Kit Installation Manual & User Guide
WARNINGS AND NOTICES

NOTICE

- This game is intended to be operated for amusement purposes only. It is not to be operated in violation of any federal, state, or local laws or regulations. As the owner and/or operator of this game you are responsible for its operation in compliance with such laws and regulations. The factory settings for this game may require adjustment in order to comply with the laws and/or regulations in the jurisdiction where the game is located. It is the sole responsibility of the operator to determine what laws and/or regulations are applicable and to make any adjustments to the game before operating it for its intended purpose.

- This manual and the information contained within is subject to change without notice.

WARNING

- Use of unauthorized parts or making any unauthorized modifications will void the warranty and may result in the game operating in an unsafe or incorrect manner.

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

- This cabinet is not suitable for installation in an area where a water jet would be used. The cabinet must not be cleaned by a water jet.

WARRANTY, REPAIR, AND RETURN POLICY

- 90-day warranty on all electronic components. All warranty periods begin on the date of purchase from Incredible Technologies, Inc.

- There is a minimum $75.00 service charge for all non-warranty repairs or returns.

- For all servicing, return to Incredible Technologies, Inc.

- 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 Incredible Technologies. Please have the product’s Cabinet Identification Device (CID) number available when calling for an RMA number.

- Merchandise returned without an RMA number will not be accepted.

- Warranty may be void if serial number or security labels are tampered with or removed. Opening the Nighthawk Chassis system will void your warranty.

- Advance replacement hardware will be shipped to the customer address on file unless specified otherwise.

- Advance replacement hardware will be billed to the customer until Incredible Technologies, Inc. receives the returned merchandise, 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).

PAYMENT FOR AND STORAGE OF REPAIR MATERIALS

- Materials sent to IT for repair must be paid for according to current price schedules and in a reasonable time. Storage fees for repaired equipment will be charged at a rate of $50.00 (Fifty US Dollars) per calendar month or fraction thereof after 90 (Ninety) days from notice to the customer that the repairs are complete. IT reserves the right to resell repaired equipment to cover accumulated storage charges when the accumulated storage charge reaches 100% (One Hundred Percent) of the repaired items’ then-current replacement cost.

- INCREDIBLE TECHNOLOGIES, INC
PERPETUAL SOFTWARE LICENSE

Incredible Technologies, Inc. ("IT,") hereby offers you ("Licensee") the right to install and use certain copyrighted computer software produced by IT under the following terms and conditions. This License shall govern the use of the software known as "Silver Strike Bowling ,09" ("Update") when applied as an update to pre-existing Silver Strike-equipped hardware ("SS Cabinets") equipped with an earlier version of the Silver Strike Bowling software ("Prior Version") or to Updates included in the purchase of a hardware/software package which constitutes a functionally complete Silver Strike Bowling ,09 game unit.

1) Licensing Fee
The Licensing Fee ("LF") shall be as follows:
• US$0.00 (Zero United States Dollars and zero cents.)

2) Term
The License shall be valid on the first date that both the LF is paid for the Update and it is installed on an SS Cabinet. If you purchased the Update under a payment arrangement where the Update is paid for in more than one (1) installment, you purchased the Update under the terms of a Term Software License. If the Update has been offered or sold to you under the terms of a Term Software License, the terms of this License shall become applicable if and when the Term Software License terminates in favor of this Perpetual Software License, as set forth in the Term Software License. The term shall be perpetual and throughout the Universe for the Update on the SS Cabinet upon which it is installed at the time the LF is paid. Updates are not transferrable to any other SS Cabinet, for any reason. If an SS Cabinet with an Update is destroyed or otherwise taken out of operation, this License shall terminate.

3) License Rights
Licensee shall have the right to utilize the Update on authorized SS Cabinets in the normal course of business and as controlled by the Rules of ITNet, as set forth in a separate “Operator Agreement” document, the terms and conditions of which, where not conflicting with the terms and conditions herein, are hereby incorporated by reference. Updates may only be operated on SS Cabinets which are installed in commercial locations, as that term is defined by IT, and to which there is general access by all parties with a general right to enter the location where the SS Cabinet is operated.

4) Legal Operation
Updates include various features which may not be lawful to operate in any given jurisdiction. No provision of any feature, or its licensure to Licensee under the terms herein shall be deemed as advice that operation of that feature is lawful or not lawful in any given jurisdiction. Licensee shall make reasonable efforts to disable any user-adjustable feature which they know or should have known as not lawful to operate in the location where an SS Cabinet with an Update is being operated.

5) Termination and Rollback
In the event that this License is terminated for whatever reason, Licensee shall have absolutely no right to operate any SS Cabinet upon which an Update has been installed. IT reserves the absolute right, at its sole discretion, to terminate the operation of any SS Cabinet upon which an unlicensed Update is installed. If Licensee wishes to restore such an SS Cabinet to operating condition without acquiring a new License for the Update, IT will roll-back that SS Cabinet, at no charge to the Licensee, to the Prior Version upon return (at Licensee’s expense) of the required hardware to IT’s service center.

6) Governing Law and Jurisdiction
The validity and construction of this License and of the rights and obligations set forth herein shall be determined and governed by the laws of the State of Illinois. The parties hereby submit to the Jurisdiction of any state or federal court in Cook County Illinois. Licensees operating outside the borders of the United States of America, regardless of their citizenship or residency, explicitly agree to allow any assets they may have in the USA or any other foreign country to be attached, garnished, forfeited or otherwise reached by any legal act if, after due process of law, they are found to be liable to IT for damages by reason of breach of this License.
7) Warranty
If the Licensee discovers any physical defect in the media (disk, EPROM, flash media, etc.) on which the Update is distributed or in the documentation, which in the opinion of Incredible Technologies, Inc. (IT) prevents the product from being used as reasonably intended, IT will replace the media or documentation at no charge. The purchaser must return the item to be replaced, with proof of purchase, to IT within 90 days after taking delivery of the Update.

8) Disclaimer and Waiver of Remedies
Acceptance of this License and installation of the Update includes disclaimer and waiver of any and all implied, statutory, or common-law warranties, including warranties of merchantability and fitness for a particular purpose, and limits the purchaser's remedy to returning the Update to IT for replacement.

IT makes no warranty or representation, either express or implied, with respect to Updates, their quality, performance, merchantability, or fitness for a particular purpose. Updates are licensed "as is," and the Licensee, by installing the Update, assumes the entire risk as to their quality and performance other than as explicitly set forth herein.

Acceptance of this License and installation of the Update includes disclaimer and waiver of any and all direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the Update, 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.

In jurisdictions which do not allow the exclusion of implied warranties or liability for incidental or consequential damages, acceptance of this License and installation of the Update includes stipulation that the most minimal requirements of the law of those jurisdictions shall govern any additional required additional rights of Licensee.

9) Severability
If any provision of this License shall be held by a court of competent jurisdiction to be illegal, invalid or unenforceable, the parties nevertheless agree that the court should endeavor to give effect to the parties' intentions as reflected in the provision, and the remaining provisions shall remain in full force and effect.
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This kit is designed for use in cabinets with a JAMMA cable and wiring installed.

If you do not have a JAMMA harness already installed in the cabinet you have selected and are wiring the cabinet yourself, refer to the JAMMA Wiring Diagram in Appendix B.

Do NOT install this kit 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.
COMPLETE KIT INSTALLATION

COMPLETE KIT CONTENTS
(1) Silver Strike Bowling 2009 System Box
(1) I/O Board Assembly
(1) Cabinet Identification Device (CID)
(1) DVI to VGA Adapter
(1) Trackball Assy, 3" White
(1) Trackball Plate
(1) 6" SVGA Cable Assy
(1) Trackball Cable
(1) I/O Power Cable
(1) Audio Cable, 6" 2 RCA to 2 RCA Plug
(2) USB Cables 6"
(1) AC power Cable
(1) Pushbutton Assy., Red
(4) Pushbutton Assy., White
(1) Card Reader Blanking Plate
(1) Marquee, SSB 2009
(1) Control Panel Overlay, SSB Diecut w/control labels
(1) Side Decal Set
(1) Silver Strike.com Logo Card
(1) Manual, SSB 2009
(1) Quick Install Guide, SSB
(1) Miscellaneous bag of hardware parts
(1) *Fully-dressed Control Panel (Includes: assembled track ball, control panel overlay and buttons as a unit)

*There is an additional fee for kits with the fully-dressed control panel. If the fully-dressed control panel was not ordered, the kit includes ONLY: trackball, control panel overlay and loose buttons NOT assembled.

RECOMMENDED TOOLS
Have the following tools ready before you begin to install this kit:

- ¼", 11/32" and 7/16" Sockets or Nut Drivers
- Phillips Head #2 Screw Driver
- 3/16", 7/32" and 9/32", or 5/16", 3/8", and ¾" Drill Bits
- 1 1/8" and 3 1/2" Hole Saw or Drill Bit
- Small Flat Blade Screwdriver
- Jig/Sabre Saw
- Router
- Push Button Nut Socket or Large Adjustable Pliers
- X-acto® Knife or other Sharp Knife/Razor Blade
- Wire Cutters
- Scissors
- Tape Measure
- Putty Knife
- Decal Roller/Squeegee
- Liquid Window Cleaner & Cleaning Cloth
- Vacuum Cleaner
Many operators notice their earnings increase with touches as simple as a fresh coat of paint and a clean cabinet. If you will be painting, you'll need these supplies:

- Air Brush or Paint Sprayer,
- Paint Brush, Paint Roller, and Pan
- Paint (and Primer) — **A black cabinet is a recommended color choice.**
- Sandpaper

**INSTALLATION PREPARATION**

**BEFORE YOU START…**

Before you install the Silver Strike Bowling 2009 kit into your cabinet there are a few things you should check first:

1. Check to make sure your existing cabinet’s monitor, speakers, AC power cord, lights, bill acceptor and coin mechanisms work. Replace or repair where necessary.

2. Check to make sure all the necessary parts are included in your kit. If any are missing/damaged please contact IT’s Technical Support at 847-870-7027 x121.

3. Check to make sure cabinet is wired with standard earth grounded A.C. plug compatible with local building codes and/or safety requirements. If not, have a qualified electrician install one (not provided).

4. Have all the necessary tools available to install this kit. Refer to the recommended tools list above to make sure you are prepared before you start.

5. Make sure any parts of the system (lights, monitor, etc.) are not plugged in. Working with any part of the system plugged in or powered on can be dangerous.

6. Keep in mind that it’s been proven that the higher quality of work put into a kit installation results in a higher earning game. Make sure you have plenty of space, time, and focus to put into this kit installation.

**PREPARING THE CABINET**

**CABINET SELECTION**

You can choose either a new cabinet or a used cabinet for your Silver Strike Bowling 2009 game. Reusing a cabinet is by far the most cost-effective way to maximize the return on your initial investment. In either case, all you need to provide is the cabinet with a monitor, JAMMA harness, coin and bill acceptors, working fluorescent/marquee lights, and speakers.

When selecting a cabinet, keep in mind that a larger control panel allows you to mount the trackball farther from the monitor. This prevents players’ hands from hitting the monitor glass when rolling the trackball forward, and will earn better than a smaller control panel closer to the monitor. An older-model Silver Strike dedicated cabinet is ideal for this purpose.

If using a Silver Strike cabinet for this installation, consider ordering a new Control Panel from Incredible Technologies. These control panels come pre-installed with controls and graphics, and can save you considerable time and money through easy installation.

**PREPARING THE CABINET FOR INSTALLATION**

Follow these steps to prepare your cabinet before installation:

1. Remove the following from the cabinet: Main Logic Board(s) (and hard drive if present), Control Panel, Monitor Viewing Glass, Marquee, and Power Supply. Now is a great time to clean both sides of the monitor viewing glass and monitor screen to ensure a clear view of the game.

2. Thoroughly clean out your cabinet. Remove all of the old buttons, joysticks, etc. **DO NOT** remove monitor and speaker wires or the wires that were previously hooked up to the control panel.

3. Remove the old graphics and adhesive from the cabinet including the control panel.
4. For a fresh look and best earnings, painting is highly recommended. Spray painting gives a better finish, but if an air brush or paint sprayer is unavailable a roller is second best. Remember to cover all exposed surfaces not to be painted. When not installing into an old Silver Strike® dedicated cabinet, the recommended color choice is black.

5. Make sure to have the sides of the cabinet and the control panel as smooth and flat as possible to allow for a higher quality finish when applying the control panel background, labels, and side decals.

6. The "new game look" should always apply to the inside of your game as well. A few wire ties and shrink tubing on your harness, some fastening hardware on your subassemblies, and a sweep with the vacuum cleaner will help ensure that glitches do not occur.

Check JAMMA Harness and Wiring
The Silver Strike Bowling 2009 Kit comes with a special I/O Board that uses your cabinet's existing JAMMA wiring harness. Make sure your existing wires and connectors are in good working order. Check the JAMMA wiring diagram in Appendix B.

Check Coin Mechanisms and Bill Acceptor
Make sure your coin mechanisms and bill acceptor are functioning properly, and your coin box and stacker are in good condition. You want to make sure your game will accept money when players are ready to play.

Check Coin Door Connections
Your cabinet should already be wired correctly through the JAMMA connector. Now is a good time to make sure your game can accept money. Check the JAMMA pinout chart in Appendix B for the correct wire colors and pins. Trace the wiring to their sources and make sure they are connected properly and securely. Be sure the wires are away from the coin door where they can be pinched or cramped.

Check Monitor
Silver Strike Bowling 2009 has been designed to operate with SVGA (800 x 600), VGA (640 x 480), medium resolution (512 x 384) and low resolution (384 x 256) monitor systems. The factory monitors in all Golden Tee Fore! cabinets are compatible with Silver Strike Bowling 2009. However, to take advantage of the best and most current quality available, it is recommended to upgrade to an SVGA compatible monitor.

Operating Silver Strike Bowling 2009 at the highest possible resolution will give your game the best results (and revenue). Many standard cabinets contain a medium-res. or VGA monitor already. If you have a low-res monitor, it may be possible to switch it to a higher resolution. Check your monitor's manual for capabilities. If not, you should consider upgrading to a newer monitor.

Also check your monitor for a DB15 VGA connector. If your current monitor has a DB15 VGA connector, it is capable of VGA or SVGA resolutions. Check your monitor’s manual on how to switch the monitor to VGA mode. Make sure the video dip switches on the I/O board match the resolution that the monitor is expecting. Plug the video cable from the Nighthawk System box directly into the monitor. Be sure to disconnect the old composite sync video cable from the monitor.

When operating with an SVGA or VGA monitor, Silver Strike Bowling 2009 uses the standard VGA sync timing and signals. When operating with medium resolution or low resolution monitors, which are common in Golden Tee Fore! dedicated cabinets, Silver Strike Bowling 2009 operates with composite negative serrated sync.
NOTE: Use either horizontal mount raster scan monitors or High Definition Televisions with compatible scan rates and video inputs.

RESOLUTION

The hardware shipped with this product as of January 2011 has HDMI output capability. However, the software is not designed for a true 16:9 aspect ratio. With the proper DIP switch setting HDMI can be used but many of the objects will have a slightly stretched or skewed look. The larger the HDTV the more apparent the stretching becomes.

CAUTION! Monitors are extremely dangerous and can result in severe injury. Make sure you follow and observe all safety precautions as outlined in your monitor's manual. ALWAYS disconnect the power to the cabinet before working on or around the monitor.
Remove Cabinet Graphics
Remove any decals from the cabinet. Make sure that the sides of the cabinet are as smooth and flat as possible to allow for a higher quality finish when applying the new side decals.

For a fresh look and best earnings painting is highly recommended. Spray painting gives a better finish, but if an air brush or paint sprayer is unavailable a roller is second best. Remember to cover all exposed surfaces not to be painted.

Remove Existing Card Reader (If applicable)
If you are using a Golden Tee Fore! cabinet, the existing card reader must be removed. Silver Strike Bowling 2009 is an offline version and does not utilize a card reader. To remove your current card reader, open the coin door to access the card reader. Reach inside and disconnect the ribbon cable from the Card Reader. Then from inside remove the four 11/32” nuts that hold the card reader to the inside of the cabinet. Once loose, pull the card reader out through the front of the cabinet. Install the supplied card reader blanking plate to cover this opening.

Vacuum Cabinet Thoroughly
The "new game look" should always apply to the inside of your game as well. A few wire ties and shrink tubing on your harness, some fastening hardware on your subassemblies, and a thorough sweep with the vacuum cleaner will help ensure that glitches do not occur.
Dust and dirt can damage your hardware and cause problems with game play. Be sure that your cabinet is clean inside and out. It is highly recommended to vacuum your cabinet at least once a month, especially near the fans and vents, to avoid overheating and costly repairs.

ELECTRONICS INSTALLATION

INSTALL NIGHTHAWK SYSTEM BOX
The Nighthawk System box houses most of the game electronics and hardware into one box that can be easily installed. Verify that the Nighthawk System box Power Switch is in the "ON" position.
1. Locate the area on the floor where the system box will be placed. Make sure there is enough clearance to plug in cables.
   - The Nighthawk System box measures 19” W x 7” H x 11” D.
2. Relocate and secure any wires to make room for the system box.
3. Place the system box so it sits flat on the floor and does not pinch wires.
   Be sure there will be sufficient air flow to the system box. Overheating can damage your system.
4. Mount the system box with 6 - #6 x ¾” Hex Washer Head Sheet Metal Screws.
INSTALL CABINET IDENTIFICATION DEVICE (CID)

The Cabinet Identification Device or C.I.D. is an innovative and important component. This device permanently identifies your cabinet as Silver Strike Bowling 2009. It should remain even if another component such as the I/O board or system box is replaced. The C.I.D. has a unique number to individualize the cabinet and is referred to as the Cabinet Identification Number.

1. Attach the C.I.D. to the inside side of the cabinet using the 2 - #6 X 1” Hex Washer Head Sheet Metal Screws. Mount so the port is facing up and the electronics face the wall.

2. Attach the USB cable from the Nighthawk System box.
   - Place the included Cabinet Identification Number on the back of the cabinet for future reference. **Refer to this number to track your equipment and whenever you are calling in for service.**
   - The Cabinet Identification Number is displayed in the operator menus in the lower right hand corner, and is labeled as Game ID. It is also displayed on the last line of the initial boot-up screen.

INSTALL I/O BOARD

**NOTE:** Before installing any electronics make sure cabinet power switch is in the OFF position and the cabinet power is unplugged from the wall.

Silver Strike Bowling 2009 comes with a specially designed I/O board that works with your cabinet’s already installed JAMMA harness. The I/O board is used as a connection interface between the JAMMA and the Nighthawk System box.

Mount the I/O board inside the cabinet using 4 of the 6 x ¾” Hex Washer Head Sheet Metal Screws, 1 in each corner. The existing JAMMA harness edge connector will attach to this board. Do not attach cables at this time.

**NOTE:** Route all cables AWAY from the I/O Board. Laying cables on top of or underneath the I/O Board will result in unwanted noise or static during the game.
INSTALL TICKET DISPENSER (OPTIONAL)

Silver Strike Bowling supports Entropy 2000 Ticket Dispenser Continuous Type (TD963CR) and Deltronic Labs DL-1275 Continuous Type ticket dispensers. If you wish to connect a ticket dispenser to this game, you will have to make a cable with the proper connectors. These ticket dispensers mates with a Molex connector #03-09-1041 or #03-09-1042. The I/O board ticket connector J201 mates with a Molex connector #22-01-2047 or #22-01-3047. Simply connect pins 1 through 4 on one end directly to pins 1 through 4 on the other end. Consult with your ticket dispenser's manual to verify installation procedures. You will need to set your ticket dispenser to ON from the Ticket Dispenser menu in the Operator Menus. Details can be found in System Setup section of this manual.

CONTROL PANEL INSTALLATION

INSTALL OPTIONAL CONTROL PANEL FOR EXISTING I.T. CABINETS

If you are installing your kit into an existing Golden Tee Fore! cabinet manufactured by IT, you can purchase a new, fully outfitted control panel. This will not only make your installation easier, it will make your game look and play better too. Use this section to install this control panel. For all other cabinet types, refer to the next section.

Attach the new control panel to the existing hinge on the control panel drawer. Drive the 4 Phillips screws into the holes in the bottom of the control panel. The control panel comes equipped with trackball and buttons in place. Snap the switches onto the buttons. Refer to the JAMMA wiring diagram to match up the correct wire to the correct button. The following buttons need to be connected: Start, Ball Weight, Overhead, Rotate Left, Rotate Right. Connect to the normally open post. Be sure common ground is connected to each common post.

Connect the 10-pin connector to the Control Panel connector J203 on the I/O board. Finally, connect the Trackball to the trackball connector J208 on the I/O board.

TRACKBALL AND BUTTON PREPARATION (FOR MOST KITS)

Mounting the trackball and buttons correctly and securely is very important for the profitability and safety of your new game. This kit is designed for use in cabinets with ¾” thick wood control panels where proper routing of the control panel is used to create a safe playing experience. If you do not have a ¾” thick wood control panel, please replace your control panel or choose a cabinet with a ¾” thick wood control panel installed. Keep in mind that if your current control panel has many old holes in it from previous buttons, joysticks, etc. that it may be easier to start with a new solid control panel. This will give your game a better look and feel and help it to earn better.

NOTE: If the cabinet already has a trackball plate installed, discard and replace with the new trackball plate. The metal trackball mounting plate and trackball mounting procedure have been designed to remove all bolts from the playing surface. Routing the wood control panel is required so the metal mounting plate is flush with the panel surface. An uneven playing surface or exposed edges will affect game play and could impact your earnings.

TIP: Trackball and button templates can be found in Appendix H of this manual. They include:

- Trackball Template to install the trackball plate and make the appropriate routing.
- Trackball Orientation Diagram to orient your trackball correctly when installing.
- Button Set Templates to position and install control panel buttons.
Trackball Preparation
Install the metal trackball plate by following these steps:

1. Cut out the template from Appendix H with a pair of scissors along the noted line. Tape this template to the top of the control panel as far away from the monitor as possible, making sure that the trackball will clear the cabinet beneath it. **NOTE:** Installing the trackball as far away from the monitor as possible will prevent players' hands from hitting the monitor glass when rolling the trackball forward.

2. Using a sharp object, mark the eight points shown on the template on the control panel. Using a pencil, trace the outside of the template. Remove the template.

3. Drill Holes 1-4 with a 9/32" or 5/16" drill bit.

4. Drill Holes 5-8 with a ¾" drill bit.

5. Route the crosshatched region to a depth of about .075" (about the thickness of a nickel).

6. Using a sabre saw cut out the center portion by cutting between holes 5-8.

7. Once you have cleaned up the routed area, install the trackball plate into the control panel using the ¼" Flat Washers and ¼-20 Nylon Hex Nuts. Be sure the mounting plate is flush with the top of the control panel.

**NOTE:** At this time you are only installing the trackball plate, do not install the trackball yet.

Button Preparation
The following are the steps you should take to prepare your control panel for the installation of the button assemblies:

1. Cut out the template(s) (see Appendix H).

2. Using a tape measure, measure the specified distances from the center of the trackball hole in the trackball plate and make a mark for both the left and right button reference points.

3. Lay each template over the appropriate reference marking point. Mark the centers of the remaining holes using a sharp object.

4. Drill a 1 1/8" hole at each marked point.

**NOTE:** Do NOT install the trackball or buttons until the control panel graphics have been applied.

Once the installation is complete, be sure to use the System Controls test in the game's System Setup menus to ensure proper functionality of all the player controls.

CONTROL PANEL OVERLAY INSTALLATION
Silver Strike Bowling 2009 comes with an oversized control panel overlay that will accommodate a variety of existing game cabinets, but works best on Golden Tee Fore!, NFL® Blitz™ and EA Sports™ PGA Tour® Golf cabinets. Follow these instructions to correctly install the control panel overlay on one of these cabinets:

1. Make sure that the newly drilled control panel has a smooth, clean surface. Sand where necessary to make sure the graphics are installed on an even surface.

2. Clean the control panel to make sure it is free from dust, grease, metal filings, etc. Make sure that all residues (adhesive, overlay material, etc.) from the previous control panel graphics are removed. This will ensure a clean, easy, and beautiful application of the control panel graphics.

3. **It is very important that the trackball and control panel graphics be mounted perfectly straight.** Find the center of your trackball template and lightly draw vertical and horizontal guidelines on the control panel, marking out your centering lines.

4. Remove a small section of the protective backing from the overlay. Carefully center the overlay over the control panel by lining up the die-cut hole with the trackball template. **Be sure the graphic is positioned perfectly straight.** Line up your pencil guidelines with the lines incorporated into the art. Once in position, gently press down on the section with exposed adhesive, affixing the overlay into place. Once affixed, the overlay cannot be removed.
5. While holding down the overlay over the attached area, very carefully turn over one side and remove the exposed backing. Gently lay down the exposed overlay from the center outward, smoothing with your hands or a roller as you go. **Be sure the overlay remains straight and square.** Repeat the process with the other side of the overlay, so the entire surface is affixed to the control panel. Make sure all bubbles have been pressed out for a clean, flat surface.

**TIP:** Liquid window cleaner can be sprayed onto the control panel before placing the overlay onto the control panel. The window cleaner will allow the overlay to be positioned with less risk of damage to the overlay or adhesive. Once in position, use a decal roller or squeegee to force any excess cleaner out. Be sure to add additional time for the liquid to evaporate.

6. Using an X-acto® knife (or other sharp instrument) carefully cut around the edges of your control panel, trimming any excess material.

7. Find the center of each hole you’ve drilled out for the buttons and use the knife to poke a hole into the overlay. Make a vertical and horizontal line (like a plus sign) from the center of the hole to the edges. You should be able to place your button in later with no edges showing.

**CAUTION:** If you choose to install a Plexiglas® cover over your control panel (not recommended), to ensure the safety of your players and the quality of your game make sure that all surfaces, edges and bolts that a player may come in contact with are smooth, safe and secure.

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**FINISHING THE CONTROL PANEL**

1. Reattach the control panel to your cabinet adjusting any hinges or chains where necessary. Make sure not to pinch or crimp any wires while re-attaching the control panel.

2. Install the trackball into the trackball plate. The trackball must be oriented correctly in order to function properly. Refer to the diagram located in Appendix H for correct orientation. You will need the following parts in order to install the trackball correctly to the plate: 4 - 10/32 x 2½” Phillips Head Machine Screws, 4 - #10 Flat Washers and 4 - #10 Split Lock Washers **NOTE:** Do not over-tighten the trackball. It will warp and cause the trackball to not operate correctly.

**IMPORTANT!** Be sure to install your trackball securely, and maintain it regularly. Loose, worn, or incorrectly mounted trackballs can result in decreased earnings and possible injury to players.

3. Secure the trackball ground wire to the trackball plate at the 8-32 stud on one end with an 8-32 KEPS nut and the other end to the cabinet ground stud (usually located near the AC power cord inlet) using an 8-32 KEPS nut.

4. Install the buttons in the holes located on your control panel. Make sure you use the red button assembly for the Start button.

5. Attach the micro switches to your newly installed buttons and connect the wires up to the correct pins on the JAMMA harness.

**NOTE:** The post on the switch labeled COM should connect to the ground wire and the post labeled NO should connect to the signal wire. See the JAMMA pin out chart in Appendix B.

**IMPORTANT!** Trackball and trackball plate MUST BE GROUNDED to Earth Ground to prevent damage to the trackball or game electronics.
COMPLETE SYSTEM BOX CONNECTIONS

Follow these procedures to correctly connect the various electronic components. Be sure the cables are connected securely and in working order. Use cable clamps, with appropriate tension, where necessary to ensure all cables stay in place during operation. Dress all cables with additional clamps and wire tie wraps where needed. Avoid loose wires or disconnected cables, as they can cause an unneeded service call.

ATTACH I/O POWER, AUDIO, AND USB CABLES.
- **I/O board power cable.** Connect from the I/O board to one of the two 4-pin power output connectors on the system box.
- **Audio cables.** Connect to the audio output jacks of the system box. Match the appropriate colors.
- **USB cable #1.** Connect from the I/O board to any USB port on the system box.
- **USB cable #2** for Cabinet Identification Device (CID). Refer to the CID Installation Section for proper orientation and placement of the CID.

ATTACH MAIN VIDEO CABLE
- If your cabinet has a VGA or SVGA monitor, connect the video cable from the main VGA port on the system box directly to the VGA or SVGA monitor input.

- If your cabinet has medium or low resolution monitor, connect the video cable from the system box to the I/O board.

Be sure to adjust your DIP Switch settings to match your monitor’s resolution. Refer to Appendix D.

ATTACH POWER CABLE
Use the AC power cord that is currently in your cabinet. The cord plugs into the System box. Have a qualified electrician do the wiring. Verify AC main voltage selector switch is in the proper position. In North America the setting is 115 volts AC. In some countries this should be set at 230 VAC.
COMPLETE I/O BOARD CONNECTIONS

CONNECT JAMMA HARNESS
Connect the JAMMA Connector to the I/O Board. Be sure it fits tightly and is oriented correctly.

CONNECT THE CONTROL PANEL SWITCHES AND CABLE
Snap the switches onto the buttons. Connect the Control Panel wiring harness using the JAMMA wiring chart found in Appendix B.

CONNECT COIN DOOR LAMPS
Connect the coin door lamp cable to the pigtail off the I/O Power cable. If your cabinet originally had a Golden Tee Fore! green PCB, then use the 9-pin connector. If your cabinet had a Golden Tee Fore! red PCB, then use the 4 pin connector. Find the mating connector leading to the coin door to make your connection.

CONNECT THE TRACKBALL
Locate the Trackball Cable and connect it to the connector labeled Trackball on the I/O board. The other end will connect to the trackball. Connect the green earth ground wire to the trackball plate.

CONNECT AUDIO CABLES
Locate the Audio Cables already connected to the system box, and connect them to the I/O board audio inputs. Inputs are color coded, so be sure to connect red to red, etc.

CONNECT THE USB CABLE
Locate the 6 ft. USB Cable from the system box and connect it to the USB port on the I/O board.

CONNECT MEDIUM OR LOW RESOLUTION MONITOR
If your cabinet has a Medium or Low Resolution monitor, you need to connect the video to the I/O board. Connect the SVGA Video cable from system box to the J501 connector on the I/O Board. Connect the Red, Green, Blue video outputs, the composite sync, and video ground from the JAMMA connector to the appropriate monitor inputs. To find the correct JAMMA pin outs refer to the diagram in Appendix B. Be sure to set the Video Dip Switches on the I/O Board to match your resolution. Refer to the diagram in Appendix D.

CONNECT VGA OR SVGA MONITOR
VGA or SVGA monitors are connected directly to the system box video output. Do not connect a video cable to the I/O Board if you are using these resolutions.

CONNECT I/O POWER CABLE
Connect the I/O Power cable to the power input connector. Use the end with the pigtail. The other end connects to the system box.

CHECK ALL CONNECTIONS
Go over your entire cabinet again and double-check all of the connections. Make sure that all connectors are tight and secure and in their proper place. Look for frayed, broken or exposed wiring and repair as needed. Bundle and wire-tie your wiring and secure it to the inside of the cabinet. A thorough and neat job now will save you a lot of time and trouble in the future.
CABINET GRAPHICS INSTALLATION

Included with your Silver Strike Bowling 2009 kit is a set of decals to place on the side of your cabinet and a brand new marquee. This will help identify your new game as Silver Strike Bowling 2009. By placing and installing these correctly it can help give players instant recognition, even from a distance.

SIDE DECAL INSTALLATION
The following are the instructions on placing your side decals correctly on to the cabinet:

1. Locate the place where the side decals will be viewed best on your cabinet. Refer to the diagram included on the decal sheet and to the right of these instructions for optimal placement.

NOTE: Make sure to have the sides of the cabinet as smooth and flat as possible, removing all previous residue from prior decals, to allow for a higher quality finish.

TIP: Liquid window cleaner can be sprayed onto the sides of the cabinet before placing the decals. The window cleaner will allow the decal to be removed and re-installed without damaging the decal or adhesive. The decal roller or squeegee forces the cleaner out, leaving just the adhesive.

2. Remove the first of the new cabinet side decals from the backing.
3. Center the first decal on the location selected for your cabinet.
4. Using your hands (or a decal roller/squeegee), press down firmly starting from the center and smooth the side decal outward. Make sure all bubbles have been pressed out for a clean, flat surface.
5. Repeat for each of the remaining side decals.

MARQUEE INSTALLATION
The following are the instructions for placing the new marquee in your cabinet:

1. Using the old marquee glass as a template, center the glass on top of your new marquee. Make sure that all the printed images are visible.
2. Using an X-acto® knife or other sharp blade, score the new marquee deeply by following the edges of the old glass as a guide.

CAUTION: Do not cut on table or counter top. Use a cutting board or a disposable surface.
3. Carefully break off any excess material you have cut off.
4. Be sure the light behind the marquee works.
5. Clean the glass on both sides to give players a clear view of the new marquee.
6. Install the marquee graphics and glass securely.
FINAL CONNECTIONS

COIN DOORS, TEST SWITCH, AND VOLUME CONTROLS
Wire the coin doors as per the JAMMA Harness Connection table in Appendix B. Connect the door lamps to the appropriate (+12Vdc or +5Vdc) supply. Some games have separate power supply outputs for the lamps. Install a test switch somewhere convenient inside the coin door area. This switch allows you to enter adjustables, run diagnostics, and see or clear audits. Make it readily accessible through the coin door. Wire it to the Test wire on the JAMMA Harness. Silver Strike Bowling 2009 has the ability to adjust volume at any time during a game. Install two push button switches (not included) inside the coin door for easy access. Connect the switches to the JAMMA harness. Refer to the JAMMA Harness Connection table in Appendix B.

INITIAL POWER-UP
There are several steps you should take when powering up your Silver Strike Bowling 2009 for the first time. This is a quick checklist for you to follow when doing your first initial power-up:

- Plug in the game and turn it ON; be sure the game powers up correctly into the attract mode.
- Adjust volume levels to desired settings.
- Adjust monitor settings for best picture.
  
  **NOTE:** Sound and Video Tests are available through the System Tests Menu. They are beneficial when making any adjustments. Proper monitor and sound adjustment is very important.
- Try all money slots. Drop quarters or tokens through to check the coin mechanisms and insert a bill into the bill acceptor. Make sure the game is adding credits.
  
  **NOTE:** Silver Strike Bowling 2009 supports most bill acceptors. Installing a bill acceptor is highly recommended and will increase your earnings. Refer to your bill acceptor's manual for installation specifications. The bill acceptor can be wired to coin door 3 on the JAMMA.
- Test all of the player input controls. You can use the PLAYER CONTROL TESTS in the SYSTEM SETUP MENU.
- Upon initial power-up the game is set to factory default settings. These settings affect game elements such as value per coin, volume settings, etc. The OPERATOR MENUS section will describe how to alter these settings for your location.

**Congratulations! You have finished installing Silver Strike Bowling 2009!**
SYSTEM SETUP MENUS

Navigating The Menu System
The System Setup menus cover a variety of important areas including collections, tests, game adjustments, and optional settings. You should familiarize yourself with these menus, as they are designed to optimize your game for your location and your business. Pay particular attention to the Collection menus, as they will detail how much money to give to your location. There are also menus that allow you to adjust various split percentages for a variety of different charges. These screens can help you maximize your investment and involve your location in the costs associated with your equipment.

Entering System Setup Mode
There are two ways to enter System Setup. Open the coin door and press the Test 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.

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 four 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
This section displays your machine’s monetary activity, and details the various areas for income and expenses. This section should be reviewed during every collection, to make sure you manage your split correctly.

General Settings
This area allows you to adjust operator adjustables, perform system tests, and reset your game back to factory settings.

Troubleshooting Shortcuts
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.

Silver Strike Settings
This area allows you to adjust settings specific to Silver Strike Bowling 2009 including the player cost schedule, game features, and game audits.

Exit
This will exit the System Setup menus and take you back into the game’s attract mode.
COLLECTIONS & EARNINGS MENU
This menu allows you to perform a collection or view various earnings and fees.

Do Collection
This section is used when making a collection. The various screens will detail the cost breakdowns and show you how much of the cash box is to be paid to the location. Please take some time to familiarize yourself with this section. Using it wisely can save you money.

Clear Unused Cash
Sometimes when you go to make your collection, there is money in the game that has not been played yet. Use this setting to clear the unused cash from the game, so your future collections will reconcile with game play.

Add Free Cash
Use this setting if you wish to add money to the game for free plays that do not advance the hard meter.

Back
This will take you back to the Main Menu.

DO COLLECTION
This screen is the main collection screen. There is a lot of helpful information displayed that will help you with your collection. It is highly recommended that you view this screen with every collection, and reset it when your collection is complete.

This screen displays the following helpful information:

Collection Date Range
The displayed dates are from your last collection until today.

Days In Operation
The number of days the machine was active and available for play since the last collection.

Reset
Highlight this to reset the number of days in operation field to „0”.

Total Income
The total income your machine made for this time period.

More Details
This selection is mainly for online games and is not applicable to Silver Strike Bowling 2009.
Total Fees
The total of the various fees that need to be set aside before making your split.

More Details
Select this to display a breakdown of the various fees, including the optional Hardware Upgrade fees that you can use to help offset the costs of your game with your location.

Note! Hardware Update Fees are included for your convenience, to help you cover the costs of owning and operating your equipment. This is a strictly optional setting that you can use at your discretion.

Balance
The total income minus the total fees.

Operator Portion of Balance
The amount of the collection that the operator keeps.

Operator Owes Location
The amount of the collection that you pay your location.

Back
If you do NOT wish to perform a collection and reset the audits, highlight Back to exit this screen and return to the Collections & Earnings menu.

Do Collection and Exit
If you wish to perform a collection and reset the audits (recommended), highlight Do Collection and Exit and press Start. This will set all the fields in the Do Collection screen to zero. Be sure to empty your cash box at the same time, so these screens will match the money at your next collection.

GENERAL SETTINGS
The General Settings menu houses various adjustable settings relating to the cabinet, and is divided into three sections.

Operator Adjustable
This area allows you to adjust options like volume, attract mode sounds, and money slot settings.

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

Advertisements
This area allows you to manage various graphic and text advertisements on your machine. This section is currently unavailable but is planned for a future update.

Back
This will take you back to the Main Menu.
OPERATOR ADJUSTABLES
This menu contains adjustable settings that pertain to you and your business. Please familiarize yourself with this section, as it can help you maximize the game’s earning potential.

General Adjustments
This area allows you to adjust options like coin message, game mode and monitor mode.

Money Slot Adjustments
This area allows you to adjust the settings of your various money slots on your cabinet.

Sound Adjustments
This area allows you to adjust the various sound settings including attract mode sounds, game volume, and stereo setup.

Collection Settings
This important area allows you to adjust various fees and splits for your collections.

Reset To Factory Settings
This option allows you to reset all the settings found in the Operator Adjustables and Silver Strike Settings sections to factory defaults.

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

GENERAL ADJUSTMENTS

Coin Message
Is set to “Insert $” by default and requires the player to insert money. No other modes are available.

Game Mode
This lets you toggle between money/free play. The default is set to Money Play.

2nd Monitor Mode
You can connect a second monitor to the extra video connector on the system box, which is great for promotions or special events. Select S-Video if your second monitor is a television screen, or SVGA if your second monitor is an RGB monitor. The default setting is S-Video.

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.
MONEY SLOT ADJUSTMENTS

Money Slot 1 (all machines)
This adjusts how much one pulse equals for Money Slot 1.
The default is set to $0.25.

Money Slot 2 (kits only)
This adjusts how much one pulse equals for Money Slot 2.
The default is set to $0.25.

Money Slot 3
This adjusts how much one pulse equals for Money Slot 3.
The default is set to $0.25.

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

No
This will not perform the reset and take you back to the previous menu.

Yes
This will perform the reset and take you back to the previous menu.

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

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 Volume from OFF to 100%. The default is set to 20%.

Attract Mode Sounds
This adjusts how often sounds are played in the attract mode: Never, Rarely (every 20th time), Sometimes (every 10th time), Often (every 5th time), 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.
COLLECTION SETTINGS
Silver Strike Bowling 2009 allows you to adjust costs and percentages for the various income types that are received. Use this menu to determine how much you want your location to help you pay for these charges and services.

Set Hardware Update Fee
This menu allows you to adjust the Hardware Update Fee. This fee is included for your convenience, as a method to have the location pay for part of your equipment. The default value is $0.00 per week.

Operator/Location Income Splits
Use this menu to fine-tune your splits for any generated income. The default settings are displayed on the accompanying screen.
Since this is an offline version, income from Player Accounts and Gift Cards are set to zero.

Operator/Location Fee Splits
Use this menu to determine how you wish to split the various fees with your location. For example, you may want to adjust the split in your favor to help cover the cost of the equipment.
Since this is an offline version, most fees are disabled and set to zero.
Tax Settings
Many states require special taxes or license fees that affect your bottom line. Use this menu to separate these costs from your collection before making your normal split.

Set Tax Rate
This menu allows you to adjust your current tax rate percentage.

Set Tax Type
This menu helps you determine who pays these taxes.

Set Tax Split
This menu allows you to split the tax fees with the location.

Reset to Defaults
This menu will set all of the collection settings to their factory default values. A verification screen will display to make sure you agree to the change.

Back
This will take you back to the Collection Settings menu.

RESET TO FACTORY SETTINGS
This menu will reset ALL settings in the Operator Adjustments and Silver Strike Settings sections to their default values. A verification screen will display to make sure you agree to the change.
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 including trackball, buttons, and money slots.

Mechanical Meter Test
This test makes the hard meter adjust by one to make sure it is functioning properly.

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

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

Screen Size Adjustment
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 ADJUSTMENTS

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 ADJUSTMENTS

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.

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.
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

Use this screen to test all of the inputs, including the trackball, buttons, and money slots. When an input is active the appropriate graphic image will light. Press the Left, Right and Start buttons simultaneously to exit this test screen.

MECHANICAL METER TEST

Click Meter
This test makes the hard meter adjust by one to make sure it is functioning properly.

Back
This will take you back to the System Tests menu.
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 and USB 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 test is not available on Silver Strike Bowling 2009 offline games.

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.

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.

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

VERSION INFO
This is a list of your machine’s software version.
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 Hardware Tests 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.

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.

NOTE: Cooling information on your system may show up as dashed lines just as shown in the picture. This is because some motherboards do not allow external access to the temperature and fan speeds. This should not be considered a problem.

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 (online only)
Check Cooling
Check Hard Drive
Hardware & Software
Communications Settings (online only)
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.
SILVER STRIKE SETTINGS

Player Cost Schedule
This option allows you to adjust the amount of money it costs a player to play various game types.

Game Audits
This area allows you to view your money audits, game purchase audits, and reset your collections and audits.

Game Options
This area allows you to adjust options specific to Silver Strike Bowling.

Reset Leaderboards
This will clear all of the game’s local leaderboards and high-score screens.

Ticket Dispenser
This area allows you to set and adjust optional ticket dispenser values and settings.

Back
This will take you back to the Main Menu.

PLAYER COST SCHEDULE
This screen details the costs of various play selections. The player cost is shown as a total, with the Operator Portion and the ITNet Portion broken out.

Single Play
This option lets you adjust how much it costs a player to play a single 10-frame game of bowling. The default is set to $1.00.

Series Play
This option lets you adjust how much it costs a player to play a 3-game series. The default is set to $2.50.

Throwdown
This option lets you adjust how much it costs a player to play a single game of Throwdown, the bracketed contest mode for 4, 8 or 16 players. The default is set to $2.00 per player.

SSB Survivor
This option lets you adjust how much it costs a player to play a Survivor game. The default is set to $0.50.

3-Frame Practice
This option lets you adjust how much it costs a player to play a 3-frame practice game. The default is set to $0.50.

3-Frame Buy In
This option lets you adjust how much it costs a player to buy a second set of 3 frames. The default is set to $0.50.

View Fixed Costs
Selecting View Fixed Costs displays payment settings and splits for some items that are not adjustable. There are no fixed costs for Silver Strike Bowling 2009.
Reset Defaults
This resets all values to their default value located on this page.

Back
Select this to return to the Silver Strike Settings menu.

GAME AUDITS
This section displays various counts and totals for a variety of areas of interest. The following values are based on the last reset, the date of which is shown at the top of the screen.

Coin Slot 1 (All Machines)
Coin Slot 2 (Kits only)
Bill Acceptor
Lifetime Money In
This field shows how much total money your machine has made in its lifetime. This field is cumulative and is not affected by resetting the audits on this screen.

Bowlers Club Cards Purchased (Online Only)
Number of Tickets Paid
Ticket Value %age Payout

More
The available audits span a number of different screens. Selecting More brings you to the next page of audit information. In total there are seven pages of audits.

Reset Audits
This will reset the fields on all seven audits screens to zero, and update the date of the last audit reset. The Lifetime Money In field will not be affected by this function.
GAME OPTIONS
Game Options presents a variety of game-specific features that can be turned on or off based on the needs of your location.

Vegas Bowling
This is a selectable game mode that displays cards for every mark earned. The default setting is OFF for this feature. If the displaying of cards is allowed in your area, turn this option ON for an added option to players.

Buy Player Cards (Online Only)
This feature is not available on Silver Strike Bowling 2009.

Sweepstakes (Online Only)
This feature is not available on Silver Strike Bowling 2009.

Announce Volume (Online Only)
This feature is not available on Silver Strike Bowling 2009.

Reset Values
This will reset the fields on all game option menus to their default settings.

More
The available options are displayed on two screens. Selecting More brings you to the next page of game options.

Delay Timeout
This sets the amount of time allowed before any player input is noticed. If the timer runs out before a player moved or the ball is thrown, the ball will be lost. Use this in conjunction with the Ball Timeout setting below to determine when a game is terminated due to timeout.

Ball Timeout
This adjusts the number of balls allowed before ending an unattended game. See Delay Timeout above.

3-Frame Practice
This setting turns the 3-frame game option on or off. The default setting is Off.

Survivor # Misses
This setting adjusts the settings for the new Survivor Mode. If you want players to have a longer play experience, adjust the number of missed strikes to a higher number. If you want players to be eliminated faster, adjust the number of missed strikes to a smaller number. The default setting for this game feature is 3.

Reset Values
This will reset the fields on all 3 game options menus to their default settings. The Lifetime Money In field will not be affected by this function.
RED PIN BONUS FREE GAME
Once the Red Pin Bonus Free Game mode is turned on, operators will have the option to set the number of consecutive Red Pin strikes needed for a free game award.

Use the menu settings to award a free game for anywhere from one Red Pin strike to 8 consecutive Red Pin strikes.

Note that the default for this feature is OFF.

Reset # Games Awarded
This will reset the number of free games awarded to zero.

Reset Values
This will reset the fields on all game option menus to their default settings.

RESET LEADERBOARDS
Use this menu to clear the leaderboards or high-score screens. You can reset individual leaderboards or all of them at once.

TICKET DISPENSER
Silver Strike Bowling 2009 supports the addition of optional ticket dispenser. Use this menu to set up and test your dispenser, and apply values to the tickets for a variety of award options.

This option will only work if an optional ticket dispenser is installed. Be sure to set the Ticket Dispenser setting to ON from the Dispenser Settings menu.
## TROUBLESHOOTING GUIDE

### Video Problems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture on 27” Monitor</td>
<td>I/O Board Dip Switch settings are wrong.</td>
<td>Adjust Dip Switch settings to match the resolution of the monitor you are using. Refer to I/O Dip Switch Settings in Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Incorrect video connection configuration.</td>
<td>Be sure the video connections are correct according to the type of monitor you are using. Refer to the diagrams in Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Monitor does not have a proper A.C. voltage input.</td>
<td>Verify A.C. power to the Nighthawk System box. Verify monitor is working on a known good system.</td>
</tr>
<tr>
<td></td>
<td>Monitor is defective.</td>
<td>Repair or replace.</td>
</tr>
<tr>
<td></td>
<td>Nighthawk System box is defective</td>
<td>Go to Nighthawk System box troubleshooting section.</td>
</tr>
<tr>
<td>No picture but game sounds are heard</td>
<td>Incorrect video connection configuration.</td>
<td>Verify video is connected to the system correctly. Refer to the diagrams in Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Since you hear game sounds the system is working.</td>
<td>Review no picture troubleshooting section above.</td>
</tr>
<tr>
<td>Scrambled Picture</td>
<td>I/O board Dip Switch settings are set wrong.</td>
<td>Adjust Dip Switch settings to match the resolution of the monitor you are using. Refer to Dip Switch Settings in Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Incorrect video connection configuration.</td>
<td>Be sure the video connections are correct according to the type of monitor you are using. Refer to the diagrams in Appendix D.</td>
</tr>
<tr>
<td>Entire picture is not seen on the screen or it does not fill the entire screen</td>
<td>Misadjusted monitor.</td>
<td>Adjust the monitor width and height. Use video screen adjustment in system tests. Refer to the monitor manual.</td>
</tr>
<tr>
<td>Missing or washed out colors</td>
<td>Bad Video connections</td>
<td>Verify continuity from the monitor to the video out on the I/O board. Red, Green, Blue video signal. <em>Mid. and Low resolution monitors only.</em></td>
</tr>
<tr>
<td></td>
<td>Contrast and brightness on the monitor needs to be adjusted.</td>
<td>Refer to the monitor manual to make adjustments.</td>
</tr>
<tr>
<td></td>
<td>Defective Monitor.</td>
<td>Verify by connecting a known good monitor to the system.</td>
</tr>
</tbody>
</table>
### Sound Problems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Sound</td>
<td>Audio Cable between the I/O board and the Nighthawk system box are not connected.</td>
<td>Verify audio cables are connected. Refer to Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Speakers are not connected properly.</td>
<td>Verify continuity from the I/O board speaker output pins to the speakers. Refer to Appendix D.</td>
</tr>
<tr>
<td></td>
<td>Volume is set to the lowest level.</td>
<td>Adjust the volume to an audible level.</td>
</tr>
<tr>
<td></td>
<td>Attract mode sounds may be set to all off. You will have sounds when playing the game.</td>
<td>Choose one of the 5 Attract Mode sound options in Sound Adjustments.</td>
</tr>
<tr>
<td></td>
<td>Defective I/O board.</td>
<td>Verify on a known working system. Replace if necessary.</td>
</tr>
<tr>
<td></td>
<td>Defective Nighthawk system box.</td>
<td>Be certain all other possibilities are explored before replacing the Nighthawk system box.</td>
</tr>
<tr>
<td></td>
<td>12V not present at the I/O Board</td>
<td>Look for broken wire or loose pin on the I/O Power Cable. Yellow = 12V, Black = Gnd.</td>
</tr>
<tr>
<td>Distorted or scratchy game sounds</td>
<td>Bad speaker.</td>
<td>Replace blown speaker.</td>
</tr>
<tr>
<td></td>
<td>Loose speaker or grill cover is causing vibration.</td>
<td>Verify all components are installed properly and securely.</td>
</tr>
<tr>
<td></td>
<td>Loose/defective audio cables from the Nighthawk system box to the I/O board.</td>
<td>Check the audio cable connections. Replace cable.</td>
</tr>
<tr>
<td></td>
<td>Ground sleeves on the RCA cables may be loose.</td>
<td>Bend the RCA cable sleeves slightly for a tight fit.</td>
</tr>
<tr>
<td></td>
<td>Defective I/O board.</td>
<td>Verify on a known working system. Replace if necessary.</td>
</tr>
<tr>
<td></td>
<td>Defective Nighthawk system box.</td>
<td>Be certain all other possibilities are explored before replacing the Nighthawk system box.</td>
</tr>
</tbody>
</table>

### Nighthawk System Box Problems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No video and no green lights on the I/O board. Fans are not heard on the Nighthawk System box.</td>
<td>No A.C. power to the Nighthawk system box.</td>
<td>Verify A.C. voltage is connected to the Nighthawk system box.</td>
</tr>
<tr>
<td></td>
<td>Power switch on the Nighthawk system box is off.</td>
<td>Flip the Nighthawk system box power switch to on.</td>
</tr>
<tr>
<td></td>
<td>Main cabinet power switch is off.</td>
<td>Be certain the main cabinet switch is set to on.</td>
</tr>
<tr>
<td></td>
<td>Defective Nighthawk system box.</td>
<td>Be certain all other possibilities are explored before replacing the Nighthawk system box.</td>
</tr>
<tr>
<td>No video and no green lights on the I/O board. Fans are heard on the Nighthawk System box.</td>
<td>DC power cord not connected from Nighthawk system box to I/O board.</td>
<td>Connect the DC power cord from the Nighthawk system box to the I/O board.</td>
</tr>
<tr>
<td></td>
<td>Defective I/O board.</td>
<td>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.</td>
</tr>
</tbody>
</table>
## Control Problems

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

## Error Messages

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most on screen error messages explain themselves.</td>
<td>Multiple</td>
<td>Follow the onscreen instructions. Many times turning the game off for ten seconds and then turning it back on will solve the error.</td>
</tr>
<tr>
<td>Flash code 6 on I/O board Diode D102</td>
<td>CID is not connected or is defective</td>
<td>Check the USB cable connection. Swap with a known good cable. Call I.T. Service for further assistance.</td>
</tr>
<tr>
<td>Please turn game off, then connect Cabinet Identification Device (CID) then turn game back on.</td>
<td>CID is not connected</td>
<td>Connect CID to the Nighthawk system box via USB cable.</td>
</tr>
<tr>
<td></td>
<td>CID cable is defective</td>
<td>Try or swap with a known good USB cable.</td>
</tr>
<tr>
<td></td>
<td>If LED is not flashing - Call I.T. Service</td>
<td>I.T. service will instruct you what to do.</td>
</tr>
<tr>
<td>Flash code 1 on I/O board diode D102</td>
<td>This indicates to USB connection fail from System box to I/O board.</td>
<td>Connect USB Cable.</td>
</tr>
<tr>
<td>Please turn game off, Then connect USB I/O board and then turn game back on.</td>
<td>USB cable is not connected</td>
<td>Connect the USB cable.</td>
</tr>
<tr>
<td></td>
<td>USB cable is Defective</td>
<td>Try with a known good USB cable.</td>
</tr>
<tr>
<td></td>
<td>I/O board has no power connection.</td>
<td>Verify power to the I/O board.</td>
</tr>
<tr>
<td></td>
<td>I/O board is defective</td>
<td>Swap with a known good I/O board. Possibly bad. Call I.T. service.</td>
</tr>
</tbody>
</table>
### Flash Code Messages

<table>
<thead>
<tr>
<th>Flash Code (I/O Diode D102)</th>
<th>Code Description</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash code 2</td>
<td>This indicates to USB connection fail from System box to I/O board.</td>
<td>Connect USB Cable.</td>
</tr>
<tr>
<td>Flash Code 3</td>
<td>INFO: Last reboot due to Watchdog time out.</td>
<td>Turn off game, wait 10 seconds, turn game on. If the problem persists call IT tech support.</td>
</tr>
<tr>
<td>Flash Code 4</td>
<td>Error when updating USB CID to latest version.</td>
<td>Turn off game, wait 10 seconds, turn game on. If the problem persists call IT tech support.</td>
</tr>
<tr>
<td>Flash Code 5</td>
<td>Updated USB CID was detected.</td>
<td>Turn off game, wait 10 seconds, turn game on. If the problem persists call IT tech support.</td>
</tr>
<tr>
<td>Flash code 6</td>
<td>CID is not connected or is defective</td>
<td>Check the USB cable connection. Swap with a known good cable. Call I.T. Service for further assistance.</td>
</tr>
<tr>
<td>Flash Code 7</td>
<td>CID Malfunction.</td>
<td>Make sure all connections are in place. Turn off game, wait 10 seconds, turn game on.</td>
</tr>
<tr>
<td>Flash Code 10</td>
<td>Error when updating USB I/O Board to latest version.</td>
<td>Turn off game, wait 10 seconds, turn game on. If the problem persists call IT tech support.</td>
</tr>
<tr>
<td>Flash Code 11</td>
<td>Updated USB I/O Board was detected.</td>
<td>Turn off game, wait 10 seconds, turn game on. If the problem persists call IT tech support.</td>
</tr>
<tr>
<td>Flash Code 12</td>
<td>I/O Board is disconnected.</td>
<td>Make sure all connections are in place. Turn off game, wait 10 seconds, turn game on.</td>
</tr>
<tr>
<td>Flash Code 13</td>
<td>I/O Board malfunction.</td>
<td>Make sure all connections are in place. Turn off game, wait 10 seconds, turn game on.</td>
</tr>
<tr>
<td>Flash Code 14</td>
<td>Incompatible I/O Board.</td>
<td>Make sure all connections are in place. Turn off game, wait 10 seconds, turn game on.</td>
</tr>
</tbody>
</table>

### Miscellaneous Problems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to exit Operator Menus</td>
<td>Dipswitch SW202 position 4 is in the on position.</td>
<td>Set position 4 of SW202 to off. Press start to exit.</td>
</tr>
<tr>
<td></td>
<td>Test switch wired from the I/O board is closed.</td>
<td>Verify satellite test switch is not closed.</td>
</tr>
<tr>
<td>No fluorescent light</td>
<td>No 120 volts A.C. power going to the light fixture.</td>
<td>Verify A.C. voltage to the light fixture.</td>
</tr>
<tr>
<td></td>
<td>Defective fluorescent light.</td>
<td>Replace fluorescent light.</td>
</tr>
<tr>
<td></td>
<td>Defective starter</td>
<td>Replace the starter.</td>
</tr>
<tr>
<td></td>
<td>Defective ballast</td>
<td>Replace the ballast.</td>
</tr>
<tr>
<td>Coin Meter is not working</td>
<td>Defective Coin Meter</td>
<td>Replace with a known good one.</td>
</tr>
<tr>
<td></td>
<td>Not wired properly</td>
<td>Connect one lead to +5 or +12 volts depending on device. The other lead to count 1 on the JAMMA connector.</td>
</tr>
<tr>
<td></td>
<td>Defective I/O board</td>
<td>Replace with a known good board.</td>
</tr>
</tbody>
</table>
## APPENDIX B
### JAMMA, TRACKBALL, AND I/O POWER CONNECTIONS

#### JAMMA Harness Connection

<table>
<thead>
<tr>
<th>SOLDER SIDE</th>
<th>PARTS SIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIRE COLOR</td>
<td>FUNCTION</td>
</tr>
<tr>
<td>*</td>
<td>A</td>
</tr>
<tr>
<td>*</td>
<td>B</td>
</tr>
<tr>
<td>*</td>
<td>C</td>
</tr>
<tr>
<td>*</td>
<td>D</td>
</tr>
<tr>
<td>*</td>
<td>E</td>
</tr>
<tr>
<td>*</td>
<td>F</td>
</tr>
<tr>
<td><strong>KEY</strong></td>
<td></td>
</tr>
<tr>
<td>Count 2</td>
<td></td>
</tr>
<tr>
<td>Yellow-Green</td>
<td>Left Speaker (-)</td>
</tr>
<tr>
<td>White-Green</td>
<td>Right Speaker (-)</td>
</tr>
<tr>
<td>Green-Black</td>
<td>Video Green</td>
</tr>
<tr>
<td>White</td>
<td>Video Sync</td>
</tr>
<tr>
<td>Green-Blue</td>
<td>Coin 2</td>
</tr>
<tr>
<td>Orange-Yellow</td>
<td>Volume Down</td>
</tr>
<tr>
<td>Black</td>
<td>GND</td>
</tr>
<tr>
<td>Black</td>
<td>GND</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NOTE: Power is NOT routed through the JAMMA connector.*

---

#### Trackball Harness Connector Pin Outs

<table>
<thead>
<tr>
<th>I/O Board Connector</th>
<th>Trackball Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN WIRE #6 - Black</td>
<td>PIN WIRE #1 – Black</td>
</tr>
<tr>
<td>PIN WIRE #1 - Red</td>
<td>PIN WIRE #2 – Red</td>
</tr>
<tr>
<td>PIN WIRE #2 - Yellow</td>
<td>PIN WIRE #3 – Yellow</td>
</tr>
<tr>
<td>PIN WIRE #3 - Green</td>
<td>PIN WIRE #4 – Green</td>
</tr>
<tr>
<td>PIN WIRE #5 - Blue</td>
<td>PIN WIRE #6 – Blue</td>
</tr>
<tr>
<td>PIN WIRE #4 - Purple</td>
<td>PIN WIRE #6 – Purple</td>
</tr>
</tbody>
</table>

#### I/O Power Cable Pin Outs

<table>
<thead>
<tr>
<th>Pin Number</th>
<th>Wire Color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yellow</td>
<td>+ 12 Volts DC</td>
</tr>
<tr>
<td>2</td>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>3</td>
<td>Red</td>
<td>+ 5 Volts DC</td>
</tr>
<tr>
<td>4</td>
<td>Black</td>
<td>Ground</td>
</tr>
</tbody>
</table>
APPENDIX C
REPLACEMENT PART NUMBERS

Please refer to these IT part numbers when placing orders.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>900196007R</td>
<td>CABINET IDENTIFICATION DEVICE, BOWLING 2009</td>
</tr>
<tr>
<td>915000285R</td>
<td>CABLE ASSY, AUDIO CABLE, 6 FT 2RCA PLUG TO 2RCA PLUG</td>
</tr>
<tr>
<td>915250304R</td>
<td>CABLE ASSY, I/O POWER FOR KITS</td>
</tr>
<tr>
<td>915000745</td>
<td>CABLE ASSY, POWER CORD. A.C.</td>
</tr>
<tr>
<td>915000315R</td>
<td>CABLE ASSY, SVG, 6 FT. DB15HD M-M</td>
</tr>
<tr>
<td>915000310R</td>
<td>CABLE ASSY, USB CABLE, 6 FT.</td>
</tr>
<tr>
<td>915000173R</td>
<td>CABLE ASSY, TRACKBALL/GUN INTERFACE</td>
</tr>
<tr>
<td>999000060R</td>
<td>CARD READER BLANKING PLATE</td>
</tr>
<tr>
<td>825100265R</td>
<td>CONTROL PANEL OVERLAY, DIECUT WITH CONTROL LABELS/TB HOLE</td>
</tr>
<tr>
<td>900265100</td>
<td>CONTROL PANEL SUB-ASSY, SSBC FULLY DRESSED CONTROL PANEL</td>
</tr>
<tr>
<td>840265303</td>
<td>DVD UPGRADE, INSTRUCTIONS SSBC TO SSB 09</td>
</tr>
<tr>
<td>765265297</td>
<td>DVD UPGRADE, SSBC2009 DVD DISK</td>
</tr>
<tr>
<td>840500288R</td>
<td>SILVERSTRIKE.COM CARD</td>
</tr>
<tr>
<td>900100303R</td>
<td>I/O BOARD FOR US SSB 09 KIT</td>
</tr>
<tr>
<td>925000303</td>
<td>KIT - US SSB 09</td>
</tr>
<tr>
<td>9250000303CP</td>
<td>KIT - US SSB 09 W/CONTROL PANEL</td>
</tr>
<tr>
<td>815000303</td>
<td>MANUAL, SSB 09</td>
</tr>
<tr>
<td>820000303</td>
<td>MARQUEE, SSB 09</td>
</tr>
<tr>
<td>850000001R</td>
<td>PUSHBUTTON ASSY, RED WITH VERTICAL MOUNTED SWITCH</td>
</tr>
<tr>
<td>850000003R</td>
<td>PUSHBUTTON ASSY, WHITE WITH VERTICAL MOUNTED SWITCH</td>
</tr>
<tr>
<td>845000265</td>
<td>QUICK INSTALL GUIDE, SSB</td>
</tr>
<tr>
<td>830000265</td>
<td>SIDE DECAL, SSB</td>
</tr>
<tr>
<td>900965297</td>
<td>SYSTEM BOX, SSBC 2009</td>
</tr>
<tr>
<td>880000030R</td>
<td>TRACKBALL ASSY, 3&quot; WHITE</td>
</tr>
<tr>
<td>885000030</td>
<td>TRACKBALL PLATE FOR 3&quot; TRACKBL WITH STANOFFS</td>
</tr>
</tbody>
</table>
APPENDIX D
NIGHTHAWK COMPONENT DIAGRAMS

Nighthawk System Box Diagram

I/O Board Diagram for KITS
This I/O Board accepts a JAMMA connector.
Note: Some elements are not available on I/O boards for Offline Kits.
Video and I/O Dip Switch Settings

**Video**

<table>
<thead>
<tr>
<th>Dedicated</th>
<th>Kit</th>
</tr>
</thead>
</table>
| 800 x 600       | SVGA
| (default) 37.8 KHz | 800 x 600 37.8 KHz |
| 640 x 480       | VGA
| 31.5 KHz        | 640 x 480 31.5 KHz |
|                 | MID
|                 | 512 x 384 25 KHz |
|                 | LOW
|                 | 384 x 256 15 KHz |

**Sw201**

OFF  ON

**Sw200**

OFF  ON

**Sw202**

OFF  ON

ALWAYS ON

DO NOT CHANGE

**ATTENTION!**

SET YOUR Sw201 DIP SWITCHES FOR THE CORRECT RESOLUTION

**Sw201 Video**

MEDIUM RESOLUTION SHOWN

OFF  ON
Detailed Cable Connection Diagram for KITS
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APPENDIX F
INFORMATIONAL GUIDES

MENU NAVIGATION SHORTCUTS

Change Collection Settings
- Push the red System Setup button inside the coin door
- Select General Settings menu
- Select Operator Adjustables menu
- Select Collection Settings menu
- Select the menu that you want changed

Add Operator Free Cash
- Push the red System Setup button inside the coin door
- Select Collection and Earnings
- Select Add Free Cash
- Move the trackball left/right to select the desired dollar amount

GAME ICON DESCRIPTIONS

Cooling Icon
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 x121 for assistance.

Tickets Owed Icon
The tickets owed icon (pictured right) will appear in the game's attract mode to warn you that the ticket dispenser is not dispensing tickets. It then tells you how many tickets are owed to players.
APPENDIX G
MOUNTING TEMPLATES

TRACKBALL ORIENTATION DIAGRAM
(VIEWED FROM UNDERSIDE OF CONTROL PANEL)

INSTALLATION NOTES:
1) THE WIRING HARNESS SHOULD POINT AWAY FROM THE MONITOR AND TO THE LEFT.
2) GROUND PIN SHOULD BE TOWARD THE MONITOR AND ON THE RIGHT SIDE.
TRACKBALL MOUNTING TEMPLATE

TOOLS REQUIRED:
DRILL, 9/32" OR 5/16" & 3/4" DRILL BITS, SABRE SAW, SCISSORS, & ROUTER

[Diagram of trackball mounting template with numbered points (1 to 8) and a note to cut along a marked line]

INSTRUCTIONS:
1) CUT THE TEMPLATE OUT WITH A PAIR OF SCISSORS ALONG THE NOTED LINE. TAPE THIS TEMPLATE TO THE TOP OF THE CONTROL PANEL AS FAR AWAY FROM THE MONITOR AS POSSIBLE, MAKING SURE THAT THE TRACKBALL WILL CLEAR THE CABINET BENEATH IT.
2) USING A SHARP OBJECT, MARK THE (8) POINTS SHOWN HERE ON THE CONTROL PANEL. USING A PENCIL, TRACE THE OUTSIDE OF THE TEMPLATE. REMOVE THE TEMPLATE.
3) DRILL HOLES 1-4 WITH THE 9/32" OR 5/16" DRILL BIT.
4) DRILL HOLES 5-8 WITH THE 3/4" DRILL BIT.
5) ROUTE THE CROSSHATCHED REGION TO A DEPTH OF ABOUT .075" (ABOUT THE THICKNESS OF A NICKEL).
6) USING THE SABRE SAW CUT OUT THE CENTER PORTION BY CUTTING BETWEEN HOLES 5-8.
RIGHT BUTTON DRILL TEMPLATE

The center of button #1 should be located 2.75" above and 8" to the right of the center of the trackball.

1

LEFT BUTTON DRILL TEMPLATE

The center of button #2 should be located 2.75" above and 9" to the left of the center of the trackball.

2
1) PLACE THIS TEMPLATE IN THE LOWER RIGHT BACK SIDE OF THE CABINET AND TAPE IT IN PLACE.
2) MARK THE CENTERS OF THE FOUR OUTSIDE HOLES AND THE LARGE CENTER HOLE USING AN AWL, NAIL, OR OTHER SHARP OBJECT. REMOVE THE TEMPLATE.
3) DRILL THE FOUR 7/32" HOLES CENTERED ON THE FOUR OUTSIDE MARKS.
4) DRILL THE CENTER HOLE USING A 3.5" HOLE SAW.
1) ALIGN THIS TEMPLATE TO THE RIGHT EDGE AND LOWER EDGE OF THE LOWER BACK SIDE OF THE CABINET AND TAPE IT IN PLACE.
2) MARK THE CENTERS OF THE FOUR OUTSIDE HOLES AND THE LARGE CENTER HOLE USING AN AWL, NAIL, OR OTHER SHARP OBJECT. REMOVE THE TEMPLATE.
3) DRILL THE FOUR 7/32" HOLES CENTERED ON THE FOUR OUTSIDE MARKS.
4) DRILL THE CENTER HOLE USING A 3.5" HOLE SAW.
Contact Information

IT Sales and Service

To purchase additional Silver Strike machines or any of IT's other fine products please visit IT's website at www.itsgames.com and click on PRODUCTS!

General Numbers

IT Sales Hotline:
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Phone: 800-345-8172

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See Appendix C for replacement part numbers.