Table of Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installing the marquee</td>
<td>4</td>
</tr>
<tr>
<td>Loading Tickets</td>
<td>5</td>
</tr>
<tr>
<td>Spin sign install</td>
<td>6</td>
</tr>
<tr>
<td>Control Panel Functions</td>
<td>7</td>
</tr>
<tr>
<td>Meter Location</td>
<td>8</td>
</tr>
<tr>
<td>Program Option</td>
<td>9</td>
</tr>
<tr>
<td>Error Codes</td>
<td>9</td>
</tr>
<tr>
<td>Software Revision</td>
<td>10</td>
</tr>
<tr>
<td>ACCTNG/RESET function</td>
<td>11</td>
</tr>
<tr>
<td>Tilt</td>
<td>12</td>
</tr>
<tr>
<td>50¢ Payout Wheel Guide</td>
<td>13</td>
</tr>
<tr>
<td>$1 Payout Wheel Guide</td>
<td></td>
</tr>
<tr>
<td>$2 Payout Wheel Guide</td>
<td></td>
</tr>
<tr>
<td>Diagnostic - Repair - Trouble Shooting</td>
<td></td>
</tr>
<tr>
<td>Diagnostic option 9</td>
<td></td>
</tr>
<tr>
<td>Diagnostic option 8</td>
<td></td>
</tr>
<tr>
<td>Diagnostic option 7</td>
<td></td>
</tr>
<tr>
<td>Diagnostic option 6</td>
<td></td>
</tr>
<tr>
<td>Power supply replacement</td>
<td></td>
</tr>
<tr>
<td>Wheel Illumination bulbs</td>
<td></td>
</tr>
<tr>
<td>Front Removal</td>
<td></td>
</tr>
<tr>
<td>Wheel Display</td>
<td></td>
</tr>
<tr>
<td>Clicker Removal</td>
<td></td>
</tr>
<tr>
<td>Wheel Encoder</td>
<td></td>
</tr>
<tr>
<td>Wheel Encoder home position</td>
<td></td>
</tr>
<tr>
<td>Assemblies</td>
<td></td>
</tr>
<tr>
<td>Spares</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td></td>
</tr>
</tbody>
</table>

Rev H - 10/2/2014
Installing The Marquee

The marquee is held on top of the game by four Allen bolts that are stored in the cash box during shipping. Place the marquee on top of the cabinet and insert the four Allen bolts from the inside bottom. You will need to open the upper back door to access the mounting holes. The location of the mounting holes are shown below with arrows. Once attached, connect the marquee harness and close the back upper door.

Loading Tickets

There are two ticket dispensers located in the front drawer. The ticket drawer can hold up to 10000 tickets. To load tickets, loosen the side bracket (labeled 2 below) so that you can move the bracket up or down. Moving the bracket up will decrease the width of a ticket and moving the bracket down will increase the ticket width. Tighten when adjusted for your ticket width. Now slide the ticket through the two guide plates until they reach the rollers. Lift the top level (labeled 1) up to disengage the rollers so that a ticket can be pushed through. Press the ticket advance button located on the backside of the dispenser to test the ticket function.
Installing The Spin Sign

The spin sign is attached at the back of the game with 3 square self-taping screws. Below shows where on the game the sign should be attached. It also shows where the 3 mounting holes on the sign are located. The sign will fit between the two light covers. In the picture below it shows the covers removed but you do not need to remove the covers to install the sign.
Control Panel Functions

Located in the front drawer is a control panel used to change the game’s settings, show accounting, and give a test credit. The Test/Up button has two functions. When the game is in programming mode, this button is used to increase the value for an option. When not in programming, this button will credit the game up without advancing the coin meter. The down button will decrease the value for an option. Pressing the program button will put the game into program mode and pressing it a second time will bring it out of programming mode. The select button is used to advance through each option. The accntng/reset button has two functions. Briefly pressing the button will put the game in accounting mode and pressing the button for 3 seconds will clear the accounting information. See “ACCNTG/RESET FUNCTION” for further details.

Meter Location

There are two meters located below the control panel. The left meter will increment for each coin registered and the right meter will increment for each ticket that is paid out.
Program Options

Press the program button to enter program mode. The option number will be displayed in the marquee display and the option value is displayed in the wheel display. Pressing the “Up” and “Down” buttons will increase or decrease the value. The select button will save that value and advance to the next option. When finished press the program button again to exit. The options are as follows:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Default value</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Volume for music</td>
<td>3</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>Volume for the Voice &amp; Clicker</td>
<td>6</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Cost of game</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Attract Time</td>
<td>1</td>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td>4</td>
<td>1/2 Ticket output</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Zone 1 value (highest)</td>
<td>1000</td>
<td>25</td>
<td>6375</td>
</tr>
<tr>
<td>6</td>
<td>Zone 2 value (left of highest)</td>
<td>100</td>
<td>25</td>
<td>6375</td>
</tr>
<tr>
<td>7</td>
<td>Zone 3 value (opposite of highest)</td>
<td>200</td>
<td>25</td>
<td>6375</td>
</tr>
<tr>
<td>8</td>
<td>Zone 4 value (right of highest)</td>
<td>100</td>
<td>25</td>
<td>6375</td>
</tr>
<tr>
<td>9</td>
<td>Tickets to add for progressive</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>10</td>
<td>Games lost until ticket add</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Bonus Value</td>
<td>0</td>
<td>0</td>
<td>9999</td>
</tr>
<tr>
<td>12</td>
<td>Factory reset</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Option 0 and 1

These options set the volume level for your game. The lower the setting, the lower the volumes. The music volume and the pirate voice are adjusted separately.

Option 2

This option tells the game how many coins it takes to start a game. This option should not be adjusted and should only be used when a card swipe system is installed. Your wheel values are based around a predetermined cost per play. Taking less or more money will impact your payout percentage.

Option 3

Attract time determines

Option 4

When the value of this option is 1 the game will only pay out half of the tickets owed.

Option 5, 6, 7, 8

These options set your bonus zones. See “50¢ PAYOUT WHEEL GUIDE” and for further information. These options determines your payout percentage.
Program Options

Option 9

This option is only used when option 10 has a value greater than 0. This option will add the amount of tickets you set this value to. It will add it to zone 1 bonus value depending on the value in option 10. See next option..

Option 10

Setting this option to any other number but zero will turn on the adjustable bonus feature. This option determines how many games must be played without hitting the bonus zones before adding the tickets you specified in option 9..

Option 11

This determines the starting value for zone 1 bonus value when option 9 and 10 are used. When entering this value, the numbers will count in 25. This option is ignored if option 9 is 0.

Option 12

Setting this to 1 and exiting programming will cause the game to display “load” on the wheel display. It will load its factory defaults.

Error Codes

When power is applied the game will go through a brief self check. On the marquee display it will show you the version of software installed in the main board along with a wheel code. The wheel display will show you what software version is installed in the wheel board. If any errors are detected the game will display a E and a number indicating the error it has encountered. The game will also report any errors during game play and attract mode. The errors that you might encounter are:

1 = Ticket 1 error - Out of tickets
2 = Compact Flash error - Flash card cannot be read
4 = Wheel Communication error - Main board has no communication to wheel board
6 = Coin 1 stuck closed - Coin switch 1 is stuck or connected to normally closed.
7 = Coin 2 stuck closed - Coin switch 2 is stuck or connected to normally closed.

How To Read Your Software Revision.

The marquee display’s has 4 digits. Digit 1 (starting from the left) is the wheel number. The next three digits is the revision number for the software installed in the main board. The wheel display only displays the revision of software installed in the wheel encoder board.
The “ACCNTNG/RESET” button located on the control panel has two different functions. When you press the button briefly the game will display in the wheel display how many times it has landed on the zone shown above on the marquee. Pressing the “UP” button will cycle through each of the zones showing you how many times it has landed on that zone. If the wheel becomes unbalanced, you will notice it will mostly land on the same zones. There are 50 zones on the wheel.

Zone 51 will inform you how many times the game has tilted.

Holding the “ACCNTNG/RESET” button down for 3 seconds will cause the game to display a “r” and clear all data pertaining to how many times a zone has been landed on.

Tilt
The function of the tilt will only enabled when the wheel is spinning. Bumping the cabinet while the wheel is spin will cause the game to play a small jingle to indicate that the cabinet has been tilted. No tickets will be paid and the player will loose their credit. It will not tilt at any other time.

Removing the Coin housing cover
In order to remove the coin mech housing, you must open the front drawer and undo the latch. Then unlock the top and remove the cover. Be sure to re-latch the cover when finished.
The game’s payout is based on the four bonus zones values. The values shown below will pay-out the percentage shown in each wheels center. The game includes decals to change the zones if a different payout is desired. The zones are numbered counter clockwise starting from the top or highest value. The values between the bonus zones cannot be changed. If you turn on the adjustable bonus option, the numbers listed in the center should be set in option 11 as the starting value. Options 9 and 10 should both be set to 1. This will result in a 2% increase for the payout percentage. Adjusting the values in option 9 and 10 will alter the payout percentage.
1$ PAYOUT WHEEL GUIDE

The game’s payout is based on the four bonus zones values. The values shown below will pay-out the percentage shown in each wheels center. The game includes decals to change the zones if a different payout is desired. The zones are numbered counter clockwise starting from the top or highest value. The values between the bonus zones cannot be changed. If you turn on the adjustable bonus option, the numbers listed in the center should be set in option 11 as the starting value. Options 9 and 10 should both be set to 1. This will result in a 1% increase for the payout percentage. Adjusting the values in option 9 and 10 will alter the payout percentage.
The game’s payout is based on the four bonus zones values. The values shown below will pay-out the percentage shown in each wheels center. The game includes decals to change the zones if a different payout is desired. The zones are numbered counter clockwise starting from the top or highest value. The values between the bonus zones cannot be changed. If you turn on the adjustable bonus option, the numbers listed in the center should be set in option 11 as the starting value. Options 9 and 10 should both be set to 1. This will result in a 1% increase for the payout percentage. Adjusting the values in option 9 and 10 will alter the payout percentage.
Diagnostic - Repair - Trouble Shooting

The game has built in error detection and diagnostics tools that help you determine what failure your game is having. See the section “Error Codes” for more information on built in error detection codes. The main circuit board has a rotary switch to enable different diagnostics tools. To access these tools, open the upper back door and locate the main circuit board. There is a small rotary switch that should be set to 0. Rotate this switch to the desired diagnostic tool you wish to use. The arrow indicates what number the switch is on. You will need to cycle power when setting this rotary switch.

Diagnostic option 9 - Use when improper amount tickets are paid out.

When this option is enabled the game will allow you to test the function of the game. When you credit the game up and spin the wheel, the wheel display will show you the speed of the wheel. The inner LED will be red. When the speed of the wheel decreases, the inner LED will turn blue to indicate that the speed is slow enough for the sensor to reliably read the position. The wheel display will show what segment it is reading. When the wheel stops, it will show you the amount of tickets that segment is worth. The wheel should match what is displayed.

Diagnostic option 8 - Use when Error 4 is encountered.

When this option is enabled the game will test the main board’s communication circuit. The display on the wheel will show “bad” until the center pins of J23 is shorted. You must unplug J23 on the main board and jumper the center pins. On a good board the display will change and display “good”. On a bad board it will still display “bad”. Replace the main board if the status doesn’t change when shorted.
**Diagnostic option 7 - Wrong numbers displayed, verify display segments.**

When this option is enabled the game will allow you to test the segments in all the displays. The game will cycle through numbers in order. Numbers should be clear and no segments should be missing. Replace the display if segments are missing.

**Diagnostic option 6 - Sensor errors are encountered.**

When this option is enabled the game will display on the wheel display the status of the four sensors used to read the position of the wheel. The first digit starting from the left side is the home sensor status. When you spin the wheel this digital will be off until it sees the home sensor then it will change to 1. It will go back to off when it goes past the home sensor. This should only go to 1 when it sees the home sensor. If it never goes to 1 then the home sensor is defective.

The next digit is the optic for the clicker. Each time the clicker hits a pin, the number will go from 0 to 1 and back to 0 when it is past the pin. If this number doesn’t change then the clicker optic is defective.

The next two digits will tell the direction of the wheel. This tests the encoder wheel sensors which there are two of them. As you SLOWLY spin the wheel clockwise, the display will show on the last two digits 0, 1, 11, and then 10. It will repeat the sequence if you keep spinning it in that direction. Change the direction and the numbers will go 10, 11, 1, and then 0. If these digits do not change as you move the wheel then the encoder sensors are not working.

**Power supply replacement**

The power supply is installed on the upper back door. You will need to open the back door to gain access to it. It is attached with four mounting screws shown with arrows.
Wheel Illumination bulbs

The wheel is lighted with 8 curly fluorescent bulbs. To replace the side bulbs, remove the small circle back cover behind the bulb you wish to replace. The bottom center bulb is replaced by opening the upper back cabinet door and reaching down to access the bulb. The upper center bulb can only be accessed by removing the marquee.

Front Removal

If it becomes necessary to repair or you wish to change the bonus values' decals you will need to remove the front plastic. Leave a insert at the top until there is only one holding the plastic front onto the wheel. Rotate the wheel to the next insert. Do not remove the top insert until last as the plastic might come out and get damaged. Carefully remove the plastic and put aside.

Wheel Display/Clicker Removal

To gain access to the wheel sensors or to service the clicker assembly, remove the snap ring and its spacer.

** NOTE ** Some models have a push type snap ring instead of a snap ring that requires a special tool.

Then there are four Phillips screws that need to be removed and the assembly will then slide back. Disconnect the wire harness connectors before fully removing.
Wheel encoder removal

There are two sensors used to detect wheel movement. One at the top and one at the bottom. The top sensor is referred to as the encoder sensor while the bottom is referred to as the point sensor. They are attached by two Phillips mounting screws. See drawing for further information. You will need to remove the front plastic and wheel display assembly to gain access to them.
Encoder Wheel - Home Position

If the encoder wheel is removed from the game or the wheel playfield is replaced you must align the encoder wheel so that the small home position hole is pointed toward the top of the game and pointing to the “N” on the playfield wheel. Failure to do so will result in wrong amount of tickets being paid when the wheel is spun.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VW/1007</td>
<td>TICKET DOOR</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>301-2590</td>
<td>ACCURIDE DRAWER SLIDE</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>VW/1010</td>
<td>TICKET / COIN DRAWER</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>VW/105x</td>
<td>CASH BOX ASSEMBLY</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>5014</td>
<td>LOCK (71G-01G-01B)</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>VW/2011x</td>
<td>CASH BOX DOOR ASSEMBLY</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>6004a</td>
<td>8-32 KEP NUT</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>6097</td>
<td>#6-32 HEX NUT</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>VW/1019</td>
<td>COIN FUNNEL</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>HH5005CL</td>
<td>BUTTON RESEAT</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>E02280</td>
<td>BUTTON RESET LOCK WASHER</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>E02299</td>
<td>CAM LOCK BODY</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>5014-1 NUT</td>
<td>3/4&quot; NUT</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>5014-2 CAM</td>
<td>LOCK CAM</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>5014-2 SCREW</td>
<td>PPH SCREW</td>
<td>1</td>
</tr>
</tbody>
</table>

![Image of a box-like object with various labels and screws]
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VW3080</td>
<td>VALUE WHEEL</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>WHEEL PIN</td>
<td>WHEEL PIN</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>91166A230</td>
<td>M4 FLAT WASHER</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>91202A226</td>
<td>M4 SPLIT WASHER</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>92005A222</td>
<td>M4 x 12 MM MACHINE SCREW</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>VW1013</td>
<td>WHEEL PLATE</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>pc60601</td>
<td>1/4-20 x 5/8 BSHCS (BLACK)</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>VW7010</td>
<td>WHEEL VALUE GRAPHIC</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>PC60622</td>
<td>1/4-20 x 1.00&quot; LG. BSHCS</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>PC60604</td>
<td>NYLOCK NUT, 1/4-20</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>CLUTCH PLATE ASSEMBLY</td>
<td>CLUTCH PLATE ASSY</td>
<td>1</td>
</tr>
</tbody>
</table>
Mech/Electrical Spares

207  T Molding ½" Black  
213  T Molding 25/32"  
5015F  Lock cam  
5014  7/8 cam lock #45  
6792  40MM snap ring  
6795  20MM snap ring  
8312  PL-L 40W fluore  
BG3002  Grille 4" speaker  
CP1051  Tilt sensor  
CR1050  Anti slam switch  
CX8384X  Ballast Work Horse 5  
DD2007X  Power Module  
E2034X  Brain Board  
EO211  Switch Low Ticket  
E00253  13W 4100K Cool White CF Bulb  
E00253  CF bulb 13w 4100k Cool white  
E02315  3amp fuse slo-blow  
FP2007  4" speakers  
HH5005  Ticket dispenser (Entropy)  
HH5005CL  Ticket dispenser (CLE)  
VW1005  Cash box  
PE1350  Drawer Slide 18  
VW1005  Cash Box  
VW1007-P800  Ticket Door  
VW1013-P700  Wheel Plate  
VW1018-900  Coin Mech Enclosure  
VW1019-P800  Coin Funnel  
VW1023  Hub  
VW1025  Hub Spinner  
VW1034  Spacer Ring  
VW1040X  Clicker Assy w/spring  
VW1050  Wave Spring  
VW1051  Clutch Assembly  
VW1052  Pin Set (50)  
VW1053X  Stop Assembly  
VW1054  Hub Outer wheel Rev A  
VW1056  Hub Inner wheel Rev B  
VW1057  Washer  
VW1058  Hexagon Bolt  
VW1059  Bearing  
VW1108-P802  Door (DBV)  
VW1122  Bracket (lock)  
VW1123  Brake Plate  
VW1150  20mm Shaft bearing  
VW1151  Wheel Weight  
VW2010  Power supply  
VW2032X  PCBA Jackpot (large)  
VW2033X  PCBA Ticket Find (small)  
VW2034X  Main I/O  
VW2035X  PCBA LED (ring)  
VW2040X  Encoder sensor  
VW2041X  Point sensor  
VW2042X  Top sensor  
VW2050HX  Main harness  
VW2051LX  Harness LED/display  
VW2053HX  Ticket Drawer harness  
VW2060LX  DC Power  
VW2061MX  Power supply ext harness  
VW2062LX  Ballast extension harness  
VW2063MX  AC Lighting harness  
VW2080LX  Jack Pot display harnesss  
VW2081LX  Harness Wheel Sensor Ext.  
VW3001  Pirate  
VW3011  Cash Box Door  
VW3026  Cover (score display)  
VW3027  Score Display Front  
VW3028  Front Glass  
VW3029  Score Display Back  

DECALS/GRAPHICS

VW7000  Decal cabinet side  
VW7001  Decal cabinet front left  
VW7002  Decal cabinet front right  
VW7003  Decal ticket door  
VW7004  Decal wheel hub  
VW7006  Decal steering wheel  
VW7011  Decal spin wheel  
VW3140  Red Filter Marquee  
VW7127  Pirate  
VW7140  Marquee Frame overlay
WARRANTY POLICY

I.C.E. Inc warrants all components in new machines to be free of defects in materials and workmanship for the period listed below:

- 180 days on Main PCB’s, Computers & Motors
- 1 year on all LCD monitor panels
- 90 days on all other electronic and mechanical components
- 30 days on all I.C.E. repairs and parts purchases

I.C.E. Inc shall not be obligated to furnish a warranty request under the following conditions:

- Equipment or parts have failed through normal wear and tear
- Equipment has been subjected to unwarranted stress, abuse or neglect
- Equipment has been damaged as a result of arbitrary repair/modification

Products will only be covered under warranty by obtaining an I.C.E. authorized RMA#. To obtain an RMA# please provide I.C.E. tech support with the game serial # or original I.C.E. invoice # and a detailed description of the failure or fault symptoms.

I.C.E. Inc will assume no liability whatsoever for costs associated with labor or travel time to replace defective parts. All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications.

I.C.E. Inc will cover domestic UPS ground, or comparable shipping costs during the warranty period. International or expedited shipments are available for an additional charge. To obtain credit defective parts must be returned to I.C.E. Inc, at the customer’s expense, within 30 days. After 30 days a 15% re-stocking fee will apply to all returns.

ICE distributors are independent, privately owned and operated. In their judgment, they may sell parts and/or accessories other than those manufactured by I.C.E. Inc. We cannot be responsible for the quality, suitability or safety of any non-I.C.E. part or modification (including labor) that is performed by such a distributor.

Innovative Concepts in Entertainment
10123 Main St.
Clarence, NY 14031
Phone #: (716) - 759 – 0360
Fax #: (716) – 759 – 0884
www.icegame.com