



MANUFACTURED  
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FROM



## *Non-Coin-Operated Home Edition*



**For technical support contact Chicago Gaming Company at (708)780-0070  
Please DO NOT contact Incredible Technologies**

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## LEGAL INFORMATION

### SAFETY NOTICES

The following safety instructions apply to all game owners. We recommend that you read this page before setting-up your Golden Tee game. Use the following safety guidelines to help protect the system from potential damage and to ensure your personal safety.

- Use with only 115 volts/60Hz
- To help prevent electric shock, plug the system power cables into properly grounded power sources. These cables are equipped with 3-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3 wire cable with properly grounded plugs.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner or uninterruptible power supply (UPS).
- Do not spill food or liquid on your system.
- Do not push any objects into the openings of the system. Doing so can cause fire or electric shock by shorting out interior components.
- Keep your game far away from radiators and heat sources.
- Do not block cooling vents.
- Be sure to turn off power before working on the machine
- Be sure to use fuses which meet the specified rating. (5A, 220V Quick-blow). Using fuses exceeding the specified rating can cause a fire and electrical shock.
- When working around the monitor, be extremely careful. Monitor parts are subject to high tension voltage. Even after turning off power some portions are still subject to high tension voltage. Monitor repair and replacement should be performed only by technical personnel who have knowledge of electricity and technical expertise.

### ENVIRONMENTAL CONDITIONS

Golden Tee Fore! Complete is intended for indoor use only. Be sure to keep dry and maintain operating temperatures of 50-104° Fahrenheit.

### HOME USAGE DISCLAIMER

This version of Golden Tee Fore! Complete is designed for non-commercial use only. The game software contains many of the menu options from the commercial unit but certain components of the commercial hardware are not included. The commercial options are disabled and any attempt to activate these options could produce undesirable results. Please leave all coin and ITNet options **DISABLED** in their respective menus.

# INITIAL SETUP

The locations of the On/Off Switch, Service Button, and Display Adjustment Panel are shown in the illustration below. If for any reason the panels on the machine need to be removed you MUST disconnect the unit from any power source.



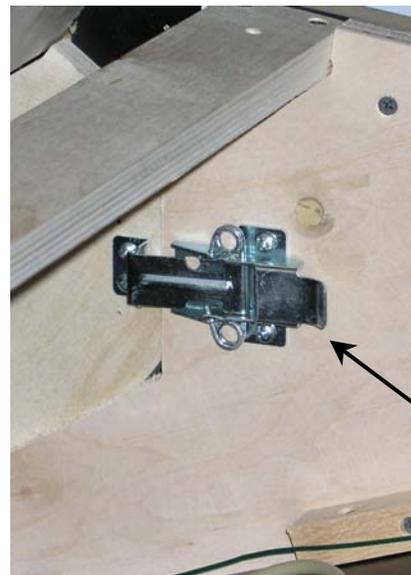
# Removing the Control Panel Assembly

For ease of movement thru narrow staircases a **trained technician** can remove the control panel assembly. **Unplug the machine before removing the control panel!** The technician will follow these simple steps to remove the control panel:

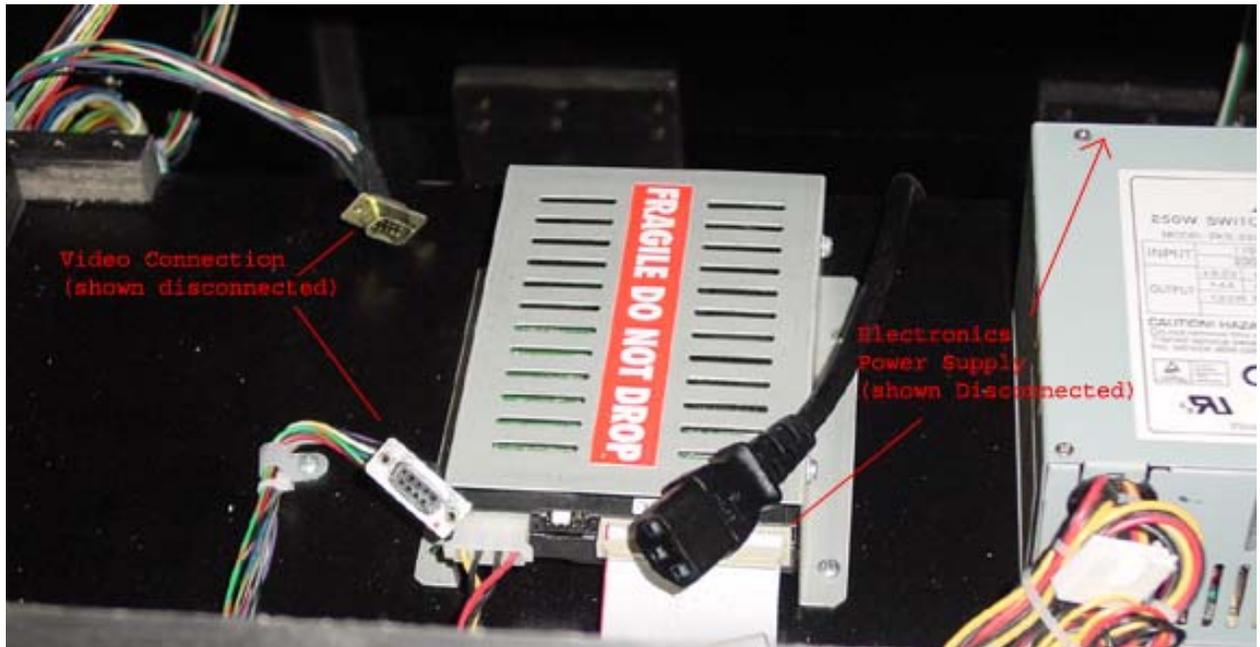
1. Remove only the two screws circled in the following picture.



2. Once the screws are removed simply grasp the control panel, at the side nearest the screen, and gently pull upward. The panel is hinged at the front and will swing open. Once the panel is open, locate the latches on both sides and release them.



3. After the latches are released grasp the bottom of the panel and gently pull up and out about six inches until the panel stops are reached, then locate the video connector and separate the connection. The A/C power connector for the power supply must also be disconnected.



4. Now that the wiring is disconnected it is safe to remove the panel. Close the control panel and grasp the assembly from the bottom and lift about one inch to disengage the stops and pull outward until the panel is clear of the cabinet.

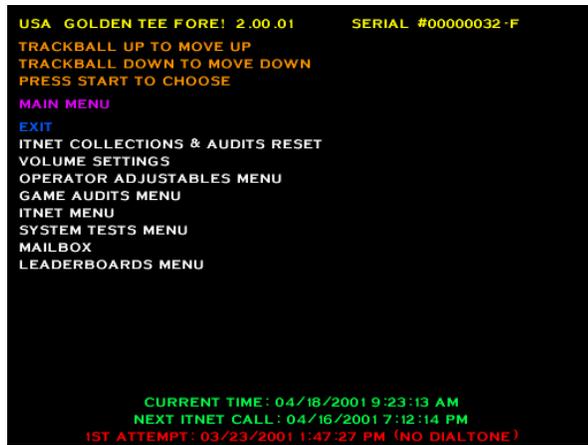


To reinstall simply reverse the procedures making sure that the video and power connections are tightly connected, and NEVER force either the connectors or the panels together.

# OPERATOR MODE

The **OPERATOR MODE** can be entered by pressing the Service Button located inside the coin door,

When in **OPERATOR MODE**, the game's country code, product name, and software version and the specific Game Serial Number are displayed at the top of the screen.



## NOTE:

Menu items can be highlighted in one of two ways: rolling the trackball Up and Down or by pressing the LEFT and RIGHT buttons. To select a highlighted item, press the START button. You can tell a menu item is highlighted as it will flash.

To exit most tests or menus and return the game to its normal state, use the trackball or LEFT and RIGHT buttons to highlight the line that says EXIT, and press the start button. Otherwise, hitting start will normally exit you out of any test you are in that does not have that option.

At the bottom of most menu screens are displayed the current date and time, next ITNet® call date and time, and the last date and time ITNet® was called (successful or not). If the last call was unsuccessful, a short error message is displayed on the First Attempt line.

The **MAIN MENU** allows you to enter several different areas:

**ITNET® COLLECTIONS & AUDITS RESET** displays the current machine coin counts, for use in separation of ITNet® fees from your collections. **DO NOT** change items on this menu.

**VOLUME SETTINGS** is used to adjust the volume of your game for your location.

**OPERATOR ADJUSTABLES MENU** is used for customizing the game to your location including player costs per game, skill level settings, attract mode sounds, etc.

**GAME AUDITS MENU** allows you to check your game's coin, games purchased, course, and lifetime audits.

**ITNET® MENU** is redesigned to take advantage of many of the ITNet® capabilities including registering your machine with ITNET®, disabling/enabling calls to ITNET®, and forcing a call to ITNet™. **DO NOT** change items on this menu.

**SYSTEM TESTS MENU** verifies the operation of the hardware, controls, and monitor through easy and automatic procedures accessed through this menu.

**MAILBOX** is a feature that was designed with the operator in mind. However, it is currently not functional in this version of Golden Tee Fore!

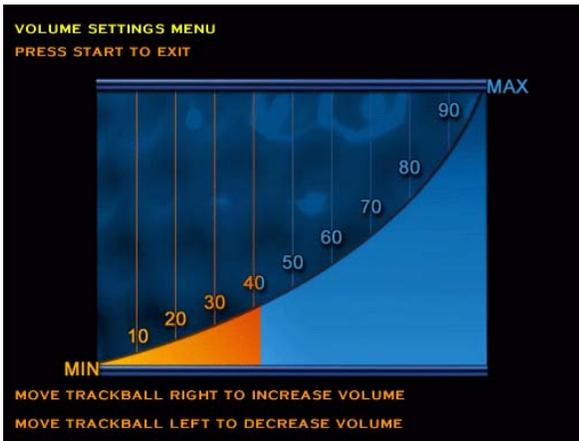
**LEADERBOARDS MENU** gives you quick and easy access to the Stroke Play leaderboards for each course.

## COLOR KEY NOTE:

For easy identification, all test screens have been color-coded. Items displayed in PURPLE are the Menu titles. This is the name of the menu that is currently displayed. Items appearing in ORANGE are instructions for that screen. The WHITE items are choices available on that menu. The BLUE item is the selection that is currently highlighted and/or can be changed\*. Any item shown in GREEN or YELLOW is an unselectable or pre-set unchangeable item. Items appearing in RED mean an action should be taken or the machine is displaying a warning. \*This selection will now flash for easy recognition.

# VOLUME SETTINGS

The **VOLUME SETTINGS** screen is used to adjust the volume of sounds and music that are heard during game play.



When this screen appears, music will play. Move the trackball to the right to increase the game's sounds and music. Roll the trackball to the left to make the game sounds softer. When you have adjusted the sounds to the appropriate volume, press the START button to exit back to the main menu. (This level will default at 40.)

## VOLUME SETTINGS

**NOTE:**

This menu option is in the **OPERATOR ADJUSTABLES MENU** as well to allow for quick access while you are already customizing your other game settings.

To change the volume, press the START button. When the volume settings screen appears, music will play. Move the trackball to the right to increase the game's sounds and music. Roll the trackball to the left to make the game sounds softer. When you have adjusted the sounds to the appropriate volume, press the START button to exit back to the main menu (This level will default at 40).

# OPERATOR ADJUSTABLES MENU

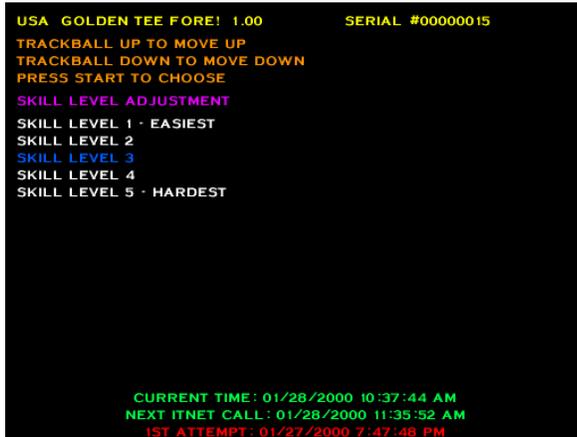
The **OPERATOR ADJUSTABLES MENU** is accessed through the **MAIN MENU**.



You can control many customizing procedures. The following are brief descriptions of each adjustable function and what the screen looks like when displayed. Remember to select an item from any menu, use the trackball to highlight the item in blue and then press the START button.

## SKILL LEVEL ADJUSTMENT

Golden Tee® Fore! lets you change the skill level needed to play the game. This setting lets you adjust some of the playing conditions such as slope of the green, wind speed, and putting sensitivity. This is good for locations with younger/novice players who are less skilled at the game, or expert/accomplished players who demand a greater challenge.



To set the game to an easy skill level, highlight **SKILL LEVEL 1 – EASIEST**.

To set the game to a difficult skill level, highlight **SKILL LEVEL 5 – HARDEST**.

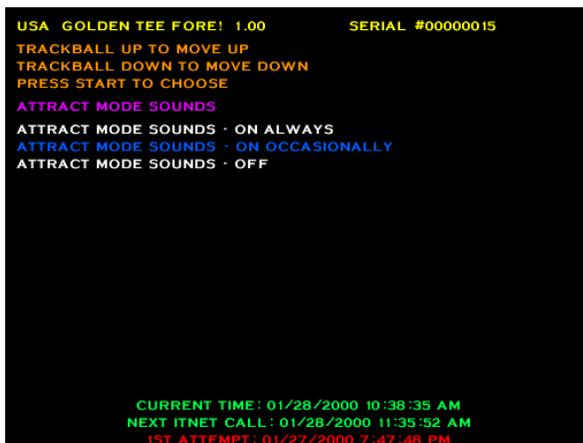
**SKILL LEVEL 3** is the default skill level and approximately the skill required for the average player. Sometimes it is best if the skill level is adjusted gradually over a period of time.

### NOTE:

The skill level adjustment will only affect regular play. The ITNET menu options appear but should remain disabled for predictable machine operation.

## ATTRACT MODE SOUNDS

This menu is used to adjust the sounds that are heard while no one is playing the game.



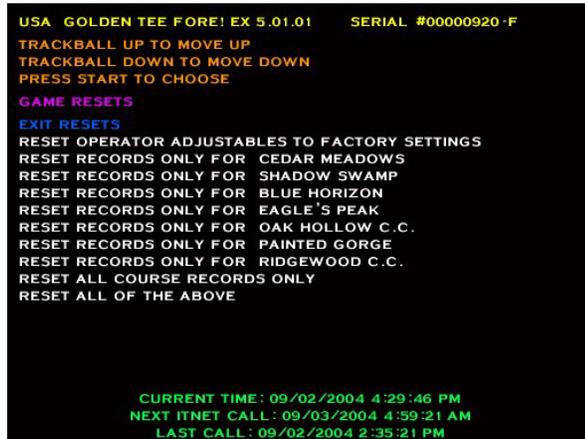
**ATTRACT MODE SOUNDS - ON ALWAYS** will play sounds during every attract cycle.

**ATTRACT MODE SOUNDS - ON OCCASIONALLY** plays sounds about every ten to twelve times the attract mode is repeated. This is the default.

**ATTRACT MODE SOUNDS - OFF** will not allow any sounds to be played during the attract mode.

## GAME RESETS

The **GAME RESETS** menu will cancel or zero out any custom features or bookkeeping figures that are no longer wanted.



**RESET OPERATOR ADJUSTABLES TO FACTORY SETTINGS** will return the game's adjustable settings (volume, skill level, etc.) to factory defaults.

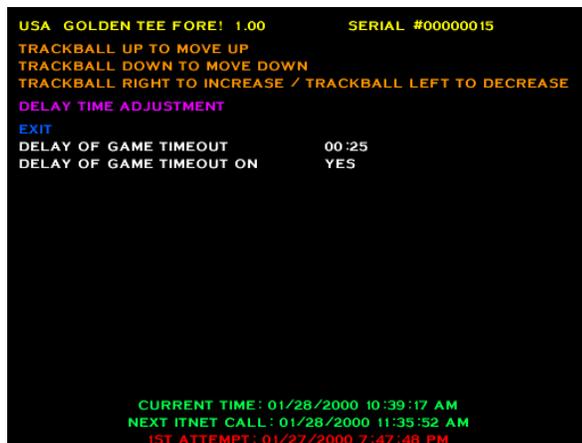
**RESET RECORDS ONLY FOR <COURSE NAME>** is used to reset the statistics and information like "Longest Drive" for each of the 7 stroke-playable courses (5 if you don't have EXtra) individually..

**RESET ALL COURSE RECORDS ONLY** is used when you want to clear the records for all courses on Golden Tee® Fore!

**RESET ALL OF THE ABOVE** is used when you want to do a broad reset and bring the game completely back to its original "out-of-the-box" settings for all operator adjustables and course records.

## DELAY TIME ADJUSTMENT

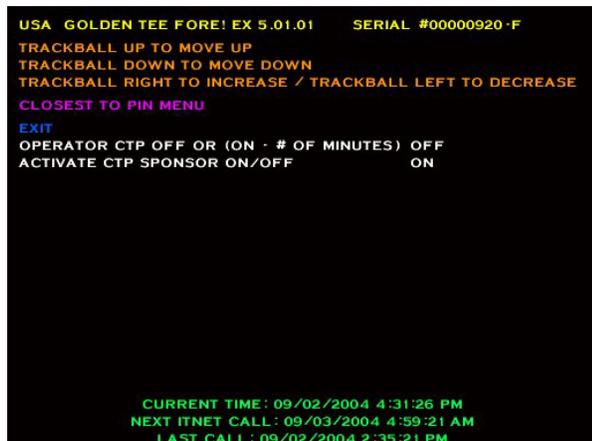
This allows for changing the delay of game time. A player's game will terminate if no activity is detected for a set amount of time. Use this setting to adjust this time delay.



**DELAY OF GAME TIMEOUT** - The game will give the player a penalty stroke if they have not taken any action after this amount of time. This function can be set from as little as 25 seconds to as high as 2 minutes. The default is set to 00:25 (25 seconds). Note: The first hole will give the player a longer 2-minute timeout.

**DELAY OF GAME TIMEOUT ON** - The **TIMEOUT** can be disabled by selecting **NO**. We recommend leaving this **YES** so the game will return to the attract mode if a player walks away from a game in progress. The default is set to **YES**.

## CLOSEST TO PIN MENU



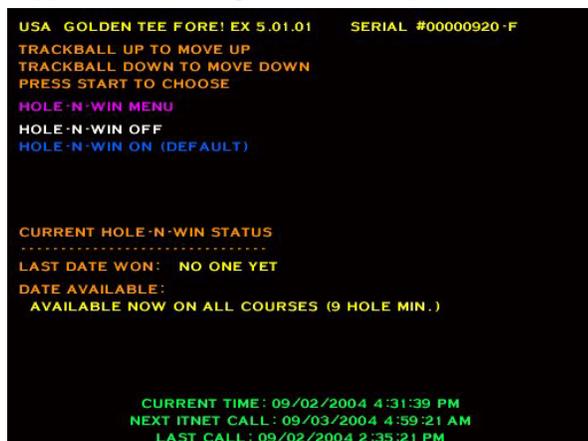
**OPERATOR CTP OFF OR (ON - # OF MINUTES)** lets the operator turn on CTP mode on his game for a varying set of minutes. By keeping this at OFF instead of a time frame it will keep the game in regular mode. If they choose a set of minutes and exit all the way off then it will prompt the operator with a message saying they are entering CTP mode and then reset the game. Once the time is up that the operator has selected they can choose to have it run for another 15 minutes or let it time out and reset the game putting it back into regular play mode.

**ACTIVATE CTP SPONSOR ON/OFF** lets the operator enable or disable the ability for selected sponsors to swipe a special card that lets them "rent" the machine from the operator. It puts the game into the special CTP mode but not until they've paid for a selected amount of time. Once their time is up they can let the machine reset back to normal or put more money in to rent the machine for a longer period of time.

## HOLE-N-WIN MENU

**DO NOT** tamper with or make changes to this menu.

**Version 4.00.00** and higher offers operators the ability to earn additional revenue with the ITNet® online feature Hole-n-win! Players pay an additional amount of money for an opportunity to win money. Part of the player-supported funds is given back to operators on their monthly ITNet® billing statement.



**HOLE-N-WIN OFF** disables the Hole-n-win! feature. All screens in the attract mode are hidden and the player is never offered a Hole-n-win! opportunity. Use this if you find out your location is ineligible to run Hole-n-win!

**HOLE-N-WIN ON (DEFAULT)** enables the Hole-n-win! feature on your machine. This is the default all games are set to and has all screens in the attract mode visible to all players. This then gives players, in the game, an opportunity to win money.

The Hole-n-win! Status shows the last date that someone won a Hole-n-win! on that specific machine. It will then show you the date that Hole-n-win! becomes re-available on that machine or if it is currently available already what courses qualify for Hole-n-win!

## GAME AUDITS

The **GAME AUDITS MENU** will supply you with a detailed accounting of helpful and informative bookkeeping and statistics.

```

USA GOLDEN TEE FORE! EX 5.00.01 SERIAL #00000920 -F
TRACKBALL UP TO MOVE UP
TRACKBALL DOWN TO MOVE DOWN
PRESS START TO CHOOSE
GAME AUDITS MENU
EXIT AUDITS
DISPLAY COIN AUDITS
DISPLAY GAMES PURCHASE AUDITS
DISPLAY COURSE AUDITS
DISPLAY LIFETIME COIN AUDITS

NOW AVAILABLE - SPECIAL PRICING SCHEDULES
SET UP SPECIAL PRICING SCHEDULES
BY VISITING WWW.ITSGAMES.COM

NOTE: IF USING SPECIAL PRICING SCHEDULES
GAME AUDITS WILL BE AFFECTED

CURRENT TIME: 02/04/2004 3:44:53 PM
NEXT ITNET CALL: 02/05/2004 5:25:06 AM
LAST CALL: 02/04/2004 3:44:06 PM
    
```

**DISPLAY GAME PURCHASE AUDITS** is designed to help in bookkeeping purposes. This screen has a similar format to the Player Cost Schedule, displaying the game types that were selected by players.

```

USA GOLDEN TEE FORE! EX 5.00.01 SERIAL #00000920 -F
PRESS START TO EXIT
DISPLAY COURSE AUDITS
EXIT AUDITS LAST CLEARED: WED FEB 04 15:45:30 2004
HOW COURSE WAS SELECTED 18 F9 B9
-----
TOTAL GAMES CEDAR MEADOWS -- -- --
TOTAL GAMES SHADOW SWAMP -- -- --
TOTAL GAMES BLUE HORIZON -- -- --
TOTAL GAMES EAGLE'S PEAK -- -- --
TOTAL GAMES OAK HOLLOW C.C. -- -- --
TOTAL GAMES PAINTED GORGE -- -- --
TOTAL GAMES RIDGEWOOD C.C. -- -- --
TOTAL GAMES BALMORAL GREENS -- -- --
TOTAL GAMES SAPPHIRE SPRINGS -- -- --
TOTAL TOURNAMENT COURSE GAMES: -- -- --
TOTAL HOLE-N-WIN ATTEMPTS: 0

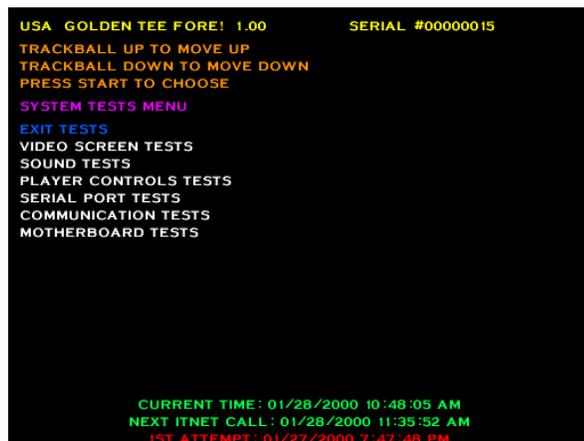
18 = 18 HOLES, F9 = FRONT 9 HOLES, B9 = BACK 9 HOLES
CURRENT TIME: 02/04/2004 3:45:55 PM
NEXT ITNET CALL: 02/05/2004 5:25:06 AM
LAST CALL: 02/04/2004 3:44:06 PM
    
```

**DISPLAY COURSE AUDITS** is a breakdown of how many games were played on each course. Note that 18 hole, Front 9 and Back 9 games are displayed with code version 2.01.06 and higher.

For version 4.00.00 and higher, Total Hole-n-win! Attempts are included on this screen.

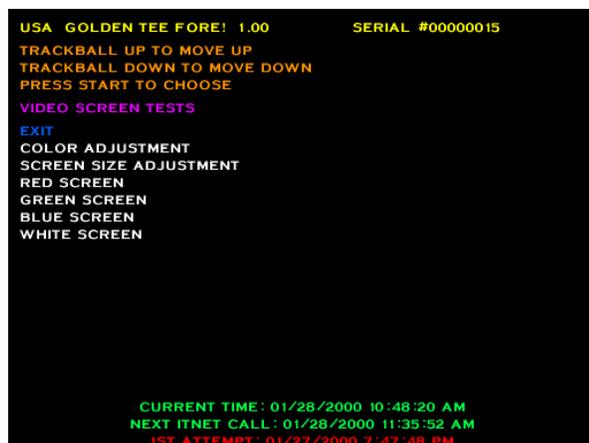
# SYSTEM TESTS MENU

Golden Tee® Fore! has been inspected and tested at the factory and should arrive to you in perfect working order. If you are experiencing any problems with the game, the **SYSTEM TESTS MENU** is a good place to start when tracking down the problem.



## VIDEO SCREEN TESTS

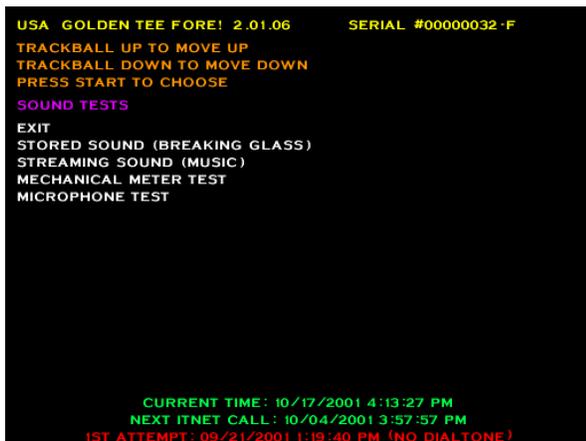
You can test your monitor and adjust colors or sizes by choosing **VIDEO SCREEN TESTS** and pressing the START button on the desired test.



These tests can be exited at any time by pressing the START button. From there move the trackball up and down or press the LEFT and RIGHT buttons to get to the next test you want to do. The screens are a grid of colored rectangles, a set of squares to test sizes, and then red, green, blue and white to test the condition of the monitor's components. Use these colors and grids to adjust your monitor so they look as good as possible.

## SOUND TESTS

Choose **SOUND TEST** from the **SYSTEMS TESTS MENU** to test the sounds and speakers in the game. The section also tests the coin meter and microphone.



Test sounds include the **STORED SOUND (BREAKING GLASS)** as well as the **STREAMING SOUND (MUSIC)**. These will help test that your sound is working properly.

To test the coin meter, select **MECHANICAL METER TEST** from this menu. If everything is working properly, the meter should increment each time the **START** button is pressed while this line is highlighted.

The **MICROPHONE TEST** will determine the dynamic volume of the area around the cabinet. In order to get the correct reading for all other sound tests, the **MICROPHONE TEST** should be run first.

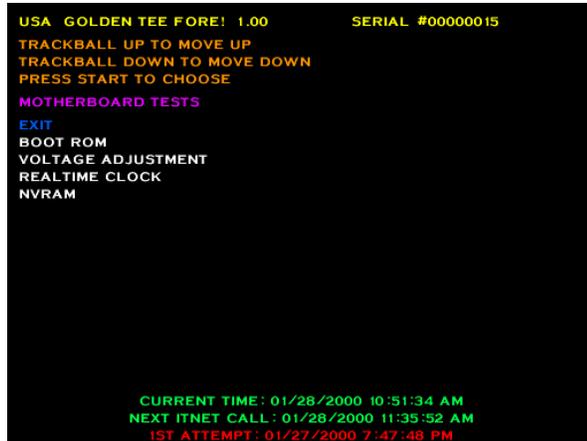
## PLAYER CONTROLS TESTS

When **PLAYER CONTROLS TESTS** is selected, the screen will display a diagram of the Golden Tee® Fore! control panel. The controls are highlighted on the diagram when the controls are active. Test all of the controls, including test and service switches. Press the **LEFT**, **RIGHT**, and **START** buttons together to exit this test.



## MOTHERBOARD TESTS

This menu is to help test some of the basic hardware located in the Golden Tee® Fore! machine.



**BOOT ROM** tests the memory your game boots from. To activate this test press the START button. You will get one of two messages: "BOOT ROM CHECKSUM IS CORRECT" or "BOOT ROM CHECKSUM IS INCORRECT". If you get the failure message please contact your local distributor or the Chicago Gaming Service Department.

**VOLTAGE ADJUSTMENT** tests the voltage levels of the game's power supply. This test reveals one of four messages the instant the menu selection is highlighted. "VOLTAGE IS WITHIN ACCEPTABLE RANGE" means that everything is working properly. "VOLTAGE IS HIGH" or "VOLTAGE IS LOW" means you have to adjust the voltage until you get the ACCEPTABLE RANGE message. "VOLTAGE DETECTION FAILURE" means there is a hardware failure with the voltage detect circuitry and you should contact your local distributor or the Chicago Gaming Service Department.

**REALTIME CLOCK** is used to display the board's clock in current local time. Pressing the START button will display the current local time and date. If the time is incorrect it can be adjusted by making a call to ITNet.

**NVRAM** tests the non-volatile RAM, or memory, on the game's board. Pressing the START button will activate this test. You will get one of two messages: NVRAM CHECKSUM SUCCEEDED or NVRAM CHECKSUM FAILED. As with all other tests if you get the failure message contact your local distributor or the Chicago Gaming Service Department.

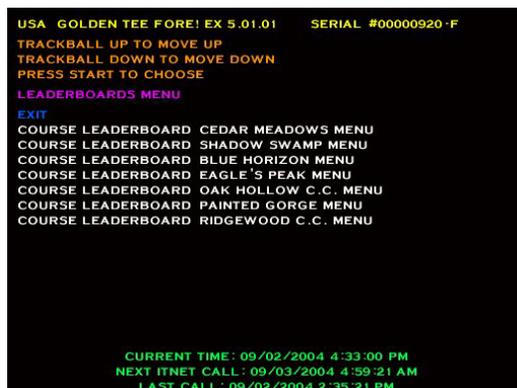
## LEADERBOARDS MENU

---

This new feature lets operators display and reset the stroke leaderboards for each course.

Select which course leaderboard you wish to work with and then hit the start button to go to the next menu.

Note: The courses are labeled by course name corresponding to the way they view on the course selection screen from left to right (top to bottom if you have Extra).



**EXIT** takes you back to the MAIN MENU.

**COURSE LEADERBOARD <COURSE NAME> MENU** lets you select for which course you want to view the leaderboard.

## DISPLAY / CLEAR COURSE LEADERBOARDS



**EXIT** takes you back to the main LEADERBOARDS MENU.

**DISPLAY LEADERBOARD** lets you display the top 20 scores for that specific course including Name (initials), score, longest drive, and great shot points.

**CLEAR/RESET LEADERBOARDS** lets you clear the leaderboard for that specific course. The leaderboard will then be cleared in both the attract mode and in the game for stroke play. A message will flash saying the leaderboard has been cleared for that course

**NOTE:** This feature clears the leaderboards for courses available in Stroke Play only. The courses available in League Play ONLY do not have these leaderboards.

## DISPLAY LEADERBOARD MENU

This menu lets you select which leaderboard you wish to see based on the 18 hole, front 9, and back 9 versions of that course.

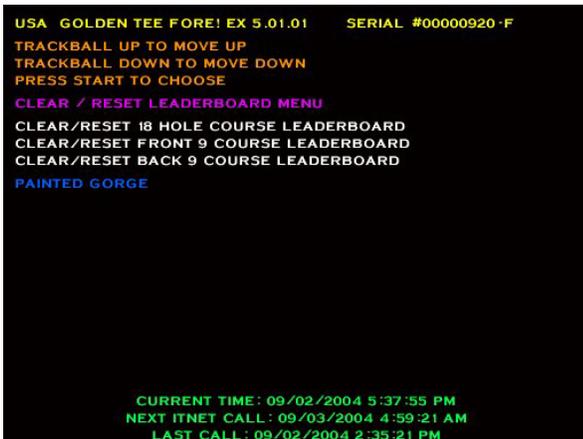


Here is what the leaderboard looks like:

NAME	SCORE	LONGESTDRIVE	GREATSHOT PTS.
1. GUS	-5	327 YDS.	0
2.	0	0 YDS.	0
3.	0	0 YDS.	0
4.	0	0 YDS.	0
5.	0	0 YDS.	0
6.	0	0 YDS.	0
7.	0	0 YDS.	0
8.	0	0 YDS.	0
9.	0	0 YDS.	0
10.	0	0 YDS.	0
11.	0	0 YDS.	0
12.	0	0 YDS.	0
13.	0	0 YDS.	0
14.	0	0 YDS.	0
15.	0	0 YDS.	0
16.	0	0 YDS.	0
17.	0	0 YDS.	0
18.	0	0 YDS.	0
19.	0	0 YDS.	0
20.	0	0 YDS.	0

## CLEAR/RESET LEADERBOARD MENU

This menu lets you select which leaderboard you wish to clear based on the 18 hole, front 9, and back 9 versions of that course.



**THE TROUBLESHOOTING SECTION HAS BEEN INCLUDED FOR USE BY  
TRAINED SERVICE TECHNICIANS**

## APPENDIX A

### GENERAL TROUBLESHOOTING

---

#### Video Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
No picture	Check Dip Switches.	Check monitor resolution chart on page 10 for correct SW-5.
	Bad connection.	Make sure there are good connections from the board's video outputs (see JAMMA connections - Page 51) to the monitor's video inputs. Make sure the video card cable is connected to the main PCB.
	Monitor.	Make sure the monitor is operating correctly. (Check it with another compatible logic board).
	Voltage too low.	Check all power supply voltages.
	JAMMA Harness connected improperly.	Identify Pin 1 on the JAMMA connector and on the PCB. If installed incorrectly, damage to the PCB may have occurred.
Scrambled Picture	Missing sync connection or misadjusted monitor.	Check the sync connection - Adjust monitor.
	Dip SW-5 set in the wrong resolution.	Check monitor resolution chart on page 10 for correct SW-5.
Missing colors or washed out color	Bad video connections.	Check the video red, green, and blue connections at video card cable and JAMMA harness.
Bright, blurry, or rolling picture	Misadjusted monitor.	Adjust the monitor, not the board. (Refer to your monitor manual).
Picture too large, too small, or off center	Misadjusted monitor.	Adjust the monitor, not the board. (Refer to your monitor manual).
Video image is flipped	Incorrect Monitor Wiring	Reverse the monitor's convergence wires or flip the monitor 180°. (Refer to your monitor manual).
Diagonal white lines or snow	GND problem or interference from other equipment.	Make sure you have Video Ground connected at the monitor and pin 14 of JAMMA.

## Sound Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
No sound	+12 vdc power supply is bad	Try another +12 vdc connection from the power supply.
	Bad connection to the board.	Check for +12 vdc power on the board.
		Check for +5 vdc power on the board.
	Sound adjustment in Operator Adjustables	Check the volume setting in the OPERATORS ADJUSTABLE section of the Operator Mode.  All of the attract mode sounds are "OFF".
	JAMMA Harness connected improperly	Check the speaker connection.
Buttons do not work or are partly inoperable. Or the selections keep scrolling on Operator Mode menus.	Miscellaneous	Identify Pin 1 on the JAMMA connector and on the PCB. If installed incorrectly, damage to the PCB may have occurred.
	Switches not properly connected.	Make sure that the common post of the switch is connected to ground.  Make sure each individual switch is working by doing the Control Panel Test found in the SYSTEM TESTS section.  Make sure that the signal wire for that particular switch is connected to the normally open post of the switch.
	JAMMA Harness connected improperly.	Identify Pin 1 on the JAMMA connector and on the PCB. If installed incorrectly, damage to the PCB may have occurred.  Make sure pins 27 and 28 of JAMMA are properly grounded.
Coin counter not working	Miscellaneous.	Make sure that the signal wire has a connection from the switch to the board.
		Make sure proper voltage is hooked up to the counter.
		The signal wire is not connected to coin counter. (Check continuity).

## Control Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
Trackball does not work	No +5 voltage.	Bad inductor (L51) or bad connection to trackball.  Check for +5V on J51 Pin 1.
	Bad trackball or trackball cable.	Change with known, good trackball and/or trackball cable.

## Power-Up Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
No reaction when game is turned ON	Voltage not good.	Check all power supply voltages.
		Short between power and ground. Check for foreign material.
		Turn power off. Disconnect the harness and measure the resistance between power and ground. It should read around 600 ohms. (0 ohms is a dead short).  Make sure the harness is not shorting to anything, such as bare or frayed wires shorting out each other or hitting bare metal.
	No power from the power supply.	Replace power supply.
	Short on the board.	Check for loose or foreign material on the board.
	Hard drive connected improperly.	Make sure hard drive ribbon cable is connected correctly. The red wire on ribbon cable connects to pin 1 on board.
	JAMMA Harness connected improperly.	Identify Pin 1 on the JAMMA connector and on the PCB. If installed incorrectly, damage to the PCB may have occurred.
Open on socketed IC's	Check for bent pins on socketed parts. Make sure that all IC's are seated in their sockets properly.	

# GENERAL TROUBLESHOOTING (CONTINUED...)

## Miscellaneous Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
Green LED not blinking (D5A or D20)	Program not running.	Make sure all socketed IC's are seated correctly. Look for bent pins.
	Bad connections.	Turn power off. Make sure you have continuity from PCB to power supply.
Sounds Bad	Miscellaneous	Check the speaker connections.
On power up the game goes through a long test ending with the Player Control Test	Start switch is stuck or the signal wire is connected to the normally closed post.	Fix the Start switch. Put the signal wire on the normally open post.
Game comes up in Test Mode	Dip Switch 51 is "OFF".	Make sure SW51-Dip Switch 1, near the JAMMA, is in the "ON" position.
Intermittent Resets	Game is not connected to earth ground	Trackball must be earth grounded
		Cabinet is not connected to earth ground. (All metal should be connected to the earth ground)

## CD-ROM Upgrade Problems

<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
Will not begin the update or updates gets stuck on a file	Low voltage after CD-ROM is connected.	Check all power supply voltages.
	Incompatible CD-ROM Drive.	Try a different CD-ROM Drive. Use the list of known good drives below.
	Possible faulty CD.	Try a different CD.
	Possible bad IDE ribbon cable	Try a different IDE ribbon cable
	Cable does not have a key and is connected backwards	Remove cable. Make sure pin 1 is oriented correctly. Re-insert cable.
Game powers up with a red screen.	CD ROM Drive not in Slave Mode.	Set the CD ROM Drive to Slave Mode.
	Security chip or Boot ROM is bad or damaged.	Check for bent pins. Make sure pin 1 is oriented correctly. Check for bent pins on the IDE connector.
	Update does not load from CD-ROM	Press SW-51 button on board to reset game. See if CD-ROM is detected and loads on second reboot.

## CD-ROM DRIVES LISTING

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### CD ROM DRIVE LISTING

The following CD-ROM Drives have been tested and are known to work with the Golden Tee Fore system. Most of these drives are available through retail outlets and can be purchased as low as \$30.00. Please remember that the faster your drive is, the faster the update will be.

SONY	CDU -4821	SAMSUNG	52X INT EIDE BEIGE
SONY	52X CD-R 5211	LG ELECTRONICS	52X IDE CD-ROM RETAIL
HITACHI	CDR-8330	US DRIVES	CYBERDRIVE 56X EIDE CD-ROM
TEAC	CD-56E	BENQ	56X IDE CD-ROM
SONY	CDU-4011	MITSUMI	54X CD-ROM DRIVE
LG CDR	8400B	SONY	52X IDE CD-ROM DRV
MEMOREX	CD 482E	SONY	52X INT IDE CD-ROM RETAIL
ACTIMA	A36T	ASUS	52X INT ATAPI CD-ROM
AFREEY	CD-2050E	TEAC	40X IDE INT CD-ROM DRV BLACK
PANASONIC	CD-594-C	BUSLINK	IDE INT 52X CD-ROM PC
TOSHIBA	XM-6102B	OBI-IBM	48X-20X IDE INT CD-ROM
MITSUMI	CRMC-FX400D	425278	IBM 48X 20X CD-ROM BLACK INT IDE

Be certain that your CD-ROM drive is in SLAVE mode. You may have to consult the instructions that came with your CD-ROM drive to determine how to do this.

## POWER SURGE PROTECTION RECOMMENDATIONS

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If you are in an area of the country that experiences frequent lightning strikes, or in a location with unreliable power distribution, it is recommended that you protect your entire system from lightning strikes, power surges and brown outs. The following products or equivalent are highly recommended. If power to the location is lost, these products will allow the machine to continue working for at least 5 minutes, allowing players to complete their games in progress. These products are available in many retail chains, such as CDW and Best Buy.

### **APC Back-UPS 500 (or equivalent)**

**Emergency battery backup and surge suppression for your entire system.**

The effects of power problems include lockup, complete data loss, hardware degradation, damaged motherboards, and more, making downtime inevitable. An APC Back-UPS instantly switches your game to emergency battery backup power and allows you to play through brief power outages or to shut down your system in the event of an extended outage. High-performance surge suppression protects your game from electrical noise and damaging power surges - even lightning.

### **Tripp-Lite isobar (or equivalent)**

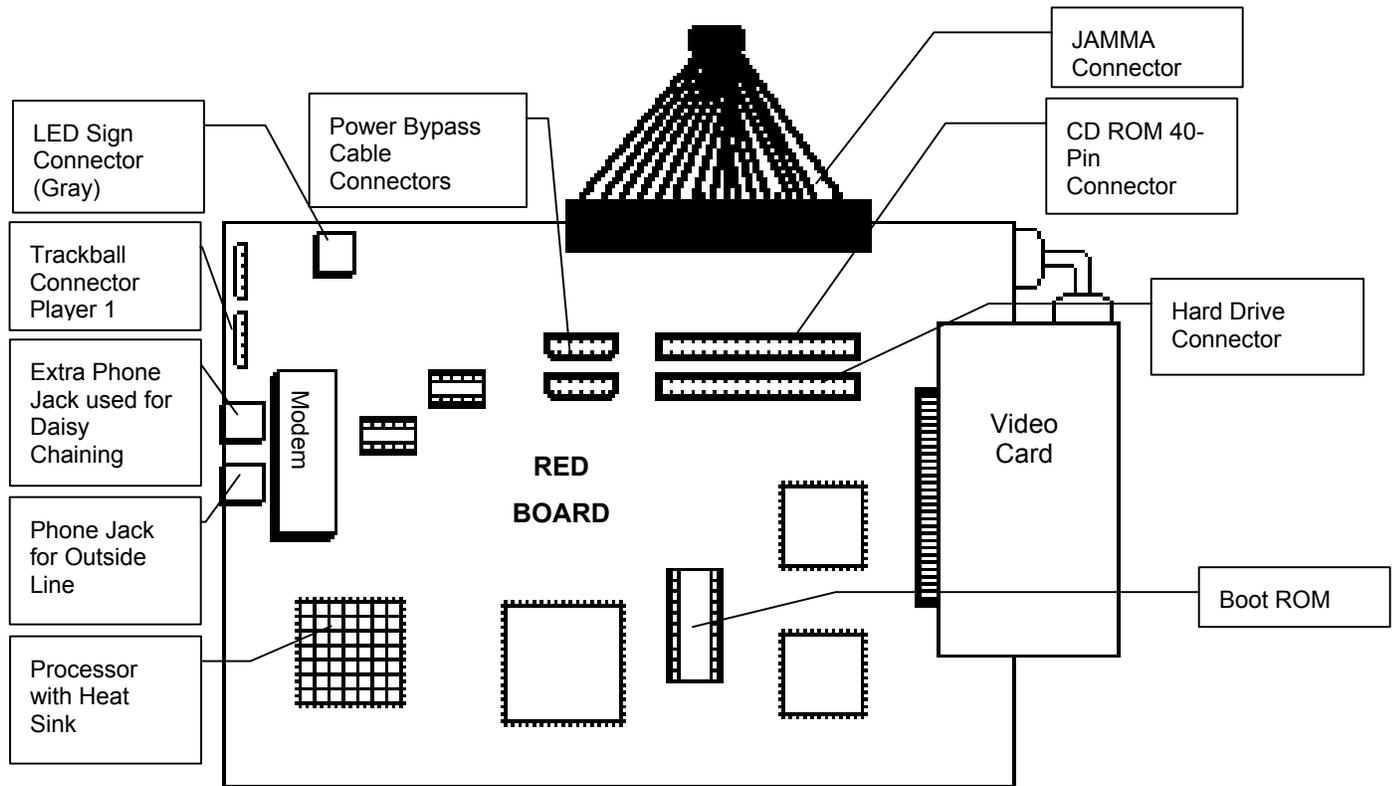
**Basic surge suppression for your entire system.**

Ideal for premium protection of personal computers with peripherals, network and CAD / CAM / CAE workstations, internetworking accessories, telecommunications systems, point of sale equipment, audio/video and home theater systems in any home, office or industrial application.

# APPENDIX B

## SERVICE INFORMATION

### Golden Tee® Fore! PCB Connections



### Dip Switch Settings

The **SW51-Dip switches** can be found on the main PCB near the JAMMA connector.

Dip Switch 1 (ON):	Normal Play (DEFAULT)
Dip switch 1 (OFF):	OPERATOR MODE
Dip switch 2 (ON):	Always "ON" (DEFAULT)
Dip switch 3 (ON):	Always "ON" (DEFAULT)
Dip switch 4 (ON):	Always "ON" (DEFAULT)

The **SW5-Dip switches** can be found near the flashing green LED. These are used to adjust monitor resolution.

Dip switch 1 (OFF):	Medium Resolution (DEFAULT)
Dip switch 1 (ON):	Low Resolution
**Dip switch 2 (OFF):	Low Resolution B Adjust
Dip switch 2 (ON):	Low Resolution A (DEFAULT)
Dip switch 3 (ON):	Always "ON" (DEFAULT)
Dip switch 4 (ON):	Always "ON" (DEFAULT)
**If you are experiencing a "jittery" image, try this mode to correct. Restart the game and adjust the monitor.	

## JAMMA Harness Connection

WIRE COLOR	SOLDER SIDE		PARTS SIDE	WIRE COLOR
Black	*	A	1	Black
Black	*	B	2	Black
Red	*	C	3	Red
Red	*	D	4	Red
		E	5	
Orange	*	F	6	Orange
KEY		H	7	KEY
		J	8	Coin Counter
		K	9	
Yellow-Green	Left Speaker (-)	L	10	Left Speaker (+)
		M	11	
Green-Black	Video Green	N	12	Video Red
White	Video Sync	P	13	Video Blue
Orange-Black	Service	R	14	Video GND
		S	15	Test
Green-Blue	Coin2	T	16	Coin1
		U	17	Start 1
		V	18	
		W	19	
		X	20	Player 1 Backspin
		Y	21	Player 1 Fly-By
		Z	22	Player 1 – Left
		a	23	Player 1 – Right
Orange-Yellow	Volume Down	b	24	Volume Up
		c	25	Coin 3
		d	26	
Black	GND	e	27	GND
Black	GND	f	28	GND

\* Power is NOT routed through the JAMMA connector.

Power is now routed through the Power Bypass cable for GREEN BOARDS.

Power is now routed through the ATX Power Supply cable for RED BOARDS.

## Trackball Harness Connection

Main Board Connector	Trackball Connector
PIN WIRE #6 - Black	PIN WIRE #1 – Black
PIN WIRE #1 - Red	PIN WIRE #2 – Red
PIN WIRE #2 - Yellow	PIN WIRE #3 – Yellow
PIN WIRE #3 - Green	PIN WIRE #4 – Green
PIN WIRE #5 - Blue	PIN WIRE #5 – Blue
PIN WIRE #4 - Purple	PIN WIRE #6 – Purple

**NOTE:** Remember to connect the trackball cable to J51 of the Main PCB. (Labeled as Trackball 1)



# APPENDIX C

## WARRANTY INFORMATION

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### Warranty, Repair and Return Policy

- 90-day warranty on all electronic components. All warranty periods begin on the date of purchase.
- There is a minimum \$55.00 service charge for all non-warranty repairs or returns.
- For all servicing, return to Chicago Gaming Company.
- ANY non-factory repair or attempted repair voids warranty.

### Return Merchandise Authorization

- All returned merchandise must have a Return Merchandise Authorization (RMA) number marked clearly on the outside of the package.
- You must obtain all RMA numbers from Chicago Gaming Company or your authorized Chicago Gaming Company distributor.
- You must have the Chicago Gaming Company component serial number available when calling for an RMA number.
- Merchandise returned without an RMA number will not be accepted.
- Advance replacements can only be obtained by organizations that purchase the product directly from Chicago Gaming Company.
- Advance replacements will be billed to the customer until Chicago Gaming Company receives the returned item, at which time a credit will be issued.
- All repairs and/or replacements will ship as soon as possible after receipt or request (subject to availability).

Chicago Gaming Company warrants to the original purchaser that the hardware product is in good working condition for a period of 90 days from taking delivery of the product. Should this product, in Chicago Gaming Company's opinion, malfunction within the warranty period because of a defect in design, materials, or workmanship, Chicago Gaming will repair or replace this product without charge under the terms as follows. Replacement of either the hardware product or its component parts will be only on an exchange basis. Any replaced parts or components become the property of Chicago Gaming Company. This warranty does not apply to those products that have been damaged due to accident, abuse, improper installation, natural disaster, or unauthorized repairs or modifications.

Chicago Gaming Company excludes any and all implied warranties, including warranties of merchantability and fitness for a particular purpose, and limits the purchaser's remedy to returning the hardware, or documentation to Chicago Gaming Company for replacement.

Chicago Gaming Company makes no warranty or representation, either express or implied, with respect to the hardware, software, or documentation, their quality, performance, or fitness for a particular purpose. The hardware, software, and documentation are licensed "as is," and the purchaser assumes the entire risk as to their quality and performance.

In no event will Chicago Gaming Company be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the software, hardware, or documentation, even if advised of the possibility of such damages. The warranty and remedies set forth above are exclusive and in lieu of all others, oral or written, express or implied. No person, seller, dealer, agent, or employee is authorized to make any modification or addition to this limited warranty.

Some states do not allow the exclusion of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

**- CHICAGO GAMING COMPANY**

**WARRANTY AND REPAIR SERVICE:**

Chicago Gaming Company

4616 W. 19<sup>th</sup> Street

Cicero, Illinois 60804

(708) 780-0070 or [chicago-gaming.com](http://chicago-gaming.com)

## **CONTACT INFORMATION**

**Technical Support, Warranty, Repair, Parts & Customer Service:**

Chicago Gaming Company (708-780-0070 ex.4851) or visit our website at [www.chicago-gaming.com](http://www.chicago-gaming.com)

Please **DO NOT** contact Incredible  
Technologies.