

FULL SWING GOLF



Operations & Maintenance Manual
version 3.0

3.0

Contents

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Introduction

1

Thank you for purchasing the Full Swing Golf Simulator. This state-of-the-art simulator will provide years of enjoyment at a level of performance and accuracy unmatched in the industry. Full Swing Golf is The Worldwide Leader in Golf Simulation.

For more than a decade, San Diego based Full Swing Golf has been recognized as the worldwide leader in the manufacture and distribution of indoor golf simulators.



The company is committed to providing a golf experience that recreates the excitement and enjoyment of the world's greatest courses while giving the most realistic and accurate ball flight possible on an indoor system. In the years following its incorporation, Full Swing Golf has made countless advances in the technology of golf simulation by integrating a proprietary ball-tracking device with Microsoft's award winning Links LS golf course software.



Full Swing's extensive golf course library offers over 50 premiere and championship courses, many of which have hosted The Ryder Cup, PGA Championship, U.S. Open, British Open, and numerous PGA tour events.

And Full Swing Golf's renowned Interactive Practice Facility is custom designed to enhance teaching, perfect club fitting, and increase club sales.

This level of realism and accuracy makes the Full Swing Golf Simulator the choice of many of the worlds finest golf facilities, golf shops, resorts, sports bars, entertainment centers, corporate headquarters, and custom homes.

Startup & Shutdown

2

▶ STARTUP

1. Locate the surge protector in the computer console and turn the Master Power switch to the **ON** position.
2. Push the large button on the front of the computer tower to switch the computer **ON**.
3. Using the remote control, turn the projector **ON**.

The computer will boot up and display the **LS Golf 3 Main Menu** (shown right). Touch Play, Practice, or Other Modes to start playing golf.



NOTE: During the startup process the software will automatically check for updates if there is an active Internet connection. If there are updates available it is highly recommended that you install as soon as possible. Follow the prompts to install the updates.

▶ SHUTDOWN

To ensure that your Full Swing Simulator runs optimally, it is important to properly shut the system down. Following these instructions carefully, along with proper maintenance, will provide years of performance.

1. Exit Course Play, the Practice Range, or Contest Mode. This will bring you to the LS Golf 3 Main Menu.

Example: How to Exit the Practice Range

- Touch the **Menu** button in the lower left corner:



- Touch the **Other...** tab on the menu box:



- Touch the **End Practice** (or **End Game**) button, then touch **YES**.



Continued next page...

▶ SHUTDOWN (continued)

2. **EXIT LS GOLF 3:** From the LS Golf 3 Main Menu screen, touch the lower left corner of the touchscreen, then the upper left corner of the touchscreen. On the next screen touch **EXIT GAME** to exit the LS Golf 3 software and return to Windows.

NOTE: For information on the **SYSTEM MENU** please refer to section 7.



3. **SHUT DOWN THE COMPUTER:** To properly shut down the computer, touch **Start**, then **Turn Off Computer**. In the “Turn Off Computer” window touch **Turn Off**. The computer will automatically power down.

NOTE: For Windows 98 computers choose Start, then Shut Down. In the “Shut Down” window make sure **Shut Down** is selected and touch **OK**. The computer will automatically power down.



4. **SHUT DOWN THE PROJECTOR:** Use the projector remote control to turn off your projector (for most projectors you must press the **Power** or **OFF** button twice).

• **WARNING: You must allow the projector to complete the cool-down process before proceeding to the next step. Failure to do so will result in shortened lamp-life, and may harm the projector.**

5. **TURN THE MASTER POWER OFF** - After the projector has properly cooled-down, turn the Master Power switch to the **OFF** position. Your simulator should now be completely powered off.

NOTE: The simulator should be shut down properly every night. Doing so will ensure proper operation of all the components. Also, make sure the Master Power switch is in the **OFF** position when vacuuming or servicing your simulator.

Practice Facility

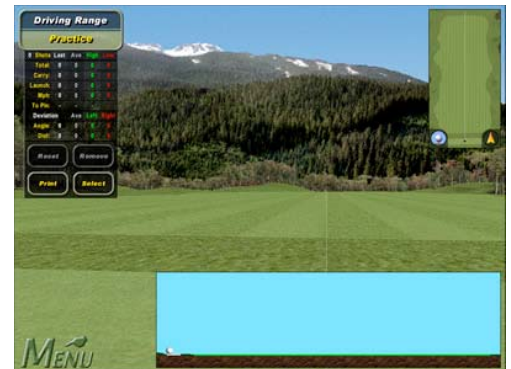
3

▶ STARTING A PRACTICE SESSION

1. From the LS Golf 3 Main Menu, touch **PRACTICE**.

2. Select from three different Practice Areas:

- **Driving Range:** Full size range with adjustable length, extensive feedback, and several options to customize your session.



- **Approach Shots:** With shots ranging from 26y to 215y, this area gives you the option to mix and match several different lies with multiple pin placements.



- **Chip and Putt:** With 15 different pin placements and 20 different chipping and putting stations, this area allows you to perfect your short game.



3. Select the distance, lie, and pin placement by touching the appropriate icons. (The default distance for the Driving Range is 380y.)

4. Touch **OK** to begin the practice session.

▶ UNDERSTANDING THE LAYOUT



1. **Stat Box** – Shows all data for the session. See below.
2. **Menu Button** – Touch this button to reveal the Practice Menu.
3. **Profile View** – Shows trajectory of the ball from the side.
Note the different colors – Black, Red, White, and Yellow.
4. **Center Line** – Shows a straight line from the tee to the pin.
5. **Tracer** – Shows the path of the ball's flight. (With Tracers ON)
6. **Top View** – View from above. (With Tracers ON)

▶ STAT BOX



- **Last Shot, Average, High, & Low** – Keeps track of all balls hit during the session.
- **Total** - Total distance including roll.
- **Carry** – In air distance without roll.
- **Launch** – Launch angle off the tee.
- **Mph** – **Ball** speed in MPH (or KPH). **NOTE:** Club head speed is roughly 70% of ball speed. (ball speed x 0.70 = approx. club head speed)
- **To Pin** – How far the last ball was from the pin.
- **Deviation** – From the center line.
- **Angle** – Angle of deviation from center line right or left.
- **Distance** – Distance from center line right or left.
- **Reset** – Clears all stats.
- **Remove** – Removes only the last shot.
- **Print** – Print stats for later review
- **Select** – Select a new practice area.

► FEATURES & OPTIONS

To access all features, options and settings of the Practice Range, touch **MENU** in the lower left corner.

Options: The following choices are available under the **Options** tab:

- **Tracers** – Set the tracers to *Off*, *Solid*, or *Comet Tail* for onscreen and top views. You can also set the color of the tracers to BLACK, WHITE, RED, or YELLOW. A great feature to show the trajectory of different clubs.
- **Practice** – Returns to the Area Selection screen.
- **Replays** – Replays the last shot; either forward or reverse angles.
- **Grid** – Turns the Grid ON and OFF.
- **Wind** – Set the wind direction and speed for the range.
- **Left Handed** – Switches between the Left and Right-handed modes.



Other...: The following choices are available under the **Other...** tab:

- **Boost** – Level the playing field or just have fun, the boost will add extra distance to a player's shot based on the percentage selected.
- **Show Pin** – The flag will be shown to you if you can't see it.
- **Rotate Controls** – View instructions on how to use the *Rotate* feature.
- **End Practice** – Ends the *Practice Range* program and returns to the *LS Golf 3 Main Menu*.
- **Set DR Length** – Sets the length of the Driving Range 100-400 yards.
- **Save Defaults** – Saves the current settings as the default for the Practice Range.
- **Tracers** – Set the tracers to *Off*, *Solid*, or *Comet Tail* for onscreen and top views. You can also set the color of the tracers to BLACK, WHITE, RED, or YELLOW. A great feature to show the trajectory of different clubs.
- **Preferences** – Here you can set Green speed and hardness, ball size and elevation.



Playing Golf

4

You have complete control over your game. Set the wind conditions, the speed of the greens, the pin position and more with the realistic LS 3 software. Play a scramble on the front nine, back nine, or all 18. Drive, chip and putt your way through world championship golf courses.

▶ STARTING A GAME

1. To start a game touch **PLAY**.
2. Touch the **ADD** or **REMOVE** buttons to enter the number of players. Touch the respective buttons to edit player names, tees, boost, handicap, and handedness. When finished, touch **NEXT**.



3. Select the desired course. From this screen you can also adjust the **CONDITIONS, OPTIONS, HOLES TO PLAY**, and select the desired **MODE OF PLAY** (See Advanced Settings for more information). When finished touch **START PLAY**.



▶ SCREEN LAYOUT

Below is an image of the standard screen layout. The items listed below will help you to fully customize your playing experience as well as teach you how to navigate throughout the game.



1. **Info Box** – Shows the Course, Hole Number, Par, Yardage and Player Info.
2. **Player Info** – Practice Stats (if Practice mode is turned on)
3. **Menu Button** – Touch here to bring up the Game Menu
4. **Center Line** - (if Practice mode is turned on)
5. **Top View** – Shows the top view of the hole (see page 16 for details).
6. **Rotate Controls** – Rotate the screen to aim your shot (see page 16 for details).

- To rotate, touch the screen where you would like to rotate to, and then touch:



- To return to center, touch:



▶ ADVANCED SETTINGS

Customizing Game Play: After selecting the course, you have several options to further customize game play. Below are detailed explanations of all the options not previously discussed in the Starting a Game section.

HOLES TO PLAY: You can select to play all 18 holes, the front 9, back 9, or select any individual hole(s) on the course. To do this just touch the holes you would like to play.

MODE OF PLAY (MOP): There are 28 different modes of play. You can set up teams to play a scramble, or have a friendly game of skins among friends. Use the UP and DOWN arrows to navigate through the settings and rules of each MOP. Each MOP lists the rules and instructions as well as team configurations.

NOTE: Some MOP's require a certain number of players. If you do not see the MOP listed you may have to add or remove players to make it available for play. Computer players are not available for simulator play.



- Alt Shot Ryder Cup Style Match
- Alt Shot Ryder Cup Style Skins
- Alt Shot Ryder Cup Style Stroke
- Alt Shot Scotch Match
- Alt Shot Scotch Skins
- Alt Shot Scotch Stroke
- Australian Hogan
- Bestball Match
- Bestball Skins
- Bestball Stroke
- Bingo, Bango, Bongo
- By the Book
- Demo Mode
- High Stakes Skins
- Hole-in-One Stableford
- Hogan Point Game
- Match Play
- Nassau
- Pars Please Bestball
- Recovery
- Scramble Match
- Scramble Skins
- Scramble Stableford
- Scramble Stroke
- Skins
- Stroke
- Team Stableford
- Wolf

▶ ADVANCED SETTINGS

CONDITIONS: LS Golf 3 allows full control over your playing experience. Change wind conditions, set your elevation, change the pin placement and more.



Description of Conditions:

- **Wind** – Settings are *Windy (15-10 mph)*, *Breezy (5-15 mph)*, or *NO Wind*.
- **Mulligans** – Can be set to 0, 1, 2, 5, 10 or Unlimited.
- **Green Speed** – Set the greens to *Slow*, *Medium*, or *Fast* speed.
- **Elevation** – Adjust the elevation for realistic ball flight. Use your default elevation or actual course elevation.
- **Green Hardness** – Set the greens to *Soft*, *Moderate*, or *Hard* firmness.
- **Auto Continue** – When set to 3, 5, 7, 10 seconds the *Post Shot Selection* box will remain on screen for that amount of time. When set to OFF, you must touch *Continue* or another Action Button to resume play.
- **Crowds** – Set to *Small*, *Medium*, or *Large Crowds*, or turn the crowds off.
- **Putting Mode** - Can be set to allow either the player or the computer to enter the number of gimmie strokes. Gimmies can also be set by distance: 6, 8, or 10 feet to the pin. When a ball comes within the selected distance, a stroke is added and the hole is finished.
- **Pin Position** – Select the pin placement on the green.
- **Sky Type** - Set the sky to *Clear*, *Wispy*, *High*, *Partly Cloudy* or *Cloudy*.

▶ ADVANCED SETTINGS

OPTIONS: Adjust the appearance and other functional aspects of the game.



Description of Options:

- **Putting Arrow** – The putting arrow helps guide you to the cup and automatically adjusts based on the contour of the green. The *On - Rotate to Arrow* setting makes for the easiest game play. Just putt straight at the base of the arrow and adjust your speed.
- **Measurement System** – *Imperial* (Yards) or *Metric* (Meters).
- **Putting Arrow Fade** – Sets the amount of time before the putting arrow fades away. The *Putting Arrow* setting must be set to *Fade* for this to take effect. Set the time to 3, 5, 7, or 10 seconds.
- **Sound Settings** – Turn background sounds *On* or *Off*. Other settings include *Small* or *Large Tournament* sounds.
- **Grid** – Set the contour grid to *Always On*, *On the Green* or *Off*.
- **Time Limit** – Set the amount of time to play. When the time limit expires you will be prompted to save the game.
- **Ball Size** – Set the ball size. This affects the visibility of the ball on-screen.
- **Tournament Play** – When *Tournament Play* is set to *On* certain settings such as *Gimmies* and *Mulligans* are disabled for an even playing field.
- **Default Elevation** – Set your own default elevation between 0 - 4000 feet.

► UNDERSTANDING GAME PLAY

Post Shot Selection – After each shot you will see the Post Shot Selection box. This box contains all information for that shot and will remain on the screen for 3, 5, 7 or 10 seconds, or until you touch Continue, depending on the Auto Continue setting (see CONDITIONS details on page 12).



1. **Lie** – This box indicates your lie as well as the distance left to the pin.

2. **Player** – Player information including name, stroke, and score.

3. **Shot Info:**

- **Total Distance** – Yardage with roll.
- **Carry** – Yardage in air.
- **Launch Angle** – Launch angle off the tee.
- **Ball Speed** – Ball speed in mph/kph. Note: Club head speed is roughly 70% of ball speed. (ball speed x 0.70 = approx. club head speed)
- **To Pin** – Distance remaining to the pin.

4. **Replays** – Touch to see a Reverse or a Forward angle replay of the last shot.

5. **Action Buttons:**

- **Continue** – Continue the game. Note: This button will override the Auto Continue setting.
- **Mulligan** – Take a mulligan.
- **Rehit** – Take a penalty and re-hit the ball (button becomes active only if applicable, e.g. When the ball is Out of Bounds or in a Hazard).
- **Pick Up Ball** – Pick up your ball, take a penalty and go to the next hole.

► UNDERSTANDING GAME PLAY

Game Options: Remember, you are on a virtual golf course; it's hard to tell how far it is to that bunker on the left, or the slope of that green, or which club to use to get over that water hazard. Fortunately there are several game options that allow you to immerse yourself in this virtual world. Understanding these options and features will give you a better feel of the course and increase your overall enjoyment of the game.

MENU Button: The Menu Button controls all options and settings once a game has been started. It is divided into three sections: **Game, Player** and **Other...** Below is the breakdown of the different game options available to you.

Game:

- **Mulligan** - Take a mulligan.
- **Show Pin** - Momentarily brings the pin toward you for better visibility.
- **Drop** – Take a drop.
- **Skip Player** – Skips the player for one turn and allows the selection of the next player to hit.
- **Next Hole** – Send all players to the next hole.
- **Hole Out** - Touch to end play for that hole and go to the next hole.
- **Practice** – Touch to turn the Practice Mode on/off for the selected shot. This allows unlimited shots from the same position. Use this feature to practice difficult tee-offs, chips, etc.
- **Tracers** – Select the type, color, and location of ball tracers.

Player:

- **Stats** – View game statistics.
- **Boost** – Turn Power Boost on/off and select percentage.
- **Add Player** – Add a player to the current game.
- **Remove Player** – Remove a player from the current game.
- **Replace** – Replace a current player with a new player.

Other...:

- **Scorecard** – Show and/or print the scorecard.
- **Rotate Controls** - View the rotate instructions.
- **Grid** – Turn the contour grid on/off.
- **End Game** – Ends the current game and prompts to save it.
- **Preferences** – Edit in-game preferences such as wind, greens, and putting options.

▶ UNDERSTANDING GAME PLAY

The Rotate Feature: This feature is helpful when you are positioned behind trees or other obstacles.

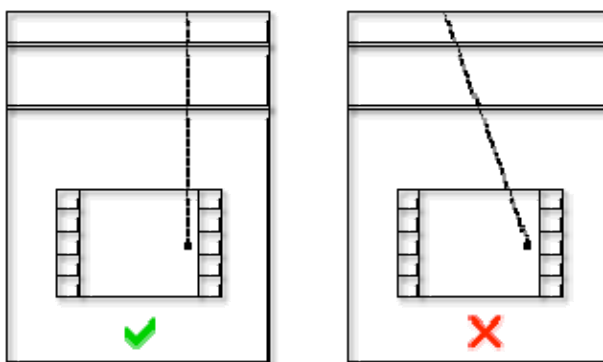
- To rotate, touch the screen where you would like to rotate to, and then touch:



- To return to center, touch:



NOTE: When hitting on the simulator all shots must be 90 degrees to the screen. Do not try to aim your shots at different areas on the screen or hit at an angle; use the Rotate feature to align your shot.



The Top-view: Touch the Top-view window in the upper-right corner to enlarge it. The yellow line indicates the direction you are facing and the numbers indicate distance and elevation. From here you can touch different areas of the hole. Notice that the yellow line and the distance indicator moves to the point you are touching. This feature is useful for determining distances and elevations at various points of the hole.

HINT: This can also be used to Rotate your position. Just touch the point you wish to rotate to on the Top-view and then touch the Rotate button as described above.



Online Tournaments

5

▶ ONLINE TOURNAMENT OVERVIEW

Online Tournaments (OT) offers a new way to play golf on your simulator. You can now compete in real-time with other players from around the world. Join tournaments hosted by Full Swing Golf, indoor golf centers and other simulator owners everywhere. Players can create an online profile that updates each time you play and can be accessed from any computer.

SIMULATOR REGISTRATION:

In order for the Simulator(s) to be part of the online community each must be registered online with a unique Registration Code. Registration Codes may be obtained online at:

www.fullswinggolftour.com/owners

NOTE: For detailed information on Registering your simulator please see page 24.

PLAYER SIGNUP:

To participate in online play each golfer must create a unique Player Profile. Players can sign up at:

www.fullswinggolftour.com/players

More information about Online Tournaments can be found at: www.fullswingtour.com

▶ ONLINE TOURNAMENT PLAY

Once the simulator is Registered and you have created a Player Profile you can begin playing online. Before you start be sure to sign up for one or more available tournaments on the website above. If you are playing with more than one player, then all must players must be signed up to the same tournament.

To begin OT play:

1. Touch **TOURNAMENTS** from the LS Golf 3 Main Menu screen.

NOTE: If your simulator is not properly registered the following options will not be available to you. Please see the SIMULATOR REGISTRATION section above.

2. Enter the number of Players:



▶ ONLINE TOURNAMENT PLAY (CONT.)

3. Enter your player ID:



4. Enter your password:

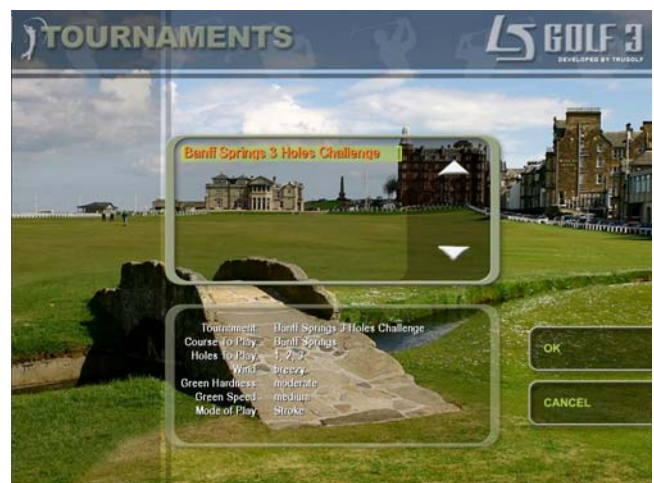
For multiple players, the system will prompt you for the second player's ID and password.

NOTE: Your Player ID and password are managed via our OT website. If you forgot your password, please go to www.fullswingtour.com to retrieve it.



5. Select the Tournament you wish to play in:

NOTE: If you do not see the tournament you wish to play in, or if you receive an error stating that there is not a common tournament for this group of players, you must log in to the OT website to ensure that all players are signed up for the same tournament.



6. Touch **OK** to start playing!

Contest Modes

6

▶ CONTEST MODE OVERVIEW

There are two different types of contests available for play: **LONGEST DRIVE** and **CLOSEST TO THE PIN**. Multiple contests can easily be created and saved for use in store promotions, parties, or corporate events. Run one contest all day, or create several contests and switch between them. There is no limit to the number of participants or the duration of the contests.

▶ LONGEST DRIVE

- To start a Long Drive Contest from the Main Menu, touch **OTHER MODES**, then **LONGEST DRIVE**.
- Choose an existing Contest by scrolling through the list or touch **NEW** to create a new one. (See *Creating a New Long Drive Contest* below).
- Touch **START CONTEST** to play.
- Enter the player's name and choose Right or Left-handed.

Creating a New Long Drive Contest:

- Touch **NEW** to start the creation process.
- Select a course.
- Set **CONDITIONS** for the Contest. (Conditions are detailed on page 12)
- Choose a hole appropriate for the contest. Pars are indicated by color.



- Set the number of attempts. This represents the number of balls each player will hit during their turn.
- Type a name for the Contest Leader Board. Example: PEBBLE NO. 18

This Long Drive Contest will be saved until you decide to delete it. There is no limit to the number of participants or the duration of the contest. You can also view and print the Leader Boards for all saved Long Drive Contests.

▶ CLOSEST TO THE PIN (CTP)

- To start a CTP Contest from the Main Menu, touch **OTHER MODES**, then **CLOSEST TO PIN**.
- Choose an existing Contest by scrolling through the list or touch **NEW** to create a new one. (See *Creating a new CTP Contest* below).
- Touch **START CONTEST** to play.
- Enter the players name and choose Right or Left-handed.

Creating a new CTP Contest:

- Touch **NEW** to start the creation process.
- Select a course.
- Set **CONDITIONS** for the Contest. (Conditions are detailed on page 12)
- Choose a hole appropriate for the contest. Pars are indicated by color.



- Select the tee (Champ, Pro, Amateur, Junior, or Ladies). The system will then tell you the yardage for the HOLE and TEE you have selected. If this is correct, touch **NEXT**.
- Select the pin placement (Easy, Moderate, or Difficult in varying stages).
- Set the number of attempts. This represents the number of balls each player will hit during their turn.
- Type a name for the Contest Leader Board. Example: BANFF NO. 4

This CTP Contest will be saved until you decide to delete it. There is no limit to the number of participants or the duration of the contest. You can also view and print the Leader Boards for all saved CTP Contests.

System Tools

7

▶ SYSTEM TOOLS OVERVIEW

The LS Golf 3 System Tools allow simulator owners and operators to access advanced functions of the software such as setting game defaults, using Hole Advertisements, running diagnostics, and upgrading your golf course library. This area is password protected to prevent unauthorized users from changing critical system settings inadvertently. The following pages detail these tools and their specific functions.

▶ ACCESSING SYSTEM TOOLS

- 1. SYSTEM TOOLS ACCESS:** From the LS Golf 3 Main Menu screen, touch the lower left corner of the touchscreen, then the upper left corner of the touchscreen. On the next screen touch **SYSTEM MENU**.



- The first time you enter the System Tools area you will be prompted to create a password. You will then be prompted to re-enter the password for validation. Please keep this password in a safe place as only a Full Swing Golf Technician can recover the password for you.

NOTE: You will need your password each time you access the System Tools. You can always reset your password from within the System Tools (see page 27).



▶ SYSTEM TOOLS MENU

Below are the different System Tools menu options, with a brief explanation of each. The following pages detail each of the options and their use.

SYSTEM TOOLS MENU OPTIONS:

1. GAME SETTINGS

- Set Defaults - Set the default game settings such as green speed, wind, players, course, etc.
- LS 3 Options Tool - Used to enable or disable Hole Advertisements
- Purge Tools - Delete saved games, log files, etc.

2. ONLINE TOURNAMENTS

- Enable/Disable Tournaments - Turn Online Tournaments ON or OFF
- Online Setup - Register your simulator online
- Online Info - View your online registration info

3. SETUP/DIAGNOSTICS

- NOMASK - Run the diagnostic program
- Custom Size Simulator - Set your software for a custom size simulator
- Dongle Drivers - Install dongle drivers
- Dongle Code - Used to upgrade your golf course library
- Dongle Serial Number - View your dongle serial number

4. SYSTEM INFO

- Usage Viewer - View LS 3 usage statistics
- Software Version - View LS 3 current software version

5. LICENSE

- License Manager - Configure your LS 3 License

6. RESET PASSWORD - Reset your System Tools password



▶ GAME SETTINGS

SET DEFAULTS:

The default settings for your simulator may be changed at any time to suit your needs. Settings such as Number of Players, Tees, Gimmies, and other Options and Conditions that are most often used, should be set as defaults. This makes starting a game fast and easy and you may reset the defaults as often as you like.

1. Touch the **ADD** or **REMOVE** buttons to enter the number of players. Touch the respective buttons to edit player names, tees, boost, handicap, and handedness. To continue setting defaults, touch **NEXT** or if you are finished changing your defaults, touch **EXIT/SAVE** and then touch **YES** to accept the changes.



2. Select the desired course. From this screen you can also set the **HOLES TO PLAY**, **CONDITIONS**, and **OPTIONS** (see pages 12-13 for details). When you are finished touch **EXIT/SAVE** and then touch **YES** to accept the changes..

LS 3 OPTIONS TOOL:

The LS 3 Options Tool is for advanced users only with the exception of the Hole Advertisement feature of the software. Use the Tool to turn Hole Ads on or off, and to set the duration of the ads. Please see the Hole Ads section on page 28 for more details.

PURGE TOOLS:

Purge Tools allows you to delete saved games and log files from your system.

1. To delete all Saved Games on the system, touch **SAVED GAMES**.

WARNING: This action cannot be undone. As soon as you touch the **SAVED GAMES** button, all Saved Games will be permanently deleted from the system!

2. To delete all Shot Logs on the system, touch **SHOT LOGS**. Shot logs are only for FSG testing purposes. There is no harm in deleting these logs.
3. To delete all Online Logs on the system, touch **ONLINE LOGS**. Online Logs record any online play on the simulator. Only delete these logs if instructed by an FSG Technician.

▶ ONLINE TOURNAMENTS

ENABLE/DISABLE TOURNAMENTS:

The Online Tournaments (OT) feature is new to LS Golf 3 version 3.0 (see section 5 for details). If you wish to disable the OT feature, touch **DISABLE TOURNAMENTS**. To enable the OT feature, touch **ENABLE TOURNAMENTS**.

ONLINE SETUP:

In order to participate in OT play you must have an active Internet connection to the simulator computer. The computer is equipped with a standard Ethernet port for high-speed Internet connections. Although Full Swing Golf recommends a wired Internet connection, it is possible to install and use a wireless Internet card. These cards are available at any computer or electronic store. If you decide to install a wireless Internet card in your system you must refer to the card manufacturer for installation support. In addition Full Swing Golf cannot provide support for your Internet connection. Please contact your local Internet Service Provider (ISP) for support with your Internet connection.

In order for the Simulator(s) to be part of the online community each must be registered online with a unique Registration Code. Registration Codes may be obtained online at:

www.fullswinggolf.com/owners

NOTE: The registration process requires the use of your Keyboard and Mouse. If you have multiple simulators, please use a different Code for each one.

1. To register the simulator touch or click **ONLINE SETUP**.

NOTE: If your simulator is not yet registered, you may also access Online Setup by touching the **TOURNAMENTS** button on the LS Golf 3 Main Menu. On the following screen touch **CONTINUE** to bring you to step 2 below.

2. You should now see the Simulator Registration window. Click **Continue** to proceed.
3. Type the Online Registration Code you received via email in the fields provided (see image at right).
4. After the four code fields have been completed, click the **Validate** button. This unique code will contact our server and automatically complete the remaining fields.
5. Click **OK** to finish. Your simulator is now registered for online play.

The image shows a 'Simulator Registration' dialog box. At the top, there's a title bar. Below it, the 'Online Registration Code' field is highlighted with a red oval and a red arrow. The rest of the form consists of several text input fields for: Simulator, Location, Address, Address Line 2, City, State / Province, Zip / Postal Code, Country, Phone, FAX, URL (website), and Email. A 'Cancel' button is located at the bottom right of the dialog.

ONLINE INFO:

Touch **ONLINE INFO** to see the current OT software version as well as your Location ID and Simulator ID. These are used to determine your unique location and simulator in the online community.

▶ SETUP / DIAGNOSTICS

NOMASK:

The NOMASK Diagnostic program displays patterns to indicate the overall functionality of the Tracking System (see pages 35-38 for details). Touch **NOMASK** to launch the diagnostic program.

CUSTOM SIZE SIMULATOR:

The Full Swing Golf Simulator comes in several different size configurations. Custom size systems require special software to ensure that ball flight is accurate. Most systems are Size A (standard size) and have an INSIDE dimension of 12'(3.66m)W x 9'6"(2.90m)H. If you are unsure of your simulator size simply measure the Width and Height of the black plastic sensor covers inside the simulator. Select your Simulator Size by touching on the proper size button.

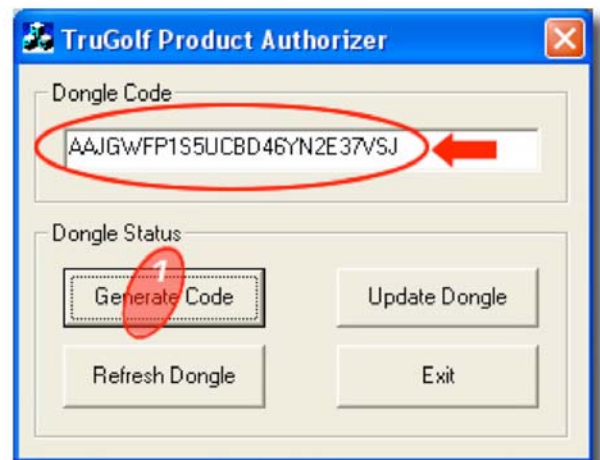
DONGLE DRIVERS:

Re-install the dongle (security device) drivers if necessary. Follow the on-screen instructions.

DONGLE CODE:

The dongle is a security device that allows access to the courses you have purchased for your simulator. You may wish to upgrade your course library as new golf courses are always being added to our software. Your dongle can be upgraded with a new code from Full Swing Golf to unlock new golf courses on your system. If you wish to upgrade your course library, please contact Full Swing Golf or your local distributor. Once your order has been received we will need the Dongle Code to process your upgrade.

1. To generate a Dongle Code specific to your system touch the **DONGLE CODE** button from within the Setup - Diagnostics Menu.
2. Touch or click the **Generate Code** button.
3. Copy the Dongle Code exactly as it appears in the window. Send this code to Full Swing Golf when instructed.
4. When you receive your new Upgraded Dongle Code, repeat step 1 above and delete the words "Dongle Connected".
5. Type your new Upgraded Dongle Code exactly as it appears (be sure your "Caps Lock" key is on), then touch or click the **Update Dongle** button.
6. After you see the words "Dongle Updated Successfully", touch or click the **Exit** button.



DONGLE SERIAL NUMBER:

If requested by Full Swing Golf, touch **DONGLE SERIAL NUMBER** to view the digital serial number of your specific dongle. If you are upgrading multiple dongles, please send the serial number along with each dongle code to avoid confusion.

▶ SYSTEM INFO

USAGE VIEWER:

The LS Golf 3 Usage Viewer (UV) is a record of all game play that has occurred on that system. The UV catalogs play time by year, month, day, and hours. Each record shows the course played, the Mode Of Play, the number of players, and the total time for the session. To launch the UV touch **USAGE VIEWER**.

Course	Mode of play	Players	Usage Time
Practice Area	Practice	1	00 : 12 : 38
Practice Area	Practice	1	00 : 04 : 57
Practice Area	Practice	1	00 : 00 : 30
Four Seasons Resort Aviara	Stroke	1	00 : 00 : 41
Pinehurst No. 2	Stroke	1	00 : 00 : 53
St Andrews Links Old Course	Stroke	1	00 : 02 : 30
Four Seasons Resort Aviara	Stroke	1	00 : 01 : 50
Four Seasons Resort Aviara	Stroke	1	00 : 00 : 48
Four Seasons Resort Aviara	Stroke	1	00 : 00 : 39
Pebble Beach Golf Links	Stroke	1	00 : 03 : 09
Pebble Beach Golf Links Resort	Stroke	1	00 : 00 : 56
Pebble Beach Golf Links Resort	Stroke	1	00 : 00 : 17
Bay Hill Club and Lodge	Stroke	1	00 : 02 : 16
Pebble Beach Golf Links	Stroke	1	00 : 01 : 51
Pebble Beach Golf Links	Stroke	1	00 : 00 : 23
Pebble Beach Golf Links Resort	Stroke	1	00 : 01 : 25
Pebble Beach Golf Links Resort	Stroke	1	00 : 00 : 52
Pebble Beach Golf Links Resort	Stroke	1	00 : 00 : 21
Pebble Beach Golf Links Resort	Stroke	1	00 : 03 : 39
Practice Area	Practice	1	00 : 00 : 17
Practice Area	Practice	1	06 : 15 : 27
Practice Area	Practice	1	00 : 02 : 51
Practice Area	Practice	1	00 : 00 : 42
Practice Area	Practice	1	05 : 49 : 11

VERSION:

Touch the **VERSION** button to view the current LS Golf 3 software version. You may be asked to do this by a Full Swing Golf Technician to ensure you are running the latest software.

► LICENSE

LICENSE MANAGER:

The Windows XP version of LS Golf 3 must be registered and activated with Full Swing Golf. Activation is available for Full Swing Golf customers on an Unlimited or Day-Use basis, depending on your contract with Full Swing Golf or its Distributors.

Licenses may be activated via telephone, email, or our website:

- Tel: + 1.858.675.1100
- Email: activation@fullswinggolf.com
- Web: www.fullswinggolf.com/activation

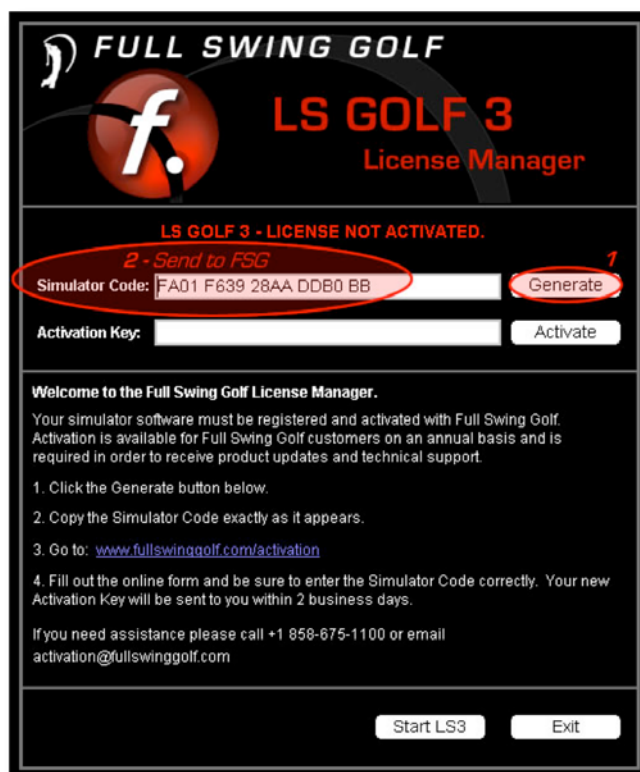
GENERATING A SIMULATOR CODE:

If you are running LS Golf 3 for the first time or you need to renew your license, you will be prompted with the LS Golf 3 License Manager screen (shown right). To generate a Simulator Code simply click the Generate button. A new simulator code will appear in the box to the left of the Generate button. This code must be sent to FSG for activation. If submitting via email or website please include the following:

- Name
- Company Name
- Email address
- Contact phone number
- Simulator Code

ACTIVATING YOUR SOFTWARE:

Once you receive your new Activation Key from Full Swing Golf copy and paste the new code into the Activation Key box or type it **exactly** as given to you by Full Swing Golf then click the Activate button. After successful activation you may be prompted to reboot your computer, then LS Golf 3 will start automatically.



► RESET PASSWORD

To change the password used to access System Tools, touch **RESET PASSWORD** from the System Tools Menu. You will then be prompted to create a new password. Please keep this password in a safe place as only a Full Swing Golf Technician can recover the password for you.

NOTE: You will need your password each time you access the System Tools. You can always reset your password from within the System Tools as described above.

▶ HOLE ADVERTISEMENTS

The Hole Advertisement feature in LS Golf 3 is highly customizable to suit you and/or your client's needs. Specific ads can be placed on individual holes or run randomly throughout the game. In addition, scripts can be written to run special ad campaigns for specific courses. The instructions below outline how the system works and how to create your own customized scripts. The following instructions assume a basic understanding of the Windows Operating System.

Hole ads can be shown for 3, 5, 7, or 10 seconds. By default Hole Advertisement is already turned on and set to show for 5 seconds in LS Golf 3. All you need to do is copy your images into C:\LSGolf3\HoleAds and create a script to run those ads. You can create as many scripts and have as many different images as you wish.

ABOUT THE IMAGES:

The most effective images are created using a quality graphic editing program such as Macromedia Fireworks, Adobe Photoshop, or Adobe Illustrator. You can create the images yourself or hire a graphic designer to do it for you.

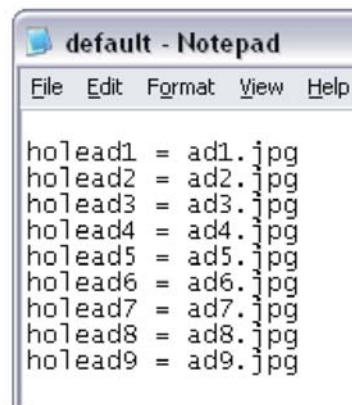
Image requirements:

- 1024 x 768 resolution
- .jpg format
- Each ad should have a specific filename (i.e. - ad1.jpg, mariosPizza.jpg, etc.)
- All ads must be copied into C:\LSGolf3\HoleAds

ABOUT THE SCRIPTS:

Scripts are small text files that tell LS Golf 3 how to display the ads. Scripts can be created in Windows Notepad or you can copy and modify the scripts provided on the last page.

The image at right shows an example of a simple script to run nine different images for the first nine holes of any course:



```
default - Notepad
File Edit Format View Help
holead1 = ad1.jpg
holead2 = ad2.jpg
holead3 = ad3.jpg
holead4 = ad4.jpg
holead5 = ad5.jpg
holead6 = ad6.jpg
holead7 = ad7.jpg
holead8 = ad8.jpg
holead9 = ad9.jpg
```

NOTE: You must have a space on each side of the “=” symbol!

If this script is saved as default.txt then the ads will run on the first nine hole of every course. The script must be saved in C:\LSGolf3\HoleAds.

The following pages will detail how to write more complex, custom scripts to suit your needs.

▶ HOLE ADVERTISEMENTS - CUSTOM SCRIPTS

RANDOM FEATURE:

Scripts can be created to assign ads to a specific hole (such as the script above) or, by adding the word *random* at the top of the script, you can assign ads to run randomly throughout game play. This is shown at right:

By saving this script as *default.txt* the ads will run randomly on every course. You can have up to 54 ads (3 per hole) displayed at random for any given course. However, only 18 of these 54 ads will be shown during the round. The program will decide which ads are shown.



```
default - Notepad
File Edit Format View Help

random

holead1 = ad1.jpg
holead2 = ad2.jpg
holead3 = ad3.jpg
holead4 = ad4.jpg
holead5 = ad5.jpg
holead6 = ad6.jpg
holead7 = ad7.jpg
holead8 = ad8.jpg
holead9 = ad9.jpg
```

COURSE FEATURE:

You can also create a script that will run specific ads on a specific course. For example, if you have an advertiser that wants to run their ads only on Pebble Beach, create a script similar to the ones above and name it *Apebble_.txt* and save it to C:\LSGolf3\HoleAds. The image at right shows a script written for a specific course (notice the file name is *Apebble_*)

Use the table on the following page to determine the script name when creating scripts for individual courses.



```
Apebble_ - Notepad
File Edit Format View Help

random

holead1 = ad1.jpg
holead2 = ad2.jpg
holead3 = ad3.jpg
holead4 = ad4.jpg
holead5 = ad5.jpg
holead6 = ad6.jpg
holead7 = ad7.jpg
holead8 = ad8.jpg
holead9 = ad9.jpg
```

NOTE: The script name must appear exactly as it does in the Script Name Table.

► HOLE ADVERTISEMENTS - CUSTOM SCRIPTS

SCRIPT NAME TABLE:

Course Name	Script Name	Course Name	Script Name
Aviara	AVIARAGO.txt	Par 3 Mountain Course	Wolf_pea.txt
Banff Springs	BANFF2K1.txt	Par 3 Ocean Course	Dorado_B.txt
Barton Creek Resort	Abarton_.txt	Pebble Beach	Apebble_.txt
Bay Hill	Bay_hill.txt	Pebble Beach Golf Resort (2006)	PB.txt
Bighorn G.C.- Cayons Course	BHCANYON.txt	Pelican Hill	PELIC2K1.txt
Bighorn G.C.- Mountain Course	Abighorn.txt	Phoenix C.C.	Phoenix_.txt
Bountiful	Cbountif.txt	Pinehurst No. 2	Cpinehu2.txt
Castle Pines	Ccastle_.txt	Pinehurst No. 8	Pinehur8.txt
The Centenary at Gleneagles	gleagles.txt	Practice Area	PracticeArea.txt
Cog Hill and Country Club	Acog_hil.txt	Prairie Dunes	Aprairie.txt
Covered Bridge	Covered_.txt	Princeville Resort	PRINCEVI.txt
Devils Island	Adevils_.txt	Riviera	Ariviera.txt
Dorado Beach	Adorado_.txt	Robert Trent Jones - Judge Course	JUDGE.txt
Entrada at Snow Canyon	Centrada.txt	Robert Trent Jones - Links Course	RTJLinks.txt
Firestone	Cfiresto.txt	Royal Melbourne	ROYAL.txt
Frankfurter	FRANKFUR.txt	Sea Island	Csea_isl.txt
Hapuna	hapuna_g.txt	Spyglass Hill Golf Course	SGH.txt
Harbour Town	Aharbour.txt	St. Andrew - Old Course	STANDREW.txt
Innisbrook Resort	Ainnisbr.txt	St. Andrews - Jubilee	standjub.txt
Kapalua - Bay	Kapa_bay.txt	St. Andrews - New Course	standnew.txt
Kapalua - Plantation	Cplantat.txt	Stone Cayon Club	stonecan.txt
Kapalua - Village	Cvillage.txt	Thanksgiving Point	THANKSPT.txt
Latrobe	Latrobe_.txt	The Belfry	Athe_bel.txt
Latrobe - Fall	Clat_fal.txt	Three Canyons	Cthree_c.txt
Latrobe - Summer	Clat_sum.txt	Torrey Pines - South	Atorrey_.txt
The Links at Spanish Bay	SB.txt	Troon North	Atroon_n.txt
Mauna Kea	bmauna_k.txt	Valderrama	Valderra.txt
Mesa Roja	MESAROJA.txt	Valhalla	Valhalla.txt
Oakland Hills	Oakland_.txt	Westfields G.C.	WESTFIEL.txt
Oakmont	OAKMONT.txt	Whistler	WHISTLER.txt

► HOLE ADVERTISEMENTS - ORGANIZING HOLES ADS

If you are just using a *default.txt* script then the process is fairly straightforward. You have a single script file and 1-54 image files that the script will run on every course. However, if you choose to create multiple Ad Campaigns then things can get a bit confusing. It is recommended that you organize your campaigns into folders. To do this, simply create a new folder for each campaign inside the C:\LSGolf3 \HoleAds directory and give the folder an appropriate name.

NOTE: Do not place the scripts inside these folders. All scripts must be placed in the C:\LSGolf3 \HoleAds directory.

For this example we will have three campaigns: Default, Pebble Beach, and St. Andrews. When the process is complete LS Golf 3 will read these scripts every time a game is started. So, when Pebble Beach or St. Andrews is played, LS Golf 3 will run the appropriate ad campaign on each course. When any other course is played the Default campaign will take over and display your default ads. Use the following steps to accomplish this:

1. Create the ad images and give them appropriate names.
2. In Windows Explorer open the C:\LSGolf3\HoleAds directory and create three new folders named default, pebble, and standrews.
3. Copy the ad images into the appropriate folder.
4. Create the scripts. Open Windows Notebook (click Start > All Programs > Accessories > Notepad). Write the scripts for the three campaigns by following the examples below. Notice how we now include the folder path in the script just before the image name. Example: foldername\

Figure 1 shows the *default.txt* script that will randomly run 18 different ads from the default folder that we created earlier.

Figure 2 shows the *Apebble_.txt* script that will randomly run 9 different ads on all 18 holes from the pebble folder that we created earlier.

Fig. 1:



```

default - Notepad
File Edit Format View Help

random

holead1 = default\ad1.jpg
holead2 = default\ad2.jpg
holead3 = default\ad3.jpg
holead4 = default\ad4.jpg
holead5 = default\ad5.jpg
holead6 = default\ad6.jpg
holead7 = default\ad7.jpg
holead8 = default\ad8.jpg
holead9 = default\ad9.jpg
holead10 = default\ad10.jpg
holead11 = default\ad11.jpg
holead12 = default\ad12.jpg
holead13 = default\ad13.jpg
holead14 = default\ad14.jpg
holead15 = default\ad15.jpg
holead16 = default\ad16.jpg
holead17 = default\ad17.jpg
holead18 = default\ad18.jpg

```

Fig. 2:



```

Apebble_ - Notepad
File Edit Format View Help

random

holead1 = pebble\ad1.jpg
holead2 = pebble\ad2.jpg
holead3 = pebble\ad3.jpg
holead4 = pebble\ad4.jpg
holead5 = pebble\ad5.jpg
holead6 = pebble\ad6.jpg
holead7 = pebble\ad7.jpg
holead8 = pebble\ad8.jpg
holead9 = pebble\ad9.jpg
holead10 = pebble\ad1.jpg
holead11 = pebble\ad2.jpg
holead12 = pebble\ad3.jpg
holead13 = pebble\ad4.jpg
holead14 = pebble\ad5.jpg
holead15 = pebble\ad6.jpg
holead16 = pebble\ad7.jpg
holead17 = pebble\ad8.jpg
holead18 = pebble\ad9.jpg

```

▶ HOLE ADVERTISEMENTS - ORGANIZING HOLES ADS (CONT.)

Figure 3 shows the *STANDREW.txt* script that will run 18 different ads, on all 18 holes, in exact order, from the standrews folder that we created earlier.

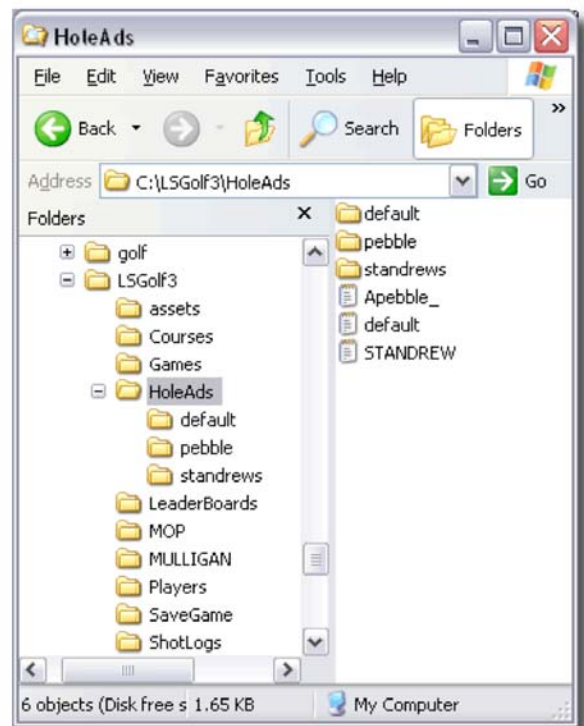
Fig. 3:

```

STANDREW - Notepad
File Edit Format View Help

holead1 = standrews\ fizzCola.jpg
holead2 = standrews\ ctpContest.jpg
holead3 = standrews\ mariosPizza.jpg
holead4 = standrews\ jakesBowling.jpg
holead5 = standrews\ rollerDerby.jpg
holead6 = standrews\ fridayLeagues.jpg
holead7 = standrews\ snackShop.jpg
holead8 = standrews\ bringTheFamily.jpg
holead9 = standrews\ bobsBait.jpg
holead10 = standrews\ bettysBoutique.jpg
holead11 = standrews\ starCinemas.jpg
holead12 = standrews\ fizzCola2.jpg
holead13 = standrews\ mariosPizza2.jpg
holead14 = standrews\ needRefreshments.jpg
holead15 = standrews\ longDrivesaturday.jpg
holead16 = standrews\ mondayNightFootball.jpg
holead17 = standrews\ joesCarWash.jpg
holead18 = standrews\ golfLessons.jpg
    
```

5. Save all three scripts into the C:\LSGolf3 \HoleAds directory. When you are finished you should have three scripts and three folders in the C:\LSGolf3\HoleAds directory as shown in the image at right. Images for each campaign should now be in their respective folders.



▶ HOLE ADVERTISEMENTS - ADVANCED OPTIONS

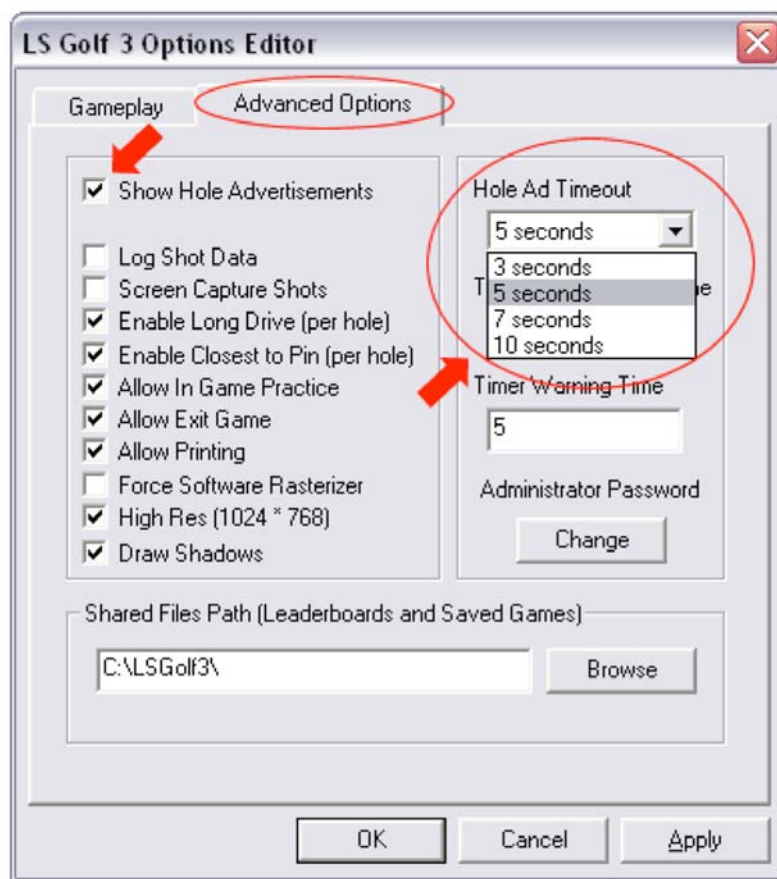
After you have created your scripts and have your ads working, you can fine-tune your campaign by selecting the length of time your ads run or by turning the ad feature on or off.

The LS Golf 3 Options Tool has two tabs: *Gameplay* and *Advanced Options*. Settings listed under the *Gameplay* tab can all be altered from within LS Golf 3; there is no need to change these settings. Settings under *Advanced Options* control Hole Advertisements, Timer settings, and several other special features.

Open the LS Golf 3 Options Tool by entering the System Menu (see pages 21-23), then touching GAME SETTINGS, then LS 3 OPTIONS TOOL, or by clicking on Start > Programs > Full Swing Golf > Utilities > Options Tool. Once the tool is open, click the *Advanced Options* tab. Make sure *Show Hole Advertisements* is checked if you want to use the Hole Ads feature. If you would like turn the Hole Ads feature off, uncheck this box. See Figure 8.

You can also adjust the length of time your ads run by making a selection from the *Hole Ad Timeout* drop down box. Ads can be set to run for 3, 5, 7, or 10 seconds. Once you have the desired settings, click *Apply* and then *OK*.

Fig. 8:



NOTE: It is not recommended to alter any of the settings other than those listed below. Doing so could reduce performance or have other adverse effects.

The Full Swing Golf Simulator is an incredible product, the result of many years of engineering along with product research and development. While the simulator is put together as a turnkey unit, it is made up of many different components that create an experience of lifelike realism. Much like your automobile, the Full Swing simulator will require regularly scheduled maintenance to keep it running optimally. By closely following this maintenance schedule the Full Swing Golf Simulator will provide many years of enjoyment.

NOTE: Maintenance Checklists are provided for your convenience at the end of this manual.

► WEEKLY MAINTENANCE

1. Inspect the bungee cords around the screen for wear. Look for broken, over-stretched or loose bungees and replace as needed. Replacement bungees can be ordered directly from Full Swing Golf.
2. Inspect the ceiling baffles and the flaps around the screen. If they come undone, refasten the Velcro.
3. Inspect the screen for rips or tears. These can be caused by broken clubs, wooden tees, or cracked balls. If a tear is present, patch it soon or it will continue to grow to the point that it is impossible to repair.
4. Inspect Tees for wear and breakage.
5. Clean the clear areas on the Lexan covers with a rag **lightly dampened** with Windex or water. This will prevent the accumulation of dust, which reduces the sensitivity of the sensors.
6. Clean the projector filter. Panasonic recommends this be cleaned every 100 hours and replaced at the same time as the lamp. Refer to your projector's operation manual for location and instructions. To clean the filter, use a small can of compressed air available at most computer and electronic stores.
7. Check the lamp hours on your projector. The lamp-life in a Panasonic projector is roughly 2000 hours (3000 in low power mode). It is recommended that you keep track of the hours used so you can order a spare lamp when you are near your limit. The lamp hours can be accessed through the on-screen menu using your remote control. Please refer to your projector's operation manual for location and instructions. Replacement lamps can be ordered directly from Full Swing Golf.

NOTE: Please see page 39 for more information on projector service.

► MONTHLY MAINTENANCE

1. Vacuum the simulator as needed, but do so at least once per month. This will reduce dust in the area and prolong the life of the electronics. Do not vacuum on, over, or near the tracking sensors. This will eventually remove the protective coating on the Lexan covers and static discharge may damage the sensors.

WARNING: You must turn the master power switch to the **OFF** position before vacuuming. Failure to do so could result in damage to the sensors due to static electricity.

2. Rotate the hitting mat 90 degrees. This will prolong the life of the mat.
3. Check for tracking problems by running NOMASK, the diagnostic program for the simulator (see page 36).

▶ THE TRACKING SYSTEM

Tracking System Overview

The Infrared Tracking System in your simulator consists of two tracks or Frames. These Frames contain the electronic sensor boards that track the golf ball as it passes through them. To protect these sensor boards they are covered by highly durable Lexan Covers. The Lexan Covers are visible as you walk into the simulator near the Screen. The first frame you come to, the frame closest to the Tee Box, is referred to as the **TEE Frame**. The second frame, closest to the Screen, is referred to as the **SCREEN Frame**.

These sensor boards work together to create two Infrared Grids. These Grids cycle at an extremely fast rate and can instantly track a golf ball traveling as slow as 2 mph and faster than 200 mph. As the ball passes through the two Grids, trajectory and velocity are determined. This tells the computer how fast and at what angle the ball left the tee. However, to get an accurate flight path, the computer needs one more piece of data: ball spin. The spin of the ball is tracked after the ball hits the screen and bounces off. Depending on the spin, the ball will bounce off the screen at different angles and pass back through the SCREEN Frame.

Using these three points of reference the computer can accurately determine the path the ball will travel. As you will notice, all of this is calculated in a fraction of a second and instantly displayed on the screen. Due to these highly sensitive tracking sensors it is not necessary to tell the computer what type of club is being hit. In fact you can throw, toss, or roll a ball with the same accurate results. You have purchased a truly unique and amazing machine.

To keep your simulator in optimum condition, it is recommended you run the NOMASK diagnostic program at least once per month. It takes only a few minutes and will keep your simulator running smoothly with a minimum of downtime. NOMASK is a diagnostic tool used to identify problems or potential issues with the Tracking System. Although the system was designed to last several years without failure, sometimes, electronic equipment can be damaged by natural or environmental causes.

NOMASK is designed to quickly find and resolve issues related to the Tracking System. The system is designed to work even though certain parts may be damaged. This is known as a redundant system. However, if several parts are damaged, or certain critical parts are damaged, the system will fail. By running NOMASK it is easy to identify potential problems or damaged boards before the entire system fails.

NOMASK is based on patterns. Certain patterns indicate specific issues. It is not necessary to interpret these patterns, only to see if they stray from the normal pattern, referred to as a Good NOMASK. The next page has instructions for running NOMASK as well as pictures of a Good NOMASK and a Problem NOMASK.

Understanding NOMASK - The NOMASK Diagnostic program displays patterns to indicate the overall functionality of the Tracking System. The program looks at both the TEE Frame and SCREEN Frame independently to determine if the system is working properly or if there are electronic or blockage issues. When checking your NOMASK it is not necessary to understand the NOMASK patterns, it is only important to note the change from a normal or GOOD NOMASK (shown below). If the image strays from a GOOD NOMASK you may have an issue with your system. Please note that a few individual stray lines are normal, and usually do not indicate a problem. As a reference, page 38 shows some examples of Problem NOMASK images. At this point you should contact Full Swing Golf Technical Support for assistance at +1.858.675.1100.

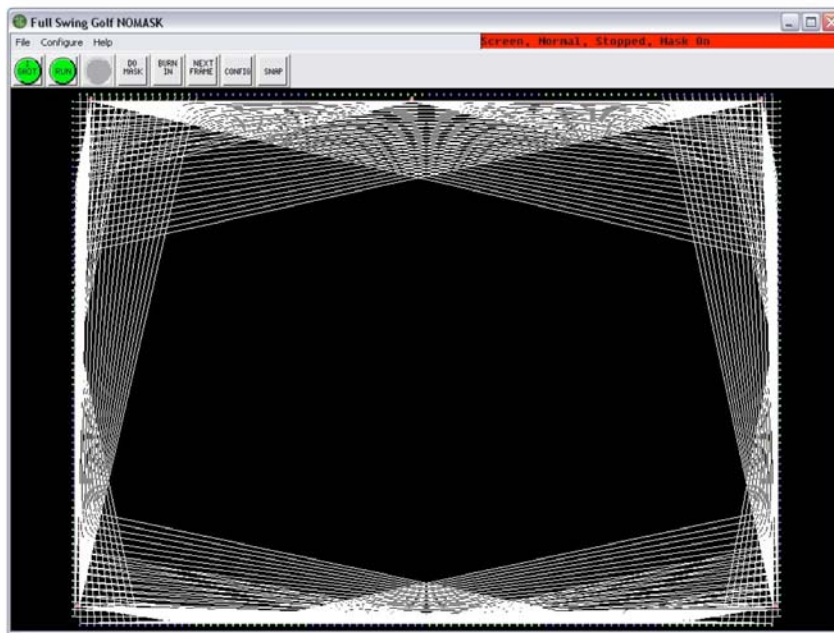
▶ **RUNNING THE NOMASK DIAGNOSTIC PROGRAM (Windows XP)**

1. Exit LS Golf and return to Windows. (See the Shut Down Procedure on page 4)
2. Double-click the **NOMASK** icon on the Windows desktop. After the program starts you will see a black screen bordered with blue and yellow dots. These dots represent Infrared Receivers on the sensor boards within your tracking system.

3. NOMASK for Windows XP

- Using the touchscreen, touch **1-SHOT**. This will take a snapshot of the **TEE Frame**. Compare this image with the GOOD NOMASK image below. If you see something other than the GOOD NOMASK image you may have an issue with your system and should contact Full Swing Golf for assistance. Continue to the next step to check the SCREEN Frame.
- Using the touchscreen, touch **NEXT FRAME**, then touch **1-SHOT** again. This will take a snapshot of the **SCREEN Frame**. Again compare the image with the GOOD NOMASK image below.

GOOD NOMASK:



NOTE: You can switch between the Tee Frame and the Screen Frame by touching Next Frame, but each time you do so, you must also touch 1-Shot to refresh the sensors.

▶ RUNNING THE NOMASK DIAGNOSTIC PROGRAM (Windows 98)

1. Exit LS Golf and return to Windows. (See the Shut Down Procedure on page 4)
2. Double-click the **NOMASK** icon on the Windows desktop. After the program starts you will see a black screen bordered with blue and yellow dots. These dots represent Infrared Receivers on the sensor boards within your tracking system.

3. NOMASK for Windows 98

- On your keyboard, press **Alt+1**. This will take a snapshot of the **TEE Frame**. Compare this image with the GOOD NOMASK image below. If you see something other than the GOOD NOMASK image, you may have an issue with your system and should contact Full Swing Golf for assistance. Continue to the next step to check the SCREEN Frame.
- On your keyboard, press **Alt+F**. This will take a snapshot of the **SCREEN Frame**. Again compare the image with the GOOD NOMASK image on the next page.

GOOD NOMASK:



NOTE: You can switch between the Tee Frame and the Screen Frame by pressing Alt+F. There is a third frame titled Bounce-back. This frame is always blank. Just press Alt+F again to return to the Tee Frame.

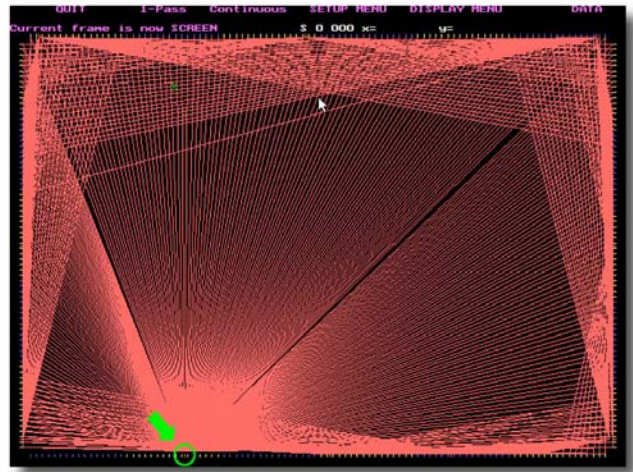
4. After you have checked both Frames, press Alt+X to exit the NOMASK program.

NOTE: Again, when checking your NOMASK it is not necessary to understand the NOMASK patterns, it is only important to note the change from a normal or GOOD NOMASK (shown above). If the image strays from a GOOD NOMASK you may have an issue with your system. Please note that a few individual stray lines are normal, and usually do not indicate a problem. As a reference, the next page shows some examples of Problem NOMASK images. At this point you should contact Full Swing Golf Technical Support for assistance.

► PROBLEM NOMASK IMAGES

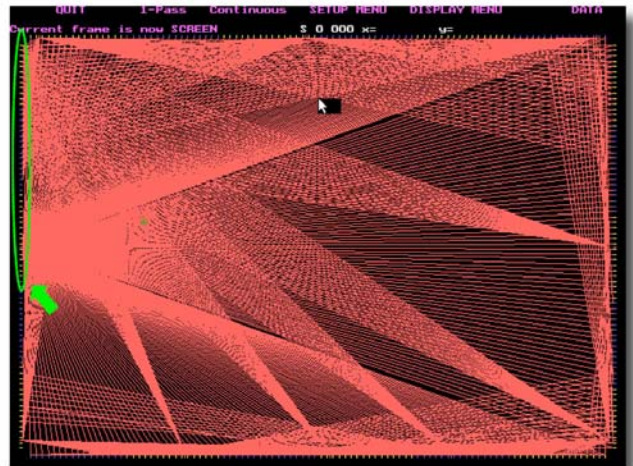
Emitter Issue:

This image shows a problem with an Infrared Emitter (green circle). The Emitter is either being blocked by an object (such as a golf ball), the Emitter is defective, or the board supporting the Emitter is defective.



Left Wall Issue:

This image shows a problem on the upper left wall. The problem starts near the center of the wall and continues to the top. The likely cause here is a bad connection between two Long Boards (green arrow). However, one of the boards themselves may be defective.



Power Issue:

This image shows a Power Issue. The likely cause is that one or both of the tracking power supplies are unplugged. However, this could also be caused by a short in the tracks due to a staple or screw lying on one of the sensor boards. A short can also be caused by a faulty power connection - Check the orange power plugs on each board to make sure they are properly connected.



NOTE: If you see any image other than a GOOD NOMASK image, please call Full Swing Golf Technical Support for assistance at +1.858.675.1100.

► PROJECTOR SERVICE INFORMATION

Full Swing Golf primarily uses Panasonic projectors in the golf simulator. However, your projector make may vary due to availability, international installations, or other special installation circumstances. Always refer to your particular projector's operation and maintenance manual for specific information on service and warranty.

Panasonic Technical Support (USA): +1.800.524.1448

Panasonic Technical Support (Canada): +1.604.278.4211

U.S. Panasonic Repair Program:

If your Panasonic projector was purchased from Full Swing Golf then it qualifies for an exclusive 3-year, parts and labor warranty through the "PANAZIP" program. In addition, PANAZIP will provide you with a loaner projector for you to use while yours is being repaired.

PANAZIP Service in the US call: +1.888.808.0170

You will need the information found in the box below, as well as a Proof of Purchase (your original Full Swing Golf Invoice). If you do not have a Proof of Purchase, or you cannot locate the information listed below, please call Full Swing Golf at +1.858.675.1100 and we will be happy to assist you. You will also be required to have a valid credit card as a deposit for the loaner projector. Panasonic will cover all shipping costs.

MAKE: Panasonic

MODEL: _____ (found on the projector body, Ex: PT-LB50U)

SERIAL #: _____ (found on the projector body, Ex: SG05532xx)

DATE OF PURCHASE: _____ (original installation date or projector purchase date)

NOTE: The PANAZIP program is only valid for U.S. customers. Canadian and other foreign customers will be covered under the Panasonic warranty, but the projectors must be shipped to our service center for repair. Foreign customers are responsible for all taxes, duties and shipping costs to and from the service center. As a courtesy, Full Swing Golf will make every effort to provide a loaner projector if requested. However, Full Swing Golf cannot guarantee that you will be provided with the same make, model, or mounting bracket. In addition, the Customer shall be responsible for all labor for installing and removing any loaner projectors. Again, the customer shall be responsible for all taxes, duties, and shipping costs of the loaner projector.

International Customers:

If you do not have a Panasonic projector purchased from Full Swing Golf, or if you have a projector from another manufacturer, please contact your local Distributor for warranty and service information regarding your particular projector. Distributor contact information can be found at www.fullswinggolf.com.

