



Online Home Edition Manual & User Guide

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NOTE

PLEASE RETAIN ORIGINAL SHIPPING BOX FOR SERVICE AND REPAIR.

Do NOT perform any installation or repair when the cabinet is powered on. Make sure the cabinet is unplugged from all power sources before and during installation.

Incredible Technologies cabinets are shipped with the USB cables disconnected from the I/O Board and the Cabinet Identification Device (CID). This prevents vibrations during shipment from damaging the contacts on the connectors. These cables must be connected before operating the equipment. IT recommends disconnecting these USB cables whenever transporting the unit.

WARNINGS AND NOTICES

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow all instructions
- Do not use this apparatus near water
- Clean only with dry cloth
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION

The motherboard is provided with a replaceable lithium battery. There is a danger of explosion if a battery is incorrectly replaced. Replace the battery only with the same or equivalent type.

WARNING

This is a Class 1 constructed device and for protection from fault currents, the equipment shall be connected to a protective earthing connection. Plug the system power cord into an AC outlet that provides a protective earthing connection. Substitute cords may not provide adequate fault protection. Only use the power cord supplied with this product or an Incredible Technologies, Inc. authorized replacement.

The MAINS plug or an appliance coupler must remain readily operable.

SHOWPIECE CABINET

SHOWPIECE CABINET CONTENTS

(1) Golden Tee GOLF Online HE Showpiece Cabinet

Shipped inside a plastic parts bag attached to the front of the cabinet:

- (1) Marquee Header
- (1) Power Cord
- (1) Game Manual
- (1) HDMI Cable

Shipped inside the cardboard sleeve on the top of the control panel:

(2) Marquee Header Brackets

NOT Included with your Showpiece Cabinet

You will need to supply a digital display for the game's main monitor, and an appropriate stand or wall mount. Be sure that the stand or wall mount is UL listed. Incredible Technologies recommends a 42" HDTV that supports 720p or 1080p for the best presentation and game play. A list of Recommended Mounting Solutions can be found under Purchasing Info and Specs at the following address on the IT web site: <http://amusement.itsgames.com/games/golden-tee-live/specs>



LEG LEVELER ADJUSTMENT

Once your game is in position at the location, it is necessary to adjust the leg levelers. The leg levelers will help stabilize the game on an uneven floor, and help it from moving or shifting during game play. The game is shipped with the two front and two rear leg levelers installed. Adjust the levelers as necessary to level and stabilize the game.

MOUNT MAIN SCREEN DISPLAY

Position the Showpiece cabinet in front of an HDTV. Incredible Technologies recommends either a 720p or 1080p flat panel HDTV from 42" or larger.

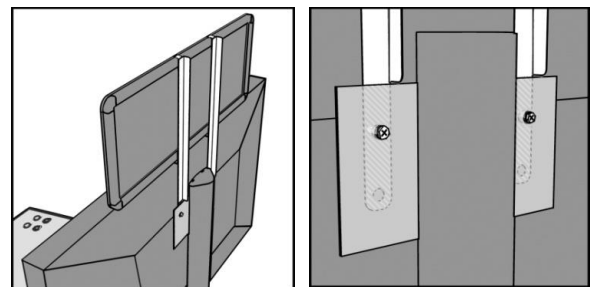
The HDTV can be mounted to a wall or the Incredible Technologies accessory stand Model 304HES. There are many different types of wall mounts available through retail, wholesale and Internet outlets. Be sure that the wall mount you select must be UL listed. Be sure that the top of the Showpiece cabinet has at least 24" clearance in all directions. Insufficient clearance may result in damage to your display or player injury.

CAUTION – This gaming machine is for use only with Incredible Technologies accessory stand Model 304HES. Use with other stands is capable of resulting in instability causing possible injury.

INSTALL MARQUEE

Your Showpiece cabinet comes with a framed marquee header that can be easily attached to the top of your monitor. The brackets for the header are shipped inside a separate cardboard insert labeled *Parts – Do Not Discard* within the cabinet packaging. The insert is located on the top of the control panel.

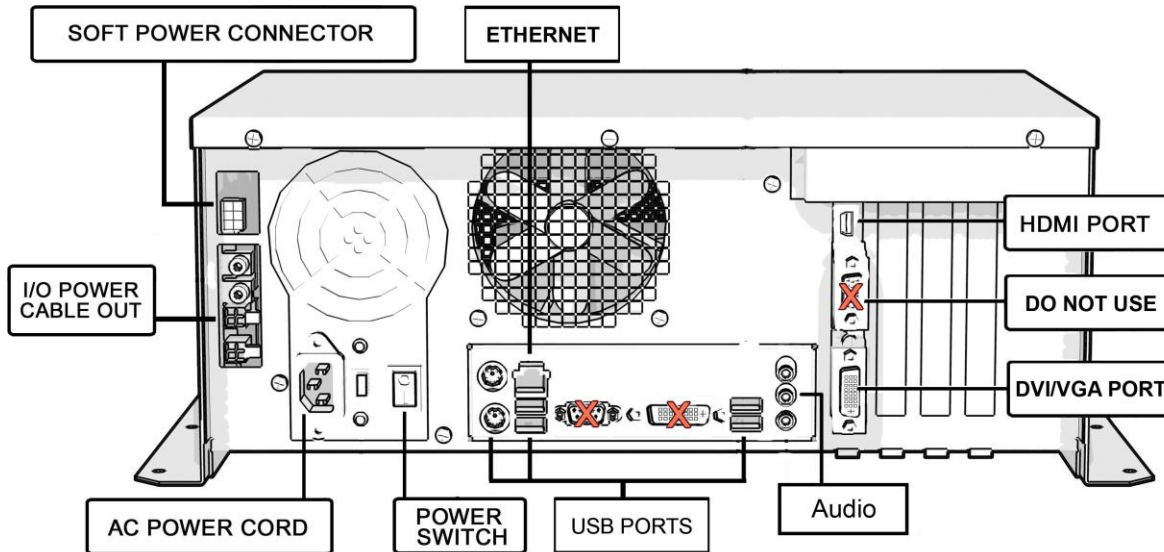
First, attach the two brackets to the back of the universal mounting plate you are using for your HD display. The brackets share the same screws used to affix the display to the mounting plate, and are sandwiched between the plate and the back of the monitor. Once the brackets are in place, slide the marquee frame onto the clips on the two newly mounted brackets. Be sure the tab on the clips rest inside the channel on the marquee frame.



HDTV DIP SWITCH SETTINGS AND NIGHTHAWK SYSTEM BOX

Before turning the game on, make sure the USB cables are connected for the I/O Board and Cabinet Identification Device (CID). The I/O board and CID are located on the left wall under the control panel. The USB cables are on the left side in a cable clip and already connected to the System Box. See Appendix D Showpiece Cabinet Connection Diagram for details.

Nighthawk System Box



DIP Switch Settings for HDTVs

The DIP switch settings in your Showpiece cabinet have been factory set to accommodate a 1080p HDTV connected through HDMI cables. DIP switch bank Sw201 on the I/O Board controls the video resolution for the main monitor. If using a DVI-D or VGA connection, or for different resolutions such as 720p, use this chart:

HDTV MONITOR APPLICATION

RESOLUTION SETTINGS

<p>1 1280 x 720 (HDMI) 720p</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p>	<p>1 1280 x 720 (SVGA) 720p</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p>
<p>1 1280 x 720 (DVI-D) 720p</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p>	<p>1 1920 x 1080 (HDMI) 1080p</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p>

IMPORTANT NOTE

I/O CARD DIAGRAM FOR ORIENTATION

Sw201 Sw200 Sw202

OFF ON OFF ON OFF ON

Sw200 ALWAYS ON
Do Not Change
Settings shown for Showpiece

ADDITIONAL SETTINGS

<p>Primary Monitor</p> <p>1 Primary Monitor has 16 x 9 Aspect Ratio</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p>	<p>Secondary Monitor</p> <p>1 Optional 2nd Monitor has 16 x 9 aspect ratio</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p>
<p>System Setup</p> <p>1 Enter System Setup Menus</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p> <p>1 Exit System Setup Menus</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p>	<p>1 Do Not Flip Optional 2nd Monitor</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p> <p>DEFAULT</p> <p>1 Vertical Flip Optional 2nd Monitor</p> <p>2 OFF ON</p> <p>3 OFF ON</p> <p>4 OFF ON</p>

Note: In the Additional Settings above, ONLY the ON switch matters for correct setup and operation.

Notes:

A reboot is required when changing resolutions

Video and audio connections to HDTVs vary, and may require additional cables not included with the Showpiece cabinet. Also, some displays may not support the resolution needed for your game. Check your display's manual for additional information.

VIDEO CONNECTIONS FOR HDTV

Golden Tee Golf Showpiece 2017 supports 1920x1080 (1080p) and 720p (1280x720) resolutions. Be sure your HDTV is compatible. 1080p is only available on the approved video cards listed on the Video Card Compatibility sheet: <http://amusement.itsgames.com/service/manuals>.

If you plan to use a **Single HDTV** as your only video output, follow the instructions below:

Connect to HDMI

Connect the HDMI cable (supplied) to the video card HDMI output on the Nighthawk system box. Do not use the HDMI output directly from the motherboard near the USB connectors.

Note: Refer to the Nighthawk system box illustration in Appendix D (page 34) for the proper HDMI cable connection. Route the cable through the clip under the lock on the back wall and down through the access panel on the back of the cabinet. Connect the other end of the HDMI cable to the proper HDMI input on your television.

Set Up Your HDTV

Refer to the HDTV manual to adjust the video signal to match the correct input for your game. Selecting the correct input is commonly found from a system menu accessed from the remote, or an Input Select button on the HDTV.

Audio Connections for HDMI

The HDMI cable will also supply audio to the speakers on your HDTV. See Audio/Video Connections Table below for details on other connection types.

Note:

Be aware that when connecting any monitor with other than HDMI you will need to use an analog audio connection. Follow the setup instructions for VGA.

Audio/Video Connections Table

Video Mode	Primary Video Connector	Audio	Secondary Video Connector
1920x1080 (HDMI) 1080p	HDMI with HDMI Cable	Digital – Via HDMI cable	VGA
1280x720 (HDMI) 720p	HDMI with HDMI Cable	Digital – Via HDMI cable	VGA
1280x720 (DVI-D) 720p	DVI-D to HDMI	Analog – Via 3.5mm Y-audio from I/O Board to Nighthawk (green port)	VGA
1280x720 (SVGA) 720p	VGA	Analog – Via 3.5mm Y-audio from I/O Board to Nighthawk (green port)	Not Available

INSTALL SECONDARY MONITOR FOR SHOWPIECE

If you plan to use Two TVs for your video outputs, follow the instructions below.

ABOUT THE SECONDARY MONITOR

Most Incredible Technologies games, including Golden Tee GOLF, support a secondary monitor. The second monitor in Golden Tee displays unique information, including game replays and advertising screens. Most other games from IT support a second monitor to display the main game screen, so more of your players can see the action. Golden Tee GOLF can also show the main display on the second monitor. See the System Setup Menus section of the Golden Tee 2017 manual.

Incredible Technologies recommends using a 16:9 computer monitor. In all cases, the second monitor requires a VGA connection from the Nighthawk system box to the digital display of your choice. See the Sw202 DIP switch settings on the HDTV Monitor Application chart.

FINAL CHECK

APPLY POWER

Connect the power cable to the socket on the back of the cabinet. Then plug the cable into a 3-pronged, grounded wall socket. Locate the power switch on the back of the cabinet and turn it ON.

Note: If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

Watch the game carefully when you first turn it on. Look and smell for smoke. Turn it OFF immediately if there is smoke. Make sure the fan inside the system box is running and the LEDs on the I/O Board are flashing. If not, something is wrong, turn off the game.

Check the Cabinet ID Device (CID) Number

Watch the screen during boot-up and wait for the Golden Tee boot verification screen to appear. Note the Cabinet ID Number (CID) that appears on this screen, and verify that it matches the CID number printed on the back of the cabinet. The screen will automatically time out and boot-up will continue.

Cabinet Temperature

The state of the art Nighthawk hardware is extremely powerful, and therefore generates a substantial amount of heat. Measures have been taken to keep the various components cool during normal use. If overheating occurs, game play and hardware longevity may be affected. Use the Check Cooling menu in the System Setup menus to monitor the temperature within your cabinet. Reach under the front right side of the cabinet and press the Test button to access the game's System Setup software menu system. Once at the main System Setup menu, use the trackball and Start button to select *Troubleshooting Shortcuts*, then *Check Cooling*.



GENERAL CABINET MAINTENANCE

Games that are in good working condition, with clear monitors, clean control panels and working trackballs are easier to play and more fun than those in poor condition. It is definitely worth your time and attention to protect your investment with a little common care. Each week, clean the display and wipe down the control panel to bring back that new game look. Test the trackball and buttons regularly to make sure they are playing properly.

CARE AND CLEANING OF RUBBER BUMPER

The rubber bumper on the front of the cabinet's control panel is made from durable nitrile rubber. Clean it using a mild soap and water solution or blue window cleaner.

NIGHTHAWK AIR FILTER

The Nighthawk System Box comes equipped with an external electrostatic air filter. This filter is held in place by a metal bracket, attached to the system box. The filter prevents debris from entering the system box and damaging the electronic components. A clogged filter will impede airflow, thus building up unwanted heat which can cause damage to your hardware. Be sure to check this filter at least once a month. Remove the filter by sliding it out of its housing. Shake off excess dirt and if necessary clean it with soap and water. Be sure the filter is completely dry before reinstalling the filter.

TRACKBALL MAINTENANCE

The trackball will require periodic maintenance to assure optimum performance. In most cases the inside of the trackball simply needs to be cleaned of any accumulated dust and debris.

To access the inside of the trackball, remove the 6 Phillips head screws that hold the trackball together and remove the top cover. Clean out any dust and debris inside the trackball. Polish the rollers and remove any foreign material that may be on the rollers. Do not lubricate the bearings, as this will only attract more dust. If the bearings do not spin freely it is best to replace the bearing assembly. Inspect the rollers for any nicks that may cause poor performance and replace if needed. Inspect the ball for any nicks and replace if needed. Parts can be obtained from Happ Controls and is an economical option rather than replacing the entire trackball assembly.

It is critical that the green field ground wire be properly connected to field ground. This prevents the trackball from building a static charge that can cause the game to lock up or reset. A static discharge can also damage the trackball's electronic components, as well as the main system.

CARE AND CLEANING OF COOLING FANS AND VENTS

The hardware that runs Golden Tee GOLF Online HE is quite sophisticated, and many of the chips and processors will get hot very quickly. Like your desktop PC, the Golden Tee GOLF Online HE hardware needs adequate ventilation to work properly. Dust and dirt can be a major cause to overheating and will lead to costly repairs. At least once a month, check to make sure the cabinet and system box fans are working and free of dust and debris. Use a vacuum to clear all the ventilation holes on the cabinet at this time as well.

CAUTION:

Incredible Technologies cabinets are shipped with the USB cables disconnected from the I/O Board and the Cabinet Identification Device (CID). This prevents vibrations during shipment from damaging the contacts on the connectors. These cables must be connected before operating the equipment.

IT recommends disconnecting these USB cables whenever transporting the unit.

SHOWPIECE CABINET REPAIR PROCEDURES

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

NIGHTHAWK SYSTEM BOX

The Nighthawk System Box houses most of the game electronics and hardware in one box that can be easily installed. As with all electronic equipment, the system box should be handled with extreme care. Shock, severe temperature, or sudden impacts can damage the internal components that require costly repair.

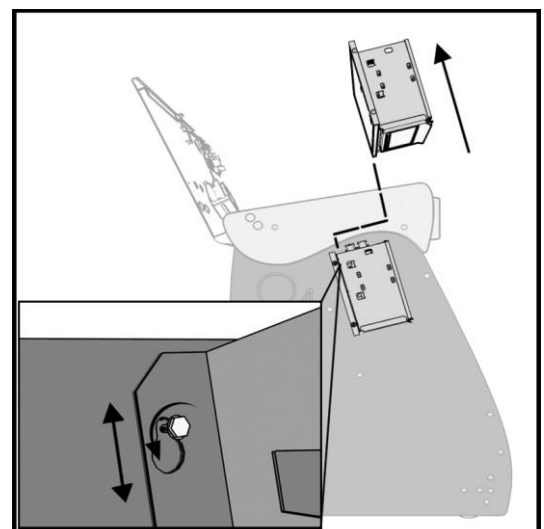
Note: Turn off power to the cabinet and remove the power cord from the back of the cabinet when performing any of the following.

System Box Removal

1. Unlock the control panel and open to expose the Nighthawk system box.
2. Disconnect all connections to the system box. Be sure all wires and connectors are clear and out of the way. Label the connectors for easy reconnection.
3. Loosen the 6 ¼" hex-head screws that secure the system box.
4. Carefully lift the system box off the screws and up out of the cabinet.

System Box Installation

1. Unlock the control panel and open to expose the inside of the cabinet.
2. Align the system box onto the 6 mounting screws of the internal slanted panel. The connection ports face up. Once the system box is in place, tighten the 6 ¼" hex-head screws to secure the box to the panel.
3. Connect the required connections. See the Connections Diagram for more details.



I/O BOARD

Note: The I/O Board is game title specific and is not interchangeable with other game titles produced by Incredible Technologies on this system. Dedicated and Retrofit Kit I/O Boards are different and are not interchangeable.

I/O Board Removal

First, unlock the control panel and open to expose the interior of the Showpiece cabinet. Disconnect all connections from the I/O Board. Label the connectors for easy reconnection and move them safely out of the way. Next, remove the six ¼" wood screws that secure the board to the interior left side of the cabinet (as you face the game). Carefully remove the I/O Board from the cabinet.

I/O Board Installation

Place the I/O Board in the proper location on the interior left side of the cabinet (as you face the control panel of the game). Be sure it is oriented properly so the cables reach the board (the USB port on the I/O Board facing the top of the cabinet). Secure the I/O Board to the side of the cabinet with the six ¼" wood screws. Use the factory mounting holes if at all possible. Be sure the board does not "bow" or is not stressed in any way. Once mounted, connect the appropriate connections.

Cabinet Identification Device (CID)

This device contains a specific ID number that identifies your cabinet. The CID is a permanent number and must be connected to the main system box via the USB cable and working properly in order for the game to operate.

CID Removal and Replacement

If for some reason you must replace the CID, disconnect the USB cable from the CID. This is the only connection to the CID. Next, remove the four ¼" wood screws that secure the CID to the interior left side of the cabinet (as you face the game). The CID is located above the I/O Board. To install a CID, mount the CID in the proper location using four ¼" wood screws. The CID should be mounted so the USB port is facing the top of the cabinet and the electronics are facing the wall.

Note: The Cabinet Identification Device should **NEVER** be removed from the cabinet, even when replacing any of the other components. The CID is the cabinet's PERMANENT Identifier, regardless of any other components.

Lock

The lock on the rear of the Showpiece cabinet allows access to the Nighthawk system box under the control panel.

Service Button

Mounted under the outer edge of the Showpiece cabinet are controls for System Setup. Reach under the rounded ledge on the front right side of the cabinet and press the red button to access the game's System Setup software menu system. The System Setup menus cover a variety of important areas including tests, game adjustments, and optional settings.

CONTROL PANEL

Opening the control panel provides access to all game controls and hardware components. To open the control panel, simply use the supplied key in the lock on the back of the cabinet and lift from the back. The control panel is hinged in front and will stay open when fully extended.

Soft Power Switch

A "soft power" switch has been added to the underside of the control panel, to assist in the update process. This switch will turn off power to the cabinet so you don't have to reach around to the main power switch located on the back of the cabinet.

Note: If you turn power off using the Soft Power Switch, you **must** use this same switch when turning power back on.

Trackball Replacement

To replace a trackball, open the control panel and remove the 4 long screws holding the trackball in place. Be careful not to lose any of the screws, washers and lock washers. Disconnect the wire harness and ground wire and remove the old trackball. Position the new trackball in the proper orientation over the existing standoffs. Make sure that the arrow on the trackball that points to the monitor is pointing up. Replace the 4 long screws and washers. Do not over tighten! Screw in until the lock washer is fully compressed. Reconnect the wiring connector and ground wire.

Note: The field ground wire is critical to avoid electrical problems and assure optimal performance.

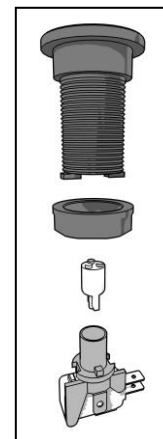
Button Replacement

All of the buttons on the control panel require a 1 1/8th inch hole, and are pre-drilled on the dedicated control panel. To remove a button, disconnect the wires from the button assembly by sliding the wires off of the micro switch posts. Next carefully twist the micro-switch assembly off of the button posts. Finally, unscrew the nut to remove the button from the control panel.

Place the new button assembly into the hole and position the smaller side of the micro-switch housing to face the rubber bumper, angled towards the middle. Tighten the supplied nut using a pushbutton wrench. Do not over tighten. Install the micro-switch by snapping it onto the pushbutton assembly by hand. Position the assembly so the micro switch posts face the rubber bumper, angling towards the middle. Reconnect the wires by sliding the wire assembly onto the contact posts of the appropriate micro switch. See the wiring diagrams in the back of this manual.

L.E.D. Lighted Buttons

The Help and Options buttons on Golden Tee GOLF Online HE are Light Emitting Diode buttons. The housing for the L.E.D. snaps into the back of the button assembly. The L.E.D. must be installed properly for the light to function properly. The Anode/positive side of the L.E.D. is connected to the +5 volts, and the Cathode/negative side of the L.E.D. is connected to the appropriate signal wire. The L.E.D. slides into the housing and the housing is marked Positive and Negative. See the lamps connector J202 in the cabinet wiring diagram in Appendix D.



Control Panel Removal

To remove the control panel from its hinge, Disconnect the trackball cable, field-ground wire, and the control panel interconnect connector to the I/O Board. Remove the screw that attaches the safety cable to the control panel. Remove the four 1/4" screws holding the panel to the hinge.

Control Panel Graphics Removal

The control panel artwork has been screened onto a solid sheet of polycarbonate, which is resistant to scratches and burns. Unfortunately long exposure to excessive situations may damage the surface over time. To remove and replace this piece, the pushbutton and trackball assemblies must first be removed. Separate the polycarbonate piece from the wood portion of the panel by starting at one corner and slowly peeling the two apart. The overlay has adhesive on the entire surface and will take some force to separate the pieces due to the adhesive. Once removed, the graphic overlay will not be able to be used again.

Control Panel Graphics Installation

To install a new polycarbonate graphics overlay, make sure the wood control panel surface is clean, smooth, and free from glue, dirt and debris. Remove the paper protecting the adhesive from the new artwork/cover panel. Carefully place it on the wood panel, aligning it properly. Press and smooth firmly to assure that it is secure. Replace the buttons and trackball in the correct orientation.

SPEAKERS

The speakers are mounted in the bottom front of the cabinet, just below the card reader. Sounds and speech are important aspects to the play experience and should be adjusted and maintained for optimal results. Make sure your speakers are in good working condition, are wired correctly, and are grounded properly to avoid buzz or hiss.

Speaker Access

In order to reach the speakers, unlock and raise the hinged control panel. The speakers are located on the front underside of the cabinet. Remove the 4 nuts with an 11/32" nut driver to remove the speakers from their mounting.

Note: Both speakers must be identically wired to work properly. For optimal sounds, both speakers must be in phase with one another. Be sure the positive wire is connected to the positive terminal of each speaker and the negative speaker wire is connected to the negative terminal of each speaker.

SYSTEM SETUP MENUS

NAVIGATING THE MENU SYSTEM

The System Setup menus cover a variety of important areas including tests, game adjustments, and optional settings. You should familiarize yourself with these menus because they are important for changing your game cabinet settings.

ENTERING SYSTEM SETUP MODE

There are two ways to enter System Setup. Reach under the front right side of the cabinet and press the red button to access the game's System Setup software menu system. Or, from the I/O Board, move the DIP switch SW202 position 4 to the ON position. This switch needs to be moved back to OFF to exit the System Setup menus. Refer to the diagram in Appendix D for all DIP switch settings.

SELECTING A MENU

A menu option can be selected at any time by rolling the trackball up or down or by pressing the Left or Right buttons.

CHOOSING A MENU/OPTION

A menu option can be chosen at any time by pressing the Start button.

CHANGING A VALUE

A value can be changed at any time by rolling the trackball left or right.

MAIN MENU

The Main Menu displays five main areas that make up System Setup mode. Please familiarize yourself with these areas, as they will help you maximize your earnings potential.

Collections & Earnings (Not Available)

Not available on Golden Tee GOLF Online HE.

General Settings – See Page 12

This area allows you to change adjustments, perform system tests, and reset your game back to factory settings.

Troubleshooting Shortcuts – See Page 20

This section presents a variety of tests and menus that will help you troubleshoot any problems you may be having with your game. The available sections are also accessible through the other main sections.

Golden Tee Settings & Audits – See Page 21

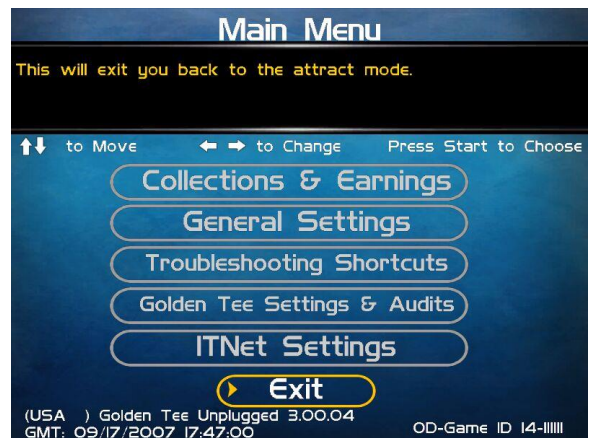
This area allows you to adjust settings specific to Golden Tee GOLF Online HE including the game adjustments, game audits and leaderboards.

ITNet Settings See Page 24

This section details various ITNet settings, such as game registration and connection settings with ITNet.

Exit

This will exit the System Setup menus and take you back into the game's attract mode.



GENERAL SETTINGS

The General Settings menu has various adjustable settings relating to the cabinet, and is divided into two sections.

Operator Adjustables

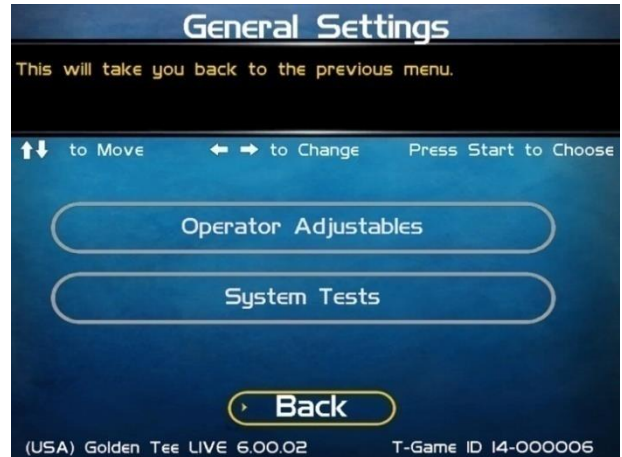
This area allows you to adjust options like volume and attract mode sounds.

System Tests

This area allows you to perform diagnostics including video adjustments, input tests, and sound tests.

Back

This will take you back to the **Main Menu**.



OPERATOR ADJUSTABLES

Operator Adjustables lets you change the game mode and show all advertisements, change sound settings and reset to factory defaults.

General Adjustments

This allows you to adjust options like game mode and advertisements.

Money Slot Adjustments (Not Available)

Not available on Golden Tee GOLF Online HE.

Sound Adjustments

Allows you to adjust the various sound settings including attract mode sounds, game volume, and stereo setup.

Collection Settings (Not Available)

Not available on Golden Tee GOLF Online HE.

Reset to Factory Settings

This option allows you to reset all the settings to factory defaults.

Back

This will take you back to the **General Settings** menu.



GENERAL ADJUSTMENTS

Allows you to adjust game mode and advertisements settings.



UPPER MONITOR SETTINGS

Allows you to check and adjust the upper monitor connection and output.



SOUND ADJUSTMENTS

In Game Volume

This option lets you adjust the In Game volume from OFF to 100%. **The default is set to 30%.**

Attract Volume

This option lets you adjust the Attract Mode Volume from OFF to 100%. **The default is set to 30%.**

Attract Mode Sounds

This adjusts how often sounds are played in the attract mode: Never, Rarely, Sometimes, Often, and Always. **The default is set to On - Sometimes.**

Stereo/Mono

This option is where you select stereo or mono setup. **The default is set to Stereo.**

Reset Values

This resets all values to their default value located on this page.

Back

This will take you back to the **Operator Adjustables** menu.

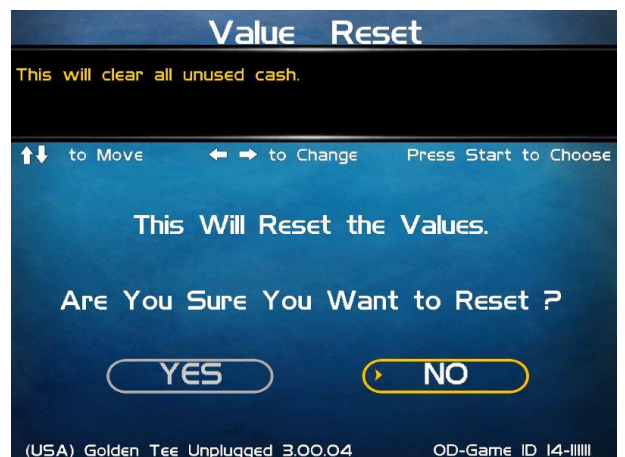


RESET TO FACTORY SETTINGS

This resets ALL settings to their default values. A verification screen will display to make sure you agree to the change.

Please Note:

This process may take several minutes to complete.



SYSTEM TESTS

This area allows you to perform diagnostics including video adjustments, input tests, and sound tests.

Video Tests

This area has tests that will help you to adjust your game's color, contrast, and screen size.

Sound Tests

This area has tests that will help you adjust your game's audio setup by playing a stored sound, a streaming sound, and testing the speaker(s).

Player Control Tests

This option allows you to test all inputs.

Mechanical Meter (Not Available)

Not available on Golden Tee GOLF Online HE.

Hardware Tests

This area includes a series of diagnostic screens and tests to help you make sure your game is functioning correctly.

Back

This will take you back to the **General Settings** menu.

VIDEO TESTS

The Video Tests section has a variety of tests that will help you adjust your monitor.

Color Test

This area will take you to a series of tests to adjust your monitor's RGB settings to have each color display properly.

Contrast Test

This area will take you to a series of tests to adjust your monitor's brightness/contrast so the game displays properly.

Screen Size Adjustments

Use this screen to align your monitor so that all the circles appear as circles and the boundary line appears on the edge of each side of the screen.

Back

This will take you back to the **System Tests** menu.



COLOR TEST

Color Grid Adjustment

Adjust your monitor to have each colored box display properly.

Red Screen

Adjust your monitor to have red display properly.

Green Screen

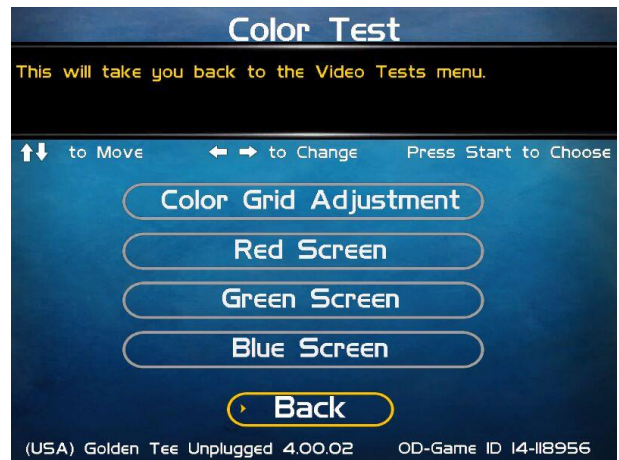
Adjust your monitor to have green display properly.

Blue Screen

Adjust your monitor to have blue display properly.

Back

This will take you back to the **Video Tests** menu.



CONTRAST TEST

White Screen

Adjust your monitor to have white display properly.

50% White Screen

Adjust your monitor to have 50% white display properly.

25% White Screen

Adjust your monitor to have 25% white display properly.

Black Screen

Adjust your monitor to have black display properly.

Contrast Screen

This option is a test you can use to adjust your monitor's contrast and brightness settings to have the boxes displayed properly.



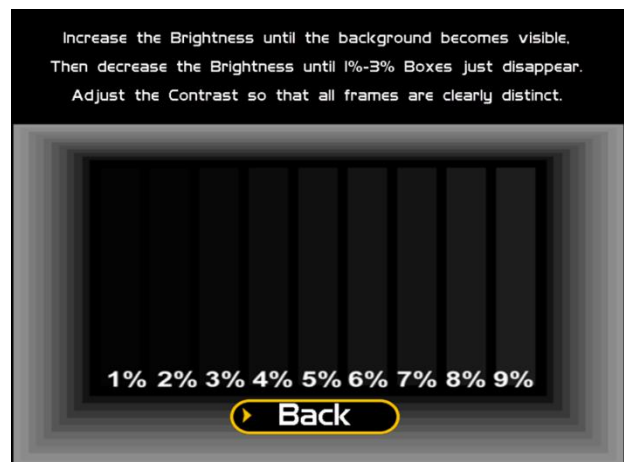
Note: May not work on older or often used monitors. If you have a monitor that's old or has been used often you may not be able to adjust the contrast and/or brightness levels accordingly. In this case adjust the monitor for best performance while getting close to the recommended settings.

Contrast Screen

This option is a test you can use to adjust your monitor's contrast and brightness settings to have the boxes displayed properly.

Back

This will take you back to the **Video Tests** menu.

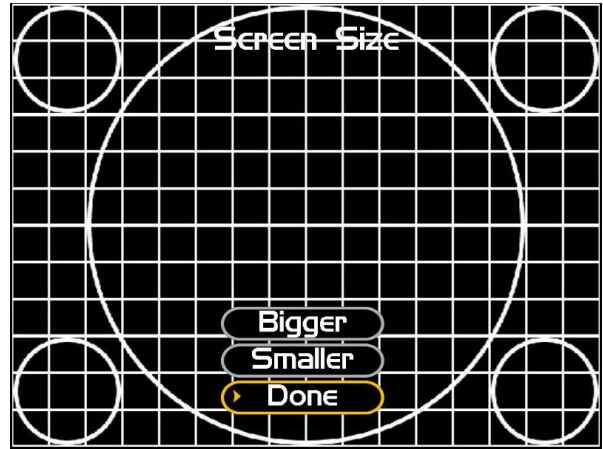


SCREEN SIZE ADJUSTMENT

Use this screen to adjust the size and aspect ratio of your picture. Press the Start button to exit.

You may need to adjust this screen to see the complete image. Use the trackball to highlight BIGGER or SMALLER and press the Start button to adjust the screen image. Press DONE to exit.

Note: Adjusting the screen size will prompt a reboot upon exit of this menu.



SOUND TESTS

Stored Sound

This will play a stored sound so you can make sure your audio setup is functioning properly.

Streaming Sound

This will play a streaming sound so you can make sure your audio setup is functioning properly.

Speaker Test

This test will say MONO if you have your game set to Mono or LEFT and RIGHT if you have it set to stereo so you can make sure your audio setup is functioning properly.

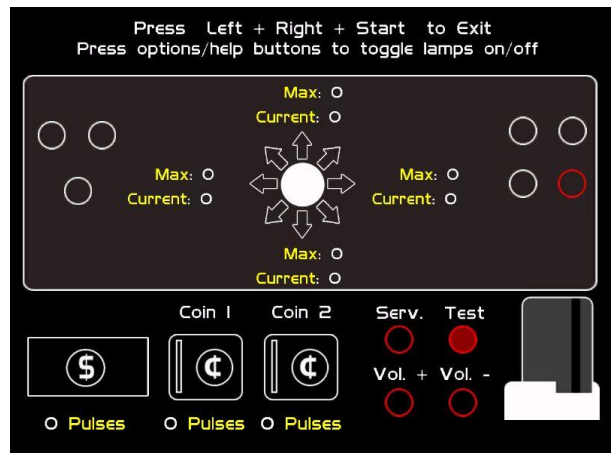
Back

This will take you back to the **System Tests** menu.



PLAYER CONTROL TESTS

Some of the features on this screen, such as Coin 1 and Coin 2 are not available in the Golden Tee GOLF Online HE.



HARDWARE TESTS

This area includes a series of diagnostic screens and tests to help you make sure your game is functioning correctly.

Hardware/Software

This area has options to view your system, USB and version info.

Check Hard Drive

This test checks the integrity of your hard drive's data.

Note: This test can take several minutes.

Check Cooling

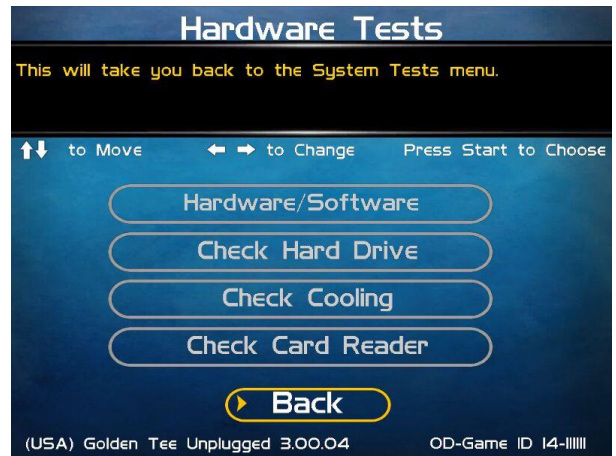
This test helps you make sure your game is functioning at the proper temperature and all fans are working.

Check Card Reader

This tests the functionality of the card reader and displays some details about the card tested.

Back

This will take you back to the **System Tests** menu.



HARDWARE/SOFTWARE

System Info

This is a list of your game's current basic system info.

USB Info

This is a list of your game's current USB devices.

Version Info

This is a list of your game's software version information.

Back

This will take you back to the **Hardware Tests** menu.



SYSTEM INFO

This is a list of your game's current basic system information, including Hard Drive, CPU and Video Card.

Back

The Back button takes you back to the **Hardware/Software** menu.



USB INFO

This is a list of your game's current USB devices.

Back

The Back button takes you back to the **Hardware/Software** menu.



VERSION INFO

This is a list of your machine's software versioning.

Back

The Back button takes you back to the **Hardware/Software** menu.



CHECK HARD DRIVE

Check File Data

This test checks the integrity of your hard drive's data.

Select **Begin Test** to initiate the process.

Note: This test can take up to 3 hours to complete.

If this test succeeds you will see the message: **Status: Hard Drive Functioning Properly**. If this test fails, you will see the message: **Hard Drive Error (#)**

Select **Back** to skip the test and return to the **Check Hard Drive** menu.

Check File System

This test REBOOTS YOUR GAME and performs a low level systems check of the integrity of your hard drive.

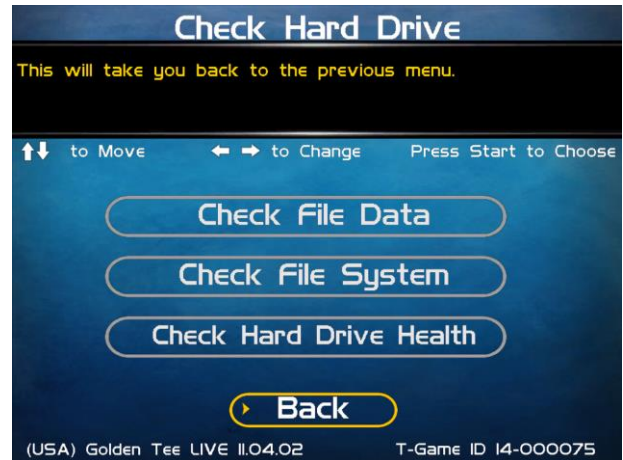
Note: This can take several minutes.

Check Hard Drive Health

This runs a test on your hard drive to determine its overall condition

Back

This will take you back to the **Hardware Tests** menu.

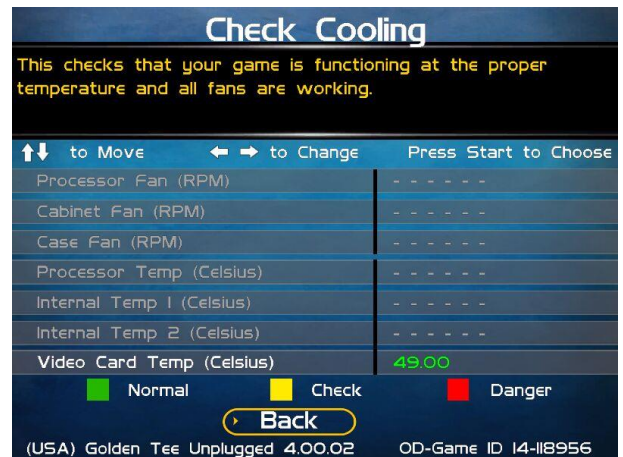


CHECK COOLING

This checks that your game is functioning at the proper temperature and all fans are working. The current status is color-coded for easy viewing. If the results are displayed in green, your cabinet is at normal settings.

Back

The Back button takes you back to the **Hardware Tests** menu.



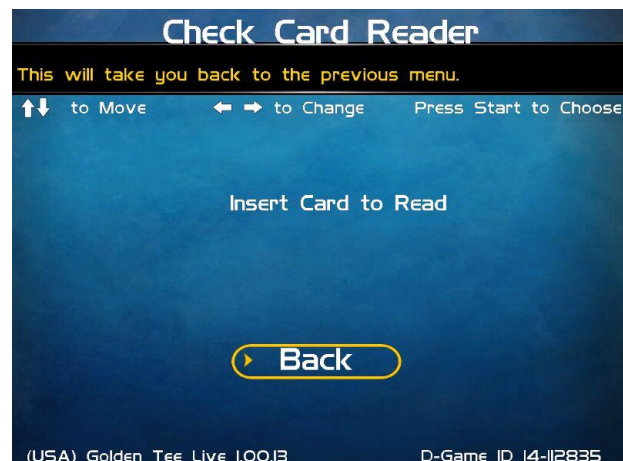
CHECK CARD READER

This test will check to see if your card reader can read and recognize properly encoded IT and credit cards.

From this screen, insert a card into the card reader. If the card can be read, a message will appear on the screen.

Back

The Back button takes you back to the **Hardware Tests** menu.



TROUBLESHOOTING SHORTCUTS

This section gathers many of the commonly used tests and menus into one convenient area. Check here first when troubleshooting problems or questions about the integrity of your machine.

The tests that are available in this section are:

Check Card Reader
Check Cooling
Check Hard Drive
Screen Size Adjustments
Communications Settings
Player Control Tests
System Tests

Descriptions of each of these tests and sections can be found elsewhere in this manual.

Back

This will take you back to the **Main Menu**.



GOLDEN TEE SETTINGS & AUDITS

Golden Tee Settings

This allows you to make custom adjustments to certain features, such as the delay of game timer.

Golden Tee Audits

Allows you to view your game play and reset audits.

Player Cost Schedule

Not available on Golden Tee GOLF Online HE.

Reset Leaderboards & Records

Allows you to clear any or all local Leaderboards and high score screens.

Note: This process may take several minutes to complete.

Back

This will take you back to the **Main Menu**.



GOLDEN TEE SETTINGS

Note: Some of these settings can be turned “On” but if listed below as “Not Available” they will NOT Work.

LIVE Prizes (Not Available)

Not available on Golden Tee GOLF Online HE.

Delay of Game Timeout

Adjust the timer that senses activity between shots.

Closest To The Pin LIVE (Not Available)

Not available on Golden Tee GOLF Online HE.

Operator CTP

Activate the ability for the game to enter Closest to the Pin (CTP) mode.

Hole-N-Win (Not Available)

Not available on Golden Tee GOLF Online HE.

Money Shot (Not Available)

Not available on Golden Tee GOLF Online HE.

More

Selecting More brings you to a second page of Golden Tee settings.

Locked Conditions

Activates the ability for the game to allow for special contests where course conditions are the same for each player.

Daily Prize Contest (Not Available)

Best score competition with other players from across the country.

Casual Difficulty

You can set the difficulty of the courses for casual games but will not impact glory or stats play. Difficulty settings can be adjusted from 1 (easiest) to 5 (hardest). The default setting is 2.

Pre-game Casual Clothing

This setting allows a random selection of 30 clothing items (including 2017 clothing but not promotional items) available as a quick selection in Casual format. There are 10 random item types of shirts, pants and hats.

Mulligans

Mulligans allow casual game players to retake a bad shot during their game. To disable this feature select OFF.

Allow Casual Straight Shots

This allows casual players the option to choose whether to play with only straight shots or to allow curved shots as in standard settings mode. To disable this feature select NO.

Spotlight Player Settings

These settings allow you to offer prizes for in-home contests based on Golden Tee casual golf game play.

Reset Values

This will reset all Golden Tee Settings to their factory defaults.

Back

This will take you back to the **Golden Tee Settings & Audits page**.



CASUAL GOLF SPOTLIGHT PLAYER

This allows operators to set the prize for a weekly drawing based on all players who achieved a score of PAR +17 or better.

Prize Settings

This opens This Week's Prize Settings to set the prize available for the winner of the drawing.

Clear Last Winner

This removes the last winner from the results.

Reset Values

This will reset all Casual Weekly Drawing settings



SPOTLIGHT PLAYER PRIZE SETTINGS

Edit Prize Text

Enter the text that best explains the prize offered. For example, "Free dinner any week night to this week's winner!"

Remove Prize

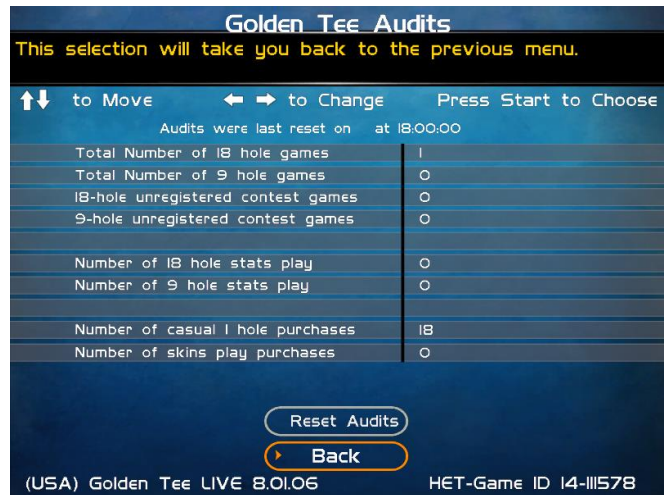
Select this option if you do not wish to run a prize drawing.



GOLDEN TEE AUDITS

This section displays various counts and totals for a number of game options. The following values are based on the last reset, the date of which is shown at the top of the screen.

Total Number of 18-hole games
Total Number of 9-hole games
18 hole unregistered contest games
9 hole unregistered contest games
Number of 18 hole stats play
Number of 9 hole stats play
Number of casual 1 hole purchases
Number of 18 hole purchases
Number of 9 hole purchases



Reset Audits

This will reset all audits to zero, and update the date of the last audit reset.

Back

This takes you back to the previous screen.

RESET LEADERBOARDS & RECORDS

Use this menu to reset various machine-specific Leaderboards.

Reset Leaderboards

This leaderboard is displayed after every hole during a casual game. Use this setting to clear the current play data. This option resets all Local Leaderboards.

Reset Course Records

Course records, such as best score on each course, are displayed on various screens during a game and in the attract mode, and replayed in the game's attract mode. Use this setting to clear all course records and game highlights.

Reset All

Use this setting to clear all Leaderboards, local records and game highlights. This process could take up to a minute to run so please be patient.



ITNET SETTINGS

This section details various ITNet settings, such as game registration and connection settings with ITNet.

Change Location (Not Available)

Not available on Golden Tee GOLF Online HE.

Location Information

This describes the cabinet location.

Communication Settings

This section lets you select and adjust various communication options. It is important for testing the Ethernet signal on your Golden Tee GOLF Online HE cabinet.

Connection Tests

This section tests your communication connections for integrity and reliability.

Re-Activate Modem (Not Available)

Not available on Golden Tee GOLF Online HE.

Back

Select this to return to the **Main Menu**.

COMMUNICATION SETTINGS

This screen shows the type of communication device that is currently in use, and its status and signal strength.

Configure Ethernet Settings

In some cases it may be necessary to reconfigure your Ethernet settings. See following page.

Back

Select this to return to the **ITNet Settings** menu.



CONFIGURE ETHERNET SETTINGS

Depending on your system setup, you may need to manually set specific settings for Ethernet to work. Use this menu to enter these settings.

Enable DHCP

Set this to Yes if your service provider or your router hardware has DHCP enabled. DHCP automatically sets the IP, Gateway and Net Mask.

If you edit the IP below to anything other than 0.0.0.0, it automatically changes Enable DHCP to No.

If No DHCP, Static IP

Set this to the IP that your service provider issued, or an IP from your router's subnet that is not already being used.

If the IP is set to 0.0.0.0, it automatically changes Enable DHCP to Yes.

Gateway

Set this to the Gateway that your service provider issued, or the IP address of your router. Example: 192.168.1.1

Net Mask

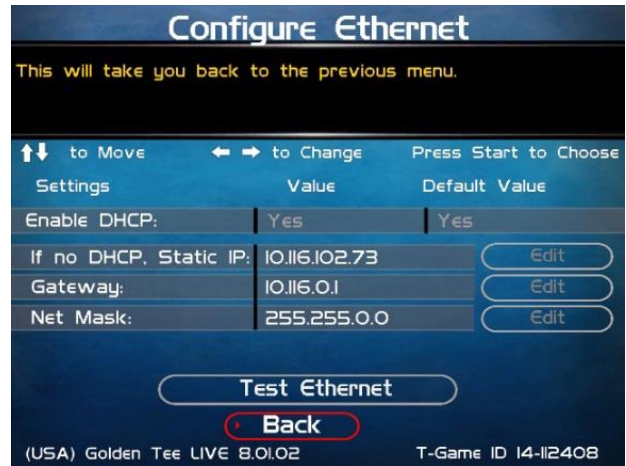
Set this to the Net Mask that your service provider issued, or if you are using a router it is typically 255.255.255.0. Example: 255.255.255.0

Test Ethernet

Selecting this will initiate a network connection using your entered network settings for DHCP or Static IP, Gateway and Net Mask. If the connection succeeds, a latency time check is also performed. Results are displayed at the end of the tests. It is a good idea to perform this test anytime you make changes to any of these settings to make sure everything works.

Back

Select this to return to the **Communication Settings** menu.



CONNECTION TESTS

Use this section to test the connection to ITNet.

Check Latency Time

This test will measure the time it takes for your game to communicate with ITNet. If successful, the delay time in seconds will be displayed.

Force Call to ITNet

This test will initiate a connection with the ITNet system and give a result status.

Back

Select this to return to the **ITNet Settings** menu.



TROUBLESHOOTING & REFERENCE

APPENDIX A TROUBLESHOOTING GUIDE

Video Problems		
Symptom	Probable Cause	Solution
No picture on the Monitor	I/O Board DIP Switch settings are wrong.	Adjust DIP Switch settings to match the resolution of the monitor you are using. Refer to I/O DIP Switch Settings in Appendix D.
	Incorrect video connection configuration.	Be sure the video connections are correct according to the type of monitor you are using. Refer to the diagrams in Appendix D.
	Monitor does not have a proper A.C. voltage input.	Verify A.C. power to the Nighthawk System box. Verify monitor is working on a known good system.
	Monitor is defective.	Repair or replace.
	Nighthawk System box is defective	Go to Nighthawk System box troubleshooting section.
No picture but game sounds are heard	Incorrect video connection configuration.	Verify video is connected to the system correctly. Refer to the diagrams in Appendix D.
	Since you hear game sounds the system is working.	Review no picture troubleshooting section above.
Scrambled Picture	I/O Board DIP Switch settings are set wrong.	Adjust DIP Switch settings to match the resolution of the monitor you are using. Refer to DIP Switch Settings in Appendix D.
	Incorrect video connection configuration.	Be sure the video connections are correct according to the type of monitor you are using. Refer to the diagrams in Appendix D.
Entire picture is not seen on the screen or it does not fill the entire screen	Misadjusted monitor.	Adjust the monitor width and height. Use video screen adjustment in system tests. Refer to the monitor manual.
Missing or washed out colors	Bad Video connections	Verify continuity from the monitor to the video out on the I/O Board. Red, Green, Blue video signal. <i>Mid. and Low resolution monitors only.</i>
	Contrast and brightness on the monitor needs to be adjusted.	Refer to the monitor manual to make adjustments.
	Defective Monitor.	Verify by connecting a known good monitor to the system.

Sound Problems

Symptom	Probable Cause	Solution
No audio	Audio Cable between the I/O Board and the Nighthawk system box are not connected.	Verify audio cables are connected. Refer to Appendix D.
	Speakers are not connected properly.	Verify continuity from the I/O Board speaker output pins to the speakers. Refer to Appendix D.
	Volume is set to the lowest level.	Adjust the volume to an audible level.
	Attract mode sounds may be set to all off. You will have sounds when playing the game.	Choose one of the 5 Attract Mode sound options in Sound Adjustments.
	Defective I/O Board.	Verify on a known working system. Replace if necessary.
	Defective Nighthawk system box.	Be certain all other possibilities are explored before replacing the Nighthawk system box.
	DIP switch settings are incorrect for your application	Refer to Monitor Applications at the back of this manual for proper setup.
Distorted or scratchy game audio	Bad speaker.	Replace blown speaker.
	Loose speaker or grill cover is causing vibration.	Verify all components are installed properly and securely.
	Loose/defective audio cables from the Nighthawk system box to the I/O Board.	Check the audio cable connections. Replace cable.
	Defective I/O Board.	Verify on a known working system. Replace if necessary.
	Defective Nighthawk system box.	Be certain all other possibilities are explored before replacing the Nighthawk system box.

Nighthawk System Box Problems

Symptom	Probable Cause	Solution
No video and no green lights on the I/O Board. Fans are not heard on the Nighthawk System Box.	No AC power to the Nighthawk System Box.	Verify A.C. voltage is connected to the Nighthawk System Box.
	Power switch on the Nighthawk System Box is off.	Flip the Nighthawk System Box power switch to on.
	Main cabinet power switch is off.	Be certain the main cabinet switch is set to on.
	Soft Power Shutdown	Press the Soft Power button with the power turned on. Or, short the top 2 pins of the 6-pin connector on the system box. See Appendix D.
	Defective Nighthawk System Box.	Be certain all other possibilities are explored before replacing the Nighthawk System Box.
No video and no green lights on the I/O Board. Fans are heard on the Nighthawk System Box.	DC power cord not connected from Nighthawk System Box to I/O Board.	Connect the DC power cord from the Nighthawk System Box to the I/O Board.
	Defective I/O Board.	Try it on a known good system. Verify by disconnecting all cables from the I/O Board except the DC power and USB cable to the Nighthawk System Box. No green lights, replace the I/O Board.

Control Problems		
Symptom	Probable Cause	Solution
Button does not work.	Switches Common post is not connected to digital ground.	Verify continuity to digital/power supply ground.
	Signal wire is not connected to the Normally Open post of the switch.	Verify continuity from the I/O Board to the Normally Open post of the switch.
	Switch is defective.	Replace defective switch.
Button always indicates closed in the player control test. Pressing it will show it is not depressed.	Signal wire is connected to the Normally Closed post of the switch.	Connect signal wire to the Normally Open post of the switch.
Button always indicates closed in player control test even with the switch disconnected entirely.	Defective I/O Board.	Test on a known good system. Replace if necessary.
Trackball is not functioning in any direction.	Trackball is not connected to the I/O Board properly.	Verify the trackball is connected to J208 labeled trackball on the I/O Board.
	Defective trackball Interconnect cable.	Verify continuity on the trackball Interconnect cable.
	Trackball is defective.	Replace trackball.
	I/O Board is defective	Replace I/O Board. Try it on a known good system.
Trackball does not work in a certain direction.	Trackball cable is defective.	Verify continuity on the trackball cable. Repair or replace if needed.
	Trackball is defective.	Repair or replace the trackball. Try it on a known working system.
	I/O Board is defective.	Repair or replace the I/O Board. Try it on a known working system.
Trackball works intermittently.	Inside of the trackball is dirty.	Clean the inside of the trackball.
	Rollers are worn.	Replace the rollers and bearings.
	Trackball is over-tightened.	Do not over-tighten the trackball. Tighten just enough to flatten the lock washers.

HDTV Video Problems		
Symptom	Probable Cause	Solution
There is no picture during boot up.	Incorrect video cable configuration.	Be sure you are using the proper cable connections. Refer to the HDTV connections configurations.
	Connected to the wrong output on the system box	Refer to the HDTV connections configurations.
	Connected to the wrong input on the HDTV	HDTVs usually have more than 1 input for a certain input type. Examples are Component 1 & 2; HDMI 1 & 2.
	Incorrect input selected on the HDTV	Be sure the correct input is selected from the HDTV input menu. Example: If using HDMI 1 that input must be selected from the HDTV video input menu.
	DIP switch setting SW 201 on the I/O Board set incorrectly.	Sw201 on the I/O Board must be configured to match the method of video you are using.

Symptom	Probable Cause	Solution
No picture after boot up	Normal black screen is displayed for a period of time just before 3D graphics are displayed.	This is normal operation. Be sure to wait at least two minutes after LOADING GAME is displayed to see if video appears.
	Your VGA cable is connected to the second monitor output.	Connect the VGA connector to the main output port.
	Incompatible video mode	Many monitors will not accept SVGA 720p or 800 x 600. A commercial grade HDTV will usually work.
Distorted or fuzzy picture	Improper cable connection	Be sure the video cables are securely connected at the computer video card and at the HDTV. This is especially critical if using a component video cable.
Picture is too big for the screen or does not fill the entire screen.	Incorrect DIP switch configuration.	Be sure Sw201 is configured to match the desired video.
	Increase or decrease screen size in games adjustments.	Location is in General Settings>Operator>System Tests>Video Screen Settings>Screen Size Adjust

HDTV Audio Problems

No Audio	RCA audio cable is not connected to the system box or HDTV	Connect the RCA audio cable to the system box and then to the proper input on the HDTV.
	RCA audio cable is connected to the wrong audio input of the HDTV	You must connect the audio cable to the matching video input selected. For example: If you are using Component 1 the audio must go to Component 1.
	HDTV audio is muted	Turn the mute off in the HDTV menu.
	Volume is turned down on the monitor or game sounds are set too low.	Adjust the volume on the game to 75% and then adjust the game volume to your desired level.
Low volume	Volume is turned down on the monitor or game sounds are set too low.	Adjust the volume on the game to 75% and then adjust the game volume to your desired level.
Scratchy or distorted audio	Poor cable connection RCA cable	Be sure the RCA audio cable is securely and entirely connected to the mating connectors.
No audio	DIP switch settings are incorrect for your application	Refer to Monitor Applications at the back of this manual for proper setup.

Flash Code Messages		
<i>Flash Code (I/O Diode D102)</i>	<i>Code Description</i>	<i>Solution</i>
Flash Code 2	Possible IO board failure	First Check Connections. Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 3	Info: Last reboot due to Watchdog time out.	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 4	Error When updating CID to latest Version	Typically CID failure. Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 5	Updated USB CID was detected. This is not an error but a notification.	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 6	Disconnected Cabinet ID Device (CID) was detected.	Check USB connection. Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 7	CID Malfunction. Typically CID is defective.	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 10	Error When updating USB I/O board to latest version. Typically an I/O board failure	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 11	Updated USB I/O board to latest version. This is not an error but a notification.	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 12	A disconnected IO board was detected.	Turn off game, Check USB and power connections, turn game on. If Problem persists call IT tech support.
Flash Code 13	I/O board malfunction. Typically I/O board has failed.	Turn off game, wait 10 seconds, turn game on. If Problem persists call IT tech support.
Flash Code 14	Game is incompatible with USB I/O board.	This usually means the wrong type of I/O board. It does not match the system box software. Try turning off game, wait 10 seconds, turn game on. If problem persists call IT tech support.

Miscellaneous Problems		
<i>Symptom</i>	<i>Probable Cause</i>	<i>Solution</i>
Unable to exit Operator Menus.	DIPswitch SW202 position 4 is in the on position.	Set position 4 of SW202 to off. Press start to exit.
	Test switch wired from the I/O Board is closed.	Verify satellite test switch is not closed.
No fluorescent light	No 120 volts A.C. power going to the light fixture.	Verify A.C. voltage to the light fixture.
	Defective fluorescent light.	Replace fluorescent light.
	Defective starter	Replace the starter.
	Defective ballast.	Replace the ballast.

APPENDIX B – SHOWPIECE INPUT/OUTPUT CONNECTIONS (I/O POWER, TRACKBALL, ETC.)

For Standard Online Kit and Deluxe Retrofit Kit

Trackball Harness Connector Pin Outs

I/O 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

I/O Power Cable Pin

Pin Number	Wire Color	Function
1	Yellow	+ 12 Volts DC
2	Black	Ground
3	Red	+ 5 Volts DC
4	Black	Ground

Control Panel J203 Connector Pin Outs

Pin	Color	Function
1	Green-White	Options
2	Brown-White	Left
3		No Connection
4	Yellow-White	Right
5	Violet-White	Flyby
6	Black	Volume GND
7	Black-White	Spin
8	Blue-White	Help
9	Red-White	Start
10	Black	Ground

Lamps J202 Connector Pin

Pin	Color	Function
1	Red-Black	Lamp Power – Buttons
5	Red-Yellow	Help Lamp
6	Red-Green	Options Lamp

Speakers J301

Pin	Color	Function
1	Yellow-Red	Left Speaker +
2	Yellow-Green	Left Speaker -
3	White-Red	Right Speaker +
4	White-Green	Right Speaker -

Service Panel J206

Pin	Color	Function
1	Red-Black	Meter Power
No Connection	Red-Green	Coin Meter
3	Orange-White	Volume Up
4	Orange-Yellow	Volume Down
5		No Connection
6	Blue	Test
7	Black	Test Ground

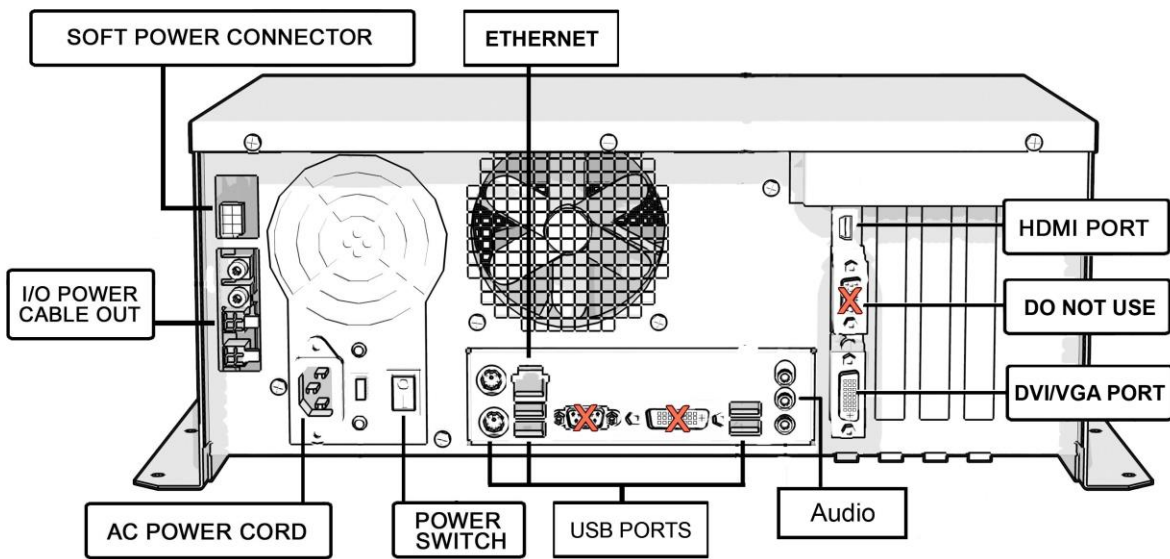
APPENDIX C REPLACEMENT PART NUMBERS

Please refer to these IT part numbers when placing orders.

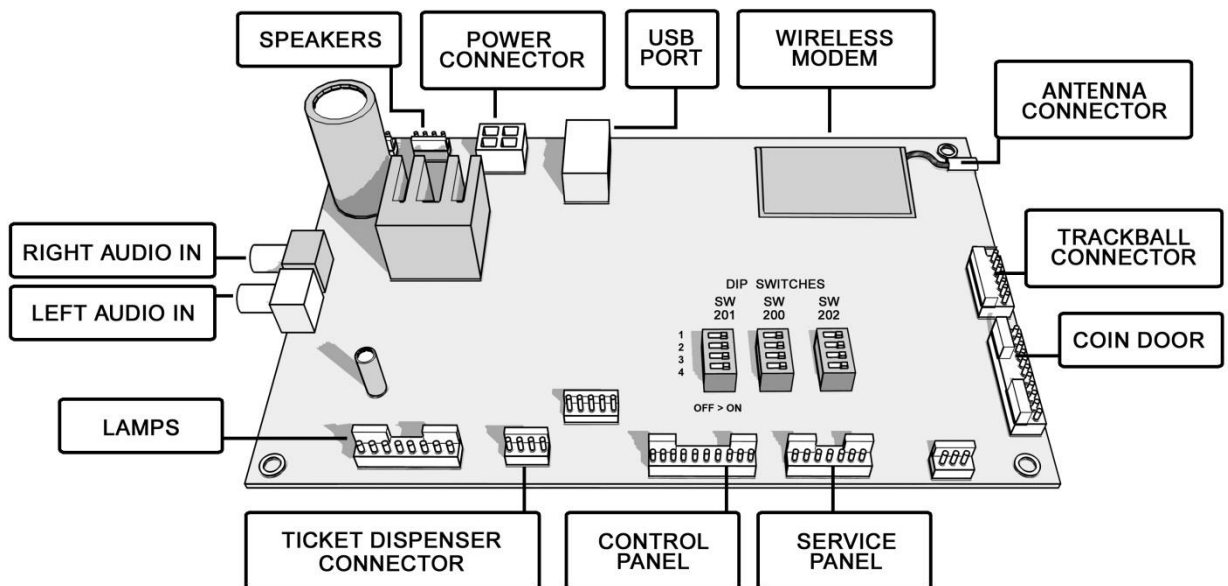
Part Number	Description
925353600P	SHOWPIECE CABINET, US GOLDEN TEE GOLF 2017 ONLINE HOME EDITION
900146007R	CABINET IDENTIFICATION DEVICE, GOLDEN TEE GOLF
915000310R	CABLE ASSY, USB CABLE, 6 FT.
915000173R	CABLE ASSY, TRACKBALL INTERFACE
915015400R	CABLE ASSY, HDMI, 15 FT.
760007104R	CARD READER, MODEL 7104USB
900353000R	I/O BOARD FOR GT GOLF ONLINE HOME EDITION (2017)
815000353	MANUAL, GT GOLF HOME EDITION ONLINE HOME EDITION
820000351	MARQUEE, GT GOLF 2017
850000001R	PUSHBUTTON ASSY, RED WITH VERTICAL MOUNTED SWITCH
850000003R	PUSHBUTTON ASSY, WHITE WITH VERTICAL MOUNTED SWITCH
861000022R	PUSHBUTTON ASSY, BLUE ROUND, ILLUMINATED
861000025R	PUSHBUTTON ASSY, YELLOW ROUND, ILLUMINATED
900775351RC	SYSTEM BOX, GT 2017
753304004	SYSTEM BOX FILTER
880000030R	TRACKBALL ASSY, 3" WHITE
885000030R	TRACKBALL PLATE FOR 3" TRACKBL WITH STANDOFFS

APPENDIX D NIGHTHAWK COMPONENT DIAGRAMS

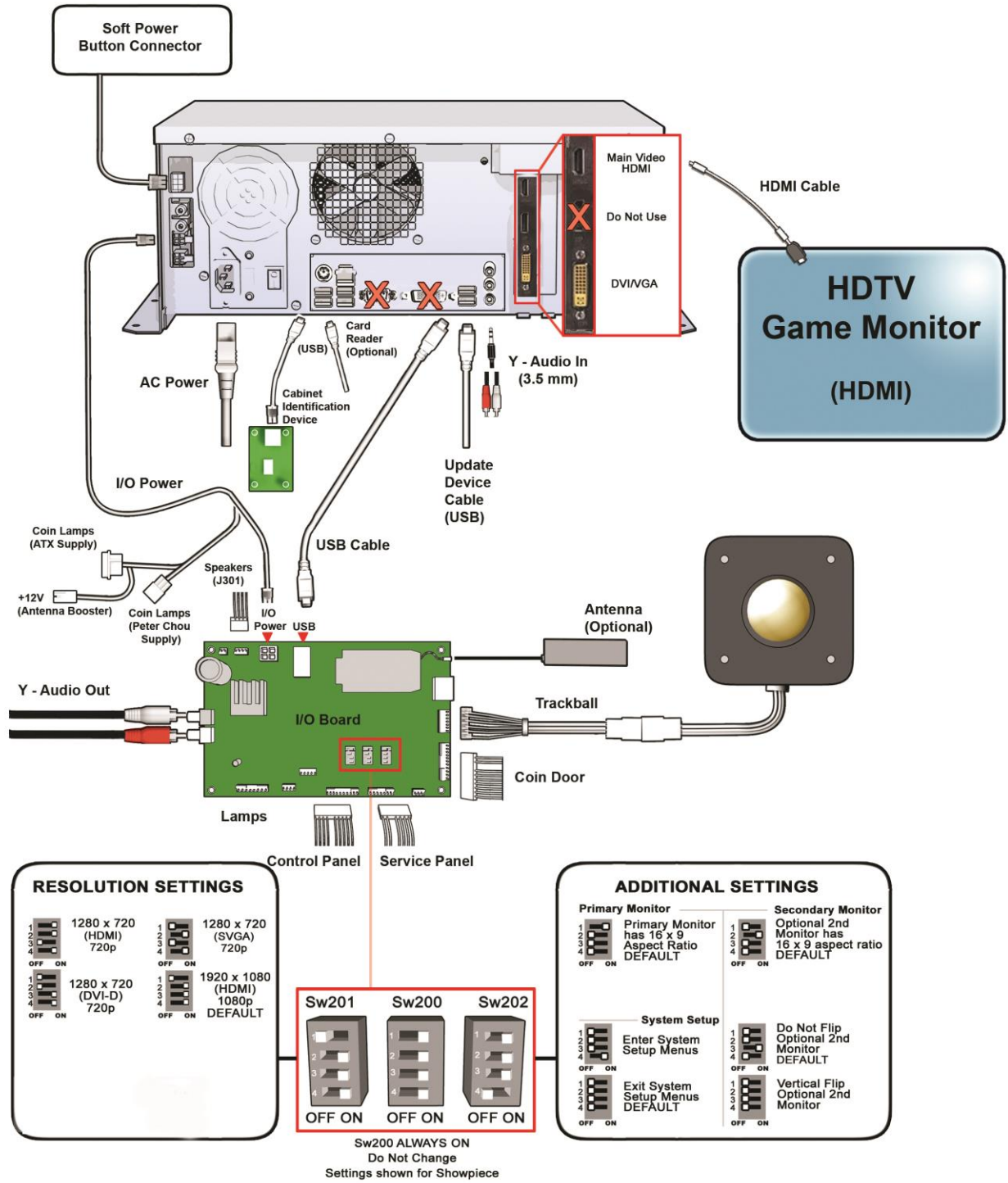
Nighthawk System Box Diagram



I/O Board Diagram



Showpiece Cabinet Connection Diagram



APPENDIX E

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The cooling icon (pictured right) will appear in the game's attract mode to warn you that a fan is not operating at minimum recommended standards. If the fans do not operate at suggested levels it may cause your game to overheat and fail.

Call Incredible Technologies Technical Support at 847-870-7027 x381 for assistance.

