm (ideal golfing conditions) - There is generally some amount of wind during calm conditions, anywhere from zero to five miles per hour for a calm day.

The wind rarely changes direction or gusts. The wind can carry the ball a little and hopefully result in better placement. This is considered a normal condition.

Breezy (summer breeze) - Anywhere from five to ten miles per hour. The wind rarely changes directions or gusts. A tail wind can carry the ball a few yards on long drives. This is considered a normal condition.

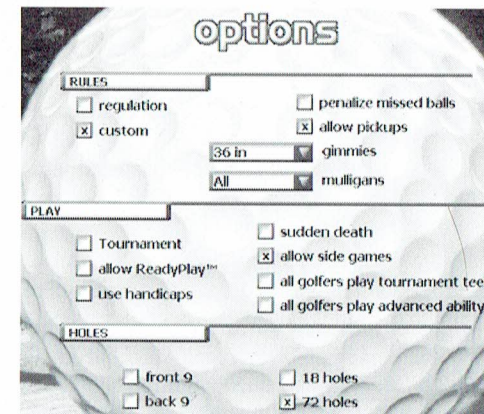
Gusty (Don't forget your kite) - Quite a bit of wind for playing golf. Anywhere from ten to twenty-five miles per hour. The wind changes direction frequently and will gust at times. A tail wind can carry the ball great distances during strong gusts. This is considered an unusual condition.

Strong (batten down the hatches) - Bring plenty of balls and some goggles. Anywhere from twenty-five to forty miles per hour. The wind changes direction frequently and will gust at times. The wind will completely destroy that perfect shot and ruin your new do. This is considered to be good weather to stay inside and play *PGA Championship Golf™ 2000*.

Note: You may set the course conditions to change randomly in the General Options. However, all conditions will be in place for the entire round or tournament.

Game Options

The game options can be changed on the Game Settings screen. Select the rules, play, and number of holes to play.



Click on the options to change the settings.

Rules - Choose the rules to use during this round.

Regulation - Forces all the rules to be regulation rules. No mulligans or gimmies will be allowed, but statistics will be calculated. Each player must play at least one round of 18 holes using *Regulation* rules in order to establish a handicap.

Custom - Allows you to choose which of the following rules you wish to enforce during the round. Mulligans and gimmies will be allowed, but course and player statistics will not be calculated during the round. Players will not receive a handicap from a round of golf if this is selected.

Allow Pickups - In some types of play you will be allowed to pickup your ball when you no longer have an opportunity to win the hole. If this rule is selected, you will be able to pickup the ball and head on to the next hole without holing out. This option is not used if *Regulation* is selected.

Penalize missed balls - A penalty stroke will not be added when a player misses the ball. This option is used if *Regulation* is selected.

Mulligans - Choose the number of mulligans a player can take. This option is not used if *Regulation* is selected.

Gimmies - Choose the distance from a hole that you will allow players to take gimmies. This option is not used if *Regulation* is selected.

Play - Choose how competitively the game will be played.

Tournament - Intense competition feel for those trying to gain the status of a champion. On some courses there will be galleries of people watching the round and announcers will give play-by-play commentary. The crowds will cheer when you make that long putt and sigh when it misses. It creates the feeling of being in a tournament and adds a little extra excitement to the round.

Allow ReadyPlay™ - Allow players to go to their ball and swing whenever they want. This option greatly accelerates game play but should be turned off by the purists who want to force honors. Use the *Camera Editor* to select which player to follow.

Use Handicaps - Require each player to have a previously calculated *Handicap* (play a round of 18 using *Regulation* rules.) The handicap of each player will be used to calculate the total score and determine the winner. The scorecard will show the handicap for each hole and the handicap for a team will depend on the type of play.

Sudden Death - Provides a way to resolve a tied round. If a tie occurs at the end of a round, the tied players will play an additional hole. The player with the best score for that hole wins the entire round. If players tie again, then additional holes are played until one player shoots a lower score.

Allow Side Games - Allows players to select which side games to play by bringing up the *Side Games* screen after the *Game Settings* screen. This option will not be available if *Skins* type of play is selected.

All golfers play tournament tees - Force all players to start from the tournament tees regardless of which tees the player had previously selected. Tournament Tees are the furthest tees from the hole.

All golfers play advanced ability - Force all players to use the advanced ability level regardless of the *Ability Level* that a player may have previously selected. Advanced ability level is the most difficult to master.

Holes - Choose the number of holes to play. The options include the front 9, back 9, 18 holes, and 72 holes (for those who just can't get enough satisfaction from an eighteen-hole round). If playing in practice mode, you can choose to go to the Driving Range, Chipping Area, Putting Green, or any hole on the selected course.

Handicap

In general, a handicap is a number that would be subtracted from your average score for 18 holes to achieve a net score of par for the course. For example, someone with a handicap of 18 would normally shoot around 90 on a par 72 course. Handicaps affect your score in different ways depending on the type of play selected.

To establish a handicap, a player must first be playing with *Regulation* rules selected from *Options* on the *Game Settings* screen. Then, choose one of seven *Regulation types of play*: **Medal, Match, Stableford, Four Ball Match, Four Ball Medal, Four Ball, Stableford**, and **Skins**. Finally, the player must complete 18-holes in one sitting. A new handicap will be generated which considers the difficulty of the course and the player's score for the round. The course difficulty can be viewed on the *Scores* screen during a game. The first number is the **CourseScoreVelocity** and the second number is the **EffectiveCoursePar**. The new handicap will be calculated using this formula:

$$\frac{((\text{RoundScore} - \text{EffectiveCoursePar}) / \text{CourseScoreVelocity})}{1}$$

The player's final handicap will be calculated using the player's last twenty handicaps according to the following method:

Number of Handicaps	Average of Lowest
1 - 6	1
7 - 16	(Number - 3) / 2
16 - 20	Number - 10

The handicap is continually tracked and updated for each player as subsequent rounds are played. Players must have established a handicap to participate in any game that has *Use Handicap* checked on *Options* in the *Game Settings* screen. The handicap that is used during the round will be adjusted considering the difficulty of the course being played. The handicap that is used will be calculated using this formula:

$$\text{Handicap} \times \text{CourseScoreVelocity}$$

Mulligans

A *mulligan* is a feature available for *Custom Rules* game play in the *Game Settings* screen on *Options*. A mulligan allows you to re-hit your last shot without penalty. Mulligans are useful for keeping a bad shot from affecting your score. They can also add to the strategy of a game if you have a limited number of mulligans.

Select the number of mulligans for each round using the drop list.

- **All** - Always allow mulligans.
- **1, 2, 4, 9, 18** - Allows a limited number of mulligans per player.
- **None** - Disable the option.

After the ball has been hit, a Mulligan button is present on the *Button Bar* (assuming the option has been enabled and you still have mulligans remaining). To use a mulligan, click the button, or select *Mulligan (M key)* from the *Action Menu*. Remember to keep track of how many mulligans you have remaining.

Note: Statistics are not updated when mulligans are allowed.

Gimmies

A gimmie is a feature available for *Custom Rules* game play in the *Game Settings* screen on *Options*. It allows you (if your ball is a certain distance from the hole) to assume that your next shot will put the ball in the hole. This option is for cautious players who are not absolutely sure about making short putts, or for the confident player who wants to speed up the game play.

Select the distance from the hole to accept gimmies using the drop list.

- **6, 12, 18, 24, 30, 36 in** - Allow players to take gimmies when their ball is within the selected distance to the hole.
- **None** - Disable the option.

When the ball is within gimmie range, the Gimmie button is available on the *Button Bar* (assuming the option has been enabled) during a round. To use a gimmie, click the button, or select *Gimmies (G key)* from the *Action Menu*.

Note: Statistics are not updated when gimmies are allowed.

Types of Play

PGA Championship Golf™ 2000 offers a total of twelve different types of play to choose from. Choose your type of play using the *Type Of Play* tab on the *Game Settings* screen. Some types of play use teams of two or four. You must select the correct number of players on the *Who's Playing* screen in order to fill the teams. If more than one team exists, you can choose which players will be teamed up together on the *Create Teams* screen after the *Who's Playing* screen.

The rules may seem complicated at first but will become clear after a few rounds.

Medal (one or more players) - This is also known as stroke play. Players compete based on their stroke totals at the end of the round or tournament. The player with the lowest score (stroke total) wins.

Handicap: Each player uses his or her full handicap.

Match (two players only) - Two players compete against each other on each hole. The winner of the hole is the player with the fewest strokes for that hole. There is no winner if the strokes are equal. The final score is calculated from the number of holes won. The player with the highest score wins the round.

Handicap: The difference between the two player's handicaps goes to the player with the higher handicap (the player with the lowest handicap gets no handicap strokes). The handicap is applied according to the difficulty or "rank" of the hole (a player applies handicap strokes on the most difficult hole first, then the next difficult, as would typically happen in match play-based games). The difficulty of the hole is shown on the *Scores* screen in the "HCP" row.

Stableford (one or more players) - Players compete against each other at each hole. Points are given for each hole as follows:

Hole Score	Points
Two or more strokes over par	-3
One stroke over par	-1
Par	0
One stroke under par	2
Two strokes under par	5
Three strokes under par	8

The player with the highest final sum wins the round.

Handicap: Each player uses his or her full handicap.

Four Ball Medal (two player teams) - This is also known as *Best Ball*. It is the same as *Medal* except in teams of two. The final score for the team is the sum of the lowest scores per hole.

Handicap: Each player uses 90% of their full handicap.

Four Ball Match (two player teams; four players only) - Same as *Match* except four players compete in teams of two on each hole. The winner of the hole is the team with the player who had the fewest strokes.

Handicap: Each player takes the difference between the lowest player's handicap and their own handicap (the player with the lowest handicap is allowed no handicap strokes). For example, player A has a 10 handicap, player B has 8, player C has 2, and player D has 13. After adjusting the handicaps for *Four Ball Match*, player A has 8, player B has 6, player C has 0, & player D has 11.

Four Ball Stableford (two player teams) - Same as *Stableford* except in teams of two. The winner of the hole is the team with the player who had the most points.

Handicap: Each player uses 90% of their full handicap.

Skins (two or more players) - Each player competes against all other players in the group on each hole. A screen appears after the Game Settings screen that prompts for dollar amounts to be entered or bet for each hole. There are 18 text boxes (half are grayed if playing 9-holes; the same values are repeated for each 18 if playing 72-holes).

There are three buttons on the screen. *All Same As First Hole* will set all text boxes with the same number that you enter in the first one. *1X-2X-3X First Hole Value* will automatically fill in the remaining text boxes - the first third at the same value as number 1, the second third at double the amount, and the last third at triple the amount. *Randomize First Value* will fill the text boxes with random values that are similar to the first value.

The skin for a hole is won by the player with the fewest strokes for that hole. If any players tie for the low score, all players are considered tied and the skin is carried over to the next hole.

For example, using the *1X-2X-3X* option, if you are playing an 18-hole round and the initial bet is \$5 per hole, then the 7th-12th holes are worth \$10, and the 13th-18th holes are worth \$15, assuming no ties carry over into them. If there is a tie on the 11th hole, then the 12th hole is worth \$20. If there is another tie on the 12th hole, then the 13th hole is worth \$35 (the \$20 carryover plus \$15 for the 13th hole). The player who has won the greatest dollar amount at the end of the round or tournament wins the round.

Handicap: Same as *Match* play.

Scramble (two player teams) - Players compete in teams of two with both players teeing off together. Teams then choose which of the two balls will be played. Both team members make the second shot from this point and choose again which one to play. The score is calculated from the total number of strokes a team needs to complete the round. The team with the lowest score wins.

Handicap: Each team uses 50% of the lowest handicap plus 20% of the highest handicap from the two players on the team.

Scramble (four player teams) - Same as a two-player scramble, but with four players per team.

Handicap: Each team uses 25% of the lowest handicap plus 20% of the second lowest plus 15% of the third lowest plus 10% of the highest handicap from the four players on the team.

Best Ball Ryder Cup (two player teams; four players only) - Players compete in teams of two with each player alternating drives at each hole. The player that does not drive hits the second shot. The players continue to alternate until the ball is in the cup. The winner of the hole is the team with the fewest strokes for that hole. There is no winner if the strokes are equal. The final score is calculated from the number of holes won. The team with the highest score wins the round.

Handicap: The team with the highest number of combined handicap strokes gets 50% of the difference between the two teams' strokes and the other team is allowed no handicap strokes. For example, team A has a 16 handicap and team B has a 10. After adjusting the handicap for *Best Ball Ryder Cup*, team A has 3 and team B has 0.

Best Ball Greensome (two player teams; four players only) - Players compete in teams of two with both players teeing off at each hole. They then choose which of the two balls will be played. The player whose ball was not chosen hits the second shot and the team alternates until the ball is in the cup. The winner of the hole is the team with the fewest strokes for that hole. There is no winner if the strokes are equal. The final score is calculated from the number of holes won. The team with the highest score wins the round.

Handicap: The team with the highest number of combined handicap strokes gets 40% of the difference between the two teams' strokes and the other team is allowed no handicap strokes. For example, team A has a 19 handicap and team B has a 14. After adjusting the handicap for *Best Ball Greensome*, team A has 2 and team B has 0.

Best Ball Bloodsome (two player teams; four players only) - Players compete in teams of two with both players teeing off at each hole. The opposing team then chooses which of the two balls will be played. The player whose ball was not chosen hits the second shot and the team alternates until the ball is in the cup. The winner of the hole is the team with the fewest strokes for that hole. There is no winner if the strokes are equal. The final score is calculated from the number of holes won. The team with the highest score wins the round.

Handicap: Same as *Greensome* play. The handicap for the team is then divided into eighteen parts. The greatest parts are used on the hardest holes first. The difficulty of the hole is displayed on the Scores screen. For example, if a team has a 38 handicap, then it will be split into two 3's and sixteen 2's. The two 3's will be used on the most difficult holes.

Note: In all types of play, ties are handled by *Sudden Death* if it is selected from the *Game Settings* screen. Golfers play as many additional holes as necessary until one player or team emerges victorious.

Side Games

This screen will follow the *Game Settings* screen if the *Side Games* option was selected from the *Game Options* tab. It allows players to select which side games to play. This option will not be available if *Skins* types of play is selected.

Enter a side game value for each item. To disable a side game, enter zero for its value. This is the number of points a player will receive from each player for completing the side game requirement. This is also the number of points each player will lose if another player completes the side game requirement.

The requirements for each side game is as follows:

Skins - Goes to the winner of each hole.

Lowest Putt Total - Goes to the player with the lowest number of putts for the round.

Ace - Goes to a hole in one.

Greenies - Goes to the player on the green and closest to the hole of a par 3. The player must then one or two putt it.

Birdies - Goes to a player who scores a birdie or better.

Up and Downs - Goes to a player who makes it up and down from anywhere around the green.

Flaggies - Goes to a player who hits the ball within a flag sticks distance of the cup off the tee.

Sandies - Goes to a player who gets up and down from a bunker.

Moles - Taken from a player who leaves a sand shot in the bunker.

Polies - Goes to a player who makes a putt from outside the length of the flag stick.

Splashies - Goes to a player who makes par after hitting into the water.

Dirty Pars - Goes to a player who scores par but never hit the fairway.

Longest Drives - Goes to the player who hits the longest drive that remains in the fairway on par fours or fives.

Chip Ins - Goes to a player who makes a chip in.

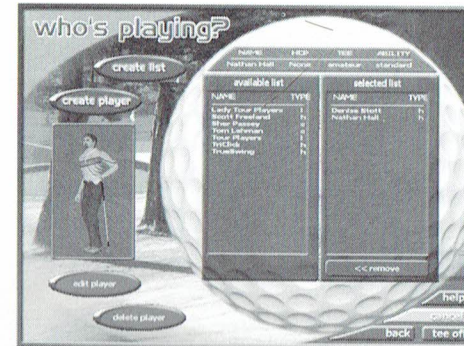
Nassau - Goes to the winners of these three areas:

- **Front 9** - Goes to the winner of the front nine holes.
- **Back 9** - Goes to the winner of the back nine holes.
- **Full Round** - Goes to the winner of the round.

- **Cancel** to go to the *Main Menu* screen without saving the changes.
- **Back** to return to the *Game Settings* screen.
- **Next** to advance to the *Who's Playing* screen.

Who's Playing

The *Who's Playing* screen is where some of the greatest names ever to play *PGA Championship Golf™ 2000* are born. It's also where they get left in the clubhouse! Create, edit, and delete players, then select them to join the round.



Create, edit and delete players before you select them to play. There are four buttons that allow you to manipulate the players.

Create List - Create a new list of computer players using the *List Editor* screen.

Create Player - Create a new player using the *Player Settings* screens.

Edit - Edit the current highlighted player or list. This button is only shown when a player or list has been highlighted.

Delete - Asks for verification, and then deletes the highlighted player or list and all of their statistics. Saved games will still contain the player, but they will no longer be available for a new round. This button is only shown when a player or list has been highlighted.

There are two list boxes in the screen, one for the *Available Players* and one for the *Selected Players*.

Available Players - This box contains a list of players that have been created but have not been selected to play in the next round. When a new player is created an entry for that player is added to this list. The entry consists of the player name, followed by *c* for computer players, *h* for human players, and *l* for lists of players.

Selected Players - This list box contains the selected players that will be playing in the next round of golf. The **Add** and **Remove** buttons affect who is dis

played in this list. When a player is added to this list, they are no longer displayed in the Available Players list. The entry consists of the player name, followed by *c* for computer players, *h* for human players, *l* for lists of players, and *r* for remote players.

There are two methods for moving players between the *Available* and *Selected Players* lists.

Double-Click - Double-Click directly on the name and it will change lists.

Add or Remove Buttons - Click once to highlight the name. Then use the **Add** or **Remove** buttons. The buttons are displayed when a player's name is highlighted. The buttons will change depending on whether the selected player can be removed or added.

- **Cancel** - to go to the *Main Menu* screen without saving the changes.
- **Back** - to return to the *Game Setting* screen.
- **Tee Off** - to start the round.

Note: This is the last setup screen before the game starts. You cannot get to the *Who's Playing* screen with a *Quick Start* game.

Player Settings

To create a player, click on the **Create Player** button on the *Who's Playing* screen. You will then be taken to the *Player Settings* screen. Select a name, and then customize the player using the following tabs.

Player Name - Feel free to enter the name of your favorite pro then prepare to assume their talents.

Options - This tab allows you to customize the player's play options.

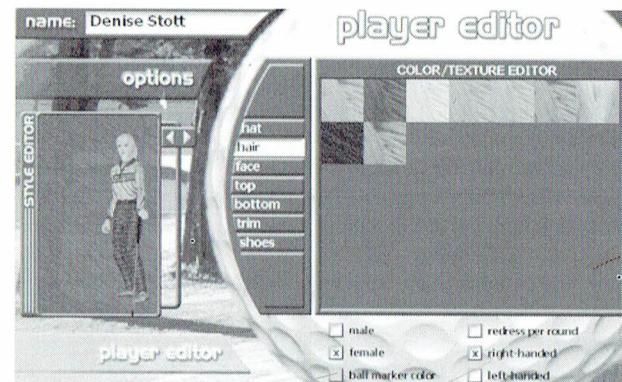
Player Editor - You can dress your golfer, choose a face, select hair, and choose other accessories.

Computer Ability - You will only get this screen if you are creating a computer player. Use these options to customize the computer player's ability.

- **Cancel** - to go to the *Who's Playing* screen without saving the changes.
- **Finish** - to go to the *Who's Playing* screen and save the changes to the player.

Player Options

To select the player options click on the **Create Player** button on the *Who's Playing* or highlight a player and select the **Edit Player** button. Select the *Options* tab once the *Player Settings* screen appears.



Customize the player options by clicking on the controls.

Ability Level - Select the ability of this player.

Ability - This option allows you to specify the difficulty required to execute the desired shot.

- **Control Method** - There are three methods of swing control available. (The traditional *Tri-Click Swing* takes three mouse clicks to swing. Interactive TrueSwing™ reads mouse movement to control the golfer's swing and is available in both vertical and horizontal mouse movements. Tri-Click masters may initially find their accuracy slightly decreased as they switch to TrueSwing™, but with a little practice, the increased level of control and the feeling of actually swinging the club will more than make up the difference. We strongly recommend TrueSwing™.)

Tees - There are five different tees available (the starting point on any hole.)

Clubs In Bag - There are 21 clubs available to each player; however, only 14 of those clubs can be used at any one time - 13 clubs plus a putter. This option allows you to select the clubs the player will carry onto the course. Each club has specific properties associated with it that should be taken into account when selecting the clubs.

- **Suggest** - This recommends the club selection for the default set of 14 clubs.

Caddie - Select the caddie settings.

- **Caddie** - If checked, the caddie will suggest a club at the beginning of the player's turn, otherwise, a driver will come up at the beginning of the hole, the selected chip club will come up just off the green, and a putter will come up whenever the player is on the green. If a different club is desired, you will need to select the desired club before each shot.
- **Chipping Club** - You must choose the default club to use for chipping. You can choose any of the irons as your default chip club. If you do not have the iron in your bag, then the closest club will be used instead.

Show Grid - In order to better read the break of a putt or see the slope of the terrain, a grid can be displayed over the immediate area.

Tees

There are five different tees available (the starting point on any hole.) Not all courses are equipped with five tees; in the case that the tee type does not exist, the player will be placed on the tee that most closely approximates the selected tee. The five options are:

Forward - For beginning players. These tees are closest to the hole.

Ladies - For standard players. Many golf courses have ladies tees.

Amateur - For standard players. The standard middle tee position.

Pro - For advanced players. Often the same as the tournament tees.

Tournament - For advanced players. These tees are usually the farthest from the hole or placed in the most difficult position.

Note: Selecting All golfers play tournament tees from the Game Settings screen on Options will force all players to use the Tournament tees regardless of any previously selected tee.

Player Ability

The player ability can be selected from the *Player Settings* screen on the *Player Options* tab. There are four choices for player ability:

Basic (average 230 yard drives) - The distance and direction of the ball are scaled to make it easy for beginners. It is harder to hit a bad shot than a good one in this mode. This is a good place to start for younger golfers and beginners.

Standard (average 250 yard drives) - The distance and direction of the ball are scaled to make this a good stepping-stone toward an advanced ability level. It is still easy to hit a good shot, but it's just as easy to hit a bad one.

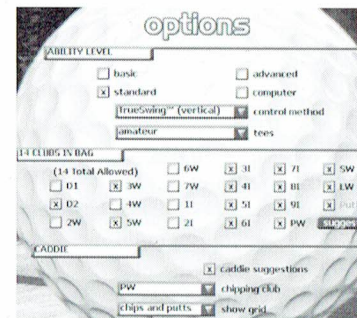
Advanced (average 275 yard drives) - The distance and direction of the ball are not scaled in this option. This swing option should be the ultimate goal of a computer golf master. All players in a tournament should set to this ability level.

Computer - Makes this player a computer controlled player with the ability selected above.

Note: In many other sports titles, creating an advanced player will result in a player having advanced abilities regardless of the ability possessed by the user. In PGA Championship Golf™ 2000, the advanced players have no inherent ability, which requires you to make up the difference. But for those of you who have not acquired the skills it takes to be advanced, we offer basic and standard players who do have inherent ability that will help you compete with the pros.

Player Editor

Change the visual appearance of the golfer with these controls. To select the *Player Editor*, click on the **Create Player** button on the *Who's Playing* screen, or highlight a player and select the **Edit Player** button. Select the *Player Editor* tab once the *Player Settings* screen appears.



Click on the buttons displayed in the center of the screen. This will allow you to change the colors, textures, and styles for that part of the golfer. You can select new textures by clicking them on the right side, or scrolling through styles and accessories using the left and right arrows on the right side of the golfer.

Hair - Select the color of hair, and scroll through different hairstyles.

Hat - Select the color of hat, and scroll through different hat styles.

Face - Select the facial features you want your golfer to have.

Top - Change the shirt pattern, and scroll through different shirt styles.

Bottom - Change the colors and apparel for the lower half of the golfer.

Trim - Change the clothing's trim color.

Shoes - Select shoes for the golfer.

Male or Female - We think you can figure this option out for yourself.

Ball Marker - Select the color of the ball marker used exclusively on the green.

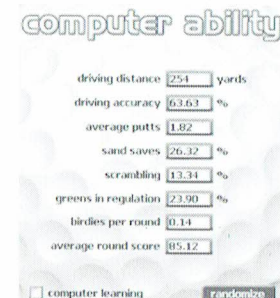
The ball marker will show the current position of the player's ball.

Redress Per Round - Just before each round of golf, your player will choose new clothing to wear. After all, you can't be caught in the same outfit twice.

Right or Left Handed - Select right or left handed clubs for the golfer to use.

Computer Player

A computer player can be created by selecting the **Computer Player** button in the *Ability Level* section of the *Player Options* tab. Once the computer player option is selected, the *Computer Ability* tab will appear.



To customize the computer player's ability, adjust these statistics as desired. For default values of *Basic*, *Standard*, and *Advanced* ability, use the *Ability Level* check buttons in the *Player Options* tab. The computer player will then play to these new statistics.

Driving Distance - The average distance that a computer player can hit the ball.

This value can be set anywhere from 200 to 310 yards.

Driving Accuracy - Set the accuracy of this player's drives by entering the percent of drives that reach the fairway. This value can be set anywhere from 40% to 90%.

Average Putts - Set the average number of putts per hole this player will take in order to get the ball into the cup. This value can be set anywhere from 1.6 to 4.5 putts.

Sand Saves - Set the percentage of time the player will be able to save par after landing in the sand. This value can be set anywhere from 10% to 75%.

Scrambling - Set the percentage of time the player will be able to save par with out getting a green in regulation. This value can be set anywhere from 10% to 75%.

Regulation Greens - Set the percentage of time the player will make a green in regulation (strokes are par - 2 when ball is on the green.) This value can be set anywhere from 10% to 85%

Birdies Per Round - Set the average number of birdies this golfer will make per round. This value can be set anywhere from 0 to 5.5.

Average Round Score - Set the average number of strokes per round. This value can be set anywhere from 66 to 144.

Computer Learning - Allow the computer player to learn after every swing. The more the computer players play, the better they get.

Randomize - Creates a random ability for the computer player. Each consecutive click of the Random button presents different settings.

List Editor

Create or edit a list of computer-controlled players. This list can be used to create large tournaments where you can compete with your favorite PGA players. Begin by entering a name for the list you are creating in the upper left corner of the screen.



Create, edit and delete players before you select them into the list. There are three buttons that allow you to manipulate the players.

Create Player - Create a new player using the *Player Creation* screens. All players created here will automatically be computer players.

Edit Player - Edit the current highlighted player. This button is only shown when a player has been highlighted.

Delete Player - Asks for verification, and then deletes the highlighted player and all his or her statistics. Saved games will still contain the player, but he or she will no longer be available for a new round. This button is only shown when a player has been highlighted.

There are two list boxes in the screen, one for the *Available Players* and one for the *Selected Players* in the list.

Available Players - This box contains a list of players that have been created but have not been selected into the list. When a new player is created, an entry for that player is added to this list. The entry consists of the player name, followed by **c** for computer players.

Selected Players - This list box contains the selected players that will be contained in the list. The **Add** or **Remove** buttons affect who is displayed in this list. When a player is added to this list, they are no longer displayed in the *Available Players* list. The entry consists of the player name, followed by **c** for computer players.

There are two methods for moving players between the *Available* and *Selected Players* lists.

Double-Click - Double-Click directly on the name and it will change lists.

Add or Remove Buttons - Click once to highlight the name. Then use the **Add** or **Remove** buttons. The buttons are displayed when a player's name is highlighted. The buttons will change depending on whether the selected player can be removed or added.

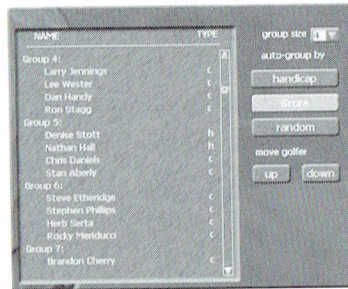
- **Cancel** - to go to the *Who's Playing* screen without saving the changes.
- **Finish** - to create the list of players and return to the *Who's Playing* screen.

Note: To move players from one list to another, edit the first list by removing the players in question, and then edit the second list by adding those players to it. To share lists with others, locate the directory named after the list in the *PGA Championship Golf™ 2000/Players* directory. Then copy the list to another machines *PGA Championship Golf™ 2000/Players* directory.

Create Teams

Create the teams that will play in the next round of golf. This list can be used to move players and teams around, or automatically group them. A group of players will be on the same hole and see each other.

Group Size - Select the group size using the combo box. Group sizes must be a multiple of the current team size.



Auto-Grouping - Select one of the auto-grouping buttons.

Handicap - Sorts the group by handicap. Players with equal handicaps will be randomly grouped.

Score - Sorts the group by average round score. Players with equal average round scores will be randomly grouped.

Random - All players will be randomly grouped.

Manual Grouping - Group the players, teams, and groups in any order.

Players - Move the players by clicking on a player's name in the list to highlight it. Use the up and down buttons to move the player in the list. All players will be shifted to make room for the player.

Teams - Move the teams by clicking on the team name in the list to highlight it. Use the up and down buttons to move the team in the list. The entire team will be moved to the new location. All teams will be shifted to make room for the team.

Groups - Move the groups by clicking on the group name in the list to highlight it. Use the up and down buttons to move the group in the list. The entire group will be moved to the new location. All groups will be shifted to make room for the group.

Note: All human players that are playing from the same machine will be forced to play in the same group regardless of any grouping method used. You cannot move computer players into a group of humans unless you increase the Group Size.

Resume (Game/Shot)

Game files are saved as .GLF files and are located in the **PGA Championship Golf™ 2000\Save** directory. You can double click a .GLF file directly in Explorer to launch *PGA Championship Golf™ 2000* and start the saved game. These files can also be opened by selecting *Resume Game* from the *Play Golf* screen. A window will appear with a list of available games. Select the game to be resumed. Then press **Resume** to start the saved game.

To save a game, select save from the *Game Menu*. To save a shot, save the game after the player has taken a shot, but before **Continue** is pressed on the Button Bar or *Action Menu*.

Note: If a player has been deleted, they will remain in saved games and will still be used by resuming the game. You may not resume games or shots that were saved on a course that you do not have.

Season Play

A new feature added to *PGA Championship Golf™ 2000* is the ability to create, edit, and play *Seasons*.

Season Selection - Select the season to play, create, edit or delete. Season files are saved as .GSF files and are located in the **PGA Championship Golf™ 2000 \Seasons** directory. Select *Play Season*, *Create Season*, *Edit Season*, or *Delete Season* from the *Play Golf* screen.

Date	Event Name	Purse
01/01	Challenger Invitational	\$75
01/02	Alpha One Pro-Am	\$100
01/03	Arrowhead Open	\$75
01/04	Black Diamond Classic	\$75
01/05	Franklin Lakes Open	\$75
01/06	Alpha Two Pro-Am	\$100
01/07	High Plains Classic	\$75
01/08	Pete Dye Invitational	\$75
01/09	Headgate Open	\$75
01/10	Colonial Classic	\$100
01/11	Alpha Three Pro-Am	\$100
01/12	The PLAYERS Championship	\$125
01/14	Tour Championship	\$150
01/15	Beta Masters	\$175
01/16	Gold Master Match Play Championships	\$200

The interface has the same functionality for playing, creating, editing, or deleting unless specifically stated below.

Season Name - Shows the name of the season currently selected.

- **Create Season** - Enter the name of the season. A warning will appear if the name is already being used. To make a copy of an existing season, select the season and change its name. To create an empty season, select the *New Season* list item and enter a name.

Available Seasons List - Shows a list of all currently available seasons in the *Seasons* file.

- **Play Season** - Select a season to play.
- **Create Season** - The first list item will be the *New Season*, an empty season. To make a copy of an existing season, select the season and change its name.
- **Edit Season** - Select a season to edit.
- **Delete Season** - Select a season to delete.

Season Info - Displays the currently selected season information including the next event to be played.

Comments - Displays the comments for the season.

- **Create Season** - Enter comments for the season.
- **Edit Season** - Edit comments for the season.

Cancel - to go to the *Play Golf* screen without saving any changes.

Play Season: Open to go to the *Game Settings* screen. Begin playing the next round.

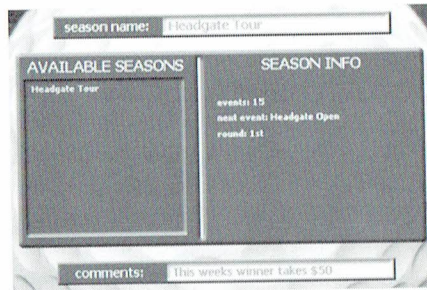
Create Season: Create to go to the *Season Schedule* screen after creating the new season.

Edit Season: Edit to go to the *Season Schedule* screen to make changes to the season.

Delete Season: Delete to go to the *Play Golf* screen after asking for a confirmation.

Season Schedule

This is where the schedule for the season is created and edited. Feel free to add as many events as desired. To create a schedule or edit an existing schedule, select *Season Play* from the *Play Golf* screen.



The edit and remove buttons will not be shown until an item in the list is selected.

Events List - Each line is a different event that will be played in the order listed. To change the order in which the events are played, edit the date of the events from the *Event Settings* screen.

- **Date** - Starting date for the event.
- **Name** - Name of the event.
- **Purse** - Total purse for the event.

Add Event - Opens the *Event Settings* screen to create and add a new event.

Edit Event - Selecting an event will bring up the *Edit Event* button. This opens the *Event Settings* screen to edit the event.

Remove Event - Selecting an event will bring up the *Delete Event* button. This will remove the event from the list after asking for a confirmation.

- **Cancel** to go to the *Play Golf* screen without saving any changes.
- **Done** to go to the *Play Golf* screen after saving any changes.

Event Settings

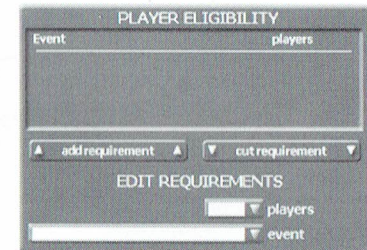
Create or edit an event in a season. Setup the rounds and eligibility. To change the event settings, select *Add Event*, or *Edit Event* from the *Season Schedule* screen.

Event Name - Enter a name for the event. The name will be displayed on the *Season Schedule* screen.

Date - Select the starting date for the event. The events will be played in the order of their start dates. Use the *Season Schedule* screen to view the order of all events.

Purse - Select a cash value to be paid to the winners of this event. The total purse is distributed to the final round players based on their final standings in the tournament. First place receives the largest share of the total purse with each subsequent player receiving a smaller percentage of the purse than the position before them.

Use the *Eligibility* tab to change the eligibility for the event. The eligibility will determine if a player is allowed to play in the event. If a player is not eligible, they cannot be added in the *Who's Playing* screen. At the beginning of an event, all eligible players will automatically be selected to play.



Player Eligibility List - Shows a list of the eligibility requirements. Each entry consists of a qualifying event and a number of top players to take from that event. Add up to ten requirements to the list. If a player meets any one of the requirements, they will be eligible for the new event.

- **Event** - The name of the qualifying event. Each player must have participated in this event prior to being eligible for the new event.
- **Players** - The number of players that can qualify for the new event. These players are taken from the top of the leader board.

Add Requirement - Add the requirement that is currently selected in the *Edit Requirements* section described below.

Remove Requirement - Remove the currently selected requirement. The requirement is removed to the *Edit Requirements* section described below.

Edit Requirements - Used to select an eligibility requirement to add to the *Player Eligibility List*.

- **Event** - Select the qualifying event that will determine eligibility for the new event.
- **Players** - Select the number of players from the qualifying event that can be eligible for the new event. These players will be taken from the top of the leader board.

Use the *Rounds* tab to change the rounds for the event. Each event can have up to six rounds. A cut can be added after each round where the players that do not meet the cut requirements will be removed. Each round is created using the *Game Settings* screen.

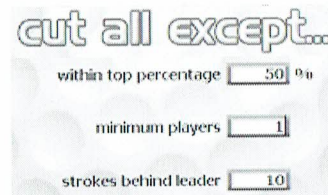


Rounds and Cuts List - Selecting a name for the event to be played.

- **Round Number** - The round number. This is the order in which the rounds will be played.
- **Course** - The course to use for this round. It is possible to play a different course for each round. This is selected from the *Courses* tab on *Game Settings* screen.
- **Format** - *Medal* play is the only *type of play* allowed.
- **Holes** - The number of holes that will be played. This is selected from the *Game Options* tab on the *Game Settings* screen.

Add Round - Add a new round to the *Rounds and Cuts List*. Opens the *Game Settings* screen to customize the round.

Add Cut - Select a round from the *Rounds and Cuts List*. This option will add a cut after the selected round. The *Cut* screen will appear and allow the cut to be customized. At the end of the round, all players will be cut except the players that meet any one of the cut requirements.



- **Within Top Percentage** - The top percentage of players that will be allowed into the next round.
- **Minimum Players** - The minimum number of top players that will be allowed into the next round.
- **Strokes Behind the Leader** - Any player that is within these strokes from the leader will be allowed into the next round.

Remove - Removes the current selection from the *Rounds and Cuts List*.

Edit - Opens the current selection from the *Rounds and Cuts List* to be changed. If a cut is selected, the *Cut* screen will appear. If a round is selected, the *Game Settings* screen will appear.

- **Cancel** - to go to the *Season Schedule* screen without saving any changes.
- **Done** - to go to the *Season Schedule* screen after saving any changes.

Machine Options

PGA Championship Golf™ 2000 will be automatically configured for ideal performance on your machine during installation. These options allow you to manually configure *PGA Championship Golf™ 2000* should you prefer to run it differently on your machine.

To customize the game options, select *Options* from the *Main Menu* screen. This screen will appear, giving four types of options available for customization:

General - Set general play characteristics.

Sound - Customize individual sound events by choosing the interval of play.

Course - These options can change the rendering speed and the quality of the scene.

Golfer - These options can be adjusted to speed rendering or improve the look of the golfer.

Recommended Settings - When the game is started for the first time, *PGA Championship Golf™ 2000* will analyze the machine and recommend settings that will give the best performance for the machine. After changes have been made, if you want to return to the default settings, select this button.

- Click **Cancel** to ignore the settings and return.
- Click **OK** or **Apply** to accept the settings.

Note: *Changing the machine settings may increase or decrease the performance. If your performance is unacceptable, use the recommended settings or see the trouble shooting section.*

General Options

All of the game options discussed in this section are available from the opening *Main Menu* screen by clicking *Options* or during the game by selecting **Options** (**Ctrl + O**) from the *Game Menu*. This opens a screen with four sections: *General*, *Sound*, *Course*, and *Golfer*. Click **General**.

Ball Size - Adjust the ball size for easier viewing during play. This option will increase the size of the ball, but will not change the flight characteristics of the ball.

Continuation Delay - Set the number of seconds that elapse before the screen automatically redraws for your next shot. The default is *None*, therefore, you must manually continue via the **Continue** button in the *Button Bar*.

Chipping Stance - Set the number of yards from the green at which golfers will automatically switch to a chipping stance and use the pre-selected chipping club.

Varying Course Conditions - Select **Never** to have the conditions remain as you set them in the *Game Settings* screen. Selecting **Sometimes** or **Always** will change the conditions on the course randomly at the beginning of the round. The conditions will not change during a round or tournament.

Metric System - The game and *Course Architect* will use the metric system in displaying distances.

Recommended Settings - Resets all options to the settings recommended for the current machine speed and ram requirements.

Sound Options

All of the game options discussed in this section are available from the opening *Main Menu* screen by clicking *Options* or during the game by selecting **Options (Ctrl + O)** from the *Game Menu*. This opens a screen with four sections: *General, Sound, Course, and Golfer*. Click **Sound**.

Some sounds are specific to *Tournaments* and other to *Recreation*.

All Sounds - Master switch to turn all sounds on or off. Turning sounds off on machines with the minimum requirements for memory results in more resources being available for the game play

Sound Events - Choose the frequency of each sound event or turn them off completely. This allows you to decrease sound you find annoying or increase the sounds you love to hear. These options are available on *Options* from the *Game Settings* screen. Select the frequency from the drop down list, or click the check boxes to affect these sounds:

- **Ambient Sounds** - Sprinklers, birds, and planes.
- **Player Comments** - First and second person comments and remarks if *Recreation* is selected.
- **Heckle Comments** - Snide remarks from a high-strung heckler when you delay too long and *Recreation* is selected.
- **Music** - Turn the games music on or off.
- **T.V. Announcers** - Play by play commentary by T.V. announcers if *Tournament* is selected.
- **Crowd Sounds** - Cheers, sighs, and the ever-famous golf clap if *Tournament* is selected.
- **Collision Sounds** - Ball impact with trees and terrain.
- **Swing Sounds** - Swing and impact sounds.
- **User Initiated** - Comments initiated by a remote player on another machine.

Recommended Settings - Resets all options to the settings recommended for the current machine speed and ram requirements.

Course Options

All of the game options discussed in this section are available from the opening *Main Menu* screen by clicking *Options* or during the game by selecting **Options (Ctrl + O)** from the *Game Menu*. This opens a screen with four sections: *General, Sound, Course, and Golfer*. Click **Course**.

Object Detail - This setting will determine the detail of the objects to use on the course. Objects include such things as trees, ball washers, and tee markers. The default object size is based upon the machine speed and is set during the installation.

Panorama Detail - This option gives you the ability to choose between different details for the panorama (the horizon view of the course). The panorama settings offer *None, Low, and High*. Using the low detail panorama can reduce render time because memory usage is reduced.

Horizon Distance - This option lets you select the distance to render the course terrain. Select a distance anywhere from 350 to 750 yards. As the distance increases, the terrain that needs to be drawn increases. This will slow the redraw speed.

Shadow Distance - This option lets you select the distance to show shadows, or select *None* to turn them off. As the distance increases, the number of shadows that need to be drawn increases. This will slow the redraw speed.

Course Sizes - This option lets you change the size of permanent course data that will remain on the hard drive. Higher numbers result in quicker initial redraw times but take up more hard disk space.

Save Course Debris - The divots and discarded tees are not cleaned up every round when this option is selected.

Recommended Settings - Resets all options to the settings recommended for the current machine speed and ram requirements.

Golfer Options

All of the game options discussed in this section are available from the opening *Main Menu* screen by clicking *Options* or during the game by selecting **Options (Ctrl + O)** from the *Game Menu*. This opens a screen with four sections: *General, Sound, Course, and Golfer*. Click **Golfer**.

Golfer Detail - Determines the detail of the golfer on the screen (by the number of polygons used in the rendering of the golfer model). The *High* option will display a smoother, more detailed golfer, but it will take longer to draw on the screen. The lower options are recommended for slower machines. The quicker your golfer can draw, the smoother the swing.

Golfer Motions - Choose the frequency of golfer motions for yourself and other golfers. Choose from the following:

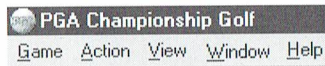
- **Ambient** - Sway, scratch, yawn, and wipe sweat.
- **Shot Reactions** - Reactions to the last swings quality.

- **Delay & Preparation** - Impatient foot tapping, crouching to read the green and checking the wind.
- **User Initiated** - Motions initiated by remote golfers on other machines.
- **Golfer Shadow** - Turn off the golfer shadow. This speeds up the golfer redraw rate.

Recommended Settings - Resets all options to the settings recommended for the current machine speed and ram requirements.

Menu Options

The pull down menus at the top of the application window provide options for game execution. These options are only available during game play. The menus are:



Game - Contains options like saving and exiting a game.

Practice - Is only available in the practice areas. It allows the player to switch between practice areas.

- **Driving Range** - Starts the player on the driving range of the selected course.
- **Putting Green** - Starts the player on the practice putting green of the selected course.
- **Chipping Area** - Starts the player on the practice chipping area of the selected course.
- **Hole 1 - 18** - Starts the player on the hole selected.

Remote - Is only available during remote games. It allows players to send text, comments and golfer motions to other players.

- **Tolerate High Latency** - If the game is frequently terminated due to a slow connection, you will want to allow a higher tolerance. Select this option to allow slow remote connections.
- **Message1 (Hot Key = F5)** - Opens the last messages saved in this slot.
- **Message2 (Hot Key = F6)** - Opens the last messages saved in this slot.
- **Message3 (Hot Key = F7)** - Opens the last messages saved in this slot.
- **Message4 (Hot Key = F8)** - Opens the last messages saved in this slot.
- **Message5 (Hot Key = F9)** - Opens the last messages saved in this slot.
- **Message6 (Hot Key = F10)** - Opens the last messages saved in this slot.
- **Message7 (Hot Key = F11)** - Opens the last messages saved in this slot.
- **Hurry Up (Hot Key = F12)** - Opens the hurry up message box.
- **Clear Messages (Hot Key = Delete)** - Delete the current messages on the screen.

Action - Provides a menu version of the game interface and all the options on the Button Bar.

View - Provides an interface for showing alternate views. In addition to the Swing Camera, you can open other cameras that provide alternate views of the shot you or your opponent is taking.

Window - Provides options to save the window configuration and placement.

Help - Opens the on-line help manual and provides About information.

- **Contents (Hot Key = F1)** - Opens the on-line help manual beginning with the Contents page.
- **On Item (Hot Key = Shift + F1)** - Displays the context-sensitive help cursor. Click anywhere on the game interface to get help on that item.
- **Keyword (Hot Key = Ctrl + K)** - Opens the on-line help manual in key word search mode.
- **About** - Displays an information box about *PGA Championship Golf™ 2000* and the current system's resources.

Game Menu

Choose *Play Golf* from the *Menu Options*. The *Game Menu* provides an interface with the game options.

Game	Action	View	Window
Main Menu...		Ctrl+M	
Options...		Ctrl+O	
Save		Ctrl+S	
Save As...		Ctrl+A	
Resume...		Ctrl+R	
Delete...		Ctrl+D	
Exit		Alt+F4	

Main Menu (Hot Key = Ctrl + M) - Asks for confirmation to quit the current game, then returns to the *Main Menu* screen.

Options (Hot Key = Ctrl + O) - Opens the *Machine Options* screen. When you are done editing the options, you will be returned to the game.

Save (Hot Key = Ctrl + S) - Save the current game. If you have just taken a stroke, but haven't selected **Continue** from the *Button Bar*, then the game will be saved as if **Continue** was selected.

Save As (Hot Key = Ctrl + A) - Save the current game. Opens a screen that allows you to name and select a location to store the saved game. If you have just taken a stroke but not selected **Continue** from the *Button Bar*, then the swing will be saved as well. You can then replay the swing by resuming the game.

Resume (Hot Key = Ctrl + R) - Resume a saved game or swing. Asks you for the name of the saved game file. Note: This will end your current game.

Delete (Hot Key = Ctrl + D) - Opens a window that allows you to select the name of the saved game file to delete.

Exit (Hot Key = Alt + F4) - Asks for confirmation to exit the execution of the application.

Action Menu

Choose Action from the *Menu Options*. The *Action Menu* provides a means of interacting with the game. It allows access to the features that create an action within the game. If the *Action Menu* item is grayed, then it is not available in the current game state. The Button Bar contains some of the current *Action Menu* items and can be used in addition to the *Action Menu*. The *Action Menu* contains the following items:

Continue (Hot Key = Enter) - Select this item to go to your next shot. Follow all of the same procedures as you did for the first shot keeping in mind distance and position changes.

Mulligan (Hot Key = M) - This item will be available if you allowed mulligans in the *Game Settings* screen and have mulligans remaining. Select it to re-hit the last shot.

Gimmie (Hot Key = G) - This item will be available if you allowed gimmies in the *Game Settings* screen and you are within the selected distance of the cup. Select it to hole out and move to the next tee.

Replay Shot - Select this option to admire a wonderful shot or to remind yourself of what to avoid in the future. A sub menu will appear with replay options. Select the option to view a replay.

Move Camera (Hot Key = Space Bar) - Moves the view of the Swing Camera so that the perspective changes. This is useful once you have repositioned the golfer with the aimer arrow so you can see where your shot will be heading. This becomes available once you have repositioned or rotated the golfer.

Rotate To Flag (Hot Key = Shift + R) - Rotates the golfer to face the flag of the current hole.

Drop Ball (Hot Key = D) - Choose a different location for the ball. Choosing this option will cost you a stroke.

Find Flag (Hot Key = F) - If you cannot see the pin from your lie, select this option to display an extension of the pin (flag stick).

Display Grid (Hot Key = X) - This will lay down a geometrical grid over the immediate landscape in front of the golfer. A grid is useful for showing terrain changes and the break (slope) of a green. Select it a second time to remove the grid.

Pick Up (Hot Key = U) - Pick up the ball and move to the next hole. This option can be selected from the *Game Settings* screen and becomes available during games to allow a player to concede the hole.

Go To Ball (Hot Key = Shift + Enter) - Move the golfer up to the ball without rendering. This is useful for speeding up game play.

Pull Pin (Hot Key = P) - Takes the pin out of the hole. Select it a second time to put it back.

Select Club (Hot Key = I or W or #) - Brings up the golf bag and allows you to select a club from it.

Chip With Club (Hot Key = C) - Alters the golfer's stance to one of a chipping stance using the current club. Selecting this option again will change the club back. You will only be allowed to chip with irons.

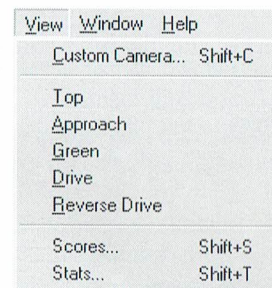
Blast With Club (Hot Key = B) - Used for getting the ball out of the sand. The ball will behave similar to the flop shot but not travel as low. Selecting this option again will change the club back. You will only be allowed to blast with irons.

Shot Setup (Hot Key = S) - Allows you to customize the player's stance, clubface, and ball position.

Show Ball Tracer (Hot Key = T) - Activates a tracer trail of the ball flight to make it easier to view the flight path.

View Menu (Game)

Choose *View* from the *Menu Options*. The *View Menu* allows you to open alternate windows, view the statistics, or the current scores.



Custom Camera (Hot Key = Shift + C) - Open the *Camera Editor* screen to create a custom camera.

Top View (Hot Key = Alt + V, then press T) - Shows a top view of the current hole.

Note: Right-clicking in the top view provides a handy distance indicator to the golfer and to the pin. Also, the location will be indicated on the main game screen by a marker.

Approach View (Hot Key = Alt + V, then press A) - Shows a bird's eye view from the fairway looking toward the green.

Green (Hot Key = Alt + V, then press G) - Shows a bird's eye view of the green looking down.

Driving View (Hot Key = Alt + V, then press D) - Shows a bird's eye view from behind the tee box looking down the fairway.

Reverse Driving View (Hot Key = Alt + V, then press R) - Shows a bird's eye view from the middle of the fairway facing the tees.

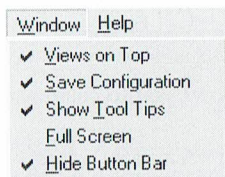
Scores (Hot Key = Shift + S) - Contains the current scores for each player on each hole. The players can be sorted by hole or by total score.

Stats (Hot Key = Shift + T) - Opens the *Statistics* screen to view player and course statistics.

You can have as many views open as you like, however, the more that are open, the slower the speed of play because each one needs to redraw after each hole. You can also right-click over any view window to see the terrain type and distance to that point. A small marker will show up in the top view over the point that was clicked. During a swing, the ball can be seen in each view as it sails through the air or rolls on the green.

Window Menu (Game)

Choose *Window* from the *Menu Options*. The items in the Window Menu can be checked or unchecked. Their state is saved and resumed each time the game is run.



Views On Top (Hot Key = Alt + W, then press V) - This will place all open views on top of the Swing Camera.

Save Configuration (Hot Key = Alt + W, then press S) - This saves the current open status, placement, and size of all windows. This configuration will be restored the next time the game is run.

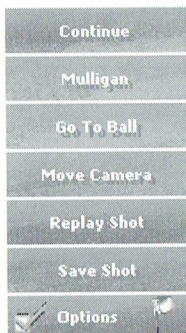
Show Tool Tips (Hot Key = Alt + W, then press T) - Turn on tool tips. Simply place the cursor over an icon to see the tool tip message. Club distances will be displayed when hovering over the clubs in the bag.

Full Screen (Hot Key = Alt + W, then press F) - This hides the menu options at the top of the screen. To access the menu options again, move the cursor to the top of the screen and the Swing Camera will automatically shift down to show them.

Hide Button Bar (Hot Key = Alt + W, then press H) - This will hide the Button Bar when it is not in use which will increase the view of the course through the Swing Camera. To access the Button Bar, move the cursor to the lower left corner of the Swing Camera and click on the *Options* icon.

Button Bar (Game)

The Button Bar is available within the Swing Camera. You can access it by clicking on the **Options** button in the lower left corner of the screen. You can keep the Button Bar visible by de-selecting **Hide Button Bar** from the *Window Menu*. This will cause the Button Bar to cover up part of the Swing Camera. The Button Bar options are also available in the *Action Menu*.



The Button Bar presents options available during game play, both before and after the shot. For a quick description of any of the buttons available, move the cursor over the button in question for a second or two and a message will appear that describes the button's function.

Before the shot, the Button Bar includes buttons such as, **Drop Ball**, **Find Flag**, **Show Grid**, and **Move Camera**.

Drop Ball (Hot Key = D) - Drop the ball in a new location.

Find Flag (Hot Key = F) - Show the flag.

Show Grid (Hot Key = X) - Shows a geometrical grid over landscape in front of the golfer. Selecting it again will hide the grid.

Move Camera (Hot Key = Space Bar) - Moves and rotates the view of the Swing Camera to match the golfer's position.

Pick Up (Hot Key = U) - Pick up the ball and move to the next hole. This option becomes available during games where the type of play allows a player to concede the hole.

Gimmie (Hot Key = G) - This button will appear if you allowed gimmies in the *Game Settings* screen AND you are within the selected distance of the cup.

Several changes occur to the Swing Camera and Button Bar after a shot is made. The shot yardage is indicated in the upper left region of the window and the Button Bar changes to include **Continue**, **Replay**, **Mulligan**, and **Gimmie**.

Continue (Hot Key = Enter) - Click this button to go to your next shot.

Replay - Click this button to replay the last shot. Select from many different camera directions.


Go To Ball (Hot Key = Shift + Enter) - Move the golfer up to the ball without rendering. This is useful for speeding up game play.

Mulligan (Hot Key = M) - This button will appear if you allowed mulligans in the *Game Settings* screen.

Gimmie (Hot Key = G) - This button will appear if you allowed gimmies in the *Game Settings* screen AND you are within the selected distance of the cup.


For a more detailed explanation of each item, see the *Action Menu*.

Camera Editor

The Camera Editor screen can be accessed by clicking on the  camera button in the top right corner of any open camera, or by creating a new camera by selecting **Custom Camera** in the *View Menu*.

The editor will come up with the current window settings if editing, and the default settings if creating a window. To customize the window, change any of these settings:




Move and Rotate - Customize the camera position and direction with the  camera icon. Click in the square box and drag it around to change the camera position, or click on the lens to change its direction. Click the **Apply** button to view the changes.

Elevation - Increase or decrease the camera elevation by dragging the slider button.

Pitch - Increase or decrease the pitch of the camera by dragging the slider button.

Attach Camera To - Select the player this camera should follow. If *ReadyPlay™* is selected on *Options* in the *Game Settings* screen, then you will be able to swing your player and will not need to watch the others take their swing. This combo box will contain the players that are allowed to be attached to:

- **Swing Camera** - You will only be allowed to follow the local human players or the furthest away in the group if there are more than one. If there are no local human players, then you will be allowed to follow any player.
- **Alternate Cameras** - You will be allowed to follow any player on the course, or the furthest away in a group.

Camera Position - Select a default camera position and direction relative to the pin or the hole. If the camera position is relative to the player, the scene to the left will show a ball in the lower area and the camera position will be shown by a small  camera icon. If the camera position is relative to a hole, the scene to the left will show a top view of a typical hole.

Maximum Performance - Select this option to increase the frame rate performance of the camera. All cameras that have this selected will share the average maximum performance. Cameras that do not have this option selected will use the remaining performance.

Default Settings - Use the default settings for the current *Camera Position*.

Cancel - to return to the game without saving the changes.

Apply - to render the camera being edited and view the changes.

OK - to apply the changes and return to the game.

— Swing Camera —

The Swing Camera displays the view from just behind the perspective of the golfer as default and provides an interface for playing the game. When the Swing Camera is created during the initial setup, the machine speed is considered in sizing the Swing Camera. The initial size can be adjusted in the same way a standard window can be resized.

Note: When you exit the application, the window size and coordinates are saved and restored during the next round if you select *Save Configuration* from the *Window Menu*.

The game can be controlled through the game interface, most of which resides within the Swing Camera. Swinging from this view will depend on the swing method, TrueSwing or Tri-Click. The left region of the window contains information about the player and the right portion contains information about the scene.



Upper Left Region - This area includes the player's name, the current number of strokes, hole number, and par for the hole. During games of 72-holes, the current round is also displayed. The number to the right of the name is that player's score. Different types of play use different scoring methods. When using Medal play, a plus figure shows that you are over par, a minus figure shows that you are under par, and an E means you are even par. You'll start every Medal round at even par. (Enjoy it while you can!)

Upper Right Region - This area includes icons that control the window. Icons for editing the view or closing it all together are available here.

Camera Editor - Opens the camera editor to change the view position and type.

Maximize - Changes the size of the camera to fit exactly into the application window.

Help - Starts context help.

Lower Left Region - This area includes buttons that can be expanded to access specific modes of the game. The currently available actions can be found in the options button, this will bring up the Button Bar. The club can be changed by selecting the club. The Shot Setup can customize the next shot. The angle of the golfer can be changed by moving the green arrow slider or by using the left and right arrow keys.

Lower Right Region - This area shows information about the current shot. The distance, lie, and wind indicators can be seen here. The larger versions provide more information but take up more room on the screen. By clicking on the icons, you can view and dismiss the larger versions of these indicators. You can use this information when analyzing your shot.

Course Region - This is the main area of the view which shows the fairway, greens and golfers.

- **Shift + Left Click** on any point to move your golfer to that position. This is useful for choosing a different tee position, clearing the path for another player's shot, or just wandering around the course.
- **Right-Click** on any point to see the distance and terrain type.
- **Right-Click** on any golfer to see their name and current score.
- **Right-Click** on the sky to see the current course conditions.

Analyze the Shot

Before each swing, analyze exactly how to get to your ideal position. The ability to analyzing a shot correctly can greatly improve your score. *PGA Championship Golf™ 2000* gives you all the tools necessary to correctly analyze your next shot and make the necessary adjustments to put the ball where you want it. A typical shot analysis will involve the following:

Distance - The distance indicator shows whether the current player's path to the hole is uphill or downhill, the distance the ball is above or below the hole, and the distance between the ball and the pin. Check any point on the course by right clicking on the position you wish to check. A distance indicator will show you the distance and elevation to that point. Examine the current club, and determine if the shot will require a full or partial swing. The elevation will change the club distance. If the pin is higher, the ball will not travel as far, if the pin is lower, the ball will travel further.

Lie - The lie indicator will show the type of terrain the ball is currently in. Some terrain may dramatically affect the ball flight while others will not affect it at all. Some clubs are harder to hit than others on various terrain. It may seem impossible to hit the ball out of sand with a wood, but irons will do the job quite nicely. Also check the area in front of the shot. If it is heavily wooded, it may be a good idea to change directions just to get out of the trees. If there are undesirable areas, you may want to try to carry them or lay up. Some terrain types are more prone to miss hits Shanks, heels, and toes can be common on some terrain if the club is not centered on the ball.

Slope of Lie - The slope of the lie is an important indicator of how the club will strike the ball. If you have trouble seeing the slope of the terrain, use the Grid option. You can compensate for these affects using Shot Setup.

- **Uphill Lie** - The shot path direction is going up hill. Since the golfers feet are at different elevations, the clubface is angled up which will produce more loft.
- **Downhill Lie** - The shot path direction is going down hill. The clubface is angled down which will produce less loft.
- **Above Side Hill Lie** - The ball is above the golfers feet. When the golfer compensates for the elevation difference by lifting the club, the ball will tend to draw (curve left.)
- **Below Side Hill Lie** - The ball is below the golfers feet. When the golfer compensates for the elevation difference by lowering the club, the ball will tend to fade (curve right.)

Wind - The wind indicator shows the velocity of the wind. It displays the speed and direction relative to the view. The wind speed will vary according to what you selected for *Wind Conditions* in the *Game Settings* screen. Depending on the wind direction and speed you may need to select a different club or aim differently. The affects of the wind on the ball can be compensated for in most cases.

Club Selection - The club selection is one of the most important parts of the shot. Evaluate the wind direction and speed, the lie, and distance to the pin. The caddie will usually do a pretty good job at this but a seasoned golfer should always make the final decision.

Aiming - Try to read the green using the *Grid* and possibly a different camera view. Adjust for the break in a green by aiming the golfer. Check the wind direction and speed; you may need to aim into the wind in some cases in order to counter the drift it will have on the ball. Aim the golfer using the **left** and **right** arrow keys, or use the aiming **slider** button at the bottom of the Swing Camera. Once the golfer direction has been changed, the perspective can then be rotated to the new direction using **Rotate View (R key)** in the *Action Menu* or from the Button Bar.

Shot Setup - Increase or decrease a club's loft by changing the golfer's stance. You can adjust the clubface to open or closed, and the swing plane to out side-in or inside-out. Shot Setup will then allow you to save your custom shot types. This is an advanced feature that will allow you ultimate control over the golfer's swing.

It is strongly recommended that you take your golfer to the practice areas. This way you can learn the characteristics of each shot analysis item. You can test different theories and adjust shortcomings. For the serious golfer, learning these techniques will provide you with a huge advantage.

Choosing a Club

There are 21 clubs available to each player; however, only 14 of those clubs can be used at any one time, 13 clubs plus a putter. The *Clubs In Bag* option on the *Player Settings* screen allows you to select the clubs the player will carry onto the course. Each club has specific properties associated with it that should be taken into account when selecting the clubs:

Angle - This is the angle of the clubface and it is what gives the ball loft. The lower the angle, the lower the ball flight.

Distance - The distance of the club is an average distance for each player. To view the average club distance for each club, move the cursor over the club for a few seconds and a tool tip message will appear if *Tool Tips* is enabled from the *Window Menu*.

The angle and distance specifications for an *advanced* player's clubs are listed below:

Club	Angle	Distance
D1	9.5°	275 yds
D2	12°	270 yds
2W	14°	260 yds
3W	16°	250 yds
4W	18°	235 yds
5W	21°	215 yds
6W	23°	200 yds
7W	25°	190 yds
1I	18°	235 yds
2I	21°	220 yds
3I	24°	205 yds
4I	27°	195 yds
5I	31°	185 yds
6I	35°	172 yds
7I	39°	160 yds
8I	43°	148 yds
9I	47°	135 yds
PW	51°	120 yds
SW	56°	90 yds
LW	60°	70 yds

The putter is always present in the golf bag and is usually used exclusively on the green or around the fringes of the green. Check the other clubs you wish to have in the player's bag. If you accidentally select too many, you'll receive a friendly error message. This is a lot better than the disqualification you would experience in an actual tournament for this rule infraction.

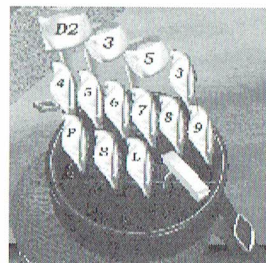
Caddie Suggestions - The caddie calculates distance to the pin, elevation difference, and course conditions. The caddie will then suggest a club using the player statistics for average club distance. If the caddie does not select the club you desire, it can be changed easily during gameplay. Whenever *Regulation* rules are selected from the *Game Settings* screen, and the player is using caddie suggestions, then statistics will be kept on the average distances hit with each club. Over time, the caddie will learn how the player uses each club and give better suggestions.

Note: To see the player's club statistics during game play, turn on screen tips, then place the cursor over a club in the bag for a few seconds. A screen tip box will appear with the current yardage.

No Caddie Suggestions - The driver will come up at the beginning of the hole, the default chipper when just off the green, and the putter will come up whenever the player is on the green. If a different club is desired, you will need to select a new club before each shot.

Changing the Club

If you have *Caddie Suggestions* selected on the *Player Settings* screen, the most appropriate club will automatically be placed in the golfer's hands before each shot. This club is displayed in the lower left corner of the Swing Camera.



If you want to override the suggested club or if you do not have *Caddie Suggestions* selected, click the club icon in the lower left corner of the Swing Camera to change it (you will probably need to do this before every shot without a caddie suggestion). This will display your golf bag. The golf bag will contain the clubs that were selected when the player was last edited. The average distance the club can reach is determined by the player ability setting. Choose the desired club from the bag by clicking on it. The golf bag will disappear and the new club will appear in the lower left hand corner. Exit the club selection mode by pressing **ESC** or clicking outside the bag.

To select a club using hot keys, type **W** or **I** + (**club number**). Woods are selected by typing **W** + # and irons are selected by typing **I** + #. If the player does not have the selected club, then the club with the closest characteristics is chosen.

Wood hot keys are:

D1 = W + 0	3W = W + 3	6W = W + 6
D2 = W + 1	4W = W + 4	7W = W + 7
2W = W + 2	5W = W + 5	

Iron hot keys are:

1I = I + 1	6I = I + 6	PW = I + P
2I = I + 2	7I = I + 7	SW = I + S
3I = I + 3	8I = I + 8	LW = I + L
4I = I + 4	9I = I + 9	Putter = I + 0
5I = I + 5		

For more information about which club to choose, see the section on *Choosing a Club*. This lists the loft and advanced distance of every club.

Drop Ball

If the ball becomes unplayable, or if you find that a shot has ended up behind an obstruction (trees, bushes, etc.), you may need to drop the ball in order to clear your next shot. A drop results in a one-stroke penalty unless the ball lands on a cart path. If the ball lands out of bounds, you will be forced to re-hit from the same location and it will cost two strokes.

Click the **Drop (Hot Key = D)** button. The cursor disappears and you are able to move the golfer around on valid drop areas. The allowable drop area extends two club lengths to either side of your existing lie, and no closer to the hole. You won't be allowed to drop in hazards or out of bounds. When you are in an allowable drop area, left click and the golfer will drop the ball at that location. If the ball rolls out of bounds again, you will have to repeat the process.

You may find that you cannot drop the ball anywhere in the Swing Camera. If this is the case, you will need to use the new buttons that appeared in the Button Bar when you started the drop mode. To access the buttons, move your cursor to the lower left corner of the screen until it appears over the buttons. Then click on the button.

Nearest Relief - This button allows you to accept the suggested drop ball location. Use this button if you are having trouble with the ball always rolling out of play again.

Drop Backward - Reposition the view so you are directly behind your original position (remember, you cannot drop closer to the hole). You may find that in order to have an allowable drop, you need the **Drop Backward** button. You may click the **Drop Backward** button multiple times until you have a satisfactory area to drop. As you do this, you'll notice that the allowable drop area increases in size.

Drop Forward - A new **Drop Forward** button appears after you click the **Drop Backward** button for the first time. This has the opposite effect of the **Drop Backward** button.

Done (Hot Key = ESC) - This option is only available when you are not being forced to drop. Select this if you decide not to drop the ball and want to return to the game.

Grid

Choose when to show the grid for each player on the *Player Settings* screen. The grid options allow you to decide when the grid will automatically appear for the player being edited or created.

The auto show options are:

Never - The grid will never be displayed for the player.

Always - The grid will always be displayed for this player every time the game redraws a scene.

Chipping and Putting - The grid will only be displayed when the player is within chipping distance of the hole. It can be very helpful for finding the break or the lip of an obscured bunker.

Putting - The grid will only be displayed when the player is on the green. It can be helpful for finding the break of the green.

Note: The grid can be turned on and off manually regardless of the selected option by clicking the *Grid* button on the Button Bar or by selecting *Grid (X)* from the Action Menu.

Shot Setup

Shot Setup offers an interface that will allow you ultimate control over the golfer's swing. You can adjust the clubface to open or closed, move the ball forward or backward in the stance, and change the swing plane to outside-in or inside-out. Shot Setup will then allow you to save your custom shot types. These features, combined with the TrueSwing™ method, allow the swing to be customized for just about any shot.

Click on the shot setup icon in the lower left section of the Swing Camera or use the *Action Menu* item **Shot Setup (Hot Key = Shift + S)**. The golfer will rotate up for better visibility and the Button Bar will show the setup shot buttons. When you find a satisfactory stance, click **Done** or press **ESC** to return to the game.

The button bar on the right contains some pre-defined stances and two custom stances. All pre-defined stances can be changed by pressing **Save** after editing. Choose between the following stances:

Straight (Hot Key = Shift + I) - Reset the shot variables to hit the ball straight.

Draw (Hot Key = Shift + D) - Setup a draw shot to get the ball to curve slightly to the left. This can be used on fairways that curve slightly to the left.

Fade (Hot Key = Shift + F) - Setup a fade shot to get the ball to curve slightly to the right. This can be used on fairways that curve slightly to the right.

Punch (Hot Key = Shift + P) - Setup a punch shot to keep the ball very low and make it travel as far as possible. This is useful for keeping the ball under trees.

Flop (Hot Key = Shift + O) - Setup a flop shot to keep the ball very low and make it travel a short distance. This can be used to get back on the fairway from within the trees.

Custom (Hot Key = Shift + 1 or 2) - Select one of the **Custom** buttons, and then customize the shot. Press **Save** in order to change the *Custom* shot. Then next time you wish to setup the same shot, just press the same **Custom** button and the last values will be returned.

The button bar on the left allows you to save, restore, or apply the current settings. Choose between these options:

Save - Save the current settings into the pre-defined stance button. The next time you select the button, these settings will be used.

Restore - Restores the pre-defined stance button to its default value. For example, if you customize the draw shot and want to restore it to the default, then select *Draw*, press **Restore**, and finally select **Save**.

Done (Hot Key = Esc) - This will end the Shot Setup mode and apply the currently selected shot to the player's stance. The selected shot will remain active until the player continues to the next position. The player will then default to a straight shot.

You can create your own shots by moving the golfer, club and ball.

Opening/Closing the Club Face - Move the cursor over the clubface until the cursor changes to a rotation arrow. Click the left mouse button and drag the clubface open or closed.

- **Opened** - When the clubface is opened, the ball will be hit to the right and will gain extra loft. Opening the clubface is typically used to pop the ball over bunker lips or bushes.
- **Closed** - When the clubface is closed, the ball will be hit to the left and will lose some loft. Closing the clubface is typically used to keep the ball low in order to stay under trees.

Moving the Ball - Move the cursor over the ball until the cursor changes to a hand. Click the left mouse button and drag the ball forward or backward.

- **Forward** - When the ball is forward in your stance, you will tend to strike the ball while in the upward motion of your swing. Moving the ball forward is a subtle means of gaining extra loft in the ball.
- **Backward** - When the ball is backward in your stance, you will tend to strike the ball while still in the downward motion of your swing. Moving the ball backward is a subtle means of reducing the loft of the ball.

Rotating the Swing Plane - Move the cursor over the golfer until the cursor changes to a rotation arrow. Click the left mouse button down and drag the golfer's swing plane inside-out or outside-in.

- **Inside-Out** - When the swing plane is inside-out, (pointing right of forward) the ball will draw or hook. This can be useful for fairways that curve to the left.
- **Outside-In** - When the swing plane is outside-in, (pointing left of forward) the ball will fade or slice. This can be useful for fairways that curve to the right.


Note: The shot setup interface is not available while putting.

— Swing (Tri-Click) —

The Tri-Click swing has been the traditional interface for swinging the club in PC golf games. You will see a *Tri-Click indicator* directly below the golfer that will be used to meter the swing power and lateral spin.



There are four parts to the Tri-Click swing:

1. **Starting the Swing** - Move the cursor over the Tri-Click meter or the golfer until the cursor changes to a  swing arrow.
2. **The Backswing** - Click with the left mouse button to start the backswing. The meter will begin to move right to indicate the backswing. As the meter continues, the swing power is increased. The mark on the right side of the indicator represents full power.

3. **The Downswing** - Click again with the left mouse button to set the power and start the downswing. The meter will begin to move left to indicate the downswing. As the meter continues, the lateral accuracy is increased. The mark on the left side of the indicator represents a straight shot.

4. **The Impact** - Finally, click again to set the accuracy and finish the shot.

There are two variables to the Tri-Click swing:

1. **Swing Power** - To hit the ball harder, simply allow the indicator to travel closer to the mark on the right (take a bigger backswing) before initiating the down swing. However, the more powerful the swing, the more difficult the accuracy becomes.
2. **Lateral Movement** - When the club head strikes the ball with any kind of left-to-right or right-to-left motion, it will impart lateral spin on the ball. The ball's flight will be curved because of the lateral spin. This will happen if you don't hit the mark on the left side perfectly.

Draw Shots - (A shot that curves slightly to the left.) To create a draw, click (the third click) slightly before the swing indicator reaches the mark on the left side of the swing meter.

Hook Shots - (A shot that curves extremely to the left.) To create a hook, click (the third click) well before the swing indicator reaches the mark on the left side of the swing meter.

Fade Shots - (A shot that curves slightly to the right.) To create a fade, click (the third click) slightly after the swing indicator reaches the mark on the left side of the swing meter.

Slice Shots - (A shot that curves extremely to the right.) To create a slice, click (the third click) well after the swing indicator reaches the mark on the left side of the swing meter.

Putting and chipping methods are slightly different.

— Swing (TrueSwing) —


Interactive TrueSwing™ is an innovative way for you to get the feeling of truly swinging the club. You can control the golfer on the screen without having to watch an indicator. This naturally makes the experience more enjoyable. You can also produce actual golf swings such as draws and fades (and in extreme cases even hooks and slices) by changing the path in which you move your mouse. You can also produce heels, toes, shanks and miss hits if your club is not centered on the ball during impact.

There are two types of TrueSwing™ to choose from, the vertical swing and the horizontal swing. The following example uses the vertical swing. Pulling the mouse back is equivalent to pulling the mouse right, and pushing the mouse forward is equivalent to pushing the mouse left when using the horizontal swing.

With Interactive TrueSwing™, you can think of your mouse as a “club.” The “face” of the “club” is the side of the mouse with the cord. The club velocity is the speed at which you move the mouse. When the “face” of the “club” strikes the ball with any kind of left-to-right or right-to-left motion, you impart spin on the ball.

Note: A golfer in TrueSwing™ mode will not have the indicator that is seen in Tri-Click mode.

There are three parts to every TrueSwing™:

- 1. Starting the swing** - To start swinging, move the cursor over or near the golfer's club. The cursor will change to a  swing arrow. Click the left mouse button to start the swing.
- 2. The Backswing** - Pull the mouse back until the golfer has completed the desired amount of backswing. Bigger backswings usually result in longer shots. Use the ESC key to cancel the swing.
- 3. The Downswing** - Push the mouse forward to complete the swing. The downswing is the most important part of the swing because it controls the power with which the golfer will hit the ball, as well as whether the club is moving right-to-left or left-to-right when the club head meets the ball.

There are three variables to every TrueSwing™:

- 1. Swing Power** - To hit the ball harder, simply push the mouse forward more quickly. The mouse speed parallels the club head speed.
- 2. Lateral Movement** - When the club head strikes the ball with any kind of left-to-right or right-to-left motion, it will impart lateral spin on the ball. The ball's flight will be curved because of the lateral spin. If the club is not centered on the ball during impact, then the ball's flight can be angled or miss hits can occur.
- 3. Tempo** - An even tempo helps achieve the perfect swing. Ideally, the *Downswing* should be about two-thirds the duration of the *Backswing*. Good tempo will result in better shots and lessen penalizing errors. Slow *Backswings* with rushed *Downswings* or rushed *Backswings* with slow *Downswings* will hurt the distance and accuracy of the shot. Long delays at the top of the *Backswing* will also result in shot errors.

Toe/Heel Shots — This situation occurs when the club is not centered on the ball during impact. The club starts out centered on the ball. As you begin to swing, your back swing may move left or right of the center. If you fail to bring the club back to its starting position, you will hit the ball with the toe or the heel of the club. Hitting the ball with the toe or heel will decrease the distance the ball will travel and change the departing angle of the ball left or right. If you

slide severely right or left, you may miss the ball completely. Some terrain types are more prone to miss hits. Toes and heels are more common in rough or sand if the club is not centered on the ball.

Draw/Hook Shots - (shots that curve slightly/extremely to the left.) To create a draw or hook shot, pull the mouse back and to the left. Then move the mouse forward and to the right to start your downswing. Be careful to finish the swing in the same position as started to avoid toes and heels. You can control the amount of draw or hook by adjusting the amount of left input during the backswing.

Fade/Slice Shots - (a shot that curves slightly/extremely to the right.) To create a fade or slice shot, pull the mouse back and to the right. Then move the mouse forward and to the left to start your downswing. Be careful to finish the swing in the same position as started to avoid toes and heels. You can control the amount of fade or slice by adjusting the amount of right input during the backswing.

Experiment with different degrees of left-to-right, right-to-left, right-to-right, and left-to-left mouse movement during the swing to see the various results.

Putting and chipping methods are slightly different.

Note: If you are consistently slicing or hooking the ball, you may have the mouse rotated in your hand even though it may appear to be aligned straight. Many mice have funny shapes and it is difficult to tell when it is straight. To determine a straight alignment, you can move your cursor along a straight vertical line. As long as the cursor stays on a vertical line, the mouse is oriented correctly. If you are consistently toeing or heeling the ball when intentionally hooking or slicing, try angling the mouse and swinging straight.

Putting and Chipping

Putting and chipping methods are different from swings taken from the tee. Both use a different method for swing power and putting reacts differently to lateral movement. The result is that you will have to use more touch on your stroke.

Swing Power - The distance the ball travels depends largely on the backswing.

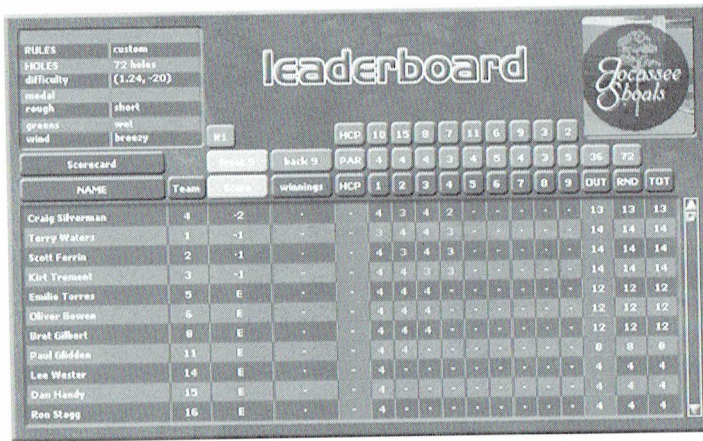
The further the club is pulled back, the greater the momentum of the club head and the further the ball will travel. To hit a short putt or chip, pull the club back slightly and swing.

Lateral Movement - The putter does not impart lateral spin on the ball. The effect is that the ball will travel in the direction it is hit. You will have to be careful about lining up your putt according to the break of the green. To do this, use the *grid*. Not getting the club center back to the ball will produce the same results.

Scores

Scores can be viewed by selecting **Scores** (Hot Key = Shift + S) from the *View Menu*. The screen defaults to a Score Card. It will contain the scores for each player in the player's group. It can be switched to a Leaderboard that will display the scores for every player in the tournament.


The score screen will show the current course conditions and the course difficulty in the upper left corner. The conditions were selected from the *Game Settings* screen and the course difficulty is used in calculating handicaps.



The score screen contains many buttons that will sort the list. Sort the list using the Name, Team, Score, Handicap, strokes on a hole, and total strokes. Just click on the button and the list will update. The handicap column displays the team's handicap being used to calculate the score. It will only be displayed if you select *Use Handicaps* from the *Game Settings* screen.

Click the **Back 9** or **Front 9** button to see the back nine and front nine scores. Click the **Leaderboard** or **Score Card** button to view every player's score or just the scores in your group.

If you are playing 72 holes, there will be four buttons that specify which round is being played. Select the round you want to view and the list will update.

Note: You can print the current scores by pressing the print button  in the top right corner of the scores screen. This will print all scores for each player in the order they are currently listed.

Statistics

There are four sets of statistics that are automatically tracked: *Player*, *Course*, *Top Medals*, and *Handicaps*. These statistics are useful in comparing players and courses. The statistics can be viewed by selecting **Stats** from the *Main Menu* or by selecting **Stats** (Shift + T) from the *View Menu*.

When playing Internet games some rooms will calculate statistics that will be displayed online.

In order for statistics to be calculated, you must be playing regulation rules. *Regulation* can be selected from the *Game Settings* screen under *Options*. You will not be able to take mulligans or gimmies using regulation rules since both would alter the statistics.

The player statistics include the following:

Holes Played	Number of holes played.
Rounds Finished	Number of rounds finished.
Holes In One	Number of holes-in-one achieved.
Chip Ins	Number of chip-ins achieved.
Driving Distance	Average distance achieved per drive.
Driving Accuracy	Percent of the drives that landed on the fairway.
Average Putts	Average number of putts to get to the cup.
Sand Saves	Percent of par recovery from landing in sand.
Scrambling	Percent of par recovery without green in regulation.
Greens in Reg.	Percent of greens hit in regulation (green hit in par -2)
Handicap	The player's handicap.
Average Score	Average score per round.
Total Eagles	Number of eagles achieved.
Birdies Per Round	Percent of birdies per round.
Pars Per Round	Percent of pars per round.
Bogeys Per Round	Percent of bogeys per round.
Other	Percent of remainder.
Average Par 3	Average strokes on par threes.
Average Par 4	Average strokes on par fours.
Average Par 5	Average strokes on par fives.

*Deleting and recreating a player will remove his or her statistics.


The course statistics include a column for the front 9, back 9, and for the entire 18 holes. The statistics include the following:

Total Yards	Total number of yards for the course.
Total Par	Par for the entire course.
Holes In One	Number of holes in one achieved on the course.
Driving Accuracy	Percent drives that landed on the fairway.
Average Putts	Average number of putts to get to the cup.

Greens in Reg.	Percent of greens hit in regulation (hitting the green in par -2)
Average Score	Average score per round.
Total Eagles	Number of eagles on the course.
Birdies Per Round	Percent of birdies per round on the course.
Pars Per Round	Percent of pars per round on the course.
Bogeys Per Round	Percent of bogeys per round on the course.
Other	Percent of remainder.

*Use the Course Manager to delete the stats for a specific course.

The top medals screen shows a list of the top scores achieved on the current course using Medal play. New players are added to the list at the end of a Medal round. Computer players are not added to the list.

Note: You can print the current statistics by pressing the print button  in the top right corner of the statistics screen.

Using the Course Architect

The *Course Architect* allows YOU to create custom courses that can be played using *PGA Championship 2000*. Courses built with the architect can be shared with others and played in remote games.

The tools to create a new course are as follows:

Menu and Button Options - Use these options to make selections and customize the course.

Create a New Course - Quickly lay out any number of holes (up to 18) and outline the terrain shapes, then apply terrain to shapes that make up each hole (rough, fairway, water, etc.)

Use the View Interface - Use the visual interface to navigate and create custom courses.

Improve Performance - Remove redundant and unnecessary data from the course and reduce the course perimeter.

Course Architect (Philosophy) - Great artists can create spectacular works regardless of the tools given them to work with, but with the right tools, any one can create something they can feel proud of. A course is much more than the sum of its holes. The way holes interact with each other and the terrain plays an important role. Our response was to create the *Course Architect* with the tools necessary to allow anyone to create a prize-winning course with minimal effort and to allow the creation of an entire course (not just individual holes.) Whether you are one of the great architects or just a computer game fanatic trying to get the most out of a game, we believe you will find the *Course Architect* fun and easy to use.

Menu Options (Architect)

The pull down menus at the top of the application window provide options for course creation. These options are available when there are no modal windows being used. The menus are:



File - Contains options like creating, saving, and exiting a course.

Edit - Edit the selected object or undo your last action.

View - Contains options to show or hide the button bars and move or zoom into the Work Window.

Tools - Contains options to create or edit shapes and objects in the *Work Window*.

Window - Lets you select alternate ways to view the course and its elements.

Help - Opens the on-line help manual and provides *About* information.

- **Contents (Hot Key = F1)** - Opens the on-line help manual beginning with the *Contents* page.
- **On Item (Hot Key = Shift + F1)** - Displays the context-sensitive help cursor. Click anywhere on the architect interface to get help on that item.
- **Keyword (Hot Key = Ctrl + K)** - Opens the on-line help manual in keyword search mode.
- **About** - Displays an information box about the *Course Architect* and the current systems resources.

File Menu

Choose *File* from the *Menu Options* to access the following commands:

File	Edit	View	Tools	Window
New				Ctrl+N
New Course Wizard...				
Open				Ctrl+O
Save				Ctrl+S
Save As...				
Import Course Library				
Course Properties...				
Course Info				
Compile Course...				
1 Riverwind.ach				
Exit				

New (Hot Key = Ctrl + N) - Creates a new empty course, 2000 yds. long by 2000 yds. wide.

- **New Course Wizard** - Starts a new course wizard that leads you through the creation of a course.

Open (Hot Key = Ctrl + O) - Opens an existing course that was previously saved.

Save (Hot Key = Ctrl + S) - Saves the current course. Ask for a file name if the course is unnamed.

Save As - Asks for a file name and location, then saves the current course.

Import Course Library - Allows a library to be imported so that it can be used in the Course Architect. When selected, a dialog box will appear allowing you to select the (.clb) library file. When the Open button is selected, the library will be added as a tab in the librarian.

Course Properties - Provides information about the course and allows the course to be named and resized.

Course Info - Shows the courses memory usage, number of objects, number of points, and other course related information.

Compile Course - Compiling your course creates a course that *PGA Championship Golf™ 2000* can load and play. You must compile your course before you can play it. There are only a few options to compiling a course. It is possible to create your course with or without trees, bushes, and 3D structures. It is also possible to create your course without shadows. These options can easily be turned on or off simply by clicking the check box next to the option. The last options allow you to register your course with *PGA Championship Golf™ 2000* so that it will be available for playing and testing. Each course played within the golf game uses textures, objects, structures, sounds, and panoramas that are stored in a course library. In order for a course to be played, the appropriate library or libraries must be loaded on your computer.

Most Recently Used Files - This section contains a list of the most recent files that have been open in the Architect. The list can contain up to four files and is useful in allowing quick access to previous course files. This list will be empty the first time that the Architect is launched after installing.

Exit (Hot Key = Alt + F4) - Requests to save the current course, then closes the Architect.

Edit Menu

Choose *Edit* from the *Menu Options* to access the following commands:

Edit	View	Tools	Window	Help
U <u>ndo</u>				Ctrl+Z
D <u>elete</u>				Del
D <u>uplicate</u>				Ctrl+D
S <u>elect All</u>				▶
D <u>rop Selected Shapes</u>				Insert

Undo (Hot Key = Ctrl + Z) - Undo the last action (Insertion, Deletion or Terrain Manipulation)

Delete (Hot Key = Del) - Delete all items that are currently selected in the *Work Window*.

Duplicate (Hot Key = Ctrl + D) - Make a copy of all items that are currently selected in the *Work Window*.

Select All - Selects all land shapes, paths, hazards, sounds, 2D, and/or 3D objects.



Drop Selected Shapes (Hot Key = Insert) - Drop all floating shapes that are currently selected in the *Work Window*. The shapes can still be dropped one at a time, by clicking the right mouse button on an existing shape and choosing *Drop* from the menu that appears, or by double-clicking in the shape itself.

View Menu (Architect)

The *Menu Options* contains options to show or hide the button bars and other windows. You can use *Zoom* and *Scroll* to adjust the *Work Window*. The arrows correspond to the direction the camera will move in the course. They do not change the camera height.

View	Tools	Window	Help
✓ File/Edit Tools			
✓ Course Tools			
✓ Window Tools			
✓ Navigation Tools			
✓ Status Bar			
✓ Course Perimeter		Shift+C	
✓ Hazards		Shift+H	
✓ Shot Paths		Shift+D	
✓ Sound Positions		Shift+S	
✓ Grid		G	
Library		Shift+L	
Modeling Clay		Shift+M	
Zoom			▶
Scroll			▶
Center Camera		Ctrl+C	
Center Rotate Origin		Ctrl+Shift+C	
Use Metric			

File/Edit tools - Show and hide the file and edit tools.

Course tools - Show and hide the course tools.

Window tools - Show and hide the window tools.

Navigation tools - Show and hide the navigation tools.

Status Bar - Show and hide the status bar.

Course Perimeter (Hot Key = Shift + C) - Show and hide the course perimeter.

Hazards (Hot Key = Shift + H) - Show and hide all hazard shapes.

Shot Paths (Hot Key = Shift + D) - Show and hide all shot paths.

Sound Positions (Hot Key = Shift + S) - Show and hide all positioned sounds.

Grid (Hot Key = G) - Show or hide the grid in the *Work Window*.

Library (Hot Key = Shift + L) - Show and hide the *Library* window.

Modeling Clay (Hot Key = Shift + M) - Renders the entire course in solid modeling clay color.

Zoom - This option will bring up another menu that will allow you to zoom in and out of the *Work Window*.

In (Hot Key = Z) - Move in closer to the course.

Out (Hot Key = Shift + Z) - Move away from the course.

Select (Hot Key = Alt + Z) - Move in until the current selection fills the screen.

After selecting the button, move the cursor over the *Work Window* to the top left corner of the area. Hold down the left mouse button and drag the cursor to the lower right corner of the area, then release the mouse button.

Cancel (Hot Key = Alt + Shift + Z) - Return to the default camera height. When zoomed in close to the ground, many times it is easier to cancel the zoom, and then use the *Zoom To Selection* tool.

Scroll - This option will bring up another menu that will allow you to move the *Work Window* around the course.

- **Left (Hot Key = Left Arrow)** - Moves the camera to the left.
- **Right (Hot Key = Right Arrow)** - Moves the camera to the right.
- **Up (Hot Key = Up Arrow)** - Moves the camera toward the top of the screen.
- **Down (Hot Key = Down Arrow)** - Moves the camera toward the bottom of the screen.

Center Camera (Hot Key = Ctrl + C) - Moves the *Camera Window* into to center of the current *Work Window*.

Center Rotate Origin (Hot Key = Ctrl + Shift + C) - Moves the rotation origin used for rotating land shapes into to center of the current *Work Window*.

Use Metric - The architect will use the metric system in displaying distances.

Librarian

Course libraries are collections of things that can be placed on the course. Trees, bushes, rocks, ball washers, bridges, stairs, and sounds are all stored in course libraries. The architect can only use objects that are found in course libraries. If custom objects are to be used in a course they must first be compiled into a course library. The architect comes with several pre-built course libraries.

Open Library - Select **Library** from the *View Menu* or Button Bar. The librarian will appear, containing one page of items for each library registered on the machine.

Close Library - Select **Library** again or use the standard windows close icon in the upper right corner of the library window.

Add Object - Move the cursor over an object in the *Library View* and hold down the left mouse button. Drag the object over the *Work Window* and place it by releasing the button. This will drop the object onto the course. To place many objects of the same type, use the *Click-Click* or *Forestry Tool* methods.

Tools Menu

The Tools Menu contains options to create or edit shapes and objects in the *Work Window*. You can measure or rotate existing objects and make elevation changes to the course.

Tools	Window	Help
Create Land Shape	L	
Create Path	P	
Create Hazard Area	H	
Create Course Perimeter	C	
Rotate		Ctrl+R
Measure		Ctrl+M
Make a Hill		Alt+Shift+H
Make a Bunker		Alt+Shift+B
Make a Slope		Alt+Shift+L
Smooth an Area		Alt+Shift+S
Flatten an Area		Alt+Shift+F
Forestry Tool		Shift+F
Click-Click Object Tool		Shift+D
Hole Definition Tool		D
Point Density Indicator		Alt+Ctrl+D
Grid Settings...		Shift+G
Repair Course...		

Create Land Shape (Hot Key = L) - Used to create land shapes for the course. Land shapes begin in the *Work Window* as objects that float above the course. While they are floating, the points can be selected, pulled around, inflated, and rotated. Dropping a land shape makes it part of the terrain. Once the shape becomes part of the terrain it cannot be resized or repositioned until it is picked up again.

Create Path (Hot Key = P) - Used to begin creating a path. Click the left mouse button on the *Work Window*. Each mouse click will add a new point to the path shape line. The last point is added by double clicking the left mouse button. The sides of the path are always parallel to the central line segment.

Create Hazard Area (Hot Key = H) - Parts of the course may be marked as hazard areas. When the course is played and the ball lands in these areas the hazards rules will apply. Hazard shapes are not dropped onto the course. They always float above the course and are drawn in red. Create the hazard areas by clicking once for each point, and double clicking to finish the shape.

Create Course Perimeter (Hot Key = C) - Mark the outside boundaries of the course.

Rotate (Hot Key = Ctrl + R) - Rotate selected objects and points around a central marker. After selecting **Rotate**, a square with a cross in it will appear on the screen. This marks the spot around which all selected points and objects will be rotated. Move this mark by clicking it with the left mouse button, and dragging it to a new position. Rotate the points by clicking the selection with the left mouse button and dragging it around the screen. To finish rotating the points, select **Rotate** again. Interesting changes can be made to a shape by selecting only some of the points before beginning the rotate.

Measure (Hot Key = Ctrl + M) - The measuring tool will show the horizontal and vertical changes between two points on the course. To start measuring hold down the left mouse button on the *Work Window* and drag the cursor around the course. If the game is set to use the metric system, then the Measure tool's units will be in metric as well. To change this setting, use the *General Options* in the game.

The Land Tools

Make a hill (Hot Key = Alt + Shift + H) - Press this button to bring up the hill tool.

This tool can be used to move the land up or down with smooth edges. The transitions between modified land and unchanged land is smooth.

Make a bunker (Hot Key = Alt + Shift + B) - Press this button to bring up the bunker tool. This tool is used to move land up or down with sharp edges. The transitions around the *Land Shape's* edge will be sharp.

Make a slope (Hot Key = Alt + Shift + L) - Press this button to bring up the slope tool. This tool is used to move land up or down with a sloping edge. The Slope Tool will make a hill or depression with a sharp edge. The transitions around the *Land Shape's* edge will be sharp. If the ground is originally flat, this tool will make an elevation change where the sides of the change are flat. This tool is especially useful when trying to tilt all or part of the entire course.

Smooth an area (Hot Key = Alt + Shift + S) - Press this button to use the smoothing tool. Smoothing can get rid of irregularities that creep in from frequent elevation changes made to the land by the other tools. This tool will allow you to specify anything from lightly to aggressive smoothing. When the tool is instructed to lightly smooth, it considers a small radius around it in determining the new elevations. For an aggressive smooth, the tool will consider large areas of terrain to find the general trend in the terrain. Everything within the selected *Land Shape* will be smoothed. Smoothing is not a real-time operation, after the operation is specified, then the changes are applied.

Flatten an area (Hot Key = Alt + Shift + F) - Press this button to use the flatten tool. Flatten will make the selected area flat and optionally level. A dialog will offer these four options for flattening:

- **Along Contour** - This will flatten the area to match the contour of the selection. This is useful if you have a bunker in a side hill and want to remove it. The area will be flattened to match the side hill. This tool can produce strange results when used on uneven terrain. It is best used on simple elevation changes.
- **Maximum Height** - This will flatten everything in the selection to the maximum height inside it.
- **Average Height** - An average height of all the terrain inside the selection is calculated and the terrain is set to this height.
- **Minimum Height** - This will flatten everything in the selection to the minimum height inside it.
- Care should be taken when using this tool, for it will destroy any elevation information inside the selection and replace it with the flattened terrain. A single floating land shape must be selected to use this tool. Everything within this selection will be flattened. This tool will result in very sharp edges and is used well in conjunction with the smoothing tool. Flattening is not a real-time operation, after the operation is specified, then the changes are applied.

Note: Multiple land operations will begin to add redundant points to the course. Removing detail will increase performance without reducing the visual quality.

Foresting Tool (Hot Key = Shift + F) - Use this tool to forest an area or place flowers in a flowerbed. Before selecting this tool, create and/or select a land shape where the objects should be placed. Then click on this tool to bring up the *Foresting Tool* dialog. This dialog allows you to choose the object, height, and the number of objects to place inside the land shape. Click the **Apply** button to forest the shape with the selected object. This tool can be used many times on the same land shape.

Click-Click Object Tool (Hot Key = Shift + O) - This tool adds an object such as a tree or building to the course. Once an object has been selected from the library view, it will be placed on the course each time the left mouse button is clicked over the Work Window.

Hole Definition Tool (Hot Key = D) - Define all of the positional information for the course (tee positions, pin positions, etc.)

- **Point Count Indicator (Hot Key = Alt + Ctrl + D)** - Each dropped shape has a number of points that are used to define the terrain within that shape. This tool allows you to select all dropped land shapes that have more than a certain number of points. For example, if 10,000 is selected, this tool will highlight all the shapes that have 10,000 or more points. This is useful in targeting shapes that can be used with the Optimize Detail tool.
- **Grid Settings (Hot Key = Shift + G)** - Brings up the Grid Settings screen which allows you to select the distance between the grid intersections. When the grid is enabled, it will be displayed in the *Work Window*. Each dot in the grid represents an intersection of the grid sections. Select *Grid* from the *View Menu* or use the **Grid** button from the Button Bar to turn the grid on or off.

Note: Do not confuse this grid with the grid that shows up when doing elevation changes.

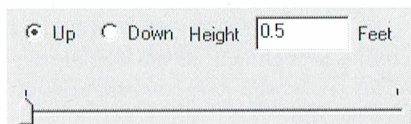
Repair Course - Goes through the entire course and repairs any invalid data. Occasionally when dropping land shapes or performing terrain elevation changes, redundant or invalid data is introduced. These situations arise very rarely but are difficult to detect without running this tool. If a repair was needed, you will be informed. Running the tool when no corrections are needed has no effect.

Land Tools

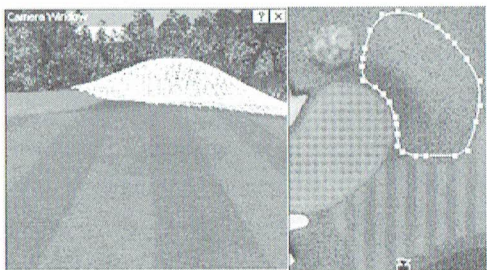
The *Tools Menu* contains the *Land Tools* options that deal with elevation changes in the *Course Architect*. They give you the feel of molding and shaping the ground into hills and valleys, much like a potter works with clay. These tools provide ways of easily modifying the elevation of the terrain in a smooth and efficient manner. You can choose operations that make a hill or valley, a bunker or mound, a flat-sided hill or valley (called slope), and smooth or flatten terrain. The Land tools are not available until conditions exist where the elevation change is applicable.

To specify what areas are to be affected, you must select *Land Shapes*. All of the elevation tools require at least one selected Land Shape. It is inside this land shape that the elevation tool modifies the terrain. In the case of Hills, Bunkers, and Slopes, you can select two Land Shapes. When using two Land Shapes, it is required that one of the Land Shapes be completely within the other Land Shape. In this case, the outside Land Shape indicates what terrain should be modified. The inside Land Shape changes the shape of the Hill, Bunker, or Slope that is created. These tools can be used to make both very large and sweeping changes, or very small and subtle changes.

Hill, Bunker & Slope tools - After selecting one of these tools, a dialog is displayed, asking for the desired elevation change. You can indicate whether the elevation change is up or down. An edit box is provided for exact elevation changes. Use the slider bar to change the elevation in a more intuitive and reactive way. Clicking either **OK** to apply or **Cancel** to ignore the change dismisses the dialog box.



These tools are able to operate with one or two selected *Land Shapes*. If two shapes are selected, one of the *Land Shapes* must be completely inside the other shape. If only one *Land Shape* is selected, then the center of the shape will be raised or lowered. If two shapes are selected, then the inside shape will be moved the full amount requested. The terrain that lies between the inside and outside *Land Shapes* will be moved at varying degrees to create the specified affect.



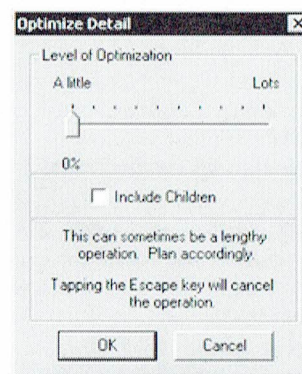
You must keep in mind that these tools make changes to the existing terrain. If the terrain is originally flat, it will make a recognizable Hill, Bunker or Slope. If multiple elevation operations are conducted upon the same land area, the result will be the aggregate, or combination, of all the changes made. Use the Camera Window to see real-time visual feedback. A grid will be displayed, indicating what the terrain will look like after each elevation change is made.

Note: Multiple land operations will begin to add redundant points to the course. Removing Detail will increase performance without reducing the visual quality.

— Optimize Detail —

Optimizing detail is a performance-increasing feature that no designer should ignore. When doing elevation operations, (Hill, Bunker, Slope, Smooth, and Flatten) detail is added to the course to make the elevations look good. The architect will add detail only to the area affected by the elevation change. As more detail is added from multiple elevation operations, redundant points begin to appear in the course. This redundancy should be removed.

Redundant detail is eliminated using the *Optimize Detail* tool. Moving the cursor over a *Land Shape* that outlines the area in question. The *Point Count* panel on the right end of the *Status Bar* will show the number of points contained in that shape. Click the right mouse button and choose *Optimize Detail* from the menu that appears. When the dialog appears, select the level of removal that is desired. If detail needs to be removed from the objects enclosed within the shape, select the include children option.

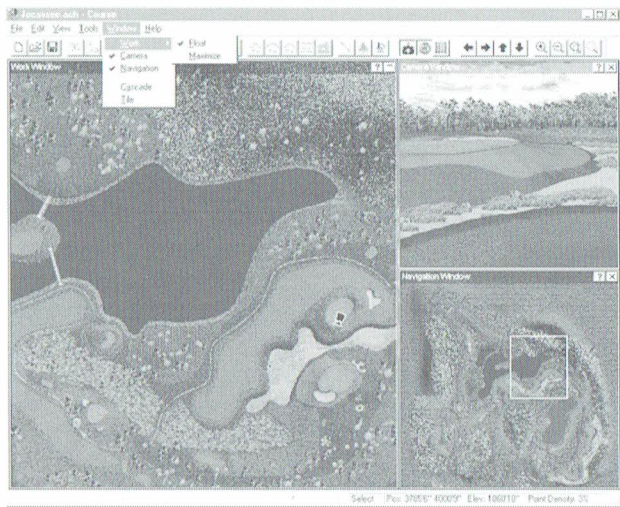


It is very important to run this tool periodically during the creation of courses. Optimizing detail will improve the performance of the architect by reducing the size of the course file and memory used. All terrain objects should have detail optimized at the smallest detail optimization setting (even greens and bunkers). This eliminates significant detail without affecting the visual appearance of the course. Many terrain objects should have detail removed at much higher levels. Examples of these objects are the main weed-rough texture that encircles the whole course, as well as objects that house flowerbeds or forests.

Note: Use the *Point Count Indicator* in the *Tools Menu* to quickly find shapes that have a high number of detail points. These shapes often have redundant or unnecessary points that can be removed.

— Window Menu (Architect) —

The course architect allows three different ways to view the course. The *Work Window* is always visible and is used to place and manipulate shapes and objects. It can be maximized to fill the entire application window. All other views can be shown and hidden from this menu in the *Menu Options*.



Work Window - Where all the work is done. It cannot be hidden and may be maximized to fill the entire application window.

- **Float** - If the *Work Window* is currently maximized, this will cause the window to float in the application frame like the other windows.
- **Maximize** - This will cause the *Work Window* to fill the entire application window.

Camera Window - Brings up a perspective view of the course and places a camera icon in the *Work Window*. You can position and rotate the camera using this icon. This window will give you an idea of how the course will look in the game.

Navigation Window - Used to quickly move the contents of the *Work Window* to see different parts of the course. Most of the course can be seen in the *Work Window*'s default position, but when the camera is close to the ground; only a small part of the course can be seen. The navigation view has a white rectangle that shows how much of the course is in view on the *Work Window*. The rectangle can be moved around by clicking the left mouse button inside the rectangle, then dragging it to a new location. The *Navigation Window* can also be opened from the *Button Bar*.

- **Cascade** - Arranges the open windows in a cascading fashion, starting at the upper left.
- **Tile** - Arranges the open windows in a tiled fashion.

Button Bar (Architect)

The *Button Bar* is available on the application just below the *Menu Options*. The button bar buttons are quick references to the *Menu Options*. The most commonly used features of the course architect are quickly accessible from the application *Button Bar*. For a quick description of any of the buttons available, move the cursor over the button in question for a second or two and a message will appear that describes the button's function. Use the *View Menu* to show or hide the button bars.



File and Edit Buttons - The *File Buttons* are used to create, open, and save the course and are also available in the *File Menu*. The *Edit Buttons* are used to delete, duplicate, and undo selections and are also available in the *Edit Menu*.



Tools Buttons - The *Tool Buttons* contain options to create or edit shapes and objects in the *Work Window*. You can measure or rotate existing objects and make elevation changes to the course. These options are also available in the *Tools Menu*. *Land Tools* are powerful operations that allow you to create hills, bunkers, and slopes. The *Click-Click*, *Forest*, and *Hole Definition* tools allow objects to be placed on the course and tees, pins, and shot paths to be selected for a hole.



Window Buttons - Lets you select an alternate way to view the course and its elements. These options are available in the *Window Menu* and the *Librarian* can be accessed from the *View Menu*.



Work Window Buttons - These options allow you to move the *Work Window* around the course and zoom in and out of selection. These buttons are available in the *View Menu*.

Note: Each of the four groups of buttons can be dragged off the main button bar. Each group then becomes its own button bar. These button bars can be rearranged, docked to either side or the bottom of the application window, or can be left floating in a button bar window by themselves.

Status Bar

The *Status Bar* is displayed along the bottom of the main application window. It can be displayed or removed by selecting *Status Bar* from the *View Menu*. There are several pieces of useful information displayed in the *Status Bar*. From left to right, they include:

Button/Menu Item Descriptions - When you move the cursor over a button or menu item, this panel shows a description of the tool and what it does.

Current Mode - The current mode of the architect is displayed in this panel. The current mode can be Freehand, Measure, Rotate, Select, etc, depending on the tool currently being used.

Position & Elevation Feedback - Any position on the course can be described by an (x, y) position. As you move the mouse cursor over the course in the *Work Window*, this panel will display the current position and elevation on the course. The units will either be in feet/inches or in meters/centimeters, depending on the setting selected from the *General Options* in the game.

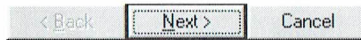
Point Count - As you move the mouse cursor over a dropped land shape in the *Work Window*, this panel shows the number of points that the object contains. Use *Optimize Detail* to reduce this number where applicable.

New Course

To create a new blank course, select *New* from the *File Menu*. The process of creating a course from scratch can be fairly tedious so in order to save time, select *New Course Wizard* from the *File Menu*. This will lead you, step by step, through the creation of your course. The wizard is used to start your course; the menu item will be grayed out once the course creation has begun.

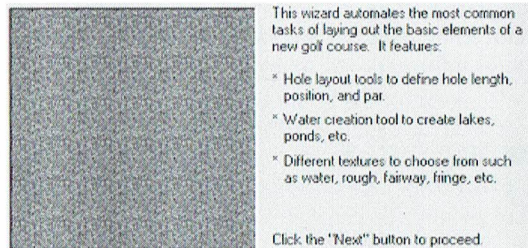
The purpose of the wizard is to allow you to quickly:

- Lay out any number of holes (up to 18)
- Apply textures to the terrain shapes that make up each hole (rough, fairway, etc.)
- Create any water objects on the course.



The wizard uses **Next**, **Back** and **Cancel** buttons to navigate through the dialogs. The very last page has a **Finish** button, instead of **Next**. Finishing the Wizard moves the work done in the wizard to the *Work Window* where it can be manipulated in the same manner as any other object. Each wizard screen has a top view of the course on the left side, and customization controls on the right. The screens are as follows:

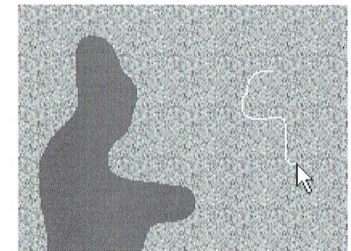
Wizard Screen: Welcome - Explains the usage of the wizard. The wizard will automatically be displayed when the Architect is launched for the first time. Use the checkbox on this screen to force the wizard to be displayed each time the Architect is run.



Wizard Screen: Main Texture - Select the main texture to use throughout the course. The selected texture will be visible outside of any terrain objects. The drop down combo box is used to choose the texture. When a texture is selected, the wizard's editing window will reflect the change. Textures listed in green are playable, meaning that if the ball lands on it in the game, no drop is required. Textures listed in red are unplayable, meaning that the game will require the player to drop on the nearest playable texture, with a penalty. Those listed in blue are unplayable but allow free drops, meaning that the game will require the player to drop, but without a penalty (used typically for areas such as cart-paths).



Wizard Screen: Water - Create water objects for the course. Move the cursor over the wizard's editing window, click and hold down the left mouse button, draw out the water object, then release the left mouse button. A line will be drawn by the cursor that follows its movements. When the mouse button is released, connecting the last point with the first point closes the line. The area is then filled with blue. To delete a water object, select it by clicking on it, and then press the **Delete** button.

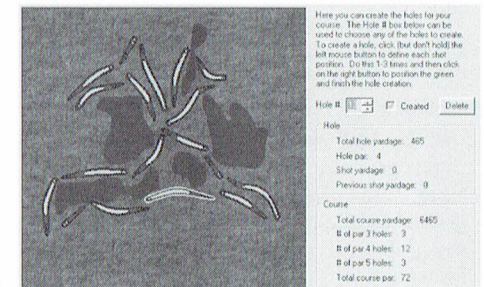


Be careful when drawing the water object, these cases will not be allowed:

- Lines cannot cross over themselves.
- Lines cannot cross over other water or holes.
- Lines cannot entirely encompass other water or holes.
- Lines cannot be too small (only a few pixels big).

Wizard Screen: Holes -

The Hole page is used to create the holes that make up the course. It is not necessary to create the holes in succession or to create all 18 holes. The up and down arrows next to the hole number can be used to select the hole to create. Once the hole is created, the **Created** check box will be selected and the information in the **Hole** and **Course** sections will be updated.



You will only be allowed to create par three, four, and five holes. Follow these directions to create the following:

Create a Par Three - Move the cursor to the desired tee-box position and click the left mouse button. Then move the cursor to the desired green position and click the right mouse button.

Create a Par Four - Move the cursor to the desired tee-box position and click the left mouse button. Move the cursor to the position where the tee-shot should land and click the left mouse button again. Then move the cursor to the desired green position and click the right mouse button.

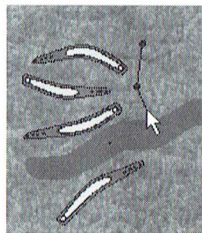
Create a Par Five - Move the cursor to the desired tee-box position and click the left mouse button. Left click on the position where the tee-shot should land, then click again where the second shot should land. Finally, move the cursor to the desired green position and click the right mouse button.

The wizard does a lot of checking, during and after the creation of a hole, to make sure that the holes can be drawn at the specified position. Holes are not allowed to do the following:

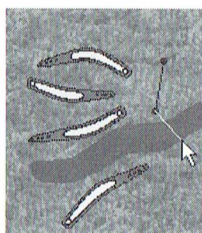
- Holes cannot cross over themselves.
- Holes cannot cross over other water or holes.
- Holes cannot entirely encompass other water or holes.
- Holes cannot be any closer than half a hole's width to any other object or to the edge of the course.

As a hole is created, a line will be drawn from the last point defined for a hole to the current position of the cursor. If the line is shown as black, it is okay to place a part of the hole where the cursor is. The line will turn red if it is not okay to place a part of the hole at that position.

Allowed



Not allowed



The information contained in the **Hole** section, such as the **Shot Yardage**, is updated as the hole is created. The information in the **Course** section is updated after each hole is created. To delete a hole, select it by clicking on it, then press the Delete button. During the creation of a hole, the **Delete** button changes to a **Cancel** button. Use this to cancel the creation of the hole at any time.

Note: When using the wizard, sometimes you may create a hole whose objects cross over themselves. If any of the shapes that make up the hole (fairway, fringe, green, etc.) cross over any of the hole's other shapes, the hole is not allowed. Since the resolution of the wizard's editing window is so small (one pixel represents just over a five-by-five yard), it's sometimes hard to tell that a hole's shapes are crossing each other. When using the wizard, we recommend that you stick to creating holes that don't have too many drastic angles in them, and then adjust the holes using the land tools in the Tools Menu.

Wizard Screen: Shape Textures - Specify the texture of each part of a hole or water. Select them from the drop down list provided on the screen. They are color-coded indicating the playability of each texture: green (playable), red (unplayable), and blue (unplayable, but with a free drop).

Wizard Screen: Finish - When the **Finish** button is pressed from the final screen, the wizard takes all the water objects, holes, and textures, and draws them in the *Work Window*. Use the *Navigation* or *Camera* windows to examine the new holes.

— Land Shapes —

Land Shape mode can be selected from the Button Bar or the *Tools Menu*. *Land Shapes* begin in the *Work Window* as objects that float above the course. While they are floating, the points can be selected, pulled around, inflated, and rotated. Right click on the floating shape to get a menu of options to perform on the shape. Dropping a shape makes it part of the terrain. Once the shape becomes part of the terrain it cannot be resized or repositioned until it is picked up again.

Use the following options to manipulate *Land Shapes*:

Create Land Shapes - Click the left mouse button on the *Work Window* and a new point will be added. Continue clicking until the new shape is complete. Double-click the left mouse button to add the last point and finish the shape.

Delete Land Shapes - Select the shape by moving the cursor over it and click the right mouse button. Choose **Delete** from the menu that appears. The shape may also be deleted by selecting all the points and pressing the Delete key on the keyboard. Choose *Delete with Children* to delete both a dropped land shape and any other shapes that are positioned inside of the shape.

Modifying Land Shapes - The points on a land shape may be moved, deleted, and duplicated. When the cursor is moved over a point, it will change to a hand pinching the point. Be careful not to cross the lines since you cannot drop a shape with crossing lines.

- **Move A Point** - Hold down the left mouse button, and drag the point to a new position.
- **Add A Point** - Move the cursor over the point closest to the place you want to add another point and click the right mouse button. Select *Duplicate* from the menu that appears. This will create a new point between the selected point and its neighbor.
- **Remove A Point** - Move the cursor over the point you want to delete and click the right mouse button. Select *Delete* from the menu that appears. A point may also be deleted by selecting it and pressing the **Delete** key on the keyboard.

Rotating Land Shapes - Select all the points in an object and select *Rotate* from the Button Bar or the *Edit Menu*. A square with a cross in it will appear on the screen. This marks the spot around which all selected points will be rotated. Move this mark by clicking it with the left mouse button, and

dragging it to a new position. Use **Ctrl + Shift + C** to center the rotation point in the middle of the work window or use the *View Menu*. Rotate the points by holding down the left mouse button and dragging it around the screen. To finish rotating the points, select Rotate again. Interesting changes can be made to a shape by selecting only some of the points before beginning the rotate.

Dropping Land Shapes - Once the land shape is the right shape and size, it can be added to the terrain. This removes it from the group of floating shapes and makes it part of the land. To drop the selection, double-click inside a single *Land Shape* or right click on the shape and select *Drop* from the menu that appears. *Land Shapes* cannot be dropped if they cross themselves or cross existing shapes in the terrain. To drop more than one object at a time, select *Drop Selected Shapes* from the Button Bar or *Edit Menu*. This will cause all shapes with any selected points to be dropped onto the terrain.

Picking Up Land Shapes - Land shapes must be picked up and made to float again in order to edit them or duplicated and moved somewhere else. To make the shape float again, right click on the dropped shape and select *Pick Up* from the menu that appears. Select *Pick Up With Children* to include all dropped shapes positioned inside of this shape.

Use as a Shape - Dropped Land Shapes can also be used to create floating Land Shapes that duplicate the dropped shape. Right click on the dropped shape and choose *Use as a Shape* from the menu that appears. A floating Land Shape will be created that is the same shape and properties as the dropped shape.

Shape Properties - To modify the shape properties, right click on the shape and select *Properties...* from the menu that appears. A dialog box will then allow you to change the texture or inflate/deflate the shape. There is also a checkbox that will allow you to change all the dropped shapes that have the same texture as the current shape. The texture will not become visible until the shape is dropped onto the terrain. The textures are color-coded indicating the playability of each texture: green (playable), red (unplayable), and blue (unplayable, but with a free drop). Inflating a shape will cause the edges of the shape to move outward while deflating the shape will move the shape edges inward.

Note: *Once a shape is dropped, you can still change the texture type but you will not be allowed to inflate or deflate the shape until you pick it up again.*

Note: *A quick way of creating a fringe is to duplicate the fairway shape and then inflate the duplicate shape and change its texture to a fringe texture. The new shape can then be repositioned over the existing fairway and dropped onto the course.*

— Path Shapes —

Select *Path Shapes* mode from the Button Bar or the *Tools Menu*. A *Path Shape* is defined by a segmented line. The edges of the path run along side the central line and squarely across the end. The sides of the path are always parallel to the central line segment. When a path shape is dropped onto the terrain it follows the elevation changes in the terrain. No check is made to verify that a golf cart can actually navigate the path nor is the terrain leveled underneath the path.

Create Path - Clicking the left mouse button on the *Work Window* will add the starting point to the new path shape. Each mouse click will add a new point to the path shape line. Double-click the left mouse button to add the last point and finish the path shape. Be careful not to let the edges of the path cross themselves or the path shape will not be dropped.

Delete Path - Move the cursor over the path to be deleted and click the right mouse button. Select **Delete** from the menu that appears. The shape may also be deleted by selecting all the points and pressing the Delete key on the keyboard.

Properties - The path's shape properties can be modified by moving the cursor over it and clicking the right mouse button. Select *Properties...* from the menu that appears. A dialog box will appear which can be used to change the texture and the width of the path. The texture will not become visible until the path shape is dropped onto the terrain.

Note: *A path shape is really only a segmented line with a texture appropriate for a cart path. It can also be used to create other paths such as cement sidewalks or flowerbed edging.*

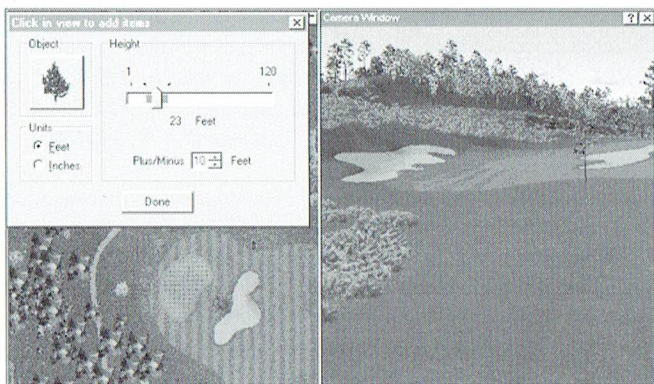
— Object Placement —

Object Placement can be initiated using the Button Bar button or by selecting the *Forestry Tool* in the *Tools Menu*. This will allow you to add objects such as trees or rocks to the course. Once an object has been selected from the library, it will be placed on the course each time the left mouse button is clicked over the *Work Window*. The **Done** button on the placement dialog must be pressed in order to finish placing objects.

Once the objects have been placed, they can be selected again by moving the cursor over them and clicking the left mouse button. All other selections are removed and the new item is selected. To keep increasing the number of selections, hold down the **Ctrl** key while clicking on items. To deselect all objects, move the cursor away from all objects and click the left mouse button. A rectangle may be used to select several things at a time. To do this, move the cursor to the top left corner of the rectangular region to be used and hold down the **Shift** key while clicking the left mouse button. Now drag the cursor to the lower right corner of the selection area and release the mouse button. To select all the objects or sounds of the same type, hold the **Control** key down and double-click on an object or sound. All the objects or sounds of the same as the one clicked on will be selected.

There are three types of objects that can be placed in the course, two-dimensional, three dimensional, and sound objects. Most objects are represented as two-dimensional images in the course. These objects include trees, ball washers, textures, and flowers. Some objects such as bridges, houses and walls must be three-dimensional. Each type of object has a unique method of placement.

Two Dimensional Objects - The two dimensional objects can be selected from the *Objects* section in the *Librarian*. There are three ways these objects can be placed: the *Click-Click Object Placement* tool, the *Foresting Tool*, and finally, drag and dropping the object from the *Librarian* into the *Work Window*.



Click-Click Placement - Allows you to quickly place objects at specific locations on the course. The *Click-Click tool* can be accessed from the *Button Bar* or the *Tools Menu*. Choose an object type from the dialog that appears by clicking the **Object** button. You can modify the settings on placed objects. Change the height of the object by moving the slider bar until the desired height is achieved. When placing many of a particular object it is some times desirable to have some variation in the height of the objects. Just choose a distance (plus or minus) that the object height can vary. You can also change the units to facilitate placement of both small and large objects. While this dialog is showing, you can click any where in the *Work Window* to place objects. The cursor will indicate that you're in *Click-Click object placement* mode.

Foresting Tool - When placing objects, you may want to place many objects in an area where the specific placement of the object is not important. Use this to forest an area or place flowers in a flowerbed. First create and select a *Land Shape* where the objects should be placed. Then choose *Foresting Tool* from the *Button Bar* or the *Tools Menu*. Choose an object type from the dialog that appears by click the **Object** button. The *Librarian* will appear and you can choose the object you would like to place. In the dialog you can specify the height of the object, any variation to the height, and an average distance between the objects. **Apply** will populate the selected land shape with the selected object type. This can be done several times if more objects are desired in the area.

Once placed, these objects can be moved, deleted and rotated.

Select Objects - Click on the object. A wire frame will be drawn around the object to indicate that it has been selected. To select all of one kind of object, hold the **Control key** down and double-click on the desired object. All of the objects that are the same as the object that was clicked on will be selected. To select objects in one area, drag a selection rectangle around the objects.

Delete Objects - Select the objects you wish to delete and right click on an object, then select *Delete* from the menu that appears or select the objects and hit the **Delete** key.

Move Objects - Click on the object, and then drag it to a new location.

Rotate Objects - Select the object(s) and choose *Rotate* from the *Button Bar* or *Menu Options*.

Properties - Once an object has been dropped onto the course, its properties can be modified by right clicking the object and choosing *Properties...* from the menu that appears. This will cause a dialog box to appear that is unique to the selected item. You can modify the height of the object from this dialog. If more than one object is selected, the *Properties* dialog values will apply to all of the selected objects. The values displayed in the dialog will be the average of all the selected objects.

Note: If the mouse cursor is moved over any entry in the *Librarian* and held there for a moment, a tool-tip will appear that gives the title of that object. In the case of textures, the tool-tip will also list whether or not a texture is playable, and if a free drop is allowed.

Three Dimensional Objects - The three dimensional objects can be selected from the *Structures* section in the *Librarian*. These are three-dimensional renditions of objects that cannot be represented by a photo. Some of these items are clubhouses, bridges, benches, houses, shacks and other miscellaneous items. These objects are never placed in mass as more care needs to be given to their placement. To place one of these structures on the course, click and hold on one of the structures in the *Librarian*. Then drag the object off the *librarian* and place it on the course. Once a structure is placed on the course several things can be done to modify it's position and orientation.

Select Structures - Click on the structure. A wire frame will be drawn around the structure to indicate that is has been selected.

Delete Structures - Right-click on the structure, then select *Delete* from the menu that appears or select the object and hit the **Delete** key.

Move Structures - Click on the structure, and then drag it to a new location.

Rotate Structures - Changing the orientation of the structure, so it faces a different part of the course is simple to do. Select the structure, then choose *Rotate* from the *Button Bar* or *Menu Options*.

Properties - Once a structure has been dropped onto the course, its properties can be modified by right clicking the object and choosing *Properties...* from the menu that appears. This will cause a dialog box to appear that is

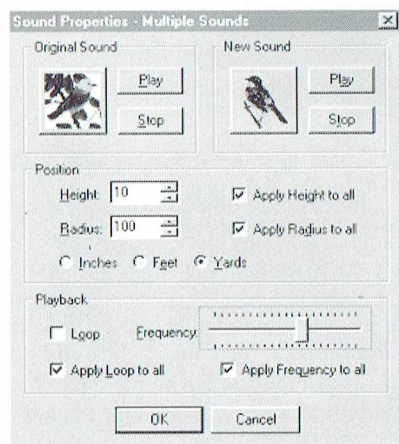
unique to the selected item. You can adjust the elevation and scale of the structure. The elevation is useful for suspending bridges between two points of land or putting a building into the side of a hill.

Sound Objects - The sound objects can be selected from the *Sound* section in the *Librarian*. These are sounds that should be played at specific locations. They include sounds such as birds, waterfalls, and other ambient sounds.

Position Sounds - Click on the sound from the *Librarian* and drag it onto the *Work Window*.

Select Sounds - As with *Two Dimensional Objects*, you can right click on a sound to select it, drag a selection rectangle around it, or press the **Control** key as you right click or double click a sound.

Properties - Once a sound has been dropped onto the course, its properties can be modified by right clicking the object and choosing *Properties...* from the menu that appears. You can change the properties for more than one sound at once. The values in the *Sound Properties* dialog can be applied to all the currently selected sounds. The *Sound Properties* dialog contains the following options:



Original Sound - Shows an image representing the currently selected sound. If multiple sounds are selected and they are of different types, this option will be disabled.

- **Play** - Plays the currently selected sound.
- **Stop** - Stops the currently selected sound.

New Sound - When the dialog is first displayed, this button will be blank. Press it to bring up the *Librarian*. Select any one of the sounds from any of the libraries and the **New Sound** button will show an image representing the new sound.

- **Play** - Plays the new sound.
- **Stop** - Stops the new sound.

Position - Select the position and range of the sound.

- **Height** - Select the source height of the sound. This is useful for birds in trees. Selecting *Apply Height to all* will move all selected sounds to this height.
- **Radius** - A sound can only be heard within its specified radius. To make a sound audible everywhere on the course, make the radius as large as the course. Selecting *Apply Radius to all* will change all selected sounds to this radius.

Playback - Select the play back options for the sound.

- **Loop** - Select this check box to run a sound continuously. Selecting *Apply Loop to all* will change all selected sounds to looping.
- **Frequency** - Control when the sound gets played. The game will check all nearby sounds to see if they should be played. The chance that a sound will be played ranges from 0 to 100 percent. Once a sound gets played the game waits another couple of seconds before trying the next by sounds again. Use the frequency slider bar to control how frequently the sound is played. Selecting *Apply Frequency to all* will change all selected sounds frequencies.

Note: When the *Sound Properties* dialog is first displayed and there are multiple sounds selected, the values displayed in the dialog are averages of the values of all the selected sounds.

Hole Information

The **Hole Definition Tool** option allows you to define all of the positional information for the 18 holes, Driving Range, Putting Green and Chipping Area. Select *Hole Definition Tool* from the *Tools Menu* to open the dialog. Use this dialog in conjunction with the *Work Window* to select positions.

A hole is defined in the following order:

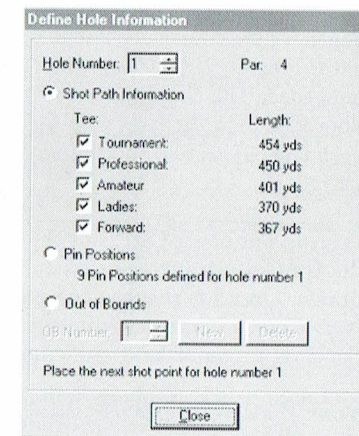
1. Select the hole number you want to define.
2. Select the tee positions (all tee positions must be on a tee-box.)
3. Select the shot path for the hole.
4. Select the pin positions (all pin positions must be on the green.)
5. Create the "out of bounds" segments."

Hole Number - Select the hole number to be defined. The par for this hole will be displayed to the right.

Driving Range / Putting Green / Chipping Area -

To define a Driving Range, Putting Green, and Chipping Area, use the hole selection arrows and move past hole 18. You will see *DR*, *PG*, or *CA* indicating that you are editing the Driving Range, Putting Green, and Chipping Area respectively.

Shot Path - The shot path is very important to the playability of the game. It is used for lining the golfers up for each shot and controlling the AI golfers path to the hole. Make sure the path is centered over the fairway from tee to hole and avoid putting shot points on unplayable terrain. If a hole requires golfers to hit over unplayable areas, put a shot point just before, and one just after the unplayable area. There is no relationship between the par of the hole, and the number of points needed in the shot path. For example, a



dog leg par four hole might need ten points in the shot path while a straight shot par five might only need two. A good rule of thumb is to always define more points than you think will be necessary for the shot path. To define the shot path, just click once for each point that you want to add to the shot path. The last point should fall somewhere near the middle of the green.

Tee Positions - The Course Architect allows up to five tee positions to be defined for each hole; Tournament (black), Professional (blue), Amateur (white), Ladies (red), and Forward (yellow). The game requires that one of these tees be defined. Select the **Shot Path** radio button, and then check which of the five tee positions you want to define. Finally, place the tees in the order that they are listed.

Pin Positions - Select this radio button to create the pin positions for the current hole. Any number of pin positions can be defined; there is no limit. The game will randomly choose a position each time the hole is played. To delete a pin, select it with the mouse, and hit the delete key on the keyboard. To move a position, click on it with the mouse and drag it to a new position on the green.

Out of Bounds - Define any number of out of bounds segments per hole. Select the **Out of Bounds** button and select **New** to create a segment. Define the segment by clicking in the *Work Window* to define the area that will be out of bounds. To create another segment simply click **New** again.

Instructions - Instructions are available at the bottom of the dialog. This area will tell you the current state of the dialog and what should be entered next.

Course Perimeter

When a new course is created in the *Course Architect*, it encompasses an area 2000 yards long by 2000 yards wide. After creating the course, a lot of this area is unneeded. The *Create Course Perimeter* option can be used to crop out all of this unneeded area. By removing the unneeded area, the file size and memory usage will be smaller. This will shorten load times and increase performance when the course is played.

To crop out unused areas of the course, select the *Create Course Perimeter* from the *Tools Menu*. Draw the new course perimeter in the same manner as a land shape is drawn. Once the shape is completed, right click inside the shape and select *Create New Course Perimeter* from the menu that appears. You will be prompted to save the current course before the new perimeter is created.

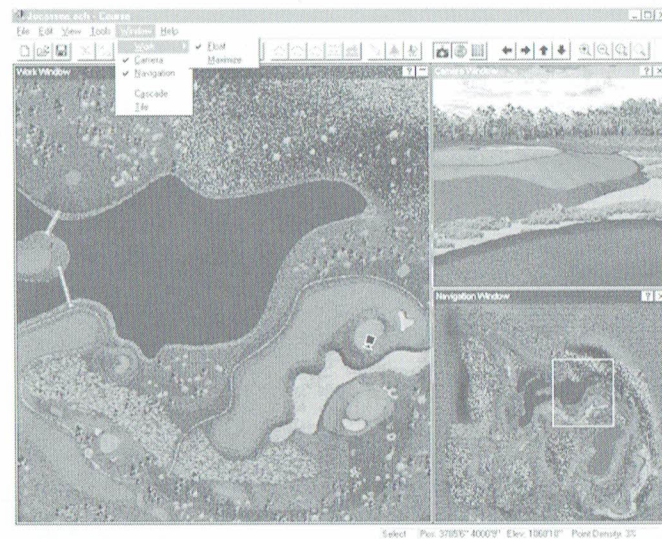
Note: You cannot Undo this option after it has completed.

If the newly created perimeter removes any terrain that has 2D objects, 3D objects, or sounds on it, those objects are deleted as well. However, a new perimeter cannot be made that leaves dropped Land Shapes outside of the perimeter.

The course perimeter can also be made larger than the existing perimeter. This will add terrain to the course, and can be useful to create more area to work in.

Work Window

The *Work Window* is a top view of the course. It is visible at all times and can be maximized to fill the entire application window. The contents of the *Work Window* can be scrolled around and made to appear larger and smaller using the *Navigation Button Bar*. All course creation work is done here including object positioning, land shape selection, and elevation changes.




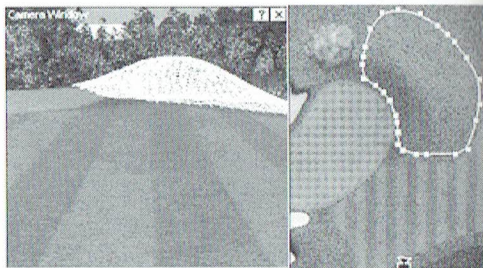
The *Work Window* can be put into several *Land Shape* modes. Each mode corresponds to a creation option that allows shapes, points and objects to be selected and repositioned. The *Work Window* can only be in one of these modes at any given time so selecting a mode, deselects the current mode.

There is a *Status Bar* at the bottom of the application window. The status bar displays some useful information such as the current mode, position, and elevation of the course at the cursor position.

Camera Window


The *Camera Window* is used to see the course as a golfer would. It is also useful when verifying elevation changes made using the *Tool Menu*. Object and land shapes not be added to this view directly but must be added to the *Work Window*. The result would then be visible in the *Camera Window*.

The camera icon  is associated with a *Camera Window* that can be moved around the course and rotated to different directions. The camera can also be made to point up and down within certain limits.



Open Window - Select *Camera Window* from the *Window Menu* or *Button Bar*.

Close Window - Clicking the camera icon with the right mouse button and select *Close Camera View* from the menu that appears, or click on the standard windows icon in the upper right corner.

Position Window - While the view is open, the camera position is represented in the *Work Window* by a  small icon. To move the camera, hold the left mouse button down in the center of the camera icon and drag the camera to a new location. To aim the camera, hold the left mouse button down in the triangle lens of the camera icon and drag the cursor to the new direction. The *Camera Window* will redraw after each change. If you want to make multiple movements in the camera (such as a move, followed by a rotate) without redrawing after each action, hold the **Control** key down, make your position changes, and then let up on the key to redraw the camera.

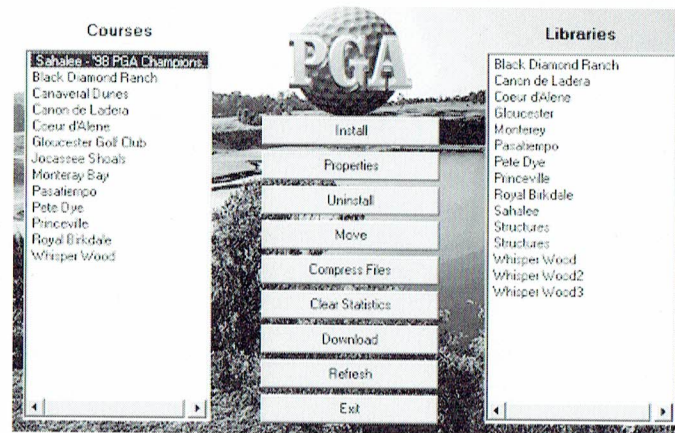
Properties - Change the elevation and pitch of the camera using the properties dialog. To open the dialog box, right click on the camera icon and select *Properties...* from the menu that appears. Use the sliders on the dialog to change the elevation, pitch, and direction of the camera.

Center the camera - Hold down the **Ctrl** key and press **C** to center the camera on the *Work Window* or use the *View Menu*.

Note: When the camera is very high, small changes in elevation will be difficult to see in the *Camera Window*. Position the camera close to the ground to see small changes in elevation. Position the camera about nine feet off the ground to view the course as the golfer would see it when the course is played.

Course Manager

The Course Manager handles the manipulation of courses being used for *PGA Championship Golf™ 2000*. The Course Manager recognizes Course files (.crs), Course Library files (.clb), and Distribution files (.xcr.)



Use the manager to do the following operations:

Installation - Double-click on any one of the recognized files to launch the *Course Manager* and begin installation. You can also run it manually or select *Course Manager* from *Course* in the *Game Settings* screen. Then select *Install*.

- If the course or library is already installed, you will be prompted to replace the existing file.
- Select the destination for the file(s) from the drive tree dialog.
- If you are installing a course or library, the files will be copied to the destination. If you are installing a distribution file, all course and library files will be extracted and copied to the destination. In both cases, you can delete the original file after installation.
- The course and library lists will then be updated with your new items.

Note: You will be informed during the installation process if you do not have the appropriate libraries. You need to have all libraries used in the course in order to finish the install.

Deletion - Highlight a course or library from the list boxes and select *Uninstall*.

- After prompting for approval to delete the selection, the manager will remove the corresponding files.
- If you are deleting a course, you will have the opportunity to uninstall all libraries that are being used exclusively by the course.
- You will be prompted to continue if you try to delete a library that is being used by another course.
- The course and library lists will then be updated.

Moving - Highlight a course or library from the list boxes and select *Move*.

- Select the destination for the file(s) from the drive tree dialog.
- If you are moving a course, then all files associated with the course will be moved to the new location. You will be prompted to move any library files that are being used exclusively by the course.

Setting Properties - Highlight a course or library from the list boxes and select *Properties*.

- The course properties will display a list of all libraries used by the course and the installed size of the course. There are three edit boxes which

display the location of additional course files. Each course can have a picture, a music bit, an AVI, and a text description in addition to the actual course and library files. You can delete the location by clearing the edit box, or select a new location for the file by moving it manually, then updating the text box. The file will not be copied or moved.

- The library properties will display a list of all the courses that use it and the installed size of the library.

Packaging for Distribution - Package all the files associated with a course into one distribution file. You can then send this file others.

- Highlight a course or library from the list boxes and select *Compress Files*.
- Select the destination for the distribution file from the drive tree dialog.
- You will be prompted to include custom libraries in the distribution file. Adding the libraries will make the file much larger. This is only necessary if you believe most people receiving the file do not already have them.
- When the distribution file is complete, a notification message will appear. Now you can distribute the compressed file and it can be installed by others using the method described above.

Clearing Course Statistics - Highlight a course from the list box and select *Clear Statistics*. You will be prompted to continue, and then the statistics for that course will be deleted. This will reset the statistics for the course.

Download additional courses - Download additional courses and submit custom courses to the Sierra Golfing Association. Select *Download* to open your web browser.

Trouble Shooting

If there is a problem, check these trouble-shooting methods for our suggested solution.

- Troubleshoot – PGA Championship Golf™ 2000
- Troubleshoot – Course Architect

If problems persist, give us a call:

- Technical Support (425) 644-4343
(see page 93 for a complete listing of all support information)
- Direct Sales Information (800) 757-7707

Trouble Shooting (Game)

Problem: Rendering time is very slow.

- Solution 1:** Decrease the window size.
- Solution 2:** Turn off shadows from the *Machine Options* screen under *Course*.
- Solution 3:** Reduce the horizon distance from the *Machine Options* screen under *Course*.
- Solution 4:** Increase the permanent course swap size from the *Machine Options* screen under *Course*.
- Solution 5:** Reduce the terrain detail, trees and object detail, and panorama detail on the *Machine Options* screen under *Course*.

Problem: The quality of the scene is poor.

- Solution 1:** Increase the terrain detail from the *Machine Options* screen under *Course*.
- Solution 2:** If the course seems too dark or light, adjust your monitor settings. The courses have been colored to favor average monitor settings.

Problem: The golfer looks choppy during swings.

- Solution 1:** Reduce the golfer detail from the *Machine Options* screen under *Golfer*.
- Solution 2:** Reduce the size of the golfer by reducing the window size, or by backing the camera further away from the golfer.
- Solution 3:** Close any alternate views.

Problem: The swing cursor does not appear for a shot in the Swing Camera.

- Solution 1:** Make sure that the Continue button has been selected from the Button Bar.
- Solution 2:** Make sure the game is active by clicking on the title bar.
- Solution 3:** Make sure the golfer that is up is a local human.

Problem: The game seems to access the CD a lot during the game.

- Solution 1:** Increase the permanent course swap size from the *Machine Options* screen under *Course*.
- Solution 2:** Reinstall the game using a larger install option.

Problem: The game is taking up too much hard drive space.

- Solution 1:** Reduce the permanent course swap size from the *Machine Options* screen under *Course*.
- Solution 2:** Reinstall the game and choose a smaller installation size.

Problem: When playing remote games, my connection is frequently terminated.

- Solution:** The game may be timing out due to a slow connection. Select **Tolerate High Latency** from the *Menu Options* to allow slow remote connections.

Problem: When I try to launch PGA Championship Golf™ 2000, I receive an error message that says, "Error Starting Program: A required .DLL file, DPLAYX.DLL, was not found." (Note: It may also have DDRAW.DLL or DSOUND.DLL instead of DPLAYX.DLL.)

- Solution:** The proper version of DirectX is not installed on your system. DirectX 6 must be installed on your computer for *PGA Championship Golf™ 2000* to run correctly. If Setup skipped the installation of DirectX and you do not have the latest DirectX installed on your computer, you will need to manually install it using Microsoft's own DirectX Setup program. To manually install DirectX, complete the following instructions:

1. With the *PGA Championship Golf™ 2000* CD in the CD drive, double-click My Computer on your desktop.
2. Highlight the CD drive (usually D: or E:).
3. From the File Menu, select Open (double-clicking on it will launch AutoPlay).
4. Open the DirectX folder.
5. Find and open/launch the DXSETUP.EXE file (double-click on it).
6. Select REINSTALL DIRECTX and follow the on-screen prompts.

Problem: *The golfer motion skips or stutters when outdoor sounds play.*

Solution 1: Reinstall the game and choose a larger install option.

Solution 2: Turn off outdoor sounds.

Problem: *I'm having a hard time with TrueSwing™.*

Solution 1: Don't hold the mouse button down during the swing.

Solution 2: Don't move your arm so much during the swing.

Problem: *My clubs don't seem to hit the distances they suggest.*

Solution: These are just average distances, the more a player plays, the closer these numbers will become.

Problem: *Some players can hit further than mine.*

Solution: Check your Player Ability. It will affect how far you can hit the ball.

Trouble Shooting (Architect)

Problem: *The architect won't run because it is missing a default texture.*

Solution: Make sure you have at least one course library installed on your machine.

Problem: *Shapes won't drop into the terrain.*

Solution: The Course Architect requires that only one other shape enclose each land shape. The outside land shape is called the parent shape. If you try to drop a land shape across the edge of another shape this would cause it to have more than one parent and the Architect will not allow that.

Problem: *The Course Architect will not run.*

Solution: If the Course Architect begins to load and then quits back to Windows it most likely that you have not installed the course libraries correctly on your machine. It is also possible that a library is installed that does not support the basic rough, fairway, and fringe textures. Reinstalling the Course Architect will fix the problem.

Problem: *A new architect course has poor performance.*

Solution1: Optimize the detail in areas that are rarely seen in the course.

Solution2: Decrease the size of the course perimeter.

Problem: *The players face the wrong direction when playing an architect course.*

Solution: Make sure the shot path was defined correctly in the whole information.

Technical Support

Sierra Support Numbers and Addresses

Technical Support

Sierra On-Line offers a 24-hour automated technical support line with recorded answers to the most frequently asked technical questions. To access this service, call (425) 644-4343, and follow the recorded instructions to find your specific topic and resolve the issue. If this fails to solve your problem, you may still write, or fax us with your questions, or contact us via our Web site.

Technical Support - United States

Sierra On-Line

Technical Support

P.O. Box 85006

Bellevue, WA 98015-8506

<http://www.sierra.com> support@sierra.com

Phone: (425) 644-4343

Fax: (425) 644-7697

Monday-Friday 8:00 a.m. - 4:45 p.m. PST

Havas Interactive offers a 24-hour Automated Technical Support line with recorded answers to the most frequently asked technical questions. To access this service, call (0118) 920-9111, and follow the recorded instructions to find your specific topic and resolve the issue. If this fails to solve your problem, you may still write, or fax us with your questions, or contact us via our Internet or CompuServe sites.

Technical Support - United Kingdom

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(Monday-Friday, 9:00 a.m. - 5:00 p.m.)

Fax: (0118) 987-5603

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de 15h a 18h30)
Fax: (01) 381-2437

Modem Support

CompuServe United Kingdom: GO UKSIERRA
CompuServe France: GO FRSIERRA
CompuServe Germany: GO DESIERRA
Internet USA: <http://www.sierra.com>
Internet United Kingdom: <http://www.sierra-online.co.uk>
Internet France: <http://www.sierra.fr>
Internet Germany: <http://www.sierra.de>

Direct Sales Information

Sierra Support Numbers and Addresses

Direct Sales / Information

U.S. Direct Sales

Sierra Direct
P O Box 629001
El Dorado Hills
CA 95762-9972

U.S.A. Sales (800) 757-7707
Hours: 24 hours a day, 7 days a week
International Sales (425) 746-5771
(916) 939-1010 (fax)
Hours: Monday-Friday 8AM to 4PM PST

Direct Mail - United Kingdom

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Disk/CD replacements in the U.K. are £6.00, or £7.00 outside the UK. Add "ATTN.: Returns."

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Internet USA: <http://www.sierra.com>
Internet United Kingdom: <http://www.sierra-online.co.uk>
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The Promise: We want you to be happy with every Sierra product you purchase from us. **Period.** If for any reason you're unhappy with the product, return it within 30 days for an exchange or a full refund... **EVEN IF YOU BOUGHT IT RETAIL.** (Hardware ordered direct must be returned within ten days.) Please send back your product, signature required if mailing via US Postal Service.

The Only Catch: You've got to tell us why you don't like the game. Otherwise, we'll never get any better. Send it back to us and we promise we will make things right. (If you bought it at a retail outlet, please send your original sales receipt.)

US Disk/Doco Replacement & Returns (Valid in North America Only)

Disk/Doco replacement:

Havas Interactive
Sierra On-Line Fulfillment
4100 West 190th Street
Torrance, CA 90504

Product Returns:

Havas Interactive
Sierra On-Line Returns
4100 West 190th Street
Torrance, CA 90504

NOTE: To replace your disk(s) please send only Disk #1 (or the CD) and copy of your dated receipt, if less than 90 days. After 90 days please include a \$10 handling fee along with Disk / CD #1. For Documentation, please include a \$ 5.00 handling fee and a photocopy ONLY of disk #1. Payment should be made at the time of your request. **Sorry, no credits cards.**

International Support

Sierra Support Numbers and Addresses International Support Services

International Sales

Sierra Direct
7100 W. Center Rd
STE 301 Omaha NE 68106

For direct orders:
Main: (425) 746-5771
Fax: 402-393-3224

United Kingdom

Havas Interactive
2 Beacontree Plaza
Gillette Way
Reading, Berkshire
RG2 0BS United Kingdom

Customer Support: (0118) 920-9111
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Fax: (0118) 987-5603

Disk/CD replacements in the U.K. are £6.00, or £7.00 outside the UK. Add "ATTN: Returns".

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DV Specialist

Brand Manager
Sr. Creative Services Manager
Sr. PR Manager
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Motion Capture Director
Motion Capture Editing

Motion Capture Male Talent
Motion Capture Female Talent

WON Programming

Music and Sound Effects
Sound Effects

Golf Commentators
Voice Talent

Intro Video Talent
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Manual Design and Layout

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Courses

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