

# OWNERS AND SERVICE MANUAL inNovative concepts in entertainment inc. 

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## 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
$\qquad$

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:

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

## 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 " $50 \phi$ 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.

## ACCTNG/RESET function

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 un lock the top and remove the cover. Be sure to re-latch the cover when finished.


## 50¢ PAYOUT WHEEL GUIDE

The game's payout is based on the four bonus zones values. The values shown below will payout 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 payout 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.


## 2\$ PAYOUT WHEEL GUIDE

The game's payout is based on the four bonus zones values. The values shown below will payout 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 florescent 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 the encoder sensor while the bottom is referred to 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.


| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
| :---: | :--- | :---: | :---: |
| 1 | VW1007 | TICKET DOOR | 1 |
| 2 | $301-2590$ | ACCURIDE DRAWER SLIDE | 2 |
| 3 | VW1010 | TICKET / COIN DRAWER | 1 |
| 4 | VW1005X | CASH BOX ASSEMBLY | 1 |
| 5 | 5014 | LOCK (710-010-01B) | 1 |
| 6 | WW3011X | CASH BOX DOOR ASSEMBLY | 1 |
| 7 | $6004 a$ | $8-32$ KEP NUT | 12 |
| 8 | 6097 | \#6-32 HEX NUT | 8 |
| 9 | VW1019 | COIN FUNNEL | 2 |
| 10 | HH5005CL | TICKET DISPENSER | 2 |
| 11 | E02289 | BUTTON RESET | 5 |
| 12 | E02289 LOCK WASHER | BUTTON RESET LOCK WASHER | 5 |
| 13 | E02289 NUT | BUTTON RESET NUT | 5 |
| 14 | $5014-1$ BARREL | CAM LOCK BODY | 1 |
| 15 | 5014 NUT | 3/4" NUT | 1 |
| 16 | $5014-2$ CAM | LOCK CAM | 1 |
| 17 | 5014 SCREW | PPH SCREW | 1 |






| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
| :---: | :--- | :---: | :---: |
| 1 | VW3080 | VALUE WHEEL | 1 |
| 2 | WHEEL PIN | WHEEL PIN | 50 |
| 3 | $91166 A 230$ | M4 FLAT WASHER | 50 |
| 4 | $91202 A 226$ | M4 SPLIT WASHER | 50 |
| 5 | $92005 A 222$ | M4 $\times 12$ MM MACHINE | 50 |
| 6 | WW1013 | WHEELEW PLATE | 1 |
| 7 | pc60601 | $1 / 4-20 \times 5 / 8$ BSHCS (BLACK) | 8 |
| 8 | VW7010 | WHEEL VALUE GRAPHIC | 1 |
| 9 | PC60622 | $1 / 4-20 \times 1.00$ LG. BSHCS | 8 |
| 10 | PC60604 | NYLOCK NUT, $1 / 4-20$ | 8 |
| 11 | CLUTCH PLATE ASSEMBLY | CLUTCH PLATE ASSY | 1 |





| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
| :---: | :--- | :---: | :---: |
| 1 | WW3158 | UPPER BACK DOOR | 1 |
| 2 | VW1006 | BACK DOOR HINGE | 1 |
| 3 | $5014-1$ BARREL | CAM LOCK BODY | 1 |
| 4 | 5014 NUT | $3 / 4 "$ NUT | 1 |
| 5 | 5014 SCREW | PPH SCREW | 1 |
| 6 | $5014-2$ CAM | LOCK CAM | 1 |
| 7 | $655 S$ | \#8 $\times 5 / 8$ SQ. DRIVE (SILVER) | 10 |
| 8 | 6203 | FH-632-20 | 4 |
| 9 | PC60643 | $6-32 \times 1 / 4$ HH SPACER | 8 |
| 10 | VW MAIN | IO BOARD | 1 |
| 11 | VW2010 | POWER SUPPLY | 1 |
| 12 | DN3099 | POWER SUPPLY TERMINAL GUARD | 1 |




## Mech/Electrical Spares

| 207 | T Molding ½" Black | VW2010 | Power supply |
| :---: | :---: | :---: | :---: |
| 213 | T Molding 25/32" | VW2032X | PCBA Jackpot (large) |
| 5015F | Lock cam | VW2033X | PCBA Ticket Find (small) |
| 5014 | 7/8 cam lock \#45 | VW2034X | Main I/O |
| 6792 | 40MM snap ring | VW2035X | PCBA LED (ring) |
| 6795 | 20MM snap ring | VW2040X | Encoder sensor |
| 8312 | PL-L 40W fluores | VW2041X | Point sensor |
| BG3002 | Grille 4" speaker | VW2042X | Top sensor |
| CP1051 | Tilt sensor | VW2050HX | Main harness |
| CR1050 | Anti slam switch | VW2051LX | Harness LED/display |
| CX8384X | Ballast Work Horse 5 | VW2053HX | Ticket Drawer harness |
| DD2007X | Power Module | VW2060LX | DC Power |
| E2034X | Brain Board | VW2061MX | Power supply ext harness |
| EO211 | Switch Low Ticket | VW2062LX | Ballast extension harness |
| E00253 | 13W 4100K Cool White CF Bulb | VW2063MX | AC Lighting harness |
| E00253 | CF bulb 13w 4100k Cool white | VW2080LX | Jack Pot display harnesss |
| E02315 | 3amp fuse slo-blow | VW2081LX | Harness Wheel Sensor Ext. |
| FP2007 | 4" speakers | VW3001 | Pirate |
| HH5005 | Ticket dispenser (Entropy) | VW3011 | Cash Box Door |
| HH5005CL | Ticket dispenser (CLE) | VW3026 | Cover (score display) |
| VW1005 | Cash box | VW3027 | Score Display Front |
| PE1350 | Drawer Slide 18 | VW3028 | Front Glass |
| VW1005 | Cash Box | VW3029 | Score Display Back |
| VW1007-P80 | 00 Ticket Door |  |  |
| VW1013-P70 | 00 Wheel Plate | DECALS | GRAPHICS |
| VW1018-900 | Coin Mech Enclosure | VW7000 | Decal cabinet side |
| VW1019-P80 | 00 Coin Funnel | VW7001 | Decal cabinet front left |
| VW1023 | Hub | VW7002 | Decal cabinet front right |
| VW1025 | Hub Spinner | VW7003 | Decal ticket door |
| VW1034 | Spacer Ring | VW7004 | Decal wheel hub |
| VW1040X | Clicker Assy w/spring | VW7006 | Decal steering wheel |
| VW1050 | Wave Spring | VW7011 | Decal spin wheel |
| VW1051 | Clutch Assembly | VW3140 | Red Filter Marquee |
| VW1052 | Pin Set (50) | VW7127 | Pirate |
| VW1053X | Stop Assembly | VW7140 | Marquee Frame overlay |
| VW1054 | Hub Outer wheel Rev A |  |  |
| VW1056 | Hub Inner wheel Rev B |  |  |
| VW1057 | Washer |  |  |
| VW1058 | Hexagon Bolt |  |  |
| VW1059 | Bearing |  |  |
| VW1108-P80 | 2 Door (DBV) |  |  |
| VW1122 | Bracket (lock) |  |  |
| VW1123 | Brake Plate |  |  |
| VW1150 | 20mm Shaft bearing |  |  |
| VW1151 | Wheel Weight |  |  |



## 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.

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