





Presented by
Retro Arcade LLC



Ice Cold Beer Manual

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Retro Arcade

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1. Legal

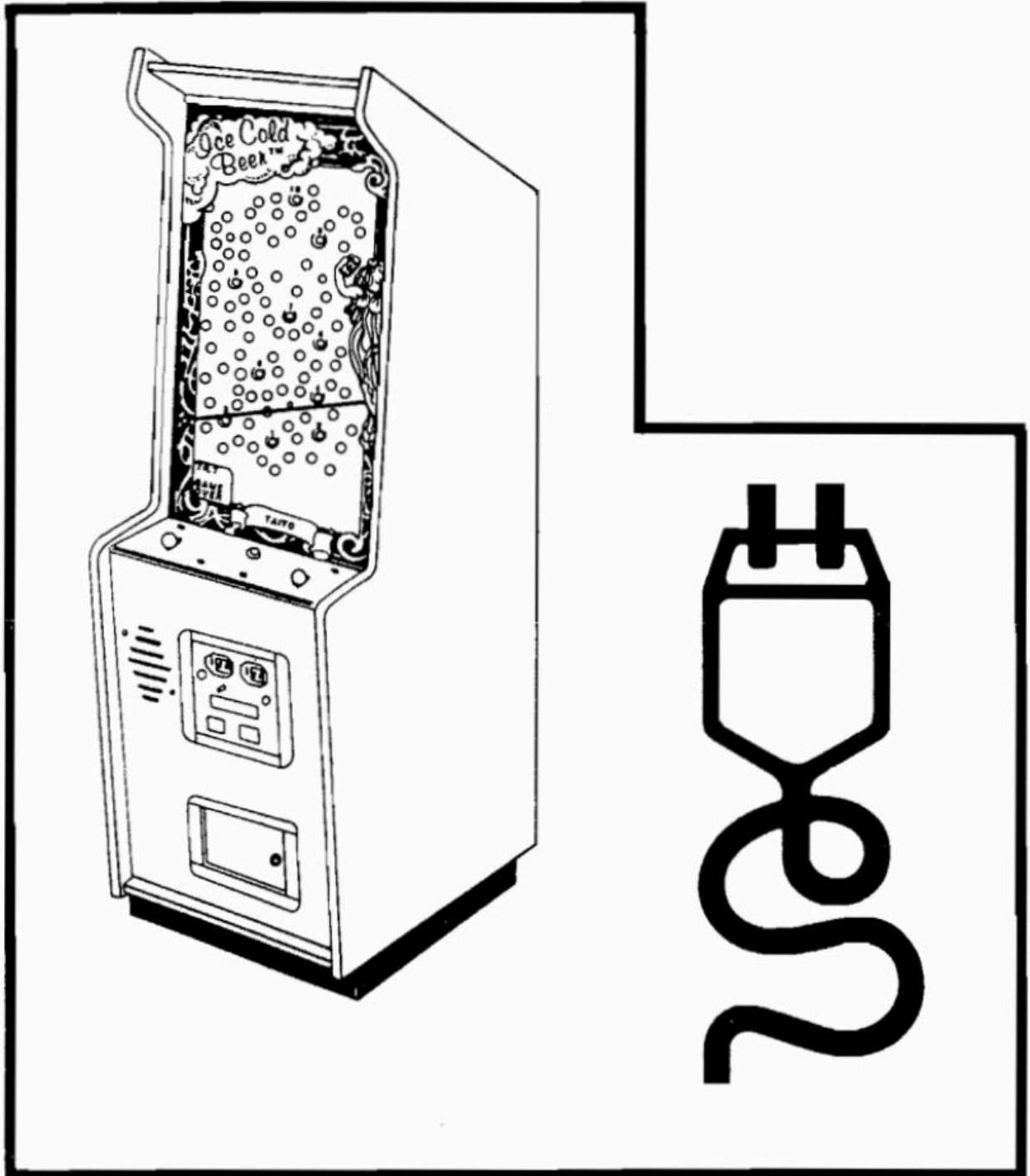


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2. “ICE COLD BEER” GAME SET-UP



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2.1. Game Features

TAITO CORPORATION'S "ICE COLD BEER"™ reproduced by Retro Arcade LLC takes the classic game feel executed perfectly with modern technology for a reliable and easy to service device sure to thrill your customers.

App downloadable from your phone app store or [here](#).

Stepper motors and screw drives make the movement of the bar reliable and robust in function.

FPGA hardware emulation allow the original code to be played perfectly, without the problems associated with maintaining old hardware.

The Control Panel has a polycarbonate overlay, so cigarette marks and mars (or drinks and food) can easily be wiped clean. This overlay can be replaced if necessary.

The Coverglass is made of fully Tempered Glass to minimize breakage.

The Back Service Door is fully removeable and the playfield may be removed as a unit making servicing of the game easier.

Leg levelers are installed on the game.

An Optional Ticket Dispenser will be available. For further information contact Retro Arcade.

2.1.1. Warrantry

· Machine warranty will consist of 6 months for the main boards and motors and 90 days on all other components. We will house replacement parts for either warranty claims or purchase through our sister company Paradise Arcade Minneapolis MN. Replacement parts can be shipped directly to the customer or to the distributor to send to your end customer. As these are commercial machines and have been designed to allow easy access to all components, the end customer is expected to remove non-working components and replacement parts will be sent.

2.2. Introduction

Retro Arcade LLC is pleased to re-introduce Taito's "ICE COLD BEER"™, a celebrated remake of this arcade icon.

The object of the game is for the player to maneuver the ball with the joysticks that moves the bar to position the ball in the lit hole. Each side of the bar can be moved independently to position the ball.

The vertical playfield is filled with non lit holes so you must use all your skills to position the ball to go in the right lit hole.

The easier lit holes are at the bottom of the playfield so you have to have steady concentration to reach the top hole.

ICE COLD BEER™ has several features like our self prompt feature. If you take too long to move the bar it will begin on its own.

The Bonus feature allows you to start out with bonus points and the quicker your ball goes in the lit hole the more bonus points you receive.

The game is designed to be entertaining to all age groups and will be available in a more child friendly form called ZEKE'S PEAK™.

2.3. Phone App Installation

Download and install the app from the [iOS Store](#) , or [Google Play Store](#)

2.4. Initial Game Inspection

“ICE COLD BEER”™ is shipped ready for operation, but a last visual check should be made to insure the game is in good condition. Please verify the following before turning the game on.

1. Check the exterior of the game for shipping damage, chips, dents or broken parts.
2. Open the Rear Service Door and check for any interior damage.
3. Make sure there isn't any damage to the wiring.
4. Check the printed circuit board, making sure there is no damage to the components.
5. Check for loose foreign objects, especially metal objects which may cause electrical problems.
6. Check Plug-in Connectors making sure they are firmly in their sockets.
7. Check the Coin Door for any possible damage, especially the switches.
8. Lift off the control panel and ensure the button and joysticks are functioning properly.

2.5. Pre Game Installation

ICE COLD BEER™ has leg levelers which should be adjusted before your game is ready to play. Not adjusting the leg levelers properly will prevent the ball from returning to the bar reliably. Be sure you readjust the levelers whenever you move the game from one location to another.

Remove the glass from the front of the game and place the ball included into any of the holes in the playfield.

Visually inspect the gate to see if the ball can be visualized through gate.

2.6. Power Requirements

“ICE COLD BEER”™ game is shipped ready for operation at 120VAC, 60 Hz with a power consumption of approximately 100 Watts.

2.7. Power On/Off Switch

To minimize the hazard of electrical shock while servicing the game, a Power ON/OFF Switch has been provided. This switch is located in the upper right back of the cabinet.

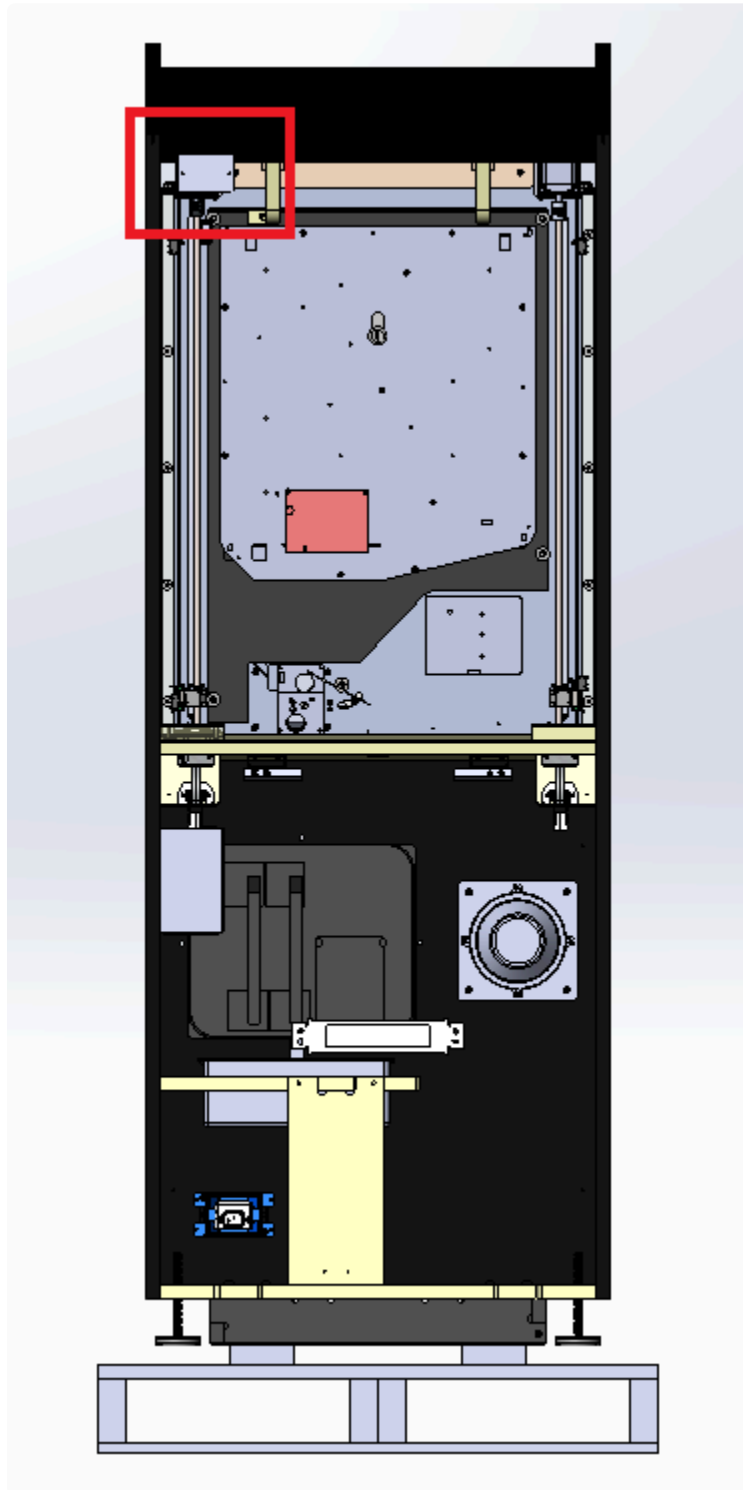
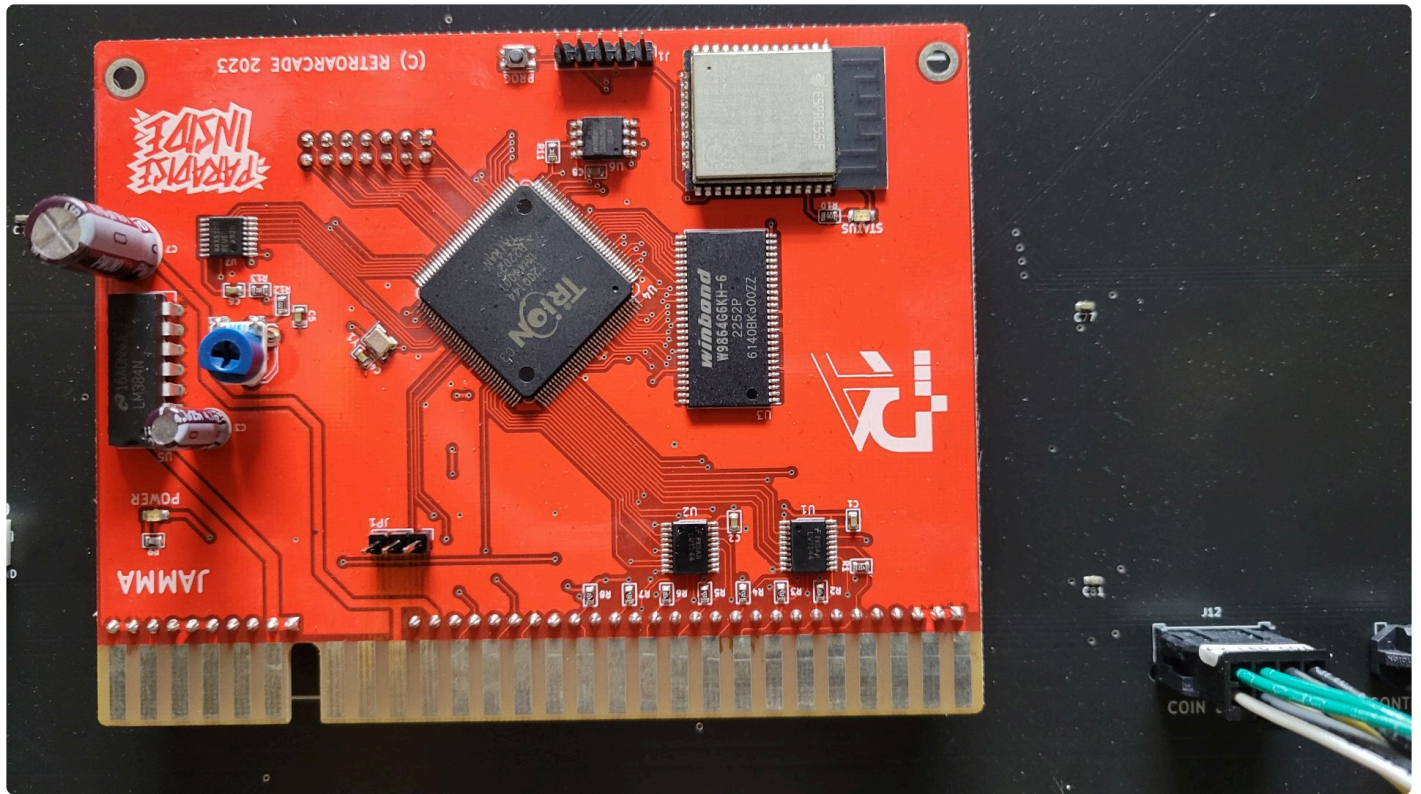


Figure 1. Power switch location.

2.8. Volume adjustment

Volume adjustment is located on the Game board



2.9. Start Up Test and Alignment Procedures

The hole test is to test the lit holes to make sure they light in the right sequence. The bar test is to insure the bar will travel the entire playfield without binding. The Errant Ball test is to test the errant ball switch and servo to make sure they function properly. Follow the instructions below before performing each of these test.

1. Open the Coin Door and unlatch the Control Panel, tilt the Control Panel forward and remove the playfield glass. Place the ball shipped separately in through any hole on the playfield.
2. Turn the game on.

2.9.1. Required Start Up Procedure

2.9.2. Game Leveling

To be written

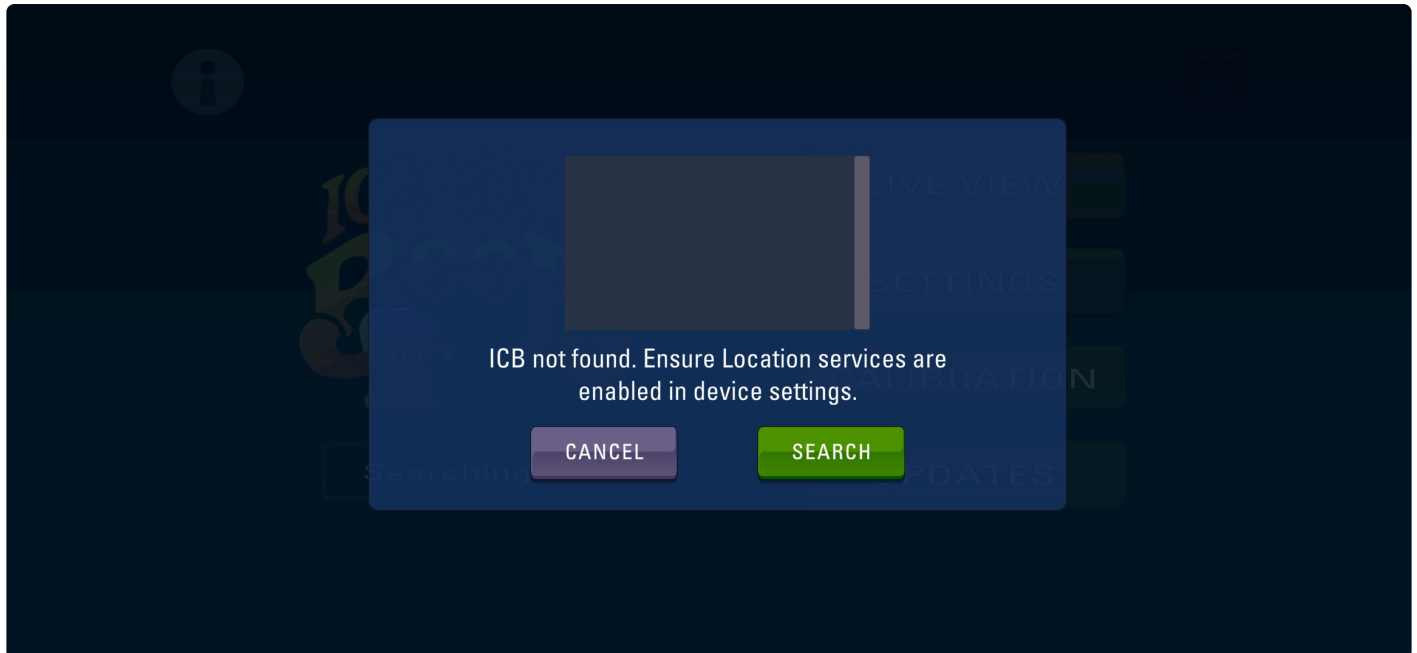
2.9.3. App Connection

Download and install the app from the [iOS Store](#) , or [Google Play Store](#)

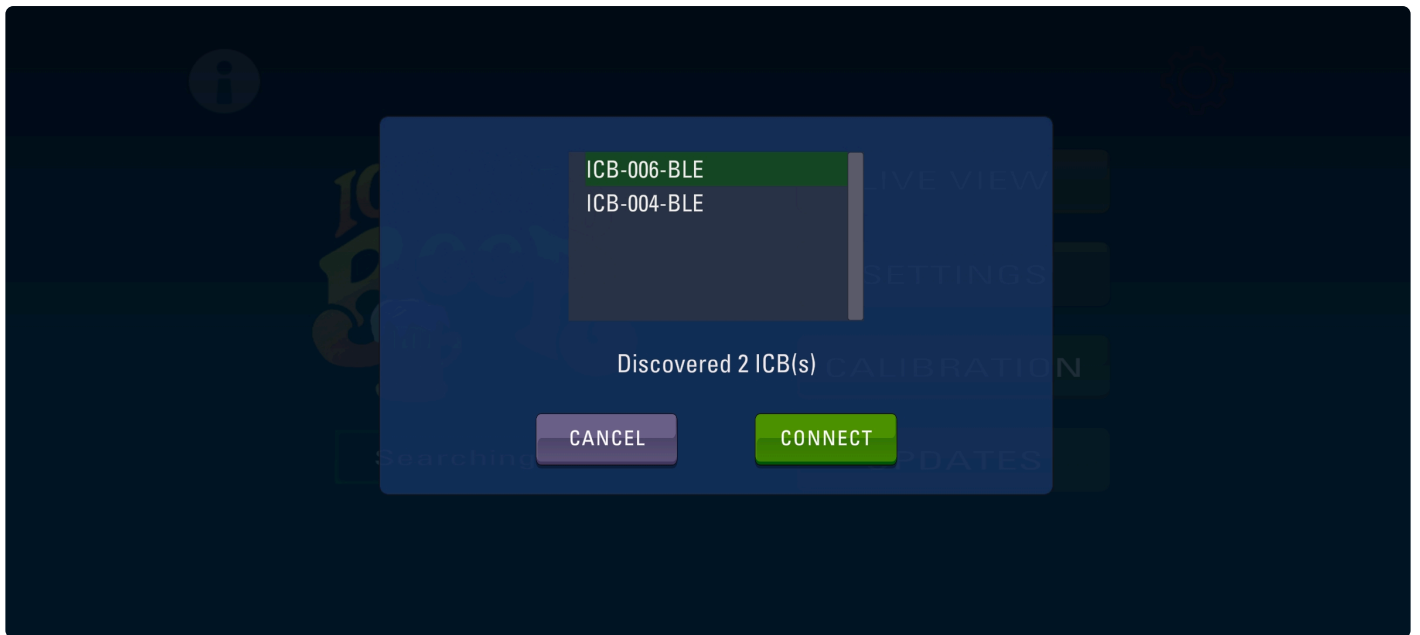
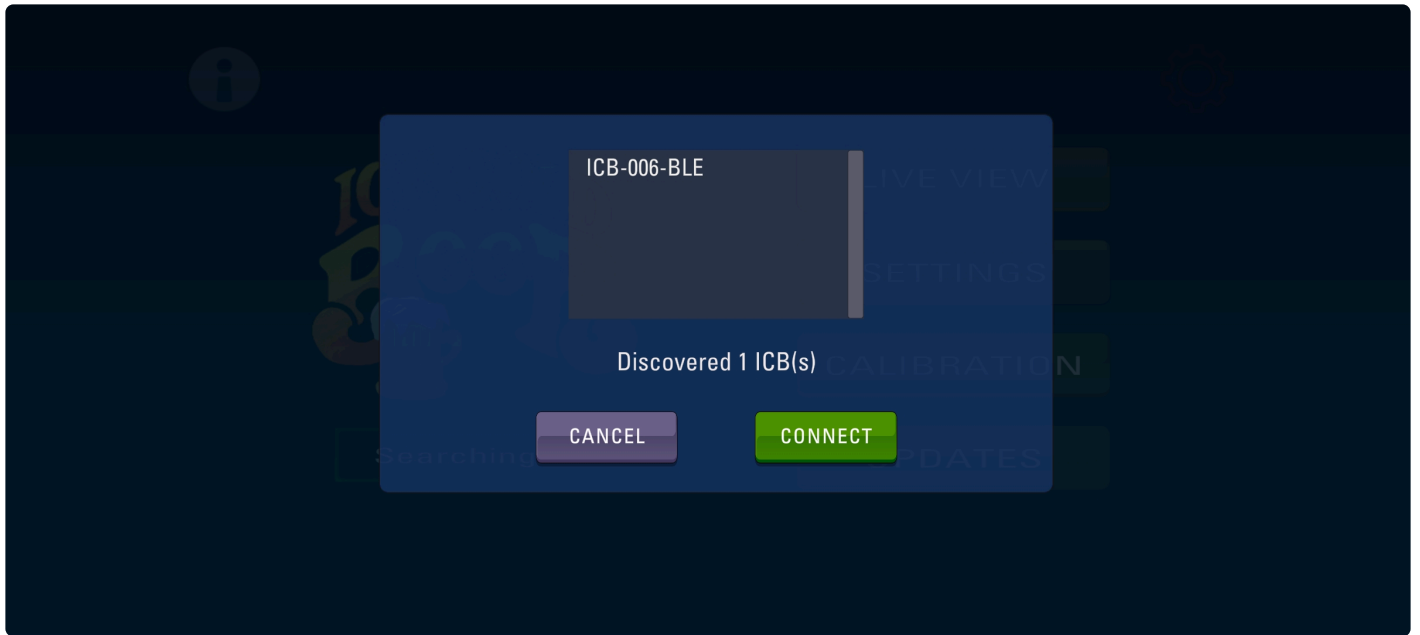
Open the app, this screen should appear:



Press "CONNECT" and it will look for any machines present and show this window

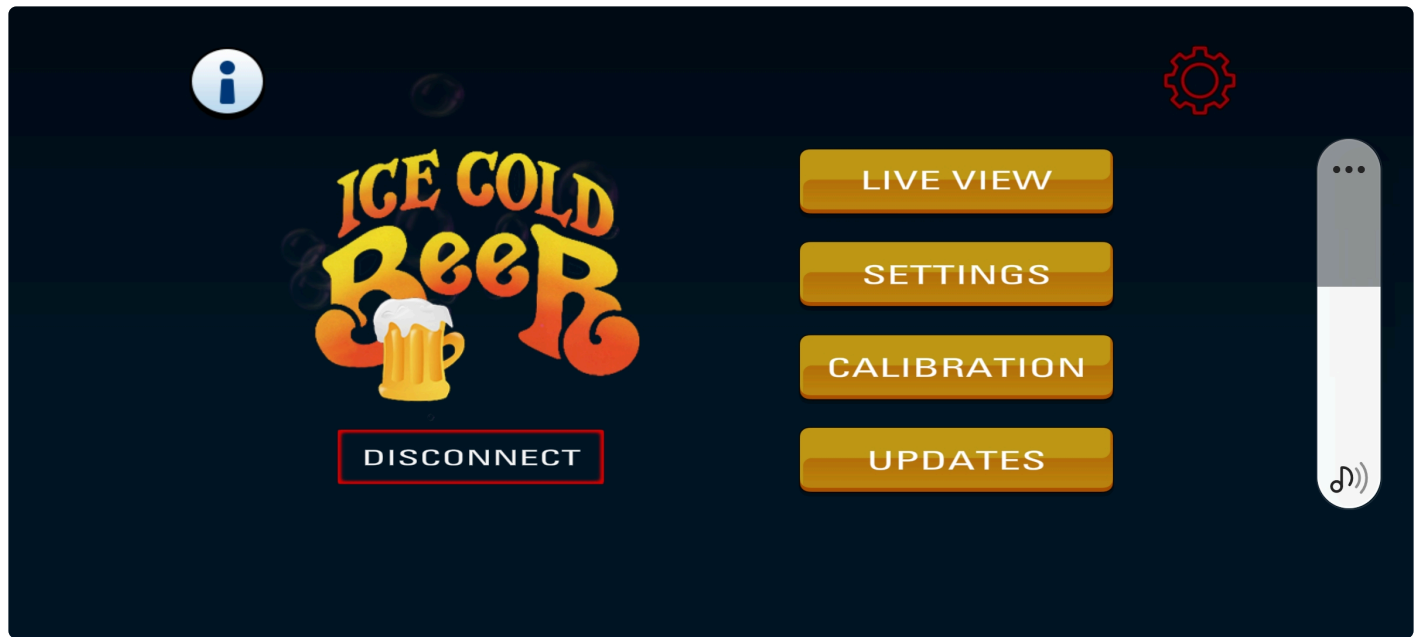


The app can find one or many machines, select the one you want, based on serial number and press connect.



Select the appropriate ICB-xx number and press connect. If no machines appear, restart the machine and the app, and try to connect again.

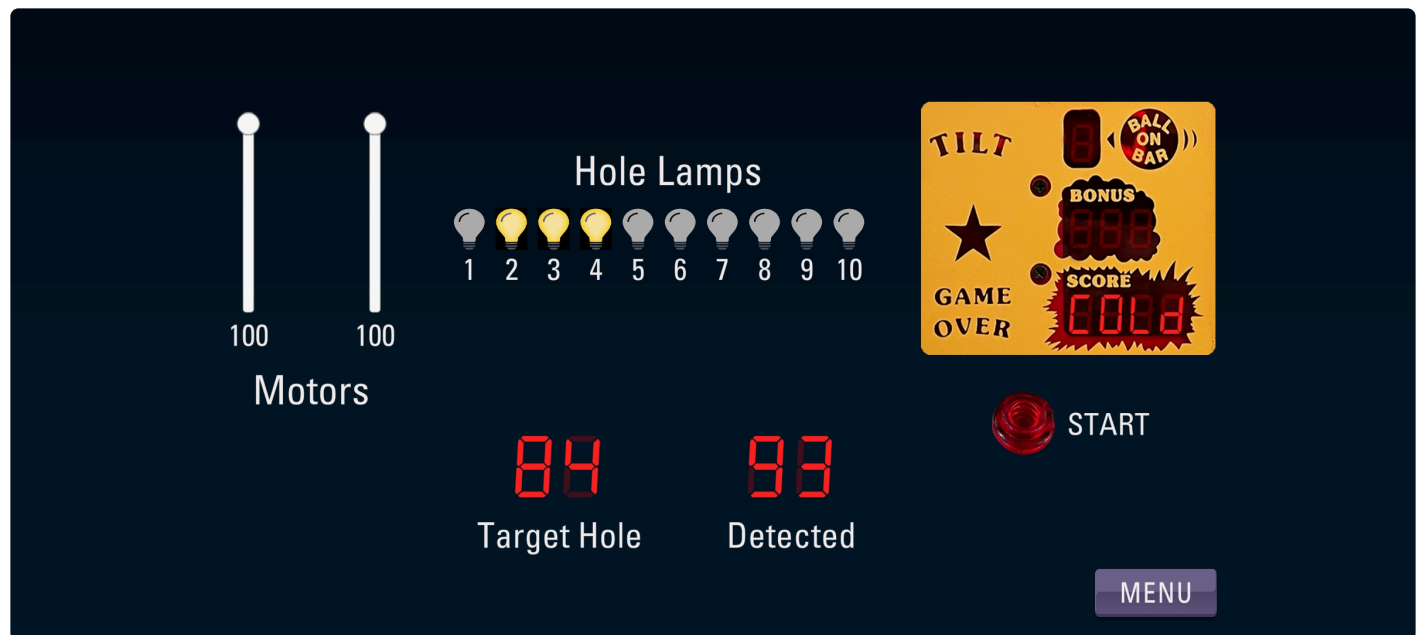
Once connected, you will return to the main screen.



You may enter the testing for this machine now.

2.9.4. Hole Test

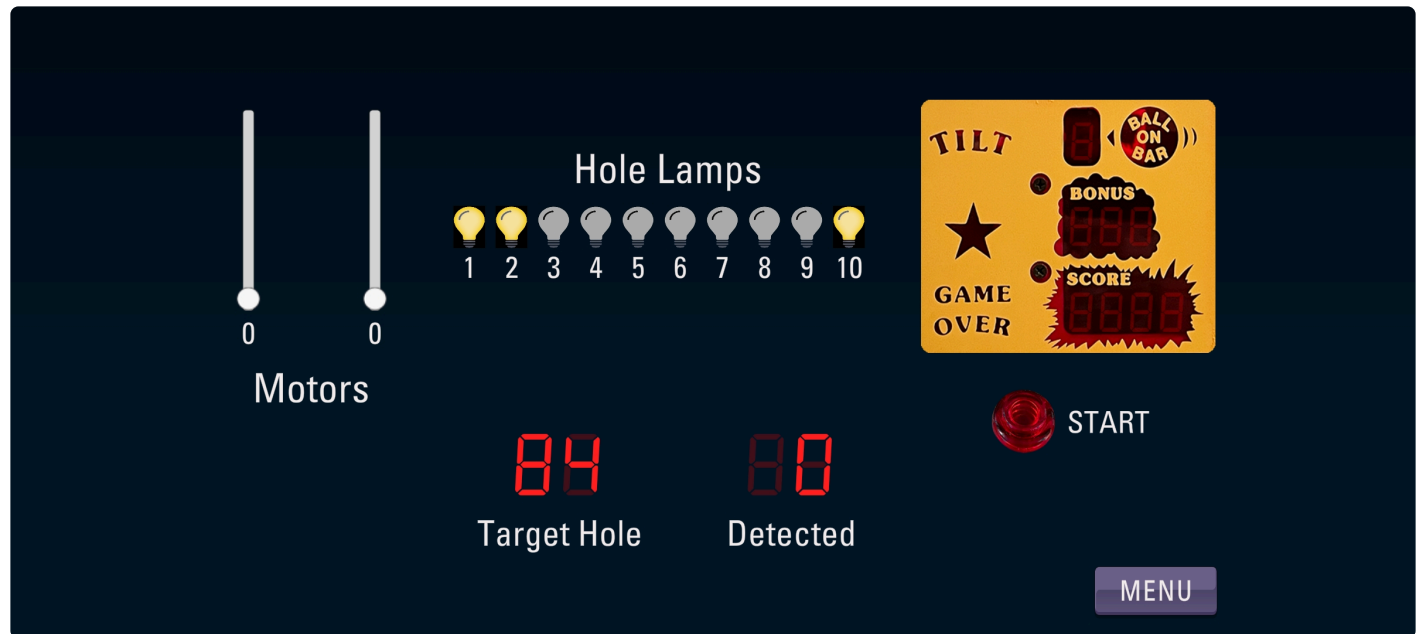
Select the first Item “Live View” and the following screen will appear.



If the ball is at the gate, the “Detected” hole will show 93. If the game has not started the “Target” hole will be 84, this is hole 1. If you manually move the gate down, remove the ball, and place it into the ball return hole, you will see the detected hole show 98.

The following table gives the mapping between play hole and the displayed Target/Detected hole numbers:

Hole 1	84
Hole 2	87
Hole 3	74
Hole 4	79
Hole 5	65
Hole 6	49
Hole 7	45
Hole 8	34
Hole 9	27
Hole 10	15
Ball Gate	93

Ball Return 98

You will also hear the servo return the ball to the gate, and hole 93 will become active again.

On the left you will see the position of the stepper motors controlling the bar.

In the middle you will see icons indicating which lights are on.

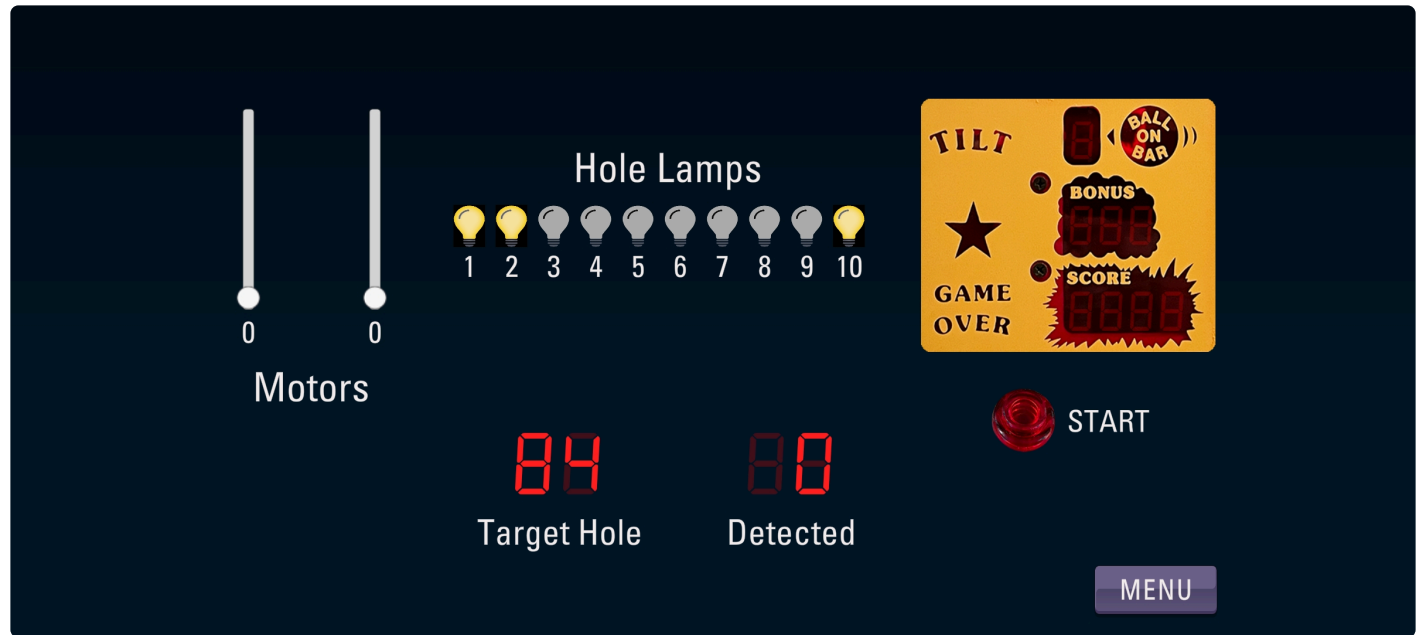
On the right you will see the output of the seven segment display.

On the bottom right, you will see the start button which will be flashing if the game is on freeplay or coins are inserted.

2.9.5. Bar Test

Add a coin or have the game set to free play and press the start button. The bar will go to the bottom of the playfield, open the gate, and allow the ball to come out.

Remove the ball from the bar and use the joysticks to move the bar all the way to the top and bottom on each side.



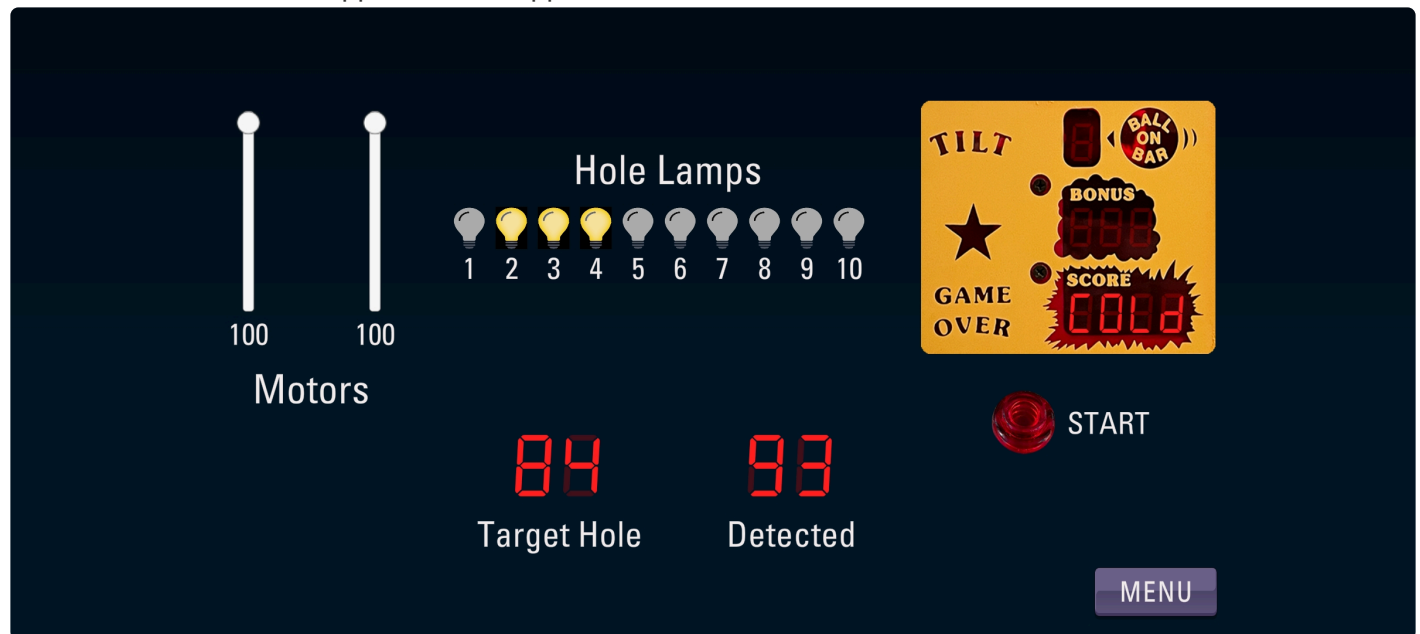
You will see the bars on the right hand side of the test app screen. The end stops will cause the bar to stop at the top and bottom of travel.

2.9.6. Errant Ball Test

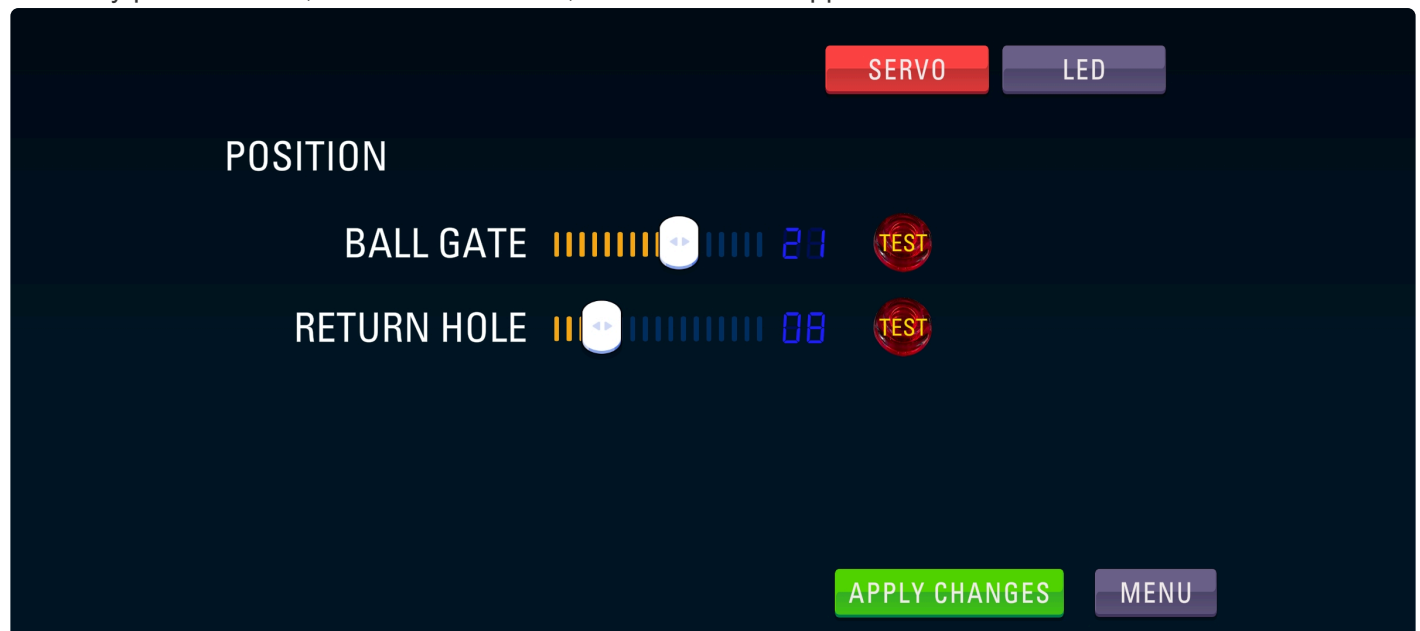
After you have tested the bar, place the ball onto the metal return at the bottom and allow it to roll into the return hole.

The errant ball servo should return the ball to the gate.

You will see this screen appear on the app.



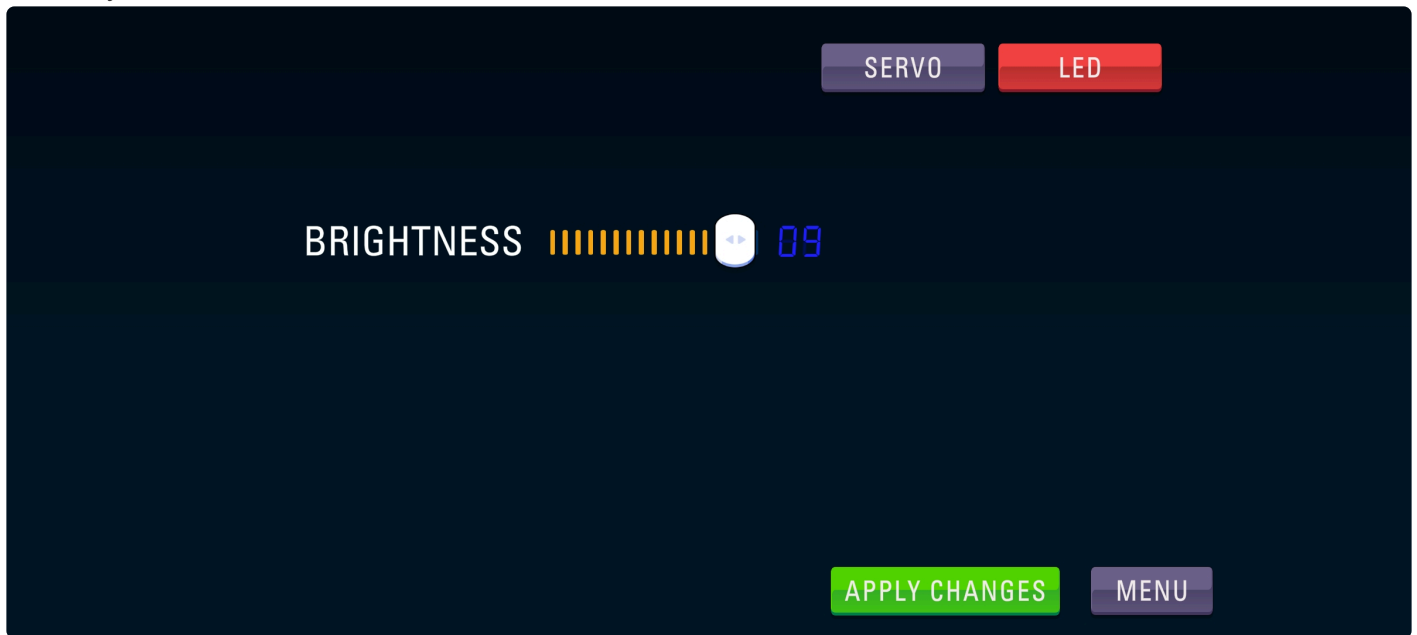
You may press "Menu", select "Calibration", this window will appear:



You can use the slider on the screen to adjust the position of the servo return at the ball gate and errant ball return.

2.9.7. LED settings

You may also select LED from the “Calibration” screen

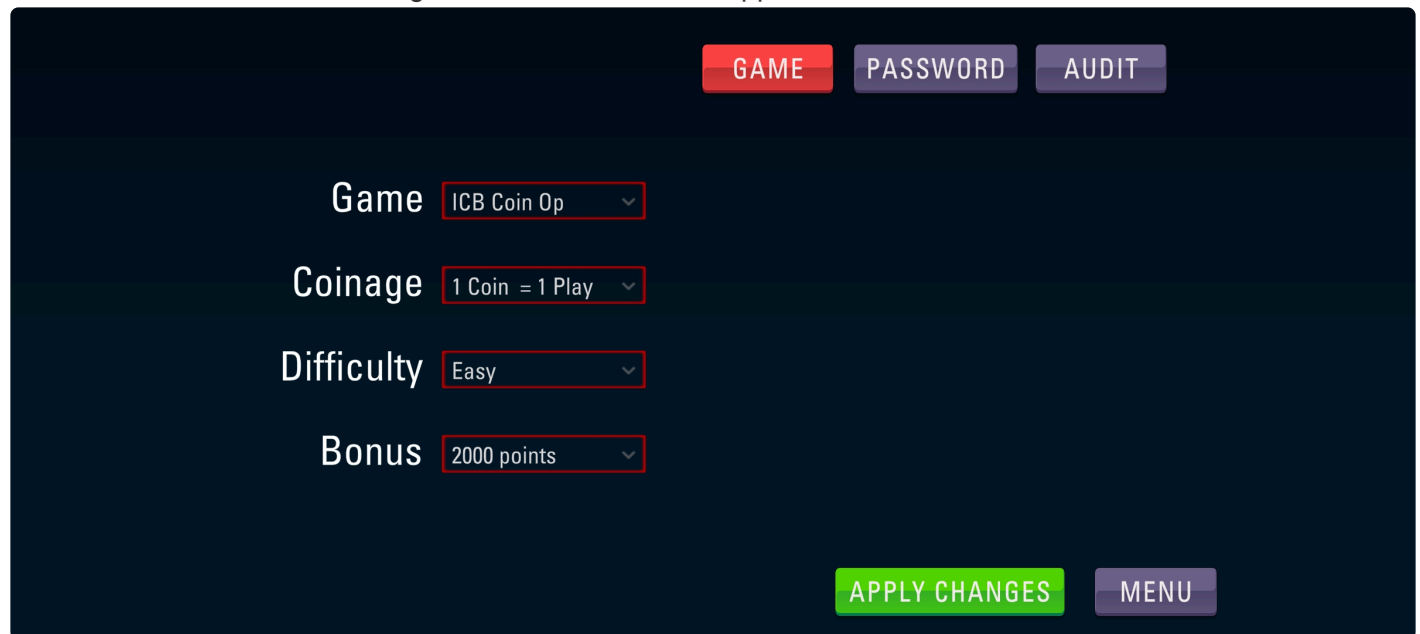


This allows you to customize the brightness of the playfield leds.

2.10. Dip Switch Settings

All settings are done through the app, turn the machine on and follow the instructions in the [App Connection section](#).

Once connected, select “Settings” and this window will appear.

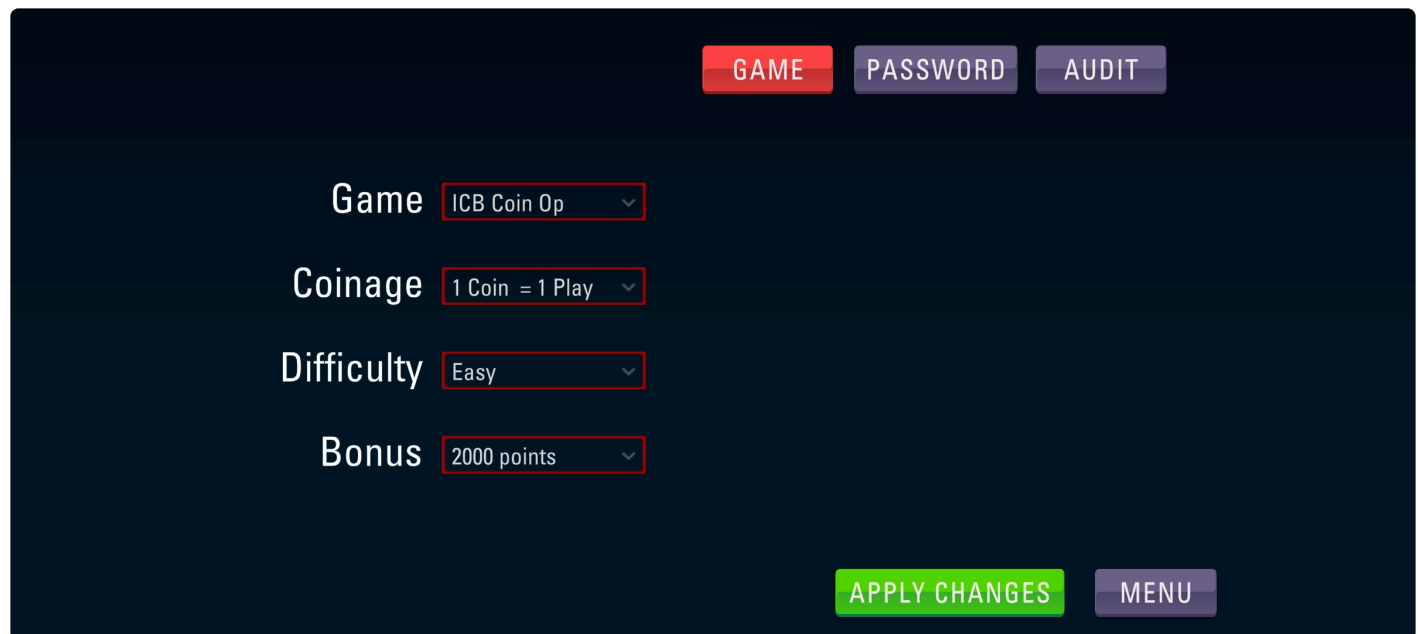


The screenshot shows a dark-themed settings window. At the top, there are three buttons: 'GAME' (red), 'PASSWORD' (purple), and 'AUDIT' (purple). Below these, there are four settings, each with a label and a dropdown menu:

- Game**: ICB Coin Op
- Coinage**: 1 Coin = 1 Play
- Difficulty**: Easy
- Bonus**: 2000 points

At the bottom right, there are two buttons: 'APPLY CHANGES' (green) and 'MENU' (purple).

2.10.1. Game Settings



The screenshot shows the 'Game Settings' menu of the 'Ice Cold Beer' arcade game. At the top, there are three buttons: 'GAME' (highlighted in red), 'PASSWORD', and 'AUDIT'. Below these, the settings are listed:

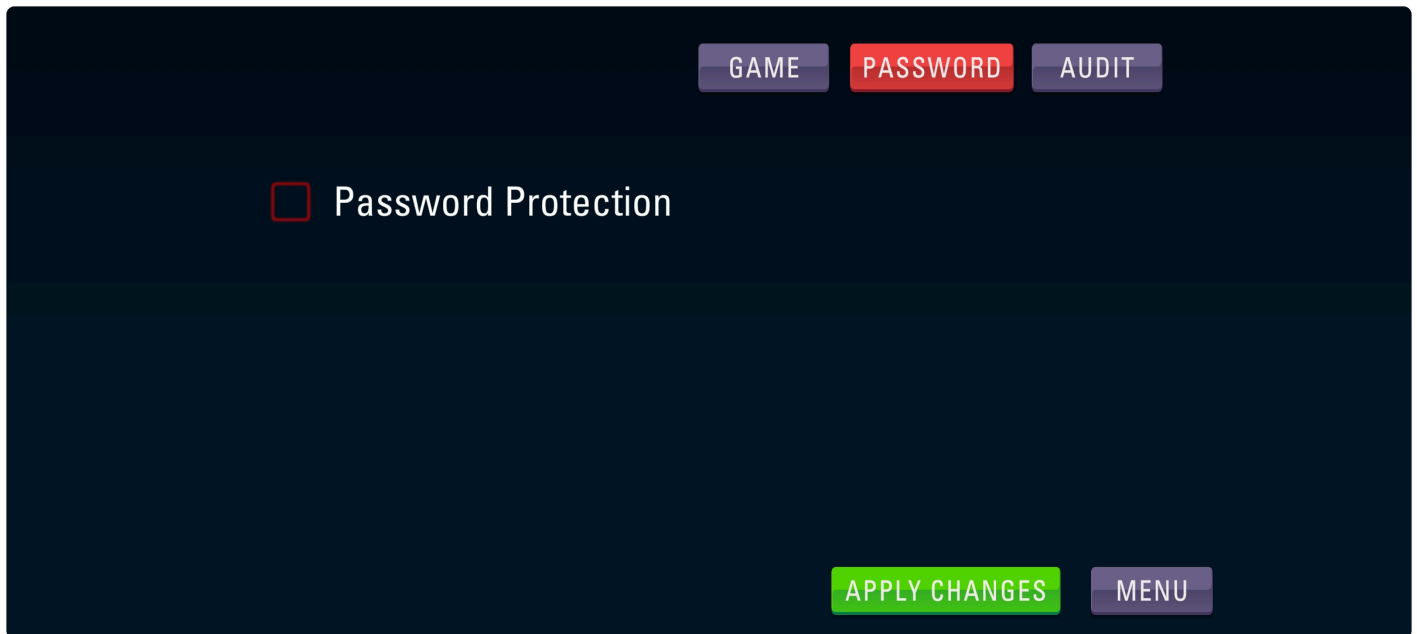
- Game**: ICB Coin Op (dropdown menu)
- Coinage**: 1 Coin = 1 Play (dropdown menu)
- Difficulty**: Easy (dropdown menu)
- Bonus**: 2000 points (dropdown menu)

At the bottom right, there are two buttons: 'APPLY CHANGES' (highlighted in green) and 'MENU'.

Here you can select ICB coin play or Freeplay (Zeke's peak is coming soon!) If you select coin play, you may also select number of coins required to start a game. (Selection between a single and 8 coins is possible) Game play difficulty may also be selected, this will determine how quickly the bar automatically advances during game play. Finally you may select the bonus setting for an extra ball.

Please note you need to press "Apply Settings" after any modifications.

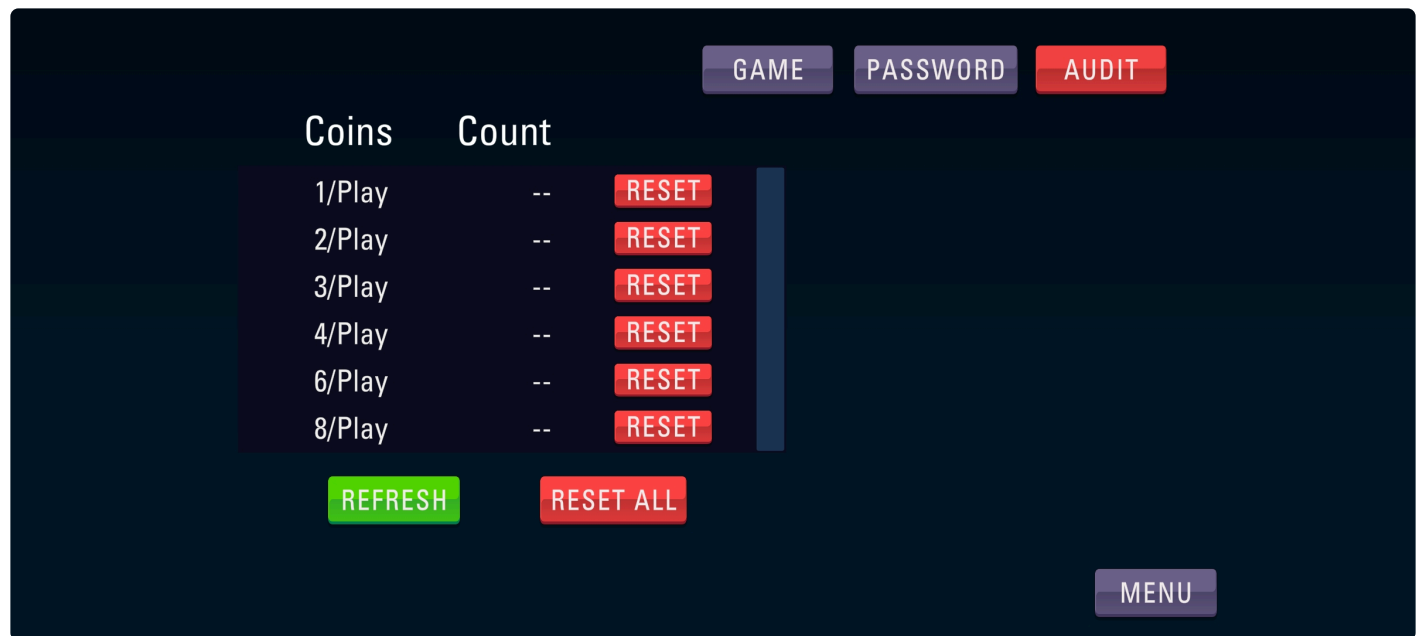
2.10.2. Password Settings



You may use this window to set password access for bluetooth to keep your machine secure.

Please note you need to press “Apply Settings” after any modifications.

2.10.3. Audit settings



Here you can see coin drop, game play and other machine audits. Refresh to see the numbers.

3. MAINTENANCE

3.1. Monthly Maintenance

- 1- Lubrication of the screw drives, Drive Slides and Bar assembly.
- 2- Tighten playfield & Drive Slide Allen bolts.
- 3- Check the Ball Gate Door for proper alignment. (Not to lose or Sticking)
- 4- Check servo alignment so the ball comes out of the gate properly.
- 5- Check for Firmware updates.
- 6- Check Game manual for updated info.

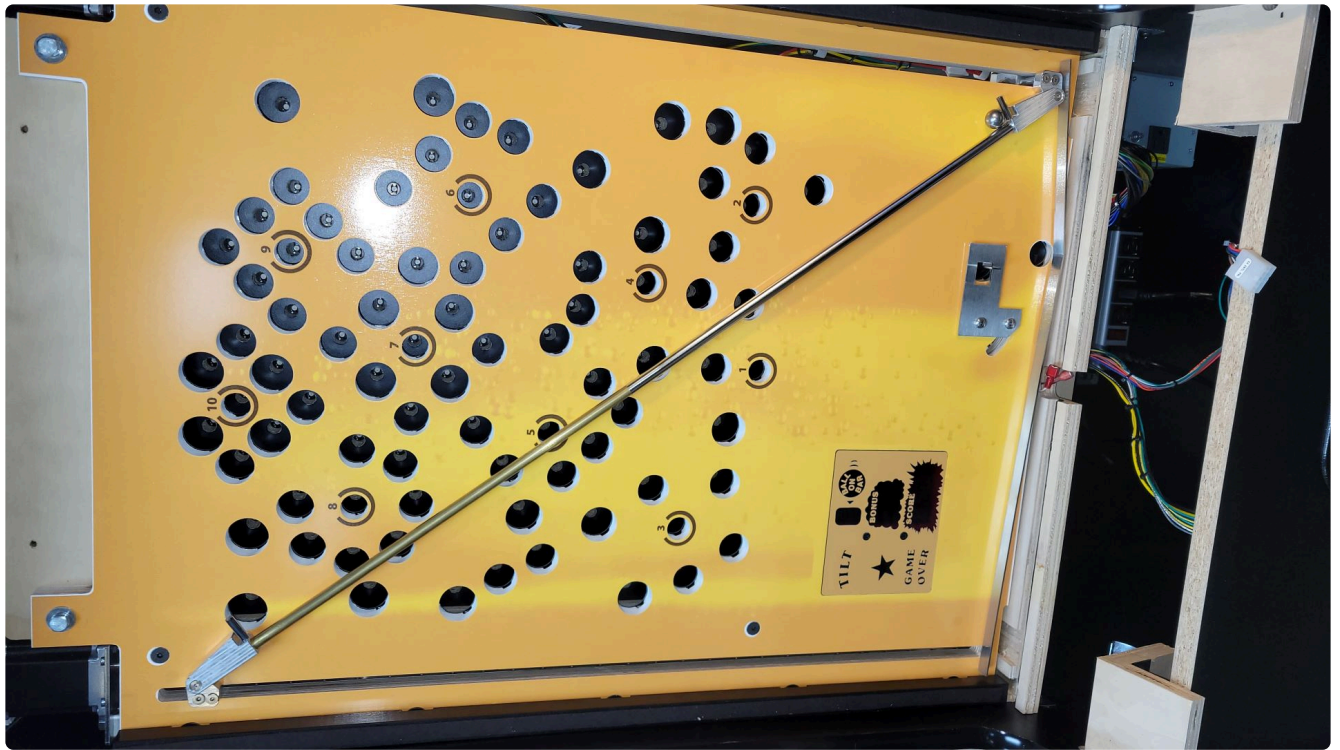
3.2. Lubrication Of Mechanical Parts

To insure a minimum of maintenance on this game a periodic lubricating of the mechanical parts is required. In high use environment, 2-4 weeks is needed, in occasional use locations, 3-6 months is adequate frequency.

3.2.1. Ball Rod Lubrication

Every 2-4 weeks in a high use environment or 3-6 months in home use the rod the ball travels on and the pivot points should be lubricated.

1. Remove the [cover glass](#)
2. Put one drop of PTFE based lubricant (we use DuPont Teflon Multi-Use Lubricant)
3. Put three drops of lubricant at the interface of the two bars
4. Remove the ball from the gate and place it on the rod
5. Replace the glass
6. Turn the machine on
7. Placing the ball on the rod will cause the machine to go into “lost ball mode” which will run the rod and pivots to their extremes.





3.2.2. Screw drive lubrication

Every 2-4 weeks in a high use environment or 3-6 months in home use the screw drives in the back of the machine should be lubricated.

(if you have brass shavings and screw drive wear, clean and do this immediately)

1. Remove the back door
2. Put a 1/2" to 1" line of grease above and below the aluminum drive block on the screw drive on each side (We use LubriMatic 11316 Multi-Purpose Grease or Molykote 44)
3. Turn the machine on
4. Allow the machine to go through its entire start up sequence where the screw drive runs to the bottom to get the ball and then all the way to the top.
5. Visually inspect the drive to ensure good distribution of lubrication, if there is not repeat the process



3.2.3. Bar Slide Rail Lubrication

When Lubricating Bar and Screw Drives also apply silicon lube to the Slide Rail Channels.



3.3. Front glass Removal

1) Remove 3 screws holding Bar assembly at top of Glass



3.4. Playfield Removal

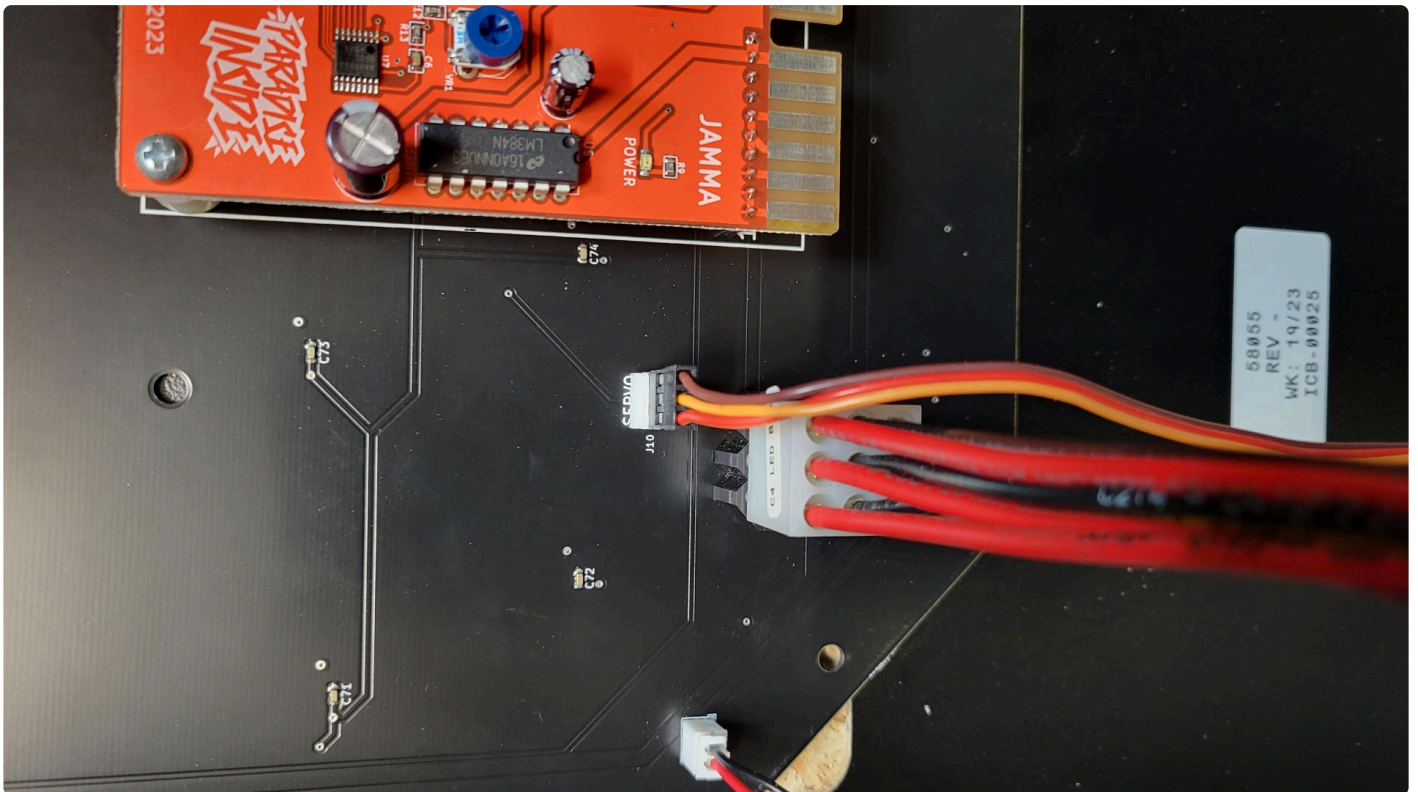
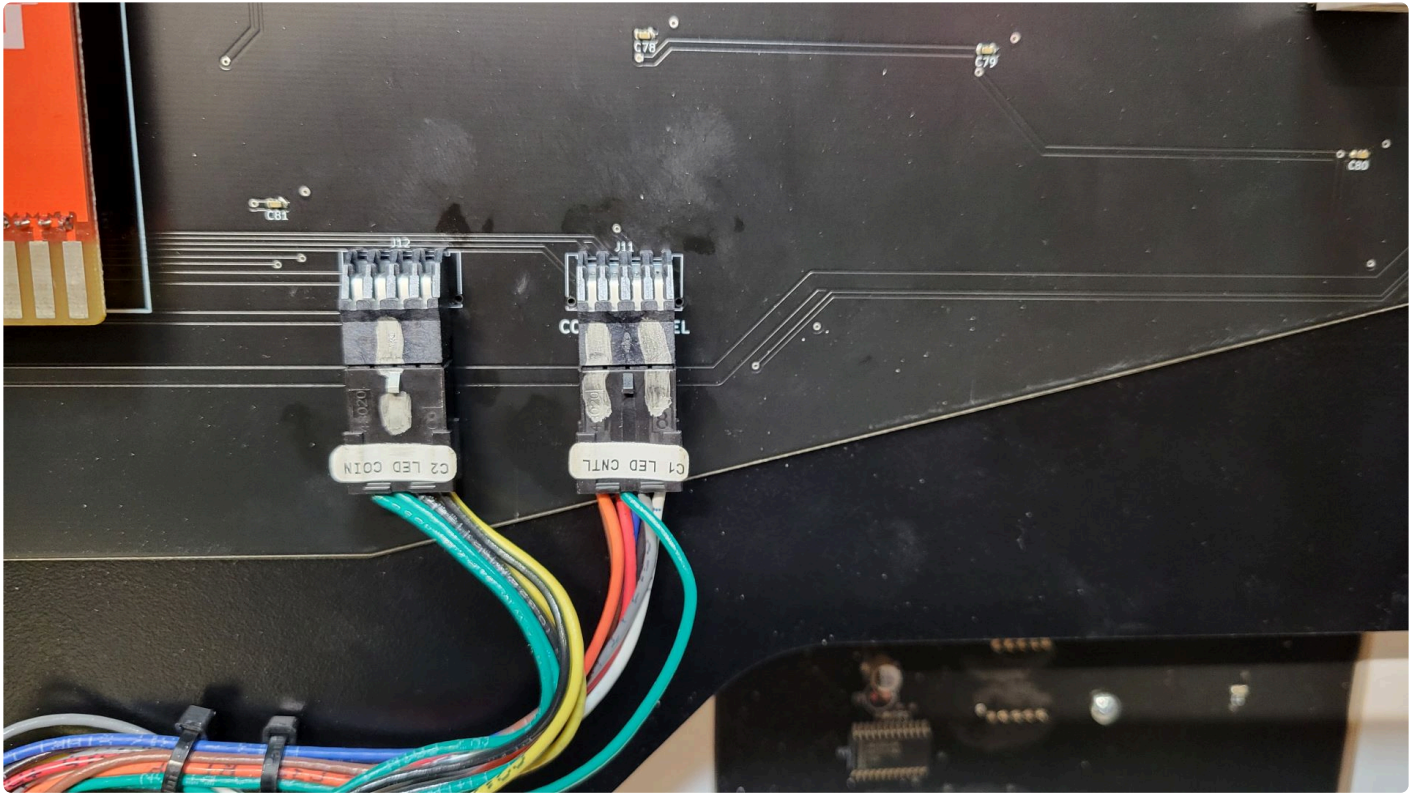
1) Remove top bar holding glass & remove glass



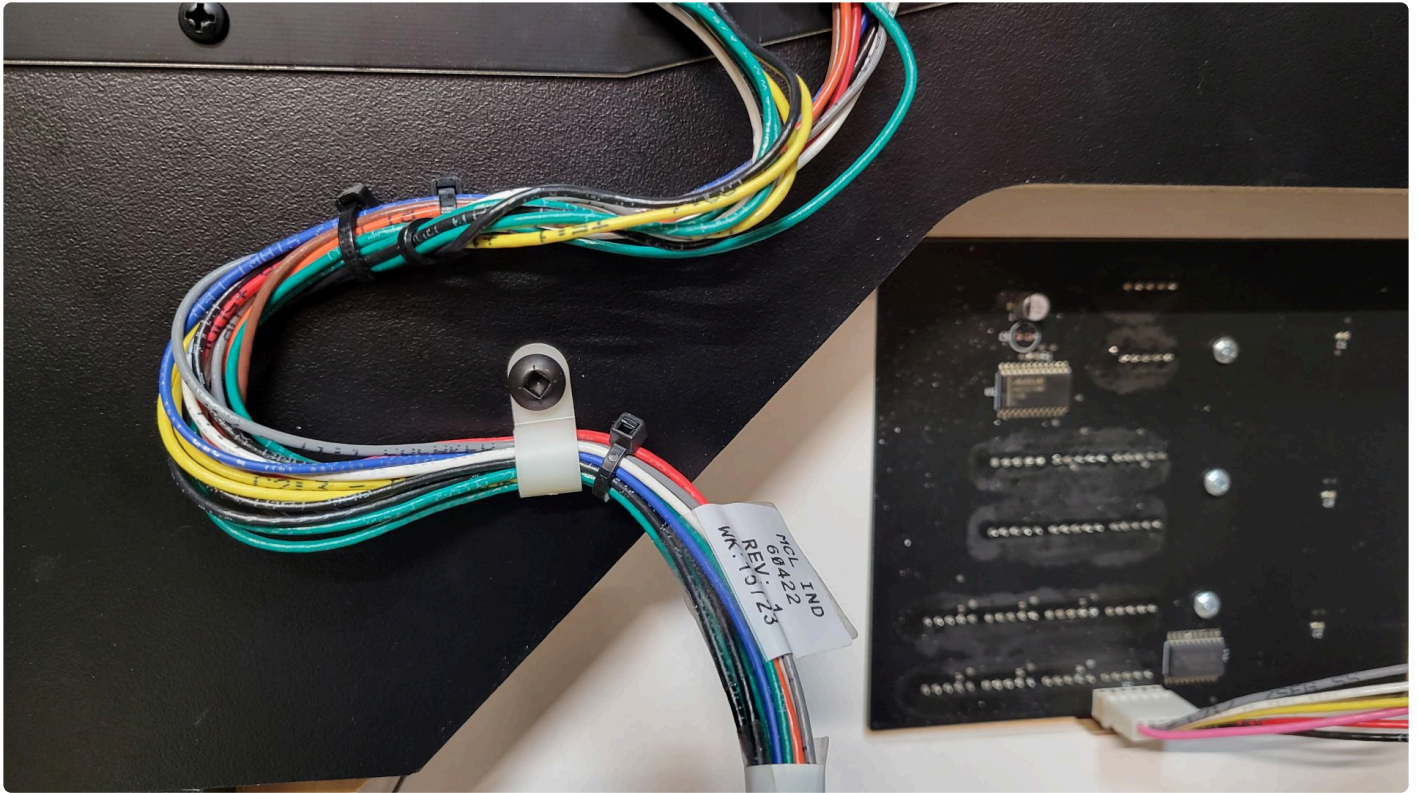
2) Remove 2 screws under marquee light & remove ball from gate



3) Remove back of game & unplug coin door, control panel & Power supply connectors



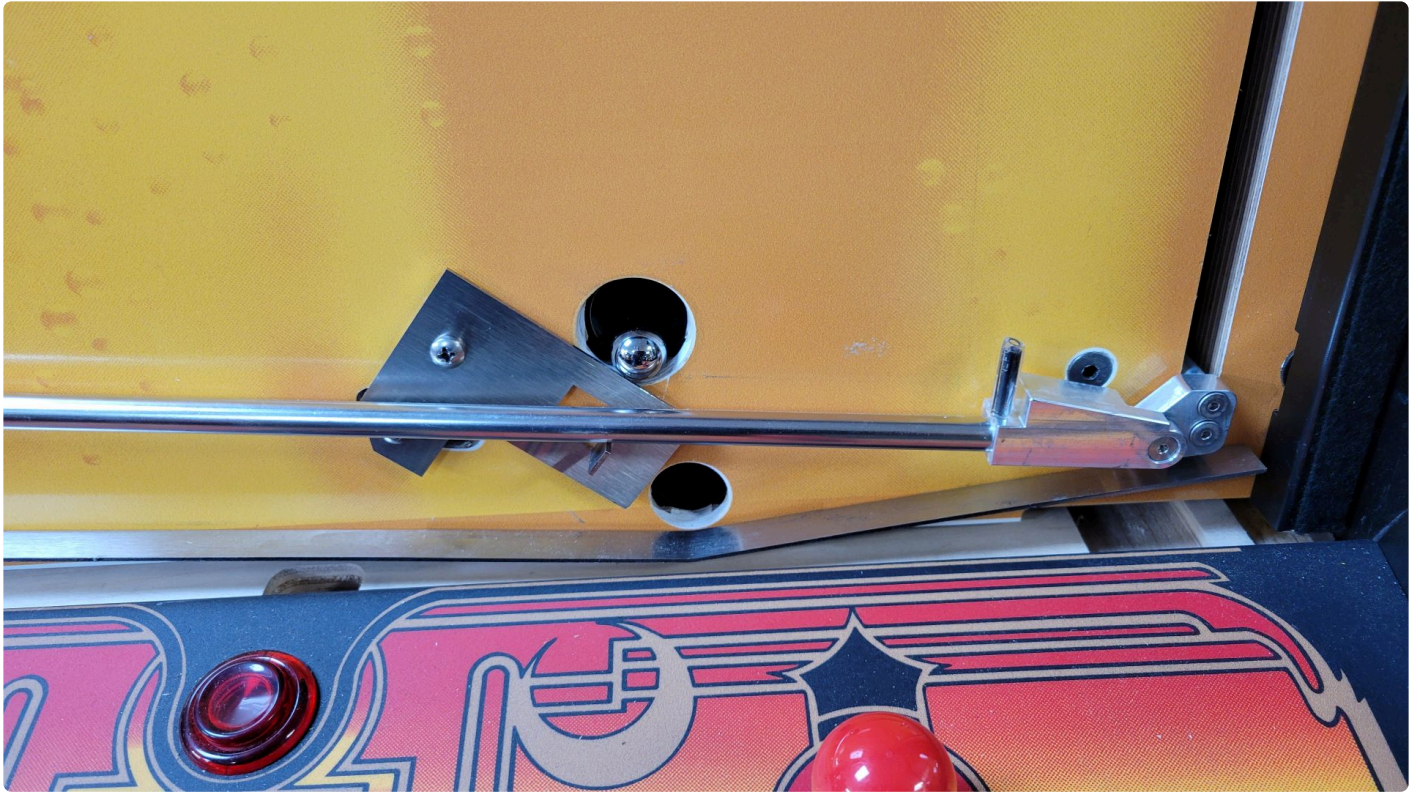
Remove wire clamp holding wiring harness to playfield



4) Tilt top of playfield forward & carefully lift it up & out

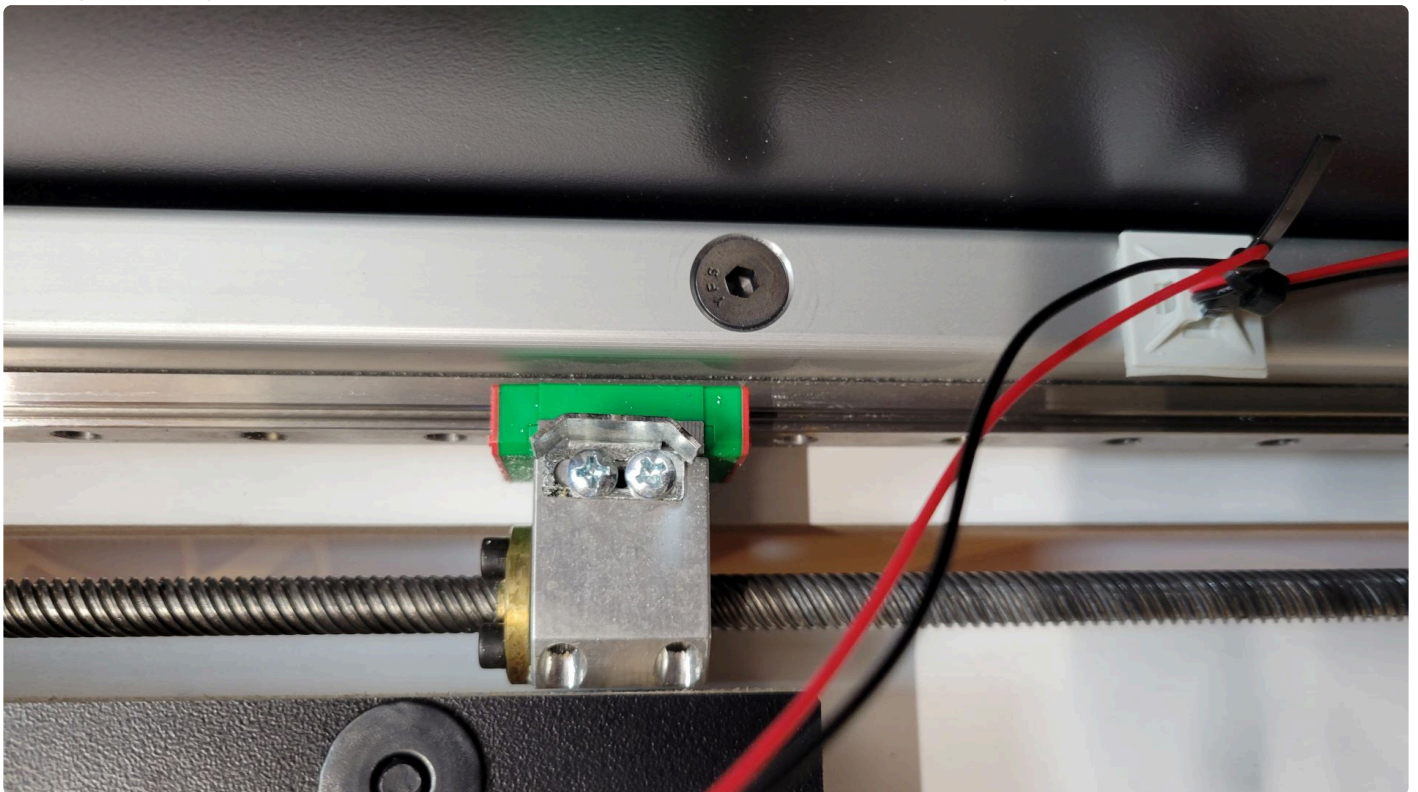
3.5. Bar / Ball gate adjustment

If Game Ball is not coming out of Gate hole or if ball is hitting glass when it rolls out of gate.



Remove back door

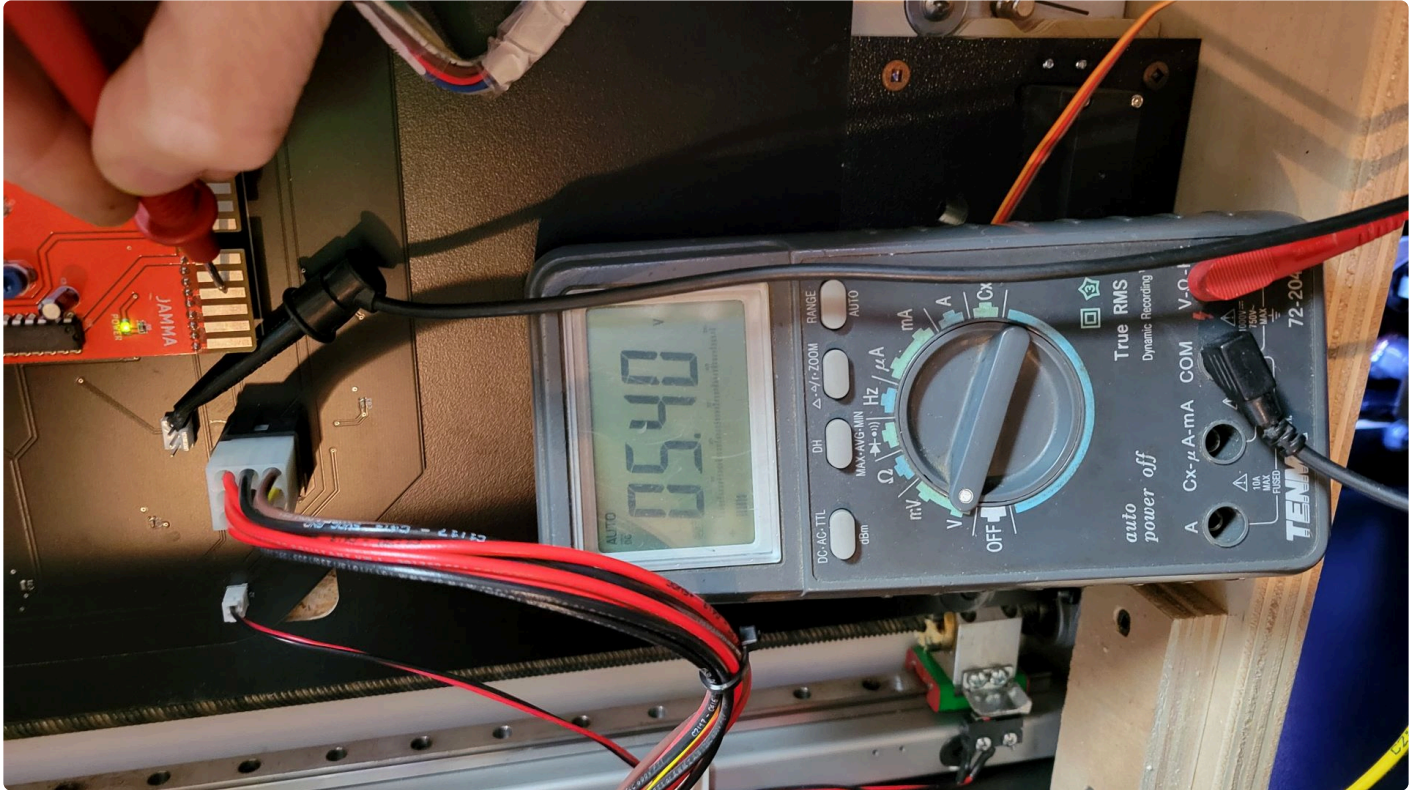
Facing back of game locate aluminum block attached to screw drive on the right hand side.



loosen screws holding adjustment tab to aluminum block and slide tab up or down to adjust bar travel limit

3.6. Power supply Adjustment

Power on game, unplug servo connector to gain access to ground connection. Connect Volt meter to 5 volt tab on game board jamma connector and set to 5.4 volts.

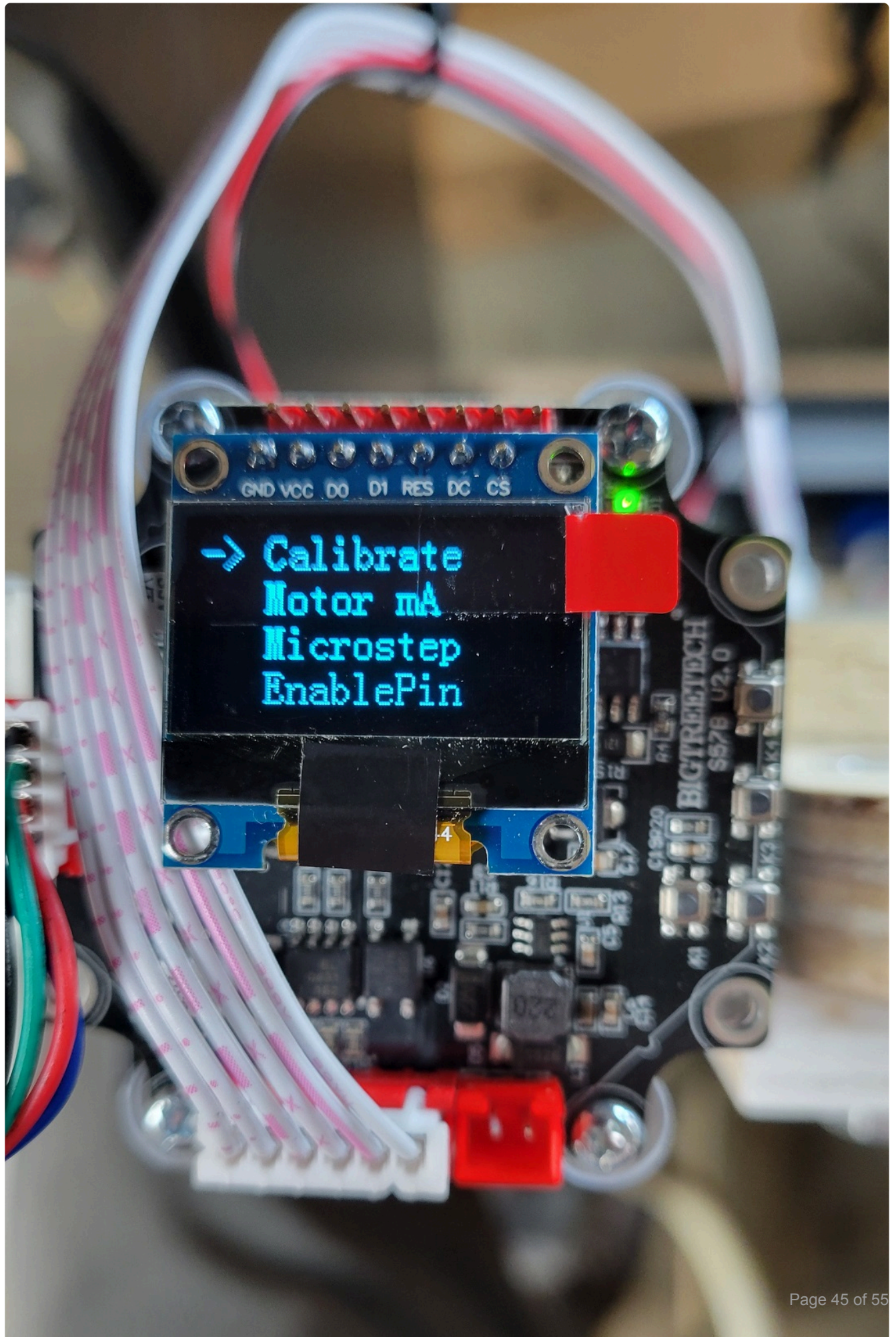


You can also check for 12 volts on the jamma connector.

3.7. Stepper Motor Current Adjustment

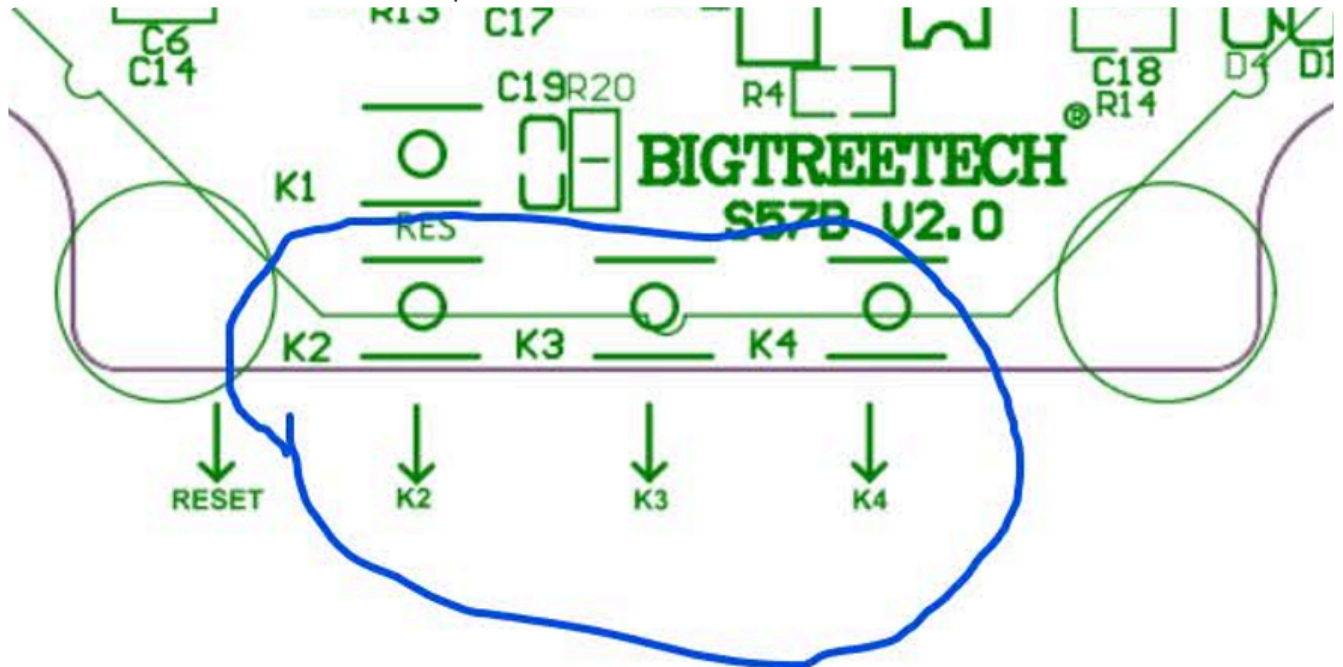
Stepper Motor Current adjustment procedure

1. Remove the top Bar holding glass in place and carefully remove the glass
2. Remove the two square head screws under the marquee light
3. Pull top of the Playfield forward and insert OLED screen as shown and power on game



Press K3 for adjustment menu

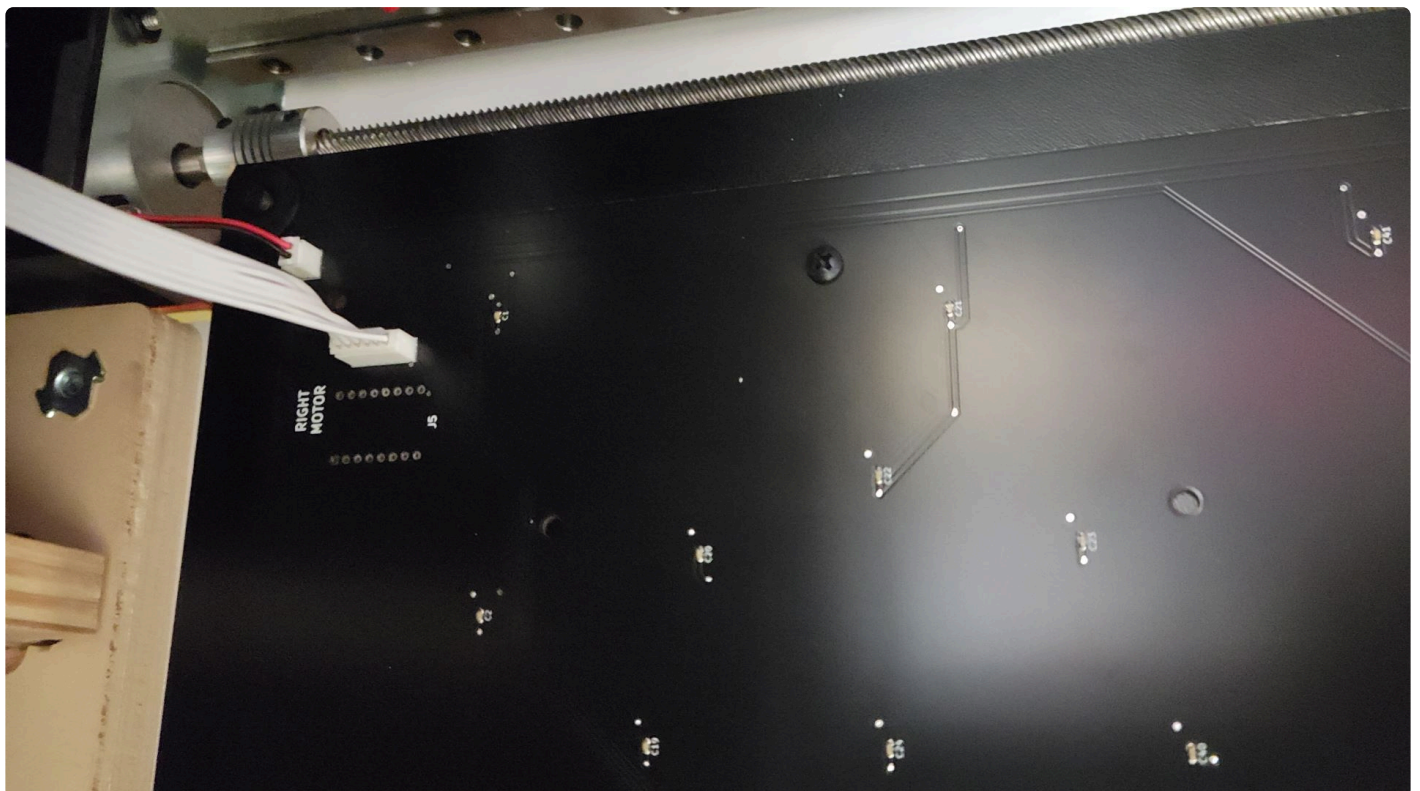
4. Press K2 to select Motor mA then press K4 for sub menu



5. Press K2 to set the motor to 700 mA. The lower the number the more responsive the electronic clutch is. Press K4 to go back to the main menu.
6. Press K2 to select Exit, then Press K4 to exit the menu screen
7. Power down Game and Repeat for second motor
8. Make sure to oil drive screws and bar assembly regularly for smooth operation.

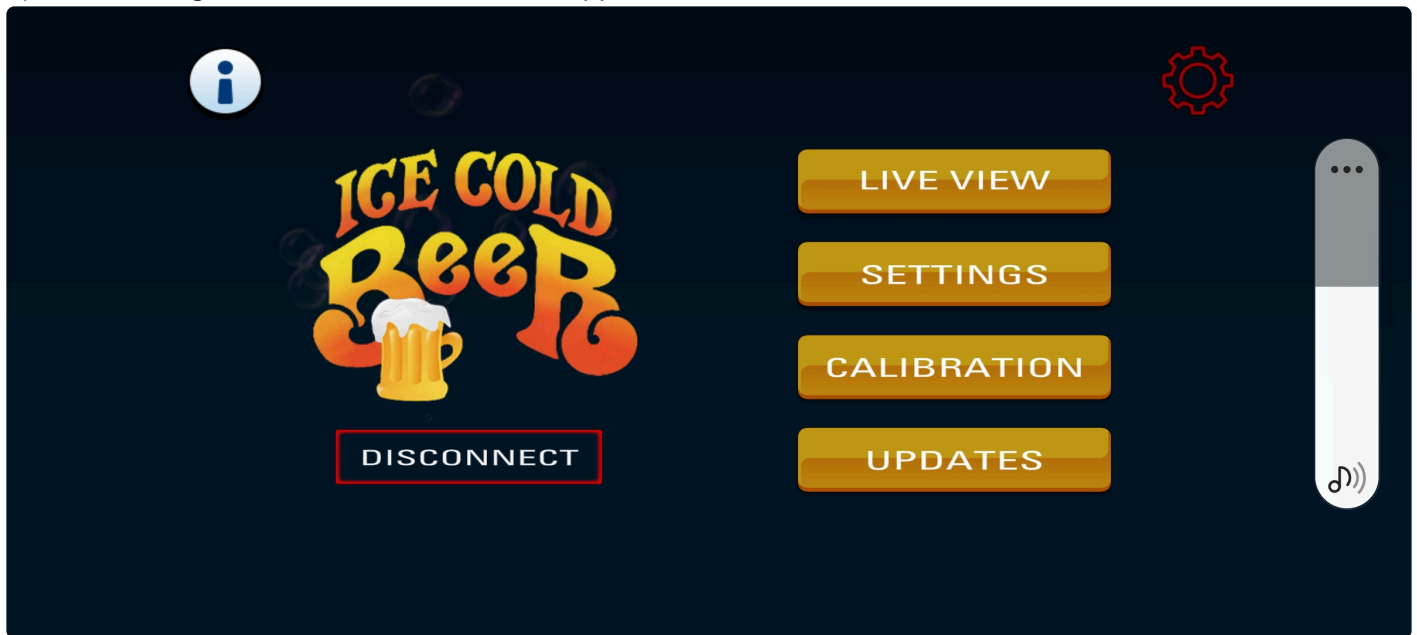
3.8. Servo Alignment Procedure

- 1) Remove Glass & Back door
- 2) Disconnect both screw drive motors from back LED board

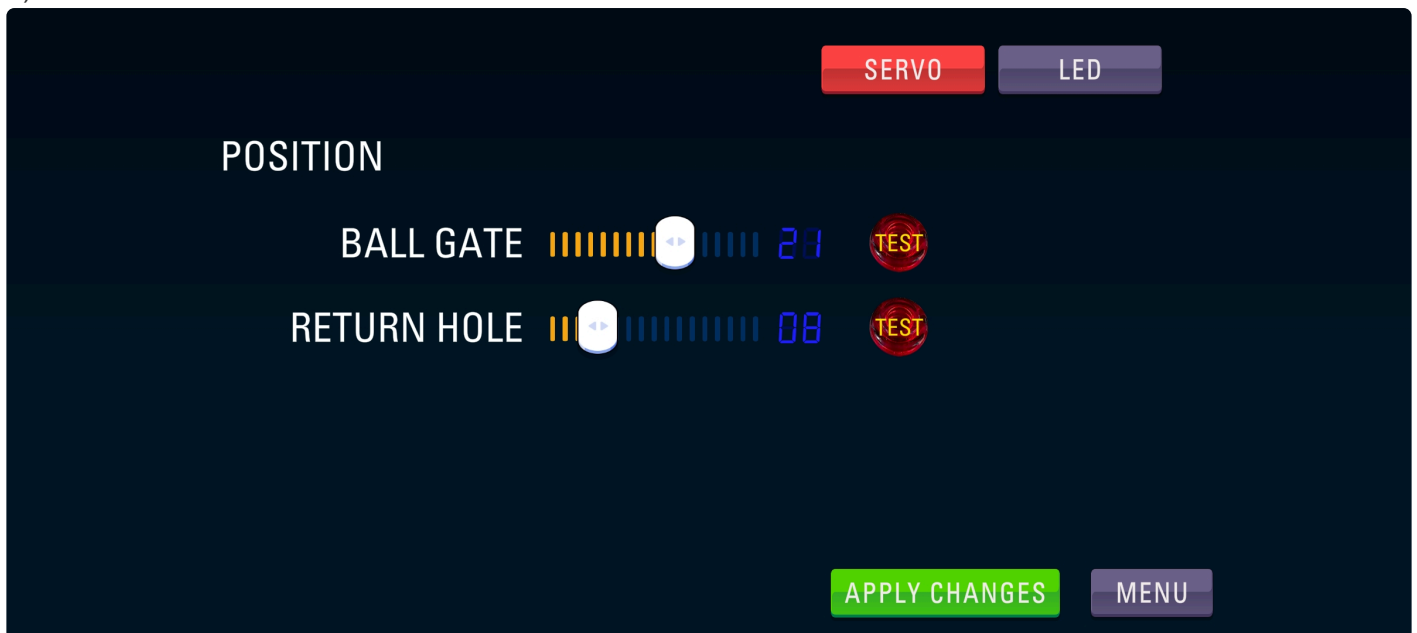


- 3) Power on game, servo should cycle from Ball gate to return hole and back to Ball gate

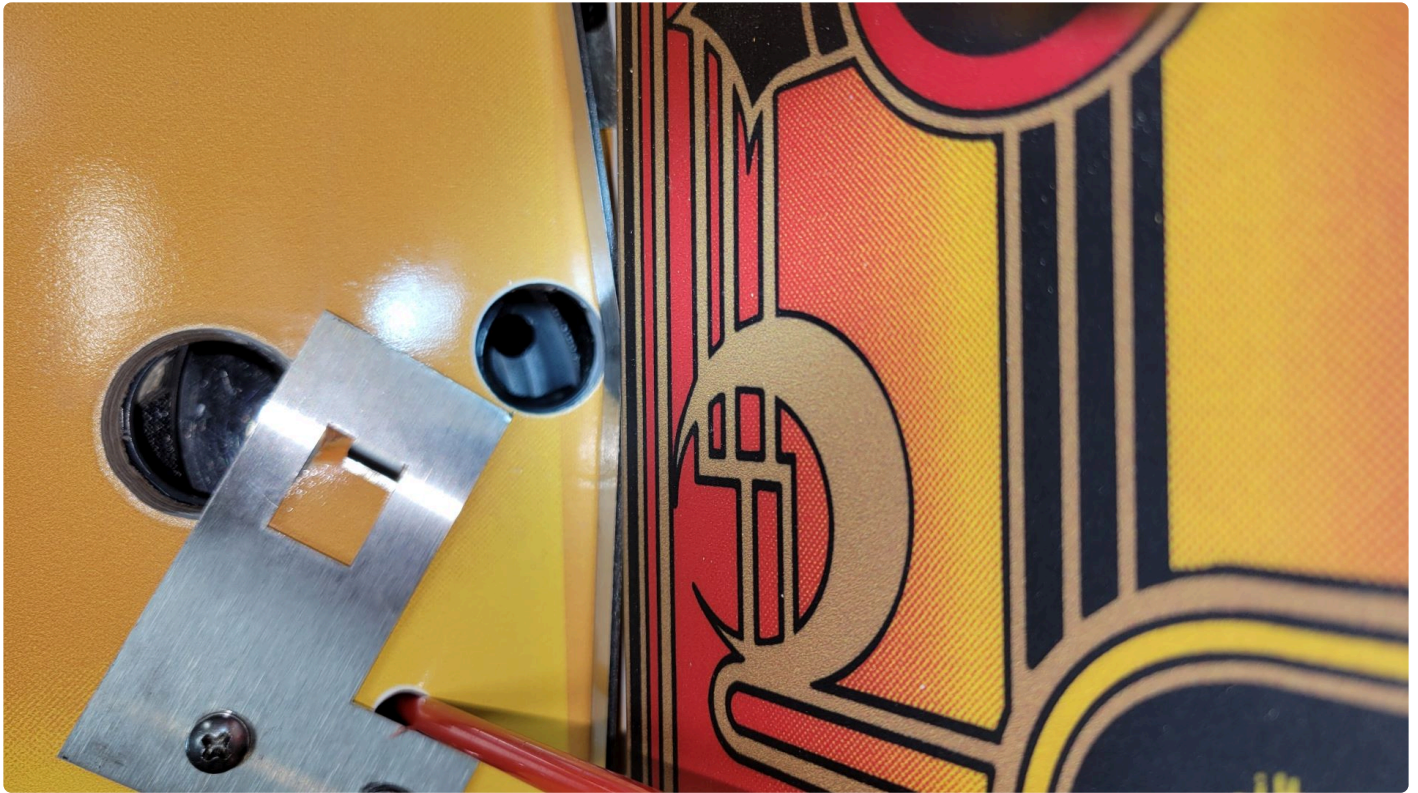
4) Connect to game with the Ice Cold Beer app



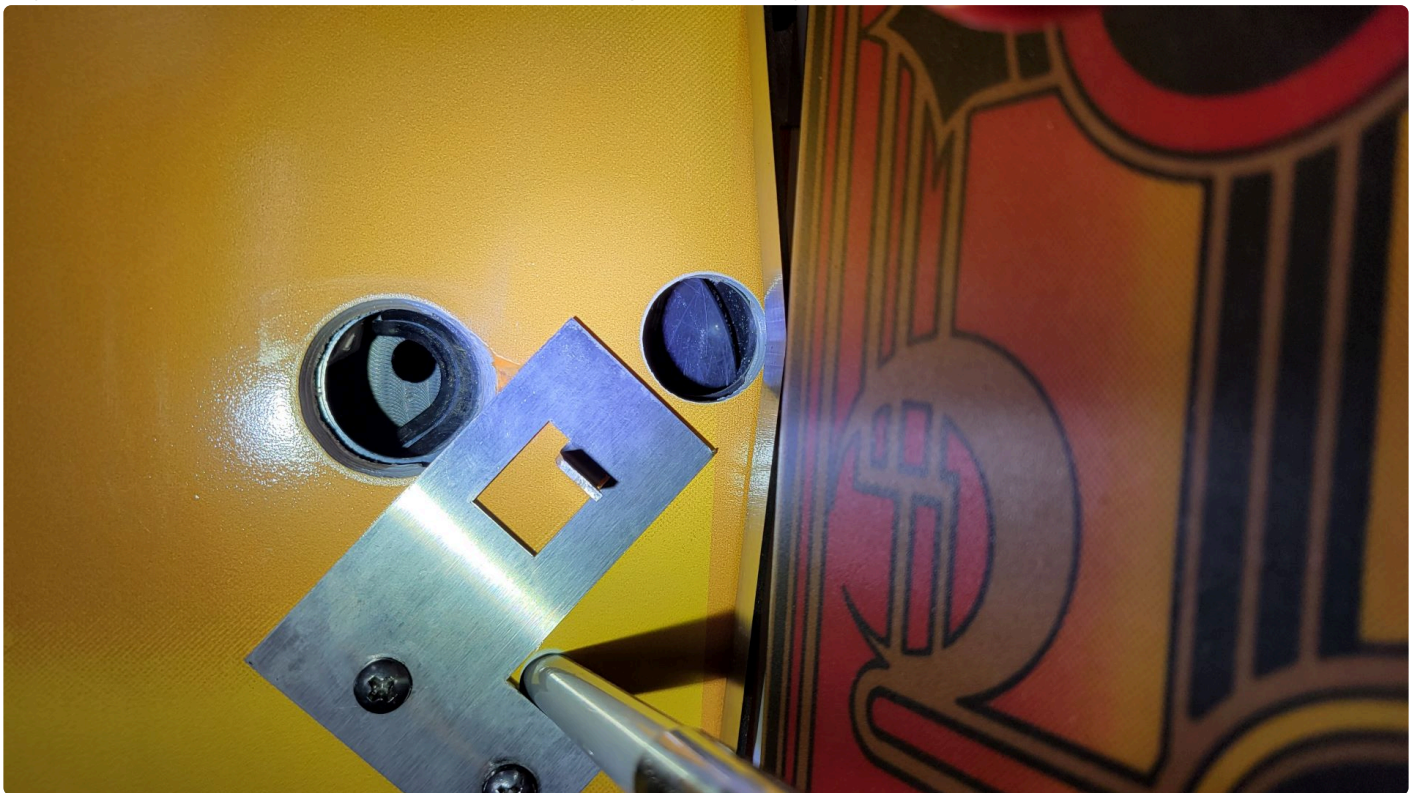
5) Select Calibration then select Servo



6) Press the Test button after the Return Hole adjuster & Servo will cycle to the Ball Return hole. Place Game Ball in Bottom hole & press Ball Gate test button. Servo Disc should cycle Game Ball to Ball Gate Hole and Ball should rest against ball Gate.



7) If Ball Does not Slide into Servo Disc, use Slide adjuster to position disc so the Ball slides into Disc slot completely. Press Ball Gate test button & ball should return to Ball Gate. If Ball Does not, use Ball Gate adjuster to reposition Servo Disc so Ball falls to gate smoothly.



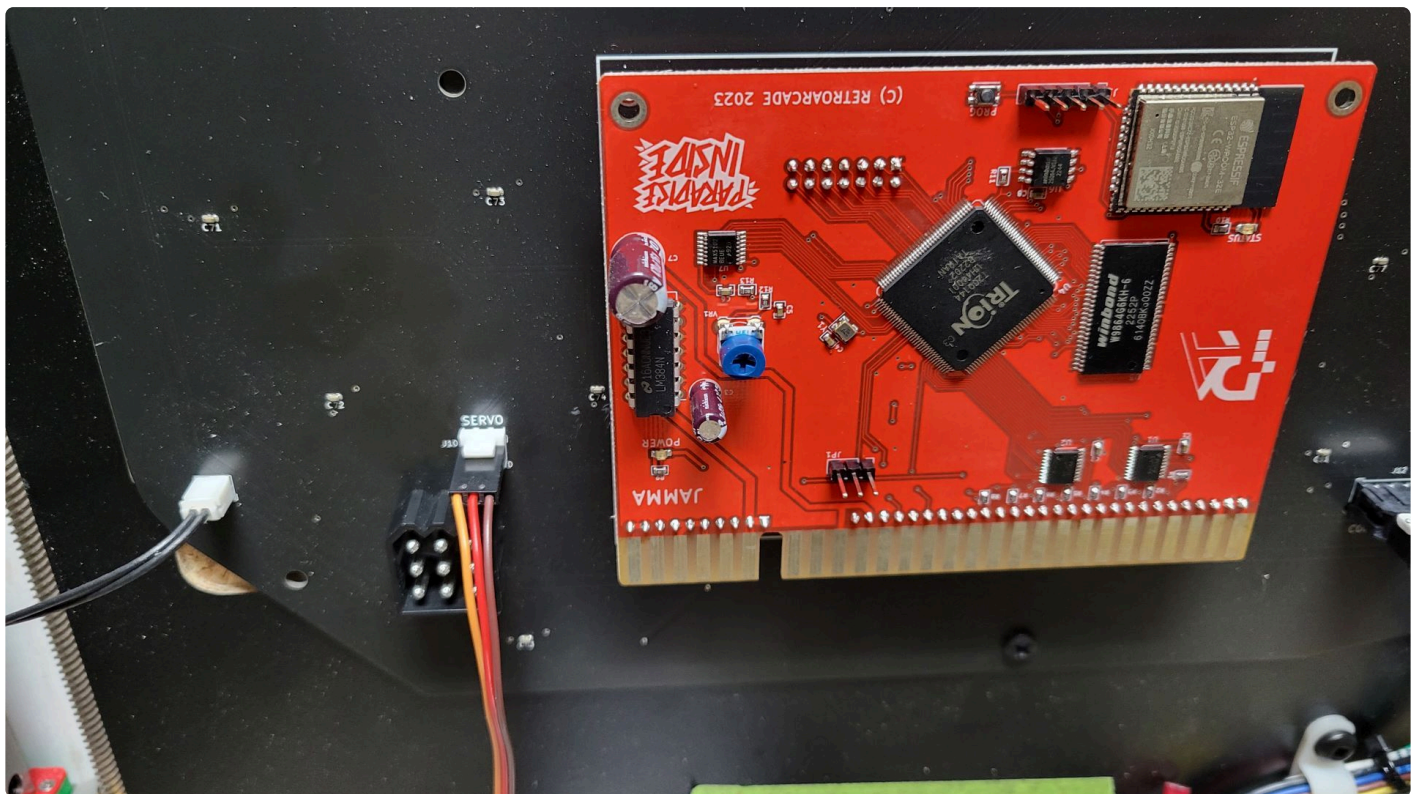
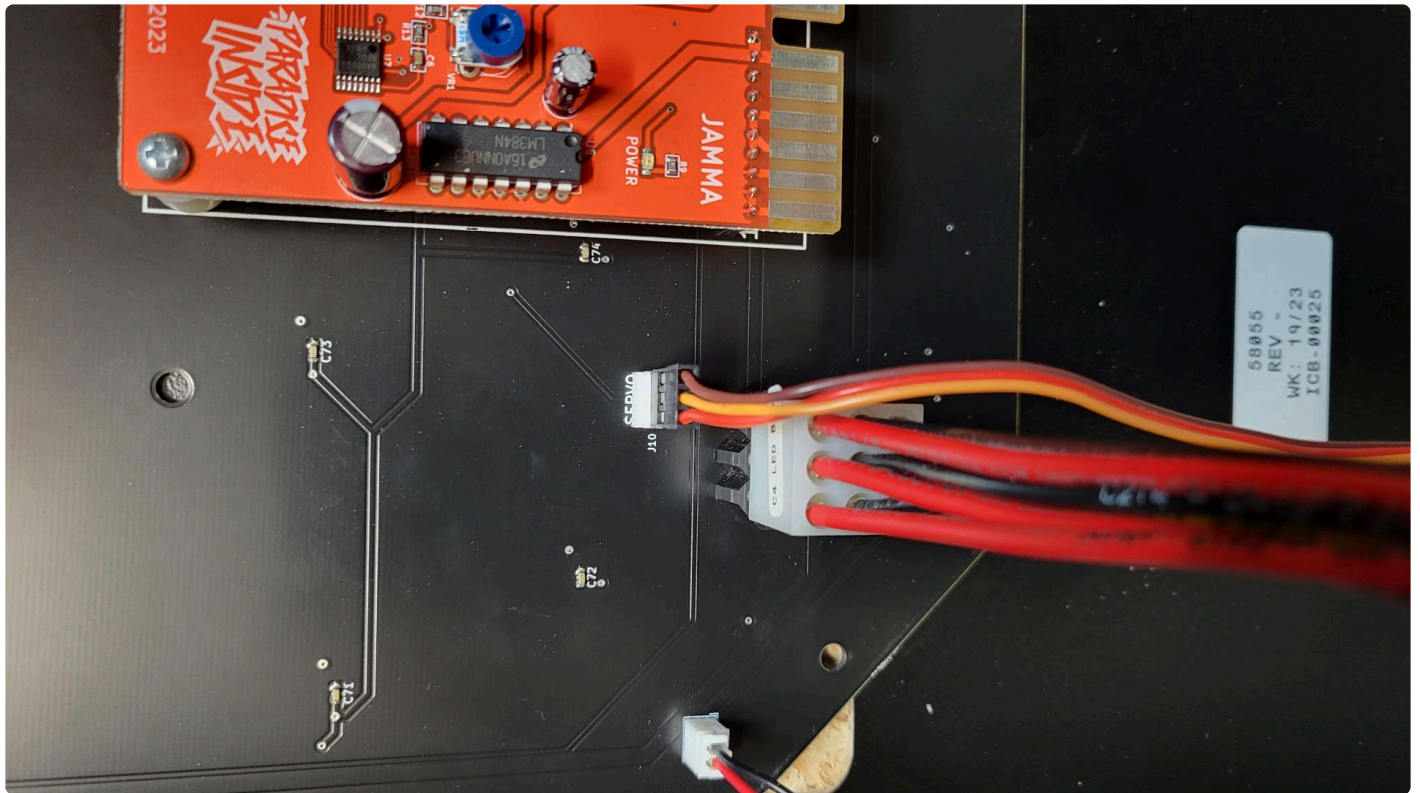
8) After performing adjustments press Apply changes to save settings, power off game & reconnect screw drive motors.

3.8.1. Replacing Servo Assembly with new unit

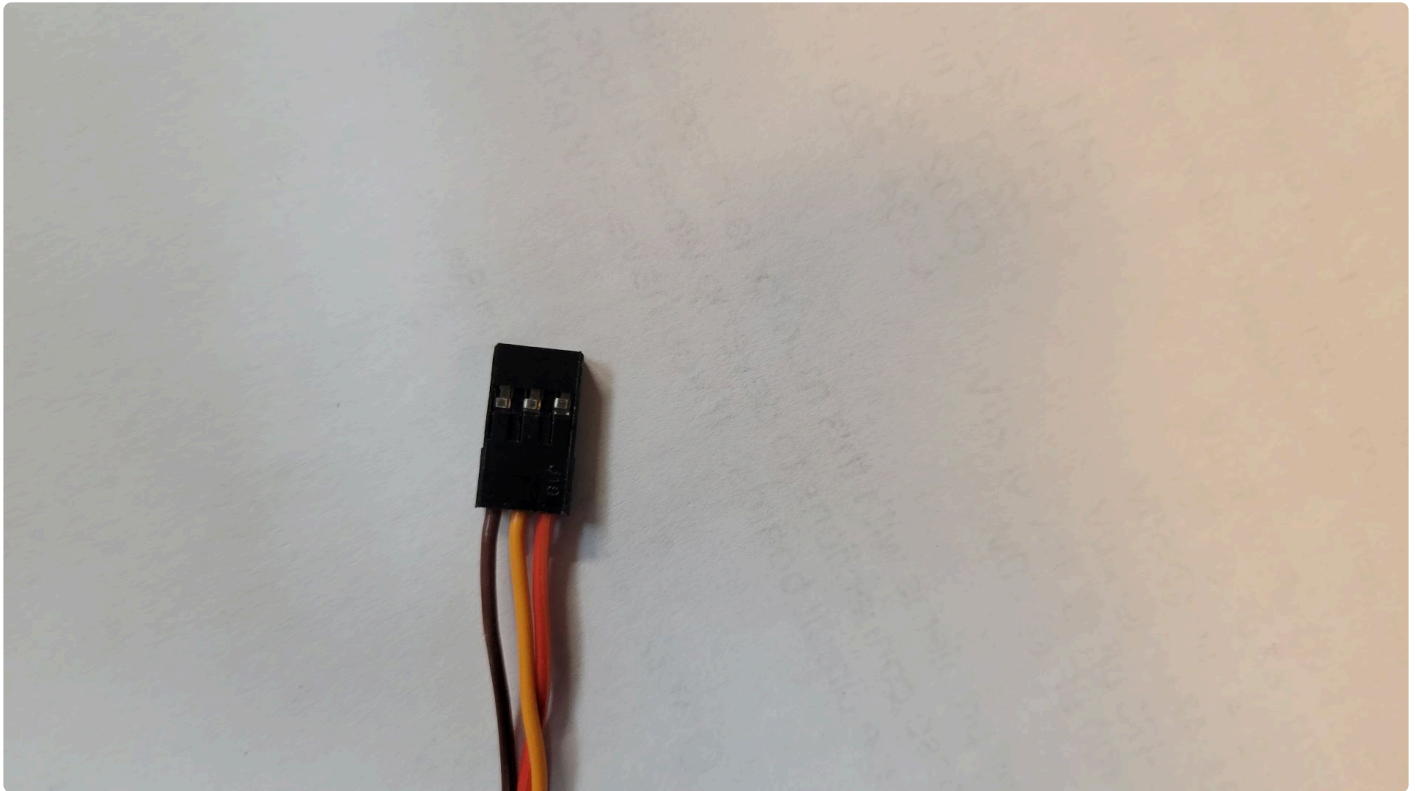
Early Production models used Back LED board Version v4.0, Later models used v4.1



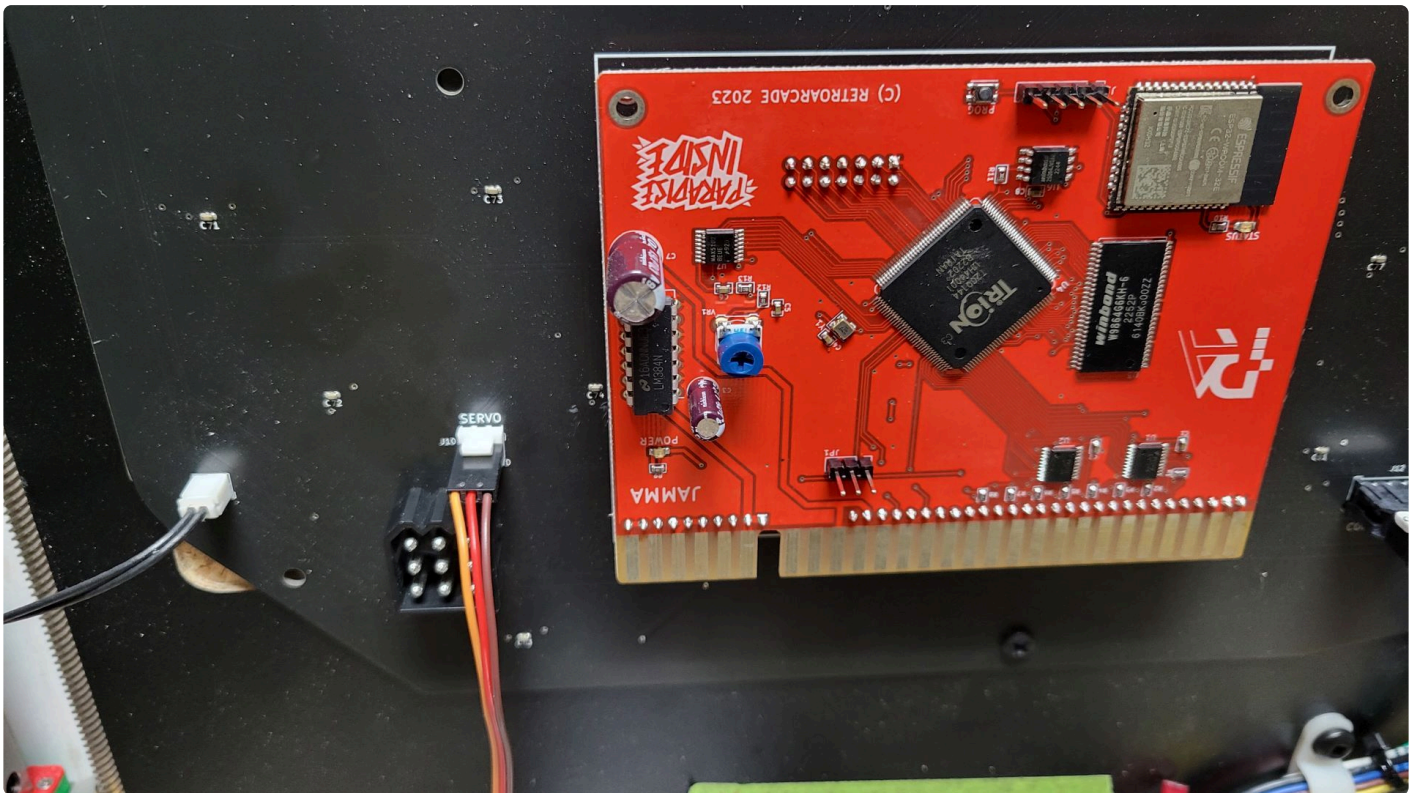
The connector on the LED board for the servo assembly is wired differently between the two versions.



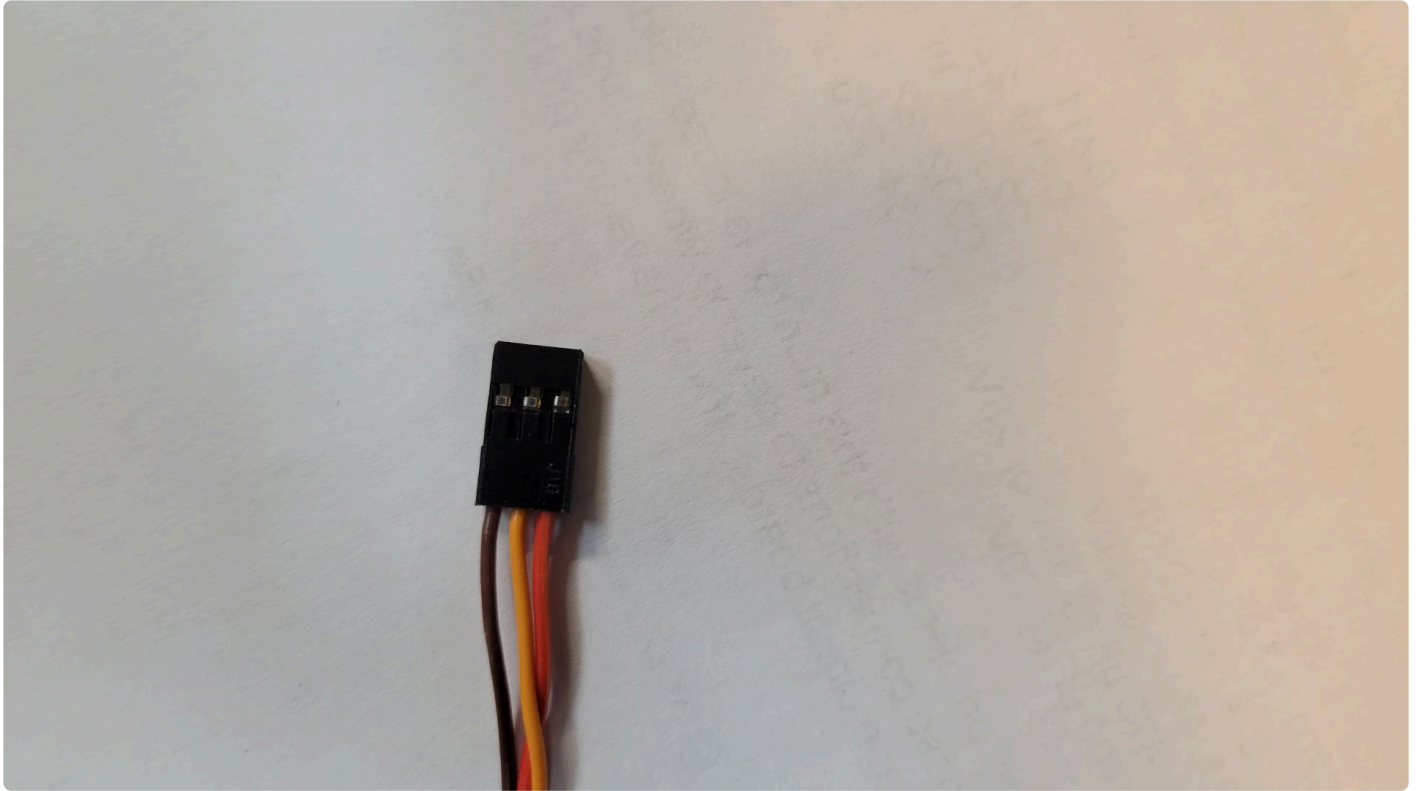
Version v4.0 servo connector is wired 5V-TX-GND



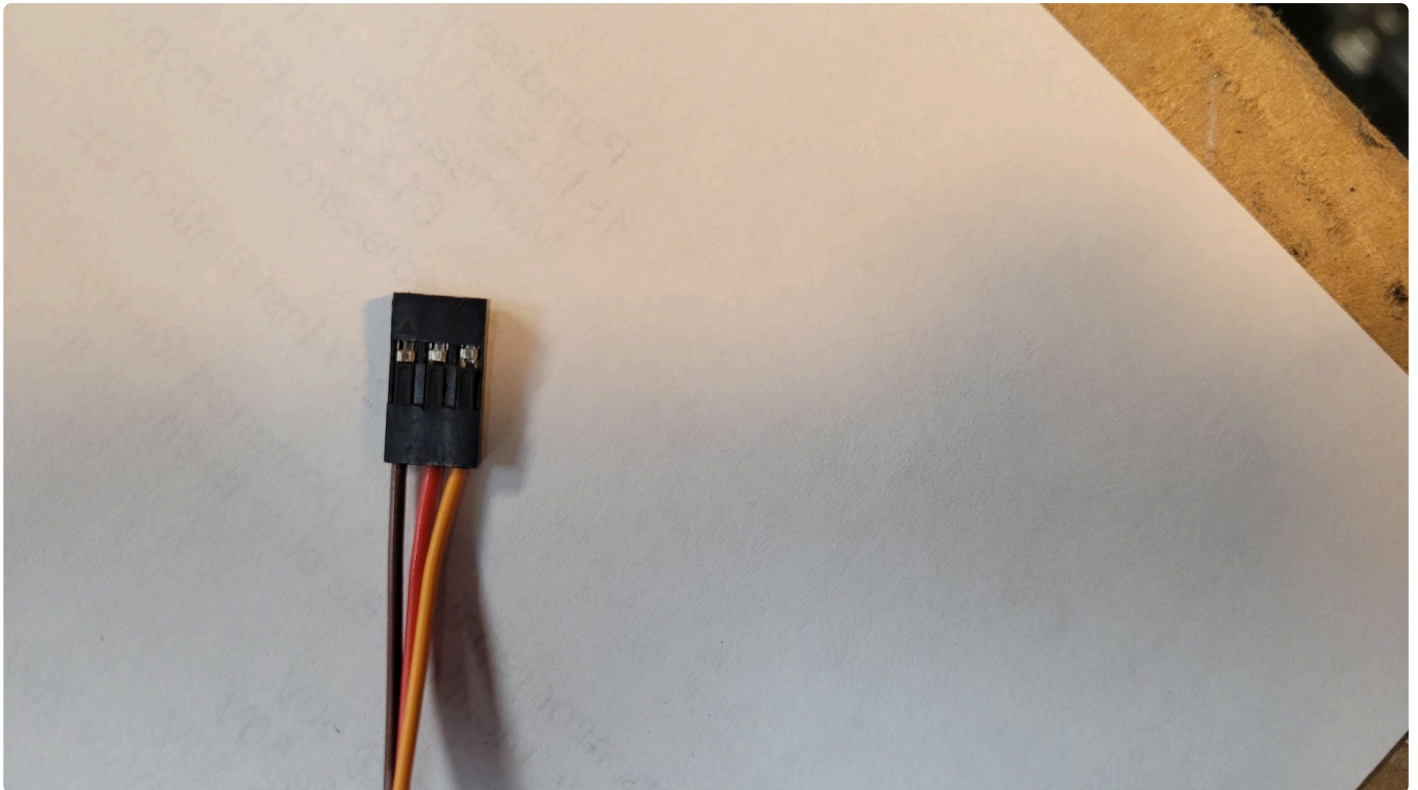
*** Brown wire always connects on the plug closest to the game board for both versions *** Version v4.1 servo connector is wired TX-5V-GND



Red wire – 5V Brown wire – Ground Orange wire – TX Servo connector for version v4.0



Servo connector for version v4.1



*** Depending on which Version LED board you have you might need to swap the Red & Orange wires on the Servo connector *** After instillation follow Servo Alignment Procedure

3.8.2. Loose Servo Disc Alignment Procedure

- 1) Power Game off then back on again. Servo motor should cycle to Return Hole than back to gate hole.
- 2) unplug servo unit and remove from playfield
- 3) Remove Allen screw (2.5 mm) holding disc to motor
- 4) Remove disc from assembly and rotate so slot in disc lines up with alignment hole as shown



- 5) Press disc back onto servo motor
- 6) Apply Blue loctite to allen screw and tighten, Do not over tighten screw Reinstall Servo assembly and follow Servo Alignment Procedure

3.9. Contacting Technical Support

Please supply the following information:

1. Your full Name, Address, contact phone number, Email address and Are you a Technician or Distributor
2. Have the app downloaded
3. Game serial number and play count (audits)
4. Description of Problem you are having. Please provide short video of issue or pictures if possible

Send information to tomc@retroarcaderemake.com