STREET FEVER,,

OWNERS AND SERVICE MANUAL

FIRST REVISION

LICENSED FROM C.L. TECHNOLOGY

TECH

TABLE OF CONTENTS

Warranty

I.C.E. warrants all components in the FULL COURT FEVER™ game, to be free of defects in material 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, modified, repaired, or operated in a fashion other that described in the service manual.

If your Full Court Fever™ game fails to conform to the above mentioned warranty, I.C.E.'s sole liability 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 UPS 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 the warranty only when:

1. The serial number of the game with the defective part is given.
2. The serial number of the defective part, if applicable, is given.
3. Defective parts are returned to I.C.E., shipping prepaid, in a timely fashion, if requested by I.C.E.
4. 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 can not 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 distributor.

INTRODUCTION

GAME FEATURES

FULL COURT FEVER™ is a revolutionary concept in Coin Operated basketball games. You will see that this game includes many features which make it the obvious choice for your location.

FULL COURT FEVER PLAY. FEVER incorporates a basket that rotates from side to side and moves back and forth. Depending on which game has been chosen, the basket will move to various DIFFERENT positions as the game progresses. This movement adds many shooting angles to challenge the player. The mechanism that operates this unique capability is very reliable and simple in design. Cut steel gears make the drive mechanism almost immune to wear, and a built in high tech multi-plate clutch absorbs any stresses that can be generated by even the most deliberate abuse. The chassis also incorporates high strength roller wheels, eliminating any maintenance on the drive surfaces of the game. Other than routine cleaning, this makes the game totally maintenance free.

CONTROL PANEL Attractive L.E.D. displays are used to display all scoring and vital information such as time, credits, and high score. The control panel is laid out in a convenient user friendly fashion, making it easy for players to operate.

TAMPER PROTECTION. FEVER has exceptional tamper circuitry integrated to the main P.C. Board. If the game is over, and someone attempts to open the ball gate, an alarm will sound for ten seconds. If someone scores a basket when the game is not in play, the basket will turn around, to prevent further attempts at game play. If any further baskets are made due to intentional vandalism, the game will then sound an alarm. This feature can not be defeated by game players, as the game is supported by a heavy duty rechargeable battery with a built in recharging circuit. Even if the game is unplugged, the anti-tamper circuitry will continue to function. As an operator you can of course turn this option off, by disabling the alarm through programming mode.

HEAVY DUTY CONSTRUCTION is incorporated throughout the game by using only heavy gage metals and plastics. The game can be assembled and disassembled many times without any harm to the game. You will appreciate this *feature* if you move your games often.

HIGH TECH GAME ELECTRONICS. Solid state electronics are used throughout the game. "MATE-LOCK" connectors are used throughout the game for their rugged reliability as well as making it virtually impossible to connect harnessing the wrong way. Heavy duty optical sensors are used throughout.

Digital sound effects are used for optimum dependability. Over twenty sound effects are incorporated into the sound effect circuitry. The game electronics have been highly integrated into the Main P.C. Board assembly, making it easy to repair games. . The game has a full feature self test system to make trouble shooting easier.

OPTIONS -A ticket dispenser and/or a dollar bill validator, can be ordered with your game.

GAME PLAY

FULL COURT FEVER™ is an electromechanical coin operated amusement game designed to be played by one to four players.

There are three different games that can be played on the game....

QUICK SHOT is the last word when it comes to exciting "Full Court" basketball action. In this exciting game, the basket and backboard move to different positions every three seconds. This means the player gets the feeling of shooting the ball from all over the basketball court. But you better shoot quick, 'cause that basket could move any second. In fact, the ability for the basket to move to all these different positions is so unique, it's covered by United States Patents!

RUN - N - SHOOT is as exciting as QUICK SHOT with one big difference! The basket does not move until you make the shot. This creates a totally different feel to the game player.

HOT SHOT is a game similar to the traditional basketball games already on the market. However, we have made this an even more exciting game. The net remains stationary as the player shoots over and over. Two points are awarded for each basket scored. When 10 seconds remain in the game, the hoop moves back into "Three Point Range", and awards the player 3 points for all baskets scored.

LINKING is a popular option in locations where more than 1 game is to be used. The games are "linked" to add direct head *to* head action between the game players. This option is built into each main p.c. board, and is as easy as connecting a phone line and setting a number in the programming mode.

MAINTENANCE &TROUBLE SHOOTING

Any 7" basketball will work with this game.

NOTE: DO NOT OVERINFLATE THE BASKETBALLS. THIS CAN CAUSE DAMAGE TO THE GAME, AND WILL SHORTEN THE LIFE OF THE BALLS.

RAIL ADJUSTMENT

Rail adjustment is important to ensure the proper operation of the chassis.

IMPORTANT: IF THE RAILS ARE NOT ADJUSTED PROPERLY, THE GAME ELECTRONICS WILL NOT ALLOW THE CHASSIS TO MOVE.

Be sure that an average 3/16" spacing is maintained between the linear optical encoder P.C. Board sensors and the guide rail. The encoder sensors can be seen on the side of the chassis opposite the gear motor between the rail and the chassis.
You will notice 3 small triangular devices coming through a hole in the side of the chassis. These are the encoder sensors.

To adjust disconnect the games' A.C. and Battery power.

Push the chassis to the front of the game. Loosen the guide rails as necessary to achieve a 3/16" spacing between the rail and the front of the sensor. Use the spacer gage provided. It is 3/16" thick. Tighten the rail(s).

AVOID DAMAGING THE LINEAR ENCODER DECAL LOCATED ON THE INSIDE OF THE GUIDE RAIL..

Push the chassis to the rear of the game and repeat the procedure. Re-adjust front and rear again if necessary.

Re-connect A.C. and battery power to the game, and test for proper operation.

MAINTENANCE & TROUBLE SHOOTING

The 5 taps FROM THE BOTTOM OF THE TRANSFORMER UP are as follows:

240 V.A.C.
210 V.A.C.
1 15 V.A.C.
90 V.A.C.
0 V.A.C.

These numbers are also indicated on the transformer itself.

The A.C. wire that is on one of the above taps, is the only wire you should move. **Please use a** blank fast-on, on any open terminals, to protect against shock **hazards.**

MAIN P.C. BOARD

IMPORTANT: BEFORE REMOVING THE MAIN P.C. BOARD OR CHANCING THE MEMORY BATTERY, CO INTO THE OPTIONS MODE, AND RECORD YOUR COUNTER AND CAME SETTINGS, SO THEY CAN BE RE-ENTERED AFTER SERVICING HAS BEEN COMPLETED.

The Main P.C. Board is located on the back of the Control Panel. Remove the 3 bolts that hold the panel to the game, and flip the control panel out.

Remove all A.C. power before removing the Main P.C. Board.

Disconnect all Mate-lock connectors from the P.C.. Board.

Remove the SIX retaining fasteners, and remove the P.C. Board.

Install in the reverse order.

If Installing a new memory battery or new P.C. Board, after installation, reset all custom game programming into system memory.

BALL SENSORS

The ball sensors are a through beam infra-red pair. To test, walk into the game, and pass a ball through the hoop when a game of "HOT SHOT" is being played. (Choose HOT SHOT because the basket will only move once during the course of the game.)

NOTE: DO NOT USE YOUR HAND TO TEST THE SENSOR, AS THE INFRA-RED BEAM CAN USUALLY SEE THROUGH A HAND, AND WILL NOT GIVE YOU AN ACCURATE TEST;.

When you pass the ball through the hoop, you should hear the **swish** sound from the game. If you hear the sound, the sensors are good.

If you do not hear the sound, **check the transmitter sensor** with an I.R. Detector card (Radio Shack part no. 276-099). The transmitter is the unit with the lit **l.e.d.** in it. If you do not see any reflected I.R. light, do **a voltage check** to be sure the sensors are receiving power. If the sensors are not receiving power, fix the power problem and proceed.

If you see reflected I.R. light, perform a continuity check to make sure the signal from the I.R. receiver is getting back to the main P.C. Board.

If you have no reflected light when it has been established that there is power, you have a defective TRANSMITTER.

If you have reflected light, and have established that the wiring between the receiver and Main P.C. Board is good, there is a high probability that the receiver is bad.

There is one final check you can make to be sure the problem is not in the Main P.C. Board. Use a wire jumper or paper clip and, jump between pins 12 &-14 on the P3 connector of the Main P.C. Board. If you do this when **a game** is in progress, a 'swish" sound should be heard each time you MOMENTARILY jump those terminals. If the sound is heard, and the wiring to the sensor is good, and the transmitter works correctly, then the receiver is definitely bad.

If you need to replace either of the sensors, refer to the "Hoop Sensor Replacement" section in the mechanical repair area for directions on how to replace the sensors.

ROTARY / LINEAR SENSORS

The Rotary / Linear sensors can be checked easily. Put the game into the options mode (as described earlier in this manual), and enter the "Burn In Self Test" mode. You will notice 2 sets of numbers on the digital readouts. These numbers should change when the basket changes position. You will notice **a** correlation between the numbers and which **axis is** moving (rotary or linear). If either set of numbers do not move when the basket moves this will prove there is a problem with one of the sensors. This should however be obvious as to which sensor IS bad however, because that particular axis should not be working correctly. Example: If the numbers are not movtng for the linear drive, the linear drive itself should also be: a) not moving correctly or b) not moving at all. If not movtng at all, see if the numbers change if you move the chassis or turntable by hand (you could have **a** bad gear motor).

MAINTENANCE &TROUBLE SHOOTING

ELECTRONIC AND ELECTRICAL REPAIR

The following section will describe repair procedures and trouble shooting hints for the game electronics.

Please read the section "Operational Background" in the beginning of Maintenance and Trouble Shooting to get a good understanding of the games basic operating parameters.

WARNING: EXERCISE CAUTION WHENEVER WORKING WITH ELECTRONICS, THEY CAN BE VERY SUSCEPTIBLE TO DAMAGE FROM SHORT CIRCUITING, OR PHYSICAL ABUSE. ALWAYS UNPLUG THE GAME WHEN WORKING ON HIGH VOLTAGE AREAS OF THE GAME, SUCH AS THE TRANSFORMER OR MONITOR.

USE EXTREME CAUTION WHEN USING VOLT METERS TO DO CIRCUIT CHECKS IF THE GAME POWER HAS BEEN LEFT ON.

ALWAYS REMOVE THE BATTERY BACK-UP POWER WHEN WORKING ON THE CAME. THIS IS NECESSARY, AS SOME CIRCUITS ARE CONSTANTLY UNDER POWER FROM THE **BATTERY.**

WHEN USING A VOLT METER, BE SURE IT IS **SET TO** THE CORRECTVOLTAGE OR RESISTANCE RANGE, BEFORE USING. THIS **CAN PREVENT POSSIBLE DAMAGE TO THE P.C. BOARD OR MISDIAGNOSIS.**

ALWAYS REMOVE POWER TO THE GAME WHEN PLUGGING OR UNPLUGGING P.C. BOARDS.

IT IS NECESSARY TO USE I.C.E. REPLACEMENT PARTS TO CONTINUE WARRANTY COVERAGE. USE OF NON-I.C.E. APPROVED PARTS WILL NOT ONLY VOID YOUR WARRANTY, BUT COULD CAUSE SERIOUS HARM TO THE GAME, OR CAUSE SERIOUS BODILY INJURY.

IF **YOU HAVE ANY QUESTIONS REGARDING REPAIR AFTER READING THIS SECTION, CALL OUR SERVICE DEPARTMENT AT I-800-342-3433 BEFORE PROCEEDING.**

FUSES

Fuses are the first thing that should be checked when the game either appears not to work, or to work-incorrectly.

There are 5 fuses in the game. 2 of them are located in the enclosure where the electronics are located, where the power cord enters the **game.**

To check or service the fuses, **FIRST REMOVE THE** POWER CORD. FAILURE TO REMOVE THE POWER CORD COULD RESULT IN SERIOUS INJURY OR DEATH. Then, using **a** small flat blade screwdriver, pry the fuse 'from the fuse holder. Pull the fuse from the fuse block, and test the fuses. Be sure to replace the fuses with the same type and value.

There are 3 fuses located on the main P.C. Board. These protect the low voltage sides of the game, the **5** volt and 12 volt sides, A.C. **&** D.C. Be sure **game power** is off when checking or replacing these fuses. Replace the Main P.C. Board fuses with the original type and value. USE SLO-BLO MDQ TYPE fuses only. Other types of slo-blo fuses may cause **strange problems with the game.**

TRANSFORMER

YOU MUST REMOVE ALL A.C. POWER FROM THE GAME WHEN SERVICING THIS COMPONENT. IT IS A GOOD IDEA TO ACTUALLY REMOVE THE POWER CORD FROM THE WALL OR FLOOR OUTLET WHEN CHANGING THE TRANSFORMER.

CAREFULLY document where **each** color wire goes, BEFORE removing any wires.

Remove the 4 screws that hold the transformer to the game frame.

Replace and reconnect the transformer.

TAKE ANY FAST-ONS THAT WERE ON THE OLD TRANSFORMER TO COVER THE UNUSED A.C. TERMINALS OFF, AND TRANSFER THEM TO THE NEW TRANSFORMER. THIS IS NECESSARY, AS THE LEADS ON THE TRANSFORMER HAVE POWER ON THEM.

CHANCING A.C. VOLTAGES

When you receive your **game** from the factory, it should already be set to the proper A.C. voltage. If for some reason however, it needs to be set to a different A.C. voltage, follow these directions.

Unplug the game from the A.C. outlet.

The A.C. input taps for the transformer are located on the front left hand side of the transformer, as viewed from the opening of the access door.

The A.C. taps can be further identified by the fact that there are 5 taps in a row. (The only place on the transformer where there are 5 taps in a row.)

The bottom tap is the 0 volt tap. One side of the **A.C.** line should **always** be left attached to this terminai.

OPTIONAL ACCESSORIES

OVERVIEW

IF YOU DO NOT FIND ANSWERS TO YOUR QUESTIONS IN THIS SECTION, REFER TO THE ACCOMPANYING MANUAL FOR YOUR PARTICULAR PRODUCT, FOR CALL OUR SERVICE DEPARTMENT AT I-716-833-0441

TICKET DISPENSER

Reter to the suppliedservice manual for all information, other than software settings.

The ticket dispenser comes pre-set from the factory to dispense 1 ticket for every 5 points scored. In addition to this, if the game player did not score enough points to get 1 ticket, the game is preset to give the player 1 ticket "just for playing".

These settings can be adjusted by changing the ticket options in the "GAME OPTIONS" mode. If you change the memory battery or main P.C. Board, you may have to reset the values for these options.

You can dispense a different amount of tickets for each game bv adjusting the "GAME XX POINTS PER AWARD" setting. For instance, since it is easier to score playing "HOT SHOT" than it is playing "QUICK SHOT", you may wish to give out less tickets per point on "HOT SHOT" than on "QUICK SHOT". Example 1 ticket per 5 points on "QUICK SHOT", and 1 ticket per 8 points on "HOT SHOT"

You can also set the game up so that the winner of MULTIPLE player games ONLY, wins tickets, or that a certain amount of points must be scored BEFORE ANY tickets will be dispensed. This is the threshold option.

BILL VALI DATOR

Refer to the supplied manual for all information other than software settings.

The validator normally requires no adjustments other than checking to see that the proper voltage is present. This validator runs on 12 volt D.C. power, with a minimum of 11.5 volts D.C. The validator will not work correctly with voltages below that specified.

The validator may work strangely, or not at all if it is grounded improperly.

The unit should be cleaned periodically to ensure proper operation. Blow out as much dirt as possible, then use a cotton swab (q-tip) to get into the front opening to remove any remaining dirt or debris. Clean the stacker belts with a rubber rejuvenator. Clean any other dirt from the unit with isopropyl alcohol.

The game comes from the factory pre-set at 2 credits per bill. You can change this by entering the "GAME OPTIONS" screen. (see GAME OPTIONS settings section for more information.)

ABOUT LINKING

With LINKING it will be possible for your customers to enjoy exciting Head to Head competition when two or more FULL COURT FEVER™ games are connected together. In fact, you can link as many as fourteen FULL COURT Fever™ games together.

Game linking is accomplished through the "Link" button located in the upper left hand corner of the control panel. When enough money is inserted into the game to create one or more credits, the "Link" button will begin to flash. If a player on another game pushes their "Link" button, the games are now linked together. Once the games are linked together, they become 1 player only games. When any of the players on any of the linked games push the game select button, the game select L.E.D. will change on all of the games. When any of the players push the "Start" button, the game begins.

When the game is over, the top four players are ranked on the display. The game spotlight will flash for the winner.

TICKET SETTINGS

Ticket settings will work in the same fashion as a regular FULL COURT FRENZY II™ game. Be sure all of the games linked together are set EXACTLY ther same. Using different settings could yield unexpected results.

NOTE: WHEN LINKING 1 OR MORE GAMES TOGETHER, IT IS ADVISABLE TO TURN THE ATTRACT MODE OFF ON ALL BUT 1 GAME. THIS WILL ELIMINATE STRANGE SOUNDS FROM MORE THAN 1 ATTRACT MODE PLAYING, BUT NOT AT THE SAME TIME.

PARTS LISTINGS

MECHANICAL PARTS

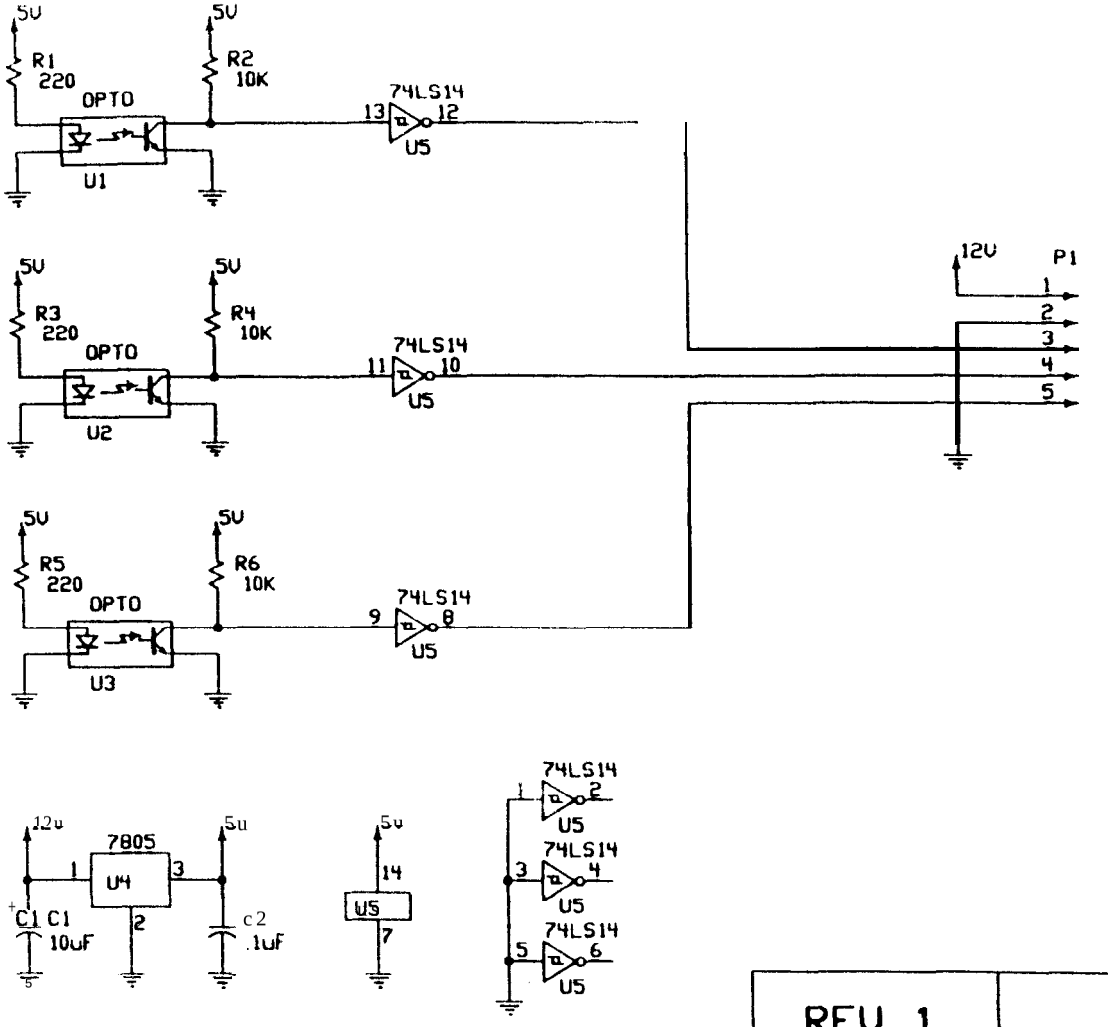
661001	Drive rail w/rack gear
BB1001	Chassis slide rail (coated)
BF1002	Turntable (with pole)
BF1003	Backboard-mounting bracket (with pole)
BF1004	Turntable chassis
BF1005	Coin door panel, frame
BF1007	Accessory door
BF1008	Cash box door
BB1009	Cash box enclosure (galvanized)
BF1025	Extension pole
BB1034	Clutch
BB1036	Turntable stop bracket
BF1039	Hoop (14 inch)
BF1042	Backboard clamp bracket
BB1043	Chassis wheel bracket
BS1100	Turntable wheel bracket
BF1055	Mesh frame side
BF1056	Connecting pipe
BF1062	Rebound guard mounting bracket
663001	7" Basketball
BF2003B	Backboard
663003	Turntable cover
BB3004	Net sensor ring, white
BF3005B	Control panel
BB3006	Rail bearings
863007	Rail bearing plates
883008	Basketball net
BT3014B	Cabinet bottom panel
BF3015	Turntable support disk
BB3021	Linear encoder gage
~~3027~~	Plastic hole cap — BB 3023
BB3022	Chassis wheels
3051	Wheel 0 Ring
BB5001	Cash box
5014	Door lock
BB6002	Chassis wheel axle
BB6003	Chassis wheel bushing
PC60601 A	Allen wrench - 5132"
PC6061 5A	#2 square drive bit

GRAPHICS AND DECALS

BF7001	Programming decal
BF7002	Rear cabinet left rear decal
BF7003	Rear cabinet left front decal
BF7005	Front cabinet decal
BF7006	Rear cabinet right rear decal
BF7007	Rear cabinet right front decal
BF7008	Ice logo decal
BF7009	Fuse rating decal
887006	Linear tracking decal
BB7007	Rotary tracking decal
7031	"Suitable for indoor use only' decal
7032	'Caution replace fuse.....) decal
7033	'Warning disconnect power....) decal
7035	'On/off" decal
7037	"5 amp fuse" decal
7039	"Caution hot surface" decal
7041	"6 amp warning" decal
BF9001	Service manual

ELECTRICAL AND ELECTRONIC PA RTS

BF2001X	fever Main P.C. Board
BT2002	Transformer
BB2005	Micro switch
BB2008	Ball gate motor (3269)
BB2009	Rotary motor (3270)
BB2010	Linear motor w/drive gear (3271)
BB2011	Photoelectric Transmitter
BB2011A	Photoelectric Receiver
BB2014X	Position encoder P C. board
BB2016	Battery, 12 volt
BT2027X	20ft. line cord
BB2023	Long life flood lamp bulb (5000 hr)



revisions				
zone	ltr	description	date	approved

REV 1		
prepared	8-92	GHD
checked		
engineer	8-92	GHD

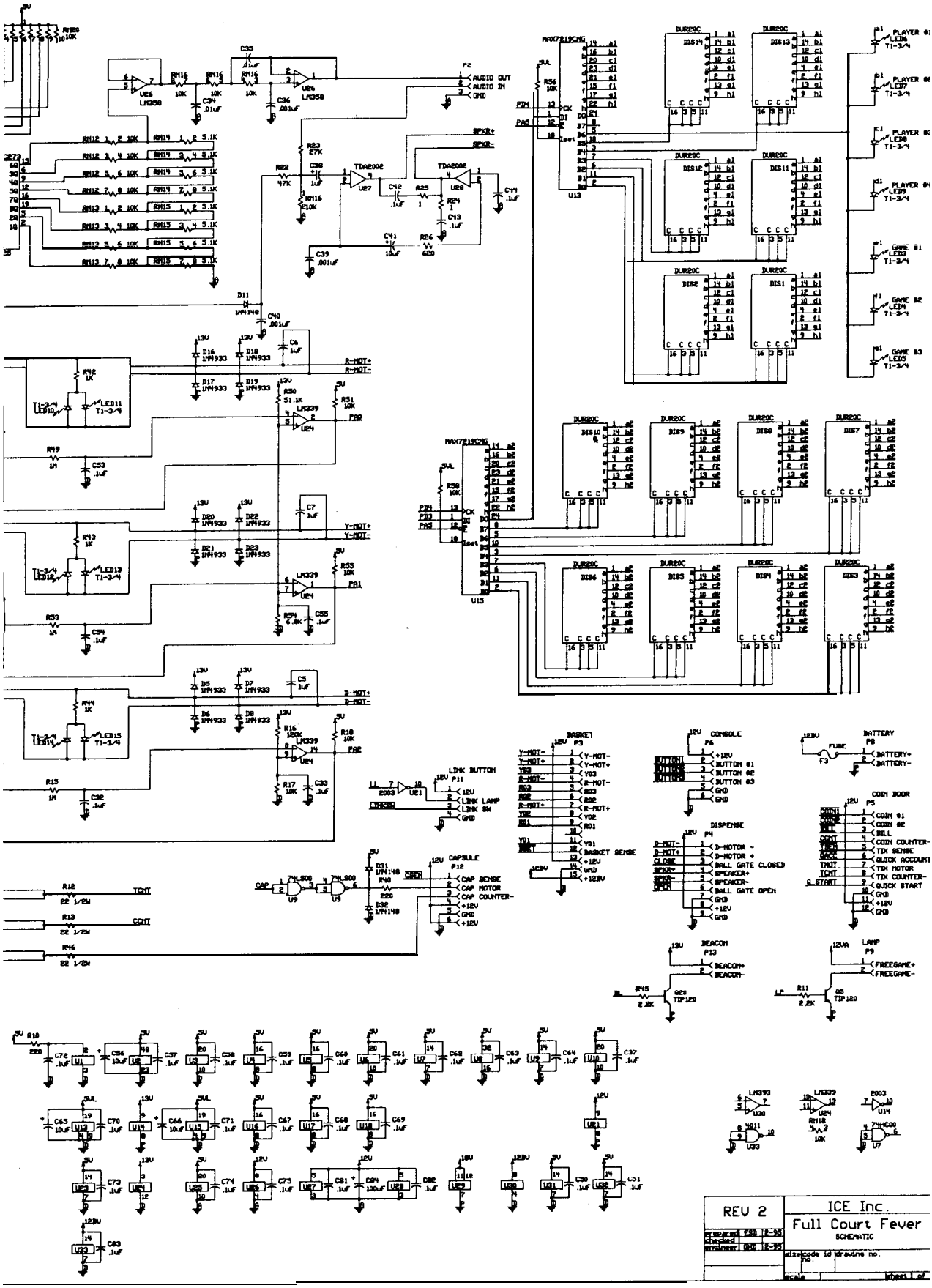
I.C.E. Inc.

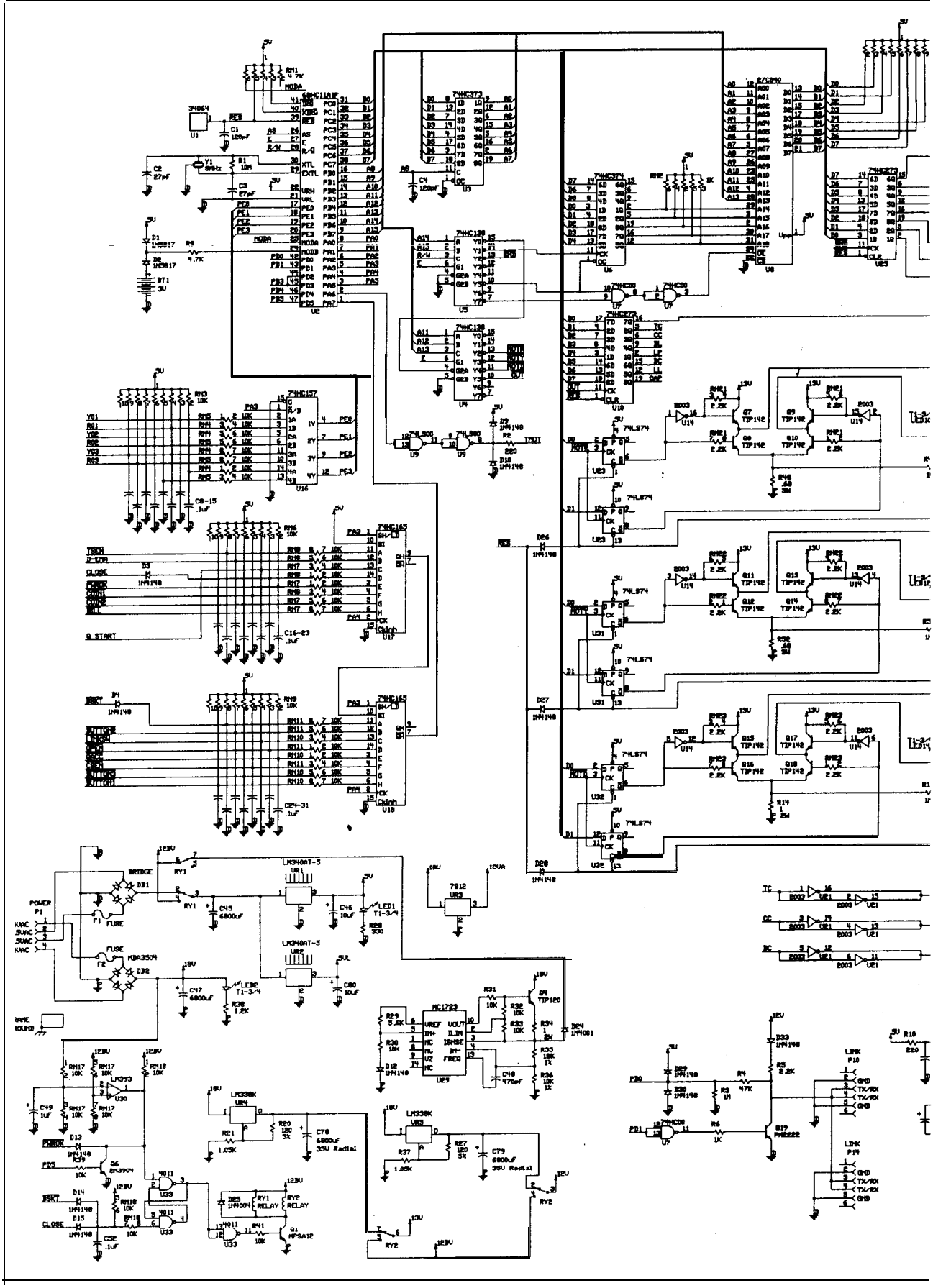
BASKETBALL GAME
POSITION ENCODER
SCHEMATIC

size	code id no.	drawing no.
A		

scale

sheet 1 of 1


AUDIO OUT
AUDIO IN
GND
SPKR+
SPKR-
R-MOT+
R-MOT-
Y-MOT+
Y-MOT-
B-MOT+
B-MOT-
LINK BUTTON
LINK LAMP
LINK SW
BASKET
BASKET SENSE
CONSOLE
BUTTON 01
BUTTON 02
BUTTON 03
BATTERY
FUSE
BATTERY+
BATTERY-
COIN DOOR
COIN 01
COIN 02
BILL
COIN COUNTER-
TIX SENSE
QUICK ACCOUNT
TIX MOTOR
TIX COUNTER-
QUICK START
DISPENSE
D-MOTOR -
D-MOTOR +
BALL GATE CLOSED
SPEAKER+
SPEAKER-
BALL GATE OPEN
CAPSULE
CAP SENSE
CAP MOTOR
CAP COUNTER-
BEACON
LAMP
FREEGAME+
FREEGAME-
PLAYER 01
PLAYER 02
PLAYER 03
PLAYER 04
GAME 01
GAME 02
GAME 03
REV 2
ICE Inc.
Full Court Fever
SCHEMATIC



ASSEMBLY

BEFORE YOU BEGIN

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

DO NOT DEFEAT THE GROUND PRONG ON THE POWER CORD FOR THE SAME REASONS AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED OUTLET COULD VOID YOUR WARRANTY.

TOOLS NEEDED: Before you start, you will want the following items:

- 7/16" Combination Wrench
- 7/16" Deep Well Socket
- Ratchet
- Side Cutters
- Adjustable Pliers

If you plan on moving your game often, or would like to speed up assembly, a cordless Ratchet is a good idea.

Your game requires a MINIMUM CEILING HEIGHT of 96" (8 feet). Check clearance before proceeding.

SET-UP

1. To begin, remove the game from the shipping containers.

2. Locate the main framework of the game and lay it on its side.

3. Locate the two "U" shaped legs, and insert them into the bottom of the frame. At the front of the frame, use the set of holes closer to the bottom of the legs. At the rear of the frame, use the holes further from the bottom of the legs. Secure with (4) 1/4-20 x 2 1/2" bolts, (8) flat washers, and (4) nylock nuts.

4. Stand the frame up, and move into its permanent location. It is a good idea to carry the frame rather than slide it.

NOTICE: IT WOULD BE A GOOD IDEA TO GET HELP WHEN LIFTING THE GAME TO THE UPRIGHT POSITION. THREE PEOPLE RECOMMENDED. THIS WILL HELP KEEP THE GAME FROM SLIDING WHEN LIFTED.

5. Move the cabinet to the front of the frame, and bolt it to the frame by installing the mounting bolts through the back of the front legs and into the rear of the cabinet. Secure with (2) 1/4-20 x 3 1/2" bolts, and (2) flat washers.

6. Locate the harness that is tie-wrapped up at the front of the frame. Cut the tie-wrap, and feed the harness down through the frame, and into the opening in the rear of the cabinet. Connect the harness to the connector located inside the cabinet. Secure the harness to the bottom of the frame with a tie-wrap through the tie down block provided.

7 Assemble the mesh framework, using the two large frame sides, and the three connecting pipes supplied. Assemble, using (6) 1/4-20 x 2" full thread bolts, and (6) flat-washers.

   a) Feed the pipes through the tie wraps that are connected to the mesh.

   b) Separate the 2 frames until the pipes go between them.

   c) Start the bolts by hand, then secure with a wrench.

NOTE: DO NOT OVER TIGHTEN THE BOLTS IN THE PIPES, OR THE INSERTS COULD BE DAMAGED. BE CAREFUL NOT TO CROSS THREAD THE BOLTS INTO THE PIPES.

8. Install the rebound guard using (2) 1/4-20 x 1 3/4" bolts, (4) flat washers, and (2) nylock nuts.

NOTE: WHEN INSTALLING FOR A 9 FT. GAME, USE THE BOTTOM SET OF HOLES ON THE FRONT OF THE MESH FRAME, THE MIDDLE SET OF HOLES FOR A 8 1/2 FT. GAME, AND THE UPPER SET OF HOLES FOR AN 8 FT. GAME. (WHEN SETTING UP AN 8 FT. GAME, YOU MAY WISH TO OMIT THE REBOUND GUARD.)

9. Install the Mesh Frame to the game. It can be adjusted to three heights: 9', 8.5', and 8 FT. Please install to the highest possible height. Install by sliding the frame inside the game to one of the 3 sets of mounting holes, and secure with (4) 1/4-20 x 1 1/2" silver allen head bolts, and (4) flat washers.

10. Install the backboard post and backboard to the turntable at this time.

    a) Feed the gray cable located in the turntable through the backboard post.

    b) Install (2) 1/4-20 x 2 1/2" bolts, (4) flat washers, and (2) nylock nuts to secure the tube to the turntable. The bolts are installed in a crisscross fashion.

    c) Install the backboard to the backboard tube, feeding the gray cable through the backboard pipe.]

ASSEMBLY

d) When installing the backboard, install a 1/4" bolt temporarily through the backboard pipe to the backboard tube to hold it in place.

e) Connect the gray cable to the blue cable, making sure the connectors are snapped in tight. Push any excess wiring back into the backboard pipe.

NOTE: FOR THE 9 FT. HEIGHT, LEAVE A 9 INCH SPACE BETWEEN THE TOP OF THE BACKBOARD AND THE MESH. FOR THE 8 1/2 FT. HEIGHT, LEAVE A 3 INCH SPACE, AND FOR THE 8 FT. HEIGHT, LEAVE NO SPACE.

11. Adjust the backboard height AS NOTED ABOVE. This will allow the proper arc for the ball when it is shot. Secure the backboard with (2) 1/4-20x2 1/2" bolts, (4) flatwashers, and (2) nylock nuts.

12. Put the basketballs into the game. BE SURE THEY ARE NOT OVER INFLATED. THIS COULD CAUSE THE BALL GATE TO OSCILLATE EXCESSIVELY.

13. Plug the game in, and follow the game set up procedures listed in this manual.

14. Open the control panel on the game by removing the 3 allen head bolts and washers that secure the panel to the frame. Tilt the panel forwards, and connect the battery harness to the Main Board. The battery connector will be the only one loose in the cabinet. Re-fasten the control panel.

15. Test the game completely after set-up, and call our service department if you have any problems, questions, or comments.

LINKING

For linking hook up instructions, see option #19 under "Customizing".

THANK YOU FOR YOUR PURCHASE OF THE FULL COURT FEVER™ BASKETBALL GAME.

CUSTOMIZING YOUR GAME

This section will discuss areas such as setting up credits, time per game, awards, etc. The section below will show how to enter into the game programming mode and how to adjust many of the game's operating parameters.

ENTERING SET-UP MODE

You must enter set-up mode to adjust all of the game features. This can be accomplished in the following manner..

1. Open the game's coin door. This is the upper door located in the center of the lower cabinet.

2. Locate the Counter / Programming button. It is located on a bracket that is attached to the cash box enclosure. The Counter / Programming button instruction decal is located on the cash box enclosure. This will give you a brief description of the features outlined below, as well as how to use them.

3. Press the Counter /' Programming button.

4. If you wish to only read the "Counter", look at the "player" displays to get the latest counter information. The display should be read from the top left (player #1) position. Once you are done reading the counter, press the Counter / Programming button once again to return to game play.

CHANGING GAME SETTINGS

When you push the Counter / programming button, you will notice that along with the counter numbers shown in the "player #" locations, there is a #1 shown in the "credits / time left" display. This is the counter's "mode" number. Each programmable "mode" on the game has a number associated with it.

1. To advance through to the different modes, press the "start" button. Each push of the button will advance you to the next mode. Whenever you are done with any programming changes, push the Counter / Programming button to return to normal game play.

2. The current value for each mode will be shown in the "player #4" location.

3. To change the shown value to a higher number, press the top "Game Select" button.

4. To change the shown value to a lower number, press the middle "Player Select" button.

Below, all the game options are shown, along with the "Mode" number.

MODE #1 COUNTER

The counter is used to keep a running total of games played on the machine since it was first built. This counter is not re-settable unless power is removed from the battery back-up on the P.C. Board (small round battery).

NOTE: If power is removed from the P.C. Board, all other custom game settings will have to be reentered.

MODE #2 COIN MECHANISM #1

This adjusts how many coins are required to receive 1 credit on the game ON THE LEFT HAND COIN MECHANISM. Set this number to reflect how many coins you wish. Example: 2 Quarters per credit. Enter the number 2.

MODE #3 COIN MECHANISM #2

This adjusts the amount of coins needed to receive 1 credit on the game ON THE RIGHT HAND COIN MECHANISM. This mechanism is set differently, so it can be used for fractional credits. For normal use, set a "1" for this mode. If you wish to use this for coins with a different value than that of coin mech #1, contact our service department for set-up information for your particular application.

FREE PLAY

You can set your game up for free play by adjusting the coins per credit for coin 1 to "0"

CUSTOMIZING YOUR GAME

MODE #4
CREDITS PER BILL

This option controls how many credits you will receive for each bill inserted.

MODE #5
CURRENT CREDITS

This displays the credits currently in the game. You can manually remove or add credits to the game by changing the value of this number.

MODE #6
TIME PER CREDIT

This adjusts, in seconds, how long each game will last The game can be adjusted from 20 - 45 seconds. The recommended time for all games is 40 seconds.

MODE #7
GAME 1 POINTS PER AWARD

This adjusts how many tickets are given away for the "Quick Shot" game. The number displayed is how many points must be scored for EACH ticket or card awarded. Setting this number to "0" will turn off the dispenser.

MODE #8
GAME 2 POINTS PER AWARD

This adjusts how many tickets are given away for the "Run -n - Shoot" game. The number displayed is how many points must be scored for EACH ticket or card awarded. Setting this number to "0" will turn off the dispenser.

MODE #9
GAME 3 POINTS PER AWARD

This adjusts how many tickets are given away for the "Hot Shot" game. The number displayed is how many points must be scored for EACH ticket or card awarded.

Setting this *number to "0" will* **turn** *off the* **dispenser.**

MODE #10
JUST FOR PLAYING

This feature is valuable in 2 respects.....

1. This can be set to any value desired, so that if a player, especially a young child can not get the minimum points required to earn awards through the above settings, awards can still be dispensed.

2. This setting can give a predetermined amount of tickets or cards per game, REGARDLESS of points scored, if the "points per award" and "winner" settings are set to "0".

MODE #11
WINNER AWARDS

This setting is used by itself if you want the WINNER ONLY to get awards in a multiple player game. The number of awards dispensed is determined by the number selected. A setting of "0" will turn off this option. The winner awards are in addition to any other awards being dispensed.

MODE #12
AWARD THRESHOLD

This mode is used to set the minimum # of points needed to get any awards whatsoever. Set the number to match the score you wish to achieve before awards are dispensed. Setting this number to "0" turns the option off.

MODE #13
AUDIBLE ALARM MODE ON/OFF

This feature is a great deterrent to tampering. The alarm will sound under the following conditions:

1. If the ball gate is forced open when a game is not in progress, or wedged open by bottles, cue sticks, etc.

2. If the game is over, or turned off, and 4 or more balls are thrown through the hoop, the game will consider this a tamper condition. This prevents players from continuing to play, even if they cut the game mesh and remove the balls in an attempt to play for free.

CUSTOMIZING YOUR GAME

3. If the game is powered down during a game. (Someone trying to keep the ball gate open). The ball gate will also automatically close at this time.

4. If the ball gate is open when the game is powered up. A setting of "1" enables the alarm. A setting of "0" turns the alarm mode off.

MODE #14
ATTRACT MODE ON/OFF/TYPE

Use this setting to control the type of attract mode you would li ke. Setting a" 1" gives you attract mode sound only. Setting a" 2" gives you movement of the basket only. Setting a " 3" gives you sound AND movement of the basket. Setting a"0" turns the attract mode off.

MODE #15
ATTRACT INTERVAL

This determines the length of time between attract modes. Change this number to change the amount of time in MINUTES between attract modes. Setting this number to "0" turns this option off.

MODE #16
GAME #1 FREE GAME THRESHOLD

This option allows you to select a POINT THRESHOLD, where a free game will be awarded for the game of QUICK SHOT. Once this threshold is reached, a FREE GAME will be awarded to the player, playing the game at that time. The free game is awarded immediately after completion of the paid game where the threshold had been broken.

Setting the value of this option to "0", turns the option off. Any other value sets that as the threshold value. We recommend 40 POINTS as a good starting point for the QUICK SHOT game.

MODE #17
GAME #2 FREE GAME THRESHOLD

This option controls the FREE GAME setting for RUN-N-SHOOT. Refer to option #16 for details.

MODE #18
GAME #3 FREE GAME THRESHOLD

This option controls the FREE GAME setting for HOT SHOT. Refer to option #16 for details.

MODE #19
LINKING STATION I.D.5

NOTE: FAILURE TO OBSERVE THE INSTRUCTIONS LISTED BELOW WILL RESULT IN IMPROPER OPERATION OF ANY GAMES WHICH HAVE BEEN LINKED TOGETHER.

Each linked game must be connected with a common modular phone line. Use no longer than a 12ft. cord to link the games together.

Connect the games together by snapping a phone line into a jack on the back of the main p.c. board on the first game. Connect the cord to the jack on the back of the p.c. board on the second game. When more than 2 games are linked, connect a second phone cord to the back of the same game, and run it to the game next to it, and so on.

When the linking option is used, each game must have its own unique "I.D. Number" so the games can properly link and talk to each other. Enter mode 19 on all games, then set a number that is different for each ame. The numbers used ma be 0 thru 13. The num%ers 14 and 15 are resewed 6 r the jackpot marquis (sold as a separate option).

Observe that game I.D.'s on all games are different, then exit programming mode on all games at the same time.

MODE #20
CREDIT DISCOUNTING

This mode enables the game to give the players an extra game when multiple coins are inserted. The number shown will be how many coins must be inserted for an extra game. Example: setting a 6 would mean that for every 6 coins inserted, an extra game would be given. Setting a "0" turns this mode off. The default value for this mode is "0".

CUSTOMIZING YOUR GAME

MODE #21
1 GAME TYPE ONLY

This mode allows the operator to set the game to play 1 type of game only. Either quick shot run-n-shoot or hot shot. This option should only be used for special purposes, as there is no way to graphically eliminate the other game options from the control panel, unless a special panel is purchased from I.C.E. This mode could be useful however, if running tournaments where the same game must be played.

Set a "1" to play quick shot only.
Set a "2" to play run-n-shoot only.
Set a "3" to play hot shot only.

Setting a "0" turns this option off. The default for this mode is "0"

BURN-IN SELF TEST MODE

This allows you to enter the BURN-IN, SELF TEST MODE, which can be very handy in problem diagnostics. To enter this mode, press and hold the GAME SELECT and START button at the same time WHEN IN MODE #1.

Perform the following tests when in this mode:

a) Push the face panel push buttons to check for their proper operation. An audible sound will be heard if working properly.

b) The face panel push buttons should light if they are working correctly.

c) Move the coin mech. micro switch wires. An audible sound will be heard if they are working correctly.

d) Shoot a ball into the basket. If the sensor is working correctly, an audible sound will be heard.

e) Notice that there are 2 sets of numbers that appear on the monitor. If the encoder sensors are working properly, a set of numbers will scroll up or down when the basket moves.

To exit the self test mode, press the "Counter / programming" button inside the coin door.

NOTE: WHEN SETTING UP MULTIPLE GAMES IN THE SAME LOCATION, IT'S A GOOD IDEA TO TURN THE ATTRACT MODE OFF ON ALL BUT 1 GAME.

GAME TESTING

It is easy and advisable to test your game after installation. After the game is set up and all options have been set up correctly, perform the following tests:

1. Test for proper acceptance of money.

2. Test for proper dispensing of tickets, if you have set that option.

3. Test for proper game play, including proper scoring.

4. Test for proper retention of game memory, when the game power is shut off, and turned back on.

5. Be sure to check your electronic game counter, and write down any info you may wish to record.

6. When testing linked games, be sure all of the game scores show up properly.

MAINTENANCE &TROUBLE SHOOTING

QUICK TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
BASKET DOES NOT MOVE FROM SIDE TO SIDE CORRECTLY (CONTINUED)	BAD WIRING TO MOTOR	CHECK W/ VOLTMETER
	BAD WIRING TO ENCODER	CHECK W/ VOLTMETER
	CHASSIS BEARING SURFACE DIRTY	CLEAN CHASSIS
	TURNTABLE BALL BEARINGS DIRTY	CLEAN BALL BEARINGS
	TURNTABLE GETTING STUCK ON MESH	TIGHTEN MESH
	SCRATCHED OR BAD ENCODER DECAL	REPAIR OR REPLACE DECAL
	TURNTABLE STOP BRACKET MISSING	REPLACE STOP BRACKET
CAME DOES NOT TAKE OR ADD MONEY CORRECTLY	BAD MAIN P.C. BOARD	REPLACE MAIN P.C. BOARD
	BAD MICRO SWITCH OR D.B.V.	REPLACE SWITCH OR D.8.V.
	BAD WIRING TO SWITCH OR D.B.V.	CHECK W/ VOLTMETER
	GAME PROGRAMMING SET WRONG	RE-SET GAME PROGRAMMING
CAME DOES NOT DISPENSE TICKETS CORRECTLY	BAD TICKET DISPENSER	REPLACE TICKET DISPENSER
	BAD WIRING TO DISPENSER	CHECK W/ VOLTMETER
	OUT OF TICKETS	ADD TICKETS
	TICKET SENSOR IS DIRTY	CLEAN SENSOR ON DISPENSER
	DISPENSER JAMMED	REMOVE TICKET JAM
	GAME PROGRAMMING SET WRONG	RE-SET PROGRAMMING
	BAD MAIN P.C. BOARD	REPLACE MAIN P.C. BOARD
NO OR LOW CAME SOUND	VOLUME TURNED DOWN	TURN UP VOLUME
	DEFECTIVE VOLUME POT	REPLACE POT
	BAD SPEAKER	REPLACE SPEAKER
	BAD WIRING TO MAIN P.C. BOARD	CHECK W/ VOLTMETER
	BAD MAIN P.C. BOARD	REPLACE MAIN P.C. BOARD
BALLS DO NOT DISPENSE QUICKLY ENOUGH, OR JAM IN THE GAME	GAME HAS EITHER TOO MANY OR TOO FEW BALLS	GAME IS DESIGNED TO WORK WITH 7 BALLS.
ALARM GOES OFF FREQUENTLY	BALL GATE CANNOT CLOSE	(SEE BALL GATE)
	BALL SENSOR WORKING INCORRECTLY	(SEE BALL SENSORS)
	BAD MAIN P.C. BOARD	REPLACE MAIN P.C. BOARD
	BALLS JAMMED IN GATE	TOO MANY BALLS IN GAME
DISPLAY L.E.D.'S DO NOT WORK PROPERLY	BAD MAIN P.C. BOARD	REPLACE P.C. BOARD
	BAD FUSE ON MAIN P.C.BOARD	CHECK ALL FUSES
CAME WILL NOT RETAIN CUSTOM PROGRAM SETTINGS	BAD MAIN P.C. BOARD	REPLACE P.C. BOARD
	BAD OR WEAK MEMORY BATTERY	REPLACE BATTERY ON MAIN P.C. BOARD
LINKED GAMES TO NOT SCORING OR WORKING CORRECTLY.	GAME I.D.3 SET THE SAME	CHANCE ALL GAMES TO DIFFERENT I.D. NUMBERS

MAINTENANCE &TROUBLE SHOOTING

QUICK TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
NO SPOTLIGHT	BAD FUSE AT POWER MODULE GAME UNPLUGGED TRIPPED CIRCUIT BREAKER DAMAGED POWER CORD BURNED OUT BULB GAME WIRING BAD	INSPECT MAIN FUSES CHECK POWER CORD CHECK BREAKER BOX REPLACE CORD REPLACE BULB CHECK W/ VOLTMETER
BALL GATE WILL NOT OPEN OR CLOSE	BAD OR LOOSE MICRO SWITCH BAD FUSE ON MAIN P.C. BOARD BAD WIRING TO SWITCH OR MOTOR BAD MAIN P.C. BOARD BAD GEAR BOX BALL GATE STOP SET IMPROPERLY	CHECK OR RE-TIGHTEN CHECK ALL FUSES CHECK W/ VOLTMETER REPAIR OR REPLACE P.C. BOARD REPLACE GEAR BOX READJUST TILL CAM TOUCHES MICRO SWITCH
PUSH BUTTONS DO NOT LIGHT OR WORK PROPERLY	BAD BULB IN BUTTON BAD MICRO SWITCH IN BUTTON BAD WIRING TO MAIN P.C. BOARD BLOWN FUSE ON MAIN P.C. BOARD BAD MAIN P.C. BOARD BUTTON STUCK SHUT	CHANGE LIGHT BULB REPLACE MICRO SWITCH CHECK W/ VOLTMETER CHECK ALL FUSES REPLACE MAIN P.C. BOARD REMOVE AND CLEAN BUTTON
BALLS DO NOT SCORE CORRECTLY	BAD I.R. TRANSMITTER BAD I.R. RECEIVER TRANS. & REC. NOT LINED UP TRANS OR REC. HARDWARE LOOSE TRANS. OR REC. DIRTY BAD HARNESSING OR WIRING BAD MAIN P.C. BOARD BAD BATTERY	REPLACE TRANSMITTER REPLACE RECEIVER CHECK ALLICNMENT TIGHTEN HARDWARE SNUGLY CLEAN (USE NO SOLVENTS) CHECK W/ VOLTMETER REPLACE MAIN P.C. BOARD CHECK CHARGING CIRCUIT OR REPLACE BATTERY
BASKET DOES NOT MOVE FORWARD OR BACKWARD CORRECTLY	BAD MAIN P.C. BOARD BAD WIRING TO MOTOR BAD WIRING TO ENCODER BOARD BAD ENCODER P.C. BOARD BAD ENCODER ALLICNMENT TO RAIL RAIL DECAL SCRATCHED OR BAD ENCODER SPACING INCORRECT BAD LINEAR MOTOR WIRING BINDING ON FRAMEWORK CHASSIS BINDING ON MESH OR ROPE CHASSIS WHEELS BINDING CHASSIS WHEELS HAVE FLAT SPOT GAME ASSEMBLED IMPROPERLY	REPLACE MAIN P.C. BOARD CHECK W/ VOLTMETER CHECK W/ VOLTMETER REPLACE ENCODER P.C. BOARD ADJUST ALLICNMENT REPAIR OR REPLACE DECAL CHECK SPACING BETWEEN LEDS REPLACE MOTOR CHECK FOR BINDING CHECK FOR BINDING CHECK WHEEL ROTATION REPLACE CHASSIS WHEELS CHECK FOR RUBBING ON FRAME OR CABINET
BASKET DOES NOT MOVE FROM SIDE TO SIDE CORRECTLY	BAD MAIN P.C. BOARD BAD ROTARY MOTOR BAD ROTARY ENCODER P.C. BOARD BAD CLUTCH	REPLACE MAIN P.C. BOARD REPLACE MOTOR REPLACE ENCODER P.C. BOARD REPLACE CLUTCH

MAINTENANCE &TROUBLE SHOOTING

OPERATIONAL BACKGROUND

The following will outline the basic operating principals of the FULL COURT FEVER™ basketball game.

The positioning system of the FULL COURT FEVER™ basketball game is operated by gear motors that control both the linear and rotary action of the game, and an optical tracking system to control the actual positioning of the basket assembly.

The linear (back and forth) motor, is a 60 R.P.M. motor with heavy duty gearing incorporated into the gear box itself. The motor is a 6-24 volt D.C. motor, operated at 12 volts D.C. This ear motor is attached to the side of the chassis mec4 anism, and its output gear mates with a rack gear attached to one of the side rails. When the motor is activated, this moves the basket mechanism back and forth.

The rotary (side to side) gear *motor is* also a 6-24 volt D.C. motor, operated at 12 volts D.C. This motor operates at 15 R.P.M., as this motor is connected straight up through the chassis and into the turntable assembly. Since the gear motor turns slowly, and is connected directly, this could cause a high amount of stress from the constant changing of direction, as well as someone rotating the turntable by hand.

To counter the stress levels imposed on the rotary gear motor, we have incorporated a heavy duty, compact friction clutch assembly to counter ANY stresses or shocks the gear motor might incur. This clutch is rated to last over 20 million revolutions. Because of its design, the clutch actually gets stronger after this time. As the average game played will turn the clutch less than 1 revolution, it is easy to see why the clutch will last a long time.

The actual positioning of the turntable and chassis is controlled by 2 identical optical encoder P.C. Boards located on and in the chassis. These optical encoders look at decals. one of which is located on one of the guide rails, and the other, on the bottom of the turntable. These decals have a series of bars, or black and reflective silver stripes on them. When the gear motors move the basket mechanism back and forth, the sensors see the bars go by them. As the bars go by, they reflect light to the sensors, creating pulses that the microprocessor on the main P.C. Board counts. The game programming counts the pulses, and converts these into numbers which are used to position the chassis and turn the motors on or off. When the game is first powered up, there is no way for the sensors to know where the chassis or turntable is positioned. For this reason there are black areas at the limits of travel on both the linear and rotary decals. When the game is first powered up, the gear motors will run until the chassis and turntable *move* to a position where the sensors see the black areas. This lets the microprocessor get a "homing" position for both linear and rotary positioning. The game then "knows" where it is.

The game incorporates a through beam infra-red optical detection system for counting balls that go through the hoop. The system uses pulse technology to reject ANY light that does not conform to the requirements set forth by the electronics contained within the sensors. This eliminates annoying problems that can sometimes affect optical sensing systems.

The ball gate uses micro switches to determine positioning of the gate, which are activated by the cam on the ball gate shaft.

All of the gear motors use a combination of hardware and software control to protect against over current damage. When an over current condition is detected, the motors will shut off automatically. The game microprocessor will then decide whether or not the motor should be turned on. It will also determine at that time which way the motor should run.

MECHANICAL REPAIR

IMPORTANT: USE ONLY I.C.E. REPLACEMENT PARTS WHEN SERVICING YOUR GAME. USING NON-I.C.E. APPROVED PARTS COULD VOID YOUR WARRANTY, AND COULD CAUSE SERIOUS DAMAGE TO THE CAME, OR INJURY TO OTHERS.

IF YOU HAVE ANY QUESTIONS REGARDING REPAIR AFTER READING THIS SECTION, CALL OUR SERVICE DEPARTMENT BEFORE PROCEEDING AT I-800-342-3433

WARNING: OBSERVE AU SAFETY PRECAUTIONS WHEN WORKING ON THE COLOR MONITOR. DISCHARGE CURRENT FROM THE MONITOR IN ACCORDANCE WITH PROCEDURES WHICH CAN BE FOUND IN THE MONITOR SERVICE MANUAL.

WHEN WORKING ON THE MOVING BASKET DEVICE OR BALL GATE MECHANISM, IT IS EXTREMELY IMPORTANT TO REMOVE BATTERY POWER FROM THE GAME, AS WELL AS A.C. POWER. THE BATTERY POWER CAN BE REMOVED EITHER BY DISCONNECTING 1 LEAD FROM THE BATTERY, OR REMOVING THE 2 PIN MATE-N-LOCK CONNECTOR FROM THE MAIN P.C. BOARD.

MAINTENANCE &TROUBLE SHOOTING

BALL GATE SERVICE.

- Remove both battery and A.C. power
- Remove the 4 bolts that hold the ball deflector to the sides of the frame.
- Remove the two bolts that hold the ball gate bearing in place. (HINT: a long extension on a ratchet can be helpful for this operation.)
- Pull the ball gate from the end by the bearing towards you (the rear of the game).
- The gear motor can now be pulled away from the retaining bracket
- Unbolt the control panel from the front of the game to gain access to the Main P.C.B.
- Unplug the mate-n-lock connector from the Main P.C.B., cut any tie-wraps, and remove the ball gate assembly.
- Remove the 2 allen head set screws, to remove the ball gate from the gear motor.
- Remove the 4 screws and star washers to remove the micro switch mounting bracket from the gear motor.
- NOTE: When removing wires from the micro switches or motor, it is VERY important to make sure all wires are returned to their proper terminals. failure to do this will result in improper operation of the ball gate, and could damage the game. The wires are color coded, so it will be easy to document where each wire goes.
- IMPORTANT: Mark the position of the micro switch mounting bracket so the switch actuators will line up correctly with the cam on the ball gate when the unit is re-assembled.
- Use thread locking compound on the allen head set screws when re-assembling the ball gate to the gear motor.
- Assemble in reverse order of disassembly. Tighten all hardware securely.
- RE test for proper operation.
- Temporarily shut off A.C. Power, reconnect Battery, and turn A.C. Power back on.

SERVICING FOR :

ROTARY & LINEAR GEAR MOTORS
FRICTION CLUTCH
ROTARY -LINEAR SENSORS (ENCODERS)

- Remove both battery and A.C. power.
- The turntable which supports the basket must be removed to gain access to the gear motors.

IMPORTANT: USE THE EXACT SAME SPACER ARRANGEMENT WHEN REPLACING THE ENCODER SENSORS. FAILURE TO MAINTAIN PROPER SPACING COULD RESULT IN THE INABILITY OF THE SENSORS TO READ THE ENCODER DECALS.

a) Remove the round plastic cover. Disconnect the harness at the opening in the center of the turntable. (3, 1 Pin Connectors.)

b) Carefully remove the 3 allen bolts that hold the turntable to the chassis. Do not lose the bolts into the turntable cover.

c) Lift the turntable carefully from the chassis, being careful not to damage the optical sensors or the wiring that comes through the center of the turntable.

- When servicing the clutch, it is not necessary to remove the motor from the chassis. Loosen the 2 allen head set screws and pull up on the clutch, using a twisting motion, to remove the clutch.

LIGHT BULB REPLACEMENT

WARNING: TURN OFF GAME POWER BEFORE REPLACING THE LIGHT BULB.

- Replace the bulb by removing the screws that secure the control panel to the game. Carefully remove the control panel, and set it on the front of the game. Replace the light bulb, and install the control panel to the game.

MAINTENANCE &TROUBLE SHOOTING

REPLACEMENT BULB:

150 WATT INDOOR SPOTLIGHT

HOOP SENSOR REPLACEMENT

- Turn off all A.C. power to the game, and unplug the battery back-up circuitry. (disconnect the 2 pin mate-lock connector from the P.C. Board.)
- Standing in the ball return tray, unscrew the 4-40 screws that holds the sensor(s) to the sensor ring. Cut the tie wrap that guides the wire at the top of the backboard tube.

  NOTE: NOTICE THE WAY THE O-RINGS ARE USED ON THE SENSOR, & BE SURE TO RE.-USE THEM WHEN RE-INSTALLING THE SENSORS.
- Cut the tie wraps that hold the 2 sensor wires together.
- Remove and replace the sensor(s)
- Run the sensor harnessing through the backboard mounting brackets.
- Make sure there is an even amount of slack coming from both sensor wires. Tie wrap the wires together immediately behind the sensor ring.
- Make sure there is enough slack in the wires, so the sensor ring and net can swing freely.
- Stuff excess wiring into the backboard tube, and secure cabling to the tube with a heavy duty tie wrap.

MECHANICAL MAINTENANCE

IMPORTANT: FOLLOW THE SUGGESTED MAINTENANCE TO ENSURE THE BEST OPERATION POSSIBLE FOR YOUR CAME. PLEASE PAY SPECIAL ATTENTION TO THE SECTION REGARDING RAIL ADJUSTMENT. THIS WILL HELP EXTEND THE SERVICE LIFE OF THE MOTORS AND ELECTRONIC COMPONENTS.

GUIDE RAIL CLEANING

The bearing design of this game makes it unnecessary to perform regular maintenance on the rails, however the surfaces of the guide rails should be kept clean and free of dirt and dust from the basketballs. Clean the rails periodically, using alcohol or a similar cleaner.

ROLLER WHEEL CLEANING

Occasionally, you will need to clean the roller wheels on the turntable, or the turntable may not rotate or go back and forth properly.

- Remove the turntable as described in the section for servicing ROTARY AND LINEAR GEARMOTORS.
- Remove the turntable from the game, and cover the rotary decal with a piece of plastic and some tape.
- Spray WD 40 or a similar cleaner into the bearings until the lubricant comes out of the bearings totally clean. Rotate the bearings as you spray the lubricant.
- Oil the bearings with 30 weight motor oil.
- Clean the top of the chassis, until all built up dirt is removed.
- Re-assemble, and test for proper operation.

GENERAL CLEANING

Clean the surfaces of the cabinet and decals with a commercial cleaner such as 409 or Fantastic. DO NOT use cleaners such as Wildcat pinball cleaner or alcohol, it can take the finish off of the decals. Use PLEDGE™ on all plastic and painted surfaces. This product works especially well on clear plastics. Please note that other spray polishes do not work as well.

BASKETBALLS

The basketballs should be checked every week for proper inflation. A bicycle tire pump and inflating needle can be purchased at any sporting goods store, and most large discount stores.

Keeping the balls properly inflated will make it more difficult to pull them past the ball gate. It will also create more realistic basketball action when interacting with the hoop.