

Jet-Hoops Coin JH100 User's Manual Revision 3 – June 19, 2024

See the full Valley Dynamo product line at

www.valley-dynamo.com



7115 Belton St. Richland Hills, TX 76118 972.595.5300

sales@valley-dynamo.com

For International Sales: international@valley-dynamo.com



















**Ticket Dispensers & Service Button** 

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Jet-Hoops <sup>™</sup> is a registered trademark. Reg. No. **97/732,033** 

United States Patent #7,673,877 B2

Canada Patent # 2,566,249

United States Patent Filing # 63/190,372

Chinese Patent Filing # 202210563119.4

European Patent Filing # EP 4 091 685

#### **Jet-Hoops Coin User's Manual**

Document Revision - 3.0 Date - June 19, 2024

#### Dear Customer,

Thank you for choosing a quality engineered Valley-Dynamo product. Jet-Hoops has been built with comprehensive quality assurance to ensure your satisfaction and trouble free use of the product.

This manual was written to assist you with Set-Up, Operation, Maintenance & Troubleshooting. Below is a list of sales and technical support contacts.

Special thanks to Aerr-Technologies for developing the technology and to Voyager, a Canadian band for developing much of the music.

We sincerely hope that you and your customers will enjoy playing Jet-Hoops.

#### Valley-Dynamo

www.valley-dynamo.com

7115 Belton St.

Richland Hills, TX 76118

U.S.A.

National Sales Email: <a href="mailto:sales@valley-dynamo.com">sales@valley-dynamo.com</a> International Sales Email: <a href="mailto:international@valley-dynamo.com">international@valley-dynamo.com</a>

Technical Assistance: technelp@valley-dynamo.com

**Tech Support Hotline** (during business hours Central U.S. Time): **1-972-595-5300** (follow prompts for Tech

Support)

Spare Parts: www.valley-dynamoparts.com

An Electronic Version of this manual can be found at: www.valley-dynamoparts.com

or www.Jet-Hoops.com

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### **Section 1 - Warranty**

Valley-Dynamo warrants its new products to be free from defects resulting from faulty manufacture or faulty components under the following terms and conditions:

#### WARRANTY PERIOD

90-day warranty period

#### WARRANTY SERVICE

Valley-Dynamo will, at its sole option, repair, upgrade or replace this product in the event of any defect in materials or workmanship during the warranty period. This shall be Valley-Dynamo's sole obligation, and the customer's sole remedy, for any warranty claim.

Valley-Dynamo will request that you provide the complete Model Number & Serial Number of the unit (not just the last 5 digits), or other proof of purchase such as an invoice or receipt.

**OPERATORS AND END USERS** – While our Tech Support staff is available to assist with diagnosis and troubleshooting, contact your Distributor for Warranty Service on your equipment.

**DEALERS AND DISTRIBUTORS** – To obtain replacement and an RMA number, contact Valley-Dynamo referencing the Model number and Serial number of the unit and the nature of the problem. Valley-Dynamo will, at its discretion, send replacement parts and/or issue an RMA for the return of failed parts. To avoid billing issues, request an RMA when the failed part is present or readily available. Credit will be issued only upon receipt and inspection of the RMA. Valley-Dynamo may send replacement parts or issue an account credit. NO REFUNDS. Valley-Dynamo reserves the right to cancel outstanding RMAs 30 days after issue. Items returned without an RMA will not be inspected or credited and may be refused or returned at Customer Expense.

REPLACEMENT PARTS COVERAGE – Valley-Dynamo warrants replacement parts for 90 days from the date of purchase. To obtain a replacement and an RMA number, contact Valley-Dynamo referencing the nature of the problem and provide proof of purchase. Valley-Dynamo will, at its discretion, send replacement parts and/or issue an RMA for the return of failed parts. To avoid billing issues, request an RMA when the failed part is present or readily available. Upon receipt and inspection of the RMA, Valley-Dynamo may send replacement parts or issue an account credit. NO REFUNDS. Valley-Dynamo reserves the right to cancel outstanding RMAs 30 days after issue. Items returned without an RMA will not be inspected or credited and may be refused or returned at the Customer's Expense.

#### **SCOPE OF COVERAGE**

Note that our warranty is not an unconditional guarantee for the duration. Valley-Dynamo products are made to our exacting standards and known for their durability, but are not indestructible and may require periodic maintenance in order to function properly.

The following are not covered by the warranty:

- 1) Shipping or transport damage.
- 2) Normal wear and tear.
- 3) Damage or deterioration resulting from neglect, misuse, accident, liquid spills, improper installation, abuse, pets, burns or mishandling.
- 4) Incidental or consequential damage (except at Valley-Dynamo's discretion).
- 5) Removal or installation charges.
- 6) Shipping charges except at Valley-Dynamo's discretion.
- 7) Unauthorized modification of the product.
- 8) Use of this product with unapproved parts, conversion kits or accessories.
- 9) Damage from fire, flood, lightning or other acts of nature.

#### **EXCLUSION OF DAMAGES**

Valley-Dynamo's sole obligation and liability under this warranty is limited to the repair or replacement of a defective product at our option. Valley-Dynamo shall not, in any event, be liable for any incidental or consequential damages resulting from interruption of service, loss of business or revenue, or for liability in tort relating to this product or resulting from its use or possession.

#### LIMITATIONS OF IMPLIED WARRANTIES

There are no other warranties, expressed or implied, including but not limited to those of merchantability, revenue generation, or fitness for a particular purpose. The duration of implied warranties is limited to the period specified in the Warranty Period section above.

### **Section 2 - Declaration of Conformity**

Jet-Hoops<sup>TM</sup> is available with CE certification to be compliant with CE directives and standards. Many products **require CE marking** before they can be sold in the EU. **CE marking** indicates that a product has been assessed by the manufacturer and deemed to meet EU safety, health and environmental protection **requirements**. It is **required** for products manufactured anywhere in the world that are then marketed in the EU.

#### **Applicable Standards:**

EMC Directive 2014/30/EU

LVD Directive 2014/35/EU

EN 55015 :2013+A1:2015, EN 55032: 2015,

IEC 60335-2-82: 2017, IEC 60335-1 Edition 5.2 2016

EN 55035: 2017, EN 61000-3-2: 2014,

EN 61000-3-3: 2013+A1:2019, EN 60939-1:2010

**Product:** Amusement Game

Model: Jet-Hoops<sup>™</sup> Coin JH100

Trademark: Reg. No. 97/732,033

**Certification Type:** ISO Type 3 Certification (\*CE Tables only)

Ratings: 120 VAC, 60 hz or 220 VAC, 50 hz, 800 W

Main Replacement Fuse: 5 amps for 120 VAC: F10AL250V, 3 amps for 240 VAC: F3AL250V (\*CE Tables only)

Ticket Dispenser Inline Fuse: 5 amps for 12 Vdc, 5GFU (\*CE Tables only)

LED Display Inline Fuses: 5 amps for 12 Vdc, 5GFU (\*CE Tables only)

#### Valley-Dynamo

www.valley-dynamo.com

7115 Belton St.

Richland Hills, TX 76118

U.S.A.

## **CE** FOR INDOOR USE ONLY (\*CE Tables only)



### **Certificate of Conformity**

Applicant: Valley-Dynamo

Address: 7115 Belton Street, Richland Hills, Texas, 76118, USA

Products: Amusement Game

Models: Jet-Hoops JH100, Jet-Hoops JH200

Trademark: Reg. No. 97/732,033

The listed products have been tested by us with the listed standards and found in compliance with the following European Directives:

EMC Directive 2014/30/EU

LVD Directive 2014/35/EU

EN 55015 :2013+A1:2015, EN 55032: 2015,

EN 55035: 2017, EN 61000-3-2: 2014,

EN 61000-3-3: 2013+A1:2019, EN 60939-1:2010

Certification Type: ISO Type 3 Certification

Ratings: 120 VAC, 60 hz or 220 VAC, 50 hz, 800 W

Signed By:

Name: Terry Ruddell

Position: Electrical Engineer

Location: 777 River Road, Lindsay, On, K9V4R4, Canada

**Date:** Oct. 21, 2019

CE FOR INDOOR USE ONLY

IEC 60335-2-82: 2017, IEC 60335-1 Edition 5.2 2016

Date of Issue: Oct. 21, 2019

7115 Belton Street, Richland Hills, Texas, 76118, USA 1-972-595-5300 www.valley-dynamo.com

**Rules of Play** 

### Section 3 – Warnings & Notices

USE OF NON-VALLEY-DYNAMO PARTS OR CIRCUIT MODIFICATIONS MAY CAUSE SERIOUS INJURY OR EQUIPMENT DAMAGE! USE ONLY GENUINE VALLEY-DYNAMO AUTHORIZED PARTS.

- For safety and reliability, substitute parts and modifications are not recommended.
- Substitute parts or modifications may void FCC type acceptance.
- Use only authorized components and parts. Failure to do so will void warranty and may result in incorrect and/or unsafe operation.

#### **WARNING**

- Disconnect power supply before any maintenance or services.
- Plug this game into a properly grounded outlet to prevent shock hazards and assure proper game operation.
- Do not use an adaptor plug to defeat the power cord's grounding pin.
- Do not cut off the ground pin.
- Do not use the power cord if damaged.

Information in this manual is subject to change without notice. Valley-Dynamo reserves the right to make improvements in the equipment function, design or components as engineering or manufacturing methods may warrant.

FOR GENUINE VALLEY-DYNAMO PARTS AND SERVICE CONTACT YOUR LOCAL AUTHORIZED VALLEY-DYNAMO DISTRIBUTOR.

PARTS CAN ALSO BE ORDERED AT: WWW.VALLEY-DYNAMOPARTS.COM

#### SAFE OPERATION \*\*\* CAUTION \*\*\*

- Do not throw debris into the hoops.
- Do not spill liquids onto or into the game (use beverage holders to hold your drink).
- Do not attempt to burn the ping pong balls (they are flammable).
- Do not lean on the Lexan side shields.
- Do not drop or place objects down the Ball Chute Exhaust.
- Do not throw balls at people.
- Keep eyes and face away from Ball Chute Exhaust when launching balls.
- Set the speaker volume at a safe dB level.
- Do not set objects down on the table.
- Properly insert the Prop Stick when lifting the table Lid. (\*CE Tables only)
- Turn off the On/Off switch at the rear and unplug the power cord before replacing any components.

- Jet-Hoops can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge with proper supervision and instruction.
- Children under the age of 8 shall not play with the appliance.
- Cleaning and user maintenance shall not be performed by children without supervision.
- Do not clean any parts of the game by waterjet.

#### FORESEEABLE MISUSE

- Do not throw debris into the hoops. This will create jams possibly requiring a technician to troubleshoot the jam while power is on and the lid open.
- Do not drop or place objects down the Ball Chute Exhaust. This will create jams possibly requiring a technician to troubleshoot the jam while power is on and the lid open.
- Do not spill liquids onto or into the game (use beverage holders to hold your drink). This could potentially cause an electrical hazard.
- Keep eyes and face away from Ball Chute Exhaust when launching balls. This
  could cause bodily injury.
- Do not set objects down on the table. A spill could potentially cause an electrical hazard.
- Make use of the Prop Stick when lifting the table Lid. The Prop Stick will protect you in case of hydraulic cylinder failure. (\*CE Tables only)

### Section 4 – Quick Set-Up



# **Quick Start Guide for the Jet-Hoops Game Cabinet**

May 30, 2024

#### **Tools Required:**

9/16" Wrench or Socket 4mm or 5/32 Allen Wrench

#2 Phillips drive Pliers

### **CAUTION**

We strongly recommend this assembly/installation is performed by professionals.

This Game is very heavy – 2 People are required to install this Game.

Do not drag the game over carpet.

NEVER ALLOW THE BACK BOX TO STAND ON ITS OWN
UNTIL IT IS FASTENED TO THE MAIN CABINET

#### ASSEMBLY SHOULD BE NEAR THE GAME'S FINAL LOCATION

- 1) CAUTION: <u>Do not use a lift truck to lift under the table sides. You may destroy the LED lights and T-Molding. Do not allow the LED light strips on the bottom of the rear Marquee Upright Section to get crimped.</u>
- 2) Remove all packaging.

**CAUTION:** Watch for sharp nails, staples, screws, etc.

3) Get assistance to manually lift the game onto the floor and in location. Adjust leg levelers to insure the table is levelled width wise and leaning 2 degrees length wise towards the players. This will allow balls on the game top to roll back to the players. Do not apply stress to the leg levelers horizontally. That means properly lifting the table and not dragging it.



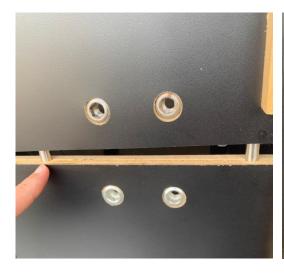


4) Remove the Coin Door key from the Coin Return and unlock the Coin Door. Remove Accessory Bag inside the Cash Box. It has the service door keys and RGB LED remote controller. Use the service key to open the top table lid and remove the cardboard box. It has extra balls, hardware, mending plates and power cord inside.



- 5) Remove the Black Ball Return shelf and Ball Shield Guard from the inside of the back section of the cabinet and set these aside.
- 6) Mount the Rear Marquee Upright Section on the rear of the cabinet, using (6) 3/8" x 2 ½" Steel Dowels, (2) Mending Plates, and (8) 3/8-16 x ¾" Hex Head Bolts. Be careful not to crimp the Led Strips inside the T-Molding. Please notice the Clearance Notches on the cabinet for safe routing of the LED Strips.

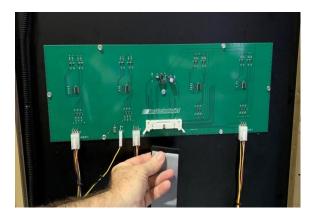
**CAUTION:** Make sure all dowels and bolts are installed and secure.

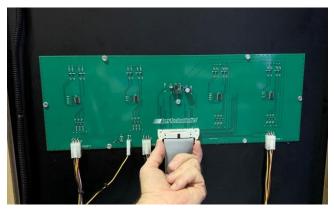


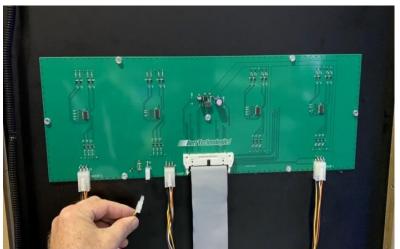


7) Unscrew and remove the rear wood panel. Feed the ribbon cable through the rear slot and connect it to the bottom of the Jet-Hoops Scoreboard. Lock the cable in place. Feed the 12Vdc power cables through the round black wire way on the bottom left and

connect the #16 guage one to the Jet-Hoops Scoreboard. Connect the other 12Vdc Power cable to the upper Marquee (top left).









8) Connect the LED Strips to any Led Strip Cables connected to the SP901E Video Controller. Make sure they run through the vertical black raceways and then close the raceway covers.





CAUTION: For locations using 220 Vac, the Power Supply (12 Vdc) inside the cabinet must be switched to 220 Vac before making the wall connection.

9) Connect the 110Vac (or 220Vac) power cable into the rear of the cabinet and into a wall plug rated for at least 5 amps. Notice the fuse holder beside the On/Off switch.

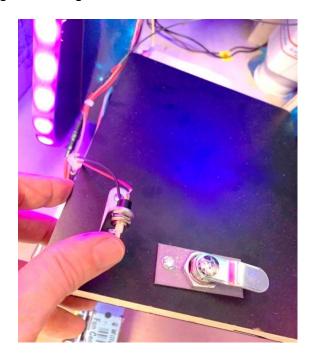








- 10) Turn on the **Power On** switch at the rear of the game and observe that all lights and displays turn on. Wait until the game has fully booted on the HMI and Table Lid Video Display. After complete power up if you get a communications error on any screen please recycle power and try again.
- 11)Open the front left service door and press the **Service Button**. This will provide you with service screens on the HMI. These screens help you **configure** your game and **test** that everything is working.



- 12)Once configured, insert coins, card swipe or bills (if equipped) to play your first game. If you don't have any coins you can press the **Service Button** and then press **Free Play** on the **HMI Touch Screen** to play. Note that there is an "**Attract**" mode that can be configured. It attracts people to the game by launching and floating a ball after a game is over. This draws people to the game which increases revenues. Note that it will only launch once after a game.
- 13)Once everything is working, install the **Ball GuardShield** by removing the **Protective Film** and inserting it into the rear slot near the hoops. It is **angled** towards the back wall to help reflect balls downward. Screw the rear wood panel back in place.



14) Remove the Protective Coating from the Side Shields. Using a 4 mm or 5/32" hex Allenkey to install the Side Shields using the screws provided in the Cash Box. Do not overtighten.





**Note:** There are extra balls and cups in the game should you need them in the future. There is also a remote control for the LED strips in the T-Molding. You can place advertising on the mTV-100 USB stick (located inside the game towards the rear right) to display ads on the Table Surface display.

The game comes preloaded with 38 Ping Pong balls. These are standard 40 mm Ping Pong balls that you can purchase in bags of 50 from Valley-Dynamo (with basketball theme) or local sporting store (no logo). There are companies that can add a logo for you for your venue. Please refer to the last section of this section for instructions on calibration of Floating Ball return system. You should see the last ball in the clear pipe exposed at the exit of the metal **Inlet Trough**. It is important that you don't overfill the pipe past this location otherwise you run the risk of ball jams.

	Set-up Parts Listing	Quantity per Game
Part Number	Description	
NI20300890	1/2-13 LEG LEVELER HEX NUT	4
	40mm HOOPS PING PONG BALL	50
20515140	C/T LEG LEVELER	4
NI870007405	CORNER CASTING BOLT 3/8-16 x 3/4"	8
JP-20100130	DEC HEAD BOLT, 1/4-20 X .984	16
JP-20600060	MENDING PLATE	2
20606760	STEEL DOWEL 3/8X2 1/2"	6

Ads on Surface Scoreboard Display: Jet-Hoops has photo ads that can display on the Table Surface video display. 8 Ads can be read from a USB stick which gets inserted into the rear grey module called an mTV-100. mTV-100 photos need to be **1280 x 720 p in size.** 

During the game the following sample photos are displayed on the rear screen. These are built into the program so are not easily changeable.









#### Sample Ads:

There are 8 ads that look like this currently on the USB stick in the mTV-100. You can change these to any 8 ads you like.





#### mTV-100 USB Stick - Ad Changing Procedure:

Turn the power off on the game. Lift the lid and towards the back left there is a module that is labeled mTV-100 with a USB stick plugged in it. Remove the USB stick from the mTV-100. Install it in your computer's USB port. Place your photos into each of these 8 folders. Remove the USB Stick from the computer and install it back into the USB port on the mTV-100. Power up the game. Your ads should display on the rear Scoreboard Video Display when the game is not being played. Each ad plays for a few seconds. A new Ad will display each time you press a button to launch a ball.



### Jet-Hoops Floating Ball Calibration Procedure

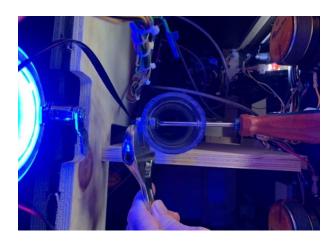
If you have issues with the ball not exiting and floating consistently you can use this procedure to recalibrate.

NOTE: If in the future you choose to use 3<sup>rd</sup> party standard 40 mm ping pong balls you may need to recalibrate using this procedure.





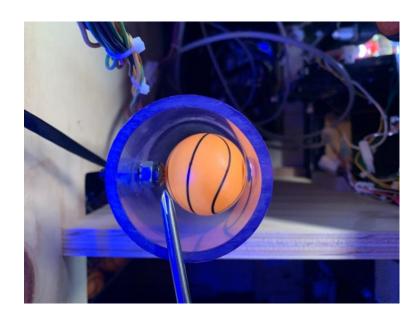
2) Step 2: Loosen Lock Nut on outside of chute.



**3) Step 3:** Turn on the game and launch a ball. Use your finger to hold the ball in the air stream against the Speed Reducer screw to view the gap between the ball and the screw.



**4) Step 4:** Adjust the Speed Reducer screw so that the gap between it and the ball is minimal, almost rubbing. Launch a few balls to see how it behaves. Once it's launching properly tighten down the lock nuts on both sides of the chute wall. Try launching a few more balls to make sure.



**5) Step 5:** If you want the ball to float higher simply adjust the 12 Vdc power supply screw in the cabinet to > 12.5 Vdc and < 13.0 Vdc. If you want the ball to float lower then adjust the 12 Vdc power supply screw in the cabinet to >12.0 Vdc and < 12.5 Vdc.



**6) Step 6:** Repeat above steps if necessary. Place Main Control Console back on the game once calibration is complete.



Enjoy your new Jet-Hoops table!!!



### Section 5 – Rules of Play



#### **Jet-Hoops NORMAL PLAY L1 (Level 1):**

- 1) Both Players (**Home Green** & **Away Red**) stand at the front of the Jet-Hoops table to pick and throw their balls.
- 2) Players can throw overhand or underhand and can bounce the ball from any surface.
- 3) If a ball bounces back onto the table lid or lands on the floor the player automatically gets a re-throw.
- 4) Each player takes a turn throwing 1 ball until they have both thrown 10 balls each.
- 5) Player with the highest score after 10 balls wins. The highest possible score in **NORMAL PLAY L1 (Level 1)** is 30. This would require a player to sink the smaller 3 point Hoop 10 times.

#### **Jet-Hoops Tournament Play:**

- 1) Jet-Hoops can be played with 2 or 4 players during tournaments.
- A coin is tossed to decide which team will be Home (Green) and which team will be Away (Red).
- Players or teams (Green & Red) stand at the front of the Jet-Hoops table to pick and throw their balls.
- 4) Players can throw overhand or underhand and can bounce the ball from any surface.
- 5) If a ball bounces back onto the table lid or lands on the floor that ball is dead and has to be thrown into the gutter.
- 6) If 2 Players are playing then each player takes a turn throwing 1 ball until they have both thrown 10 balls.
- 7) If 4 Players are playing then each player takes a turn throwing 1 ball until they have all thrown 5 balls each.
- 8) Player or Team with the highest score after 10 balls wins. The highest possible score is 30. This would require a team to sink the smaller 3 point Hoop 10 times.

#### Jet-Hoops FLASHING HOOP L2 (Level 2):

- 1) Both Players (**Home Green & Away Red**) stand at the front of the Jet-Hoops table to pick and throw their balls.
- 2) Players can throw overhand or underhand and can bounce the ball from any surface.
- 3) If a ball bounces back onto the table lid or lands on the floor the player automatically gets a re-throw.
- 4) Each player takes a turn throwing 1 ball until they have both thrown 10 balls each.
- 5) Player with the highest score after 10 balls wins. The highest possible score in **FLASHING HOOP L2 (Level 2)** is 19.

#### Jet-Hoops 3 IN-A-ROW L3 (Level 3):

- 1) Both Players (**Home Green & Away Red**) stand at the front of the Jet-Hoops table to pick and throw their balls.
- 2) They will throw 3 balls in a row 3 times during the game. They must sink all 3 hoops in a row to get the 6 points.
- 3) Players can throw overhand or underhand and can bounce the ball from any surface.
- 4) If a ball bounces back onto the table lid or lands on the floor the player automatically gets a re-throw.
- 5) Player with the highest score after 9 balls wins. The highest possible score in **3 IN-A-ROW L3 (Level 3)** is 18.

#### Jet-Hoops WHACK-A-HOOP L4 (Level 4):

- 1) Both Players (**Home Green & Away Red**) stand at the front of the Jet-Hoops table to pick and throw their balls.
- 2) Players can throw overhand or underhand and can bounce the ball from any surface.
- 3) If a ball bounces back onto the table lid or lands on the floor the player automatically gets a re-throw.
- 4) Player with the highest score after 10 balls wins. The highest possible score in **WHACK-A-HOOP L4 (Level 4)** is 30. This would require a person to sink the smaller 3 point Hoop 10 times.



#### **Troubleshooting**

#### Section 6 - Routine Maintenance

**Note:** This section can be performed by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge with proper supervision and instruction.

#### Cleaning:

**CAUTION:** Please remove power by turning the ON/OFF switch at the rear to the OFF position and unplug the power cord before cleaning.

Use Windex or similar cleaner to wipe down the entire table where needed. This includes the Hoops, Hoop Sensors, HMI (Human Machine Interface) Touch screen, Table Lid LED Plastic cover, Beverage Holders, Push-Button Lights, Side Shields, Table Graphics, Coin/Bill Acceptor, Ticket Dispenser, the black Ball Return Assembly, etc.

#### **Hoop & Net Inspection:**

Inspect Hoops and Nets for any damage, debris, etc. Check to make sure each hoop is not bent. It should be perpendicular to the rear wall. Check to make sure net is hooked to each hook under the hoop.

#### **Hoop LED/Sensor Module Inspection:**

Inspect each of the 6 Hoop LED/Sensor modules to make sure there is no dirt or debris in front of the sensors. Make sure all cable connections at the rear are secure.

#### **Ball Inspection:**

**CAUTION:** Please remove power by turning the ON/OFF switch at the rear to the OFF position and unplug the power cord before lifting the Table Lid unless you absolutely must have power on for viewing balls in "Free Play" or "Auto Cycle". Properly insert the Prop Stick (\*CE tables only) when lifting the table Lid.

Using the key in the Accessories Bag, unlock and open the Table Lid. If any of the balls look damaged then place the game into "Free Play" mode (refer to Section 7) and press buttons until the damaged ball(s) surfaces through the Ball Exhaust Chute. You may also want to consider cleaning each ball before placing them back in the game.

#### **Ball Return Inspection:**

**CAUTION:** Please remove power by turning the ON/OFF switch at the rear to the OFF position and unplug the power cord before lifting the Table Lid unless you absolutely must have power on for viewing balls in "**Free Play**" or "**Auto Cycle**". Properly insert the Prop Stick (\*CE tables only) when lifting the table Lid.

Inspect the Hoop Nets to make sure no balls are trapped and that no debris is stopping the balls from dropping down the net and into the metal **Inlet Trough** chute. Inspect the ball return chute for any debris as well.

Search for any debris that may be lodged in the Ball Return piping. If debris is found you can try to place the game into "Free Play" mode and press buttons until the debris works itself down to the wire frame Solenoid Trough. If this does not work you may have to disconnect the piping or blow it clean using a vacuum cleaner blower. "Auto Cycle" mode is also another option for cleaning out balls.

#### **LED Inspection & Remote Controller Battery Replacement:**

**CAUTION:** This procedure requires the power to be on during inspection.

Inspect all LED lights to make sure they are all working. The LED lighting in the T-Molding is controlled by the remote controller in the Accessory Bag. You can press various buttons to select the color or speed of these LEDs. Note that there is a battery in the remote controller (CR2025 Lithium Battery 3V) that may need replacing every few years. If you find an LED strip that is not working refer to **Section 9 – Troubleshooting** for details.





The LED lights above the Hoops can be turned on using the **Troubleshooting** screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details.

Inspect the LED lights in the Beverage Holders and around the Ball Exhaust Chute to make sure they are all on. If you find an LED that is not working refer to **Section 9 – Troubleshooting** for details.

Inspect the LED Lights inside the speakers to make sure they both work. If you find a set that is not working refer to **Section 9 – Troubleshooting** for details.

#### **Pushbutton Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

The Pushbutton lights and switches on the Control Panel Console can be tested using the Troubleshooting screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details. Open the Ticket Dispenser door and press the **Service Button** to make sure the HMI Touch Screen changes accordingly.

#### **Sensor Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

The ball sensors above and below the Hoops can be tested using the Troubleshooting screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details.

#### **Ticket Dispenser Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

The ticket dispenser can be tested using the Troubleshooting screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details. There is a button on the side of the Ticket Dispenser to manually feed tickets. Try pressing this button to make sure tickets feed properly.

#### Coin Mech(s), Card Swipe(s) & Bill Acceptor Inspection:

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

The coin mech(s), card swipe(s) and bill acceptor can be tested using the Troubleshooting screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details. Check the Coin Mech light to make sure it is not burned out. Inspect the mechanical mechanisms on both the Coin Mech and Bill Acceptor for any major wear or jamming issues.

#### **Blower Fan Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

Using the Troubleshooting screen on the HMI Touch Screen, turn on and off the Blower Fan manually to make sure it functions correctly. Refer to **Section 9 – Troubleshooting** for details.

#### **Solenoid Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid opened during inspection.

Solenoids can be tested using the Troubleshooting screen on the HMI Touch Screen. Refer to **Section 9 – Troubleshooting** for details. **NOTE:** these have to be tested one at a time. Make sure that the Solenoid springs are not compressed when the solenoids are in the Off state. Over time these springs may compress not allowing them to pull back to the Off position fully. If this is the case then you must replace the springs. To keep running you can remove and try to stretch them out. Then reinstall and test.

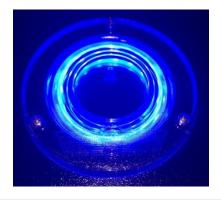
#### **Exhaust Chute Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid opened during inspection.

Make sure there is no debris in the Exhaust Chute above the screen. If Debris is causing problems for ball delivery then refer to **Section 9 – Troubleshooting** for details.

Make sure that balls can just slightly pass by the Speed Reducer screw located near the exit. If this screw is too tight then balls will not slow down and will fly out of the chute. If too loose, balls will get stuck. Refer to **Section 9 – Troubleshooting** for details.

Periodically check and tighten the 2 lower Solenoid Trough screws on the Exhaust Chute above the Blower Fan:







#### **Table Lid Supports Inspection:**

**CAUTION:** This procedure requires the power to be on and the lid opened during inspection.

Make sure there is nothing restricting the Table Lid Supports. Make sure all lid support security screws are secure. If the table lid is having trouble staying open then please order new supports from Valley-Dynamo.

#### Wiring Inspection:

**CAUTION:** This procedure requires the power to be off and the lid opened during inspection.

Inspect all wiring for burn marks, melting, loose connections, etc. Over time, screws on the power supplies that hold down wiring will loosen. It is recommended that all of these screw terminals get tightened periodically.

#### Music, Cheers, Videos & Ads Inspection:

**CAUTION:** This procedure requires the power to be on and the lid closed during inspection.

Using the Troubleshooting screen on the HMI Touch Screen you can test each of 8 songs, cheers, goal videos and advertising. Refer to **Section 9 – Troubleshooting** for details.

#### **Overall System Check:**

**CAUTION:** This procedure requires the power to be on and the lid opened during inspection.

By placing the game in "**Auto Cycle**" you can have the game automatically cycle 10 balls Green and 10 balls Red. You will need to place these balls in a box and when the automatic cycle ends place the balls in the Inlet Trough ball return near the hoops. This is a good way to test many things at the same time such as lights, solenoids, fan, LEDs, music, videos, etc. Refer to **Section 9 – Troubleshooting** for details.

### Section 7 – Power Up, Configuration & Operation

Power Up:

**CAUTION:** Lid shall be kept closed during power up.

Turn power on the game by pressing the toggle switch at the rear of the table. The LED indicator on the toggle switch should turn on.

The following devices should power up: T-Molding LED Lights, Beverage Holder LEDs, Ball Exhaust Chute LEDs, HMI (Human Machine Interface) Touch Screen, table surface Video Display, Hoop LEDs, etc.

The HMI and table surface Video Scoreboard Display will initially display the **Jet-Hoops** logo and Valley-Dynamo screens.





Once power up is complete the HMI touch screen will display the **Main** screen.



**Note:** Recycling power is a good way to reset the game or clear any errors.

#### Configuration:

The HMI Touch Screen allows the owner to configure the game using a "Configuration" screen. Open the Ticket Dispenser Door on the front left and press the "Service" button.



The "Configuration" screen will display like this on the HMI Touch Screen:



**Hour/Day/Month/Year:** This allows you to adjust these for your time zone. Simply touch the number you want to change and use the pop-up keypad to enter the new number and then press **Enter**. You will notice in the top left a Minimum and Maximum range for each number. If the date is not being saved after a power failure, then it's time to replace the battery on the Main Processor. (5-year life expectancy) Refer to **Section 8 – Spare Parts.** 



# of Green Games or Red Games: These fields keep track of the total # of games that each side has played. (Maximum of 32,767) You can reset these counters by pressing the "Reset" buttons. Note: There is also a physical counter near the coin tray that is non-resettable. It is the sum total of all credits inserted.

**Music Before Game:** Pressing this button will turn green and allow music to play before a game. There are a total of 8 tunes that cycle one after the other. These files reside on a microSD card on the sound module. Technically you could place your own licensed music onto this microSD card.

**Music During Game:** Pressing this button will turn green and allow music to play during a game. When a goal is scored a Cheer will interupt the song. If this is set to off (red) the Cheers will still play when a goal is scored.

**Attract On/Off (X) Mins:** This button enables (On) or disables (Off) the Attract Mode feature. When the game is over and people leave the game, a ball will pop up X Minutes afterwards (adjustable). Typically this is set for 1 Minute. This attracts new players to the game. They will grab and toss this ball into a cup. Nothing will happen but they feel good about their throw and want to play more so they insert credits to play. We did a study and found this feature

increased revenues by 30%. Only 1 free ball can pop up after a game is over otherwise people would simply wait for free balls every minute and not want to pay to play.

**Max Game Time:** This is the maximum time that a game can last. This is typically set for 7 minutes. Once this time is reached the game will end regardless of how many balls each player has left. If there are enough extra credits then another game will start.

**Shot Clock:** This is the amount of time in seconds allowed before a Green or Red pushbutton is enabled and flashes again. Note that this value gets reset to 0 whenever a hoop is made.

**Last Shot:** This is the amount of time allowed in seconds on a player's very last shot (ball #10).

**Whack A Hoop Time:** This is the amount of time between Hoops lighting up when playing WHACK-A-HOOP L4. You only get a point when you sink a ball in a Hoop that is lit up so the smaller this time the more difficult it will be for players to score.

**Green Tickets Enabled:** Pressing this button will turn green and will enable the left Green Ticket dispenser and all of its associated HMI screens.

**Red Tickets Enabled:** Pressing this button will turn green and will enable the right Red Ticket dispenser and all of its associated HMI screens.

# of Tickets to Dispense Based on Score: You can enter a number from 0.0 to 9.9 in these fields by pressing the field and entering in your number. If you were to enter 2.5 for Winner and 1 for Loser and the final score was Green 7 and Red 2 then 7 x 2.5 = 17.5 (18 rounded up) tickets would dispense for Green and 2 tickets for Red. If both ticket dispensers are enabled and wired then 18 tickets would dispense from the Green Ticket Dispenser and 2 tickets would dispense from the Red Ticket Dispenser. If only 1 Ticket Dispenser is enabled and wired then 18 + 2 tickets would dispense from the 1 Ticket Dispenser. A screen will display after the game is over to let both players know how many tickets they each won. As the tickets are being dispensed the counter beside these numbers increment:



# of Tickets For a Perfect Score of 30: You can enter a number from 0-99 in this field by pressing the field and entering in your number. Since a perfect score is so hard to get, it should be rewarded with even more tickets.

**GAME MASTER RESET:** This button does the same thing as recycling power. If there are enough extra credits then a new game will start.

**FREE PLAY:** This button allows players to play for free once you "**Return to Main Screen**". After a game is over the score is reset and a new game can be selected. Note that in Free Play you can press **END** in the middle of a game in order to end the current game, select and start a new game.



# of Credits for 1 Person to Play: You can enter a number from 1-99 in this field by pressing the field and entering in your number. If you were to enter 7 then both players would each need to insert 7 coins for a total of 14 coins. If the coins are quarters then this would equate to \$1.75/player. NOTE: If someone wishes to play by themselves they would simply insert 7 coins and then press the flashing Green pushbutton to get started. If a second player comes along after Green has started and inserts 7 coins then Red can join in. Both Green and Red will still only get 10 balls each to throw.

Bill accepters have dip switch settings on it or can scan a sheet so that they send 4 long credit (pulses) when \$1 is inserted. Make sure the "on" pulses from the bill acceptor are long enough (>.01 sec., 100 ms) for our processor to read.

# of Credits for 1 Person Fri/Sat: If you want to charge more on a busy Friday or Saturday you can enter a different # of credits for these days. The game uses an internal clock/calendar to monitor the day of the week. Make sure the Hour/Day/Month/Year is displaying correctly and battery on the PLC processor is good. Do not set this to 0 otherwise people will play for free on Friday and Saturday.

**Clear Credits:** Press this button to clear all credits. (New units only)

**Single Coin Mech:** Press this button if you only have 1 Coin Mech or Card Swipe. This would need to be wired to the Green Coin Mech wires. (New units only)

**Two Coin Mechs:** Press this button if you are installing 2 independent Coin Mechs or Card Swipes. The left Coin Mech or Card Swipe would be for the Green Player and the right Coin Mech or Card Swipe would be for the Red Player. If someone only inserts coins or swipes the Red side then only Red plays.

**No Activity Reset Time:** If there is no activity for X minutes such as pressing buttons, sensing balls or entering coins, the game will time out and reset after this amount of time.

**Troubleshooting Screens:** If you need to perform troubleshooting simply press the "**Service**" button in the left front door and select the appropriate screen.

**Return to Main Screen:** If you are finished you can simply press "**Return to Main Screen**" to display the game status. **NOTE:** To return to "**Configuration**" screen you would need to press the "**Service**" button again.

Music & Cheers: Jet-Hoops comes preloaded with music and cheers on a MicroSD card mounted on a Blue Sound Module located on the main processor Carrier board. There are 8 music files and 8 Cheers. These are .mp3 files. Technically you could load your own 8 songs and 8 cheers but you would have to make sure you own the music licenses for each. If no music or cheering plays, the MicroSD card may be corrupted and should be replaced.

**Bluetooth Audio:** If you don't want to hear any onboard music or cheers from the game at all you can Bluetooth music to the game from your computer or phone by moving the audio cable from the blue Sound Module on the PLC Carrier board to the input of the KN320 Bluetooth device mounted to the Audio Amplifier. Then simply synch your phone in Bluetooth settings to the KN320 device.





**Videos & Ads on Table Surface Scoreboard Display:** Jet-Hoops has cheer videos & photo ads that display on the top surface Scoreboard. 8 Photo Ads can be added with a USB stick that plugs into the rear grey mTV-100 module.

#### **Cheer Videos:**









#### **Sample Photo Ads:**





#### mTV-100 Procedure:

Turn the power off on the game. Lift the lid and towards the back right there is a grey module that is labeled mTV-100 with a USB stick plugged in it. Remove the USB stick from the mTV-100. Install it in your computer's USB port. Place your photos into each of these 8 folders. They must be **1280 x 720 p**. Remove the USB Stick from the computer and install it back into the USB port on the mTV-100. Power up the game. A different ad displays on the top surface Video Display during game play each time a PB is pressed and ball launched. A new Ad displays every few seconds after a game is finished. This helps promote things like food and beverage deals, upcoming events, etc.



**T-Molding LED Lights:** The LED lighting in the T-Molding is controlled by the remote controller in the Accessory Bag. You can press various buttons to select the color or speed of these LEDs. Note that there is a battery in the remote controller (CR2025 Lithium Battery 3V) that may need replacing every few years. If you find an LED strip that is not working refer to **Section 9 – Troubleshooting** for details.



#### Operation:

Jet-Hoops is preconfigured to accept 4 quarters or 1 dollar bill for each player to play.
 NOTE: Refer to Configuration on previous pages for details on how to change this.
 You can set it to more credits on week-ends. (Friday & Saturday)

Insert 8 quarters or 2 x \$1 bills to begin playing with 2 players (Green on the left, Red on the right). A Credit screen displays the number of credits required and paid by each player. Any credits paid beyond the required amount get added to the **Extra** Credits field. For example on the screen below Home (Green) plays Away (Red) a game then Green plays alone for one game. They select one of the 4 different games, select 1 or 2 players and then press START.

Note that in this case Green would need to select 1 PLAYER on the very last game before pressing the START button.



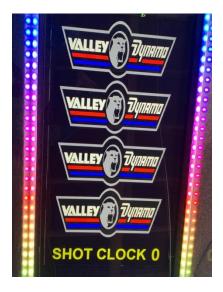
The Green player presses the flashing Green Pushbutton to start the game.

If someone wishes to play by themselves they would simply insert the number of credits required for Green or Red (if 2 coin mechs) and then press the flashing Green or Red pushbutton to get started. If there are enough Extra Credits after a game then a new game can be selected and started.

2) Once the Green or Red button is pressed a ball will launch and the following screen will display on the HMI showing score, shot clock time and # of balls left.



The table surface will display ads like these during game play. A new ad displays every time a button is pressed to launch a ball.





- 3) The Green player grabs the ball that is floating in the air after it exits the Ball Exhaust Chute and throws the ball overhand or underhand into one of the hoops. The small Hoop is worth 3 points, medium Hoop is 2 points and large Hoop is worth 1 point. They can bounce the ball off any surface if they wish. If a ball bounces back onto the table lid or lands on the floor the player automatically gets a re-throw. Note that the table should be leveled to 2 degrees to allow balls to roll back towards the players.
- 4) If a hoop is made the Green LEDs above that hoop will flash and then turn off, crowd cheering will occur, the table surface Video Display will show a goal scored video display image and the HMI Touch screen and digital scoreboard will display the updated score.





- 5) The Red player can now press the flashing Red pushbutton and the cycle repeats until both players have thrown 10 balls each. Note: If the players stop playing for X minutes (Adjustable from the Configuration Screen, typically 2 or 3 minutes) it is assumed they have abandoned the game and it will automatically reset, clearing any past credits inserted in the game and defaulting to NORMAL PLAY L1. Pressing the Game Reset on the Configuration Screen of the HMI or recycling power on the game will only clear the credits for the last game. Any extra credits will remain. Also if the game takes too long to play exceeding Max Game Time which is typically 7 minutes then the current game is over and resets. If there are extra credits then a new game will start.
- 6) Both players repeat the above until 10 balls each have been thrown.
- 7) If you have one or two ticket dispensers installed and enabled from the "**Configuration**" screen, tickets will automatically dispense to the winner and loser based on what you set-up. See "**Configuration**" details on previous pages.

8) The following screen will appear to show the number of tickets that **Green (Home)** and **Red (Away)** wins and the actual number of tickets dispensed:



If ticket dispensers are empty or jammed a message screen like this will display:

```
Home Tickets Problem
Please Notify Attendant!

# Tickets Home 4 0

# Tickets Away 9 0

Away Tickets Problem
Please Notify Attendant!
```

9) The following HMI screens will appear once all of the tickets have dispensed:





10) The following table surface Video Display screen will appear once all of the tickets have dispensed:



11) After a few seconds the table surface Video Display will display advertising. Refer to the "**Configuration**" section on previous pages for more details on how to load your own ads. After 8 ads display the FINAL SCORE screen will again display. This gives the winner bragging rights until the next game is played.



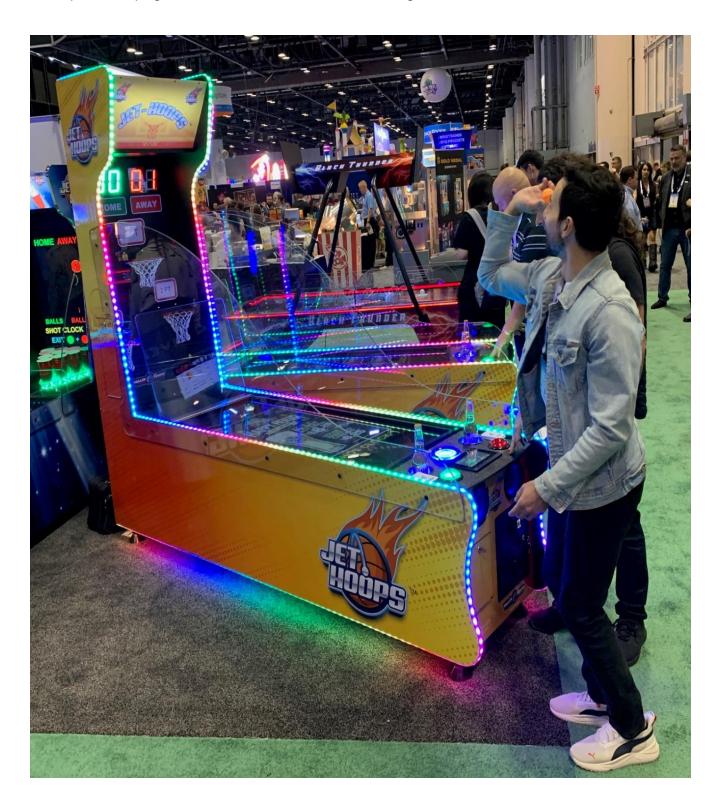




12) LED Lights above the 3 Hoops will strobe to get players attention. Music will play "Before Game" if enabled on the "Configuration" screen.



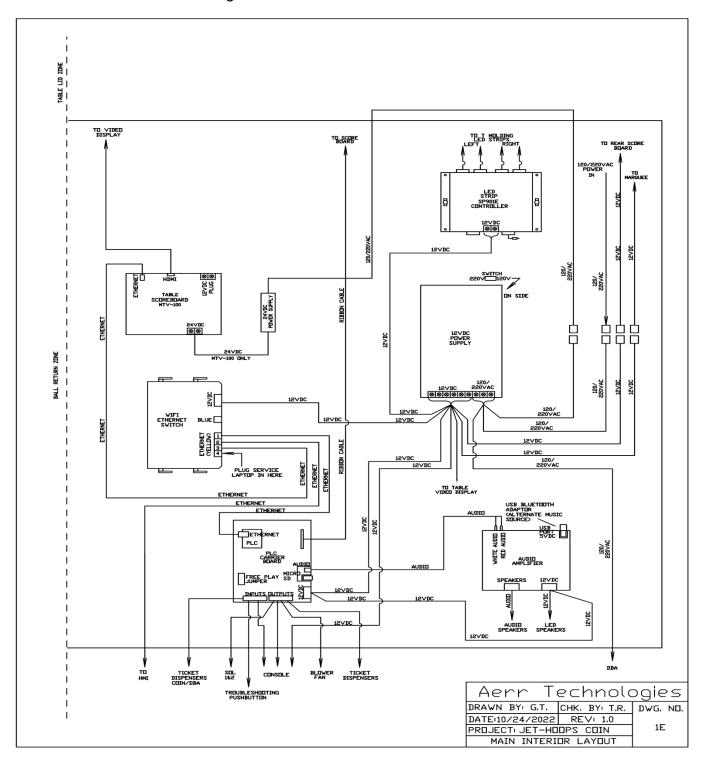
T-Molding LED lights will light up in various colors and strobe (some versions) if configured to do so using the remote controller. See "**Configuration**" section on previous pages for more details on how to change this.



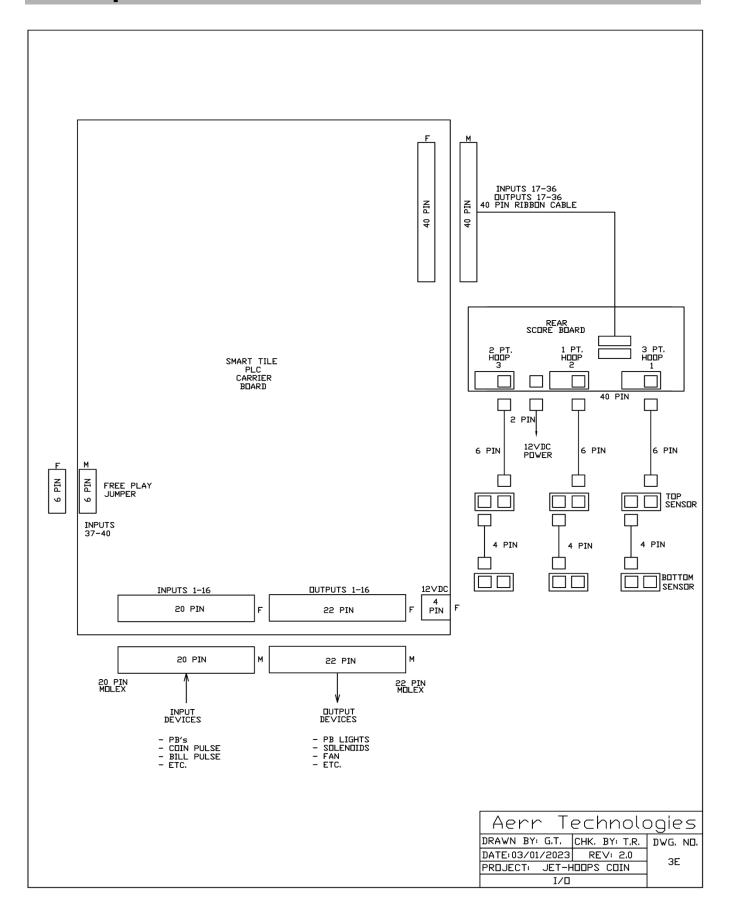
## **Section 8 – Electrical Drawings & Replacement Parts**

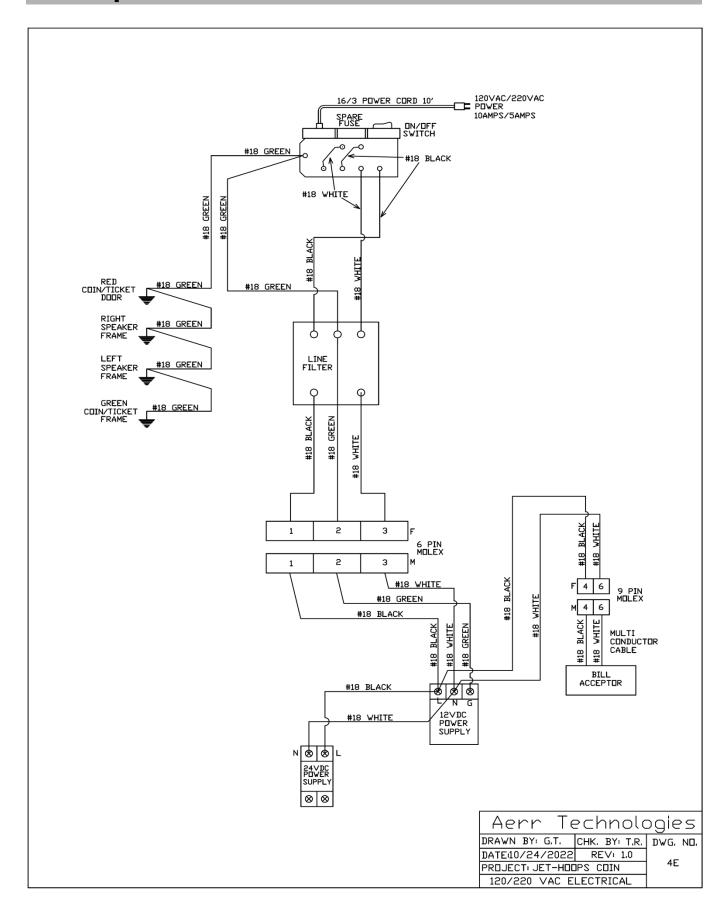
#### **Electrical Drawings:**

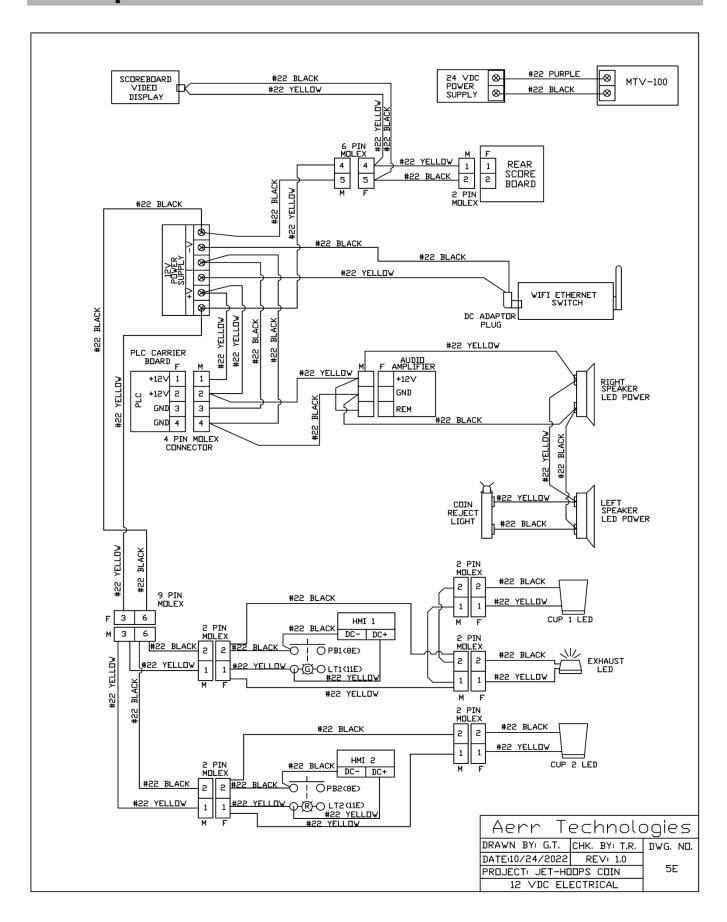
The purpose of including electrical drawings is to assist you with identifying each of the replacement components and also for troubleshooting in the next section 9. Drawings ending with E relate to electrical wiring and H relate to wire harnesses.



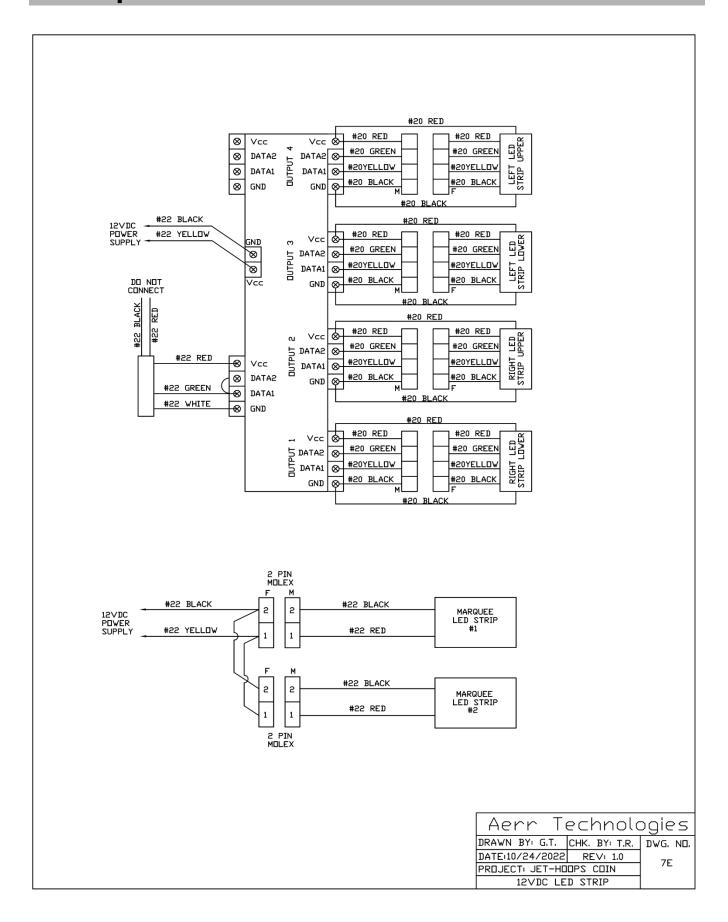
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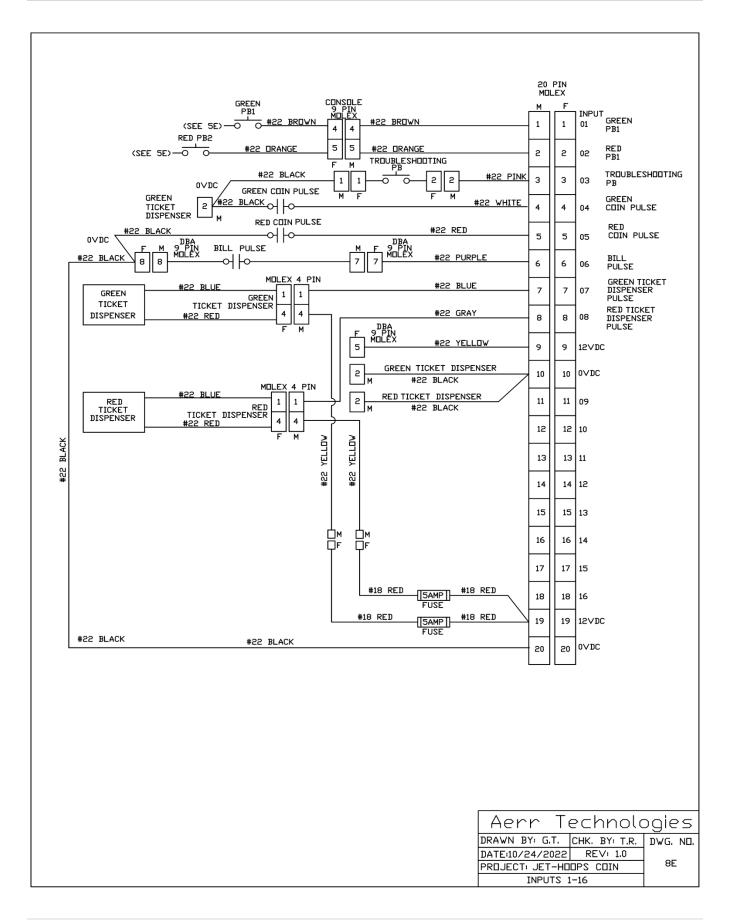


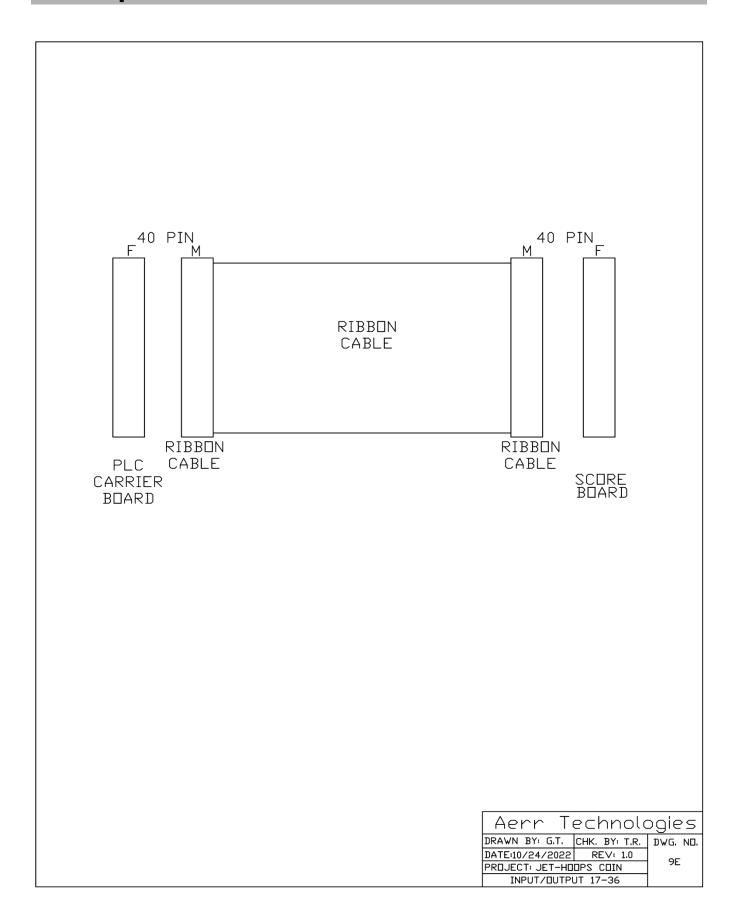




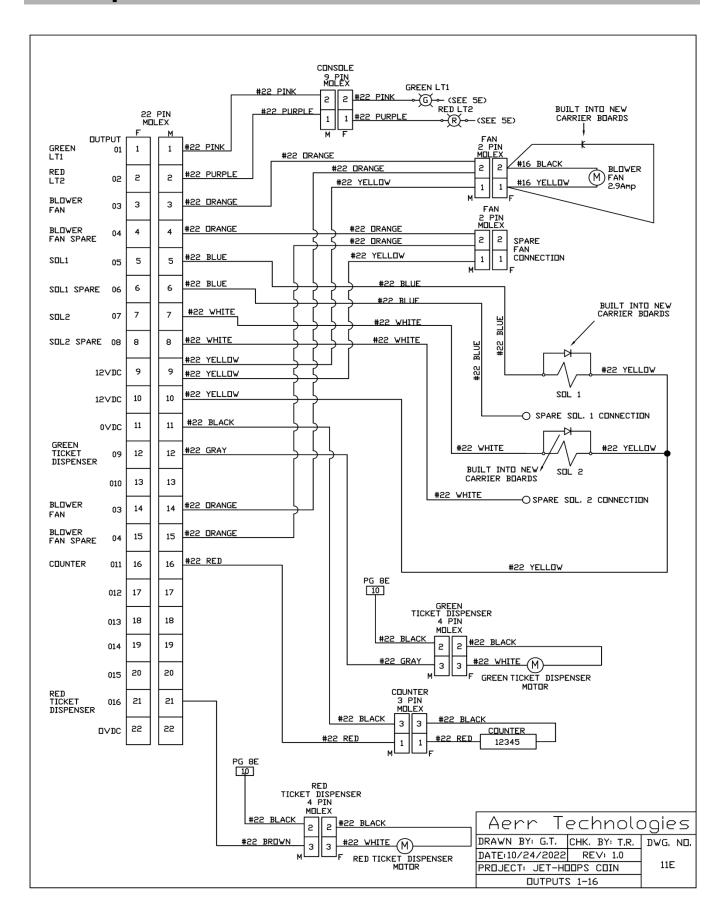
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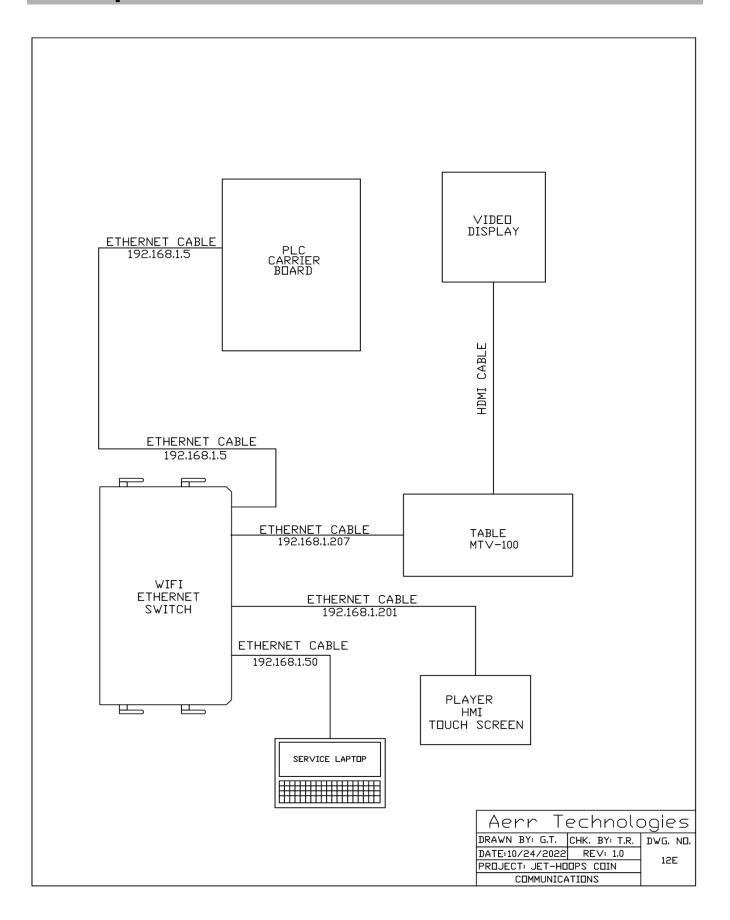


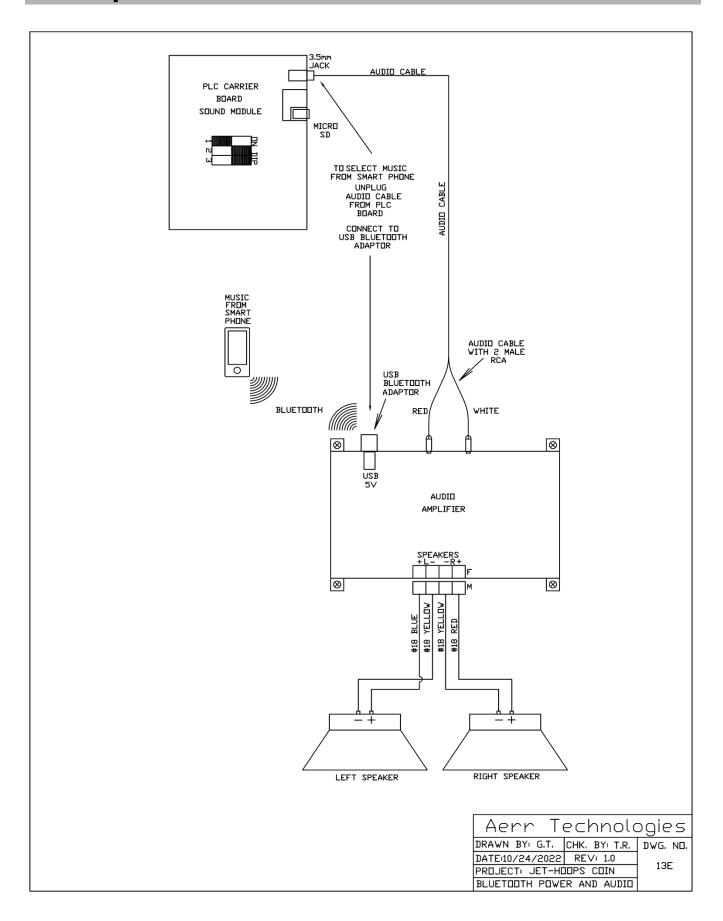


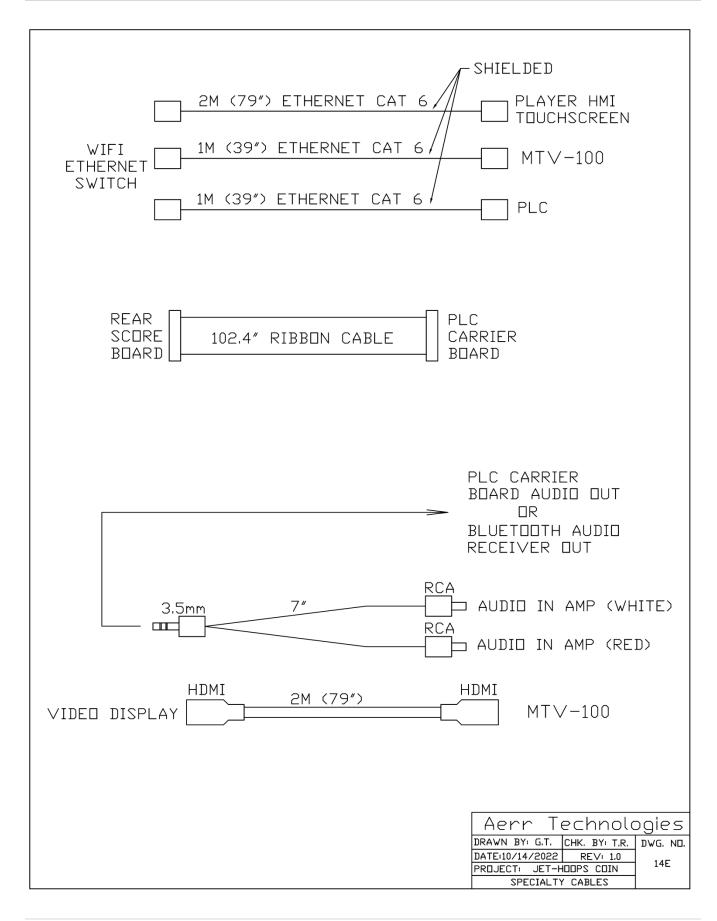


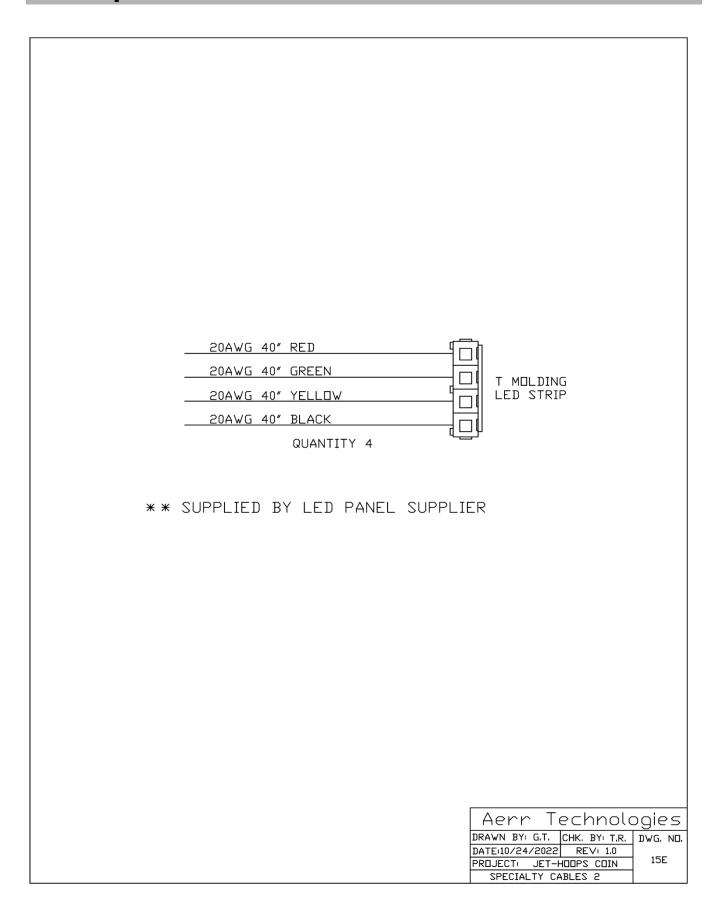
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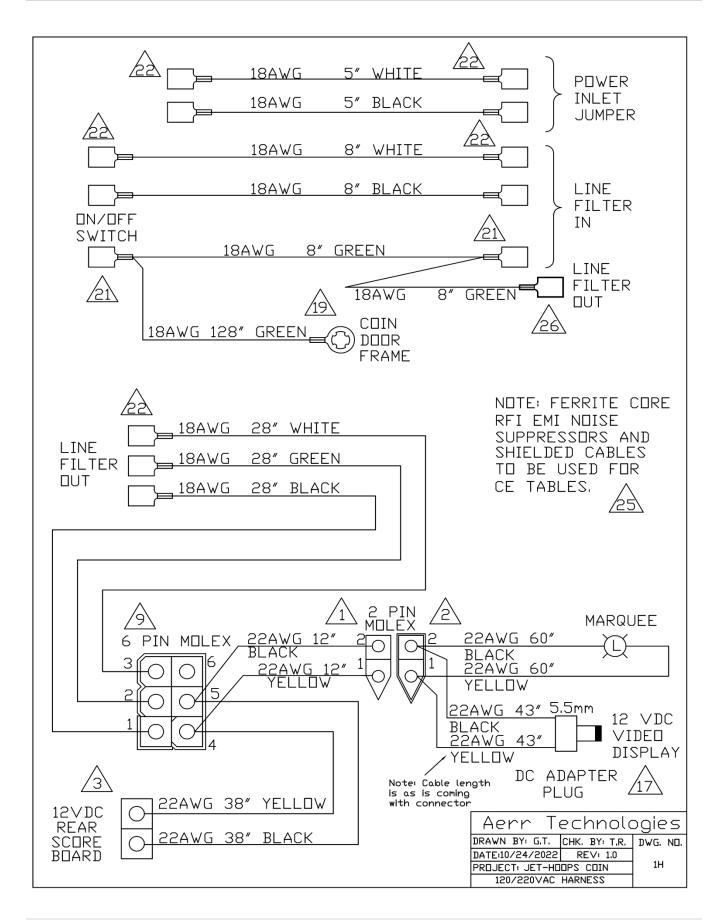


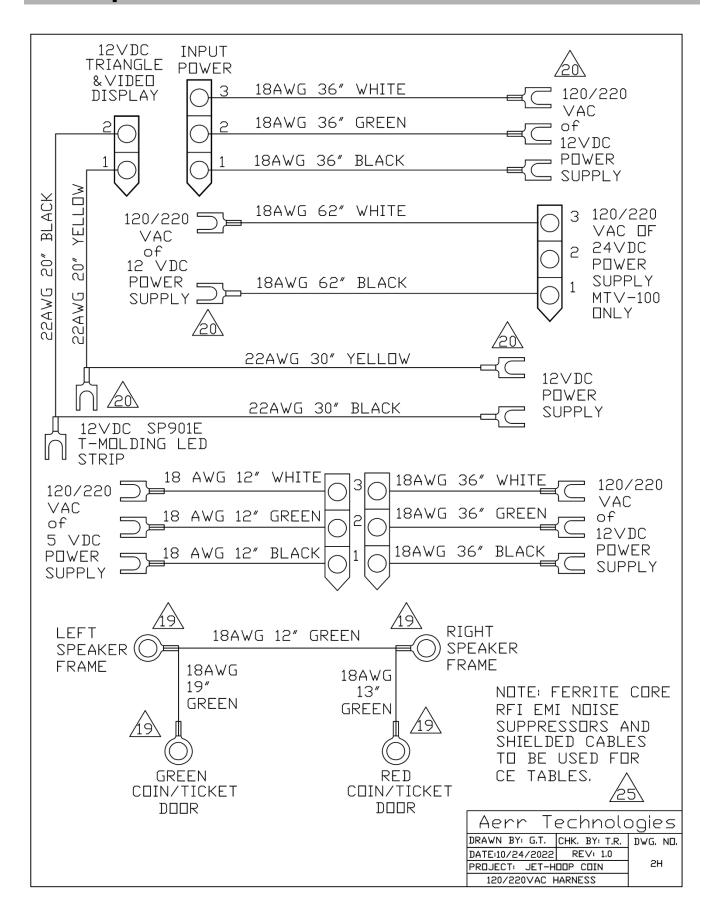


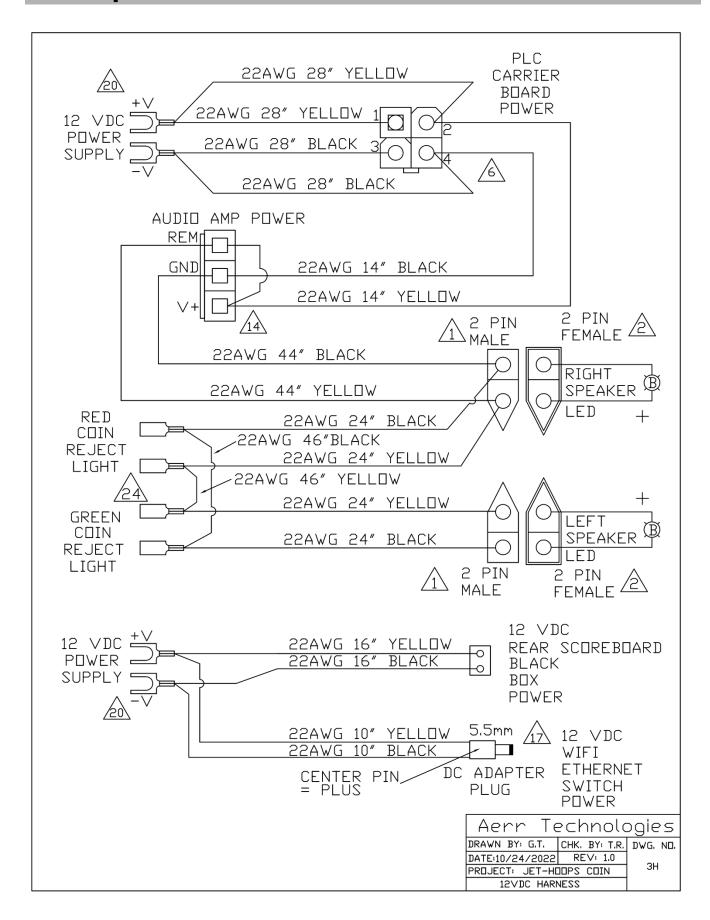


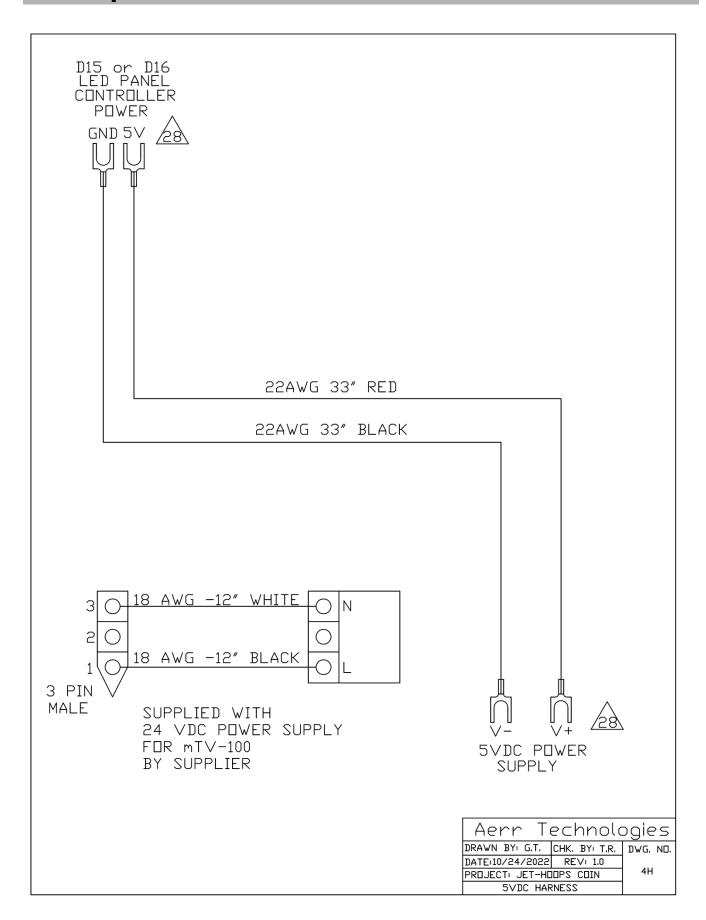


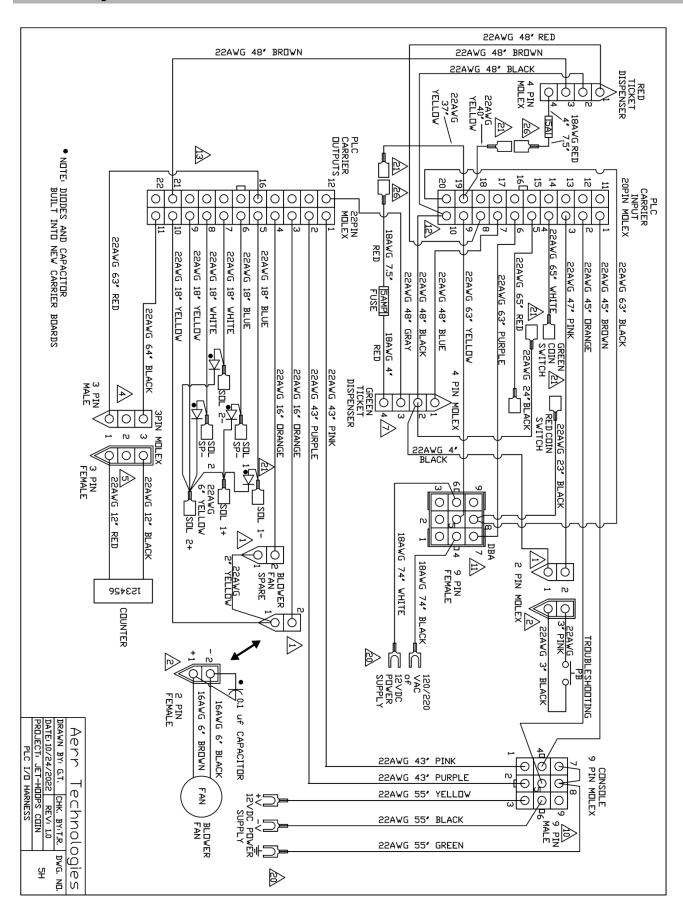


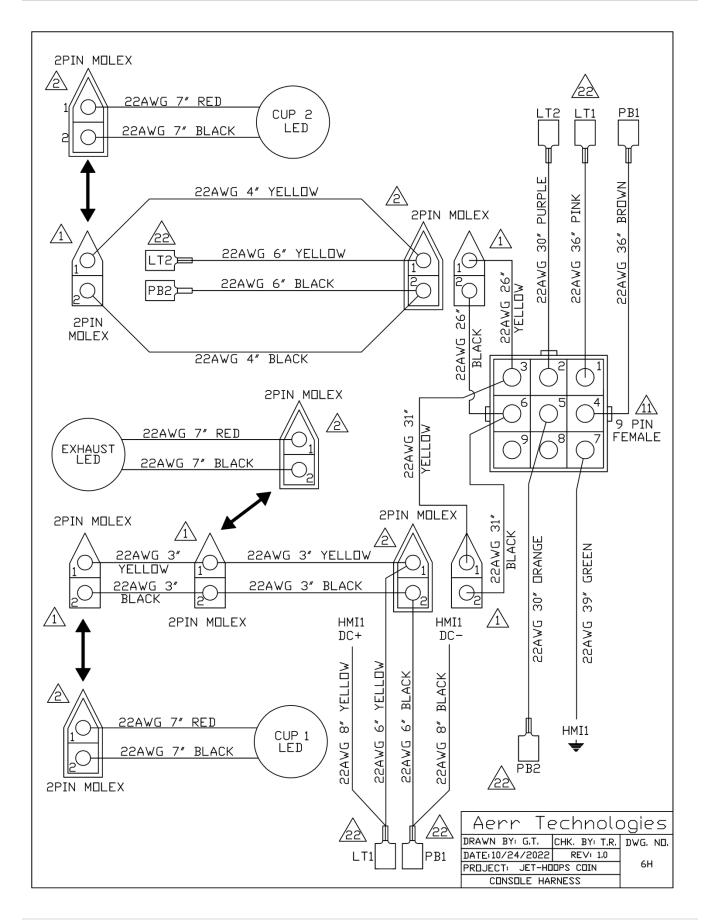


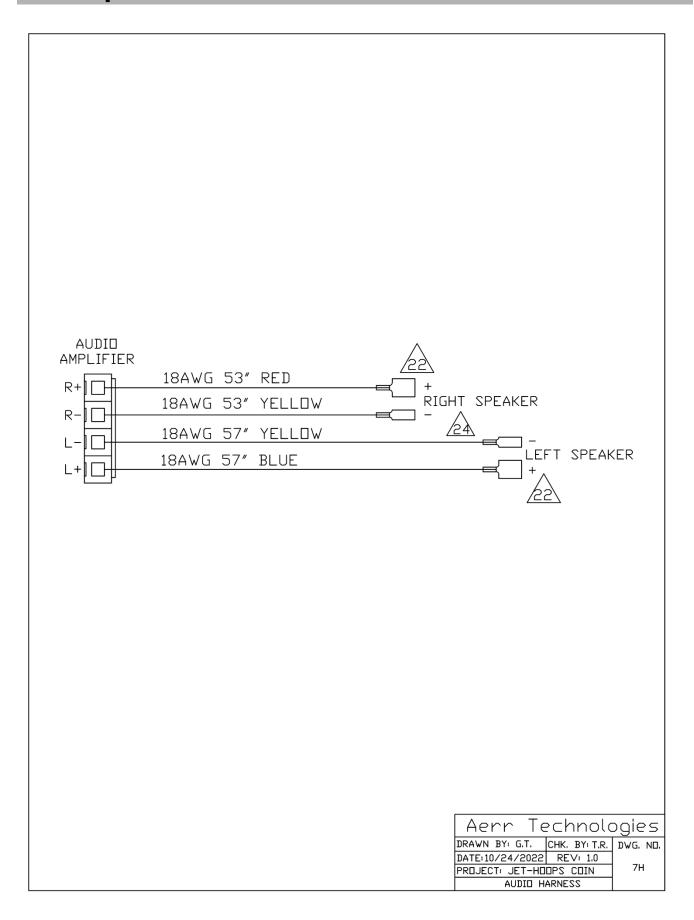




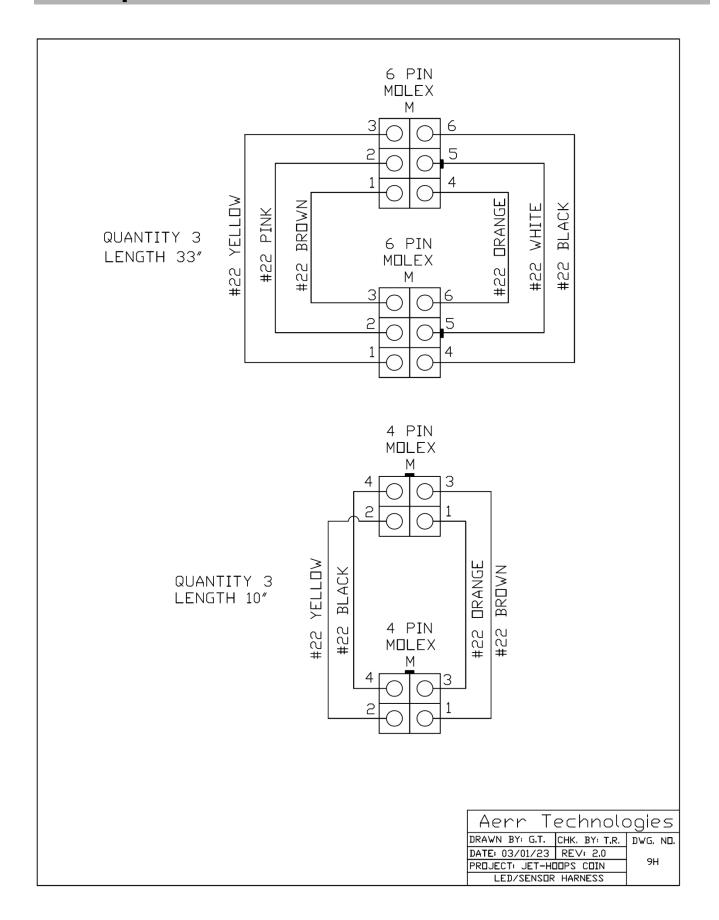








# Jet-Hoops Coin JH100 User's Manual Aerr Technologies DRAWN BY: G.T. CHK. BY: T.R. DWG. ND. DATE:10/24/2022 REVI 1.0 PROJECT: JET-HOOPS COIN 8H FREE PLAY JUMPER



#### **Replacement Parts:**

Please refer to the www.valley-dynamoparts.com website for any Jet-Hoops replacement parts.

#### Section 9 - Troubleshooting

\*\*\* Troubleshooting Tools: Please insure that you have a Volt Meter, 9/16" Wrench or Socket, 4 mm or 5/32 Allen Wrench, #2 Phillips Drive, Pliers, Tamper Proof Torx Bits

**CAUTION:** Some of these troubleshooting procedures will require power on the table while the lid is open. Do not touch any live exposed screw terminals, connections, etc. that are powered.

#### **Troubleshooting Screens:**

The HMI Touch Screen comes equipped with "Troubleshooting" screens that can help you troubleshoot. Open the Ticket Dispenser door and press the "Service" button. This will take you to a "Configuration" screen. Then press the "Troubleshooting Screens" button.

This will display the following.



#### **Hoop Sensors:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

The Jet-Hoops Scoreboard interfaces to 6 sets of sensors 2 for each hoop. A top sensor is located above the net and a bottom sensor below the net. Both sensors need to see the ball before confirming the hoop was made. This way a ball bouncing around the hoop but not falling into the net will not falsely trigger a hoop made. You can change the minimum "On Time" of the Hoop Sensors in order to debounce them. Typically the shortest time is best.

The round light indicators along the bottom of the above screen display the status of other inputs on the game: push-buttons, coin pulse, bill pulse and ticket motor.

#### **Console Pushbuttons:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

If you press the Green Pushbutton on the console you will see the far left indicator light turn green and display "Green PB On". Pressing the Red Pushbutton will activate the next indicator "Red PB On".



#### **Green Coin Pulse:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

If a coin is inserted in the green coin mech the "Green Coin Pulse" light will indicate green momentarily. The counter below it will increment. You can reset this counter by pressing the "Reset" button below it. You can adjust the minimum "On" time of this pulse in order to debounce the switch.

#### **Red Coin Pulse:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

If a coin is inserted in the red coin mech the "Red Coin Pulse" light will indicate red momentarily. The counter below it will increment. You can reset this counter by pressing the "Reset" button below it. You can adjust the minimum "On" time of this pulse in order to debounce the switch.

#### Bill Pulse:

**CAUTION:** This procedure requires the power to be on and the lid closed.

If a bill is inserted in the Bill Accepter the "Bill Pulse" light will turn green momentarily several times. The counter below it will increment by 4 for each \$1 inserted. You can reset this counter by pressing the "Reset" button below it. You can adjust the minimum "On" time of this pulse in order to debounce the switch. It is important to set your Bill Acceptor pulse width as long as possible. Please note that many Bill Acceptors require setting a switch or scanning a configuration sheet to set its output pulse width to a value equal or greater than 100 ms so our processor can read it. Please refer to your Bill Acceptor's manual.

#### **Green Ticket Motor:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test your ticket dispenser you can enter a number from 2-99 under the "Green Ticket Motor" light. Then press "Dispense" to dispense that number of tickets. This can be useful when trying to feed in a new stack of tickets or for clearing a ticket jam. The number of tickets dispensed will indicate as well.

### **Red Ticket Motor:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test your ticket dispenser you can enter a number from 2-99 under the "**Red Ticket Motor**" light. Then press "**Dispense**" to dispense that number of tickets. This can be useful when trying to feed in a new stack of tickets or for clearing a ticket jam. The number of tickets dispensed will indicate as well.

The pulse "On" time can be entered for the Green Coin, Red Coin and Bill Pulse. The fastest pulse time is <u>best</u> which is <u>0.01 seconds.</u>

#### **Next Screen:**

You can press the "Next Screen" button to get to the next screen which will look like this:



### **Test Green Hoop LEDs:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

Each hoop has 2 sets of Green LEDs. If 1 set burns out you still have another Green set as a back-up. To make sure all Green LEDs are working on all hoops you press the "**Test Green Hoop LEDs**" button. To turn these LEDs off you simply press the button again.

### **Test Red Hoop LEDs:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

Each hoop has 2 sets of Red LEDs. If 1 set burns out you still have another Red set as a backup. To make sure all Red LEDs are working on all hoops you press the "**Test Red Hoop LEDs**" button. To turn these LEDs off you simply press the button again.

#### **Test Green PB Light:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test the Green PB Light on the main console you can press the "Test Green PB Light". You will see the Green PB Light turn on. To turn this light off you simply press the button again.

### **Test Red PB Light:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test the Red PB Light on the main console you can press the "Test Red PB Light". You will see the Red PB Light turn on. To turn this light off you simply press the button again.

### **Test Sol1 Retract Cylinder:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test the 1<sup>st</sup> electric solenoid cylinder that the balls see first (the one holding back many balls under the table lid) you press "**Test Sol1 Retract Cylinder**". **NOTE:** To shut off or extend the solenoid cylinder you simply press the button again or let it time out. Note that there is a spare redundant cable with molex connector that could be used if the test fails.

### **Test Sol2 Retract Cylinder:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test the 2nd electric solenoid cylinder (the one that allows a ball to drop on top of the Fan) you press "**Test Sol2 Retract Cylinder**". **NOTE:** To shut off or extend the solenoid cylinder you simply press the button again or let it time out. Note that there is a spare redundant cable with molex connector that could be used if the test fails.

#### **Test Fan:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test the Fan you can press "**Test Fan**". You will see the Fan turn on. To turn the fan off you simply press the button again. Note that there is a spare redundant cable with molex connector that could be used if the test fails.

### **Test Green Tick Dispenser:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test the Green Ticket Dispenser you can press "**Test Green Tick Dispenser**". This button will turn green. You will see the Green Ticket Dispenser motor turn on and dispense tickets. To turn the motor off simply press this button again.

### **Test Red Tick Dispenser:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To test the Red Ticket Dispenser you can press "**Test Red Tick Dispenser**". This button will turn green. You will see the Red Ticket Dispenser motor turn on and dispense tickets. To turn the motor off simply press this button again.

#### **AUTO CYCLE:**

**CAUTION:** This procedure requires the power to be on and the lid opened.

To have the game automatically cycle you can press the "AUTO CYCLE" button. This button will turn green. The game will automatically cycle through one entire 2 player game. To initiate a new AUTO CYCLE you must press the button off and then back on again. This is a good way to clean out the ball return piping and to test the functionality of the game. It is recommended to have a box handy for the balls for this procedure.

### **Next Screen:**

You can press the "Next Screen" button to get to the next screen which will look like this:



### **Test Video 1:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test Video 1 on the table surface Video Display press "**Test Video 1**". You should see the following screen:



#### Test Video 2-8:

**CAUTION:** These procedures require the power to be on and the lid closed.

To test Video 2-8 on the table surface Video Display press "Test Video 2-8".

### **Test Ad 1-8:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test Ads 1-8 on the table surface Video Display press "**Test Ad1-8**". You should see advertising like this:





### Test Cheer 1-8:

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test Cheers 1-8 press "**Test Cheers 1-8**". You will hear cheers from the crowd through the speakers.

### Test Music 1-8:

**CAUTION:** This procedure requires the power to be on and the lid closed.

To test Music 1-8 press "Test Music 1-8". You will hear music through the speakers.

#### **Return to Main Screen:**

**CAUTION:** This procedure requires the power to be on and the lid closed.

To return to the Main Screen simply press the "Next Screen" button to get to the "Configuration" screen and then press "Return to Main Screen".

### **Troubleshooting Symptoms & Related Drawings:**

#	Symptom	Related E-Drawing Numbers	Related H-Drawing Numbers
1	No Power at All	1E, 4E, 5E	1H, 2H
2	Table Surface Video Display Faulty	1E, 3E, 4E, 5E, 12E, 14E	1H, 2H, 3H
3	HM I Touch Screen Faulty	1E, 4E, 5E, 12E, 14E	1H, 2H, 3H, 5H, 6H
4	Jet-Hoops Score board Faulty	1E, 3E	9H
5	Jet-Hoops LED/Sensors Faulty	1E, 3E	9H
6	Beverage Holder LEDs Faulty	1E,4E,5E	1H, 2H, 5H, 6H
7	Exhaust Chute Faulty	1E, 4E, 5E	1H, 2H, 5H, 6H
8	Speaker LEDs Faulty	1E, 4E, 5E	1H, 2H, 3H
9	T-Molding LEDs Faulty	1E, 4E, 5E, 7E, 15E	1H, 2H
10	Coin Mech(s) Faulty	1E, 3E, 4E, 5E, 8E, 11E	1H, 2H, 3H, 5H
11	Bill Acceptor Faulty	1E, 3E, 4E, 5E, 8E, 11E	1H, 2H, 3H, 5H
12	Credit System Faulty	1E, 3E, 4E, 5E, 8E, 11E	1H, 2H, 3H, 5H
13	Credit Counter Faulty	1E, 3E, 4E, 5E, 8E, 11E, 12E	1H, 2H, 3H, 5H
14	Ticket Dispenser(s) Faulty	1E, 3E, 4E, 5E, 8E, 11E	1H, 2H, 3H, 5H
15	Pushbutton LEDs Faulty	1E, 3E, 4E, 5E, 11E	1H, 2H, 3H, 5H, 6H
16	Pushbutton Switches Faulty	1E, 3E, 4E, 5E, 8E	1H, 2H, 3H, 5H, 6H
17	Service Button Faulty	1E, 3E, 4E, 5E, 8E	1H, 2H, 3H, 5H
18	Audio Faulty	1E, 3E, 4E, 5E, 13E, 14E	1H, 2H, 3H, 7H
19	Ball Delivery Faulty	1E, 3E, 4E, 5E, 11E	1H, 2H, 3H, 5H, 6H
20	Goal Scoring Faulty	1E, 3E, 4E, 5E, 9E, 11E, 12E	1H, 2H, 3H
21	Abnormal Noise Issues	1E, 3E, 4E, 5E, 11E, 13E	1H, 2H, 3H, 5H
22	Balls Not Rolling Back to Player on Table Lid	Mechanical	M echanical

### Symptom #1: No Power at All

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Check that the 120Vac/230Vac cord is plugged into the wall outlet and that your breaker for the wall outlet has not tripped.
- 2) Check that the 120Vac/230Vac cord is plugged into the rear of the Jet-Hoops table and that the toggle switch is in the "**On**" position. Check the fuse in the toggle switch housing to make sure it has not blown. There is a spare fuse in the holder.
- 3) Check the 12Vdc Power Supply connections to make sure you have AC power going in and 12 Vdc power coming out. Make sure the voltage is set to 12.5 Vdc using the rotary dial on the 12 Vdc power supply.

### Symptom #2: Table Surface Video Display Faulty

- 1) Check the 120 Vdc cord that plugs into the Video Display. Check the other end of this cord to make sure it is plugged in properly.
- 2) Use the troubleshooting screens on the HMI to test a sample Video or Ad. See instructions earlier in this chapter for details.

- 3) Make sure the HDMI cable is plugged into the Video Display. Make sure the other end is plugged into the mTV-100. Swap the HDMI cable if necessary.
- 4) Make sure the USB stick is secure in the mTV-100.
- 5) Make sure the mTV-100 has 24 Vdc power. There is an LED indicator light on the mTV-100.
- 6) Make sure the USB stick is still readable using an mTV-100. If you plug the USB stick into your computer it should have Ads on it.

### Symptom #3: HMI Touch Screen Faulty

**CAUTION:** This procedure requires the power to be on and the Control Console to be removed.

- Make sure 12Vdc power is available to the rear of the HMI touch screen. You will need
  to remove the Control Console by removing the security screws around the perimeter of
  the black plastic console.
- 2) Make sure Ethernet cable is plugged in at the HMI and at the Wireless Router.
- 3) If there is an error on the screen check the Ethernet cable and Wireless Router. Recycle power.
- 4) You can use contact spray on the ethernet connections if errors reoccur.
- 5) If errors still occur replace ethernet cable or wireless router.

### Symptom #4: Jet-Hoops Scoreboard Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Remove rear cover. Make sure there is 12Vdc power going to the Digital Scoreboard. If not you will need to open the lid to trace this cable back.
- 2) Make sure the ribbon cable, sensor cables and 12 vdc power cable is secure on the Digital Scoreboard.
- 3) Make sure the ribbon cable is secure on the PLC carrier board inside the table. This will require opening the lid.

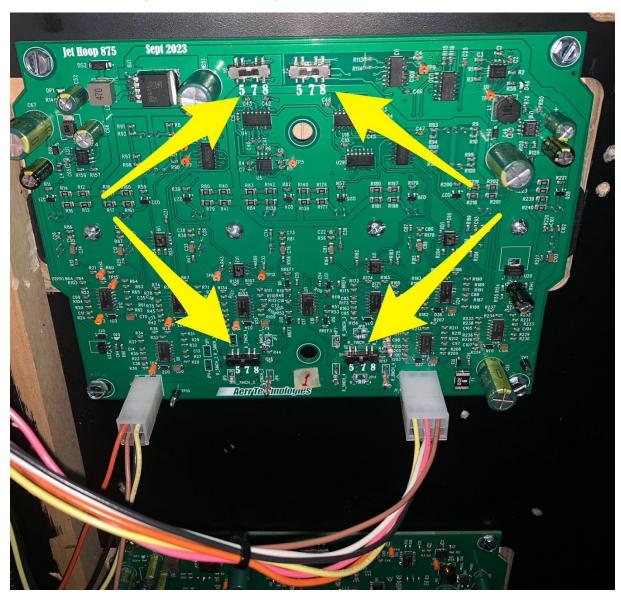
### Symptom #5: Jet-Hoops LED/Sensor Faulty

**CAUTION:** This procedure requires the power to be on.

- 1) Make sure the ribbon cable, sensor cables and 12 vdc power cable is secure on the Jet-Hoops Scoreboard and Jet-Hoops LED/Sensor modules. Make sure ribbon cable is secure at the PLC carrier board.
- 2) Use the troubleshooting screens on the HMI to view sensor status. You will need someone to wave their hand in front of the sensor while viewing at the HMI.
- 3) Use the troubleshooting screens on the HMI to turn on the LED lights at each Hoop to test the Green and Red LEDs above each hoop.

4) Check that both the top and bottom 8" hoop (1 Point) sensor modules have all selector switches set to 8". (total of 8 switches)

Check that both the top and bottom 7" hoop (2 Point) sensor modules have all selector switches set to 7". (total of 8 switches)



Check that the top 5" hoop (3 Point) sensor module has all 4 selector switches set to 5". (total of 4 switches)

Check that the bottom 5" hoop (3 Point) sensor module has <u>all 4 selector switches set</u> <u>to 7"</u>. (total of 4 switches)

### Symptom #6: Beverage Holder LEDs Faulty

**CAUTION:** This procedure requires the power to be on and the Control Console to be removed.

1) Make sure 12Vdc power is available to the rear of the Beverage Holder. You will need to remove the Control Console by removing the security screws around the perimeter of the black plastic.

### Symptom #7: Exhaust Chute Faulty

**CAUTION:** This procedure requires the power to be on and the Control Console to be removed.

- If air is not flowing properly check the screen above the blower for any debris. Clear debris by removing the exhaust chute piping by removing 2 screws towards the base of the piping where it connects to the horizontal metal solenoid trough ball return track for the 2 solenoids.
- 2) If the ball does not exit the chute properly to float then remove the console cover and adjust the screw speed reducer towards the top of the exhaust chute so that the ball **just barely** makes it past the **speed reducer** without jamming.



### Symptom #8: Speaker LEDs Faulty

**CAUTION:** This procedure requires the power to be on and the Control Console to be removed.

 Make sure 12Vdc power is available to the rear of the Speaker LEDs. You will need to remove the Control Console by removing the security screws around the perimeter of the black plastic.

### Symptom #9: T-Molding LEDs Faulty

- 1) Check for loose connections at the black LED T-Molding Lighting controller SP901E.
- 2) Locate the Handheld Controller for the LED Lighting and try pressing various buttons including "On" and "Off". Replace batteries in this Handheld Controller if necessary. See Section 6 Routine Maintenance for details. If this does not work then replace the Handheld Controller.

- 3) Lift the Black Cable Tray cover mounted on the inside wall of the rear of the table (one on each side). Check to make sure all LED strip connectors are plugged in and secure.
- 4) Check all solder connections near the connectors. Repair if necessary.
- 5) If the above does not work then replace the defective LED stripping in the T-Molding.
- 6) If the above does not work then replace the defective controller SP901E.

### Symptom #10: Coin Mech(s) Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Use the HMI "**Troubleshooting**" screen to test the Coin Mech(s) or Card Swipe(s). See instructions earlier in this chapter for details.
- 2) Have someone insert a coin or swipe a card while you watch the LED inputs on the PLC Processor. The LED input should flash when a coin is inserted. If not then check connections and cable harness from the PLC Carrier board to the Coin Mech switch.
- 3) Make sure the number of coins required to start the game is properly set up on the "Configuration" screen discussed in Section 7. Also the Coin "ON" Pulse time. Recommend setting this to .01 sec.
- 4) If the Coin Mech LED is not working unlock and open the Coin Mech door. Check the connection and cable harness to the Coin Mech LED light back to the PLC Carrier Board. Check for 12Vdc power at the Coin Mech LED.
- 5) Check to make sure the Coin or Card pulse from <u>your device</u> is <u>> 100 ms</u> long. On the Troubleshooting screens set the coin pulse to .01 sec.

### Symptom #11: Bill Acceptor Faulty

- 1) Use the HMI "**Troubleshooting**" screen to test the Bill Acceptor. See instructions earlier in this chapter for details.
- 2) Have someone insert a bill while you watch the LED inputs on the PLC Processor. The LED input should flash fast several times when a bill is inserted. If not then check connections and cable harness from the PLC Processor to the Bill Acceptor. Check power to the Bill Acceptor.
- 3) Make sure the number of credits required to start the game is properly set up on the "Configuration" screen discussed in Section 7. Also the Bill Pulse time.
- 4) Make sure the number of pulses is set up properly on the Bill Acceptor itself.
- 5) Inspect the Bill Accepter to make sure it is not full or jammed.
- 6) Check to make sure your Bill Acceptor pulse is > 100 ms long. On the Troubleshooting screens set the Bill pulse to .01 sec.

### Symptom #12: Credit System Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

1) Check the "Configuration" and "Troubleshooting" screens to make sure the proper number of credits are properly configured for starting the game. On Fridays/Saturdays check to make sure the number of credits for these days is properly configured. If Friday/Saturday is not functioning properly then the main Processor battery (CR1632 3V Lithium) will need to be replaced. It has a 5 year life expectancy. Then re-enter the time & date and possibly any other important "Configuration" info for your game. Typically the number of week-end credits is >= to regular credits. Do not set either of these to 0 otherwise your customers will be playing for free.



## Symptom #13: Credit Counter Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

1) Open the Coin Mech Door. Check the wiring connections and harness from the mechanical counter to the PLC Carrier Board. Insert credits to see if counter counts up.

### Symptom #14: Ticket Dispenser(s) Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

1) A warning message will display on the HMI Touch Screen when one or both ticket trays are empty:



- 2) Use the troubleshooting screen to test the Ticket Dispenser. See instructions earlier in this chapter for details.
- 3) If the tray is not empty check all connections and cable harness to/from the Ticket Dispenser. There should be 12Vdc power at the connector to the Ticket Dispenser.
- 4) Check the ticket dispenser to make sure there are tickets available and that there are no jams. You may need to remove the Control Console by removing the security screws around the perimeter of the black plastic. Note that there is typically a button on the ticket dispenser to manually feed tickets.

### Symptom #15: Pushbutton LEDs Faulty

- 1) Make sure 12Vdc output wiring is secure at the rear of the Pushbutton Light. You will need to remove the Control Console by removing the security screws around the perimeter of the black plastic.
- 2) Twist the LED Light holder at the rear and pull it out to inspect the LED to make sure it is secure in the holder.
- 3) Replace the LED Light as a last resort. Make sure + and polarity are correct. See **Section 8 Spare Parts.**

### Symptom #16: Pushbutton Switches Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Use the "**Troubleshooting**" screen to test the Pushbutton switches. See instructions earlier in this chapter for details.
- 2) Have someone press the Pushbutton while you check the status of the inputs on the PLC Carrier board.
- 3) Check all connections and cable harness to/from the Pushbutton switch. You will need to remove the Control Console by removing the security screws around the perimeter of the black plastic.
- 4) Replace the contact switch on the Pushbutton. Refer to **Section 8 Spare Parts** for details.

### Symptom #17: Service Button Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Have someone press the Service Button while you check the status of the inputs on the PLC Carrier board.
- 2) Check all connections and cable harness to/from the Service Button. Refer to electrical drawings in Section 8.
- 3) If not working then replace the Service Button. Refer to **Section 8 Spare Parts** for details.
- 4) If still not working replace the PLC Carrier board.

### Symptom #18: Audio Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Increase the volume on the Audio Amplifier. Check all selector switch positions.
- Inspect all audio amplifier connections to make sure there is 12Vdc power going to it, that the speaker connection is secure and that the incoming audio cable from the PLC Sound Module is secure.
- 3) Check the wire connections and cable harness at the speakers. You will need to remove the Control Console by removing the security screws around the perimeter of the black plastic.
- 4) Power the game down, remove and inspect the MicroSD card in the PLC Sound Module to make sure it has all of these sound files on it. If not, download these files from this link:

https://www.dropbox.com/sh/7q0n0dh3vrpxoa3/AAA1EsIVtHgvqMrk\_VVKGWgna?dl=0

	Cheer1	skyler mic	Aerr Technologies
	Cheer2	skyler mic	Aerr Technologies
<b>№</b> 00003	Cheer3	skyler mic	Aerr Technologies
<b>№</b> 00004	Cheer4	skyler mic	Aerr Technologies
<b>№</b> 00005	Cheer5	skyler mic	Aerr Technologies
<b>)</b> 00006	Cheer6	skyler mic	Aerr Technologies
<b>№</b> 00007	Cheer7	skyler mic	Aerr Technologies
≥ 00008	Coin	Voyager	Aerr Technologies
<b>№</b> 00011	Music11		Aerr Technologies
	Music12	Voyager	Aerr Technologies
<b>№</b> 00013	Music13	Voyager	Aerr Technologies
≥ 00014	Music14	Voyager	Aerr Technologies
	Music15	Voyager	Aerr Technologies
<b>№</b> 00016	Music16		Aerr Technologies
<b>2</b> 00017	Music17	Voyager	Aerr Technologies
00018	Music18	Voyager	Aerr Technologies

### Symptom #19: Ball Delivery Faulty

- 1) Press the next flashing button to see if a ball arrives. If a ball does not arrive then press the next flashing button while watching the 2 solenoid cylinders to see what the problem is. If one of the Solenoid Cylinders is causing the balls to jam then adjust or replace the solenoid cylinder. If the balls are jammed upstream try to clear the jam. This may require taking the piping apart by unscrewing the clamps or use of a vacuum cleaner blower to blow balls and /or debris towards the wire frames to clean out any debris.
- 2) Check to make sure the solenoid plungers are not rubbing against the wire frame ball delivery system or solenoid bracket.
- 3) Check the solenoid springs to make sure they still have enough tension. You can remove them. Stretch them by 50% of their length and then reinstall them.
- 4) Use the "Troubleshooting" screen to test the Solenoid Cylinders and Fan. See instructions earlier in this chapter for details. If one of the Solenoid Cylinders or Fan is not working then check connections and cable harnesses to the applicable device. There is spare molex cable for each solenoid and fan that you can swap to if one of these devices is still not working.
- 5) If the above does not work then replace the non-functioning Solenoid Cylinder or Fan. Refer to **Section 8 Spare Parts** for details.

### Symptom #20: Goal Scoring Faulty

**CAUTION:** This procedure requires the power to be on and the lid opened. When lifting the lid attach the Prop Stick as a safety measure. (\*CE Tables only)

- 1) Remove rear cover. Make sure there is 12 Vdc power going to the Digital Scoreboard. If not you will need to open the lid to trace this cable back.
- 2) Make sure the ribbon cable, sensor cables and 12 Vdc power cable is secure on the Digital Scoreboard.
- 3) Make sure the ribbon cable is secure on the PLC carrier board inside the table. This will require opening the lid.
- 4) Make sure the 8", 7" and 5" selector switches are set properly for each hoop sensor board. Note that the bottom sensor of the 5" hoop is set to 7". Total of 4 switches.
- 5) Use the troubleshooting screens to test the sensors.
- 6) Make sure the nets are secure in every hook on each of the 3 hoops.

### Symptom #21: Abnormal Noise Issues

- 1) Open the table lid and listen for the source of the noise.
- 2) If the source of the noise is the Blower Fan then shut off the power and unplug the power cord. Dismantle the Blower Fan to see if there is any debris inside it. Remove the debris and reinstall the fan. Plug the cord back in and turn on the game to see if the noise has disappeared. If not then replace the Blower Fan.
- 3) If the source of the noise is the 12 Vdc Power Supply Fan then shut off the power and unplug the cord. Dismantle the 12 Vdc Power Supply Fan to see if there is any debris inside it. Remove the debris and reinstall the power supply. Plug the cord back in and turn on the game to see if the noise has disappeared. If not then replace the Power Supply Fan.
- 4) If the source of the noise is the solenoids then use the "**Troubleshooting**" screens to test the solenoids to narrow down the source. If the solenoids or trough need mechanical adjustment then turn off the power and unplug the cord. Make the needed adjustment. Plug the cord back in and turn on the game to see if the noise has disappeared. If not then repeat the above a few times until the noise disappears otherwise replace the solenoid in question.
- 5) If the source of the noise is coming from the audio speakers then use the "Troubleshooting" screens to test the various Cheers and Music to see if it's a particular file that may be corrupted. If the noise is consistent with all music then check all audio connections. Try removing and reinstalling the MicroSD card from the sound module on the PLC Carrier board. Try reloading the Cheers and Music files onto the MicroSD card. Try moving the audio cable to the KN320 Bluetooth device input and test using your Bluetooth on your phone to play music. If this works then replace the blue Sound Module on the PLC Carrier board. If this does not work then try replacing the speakers or audio amplifier. Refer to Section 8 Spare Parts for details.

### Symptom #22: Balls Not Rolling Back to Player on Table Lid

**CAUTION:** This procedure requires the power to be on and the lid closed.

1) Grab a ball and place it on the table lid near the Front Ball Guard. The ball should roll towards the front of the game. If not adjust the table levelers under the table so that the table lid is leaning 2 degrees towards the players.

Please contact Valley-Dynamo **Tech Support Hotline** (during business hours Central U.S. Time): **1-972-595-5300** (follow prompts for Tech Support)

