# **SPACE BALLZ SERVICE MANUAL**

VERSION 1.0



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# **SAFETY NOTIFICATIONS**

Through out the use of this manual, certain areas require special attention for the safety of the service personal. Please take note of the following notifications and be certain to read the information contained within. Failure to follow the given information could lead to personal injury or property damage. Follow all instructions contained within this manual and do not make any modifications to the game without first contacting Jennison Entertainment Technologies.

# DANGER

All danger messages are marked in RED boxes. Failure to adhere to these messages could result in personal injury or injury to others.

# WARNING

All warnings will be marked in ORANGE boxes. Failure to follow these warnings could lead to damage to the unit and or personal property.

# CAUTION

Caution messages are marked in YELLOW boxes. Failure to follow these caution messages could result in damaging the unit.

# ATTENTION

Attention boxes are in BLUE. These messages are provided in cases where service personal must follow directions provided

by J.E.T.



# **EPILEPSY WARNING**

# **EPILEPSY DANGER**

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these "photosensitive epileptic seizures" while watching video games.

These seizures may have a variety of symptoms, including lightheadedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects.

Immediately stop playing and consult a doctor if you experience any of these symptoms. Parents should watch for or ask their children about the above symptoms - children and teenagers are more likely than adults to experience these seizures.

The risk of photosensitive epileptic seizures may be reduced by taking the following precautions: Play in a well-lit room

Do not play when you are drowsy or fatigued

If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing.

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# DANGER

DO NOT perform repairs or maintenance on the game with the power ON. Always turn the power OFF and unplug the unit from the wall before servicing.

# DANGER

DO NOT attempt to remove or modify the rear door safety switch. The switch is designed to protect you from moving parts should you need access to the back.

# DANGER

DO NOT remove the game from its shipping pallet or skid without first reading the entire installation guide in this manual!

# DANGER

DO NOT remove the front cabinet glass without first reading the removal instructions. Do not attempt to remove the glass without at least two people.

# DANGER

DO NOT attempt to assemble Space Ballz without another adult to assist in the assembly. J.E.T. recommends at least three people for assembly.



DO NOT move the game without the help of another adult. Only pull on the main cabinet while moving. Never attempt to move the game with the control cabinet.

# **SPACE BALLZ SAFETY, CAUTIONS, & NOTICES**

# WARNING

Set the 115/230 VAC selector switch on all power supplies for the correct line voltage at the installation site. Check that all power supplies, fans, and fluorescent lamps are rated for the same line voltage.

# WARNING

This unit is suitable for INDOOR use only. The should not be placed in damp environments or in areas within close proximity to the ocean.

# WARNING

If the power cord is damaged - replace it with a new one. DO NOT attempt to use a damaged or repaired power cord.

# WARNING

Always plug the game into a grounded circuit and verify the total voltage draw on the circuit does not exceed its capacity.

# CAUTION

Use appropriate care when servicing the game and ensure that all removed components are away from facility guests

and children.

# CAUTION

Only qualified service personal should service Space Ballz. Contact J.E.T. first with any questions before replacing any part.

# **FCC COMPLIANCE**

The Federal Communications Commission requires that all amusement machine devices used in commercial applications comply with guidelines for the amount of interference the internal components produce. Space Ballz complies with this requirement and the following statement is posted on all units.



# **Canadian Emissions Statement**

(According to Industry Canada Notice ICES-003, Issue 4)

This Class "A" digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique da la classe "A" respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

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# **RoHS COMPLIANCE**

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the European Union market, new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

Jennison Entertainment Technologies has taken steps to comply with this directive while sourcing the parts for all machines. If available to the industry, these certified components were used in the construction on Space Ballz.

As of January 2011, Jennison Entertainment Technologies has tested all components used in the manufacturing of Space Ballz<sup>™</sup>. All components have been found to be within the standards set forth for RoHS compliance by the European Union. Test reports are available and will be provided upon request.

To verify that your machine has RoHS Compliant parts, look for the following logo on the information sticker on the back of all our units.



With our unique testing equipment, Jennison Entertainment Technologies can test components from ANY SUPPLIER from ANY COUNTRY where we source our parts. The tools we utilize allow us to spot check suppliers who have also self declared their components to be compliant ensuring you and your guests safety.



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# **DIMENSION INFORMATION**

SPACE BALLZ CABINET DIMENSIONS							
LENGHTH WIDTH HEIGHT WEIGHT						GHT	
INCHES	ММ	INCHES	MM	INCHES	MM	POUNDS	KG
56"	1423	57"	1448	102"	2591	1200	544
						<u>_</u>	
	S	PACE BALLZ	SHIPPING	DIMENSIO	<mark>NS - SKID #</mark>	1	
LENG	S GHTH	PACE BALLZ	<mark>Z SHIPPING</mark> DTH	DIMENSIO HEI	<mark>NS - SKID #</mark> <sub>GHT</sub>	1 WEI	GHT
LENG	S бнтн мм	PACE BALLZ WIT	<mark>Z SHIPPING</mark> отн мм	DIMENSIO HEI INCHES	NS - SKID # <sup>GHT</sup> MM	1 WEI POUNDS	GHT KG
LENC INCHES 96"	<mark>бнтн</mark> 2439	PACE BALLZ with INCHES 48"	<mark>Z SHIPPING</mark> отн мм 1219	DIMENSIO HEI INCHES 85"	<mark>NS - SKID #</mark> GHT 2159	<b>1</b> wei POUNDS 1000	<mark>GHT</mark> КG 454
LENC INCHES 96"	S бнтн 2439 S	PACE BALLZ WIT INCHES 48" PACE BALLZ	C SHIPPING OTH 1219 C SHIPPING	DIMENSIO HEI INCHES 85" DIMENSIO	NS - SKID # GHT 2159 NS - SKID #	1 wei POUNDS 1000 2	GHT КG 454

LENG	GHTH	WI	ОТН	HEI	GHT	WEI	GHT
INCHES	ММ	INCHES	ММ	INCHES	ММ	POUNDS	KG
96"	2439	48"	1219	60"	1524	800	363

Space Ballz ships on two 4' x 8' skids. The main cabinet ships on one and the control center, top section # 3, and top section # 4 ship on the other. The skid that the main cabinet is on has been designed so that a forklift can lift the unit off. There is enough clearance under the game, where forks can comfortable fit. We do NOT recommend removing this game from the skid without the use of a forklift! The front glass is not secured to the cabinet. Be sure to hold this while removing the unit!







DO NOT ALLOW ANYONE TO GET UNDER THE UNIT WHILE IT IS BEING LIFTED. NOTE THAT THE CABINET GLASS IS NOT SECURED TO THE MACHNIE

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# **ELECTRICAL REQUIREMENTS**

SPACE BALLZ ELECTRICAL REQUIREMENTS				
	VOLTS	HERTZ	AMPS	
DOMESTIC POWER REQUIREMENTS	120 VAC	60 HZ	6.0 AMPS (MAX)	
FOREIGN POWER REQUIREMENTS	250 VAC	50 HZ	2.5 AMPS (MAX)	

# DANGER

IF YOU CHOOSE TO CONVERT YOUR UNIT TO A DIFFERENT LINE VOLTAGE THAT IT WAS AT INITIAL TIME OF DELIVERY, YOU MUST CHANGE THE FLUORESCENT LIGHTING AND ALL FANS. YOU MUST ALSO SELECT THE NEW INPUT AC VOLTAGE ON ALL POWER SUPPLIES

# DANGER

DO NOT OVERLOAD ANY CIRCUIT WITH THE ADDITION OF SPACE BALLZ. ENSURE THAT THE OUTLET HAS PROPER VOLTAGE BEFORE TURNING ON THE UNIT

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# **INSTALLATION**

THIS INSTALLATION MANUAL HAS BEEN DESIGNED IN COLOR COORDINATED SECTIONS. EACH COLOR HAS A DIFFERENT MEANING AS SEEN IN THE FOLLOWING CHART. FAILURE TO FOLLOW THIS MANUAL IN ITS ENTIRITY COULD LEAD TO SERIOUS BODILY INJURY. IF THERE IS ANY DOUBT DURING THE INSTALLATION OF THIS UNIT - CONTACT JENNISON ENTERTAINMENT TECHNOLOGIES OR YOUR DISTRIBUTOR PRIOR TO CONTINUING. NEITHER J.E.T. OR YOUR DISTRIBUTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING IMPROPER INSTALLATION PROCEDURES.

# **RED SECTIONS**

RED SECTION AREAS REQUIRE 2 OR MOR PEOPLE MINIMUM TO SAFELY COMPLETE - EACH PERSON SHOULD BE ABLE TO LIFT 170 POUNDS EASILY. THESE SECTIONS SHOULD NEVER BE ATTEMPTED TO BE COMPLETED BY LESS THAN 2 PEOPLE.

# **YELLOW SECTIONS**

YELLOW SECTION AREAS REQUIRE CAUTION TO SAFELY COMPLETE.

# **BLUE SECTIONS**

BLUE SECTION AREAS CAN BE SAFELY COMPLETED BY ONE PERSON WORKING BY THEMSELVES. THE INSTALLAER SHOULD STILL EXERCISE CAUTION WHEN WORKING AROUND GUESTS.



# THOUGHOUT THE TEXT IN THIS MANUAL - THERE ARE SEVERAL REFERENCES TO SECTION NUMBERS. THE ABOVE DIAGRAM SHOULD BE REFERENCED DURING INSTALLATION IN ORDER TO DETERMINE WHAT SECTION THE INSTRUCTIONS ARE REFERENCING.

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### <u>Step # 1</u>

### Inspect the main cabinet for shipping damage

Inspect the game packaging for any damage during shipment. Please note that you must notate any damage to the equipment on the Bill of Lading during the delivery process. Any claims for damage must be made directly with the shipping or freight company. Jennison Entertainment Technologies and (or) the distributor the equipment was purchased through, is NOT RESPONSIBLE for any damage received during shipping and CANNOT help with the filing of the damage claim.

# NOTICE

# PACKAGING AND PALLET MAY BE DIFFERENT THAN SEEN IN PHOTO



**Check Box When This Step is Complete** 

#### Step # 1-A

# Inspect the upper sections for shipping damage

Inspect the two crates containing Section 3 and Section 4. These crates are stacked on top of each other. Notate any damage to the crate on the Bill of Lading BEFORE the Freight Carrier departs. Cut and remove the metal banding holding the crates to the skid.

# NOTICE

PACKAGING AND PALLET MAY BE DIFFERENT THAN SEEN IN PHOTO



Check Box When This Step is Complete

#### Step # 1-B

Inspect the control panel for shipping damage

Inspect and remove the Control Section (Section # 1) from the pallet.



Be careful when removing the foam packaging as there is acrylic below that can easily be scratched when using a utility knife or razor blade.

# NOTICE

# PACKAGING AND PALLET MAY BE DIFFERENT THAN SEEN IN PHOTO

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### <u>Step # 2</u>

# Remove and open the upper sections

Remove and separate the two crates. Remove the wooden tops (If Applicable). Be careful when using a hammer to open the crate - there are sensitive electronic components and glass pieces within each crate.



# NOTICE

PACKAGING AND PALLET MAY BE DIFFERENT THAN SEEN IN PHOTO

**Check Box When This Step is Complete** 

# Step # 2-A

# **Opening the upper section crates**

Remove the support bars (If Applicable) and then carefully remove any top packaging. Remove enough of the packaging to access the metal cross bars.

NOTICE

PACKAGING AND PALLET MAY BE DIFFERENT THAN SEEN IN PHOTO



Check Box When This Step is Complete

# <u>Step # 2-B</u>

Removing section # 3 from the crate properly

Lift Section # 3 out of the wooden crate by lifting on the metal



support bars as seen in the photo to the right. PLEASE SEE STEP # 2-C BEFORE PROCEDING.

# WARNING

2 PEOPLE REQUIRED - 150 POUNDS

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### <u>Step # 2-C</u>

### How NOT to lift section # 3 out of the crate

**DO NOT** lift like shown in the photo to the right. Lifting the unit by placing your hand on the bottom of the unit could damage the LED Board installed in this area. There is no safe hand hold there. Instead pull the unit out like shown in Step # 2-B and then place a hand on the bottom of the metal cabinet.



# CAUTION

DO NOT LIFT AS SHOWN IN PHOTO

Check Box When This Step is Complete

## <u>Step # 2-D</u>

### Safely place section # 3 on the floor

Carefully place Section # 3 on the ground in a safe area away from customers. Be very careful about the acrylic edge on the front of the section. This section is fragile and does extend out further than the bottom of the cabinet. If you cannot safely place this as seen in the photo - lay the entire unit on its back. (Glass Facing Up)

# WARNING

2 PEOPLE REQUIRED - 150 POUNDS



Check Box When This Step is Complete

#### Step # 3

# **Inspecting the right cabinet LED lights**

1) Ensure that the 4-Pin Molex connector located on the upper left of



the cabinet (Section # 2) is properly connected and seated. There is no way to access this connector after the top two sections are installed.

# NOTICE

THERE IS NO WAY TO ACCESS THIS CONNECTOR AFTER THE TOP IS INSTALLED

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### <u>Step # 4</u>

# **Inspecting the left cabinet LED lights**

1) Ensure that the 4-Pin Molex connector located on the upper right part of the cabinet (Section # 2) is properly connected and seated. There is no way to access this connector after the top two sections are installed.

# NOTICE

# THERE IS NO WAY TO ACCESS THIS CONNECTOR AFTER THE TOP IS INSTALLED



**Check Box When This Step is Complete** 

#### <u>Step # 5</u>

# Preparing section # 3 for installation

Extend the handles as seen in the photo to the right. When lifting Section # 3, you want to have one hand on the handle and the other hand under the front lip. This is the safest way to lift the unit without damaging the acrylic glass. Note that the handles may either be mounted vertically as seen in the photo or horizontal. **SECTION # 3 WEIGHS APPROX. 150 POUNDS.** 

# DANGER

THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



Check Box When This Step is Complete

### <u>Step # 5-A</u>

Inspecting the mounting holes for section # 3

There are four holes located on top of Section # 2 (Main Cabinet).



The bolts that are welded onto Section # 3 will go into these four holes. The two people who will lift the upper section will have to guide the unit into these four holes while lifting the weight of the unit.

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### <u> Step # 5-B</u>

# Testing the weight of section # 3

Each person should take a side and lift initially as shown in the picture to the right. Be careful not to put too much pressure onto the acrylic which extends out below the bottom of the metal cabinet. Test the weight of the unit before proceeding.

# DANGER

SECTION # 3 WEIGHS APPROX. 150 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME. IF TWO PEOPLE CANNOT SAFELY LIFT THE SECTION -SEEK ADDITIONAL ADULT HELP BEFORE INSTALLING ONTO THE GAME!



**Check Box When This Step is Complete** 

#### <u>Step # 5-C</u>

# Preparing the proper placement of section # 3

The safest place to lift section # 3 onto the main cabinet (Section # 2) - is from the rear of the game. This will prevent any resting of the section on the large piece of glass on the front of the main cabinet. You will need either two step stools or two ladders. This will help in getting the unit high enough to guide it into the mounting holes. Take note not to exceed the weight capacity of the ladder or stool.

# DANGER

SECTION # 3 WEIGHS APPROX. 150 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



Check Box When This Step is Complete

### <u>Step # 5-D</u>

Preparing the proper placement of section # 3 - Cont.

Safely walk the piece around the back of the game. Make sure that



there are no customers around this area.

# DANGER

SECTION # 3 WEIGHS APPROX. 150 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.

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# <u> Step # 5-E</u>

# Lifting section # 3 into place

At the same time - each person should carefully climb either the step stool or the ladder until they have reached a height where the bolts can be guided into the mounting holes. Make sure you have a proper grip before ascending the ladder and never stand under the weight.

# DANGER

SECTION # 3 WEIGHS APPROX. 150 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME. IF TWO PEOPLE CANNOT SAFELY LIFT THE SECTION -SEEK ADDITIONAL ADULT HELP BEFORE INSTALLING ONTO THE GAME!



**Check Box When This Step is Complete** 

#### <u>Step # 5-F</u>

# Lifting section # 3 into place - Cont.

1) After getting the unit above the main cabinet - adjust your hold on the unit as needed. Do not let go of the unit. If you must set it down for any reason - make sure it is resting on the four bolts and not the acrylic glass. Do not allow it to sit on these bolts for an extended period of time.

2) Check to make sure that the wire harness is plugged into the LED connector on the left and right. Do not let go of the unit to adjust this.

# CAUTION

DO NOT ALLOW THE ACRYLIC TO TAKE ANY WEIGHT OF THE UPPER SECTION. IT CANNOT TAKE THE WEIGHT AND WILL BREAK.



Check Box When This Step is Complete

### <u> Step # 5-G</u>

Lifting section # 3 into place - Cont.

If you must rest for any reason. Make sure the unit is resting on the



four bolts. Check to make sure none of the bolts are either close to the mounting holes or close to the edge of the game. <u>These bolts</u> were not designed to hold weight in this manner - do not keep the <u>unit in this position for an extended period to time and do not</u> <u>release you grip on the top at any point</u>!

# CAUTION

DO NOT ALLOW THE ACRYLIC TO TAKE ANY WEIGHT OF THE UPPER SECTION. IT CANNOT TAKE THE WEIGHT AND WILL BREAK.

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### <u>Step # 5-H</u>

### Lifting section # 3 into place - Cont.

Hold the section as shown in the picture to the right and guide it close to the mounting holes. You should be able to see where the bolts line up to the mounting holes.



Check Box When This Step is Complete

#### <u>Step # 5-I</u>

# Lifting section # 3 into place - Cont.

Get the unit as close to the mounting holes as possible. Take care not to damage the acrylic glass on the front while guiding the piece into position.



Check Box When This Step is Complete

# Step # 5-J

Lifting section # 3 into place - Cont.

The hardest part while installing Section # 3 is aligning the acrylic on



the upper section with the glass on the lower cabinet section. Before you lower Section # 3 onto the cabinet - ensure that the acrylic sleeve fits on top of the glass. You may need a third person to assist you here in guiding which way the section needs to be oriented.

# CAUTION

DO NOT ALLOW THE ACRYLIC TO TAKE ANY WEIGHT OF THE UPPER SECTION. IT CANNOT TAKE THE WEIGHT AND WILL BREAK.



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### Step # 5-K

# Lifting section # 3 into place - Cont.

Carefully guide the acrylic onto the cabinet glass while lowering the unit into the mounting holes. Let the unit down naturally - do not force it. If it will not go smoothly into place - pull it up and then try again. A third person can help guide the acrylic into place or tell the installers which way they need to orient the piece.



**Check Box When This Step is Complete** 

# WARNING

**IF NEEDED - SEEK HELP OF A THIRD PERSON** 

# Step # 5-L

Checking the seem of the acrylic and cabinet glass

When the acrylic is aligned properly with the glass - the top should drop smoothly into place creating a perfect seem.

# WARNING

DO NOT REST THE TOP SECTION ON THE ACRYLIC - IT WILL BREAK



Check Box When This Step is Complete

# <u>Step # 5-M</u>

Checking the overall appearance

After Section # 3 is installed on top of Section # 2 - step back and check the alignment of the entire structure.



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### <u>Step # 5-N</u>

# Installing nuts to hold section # 3

Locate the provided nuts, washers, and lock washers. Open the rear access door and look up to your right. You will see the two bolts from Section # 3 sticking through the mounting holes. Screw each nut onto the bolts using both the washers and lock washers. Repeat the same thing for the two bolts on the left side (from the rear) of the cabinet.



Check Box When This Step is Complete

#### Step # 5-0

### Tightening the nuts for section # 3

Use the provided tool (Metric # 17 Wrench) to tighten the nuts on all four bolts.

# CAUTION

WHEN USING A TOOL TO TIGHTEN THE NUTS - BE CAREFUL OF THE LED LIGHT CONNECTORS LOCATED ON THE ACRYLIC PLAYFIELD.



Check Box When This Step is Complete

#### <u>Step # 6</u>

Removing section # 4 from crate

Open the second crate containing Section # 4. Remove the unit from

the crate and carefully place it on the ground. Remove the foam packaging. Use the provided tool and remove all the screws holding the front acrylic. Be sure to keep these screws in a safe place and put the acrylic panel somewhere where it wont get scratched.

# WARNING

SECTION # 4 CONTAINS A 32" FLAT SCREEN TV - DO NOT DROP THIS SECTION



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# Step # 6-A

# Locating the bolts on section # 3

1) If you look up at Section # 3 - you will see four bolts that come off the front of the main unit. When Section # 4 is installed - these bolts will secure the unit in place.

There are two elongated holes in the upper part of Section # 3
 where the tabs on Section # 4 will fit into place.



Check Box When This Step is Complete

# <u>Step # 6-B</u>

# Locating the support holes

The two tabs on Section # 4 will fit into the two holes on the top of Section # 3.



Check Box When This Step is Complete

# <u>Step # 6-C</u>

Locating the support tabs

The two tabs on Section # 4 will fit into the two holes on the top of Section # 3.



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### <u>Step # 6-D</u>

### Preparing to install section # 4

Again you will need to use two step stools or ladders. However this time, you will install Section # 4 from the front. Place the stools so that it will be easy for you to approach the game with the unit. Section # 4 weighs approx. 100 pounds.

# DANGER

MAKE SURE YOU DO NOT EXCEED THE WEIGHT CAPACITY OF THE STEP STOOL. ADD YOUR WEIGHT PLUS 100 POUNDS WHEN CALCULATING THE CAPACITY



**Check Box When This Step is Complete** 

#### <u>Step # 6-E</u>

### Initial lifting of section # 4

Two people should pick Section # 4 up as shown in the picture. You will want to make sure all wires are pushed into the cabinet so they do not impede during installation.

# DANGER

SECTION # 4 WEIGHS APPROX. 100 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



Check Box When This Step is Complete

#### Step # 6-F

Approaching the game with Section # 4

When approaching the game from the front - be careful not to damage the front glass. Carefully climb onto the step stools while supporting the weight of the unit.

# DANGER

SECTION # 4 WEIGHS APPROX. 100 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



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#### <u>Step # 6-G</u>

### Lifting Section # 4 and aligning the tabs with receiving holes

While lifting Section # 4 up towards Section # 3, visually align the metal tabs with the receiving holes as you climb up the step stool. This will make placement quicker and require less effort.

# DANGER

SECTION # 4 WEIGHS APPROX. 100 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



**Check Box When This Step is Complete** 

#### <u>Step # 6-H</u>

#### Fitting Section # 4 to Section # 3

For Section # 4 to fit quickly, insert the top two tabs into the receiving holes first. This will require you to slightly angle the unit in order to fit the tabs. Once the tabs are inserted into the receiving holes, you can release some of the angle and allow the unit to slide into a locking position. The bolts on Section # 3 should slide right into the holes on Section # 4.

## DANGER

SECTION # 4 WEIGHS APPROX. 100 POUNDS. THE TWO PEOPLE WHO WILL INSTALL THIS SHOULD BE ABLE TO LIFT THAT AMOUNT OF WEIGHT ABOVE THEIR HEADS FOR AN EXTENDED PERIOD OF TIME.



Check Box When This Step is Complete

#### <u>Step # 6-I</u>

Section # 4 re-positioning

In some cases - the tabs may go directly into the receiving holes - but

the bolts on Section # 3 are not aligned with the holes on Section # 4. In this case, you may need to lift the entire unit up slightly and then allow if to fall back into place which watching the location of the bolts.

# DANGER

DO NOT RLEASE YOUR GRIP UNTIL YOU ARE SURE THAT THE TWO TABS FIT PROPERLY INTO THE RECEIVING HOLES.



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### <u>Step # 6-J</u>

## Securing Section # 4 to Section # 3

1) As you can see in the photo to the right - the support tab fits securely into the receiving hole and the bolts on Section # 3 fit right through the receiving holes on Section # 4.

2) Use the provided nuts, washers, and lock washers to secure each of the four bolts. Use the provided tool to tighten all nuts.



Check Box When This Step is Complete

#### Step # 7

# **Connecting Electrical Connectors**

Open the rear access door and look up and to the left. Just above the access hole - you will see two wire connections that must be plugged in. Take each wire and push it down through the hole in the rear of the cabinet.



Check Box When This Step is Complete

#### Step # 7-A

**Connecting Electrical Connectors** 

After pushing both connectors through the rear hole - plug each one into the corresponding connectors.



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### <u>Step # 7-B</u>

#### **Connecting Electrical Connectors**

After plugging both connectors into their corresponding connectors, push the excess wire back up into the hole so that it does not get caught in the vertical ball feed structure. Keep the wire up against the wall and away from the metal ball feed holders.



Check Box When This Step is Complete

#### <u>Step # 7-C</u>

# **Connecting Electrical Connectors**

From the rear access door - look up through the access point and to the right. There will be eight connectors. Separate each wire and run them through the hole in the back corner of the cabinet.



Check Box When This Step is Complete

#### **Step # 7-D**

**Connecting Electrical Connectors** 



After you run the cables through the rear corner access point ensure that there is nothing that can get caught on the motor belt and claw mechanism as to will move back and forth after powering up the game.

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### <u>Step # 7-E</u>

# **Connecting Electrical Connectors**

1) Plug each of the 8 Connectors into the corresponding connector near the CPU (computer board). Each connector should be numbered and will match the corresponding connector.

2) Once all 8 Connectors are inserted and properly seated. Be sure to store all cables to the right of the main board away from sensitive electronics and the computer's fan.



SOME CPU'S MARY VARY FROM PICTURE



Check Box When This Step is Complete

#### <u>Step # 7-F</u>

## **Connecting Electrical Connectors**

1) Locate the 10-Pin Molex connector in the right side of Section # 3.



Check Box When This Step is Complete

### **Step # 7-G**

**Connecting Electrical Connectors** 

1) Pull the 10-Pin connector through the opening closest to the side of the cabinet and plug it into the round LED board on the right side.



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# <u>Step # 7-H</u>

# **Connecting Electrical Connectors**

1) Locate the 5 Connectors in Section # 3. These are located on the left side of the cabinet (Looking at the game front).



Check Box When This Step is Complete

# <u>Step # 7-I</u>

# **Connecting Electrical Connectors**

1) Pull the 5 Wires through the opening on the left from Section # 3 to Section # 4



Check Box When This Step is Complete

# <u>Step # 7-J</u>

Connecting Upper Left Cabinet Wires - Section # 4

1) Connect the 10-Pin Molex connector to the round LED board on your left in Section # 4.



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## <u>Step # 7-K</u>

### Connecting Upper Left Cabinet Wires - Section # 4

**1)** Connect the monitor VGA Cable. Note: In some units - this cable might be a HDMI cable.

**2)** Connect the 110 Volt (OR) 220 Volt three pin LED Light harness.

**3)** Connect the two pin left and right speaker connectors.



Check Box When This Step is Complete

### **Step # 7-L**

# **Connecting the Speaker Cables**

Insert the two pin Molex connector(s) in the left and right speakers on the acrylic marquee.

# WARNING

USE TWO PEOPLE TO ATTACH THE ACRYLIC MARQUEE



Check Box When This Step is Complete

#### Step # 8

Secure the Acrylic Marquee to the Cabinet

Use the screws you took out of the marquee earlier and replace them into the holes securing the acrylic to the cabinet

# WARNING

USE TWO PEOPLE TO ATTACH THE ACRYLIC MARQUEE



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#### Step # 9

# Pull the wires out of the control panel

Pull the wires out of the control panel and inspect each connector. Ensure that all pins are properly seated in the connectors.



Check Box When This Step is Complete

# <u>Step # 9-A</u>

# Pull wires out of the main cabinet

Pull the wires out of the main cabinet and check that the pins in each of the connectors are properly seated.



Check Box When This Step is Complete

#### Step # 9-E

Attach the wires from the control panel to the main cabinet

Attach the wires from the main cabinet (Section # 2) (If Applicable) to the wires in Section # 1. Each connector is marked or numbered to the corresponding connector.



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Space Ballz Service Manual

C

#### <u> Step # 9-0</u>

#### Attach the wires from the control panel to the main cabinet

In some units - a PCB is used to connect the wires from the control center (Section # 1) to the main cabinet (Section # 2). In this case, connect each Molex connector to the appropriate space on the PCB. Be sure that the connectors are properly seated.

# CAUTION

ENSURE THAT EACH CONNECTOR IS PROPERLY SEATED



**Check Box When This Step is Complete** 

Attach the wires from the control panel to the main cabinet

In some units - a PCB is used to connect the wires from the control center (Section # 1) to the main cabinet (Section # 2). In this case, connect each Molex connector to the appropriate space on the PCB. Be sure that the connectors are properly seated. Please note that the speaker connection may vary from what you see in the photo.

# CAUTION

ENSURE THAT EACH CONNECTOR IS PROPERLY SEATED



Check Box When This Step is Complete

#### <u>Step # 10</u>

Attaching the control center to the main cabinet



Push the control center (Section # 1) into the metal brackets on the main cabinet (Section # 2). Be sure that the unit is properly aligned and all wire connections are stored in the access panel and NOT wedged between the cabinet.

# CAUTION

BE SURE THAT ALL WIRES ARE STORED PROPERLY BEFORE PUSHING THE CABINETS TOGETHER



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### Step # 10-A

#### Attaching the control center to the main cabinet

Slowly push the control center in towards the main cabinet. If both units are perfectly level - they will slide together with no problem. If your floor is angled at all - the two units may not fit together with out moving both units until you find a level location. DO NOT FORCE THE TWO TOGETHER! YOU WILL DAMAGE THE WIRES. BE SURE TO LOOK UNDER THE CABINET AS SOMEONE IS PUSHING THE TWO TOGETHER TO ENSURE THE WIRES ARE NOT GETTING CRUSHED.

# WARNING

ENSURE THAT BOTH CABINETS ARE ON LEVEL GROUND BEFORE PUSHING TOGETHER



**Check Box When This Step is Complete** 

#### <u>Step # 10-B</u>

# Securing bolts to the control center

When the two units are pushed together and you are sure that all wires are stored properly and not being crushed, locate the four screws, washers, and lock washers from the spare parts bag and insert them into the four holes on the control center. If the control center is aligned properly and the floor is level. The screws will go right in. If the floor is angled at all - the screws will not go in!

# CAUTION

ENSURE THAT BOTH CABINETS ARE ON LEVEL GROUND BEFORE PUSHING TOGETHER - IF THEY ARE NOT - IT WILL BE IMPOSSIBLE TO PUSH THE TWO TOGETHER



Check Box When This Step is Complete

#### <u>Step # 11</u>

Installing the second vertical ball riser



Located in the main cabinet for shipping is the second vertical ball riser. Remove the assembly from the unit and remove its packaging. Note that this piece may also be packaged in a box outside the game.

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### Step # 11-A

# Installing the second vertical ball riser

Remove the 4 bolts stored in the ball riser.

# NOTICE

BOLTS, WASHERS, AND LOCK WASHERS MAY BE STORED IN SPARE PARTS BOX



Check Box When This Step is Complete

### <u>Step # 11-B</u>

# Installing the second vertical ball riser

**1)** Hold the second stage ball riser in one hand and a few of the securing bolts in your other hand. While looking into the rear of the cabinet - insert the ball riser and look upwards.

**2)** Insert one of the bolts with your other hand into one of the four holes in the exterior part of Section # 3.

# WARNING

BE SURE TO HAVE A GOOD GRIP ON THE RISER -DROPPING IN INSIDE THE CABINET WILL DAMAGE IT AND ELECTRICAL CONNECTIONS WITHIN THE GAME



Check Box When This Step is Complete

#### <u> Step # 11-0</u>

Installing the second vertical ball riser



Use the provided tool to tighten the four bolts by turning it clockwise.



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## <u>Step # 11-D</u>

# Installing the second vertical ball riser

**1)** Ensure there is at least 5mm clearance between the metal ball support structure and the acrylic when you physically move the ball riser belt through the acrylic ball feeder.

**2)** The clearance is to ensure that the ball riser will not jam during normal operation. After you have the proper clearance - tighten all four bolts holding the structure.



Check Box When This Step is Complete

#### <u>Step # 11-E</u>

# Installing the second vertical ball riser

Check the clearance of the ball riser with the acrylic structure near the top of the ball feed. Ensure that the metal ball holders do not hit the acrylic.



Check Box When This Step is Complete

#### Step # 11-F

Installing the second vertical ball riser



**1)** Connect the 4-Pin motor wire connector to the 4-Pin Molex connector inside the game.



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#### Step # 12

### Locating the ballz

Locate the balls stored in the rear access area in the main cabinet



Check Box When This Step is Complete

#### Step # 12-A

### Preparing the ballz

Place 7-8 balls into the ball feed area (just above the wooden plank). The balls should roll into the first vertical riser.

# CAUTION

USING LESS THAN 6 BALLS IS NOT RECCOMMENDED AS THE MOTORS WILL CONTINUOUSLY OPERATE. USING MORE THAN 9 BALLS MAY CAUSE JAMS IN THE COLLECTION AREA BEFORE THE FIRST ELEVATOR



Check Box When This Step is Complete

#### Step # 13

Load tickets into the unit

Load tickets into both ticket dispensers. Be sure to engage both of the gear heads on both dispensers. After the game is turned ON - Y will need to push the YELLOW advance button on each ticket dispenser to feed the tickets through.



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#### <u>Step # 14</u>

### Getting ready to power ON

Locate the two power supplies in the rear of the game. Ensure that both voltage selectors are set to the line voltage of your facility.

# WARNING

# ENSURE THAT ALL POWER SUPPLIES ARE SET TO THE PROPER VOLTAGE BEFORE POWER ON



**Check Box When This Step is Complete** 

#### Step # 14-A

#### **Getting ready to power ON**

Locate the power plug provided in the spare parts box. Plug the cable into the machine and the other into a GROUNDED circuit. Ensure that the circuit will not be overloaded with the addition of Space Ballz. Check the units power requirements by referencing the serial number plate BEFORE proceeding. Turn the game power on.

# DANGER

ALWAYS INSPECT AND REPLACE DAMAGED ELECTRICAL CORDS. DO NOT ATTEMPT TO USE OR FIX A DAMAGED CORD



Check Box When This Step is Complete

#### Step # 15

**Inspecting unit after power ON** 

After the game is powered ON. Check to make sure all of the

following work properly:

 ALL LED lights on both the main cabinet and the control center work properly. Check to ensure the plasma dish works properly
 The PC starts properly and an image is displayed on the monitor. (It may take up to two minutes for the PC to start)

**3)** A ball is loaded into the claw mechanism - and the claw mechanism begins moving



# **GAME SETTINGS & PROGRAM**

Space Ballz has been designed to include a software program where all game settings are easily managed through the use of a simple keypad. Although the software is very simple to navigate, we highly recommend reading the following programming section to fully understand how to make changes to the software and how each change will affect the machine. Should you have any questions about accessing the software, or need to make a change outside the capability of the current software, please contact Jennison Entertainment directly.

The chart below should be used to record an changes in the software and the reasons for the change. This will allow you to track which software version is installed or allow another technician to service the unit and quickly identify what has been changed since delivery.

SOFTWARE VERSION	REASON FOR CHANGE
20110413.A	INITIAL PROGRAM INSTALLED AT FACTORY
	SOFTWARE VERSION           20110413.A           . <t< td=""></t<>

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# <u>Step # 1</u>

### Locate the keypad inside the control center

Open the ticket access door and look towards the left of the ticket storage bins. Locate the keypad. The keypad is connected to the PC through a USB cable. Ensure that the "green" indicator light on the keypad is illuminated. The illuminated light is your indication that the keypad connection is proper and that it is recognized through Windows.



## <u>Step # 2</u>

### **Entering the software**

On the keypad, push and hold the plus (+) button. Keep holding the button down and the game should enter the software mode after a few seconds. Notice: You must push and hold the button in order to enter the software mode. Pushing the plus (+) button only once will not enter the software.



# <u>Step # 3</u>

# **Checking the installed software version**

You will recognize that you have entered the software by looking at the SEG displays along the bottom of the playfield. While in the software mode, the software version will be displayed along the nine SEG displays.



### **Current Game Software Version**

20110416.A

Notice: Always check our website for the most current software version available.

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# <u>Step # 4</u>

# Viewing the password screen

After pushing and holding the (+) button, the screen will display the phrase "ENTER PASSCODE TO ENTER SYSTEM SETUP". This is your indication that the game is now in setup mode and you can release the (+) button.



# <u>Step # 5</u>

# Entering the pass code

The system setup is protected by a numeric pass code. A pass code is used so that operators can ensure settings cannot be changed without proper permissions and proper access. Enter the proper pass code and push "ENTER" to gain access to the system information page.

# **DEFAULT PASSCODE**

0000

Notice: You can change the pass code to any four digit numeric code. Please remember the pass code.



# <u>Step # 6</u>

# Using the keypad to make a selection

After inserting the proper pass code, push the **"ENTER"** button on the keypad to enter the system setup. If the pass code is incorrect, the screen will prompt you to enter the pass code again. If you have forgotten the pass code - please contact JET to learn how to gain access.



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# <u>Step # 7</u>

# Viewing the Space Ballz main setup page

After successfully entering the proper pass code, the Space Ballz main setup page will be displayed. This page will show basic instructions for navigation and will also display the current PC Software Version.

# **CURRENT PC SOFTWARE VERSION**

# JETSB2010V1.0

Note: The PC SOFTWARE is not the same as the Game SOFTWARE Version. The PC SOFTWARE is the screen that allows you to make quick changes to the GAME SOFTWARE. Periodically, JET may update this software to allow the user to make quicker changes to the game.



# <u> Step # 8</u>

# **Confirming selection on the keypad**

Push the **"ENTER"** button to continue into the software pages. Pushing the **"ENTER"** button will also confirm any changes you make while in the software.



# <u>Step # 9</u>

# Audit page view

The Space Ballz software has been designed to keep track of all credits that have entered the machine and of all tickets that have been payed out by both of the ticket dispensers. This is designed as a backup system to the installed coin / ticket meters. There are two audits available for the operator:



<u>**Historical Audit</u>**: The historical audit allows for the operator to keep track of the game performance from when the game was first installed - or over a long period of time. This can be reset at any time.</u>

Weekly Audit: Designed for shorter periods of time.

# <u>Step # 10</u>

# **Resetting audit information**

The information stored in both audit pages can be deleted at any time. To delete the information, select the proper page by using the arrow keys and then push "ENTER" - You will be given a warning box where you will have to push "ENTER" again to confirm your selection.

Although we recommend you delete the WEEKLY RECORD after each collection - we also encourage you to save the HISTORICAL RECORD so that you can monitor the games payout over a longer period of time. In some cases, weekly payout percentages could be skewed by jackpots being won just before a collection.



### <u>Step # 11</u>

# Changing the number of balls per credit & balls per bonus

The first page of the setup program allows the operator to change the number of balls given per credit and the number of balls given when the bonus is won.

**Balls Per Credit**: This is the number of balls the player will receive for playing each game. The default is set to 1 ball per play.

**Balls Per Bonus**: This is the number of balls awarded if the player successfully wins the bonus feature. If the player gets their ball into the bonus hole, then the game will enter the bonus mode and the player will get additional balls to play. The default value is 3 balls.



### <u>Step # 12</u>

### Changing the number of balls per credit

To change the number of Balls Per Credit, make sure you are in the **"BALLS PER CREDIT / BONUS"** page. In that page, push

# SETUP

the **"ENTER"** button and you will be prompted to enter the number of **"BALLS PER CREDIT"**. The saved value will disappear and you will be able to enter another value using the keypad. Push the **"ENTER"** button to save that value. From there - the curser will automatically move to the number of **"BALLS PER BONUS"**. You will than have to reenter your chosen value and push **"ENTER"** to save. Select the number of balls given when the credit/Bonus is won. Options: 1-10 Balls

Balls Per Credit : **1 BALLS** Balls Per Bonus :

> Type a value to change the number of balls Press Enter to save changes

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# <u>Step # 13</u>

### Changing the number of balls per bonus

To change the number of Balls Per Bonus, make sure you are in the "BALLS PER CREDIT / BONUS" page. In that page, push the "ENTER" button and you will be prompted to enter the number of "BALLS PER CREDIT". The saved value will disappear and you will have to re-enter the value using the keypad. Push the "ENTER" button to save that value. From there - the curser will automatically move to the number of "BALLS PER BONUS". You can than enter your chosen value and push "ENTER" to save.

# SETUP

Select the number of balls given when the credit/Bonus is won. Options: 1-10 Balls

Balls Per Credit : Balls Per Bonus : 3 BALLS

> Type a value to change the number of balls Press Enter to save changes

### <u>Step # 14</u>

### Changing the cost per credit & ticket values

For audit purposes, the Space Balls PC software features the ability record the cost per credit and the cost per ticket. This allows the game software to mathematically determine the ticket payout for the audit pages. **These values must be set properly in order for the game to determine the ticket payout from either one of the audit pages.** 



### <u>Step # 15</u>

# Changing the cost per credit

To change the cost per credit - from the "COST PER CREDIT / TICKET" page, push "ENTER" this will delete the value in the "COST PER CREDIT" section and then you can enter a new value. The value that you enter into this field should be whatever the value is for each token, chip, or credit.

# DIT

SETUP

onus Select the actual cost of each credit/tic



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# <u>Step # 16</u>

## Changing the cost per ticket

To change the cost per ticket - from the "COST PER CREDIT / TICKET" page, push "ENTER" this will delete the value in the "COST PER CREDIT" section. You will have to re-enter the proper value and push "ENTER". You will then be able to enter the "COST PER TICKET" value. This value should be whatever your individual ticket cost is per ticket. For example: 0.005 for half of a US Penney or 0.01 for 1 US Penney. Be sure to include the decimal. After entering the proper value - push the "ENTER" button to exit the select mode.



### <u>Step # 17</u>

# Changing the amount of credits required per play

To change the number of credit required to begin the game, select the **"CREDITS"** page. Push the **"ENTER"** button and enter what ever value you want. After the proper value has been entered, push the **"ENTER"** button to save. Note that if you enter "O" - the game will run in FREEPLAY. If you are using a card system - set the credit value to "1". You will need to change your cost per credit in order to get the proper payout displayed in the audit page. Games shipped to New Jersey will be limited to a maximum of either \$1.00 or \$2.00 Game Play. New Jersey software is limited by the following selection: Selecting 1-4 credits will only allow <u>4</u> coins to enter the game for one game play. Selecting 5-20 credits will only allow <u>8</u> coins to enter the game for one game play.



# <u>Step # 18</u>

#### Setting the proper currency

Space Ballz has been designed so that the software can be used in foreign Countries and still display the proper values in the audit page. From this page, select your currency from the list. Note: Please use **"US DOLLAR"** unless you have contacted JET and received a different software version for your Country.



### <u>Step # 19</u>

### Setting mercy ticket values

From the "MERCY TICKETS" page, you can select the number of mercy tickets the game will pay out should there be a malfunction during game play. Please note that the game will only pay out mercy tickets should a malfunction occur. In many cases - due to the design of the software, should a malfunction occur, the game will award another play instead of paying out mercy tickets.



#### <u>Step # 20</u>

### Setting the score state values

There are four different pre-set score state values that can be chosen by the operator. The game software has been designed so that it is very easy to change between these score states should the need arise. The values displayed on this page correspond to the nine score SEG displays along the bottom of the playfield. The values on this screen are displayed from left to right and the largest number will be in the center channel. To change the score state values, push the **"ENTER"** button and then use the arrow keys to select a new pay table. Push the **"ENTER"** button to confirm your selection. Note: Any value two digit value can be used for any channel. For information on how to program a custom value, please contact JET.



### <u>Step # 21</u>

#### Setting the score state values - continued

Use the up or down arrow keys to change between the different score states. Select the letter of the score state that you would like to set. Push the **"ENTER"** button to select that score sate.

### SETUP

Select the desired score state. These are the ticket values along the bottom of the play field. A: 5 10 15 20 100 20 15 10 5 B: 5 50 25 2 250 2 25 50 5 C: 10 90 50 10 500 10 50 90 10 D: 20 80 60 20 750 20 60 80 20 Current Setting : **B** Press  $\uparrow \downarrow$  or  $\leftrightarrow \rightarrow$  to change the setting Press Enter to save changes

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## <u>Step # 22</u>

### Setting the score state values - continued

Use the up or down arrow keys to change between the different score states. Select the letter of the score state that you would like to set. Push the **"ENTER"** button to select that score sate.

alue	s along the bottom of the play field.
A:	5 10 15 20 100 20 15 10 5
B:	5 50 25 2 250 2 25 50 5
C:	10 90 50 10 500 10 50 90 10
D:	20 80 60 20 750 20 60 80 20
Cur	rent Setting : D
	Press $\uparrow \downarrow$ or $\leftarrow \rightarrow$ to change the setting Press Enter to save changes

#### <u>Step # 23</u>

#### Setting the bonus score state values

There are four different pre-set bonus score state values that can be chosen by the operator. The values displayed on this page correspond to the nine bonus score SEG displays along the bottom of the playfield. The values on this screen are displayed from left to right and the largest number will be in the center channel. To change the bonus score state values, push the **"ENTER"** button and then use the arrow keys to select a new pay table. Push the **"ENTER"** button to confirm your selection. Note: Any value two digit value can be used for any channel. For information on how to program a custom value, please contact JET.



### <u> Step # 24</u>

# Setting the system pass code

The system setup is protected by a numeric pass code. A pass code is used so that operators can ensure settings cannot be changed without proper permissions and proper access. The setting can either be set to "**ON**" or "**OFF**". Push the "**ENTER**" button to select the setting. If set to "**ON**" then select a four digit numeric code. Push "**ENTER**" again to confirm your code. Please remember the four digit code as you will not be able to gain access to the setup pages without the proper pass code. If you forget your pass code, contact JET.



### DEFAULT PASSCODE

0000

# <u>Step # 25</u>

# Adjusting the volume

You can adjust the volume of both the Attract Mode and the Game Mode Volume. The settings are from 0-10, with 10 being the highest. In a noisy arcade setting, we suggest you leave both volume levels at 10. Please note that volume can also be adjusted on the subwoofer itself by turning the volume knob. To change either value, press the **"ENTER"** button and then select the desired level using the numeric keys on the keypad.



### <u>Step # 26</u>

### Exiting the software

After changing any value within any of the pages, you can EXIT the software by pushing and holding the minus (-) button. Continue to hold this button until you see the screen exit and the JET logo. The game will then re-start. It takes about 2 minutes to fully re-start the game. During this time, you may see video on the monitor, but the game will not be ready to play until the unit finishes its diagnostic process. You will see the game load both the Bonus Score State Values and then the Game Score State Values before finishing the diagnostic process. After all lights turn BLUE and then begin to cascade, the game is then ready to play.



# <u>Step # 27</u>

### **Exiting the software - continued**

Your indication that you have successfully exited the game software menu will be that the screen will initially show the JET company logo. When you see this screen - release the (-) button.





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## <u>Step # 28</u>

### **Exiting the software - continued**

As the software re-starts - look to make sure that the Bonus Score State values load across the bottom of the game. These values should load from left to right. This is your opportunity to check to make sure that the proper values have bee set.



#### <u>Step # 29</u>

## **Exiting the software - continued**

After the Bonus Score States are displayed - the software will display the Game Score State values across the bottom 9 SEG displays. These values should load all at the same time giving you a few seconds to check and make sure that the proper values have bee set.



#### <u>Step # 30</u>

# **Exiting the software - continued**

If you have changed the score state values - the promo screen that is occasionally displayed on the monitor should



also update itself with the new value. This value is determined by taking the number in the MIDDLE BONUS SCORE STATE value and then multiplying it by the number of BONUS BALLS. For example: If you select a Bonus Score State with 250 being the middle value and then you have selected to have three bonus balls - the maximum amount of tickets that can be won during that bonus round is 750 tickets. Note that this value does not include the number of tickets that can also be won during game play before the bonus was started.



# **STATE OF NEW JERSEY APPROVED SOFTWARE**

Under the rules and regulations governed by the State of New Jersey Legalized Games of Chance Control Commission, there are certain requirements for amusement and redemption games. A certain version of software has been designed to allow Space Ballz to be operated within the State of New Jersey. This version of the software complies with the following requirements:

1) Maximum allowable wager per player dose not exceed \$10.00 per game. In Space Ballz (20120301.N) the game will not accept more than 4 coins on \$1.00 Play or 8 coins on \$2.00 Play.

2) Maximum allowable accumulation of inserted credits does not exceed \$10.00. In Space Ballz (20120301.N) the game will not accept more than 4 coins on \$1.00 Play or 8 coins on \$2.00 Play.

3) Device must lockout after \$10.00 is inserted. Space Ballz will not accept more than \$2.00 maximum.

4) Device must lockout after maximum wager per game is inserted, unless a discount is offered. The coin mechanism in Space Ballz will not accept more than \$2.00.

5) Device must not escrow inserted credits for more than one game's play unless a discount is offered.

6) Device must award tickets, tokens or prizes immediately upon completion of the game, or offer player an option to collect or accumulate winnings.

7) Device must not possess a "Knock-Off" mechanism.

8) Device should possess meters for "Coin In" and "Token/Ticket Out"

9) Device must not award cash prizes - only tickets, vouchers or tokens which may be redeemed for prizes within the facility.

10) Device must not be capable of awarding a prize in excess of \$10,000.00.

11) Device must not incorporate a reflexive outcome determination or auto-percentaging

12) Device must retain tickets or tokens owed upon power interruption

The above requirements are published here for your information and obtained from Eclipse Compliance Testing in conjunction with the New Jersey Legalized Games of Chance Control Commission. In order to operate Space Ballz within the State of New Jersey - you must operate a version of the software which complies with the above requirements. Call your local distributor to order this software before operating the game. The version of software which complies with these requirements can be found below.

# **State of New Jersey Approved Software**

# Verifying the installed software version

To view the installed software version, push and hold the plus (+) button on the keypad. While in the software mode, the software version will be displayed along the nine SEG displays. In order to operate the game in the State of New Jersey - you must only use this version of software.



### New Jersey Game Software Version

20120301.N

The installed software version can be viewed at any time by entering the setup and looking at the SEG displays.

# **ADJUSTING THE PAYOUT PERCENTAGE**

# **TICKET PAYOUT REFERENCE CHART**

COST PER PLAY (USD)	# BALLS PER CREDIT	# BALLS PER BONUS	GAME SCORE STATE	BONUS SCORE STATE
\$0.50				
\$0.75				
\$1.00				
\$1.50				
\$2.00	1	3	10/50/90/10/500\10\90\50\10	10/10/10/250\10\10\10\10
\$3.00				

The above ticket payout table is for reference only. These numbers have been determined after considerable testing in field locations. This chart assumes a ticket cost of USD 0.01 (one Penney) and a desired payout of 30-35%

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# MAIN BOARD INPUTS

IC	INPUT #	CONTENT	PICTURE
	1	COIN ACCEPTOR	
	2	BILL ACCEPTOR	
	3	TICKET RESET	
80	4	TICKET SIGNAL # 1	
Ď	5	TICKET SIGNAL # 2	
	6	BALL DROP BUTTON	
	7	INSTRUCTION BUTTON	
	8		
	9	SCORE SWITCH # 1	
	10	SCORE SWITCH # 2	
	11	SCORE SWITCH # 3	
60	12	SCORE SWITCH # 4	
Ъ	13	SCORE SWITCH # 5	
	14	SCORE SWITCH # 6	
	15	SCORE SWITCH # 7	
	16	SCORE SWITCH # 8	
	17	SCORE SWITCH # 9	
	18	BONUS HOLE SWITCH	
	19	BELT SWITCH # 1	
10	20	BELT SWITCH # 2	
<b>D</b>	21		
	22	CRANE - LEFT SWITCH	
	23	CRANE - RIGHT SWITCH	
	24	BONUS STOP SENSOR	
	25		
	26	U11 IS NOT UTLIZED IN SPACE BALLS. THIS SPARE IC CAN BE USED IN U08,U09, & U10	
	27		
11	28	PUT THE DEFECTIVE IC BACK INTO <b>U11</b>	
5	29	BEFORE POWERING THE UNIT ON. IF THIS FIXES YOUR PROBLEM. BE SURF TO	
	30	RECORD THAT THE IC IN <b>U11</b> IS NOW	
	21	IN ANOTHER SOCKET	
	32		

# **MAIN BOARD INPUTS - CONTINUED**

SPACE BALLZ - MAIN BOARD INPUT CHART CONTINUED							
IC	INPUT #	CONTENT	PICTURE				
	33						
	34	<b>U12</b> IS NOT UTLIZED IN SPACE BALLS. THIS					
U12	35	TO RECITFY POTENTIAL ISSUES WITH					
	36	THOSE IC'S. IF YOU SWAP IC'S, BE SURE TO PUT THE DEFECTIVE IC BACK INTO <b>U12</b> BEFORE POWERING THE UNIT ON. IF THIS FIXES YOUR PROBLEM, BE SURE TO RECORD THAT THE IC IN <b>U12</b> IS NOW					
	37						
	38						
	39	DEFECTIVE AND CANNOT BE USED AGAIN IN ANOTHER SOCKET					
	40						

The Space Ballz input/output board utilizes 5 input IC's to control all inputs used within the game. In Space Ballz, only three of the five IC's are used U08, U09, U10. The remaining two IC's U11 and U12 are not used to control any input function. These two IC's can be used to replace the other IC's should they become corrupt.

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# MAIN BOARD OUTPUTS - (THROUGH VERSION 20110413.A)

SPACE BALLZ - MAIN BOARD OUTPUT CHART			
OUTPUT #	CONTENT	OUTPUT #	CONTENT
1	SIDE LIGHT # 1	25	BELT SYSTEM # 1
2	SIDE LIGHT # 2	26	BELT SYSTEM # 2
3	SIDE LIGHT # 3	27	CRANE MOTOR
4	SIDE LIGHT # 4	28	CRANE DIRECTION
5	SIDE LIGHT # 5	29	BONUS ARM MOTOR
6	SIDE LIGHT # 6	30	MONKEY LIGHT
7	SIDE LIGHT # 7	31	STEP MOTOR
8	SIDE LIGHT # 8	32	CRANE COIL
9	SIDE LIGHT # 9	33	COIN COUNTER
10	BONUS LIGHT # 1	34	TICKET COUNTER
11	BONUS LIGHT # 2	35	TICKET DRIVER # 1
12	BONUS LIGHT # 3	36	TICKET DRIVER # 2
13	BONUS LIGHT # 4	37	SCORE SEG
14	BONUS LIGHT # 5	38	JET COLA MOTOR
15	BONUS LIGHT # 6	39	WRENCH MOTOR
16	BONUS LIGHT # 7	40	COLLECTION BAR MOTOR
17	BONUS MOVING LAMP # 1	41	SCORE LAMP # 1
18	BONUS MOVING LAMP # 2	42	SCORE LAMP # 2
19	BONUS MOVING LAMP # 3	43	SCORE LAMP # 3
20	BONUS MOVING LAMP # 4	44	SCORE LAMP # 4
21	BONUS MOVING LAMP # 5	45	SCORE LAMP # 5
22	BONUS MOVING LAMP # 6	46	SCORE LAMP # 6
23	BONUS MOVING LAMP # 7	47	SCORE LAMP # 7
24	BONUS MOVING LAMP # 8	48	SCORE LAMP # 8

THE ABOVE O	UTPUT CHART CORRESPONDS TO SOFTWARE VERSION(S) (20110413.A)
OR OLDER. A	BOVE SOFTWARE WAS INSTALLED ON UNIT NUMBERS SB0110100001-
	SB0110100029

# MAIN BOARD OUTPUTS - (VERSION 20110730.A & NEWER)

SPACE BALLZ - MAIN BOARD OUTPUT CHART			
OUTPUT #	CONTENT	OUTPUT #	CONTENT
1	SIDE LIGHT # 1	25	BELT SYSTEM # 1
2	SIDE LIGHT # 2	26	BELT SYSTEM # 2
3	SIDE LIGHT # 3	27	CRANE MOTOR
4	SIDE LIGHT # 4	28	CRANE DIRECTION
5	SIDE LIGHT # 5	29	BONUS ARM MOTOR
6	SIDE LIGHT # 6	30	MONKEY LIGHT
7	SIDE LIGHT # 7	31	STEP MOTOR
8	SIDE LIGHT # 8	32	CRANE COIL
9	SIDE LIGHT # 9	33	COIN COUNTER
10	BONUS LIGHT # 1	34	TICKET COUNTER
11	BONUS LIGHT # 2	35	TICKET DRIVER # 1
12	BONUS LIGHT # 3	36	TICKET DRIVER # 2
13	BONUS LIGHT # 4	37	SCORE SEG
14	BONUS LIGHT # 5	38	JET COLA MOTOR / WRENCH MOTOR
15	BONUS LIGHT # 6	39	COIN MECH CUTOFF
16	BONUS LIGHT # 7	40	COLLECTION BAR MOTOR
17	BONUS MOVING LAMP # 1	41	SCORE LAMP # 1
18	BONUS MOVING LAMP # 2	42	SCORE LAMP # 2
19	BONUS MOVING LAMP # 3	43	SCORE LAMP # 3
20	BONUS MOVING LAMP # 4	44	SCORE LAMP # 4
21	BONUS MOVING LAMP # 5	45	SCORE LAMP # 5
22	BONUS MOVING LAMP # 6	46	SCORE LAMP # 6
23	BONUS MOVING LAMP # 7	47	SCORE LAMP # 7
24	BONUS MOVING LAMP # 8	48	SCORE LAMP # 8



# **ADDITONAL INPUT/OUTPUT CHARTS**

SPACE BALLZ - MB232A1 CHART			
INPUT	CONTENT	OUTPUT	CONTENT
CN5.1		CN2.1	LAMP - R
CN5.2		CN2.2	LAMP - G
CN5.3		CN2.3	LAMP - B
CN5.4		CN2.4	
CN5.5	SPI_SD	CN2.5	
CN5.6	SPI_CLK	CN2.6	
		CN2.7	
		CN2.8	
P0.0		CN4.1	LAMP_CONTROL CENTER 1 - B
P0.1		CN4.2	LAMP_CONTROL CENTER 1 - G
P0.2		CN4.3	LAMP_CONTROL CENTER 2 - B
P0.3		CN4.4	LAMP_CONTROL CENTER 2 - G
P0.4		CN4.5	LAMP_CONTROL CENTER 3 - B
P0.5		CN4.6	LAMP_CONTROL CENTER 3 - G
P0.6	PEG_CLK	CN4.7	
P0.7	PEG_SD	CN4.8	

EXTENT SEG DISPLAY			
7_SEG	CONTENT	7_SEG	CONTENT
SEG1_1	SCORE SEG5-1	SEG2_1	
SEG1_2	SCORE SEG5-10	SEG2_2	
SEG1_3	SCORE SEG5-100	SEG2_3	
SEG1_4	BONUS - 1	SEG2_4	
SEG1_5	BONUS - 10	SEG2_5	
SEG1_6	BONUS 5 - 100	SEG2_6	
SEG1_7		SEG2_7	
SEG1_8		SEG2_8	

MT-DIR MOTOR DRIVE PCB I/O			
INPUT	CONTENT	INPUT	CONTENT
P30	MOTOR CLK	P16	MOTOR_MAINBOARD
P31		P17	
P12			
P12			

# **SPACE BALLZ TROUBLESHOOTING GUIDE**

The troubleshooting section of this manual is to be used as a guide for determining what component maybe faulty and what steps are recommended to rectify the problem. Before contacting your distributor, please check to make sure that the unit is in fact plugged in and receiving power and that there are no loose connections. Should you have any questions, please contact JET before servicing the unit. Servicing the unit in a way not described in this manual could void any warranties on the unit.

As in all parts of this manual, the troubleshooting guide is color coordinated in order to quickly identify the problem, the probable cause, and the solution. When diagnosing a problem - always check the most simple things first.

Should you require assistance in ordering parts for Space Ballz, please contact the following:



JENNISON ENTERTAINMENT TECHNOLGIES

822 SOUTH NOVA ROAD DAYTONA BEACH, FLORIDA 32114

MAIN PHONE: + 1-(386)-255-1599

**TOLL FREE PHONE: 1-877-553-8267** 



BETSON ENTERPRISES 303 PATERSON PLANK ROAD CARLSTADT. NEW JERSEY 07072

MAIN PHONE: + 1-(201)-438-1300

TOLL FREE PHONE: 1-800-524-2343

PROBLEM	CAUSE	SOLUTION
ERROR CODE 9 - <b>(Err-9)</b>		1) In units where the score micro switches were installed in the floor of the play field - The most common problem is that the ball bounced over the metal micro switch and did not cause it to activate. Check that there is enough length of the metal wire so that the ball will activate the sensor as it rolls over it.
		2) In units where the score micro switches were installed on the back acyclic play field - The most common problem is that the ball squeezed by to the left or to the right of the metal switch wire and did not cause the switch to activate. Check to make sure that the switch wire is located directly in the middle of the score channel and that any ball will roll under the switch wire and cause it to activate. In some cases, you may need to adjust the location of the switch itself.
One of the 9 score micro-switch(s) did not detect the ball during game play		3) If in either of the above cases, the balls appear to be activating the metal switch wires - check to make sure each switch is working properly and that all wire connectors are securely seated. If there is a defective switch or broken metal switch wire, replace that switch.

SPACE BALLZ TROUBLESHOOTING GUIDE			
PROBLEM	CAUSE	SOLUTION	
ERROR CODE 19 - <b>(Err-19)</b>		1) Check to make sure there is a ball in the upper acrylic structure. There should only be ONE ball being held in the upper structure. If there is more than ONE ball - there is a problem with the micro-switch that shuts off power to the second vertical elevator. If power is not shut off to this riser after one ball is loaded, the addition of multiple balls in this holding area will cause a jam.	
		2 Check to make sure that the micro-switch in the upper acrylic structure is connected and working properly. There is the possibility that the metal wire on this micro-switch could become lodged above the acrylic and not shut off the motor. In that case, check to make sure there is proper length on the switch wire and that it clears the acrylic. The weight of certain balls could cause this wire to "push" either to the right or left side when a ball is loaded causing a elevator to continue working and causing a second ball to load. In his case, the weight of both balls may push the switch wire down - but since there are two balls in the holding area, both balls may be loaded into the crane causing a jam.	
Upper ball system fault or jam		3)Check to make sure that the solenoid in the upper acrylic ball structure is working properly and that the connectors of the wires going to this solenoid are properly seated. If balls continue to run into the crane, then there is a possibility that the solenoid is not working properly. Check to make sure that the solenoid plunger is in place and that the spring is good. Check the solenoid board (MB13007.PCB) and ensure that it is working properly.	
ERROR CODE 20 - <b>(Err-20)</b>		1) The most common reason for an Err-20 is that there is not enough balls in the middle acrylic ball structure. There should be at least three balls in this staging area in order to activate the motor switch and turn off the power to the large ball elevator. Check to make sure that the third ball in the holding area properly puts enough weight onto the switch wire in order to activate the switch in the acrylic track. You may need to adjust the metal wire in order for the ball to properly push the wire down.	
		2) Check to make sure you have enough balls in the system and that they are not jammed somewhere else. If three balls are not present in the middle holding area, and a ball is not pressing on the metal switch wire, an Err-20 will be displayed on the screen. The balls may be jammed up somewhere in	

motor could be faulty.

3) After playing the game - there might be a possibility of the balls collecting behind the playfield. This is caused by two things: A) The machine may not be sitting entirely level on the floor. If the front of the cabinet is higher than the rear of the cabinet - the balls will be acting against gravity and may not fall into the first elevator as is designed. B) The balls may be damaged, deformed, or under-inflated which is causing them to not roll perfectly and could catch in parts of the collection area. Check to make sure that the balls are in good condition and are free from damage including small bumps or tears in the seams.

# Middle ball system fault or jam

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SPACE BALLZ TROUBLESHOOTING GUIDE			
PROBLEM CAUSE	SOLUTION		
	1) Check to make sure the optic sensor on the left (left - facing the front of the cabinet) is in good condition and receiving 12 volts.		
ERKOR 22 - <b>(Err-22)</b>	2) Ensure that the crane mechanism passes over the sensor. It is possible that the sensor might have moved and the metal assembly is not breaking the opto.		
Left robotic crane sensor fault	3) If the sensor is in good condition and receiving power, then the only other issue could be a bad input IC. Replace the U10 Input IC with one of the spares (U11 or U12).		
$EPPOP 22  (Err \ 22)$	1) Check to make sure the optic sensor on the right (right - facing the front of the cabinet) is in good condition and receiving 12 volts.		
ERROR 23 - (EII-23)	2) Ensure that the crane mechanism passes over the sensor. It is possible that the sensor might have moved and the metal assembly is not breaking the opto.		
Right robotic crane sensor fault	3) If the sensor is in good condition and receiving power, then the only other issue could be a bad input IC. Replace the U10 Input IC with one of the spares (U11 or U12).		
EBBOB 24 - <b>(Err-24)</b>	1) The micro-switch located within the Bonus Hole acrylic structure is not properly working. Check to make sure the metal switch wire is bent properly and will react to a passing ball.		
	2) Check all wire connection going to the switch and ensure that it is receiving 12 volts. If the switch is receiving power but will not send an input - replace the switch.		
Bonus hole micro-switch fault	3) If the switch is in good condition and receiving power, then the only other issue could be a bad input IC. Replace the U10 Input IC with one of the spares (U11 or U12).		
	1) Game not plugged in or turned ON. Check to make sure the game is		

Game will not power up	plugged into a grounded outlet and that it is receiving the proper line voltage. Make sure that the switch is powered ON.
1) Game not plugged in or turned ON	2) No power to the receptacle. Check to make sure the outlet is receiving the proper line voltage and that all power supplies inside the game are set to the proper line voltage.
<ul><li>2) No power to the receptacle</li><li>3) Game input line AC fuse broken</li><li>4) Decrements have been</li></ul>	3) Game input line AC fuse broken. Check and make sure the fuse is not broken. Perform a continuity check on the fuse. Only replace fuse with a similar one with the same specifications.
4) Power supply broken	4) Check to make sure the power supply is receiving the proper input voltage and that they are producing the correct output voltage.

SPACE BALLZ TROUBLESHOOTING GUIDE			
PROBLEM	CAUSE	SOLUTION	
		1) Machine is out of tickets. Replace tickets and ensure they are properly fed into the ticket dispenser.	
Tickets not dispensing		2) Push the black ticket reset switch. If tickets are properly loaded into each ticket dispenser, push the black ticket reset switch located next to the coin/ticket meters. This will send a signal to the board to pay out all owed tickets. Always push this switch after refilling tickets in the machine.	
1) Machine is out of tic	kets	3) Check the connections between the ticket dispensers and the ticket PCB. Check to make sure that there is 12 volts going to each ticket dispenser. Further check to make sure the connections on the board between the control center and the main cabinet are properly seated and all pins secured. There is a possibility that these pins could become loose if someone recently	
<ol> <li>Operator did not push the proper button to dispense tickets after ticket refill</li> </ol>		moved the machine by pulling on the control center or if the control center was recently detached from the main cabinet.	
3) There is a fault between the main board output and the ticket dispenser		4) There is a faulty ticket PCB. If all connections are good and there is continuity on both ticket outputs from the main board to the ticket dispensers. You may have a faulty ticket PCB. If the issue is on one side, swap the ticket PCB from the working side and check to see if that resolves the	
-, mere is a rulity tick		problem. If YES, replace the ticket PCB. If NO, continue below.	
5) There is a faulty score switch input IC		5) There is a faulty input IC controlling on the score switch. If both ticket PCB's are operating properly - then the main board may not be getting the input pulse from the score switch. Refer to the input chart on page 49 of this manual and replace the appropriate input IC's that control the score inputs (U09 & U10).	
		1) The most common reason why the wrong ticket amount is being awarded or dispensed is because the dip switch bank is set improperly. Be sure to check that <b>Bank # 1 / Switch # 2 (1.2)</b> is set to the following:	
Incorrect ticket amo	unt being dispensed	For 1:1 Payout - Set switch 1.2 to ON	
	o sepences	For <b>1:2</b> Payout (50% of the displayed value - for 2 point tickets) - Set switch <b>1.2</b> to <b>OFF</b>	

1) Dip-switch settings set incorrect

2) One of the score switches are faulty

2) If a player is getting the same amount of tickets regardless of which score state that the ball falls into - chances are that there is a stuck score micro switch on one of the 9 score states. First check to see what value of tickets are being awarded. For example, if a player wins 10 tickets when a ball falls into a score channel with a value of 5 - check to make sure that all # 10 switches are properly functioning and that the metal switch wire is not engaged or bent. It is possible on units where the switches are mounted in the floor of the collection area, to have the switch wires get stuck either on top of the cabinet or in the wires directly below the hole opening.

	SPACE BALLZ TROUBLESHOOTING GUIDE			
PROBLEM	CAUSE	SOLUTION		
		1) Check to make sure the pins in all the Molex connectors that power the claw solenoid are properly seated. Start with the two pin Molex at the solenoid. Then check the 12 pin Molex located just inside the rear access door and above the CPU (Computer). Then continue on to the solenoid PCB (MJ13007.PCB). This is located just under the games Input/Output board. Check that the J2 connector (The one that has the two RED wires and one WHITE wire in the three pin Molex) is properly seated and the pins are secure. From there continue out the J1 Connector to Output # 32 on the Input/Output board.		
Crane claw will not rel the "Drop Button" is game play clo	lease ball when either pushed (or) when the ck has expired	<b>2)</b> The most common place for a break is within in the cable tray wire protector. Perform a continuity check both the RED and the WHITE wire going from the two pin Molex at the solenoid to the 12 pin Molex connector inside the main cabinet and above the CPU (Computer). During a continuity check - you will most likely find one of these two wires to be the problem. If you DO NOT get continuity on one of these two wires, replace that wire segment between each Molex connector. If you DO get continuity on both of these wires, continue to perform the same check on each segment described in section 1.		
<ul> <li>1) There is a loose wire or pin in one of the wire harnesses going from the Output board to the solenoid.</li> <li>2) There is a broken wire in the cable tray / cable protector going to the solenoid</li> </ul>		<b>3)</b> If you do get continuity on all wire segments from the solenoid connector to J2 on the MJ13007.PCB and you get continuity on the wire segments from the J2 connector to Output # 32 on the Input/Output board - try replacing the MJ13007.PCB board. If that doesn't solve the problem, continue on below.		
		<b>4)</b> Check to make sure that there is 12 Volts going to the crane claw solenoid. Check the solenoid itself. With the game turned OFF, apply a 12 Volt power source directly to the solenoid to check its operation. If the solenoid is in fact working properly, continue below.		
<b>3)</b> The solenoid PCB (M	J13007.PCB) is faulty	<b>5)</b> If all wires are intact, the solenoid PCB good, and the solenoid itself working when power is applied to it. There only other problem could be		
<b>4)</b> There is not 12 Volts	going to the solenoid	nechanism with mechanical linkage. A bolt with a lock washer are used to secure the linkage to the plunger. Check to make sure that all linkage is secured and tight. Check to make sure both springs are firmly attached. The purpose of the springs are to assist the claw to return to a closed position		
the solenoid plunger is missing.	disconnected or	after the solenoid is de-energized.		
<b>6)</b> Replace the IC that c # 32 or the Input/Outpu	ontrols the Output for ut board is faulty	<b>6)</b> If all the linkage is properly attached and the crane claw physically open if you apply had pressure to the solenoid plunger and all of the above steps have been followed - then the most likely issue is a problem with the Input/Output board.		

SPACE BALLZ TROUBLESHOOTING GUIDE		
PROBLEM	CAUSE	SOLUTION
No sound coming from the speakers 1) The 120/220 converter is not receiving power or is defective		<b>1)</b> Check to make sure that the 120 volt to 220 volt converter is plugged in and turned ON. Check to make sure you are receiving 120 volts to the converter and that it is producing 220 volts.
		2) Check to make sure that the volume knob on the subwoofer is turned up. Keep this knob turned all the way up and adjust the volume within the software. Also check to make sure that the bass knob is set to the desired level.
		<b>3)</b> Check to make sure that the volume is properly in the game software. There are volume options for both the game mode and attraction mode. We recommend you keep both setting at 10 for louder environments.
		<b>4)</b> Check both speaker connections on the subwoofer and check the channel connectors on the subwoofer.
		<b>5)</b> Check both the speaker connection and the channel connectors on the CH-TKQ.PCB board located between the control center and the main cabinet. If you moved the control center at some point - it is possible for the speaker connection to become loose. On units # 0007 - 0029, the speaker connections were located at CN09.
		<b>6)</b> Check to make sure both speakers in the acrylic marquee are plugged into the correct speaker wires coming from the game.
		7) Check to make sure the two pin speaker cables are plugged in between Section # 3 and Section # 4. It is possible to have missed these connectors
<ul> <li>2) The volume knob on the subwoofer is turned down.</li> <li>3) The volume settings within the software</li> </ul>		during initial installation.
		<b>8)</b> Check both two pin speaker connectors coming out of the bottom of Section # 3 and plugging into the speaker connectors near the CPU.
are not set properly		9) Check to make sure that the audio cable is plugged securely into the
<b>4)</b> The connections on the back of the subwoofer are improper		speaker port of the CPU.
<b>5)</b> The connections between the control center and main cabinet are improper		<ul><li>10) If your wireless keyboard and mouse was left plugged in - it could be possible that someone accidently muted all sounds in Windows directly.</li><li>Push the escape button on the keypad. From the Windows screen, click on</li></ul>

**6)** The speakers in the acrylic marquee are disconnected

**7 - 9)** Check the connectors on the entire speaker harness

**10)** The sound is muted in Windows

**11)** Test the sound on the PC through Windows using head phones.

"START" and then on "CONTROL PANEL". From there click on "SOUNDS". Ensure that the mute button is NOT checked. You may also see a shortcut to this on the lower tray or you may be able to push the mute button directly on the wireless keyboard itself.

**11)** If you have tried all of the above and still do not receive sound - plug in a standard set of headphones into the CP audio jack and test the sound through Windows. If you HEAR sound - then the CPU is good and the speakers or sub are defective. If you DO NOT hear sound - the CPU should be replaced.