

OWNERS AND SERVICE MANUAL INNOVATIVE CONCEPTS IN ENTERTAINMENT INC.

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INTRODUCTION

DESCRIPTION

Thank you for purchasing I.C.E. Games newest ticket dispensing game, **TUX RACER**[™].

TUX RACER[™] is a fun and challenging game of skill, which is simple to play and exciting for everyone who plays it. It has a simplistic design, using large and durable pads to maneuver the Penguin racer through the wintry obstacle course to the finish line.

The only skills involved are steering the penguin racer down the hill while trying to capture the fish to increase points, and trying to increase speed from start to finish. The game gets more exciting and the skill increases when trying to beat a previous score, either in points or speed. A better score will yield more tickets, depending on owner / operator programming.

The cabinetry and graphics have been designed using only the finest materials, and the electronics in the game have been extensively tested to assure years of trouble free service. Even the programming options are easy to understand and adjust.

The game has a 29" monitor shielded by a separate plate of tempered glass for protection from damage.

Game set-up is a snap. Just plug in, set a few programmable options, and your ready to go.

GAME PLAY

The game begins when the player has inserted enough money to create 1 "credit". Press the Start button to start the game.

The object of the game is to race the Tux Racer penguin down the snow-covered mountain course on his belly. While maneuvering him through the course there are several "fish" you can capture by gliding over them as you go, which will increase the total points you gain during the game. You will steer the Tux Racer penguin by pressing on the Left and Right pads or "flippers."

Combining speed and accuracy in capturing the fish are the only skills involved. The Racer will not wipe out if he hits any of the obstacles, but will slow down and redirect back on course to continue the race down the hill. No points are deducted during play.

Bonus points are awarded for capturing the "Giant Fish," which are found on several occasions throughout the course. You will get double the usual number of points for capturing the Giant Fish, than for capturing the regular fish.

The skill level can be set for "easy" or "hard" by the owner / operator, depending on the type of customers found utilizing the game most often.

The number of tickets dispensed will depend on the program settings made by the owner / operator.

Tickets will be dispensed either before, during, or after the game ends, also depending on the programming options chosen by the owner / operator.

SET-UP/ MAINTENANCE

SAFETY PRECAUTIONS

IMPORTANT: FAILURE TO FOLLOW THESE DIRECTIONS CLOSELY COULD CAUSE SERIOUS DAMAGE TO YOU AND/OR YOUR GAME.

WARNING: WHEN INSTALLING THIS GAME, A 3-PRONG GROUNDED RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION AND/OR DAMAGE TO THE ELECTRONICS.

DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASONS AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.

SET UP

To avoid unnecessary movement of the game, setup the game in its permanent location.

The footprint is approximately 28" x 40".

After completely removing all the packaging from the unit, remove the tape over the coin return. The keys for the cash box door will be found. The rest of the keys and power cord will be in the cash box.

Level the game using the leveler feet on the bottom of the game.

The next step is to simply plug the unit to a 3prong grounded receptacle and turn the switch on.

CLEANING

Regular cleaning of the game will keep it looking new and greatly enhance its appeal.

Clean the glass portions of your **TUX RACER™** with a standard window cleaner such as Windex®.

Clean the cabinet sides with a good cleaner such as Fantastik® or Formula 409® and a soft rag. A mild soapy solution can also be used.

NOTE: DO NOT USE ALCOHOL, THINNERS OF ANY KIND, OR PINBALL PLAY FIELD CLEANERS ON ANY OF THE CABINET SURFACES, ESPECIALLY THE DECALS.

IF YOU HAVE ANY QUESTIONS ABOUT INSTALLATION OR PROPER FUNCTION OF YOUR GAME, PLEASE CALL OUR CUSTOMER SERVICE DEPARTMENT AT (716) 759-0360.

PROGRAMMING

NAVIGATING

The programming button is located inside the top left coin door. It is a small RED button, attached to the top of the cash box. Push the red button to enter the programming mode.

Use the **Right** pad to move **up** through each menu, and the **Left** pad to move **down**. Use the **Start** button to **select** the option you wish to set. The selected option will change from white print to yellow print.

Once you enter the option you wish to change, you will use the left and right pads to move through that option. Use the start button to select or highlight the option (the print will change to yellow), then <u>hold</u> down the start button while pressing either the left or right pad to change the option.

Once the option is set to the configuration you would like, you must then use the left and right pads to move to the bottom of the menu. Use the start button to select either the word <u>ACCEPT</u>, to accept your changes, or <u>CANCEL</u>, if you do not wish to keep your changes. The selected item will change to yellow print.

You will then be taken back to the Main Configuration Menu. Any changes that were accepted will remain when you exit the programming mode by selecting Quit.

Use the <u>Reset Defaults Menu</u> to reset all options to Factory Settings.

DETAILED DESCRIPTIONS OF PROGRAMMING OPTION MENUS

The Main <u>CONFIGURATION</u> Menu appears when the programming button has been pushed.



The options in the Main Configuration Menu are:

- CREDITS-This option allows the operator to set up the number of Coins Per Credit, the number of Games Per Credit, to set the game for Free Play, to set the game to Count Coins, or to set the game to Count Credits.
- TICKETS- This option allows the operator to set up the Minimum Tickets dispensed per game, the Maximum Tickets dispensed per game, whether to Dispense Tickets or not, and if so, whether tickets should Dispense Before the game starts, Dispense During the game, or Dispense After the game ends. The owner / operator also decides on the Tux Speed here.
- 3. AUDIO– This option allows the operator to set up Attract Sounds, Sound Effects, Music, Sound Volume Balance, and Music Volume Balance.

NOTE: The <u>Main Volume Controls</u> are located on the I/O Board, found inside the rear access panel on the right side. See Photo in GAME REPAIR section of this manual.

- 4. **RESET DEFAULTS** This option allows the operator to reset the game to the original Factory Defaults for all the above options.
- 5. **BACK / QUIT** Allows the operator to exit the programming mode.

PROGRAMMING

CONFIGURE CREDITS MENU



The options available in this menu are:

- 1. **Coins Per Credit-(1-10):** This option allows the operator to set the number of coins needed to create 1 credit. The default setting is "1".
- 2. Games per Credit- (1-10): This option determines how many games or turns the player gets per credit. The default setting is "1".
- Free Play- (On / Off): This option turns the Free Play mode On or Off. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "O" off.
- Count Coins- (On / Off): This option determines whether the game will count the coins coming into it or not. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "O" off.
- Count Credits- (On / Off): This option determines whether the game will count the credits used in the game or not. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Å" on.

Note: Remember to Save your settings by using the start button to select <u>Accept</u> at the bottom. Select <u>Cancel</u> to cancel your changes.

CONFIGURE TICKETS MENU



The options available in this menu are:

- 1. **Minimum Tickets- (1-3):** This option determines the minimum number of tickets a player will receive for 1 credit or game. The default setting is "3".
- 2. **Maximum Tickets-(1-30):** This option determines the maximum amount of tickets that a player can receive for 1 credit or game. The default setting is "6".
- Dispense Tickets-(On / Off): This option determines whether the game will dispense any tickets at all. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Å" on.
- Dispense Before- (On / Off): This option determines whether tickets will be dipensed before the game begins. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "O" off. NOTE: The Maximum Tickets setting determines the number of tickets dispensed before the game.
- Dispense During- (On / Off): This option determines whether tickets will be dipensed during the game. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Å" on.
- Dispense After- (On / Off): This option determines whether tickets will be dipensed after the game. A "Ä" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "O" off.
- Tux Speed-(Easy»Hard): This option allows the operator to decide if the game will be easy or difficult to play. The default setting is "easy".

PROGRAMMING

Note: Remember to Save your settings by using the start button to select <u>Accept</u> at the bottom. Select <u>Cancel</u> to cancel your changes.

CONFIGURE AUDIO MENU

and the	Config	ure Audio	
	Attract Sounds: Sound Effects: Music: Sound Volume: Music Volume:	⊗ ⊗ ≪ ← − − 0	⊖ ⊳ –>
7	Cancel	Accept	

The options available in this menu are:

- Attract Sound-(On / Off): This option determines whether the game will produce an "Attract sound" or not. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Å" on.
- Sound Effects-(On / Off): This option determines whether the game will have sound effects or not. A "Å" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Å" on.
- Music-(On / Off): This option determines whether the game will have music or not. A "Ä" indicates that the option has been turned on. A "O" indicates that it has been turned off. The default setting is "Ä" on.
- 4. Sound Volume Balance-(<Low»High>) This option determines the volume balance of the game sounds coming from the game. This setting should be determined during normal business hours for optimal performance.
- Music Volume Balance-(<Low»High>) This option determines the volume balance of the music coming from the game. This setting should be determined during normal business hours for optimal performance.

NOTE: The <u>Main Volume Controls</u> are located on the I/O Board, found inside the rear access panel. See Photo in GAME REPAIR section of this manual.

Note: Remember to Save your settings by using the start button to select <u>Accept</u> at the bottom. Select <u>Cancel</u> to cancel your changes.

RESET DEFAULTS



The options available in this menu are:

 Accept / Cancel: Choose this option if you wish to reset the factory defaults for all programming options. Use the Start button to select <u>ACCEPT</u>, if you wish to reset the game to the factory defaults. Select <u>CANCEL</u> if you wish to keep your programming settings, or if you entered this menu item in error.

QUIT / BACK

1. Select <u>Quit / Back</u> from the Main Configuration menu to exit the programming mode. Any programming changes made will be saved and the game will restart.

QUICK TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
NO GAME POWER	ON-OFF SWITCH ON GAME TURNED OFF A.C. POWER FUSE BLOWN GAME NOT PLUGGED IN OR CORD DAMAGED BAD POWER MODULE	TURN POWER ON REPLACE WITH PROPER FUSE CHECK POWER CORD REPLACE POWER MODULE
GAME WILL NOT TAKE MONEY OR GIVE CREDITS CORRECTLY	BAD COIN SWITCH COINS PER CREDIT SETTING INCORRECT BAD COIN MECHANISM LOOSE OR DAMAGED HARNESSING BAD MAIN P.C. BOARD BAD I/O BOARD	CHECK W/METER AND REPLACE CHECK PROGRAMMABLE SETTING ADJUST OR REPLACE CHECK W/METER AND REPAIR REPAIR OR REPLACE MAIN BOARD REPAIR OR REPLACE I/O BOARD
TICKETS DO NOT DISPENSE OR DISPENSE INCORRECTLY	ZONE VALUES SET UP INCORRECTLY TICKET DISPENSER OPTICAL SENSOR DIRTY TICKET DISPENSER HARNESSING BAD TICKET DISPENSER BAD BAD MAIN P.C. BOARD BAD I/O BOARD	CHECK PROGRAMMABLE SETTING CLEAN OPTICAL SENSOR CHECK W/METER AND REPAIR REPLACE DISPENSER REPAIR OR REPLACE MAIN BOARD REPAIR OR REPLACE I/O BOARD
LOW / NO TICKET INDICATOR DOES NOT WORK	BAD INDICATOR L.E.D. L.E.D. INSTALLED BACKWARDS HARNESSING BAD TICKET MICRO SWITCH BAD	REPLACE L.E.D. REVERSE L.E.D. CHECK W/METER AND REPAIR REPLACE MICRO SWITCH
GAME LIGHTS ON, MONITOR OFF	POWER SUPPLY IS NOT ON MAIN P.C. BOARD IS NOT FUNCTIONING MONITOR NOT FUNCTIONING POWER SUPPLY NOT PLUGGED INTO MAIN P.C. BOARD MONITOR NOT CONNECTED TO MAIN P.C. BOARD	REPAIR OR REPLACE MAIN BOARD REPAIR OR REPLACE MAIN BOARD REPAIR OR REPLACE MONITOR CHECK CONNECTIONS TO POWER SUPPLY CHECK CONNECTIONS TO MONITOR
START BUTTON NOT FUNCTIONING	BAD MICRO SWITCH BUTTON HAS FALLEN OUT OF SWITCH HOLDER BAD I/O BOARD CONTROL PANEL HARNESS NOT CONNECTED PROPERLY	REPLACE SWITCH REPAIR OR REPLACE SWITCH HOLDER REPAIR OR REPLACE I/O BOARD CHECK CONNECTIONS
LEFT OR RIGHT FLIPPER PAD NOT RESPONDING WHEN PRESSED.	CONTROL PANEL HARNESSING NOT CONNECTED BAD MICRO SWITCH	CHECK CONNECTIONS REPLACE SWITCH
MONITOR ON, GAME LIGHT(S) OFF	BAD BULB(S) BAD BALLAST	REPLACE BULB(S) REPLACE BALLAST
PROGRAMMING SWITCH NOT RESPONDING	BAD MICRO SWITCH BAD I/O BOARD BAD CONNECTION IN WIRING	REPLACE MICRO SWITCH REPAIR OR REPLACE I/O BOARD CHECK WIRING CONNECTIONS

GAME REPAIR

WARNING: ALWAYS REMOVE POWER FROM THE GAME BEFORE ATTEMPTING ANY SERVICE, UNLESS NEEDED FOR SPECIFIC TESTING. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SERIOUS INJURY TO YOURSELF AND/OR OTHERS.

TROUBLESHOOTING PHILOSOPHY

To find problems with the game, always check the obvious first. See that the game is plugged in, and that all of the fuses on the game are good. This includes the fuse that is located INSIDE the power module.

Next, check to see that all of the connectors are firmly seated, and that no wires have been pulled out.

If a P.C. Board is suspected as causing your problems, check to see that all of the I.C. chips are firmly seated on the board.

If light bulbs are suspected, swap them with one that is known to work to narrow the problem down to bulb or P.C. Board.

MAIN P.C. BOARD REPLACEMENT

(LOCATED INSIDE REAR ACCESS PANEL) (PHOTO ON PAGE 11)

- 1. Remove all A.C. power from the game.
- 2. Carefully remove all of the connectors from the P.C. Board.
- 3. Remove the 10 plastic hexagon nuts that secure the board to the mounting bracket.
- 4. Gently pull the P.C. Board from the mounting bracket studs.
- 5. Reassemble in reverse order.

I/O BOARD REPLACEMENT

(LOCATED INSIDE REAR ACCESS PANEL) (PHOTO ON PAGE 11)

- 1. Remove 4 plastic hexagon nuts securing I/O board to mounting bracket.
- 2. Gently pull the I/O board from the mounting bracket studs.
- 3. Repair or replace I/O board.
- 4. Reassemble in reverse order.

BULB & BALLAST REPLACEMENT

Marquee Lighting

- 1. Remove 6 screws in top marquee (top of machine).
- 2. Remove plastic clip holding bulb in place (right side).
- 3. Press red button on light socket (left side), bulb will pop out of socket.
- 4. Replace bulb with PL-L 40 watt fluorescent style bulb.
- 5. Re-attach plastic clip.
- 6. Reconnect harnessing.
- 7. Reassemble in reverse order.

Ballast- Marquee Lighting

- 1. Remove 6 screws in top marquee, (top of machine).
- 2. Unplug harnessing from ballast.
- 3. Remove 2 screws holding ballast (and ground wire) to cabinet.
- 4. Replace with new ballast.
- 5. Secure ballast and ground wire with screws.
- 6. Reconnect harnessing
- 7. Reassemble in reverse order.



GAME REPAIR

Control Panel Lighting

- 1. Remove 4 screws holding control panel in place.
- 2. Lift out control panel, unplug harnessing.
- 3. Remove plastic clip securing bulb, (right side).
- 4. Press red button on light socket (left side), bulb will pop out of socket.
- 5. Replace bulb with PL-L 40 watt fluorescent style bulb.
- 6. Re-attach plastic clip.
- 7. Reconnect harnessing.
- 8. Reassemble in reverse order.

Ballast– Control Panel Lighting

- 1. Remove 4 screws holding control panel in place.
- 2. Lift out control panel, unplug harnessing.
- 3. Remove 2 screws holding ballast (and ground wire) to cabinet.
- 4. Replace with new ballast.
- 5. Secure ballast and ground wire with screws.
- 6. Reconnect harnessing.
- 7. Reassemble in reverse order.



COVERGLASS REPLACEMENT

- 1. Remove 4 screws holding control panel in place.
- 2. Lift out control panel, unplug harnessing.
- 3. Remove 3 screws holding glass retaining bracket in place.
- 4. Remove any broken pieces of glass from game and control panel area.
- 5. Replace coverglass, lifting it into slot on top and resting it on lip below.
- 6. Replace glass retaining bracket.
- 7. Reconnect harnessing to control panel, and place control panel back onto game.
- 8. Replace 4 screws to secure control panel to game.

CONTROL PANEL BUTTON REPLACEMENT

- 1. Remove 4 screws holding control panel in place.
- 2. Lift out control panel, unplug harnessing.
- 3. Turn control panel over.
- 4. Remove light assembly from start button.
- 5. Remove plex on top of control panel
- 6. Remove wiring from affected button assembly.
- Remove switch from bottom of affected button(s) by unscrewing bottom of button assembly.
- 8. Replace switch with new one.
- 9. Reconnect any wiring you disconnected during disassembly.
- 10. Replace control panel top plex.
- 11. Reconnect light assembly in start button.
- 12. Reconnect harnessing to control panel.
- 13. Replace screws securing control panel to game cabinet.

GAME REPAIR

MONITOR CHASSIS BOARD REPLACEMENT

NOTE: THIS REPLACEMENT SHOULD ONLY BE DONE BY A QUALIFIED TECHNICIAN TO AVOID INJURY TO YOURSELF OR OTHERS. HIGH VOLTAGE MUST BE DISCHARGED FROM FLY BACK TRANSFORMER ON UNIT PRIOR TO REMOVAL.

- 1. Remove 2 screws holding chassis to monitor mounting support.
- Disconnect wiring. NOTE: <u>Red wire</u> contains <u>High Voltage</u> and must be discharged properly prior to removing.
- 3. Repair or replace Monitor Chassis Board.
- 4. Reassemble in reverse order.

LOCATION OF: MAIN PC BOARD , I/O BOARD, MAIN VOLUME CONTROLS, CARD READER, & POWER SUPPLY (FROM REAR OF GAME)



PARTS LISTING

MECHANICAL PARTS:

WA5001 COIN DOOR	
FP1019S LEVELER FOOT	
HR2005 BUTTON-LARGE RC	OUND WHITE
SP3027 COVER GLASS (MO	NITOR)
TX3009 FLIPPER PAD (RIGH	IT)
TX3010 FLIPPER PAD (LEFT	-) -

ELECTRONIC PARTS:

8160	FLASH CARD
8449	BALLAST
8312	BULB (PL-L 40 W FLUORESCENT)
BW2017	BULB PLASTIC CLIP
BW2018	BULB PLASTIC SUPPORT
TX2005	BUTTON(S) (BLUE SOLID)
CG2027	POWER CORD
DD2035X	PCB I/O BOARD
HH5005	TICKET DISPENSER
LP2007	SPEAKER (4X10)
MON29V	MONITOR (29" VGA)
TX2034	PCB MOTHERBOARD
TX2010	POWER SUPPLY 400 WATT
TX1010X	CARD READER ASSEMBLY

GRAPHICS & DECALS

DECAL - CABINET-LEFT
DECAL - CABINET-RIGHT
DECAL - START BUTTON
DECAL - CONTROL PANEL
TOP MARQUEE WITH GRAPHICS
DECAL - FRONT
DECAL - FRONT MARQUEE
SERVICE MANUAL











Warranty

I.C.E warrants all components in the **TUX RACER**[™] game to be free of defects in materials and workmanship for a period of ninety days from the date of purchase.

This warranty does not cover items damaged due to normal wear and tear, subjected to abuse, improperly assembled by the end user, modified, repaired, or operated in a fashion other than that described in the service manual.

If your **TUX RACER**[™] game fails to conform to the above-mentioned warranty, I.C.E.'s sole responsibility shall be at its option to repair or replace any defective component with a new or remanufactured component of equal to or greater O.E.M. specification.

I.C.E. will assume no liability whatsoever, for costs associated with labor to replace defective parts, or travel time associated therein.

I.C.E.'s obligation will be to ship free of charge, replacement parts by U.P.S. Ground, U.S. mail, or other comparable shipping means. Any express mail or overnight shipping expense is at the cost of the purchaser.

Products will be covered under warranty only when:

- The serial number of the game with the defective parts is given.
- The serial number of the defective part, if applicable, is given.
- Defective parts are returned to I.C.E., shipping pre-paid, in a timely fashion, if requested by I.C.E.
- A copy of the sales receipt is available as proof of purchase upon request of I.C.E.

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



WARRANTY

ICE Inc warrants that all of its products will be free from defects in material and workmanship.

When placing a warranty request, please be prepared to provide the following information:

- · Serial Number of Game or Bill of Sale
- Machine Type
- A Detailed Description of the Equipment Fault Symptoms

ICE product, including Cromptons, Sam's Billiards, Uniana and Bell Fruit is warranted as follows:

- 180 days on the Main PCB and Computers
- 90 days on all other components (i.e. DBV's, Ticket Dispensers, etc)
- · 30 days on repaired items
- 3 years on all Crane Harnessing
- 9 Months on Printers

ICE Inc shall not be obligated to furnish a warranty request under the following conditions:

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

ICE Inc will assume no liability whatsoever for costs associated with labor to replace defective parts or travel time associated therein.

All defective warranty covered components will be replaced with new or factory refurbished components equal to OEM specifications. ICE Inc will cover all UPS ground, or comparable shipping means, freight costs during the warranty period. Expedited shipments are available for an additional charge.

Defective parts are returned to ICE Inc, at the customer's expense, in a timely fashion.

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

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