



Commitment To Excellence

**COUGAR IQ
IQ-A-RB-ENG**

INSTALLATION AND OPERATION MANUAL

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VALLEY RECREATION PRODUCTS, INC.
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P.O. BOX 656 PHONE: 517 892-4536**



Dear Valued Customer:

Welcome to the world of Valley Electronic Darts! I'm sure you will find the added player features in this game will increase interest in the playing of electronic soft-tip darts and in turn increase your profits.

Please take a few minutes to fill out the enclosed warranty registration card. It contains important information and will provide a way to notify you of any field changes, upgrades, etc. that may occur. Return postage is guaranteed so drop it in any mailbox.

The serial number of the game is found on the right hand side of the game.

The warranty period on all Valley Dart Games is one full year from the date of purchase. See the Operation and Installation Manual for specific details.

Thank you for your choice of Valley Electronic Darts. I am confident that the engineering, manufacturing and customer service behind this product is the best anywhere and will provide you with maximum performance with minimum problems.

If you should have any questions call me toll free at 800-331-5420.

Robert Corrigan
National Service Manager

**VALLEY
RECREATION
PRODUCTS
INC.**

ELECTRONIC DIVISION

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LIMITED WARRANTY

Limited Warranty

This product is warranted against manufacturer defects or failure of electronic components for a period of one (1) full year. Valley Recreation Products, Inc. will repair or replace any component, assembly, or subassembly that fails during normal operation, free of charge, for a period of one (1) year. Any modification unauthorized by Valley Recreation Products, Inc. made to any part of this product will void all existing warranties. This warranty does not apply to damage resulting from misuse, abuse, neglect, improper installation or maintenance.

The foregoing warranty is exclusive and in lieu of all other warranties of merchantability, fitness for and of any other type, whether expressed or implied. Valley Recreation Products, Inc. neither assumes nor authorizes anyone to assume for it any other obligation or liability in connection with said product and will not be liable for consequential damages.

Warranty service is available through your distributor.



DESCRIPTION

SERVICE PHONE NUMBER: 1-800-331-5420

SERVICE FAX NUMBER: 1-815-895-2118

Please fill in the Serial Number for easy reference.



SERIAL NUMBER: _____

(Found on the upper right side of the lower cabinet near the hinge)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by VALLEY RECREATION PRODUCTS, INC. for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Classe A prescrites dans le règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



To ensure safety, modification to any part of this game is prohibited.



The keys to this game should not under any circumstances be left in the locks or be accessible in any way to unauthorized service personnel.



This TECHNICAL MANUAL is subject to change. Supplements are available upon request.

Models & Conventions / Symbols








Models

Below are the three models of the IQ Game currently available.

	<u>Model #</u>	
1.	Standard IQ Game Card Reader Upper Display	IQ-A-RB-ENG
2.	WOU Without Upper Display	IQ-A-RB-WOU
3.	WOB Without Upper Display Without Card Reader	IQ-A-RB-WOB

Conventions / Symbols

This manual switches when necessary between the IQ Game itself and the computer setup containing the League Machine for Windows Software™. For clarity, throughout this manual you will find these fonts and symbols in use:

<u>Symbol</u>	<u>Meaning</u>
<i>Times New Roman typeface in Italics</i>	<ul style="list-style-type: none">• Denotes specific button to be pushed on the IQ Game.
	<ul style="list-style-type: none">• A procedure using buttons on the IQ Game.
	<ul style="list-style-type: none">• A caution or warning. Pay special attention to the note.
	<ul style="list-style-type: none">• Additional information on this subject elsewhere in the manual is referenced.
	<ul style="list-style-type: none">• A step requiring a phone call or talking about phone lines.
	<ul style="list-style-type: none">• Steps using the mouse on the computer (LMW).
	<ul style="list-style-type: none">• A procedure using the LMW software.
	<ul style="list-style-type: none">• A step requiring you to write something down.

Models & Conventions / Symbols (Continued)

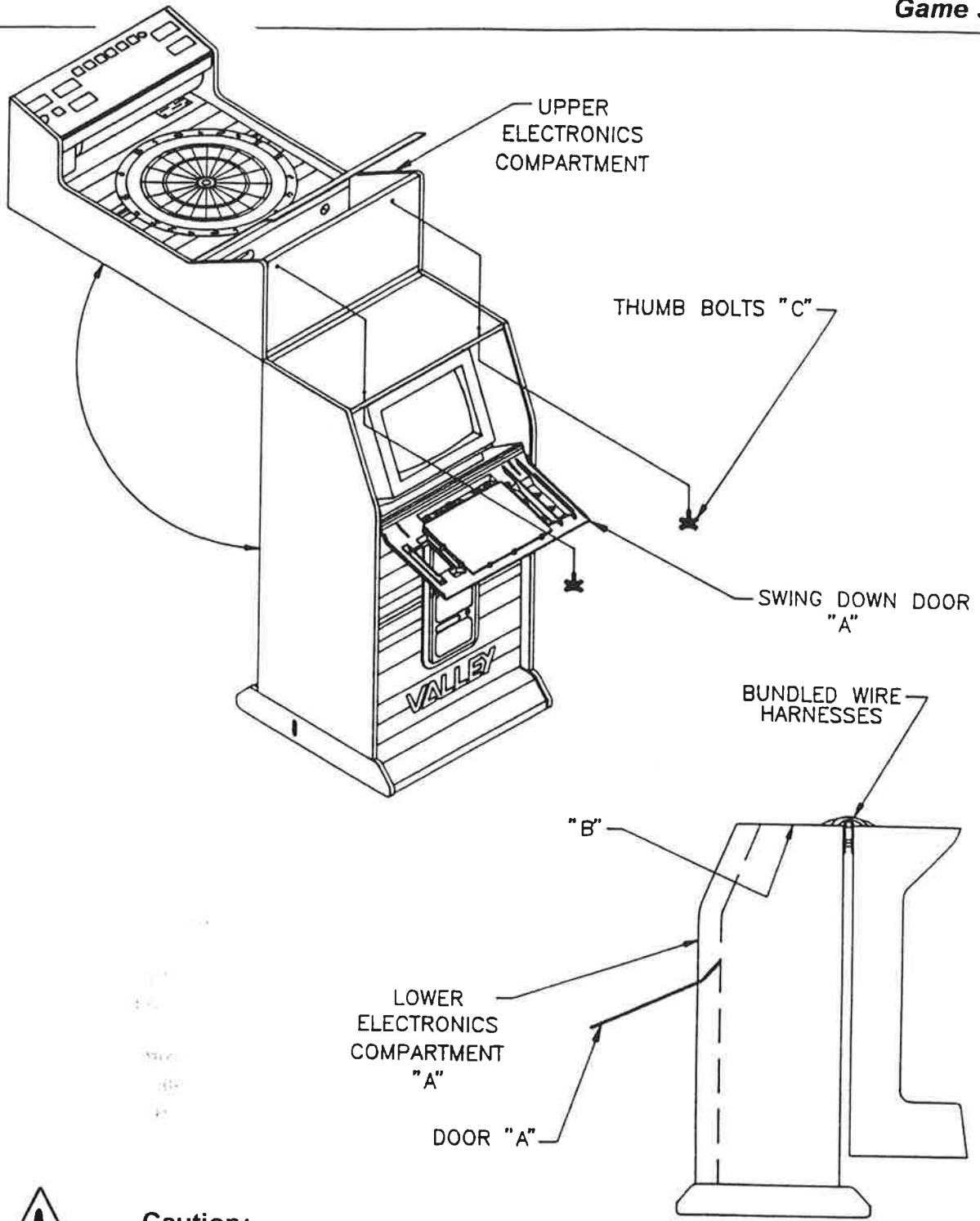
LMW

- **League Machine For Windows Software™**
LMW is a Microsoft FoxPro database application installed on a PC-compatible clone. This software tracks fees, and manages information gathered electronically or entered manually. Automated retrieval of information can be performed at any time while the computer is in use for other functions, and processed after retrieval. LMW gets its data from the IQ Game.



This manual was written using software version 2.6. Before calling the Valley Service Department, press the *Red, Blue, and Gray buttons* at the same time. A small window will appear with a list of information, the only numbers that service needs are:

Version
Comm ID
Bios Version



Caution:

To avoid possible injury, when game is in the upright position, please check that the Thumb-bolts "C" are securely fastening the game halves together.

Specifications and Installation:

Specifications:

THIS GAME IS SUITABLE FOR INDOOR USE ONLY.

Height:	86" upright	Width:	24"
Weight:	222 lbs.	Voltage:	120 Volts

Installation:

NOTE:
To install this game, a working area of approximately 6' x 4' with a 90" ceiling clearance is needed.

1. Pull and open swing down door "A" to access the monitor cover door.
2. Remove the washers and thumb-bolts "C" from the plastic bag located inside the cash box and set them aside, but within reach.
3. Slowly and carefully swing the upper section of the game upright **bracing the back until the game is securely fastened** (step 4).
4. Verify that the wires are not pinched. Replace the washers and thumb-bolts "C" in the inside top "B" of the lower electronics compartment and thread upward to secure the upper section of the game. **Tighten the bolts.**
5. This game is equipped with replaceable power/line cord. The cord is located inside the pedestal (monitor compartment) when game is shipped and must be routed through the opening at the back of the game prior to operation. To do this, follow the instructions below, and refer to the drawing on the next page.
 - A. Open Monitor Cover Door.
 - B. Turn power cord cover latch counterclockwise until the power cord hole cover itself can be rotated counterclockwise. See drawing on next page.
 - C. Turn power cord hole cover to expose opening. See drawing on the next page.
 - D. Locate power cord (inside pedestal), and route plug end through opening. Push the entire length of the cord through the opening.
 - E. Return power cord hole cover to its original position making sure cord is inserted through slot in cover. Be sure power cord cover latch falls back into position.
 - F. If the cabinet top must be folded down for any reason, the power cord must be placed back inside the pedestal.
 - G. Move the game to its selected location without tilting it more than 10°, any greater angles may cause the game to tip over. Plug power cord into an appropriate outlet.



CAUTION

To ensure safety, it is recommended that the game be secured to the floor or to the wall with the Stability Kit provided according to the instructions on the following pages.

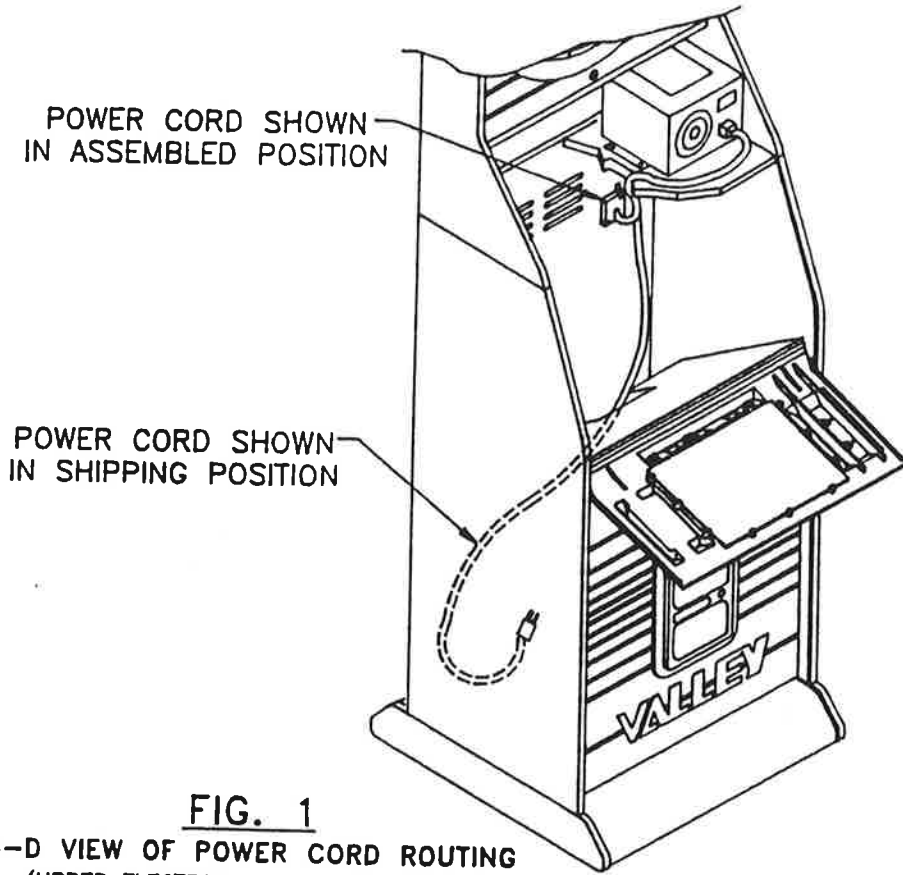


FIG. 1
3-D VIEW OF POWER CORD ROUTING
(UPPER ELECTRONIC DOOR NOT SHOWN)
(MONITOR NOT SHOWN)

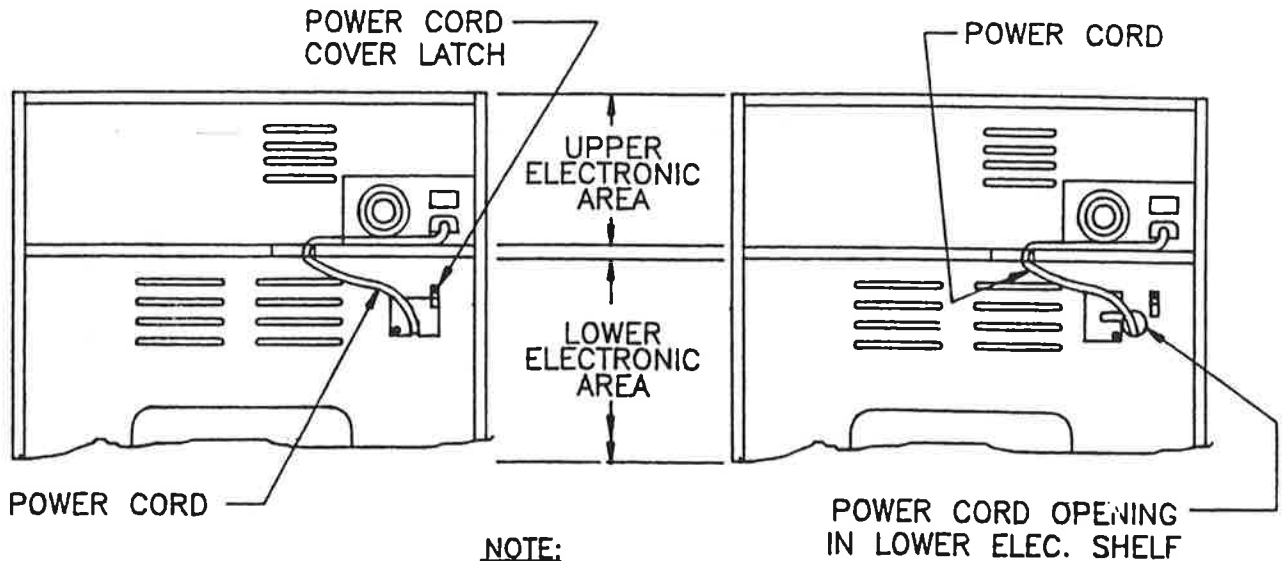


FIG. 2
FRONT VIEW OF POWER CORD
COVER IN CLOSED POSITION

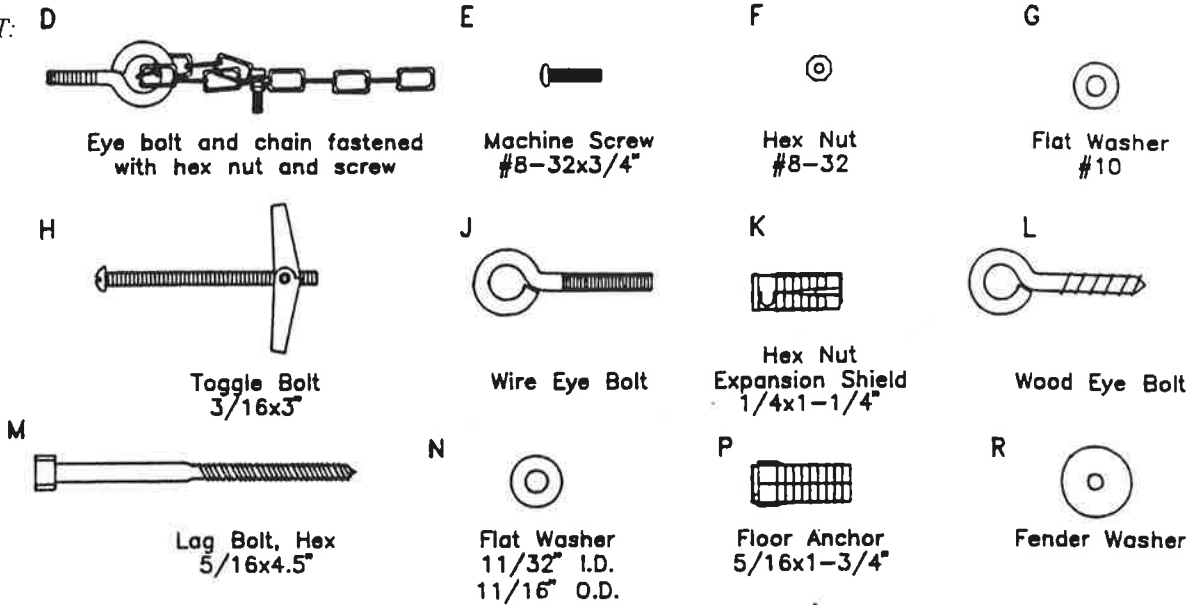
NOTE:
UPPER AND LOWER
ELECTRONIC DOOR, MONITOR
NOT SHOWN

FIG. 3
FRONT VIEW OF POWER CORD
COVER IN OPEN POSITION

Stability Assurance Kit Installation

Parts List & Tools Needed

PARTS LIST:



Installation Instructions

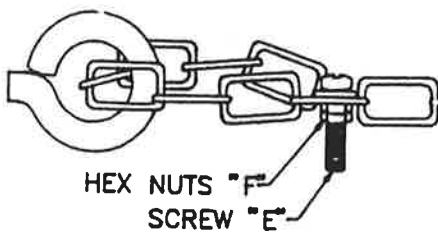
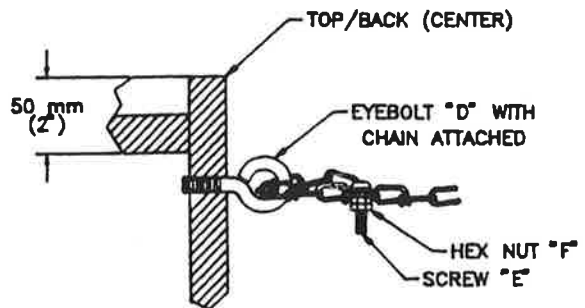
TOOLS NEEDED:

Measuring tape
 Small screwdriver (Phillips and Flathead)
 Pliers or Crescent wrench
 Drill with:
 1/2" bit to secure the game to a hollow wall
 1/2" masonry bit to secure the game to a concrete, brick, or stone wall.

Attachment of the Chain to the Wall:

Step 1: Fasten eye bolt and chain to the game.

- Screw the eye bolt with chain (D) into the insert on the upper back wall of the game.

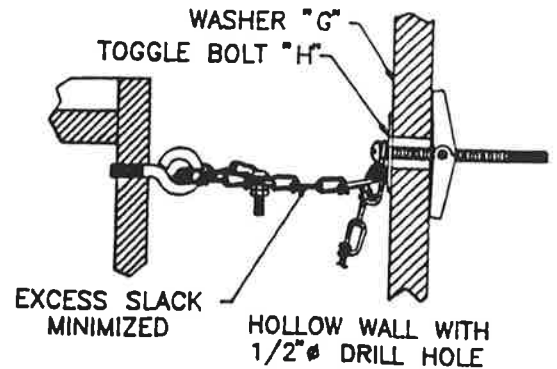


Stability Assurance Kit (Continued)

Step 2: Fasten to the wall according to the following instructions A, B, or C.

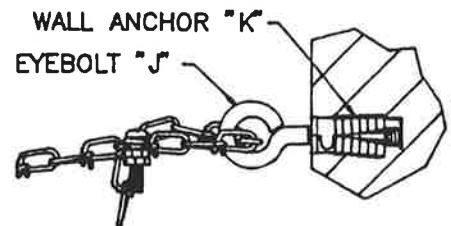
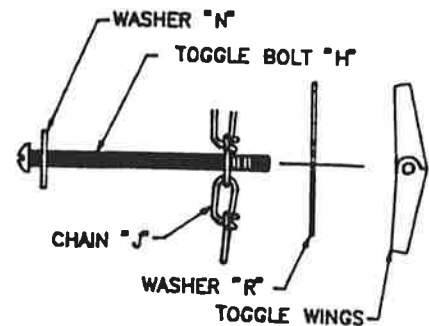
A. Hollow wall - plaster, drywall, etc.

1. With the game in the position where it will be played, mark a spot on the wall directly in line with the eye bolt and chain attachment on the back of the game.
2. Drill a 1/2" diameter hole at the marked spot.
3. Unscrew the wings from the toggle bolt (H).
4. Place a fender washer (R) on the toggle bolt.
5. Place the toggle bolt (H) through a loop in the chain a few inches from the end of the chain. The toggle bolt (H) may have to be threaded through the loop in the chain.
6. Slide a fender washer (R) on the toggle bolt (H) and screw the wings back on.
7. Push the toggle bolt (H) into the drilled hole in the wall.
8. Fasten the toggle bolt (H) tightly until the wings are snug against the back of the wall as shown. Keep the chain as taut as possible to minimize slack.



B. Concrete, brick, stone wall

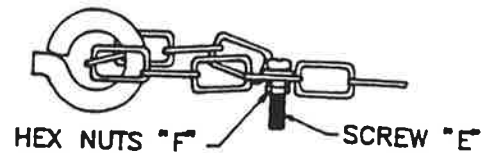
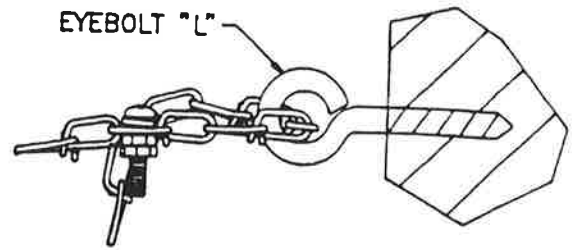
1. With the game in the position where it will be played, mark a spot on the wall directly in line with the eye bolt and chain attachment on the back of the game.
2. Drill a 1/2" diameter hole, 1-1/4" deep at the marked spot.
3. Pound the wall anchor (K) into the hole until it is flush with the wall surface.
4. Screw the eye bolt (J) into the wall anchor (K) until it is tight.
5. Thread the chain through the eye bolt and attach it to itself with the screw (E) and the two hex nuts (F) as shown. Keep the chain as taut as possible to minimize slack.



Stability Assurance Kit (Continued)

C. Wood Stud Mounting

1. With the game in the position where it will be played, mark a spot on the wall directly in line with the eye bolt and chain attachment on the back of the game.
2. Screw the eye bolt (L) into the stud at the marked spot.
3. Thread the chain through the eye bolt and attach it to itself with the screw (E) and the two hex nuts (F) as shown. Keep the chain as taut as possible to minimize slack.

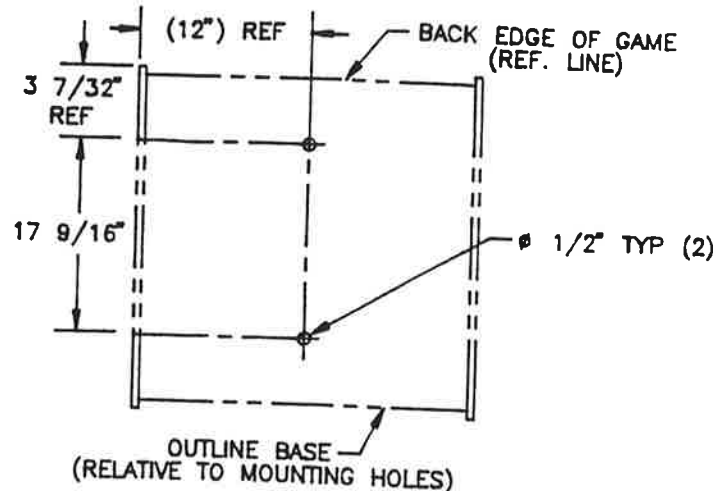


ATTACHMENT TO THE FLOOR:

Fasten to the floor according to the following instructions A or B.

Concrete floor

1. Mark two spots on the floor according to the diagram.
2. Drill the two holes at the marked spots 1/2" diameter X 1-3/4" deep each.
3. Pound in the floor anchors (P).
4. Align the holes in the base of the game with floor anchors (P).
5. Secure the game with the flat washers (N) and lag bolts (M).
6. Tighten the lag bolts until flush with the bottom of the counterbored holes in the base.

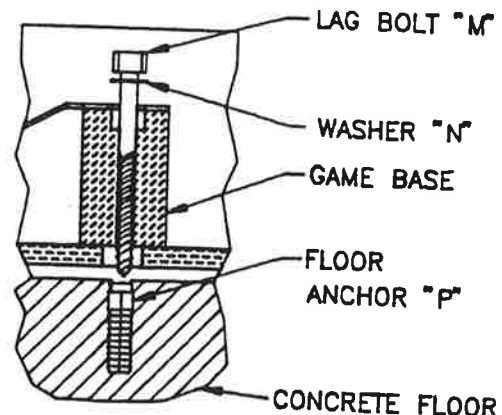


Wood floor

1. Position the game in its selected location.
2. Secure the game with the washers (N) and lag bolts (M).

NOTE:
If desired, a 1/8" diameter pilot hole maybe used to start the lag bolt.

3. Tighten the lag bolts (M) until flush with the bottom of the counterbored holes in the base.



GAME FEATURES

New and General Features

NEW: 14" Color VGA Monitor

The monitor is the "information source" on this game. Menus to choose game/options and set up league play appear on monitor with simple 3-button menu selection system. Scores, feats, and all game in progress graphics appear here as well.

NEW: League Interfacing Capability-

New features allow your Valley Dart Game to interface directly with New League Machine for Windows™ software over dial-up phone lines with a fax/modem, making league management more efficient. These features include:

Card Reader. (if equipped)

Card Reader can be used to identify league players, charge debit cards, and access bookkeeping, programming, and service modes of game. The Card Reader can be used to download league results to/from the game to a Personal Data Assistant (PDA) to the League Machine software.

FAX/Modem. (optional)

The IQ game can be connected to a FAX/modem to send and receive league data to and from League Machine for Windows™. The IQ game also can use a feature provided by your local phone company called, Caller ID. The IQ game software can be upgraded remotely using the modem in the IQ game and a computer with a modem.

Game To Game Communication.

When games are connected to each other in one location, this is called a Network. The games are connected by network cables (see Appendix B of this manual under Build Network Cables & Network Installation). This feature uses the network to send league data and software updates to all games in a location, to use debit cards, select game settings, ad screens and promotions, etc..

NEW: NDA ADA Handicapping.

Select either handicapping method for team play. Use NDA spot darts handicapping, or ADA points per dart handicapping. The following outlines each of the handicapping systems and when they are or are not available.

NDA

A method of handicapping set-by the National Dart Association

Available: *'01 Games*

all games (ie. 701)

all options (ie. Wipe-Out)

Cricket Games

all games (ie. Chanceft)

all options (ie. Cut Throat)

Not Available: *All Practice and Skill Games*

Shanghai / High Score / Low Score / Shave-it).

ADA Neutralizer

A method of handicapping set-by the American Dart Association

Available: *301 - Traditional Game only*

Straight Cricket Game only (Option=None)

Not Available: *All other '01 Games and Options*

All other Cricket Games and Options

All Practice and Skill Games

Shanghai / High Score / Low Score /Shave-it).

New and General Features (Continued)

Player Programmable Bull's-eye.

Players can choose either single or double bull's-eye scoring.

Games -

High Score, Low Score, Shanghai, 301, 501, 701, 901, and Cricket, Chance It Cricket, **NEW** You Pick It Cricket.

Options for 301/501/701/901-

Wipe Out™, Wipe Out 103™, Double In, Double Out, Double In/Double Out, Masters Out, Double In/Masters Out, and Team Play.

Options for Cricket -

Traditional, Cut-Throat, Mark21, **New** Limit 201, **New** Master Cricket, and Team Play.

Team Play

Permits 301, 501, 701, 901, and Cricket with all options.

League Play (requires LMW(League Machine for Windows™))

Permits 301 and 501 with options of: Any In/Any Out, Double In, Double Out, Masters Out. Cricket with options of: Any In/Any Out, and Limit 201.

ERNIE

Your favorite cyber competitor ERNIE is available for all games.

Note handicap play is not available in conjunction with ERNIE. ERNIE's price is programmable.

Feats Readout

Game Feats are displayed on the monitor and the Upper Display

Infrared Sensor

Detects player removing his/her darts from the target and automatically changes to the next player.

Tru-Score

Anti-Flighting Software and Missed Dart Detection.

Diddle Darts

12 darts are allowed to practice or to establish starting positions, after credits are deposited.

Programming Settings

Each game (including options) can be programmed for different Round Limits, Prices, and Bullseye Settings.

Bookkeeping

Allows the operator to keep a record of total credits collected and credits used per game.

Dormant Time Out

30 minute inactivity time ends game.

GAME FEATURES

New and General Features (Continued)

Sleep Mode (programmable)

The monitor goes into Sleep Mode to prevent image burning (etching) on the screen.

The monitor screen turns black. The target and dart alarm (if programmed) are active.

Sleep mode can be exited three ways: Coin Drop, Card Swipe, or when any button is pressed.

Sleep Mode can also be set manually.

To put the Game to sleep, press the *Red Button*, the *Blue Button* and the *Gray Button* at one time, hold them down and a Program Box will appear on the screen, press the *Select Button* at the same time (+ button press) and the game will go to sleep.

Screen Saver

The game displays random images to prevent screen burning.

The Screen Saver can be exited three ways: Coin Drop, Card Swipe, or when any button is pressed.

Delay time before screen saver is activated is programmable or can be turned off.

Tru-Score II

Your Valley Dart Game is equipped with an impact sensor to detect darts which bounce off the door or hit the Dart Catching Ring (DCR). The darts which do not hit the scoring area of the target are indicated by a short tone. By sensing all the darts which have been thrown, the game will alert the player to remove the darts



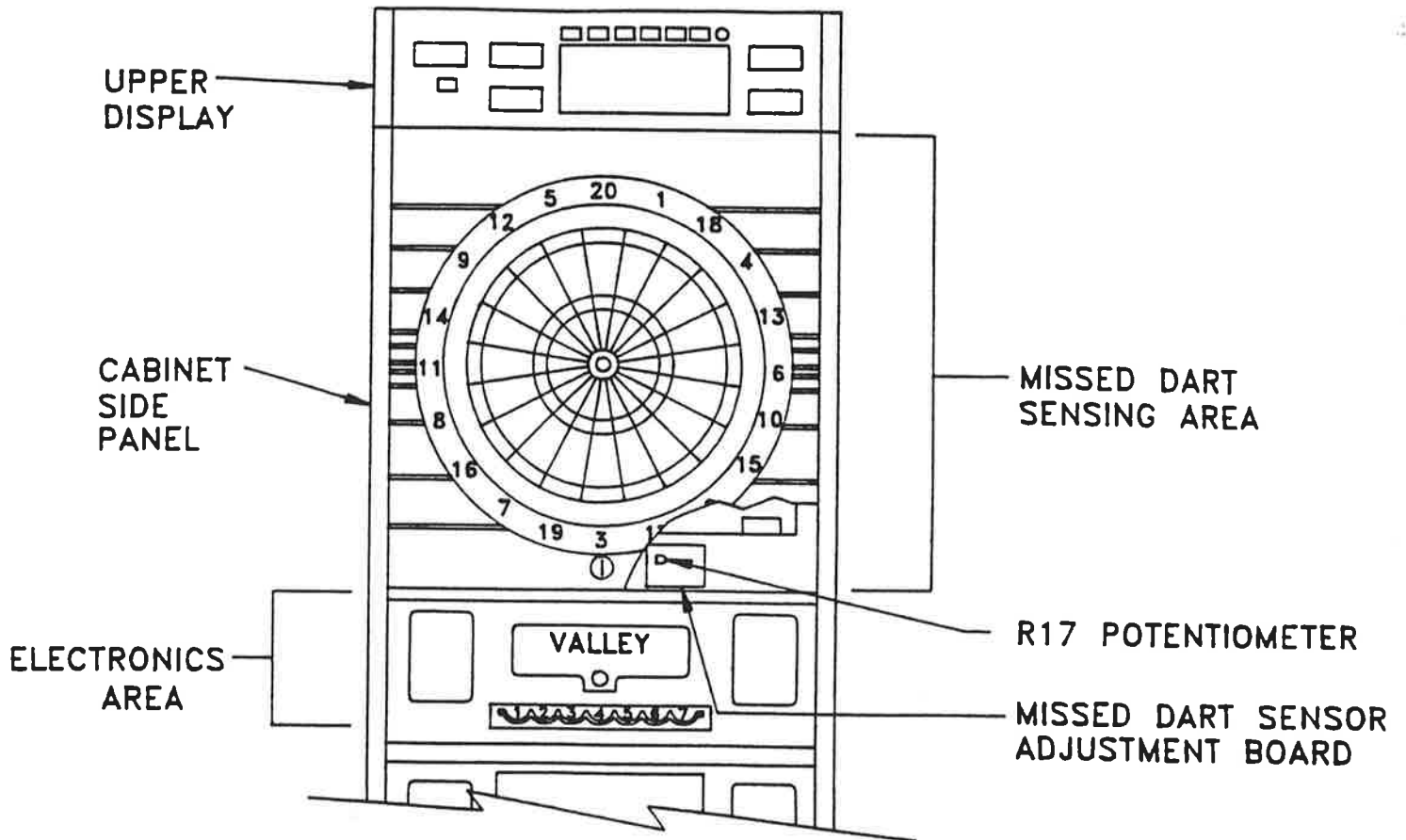
This feature is factory adjusted and ready to use. If further adjustments are necessary, refer to the Dart Sensor Adjustment Procedure in the Game Features Section of this manual.

GAME FEATURES

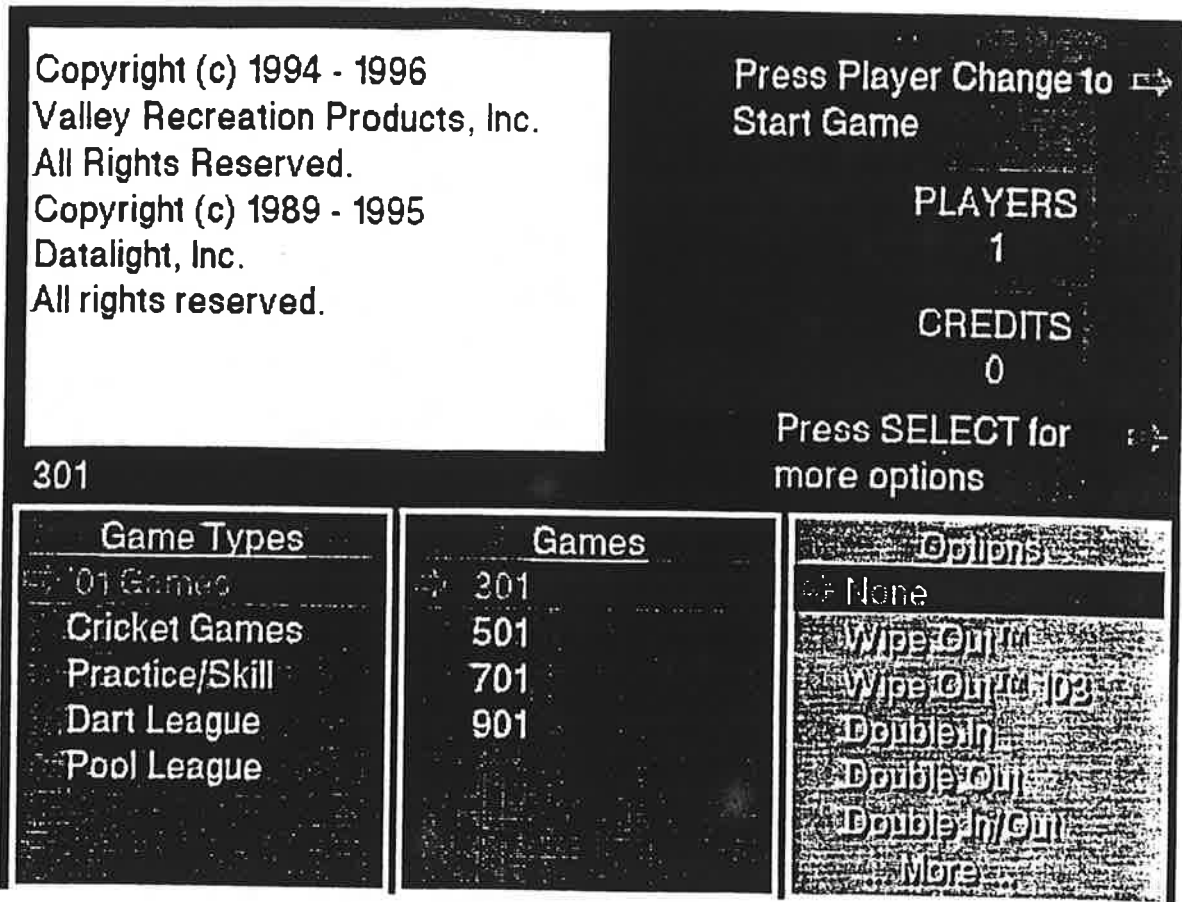
Infrared Motion Sensor

This dart game is equipped with an infrared sensor that detects a player removing his/her darts from the target. For games equipped with a Card Reader, the infrared sensor is integral to the Card Reader. The infrared sensor (IR) is in effect after 3 darts have hit the target or the door and have been detected by the Tru-Score II Impact Sensor.

Players do not need to push the *Player Change Button* as the game will sense the player's movement while removing the darts. However, if all darts have not been counted, such as when a dart misses the game completely or when Tru-Score II is disabled, the Infrared Motion Sensor will not change players, and it will be necessary to press the *Player Change Button*.



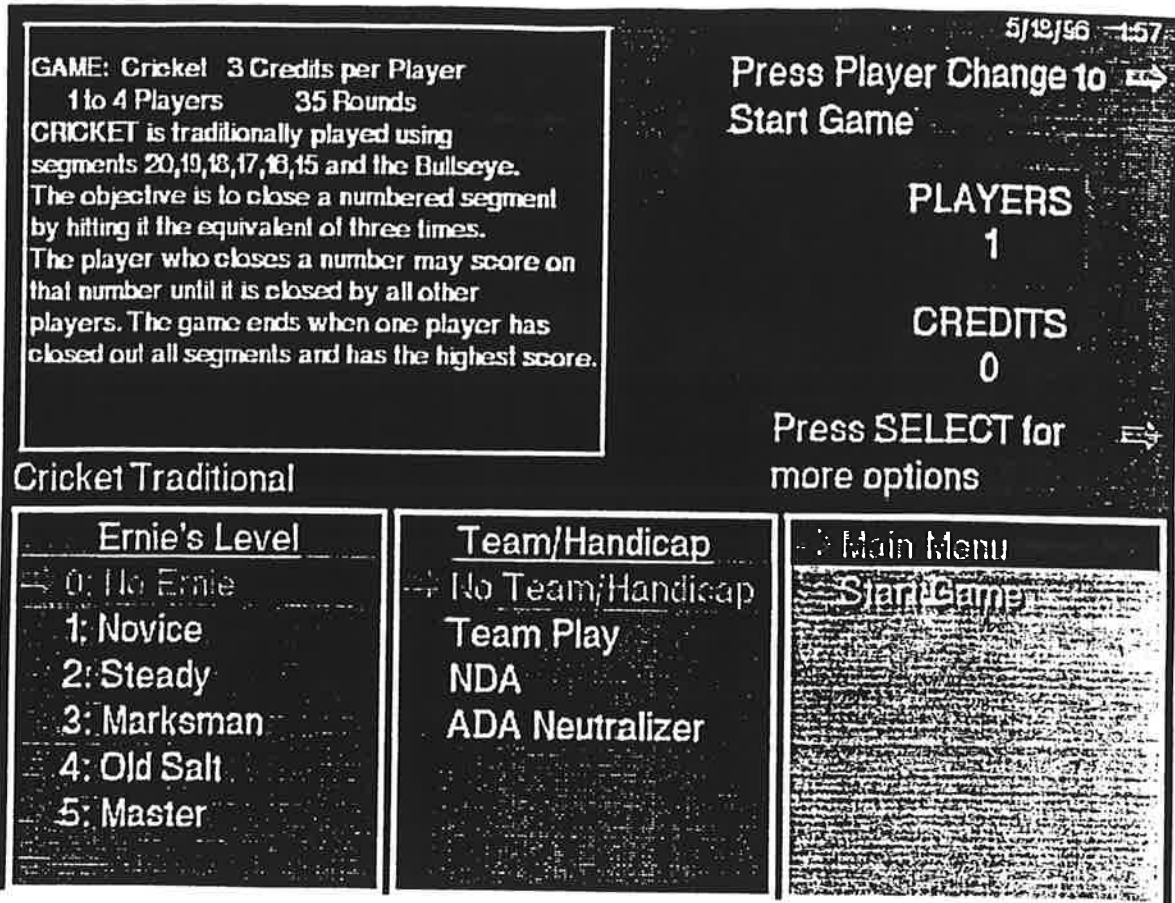
Quick Game Setup 



- A. The *Main Menu* consists of the red Game Types window, the blue Games window, and the gray Options window. To scroll through options in any window, press the corresponding red, blue, or gray button beneath the window. The options in the windows can be chosen by moving the lightbar to the desired selection (this is referred to in the rest of this manual as 'highlighting'). The games list in the blue window changes according to which game type is highlighted in the red window. In the same manor, the options list in the gray window changes according to what is highlighted in the blue window.
- B. The *Game Description Window* is the dark gray window in the upper left corner. All game descriptions, including the number of credits required per player, the maximum number of players, the maximum number of rounds, and the game instructions appear here when a game is highlighted. All game descriptions and options may be viewed using the 3 menu buttons. No coins are needed to browse through the game descriptions.
- C. The game and any options which are currently highlighted appear directly below the Game Description Window in the red, blue, and gray Windows.
- D. The *Player Window* indicates how many players have been activated.
- E. The *Credit Window* indicates how many credits are available for play.
- F. Press the *Select Button* for more options.

GAME PLAY SETUP

Quick Game Setup (Continued)



- G. This *Options Menu* consists of the red Ernie's Level window, the blue Team/Handicap window, and the gray Main Menu / Start Game window.
- H. Ernie's level (No Ernie through Master) can be selected by scrolling through the list. You may also choose to assign Ernie's starting position.
- I. Team play & Handicapping methods can be selected by scrolling through the list. The rules/options are explained in more detail under the Complete Step By Step Instructions.
- J. If satisfied with the selections made and all possibilities have been explored, start the game by highlighting the Start Game option in the gray option box.
- K. Press the *Select Button* to start the game.

Complete Step by Step Instructions**Main Menu.** 

- Select **Game Types** by scrolling through menu options using the *Red Button*.
- Select **Games** by scrolling through menu options using the *Blue Button*. Read the description of the game in the dark gray box in the upper left hand corner of the screen.
- Select **Options** by scrolling through menu options using the *Gray Button*.
- View prices located in the dark gray box in the upper left hand corner of the screen.
- Press the *Select Button* to view the Secondary Options Menu (Ernie or Team/Handicap).
- Insert correct number of coins for desired number of players.
- Press *Player Change Button* once. If in accumulative mode, press the *Player Change Button* once for each player.
- Press the *Select Button* to return to the Secondary Options Menu.

Secondary Options Menu. 

- Press the *Red Button* to scroll through the menu options and select Ernie's Level. If a skill level for Ernie has been highlighted, the blue window will display a menu for Ernie's Position. Choose from LAST, 1st, 2nd, or 3rd.
- Press the *Select Button* and return to the Secondary Options Menu.

Handicapping.

- The NDA tracks rounds as well as darts. Round 0 is considered the handicap round meaning if you are entitled to a handicap round, you would throw it in Round 0.

Team/Handicap Play. 

- Press the *Blue Button* to scroll through the menu options and select Team/Handicap.
- Press the *Blue Button* to scroll through the menu options and select Team Play. Players 1 & 3 are one team and players 2 & 4 are the other.

NDA Handicapping. 

- Press the *Blue Button* to scroll through the screen options and select NDA HANDICAPPING. Press the *Gray Button* to scroll through the options and select Set Up Handicap in gray window. Press the *Select Button* to set up handicap.
1. The Red window will display one player. Press the *Player Change Button* enter the number of players wanted (Example: 1, 2, 3, 4). Highlight desired player using the *Red Button*.
 2. Blue window will list spot dart choices (None, 1, 2, 3). Highlight your choice and press the *Select Button* to enter. The spot dart information will be displayed in the dark gray box in the upper left corner of the screen and the next player will automatically be highlighted.
 3. Repeat steps one and two until all player handicaps are set up.
 4. When all player's handicaps have been entered and there are enough credits to start a game, choose Start Game from the gray menu box using the *Gray Button*. If the Main Menu option is selected, all handicapping information will be cleared.

NOTE:

The game will start with the handicap round as round 0 in Upper Display

GAME PLAY SETUP

Complete Step by Step Instructions (Continued)

ADA Neutralizer

- Select **ADA NEUTRALIZER** by scrolling through menu options using the *Blue Button* (Available only for 4 Player 2 position Cricket no options and 2 Player 301 no options). Next, select *Set Up Handicap* in gray window, and press the *Select Button* to set up handicap.
 1. Select the player to be handicapped from the red window.
 2. The blue window will list the Points Per Dart (PPD) average options
 3. The gray window will still list *SETUP HANDICAP*, *MAIN MENU* and *START GAME*..
 4. Highlight *SETUP HANDICAP* and press the *Select Button*..
 5. The *POINTS PER DART* Screen will appear. Follow instructions on the screen.
 6. Repeat the process for all players and handicap. The game description window will list all players and their assigned handicaps. If changes are needed, highlight the player in the red window, and re-enter PPD Average value.
 7. When all player's handicaps have been entered and there are enough credits to start a game, choose *Start Game* from the gray menu box. If the *Main Menu* option is selected, all handicapping information will be cleared.

Start of Game Play.

While the Blue game screen is displayed and before the first dart is thrown, these options are available:

1. Ernie can throw for an absent player (except in the handicap round).
2. Escape back to the Main Menu by pressing the *Blue Button*. Returning to the main menu will clear all previously chosen options.
3. You can change the Bullseye setting. A solid blue circle indicates a single bullseye (both inner bull and outer bull are worth 50 points). A red circle inside of the blue circle indicates a double bullseye (inner bull is 50 points, outer bull is 25 points). This can be changed by pressing the gray button before throwing the first dart.
4. Throw the first dart to start the game.

NOTE:

Some game options in Leagues, have pre-set bull'seye values that cannot be changed.

After each turn, the player can remove the darts. If the Infrared Motion Sensor is engaged the monitor will read *REMOVE DARTS* until the player moves away from the game. The game will automatically change players. When the *DON'T THROW* message disappears, the next player may throw.

NOTE:

If all darts have not registered, the player must press *Player Change* before removing darts.

Complete Step by Step Instructions (Continued)

End of Game Play.

- A feat screen is displayed on the monitor at the end of the game for a short period.
- The feats will be shown for up to two minutes.
- If credits remain or are added during feats readout, a new game with the same setup may be started by pressing the *Select Button* or the *Player Change Button* before the feat screen times out. Press the *Red Button* and return to the menu.
- In addition, the upper display will also show Marks Per Round (Cricket) and Points Per Round and Points Per Dart (01 games) in the Temporary Score and Player LEDS.

GAME FEATS

'01 Game Feats

Game Winner	PLAYER 3			
Assist To	PLAYER 1			
Player Names	PLAYER 1	PLAYER 2	PLAYER 3	PLAYER 4
Points/Round	39.3	41.6	45.0	45.0
Points/Dart	15.1	15.5	21.5	18.6
Hat Trick	0	0	0	0
TON	0	0	0	0
Wipe Outs	0	0	0	0
Total Darts	16	13	14	10

Main Menu
Press SELECT or PLAYER CHANGE to start a new game with the same setup.
Next Page

'01 GAME FEATS

6Th. Dart out (301)	A win in 6 darts	Assist	An assist while playing "Team"
7Th. Dart out (301)	A win in 7 darts	Hat Trick	3 Bullseyes in one turn
8Th. Dart out (301)	A win in 8 darts	TON	A score of 100 to 150 in one turn
9Th. Dart out (301/501)	A win in 9 darts	High TON	A score of 151 or greater in one turn
10th Dart out (501)	A win in 10 darts	Total number of Darts Thrown	Number of Darts thrown during the Game.
11th Dart out (501)	A win in 11 darts	Wipe Outs	someone wipes out your score
12th Dart out (501)	A win in 12 darts		
4Th. Round out (301)	A win in the 4th round		
5th Round out (501)	A win in the 5th round		

NOTE:
 A "bust" situation cancels any feat obtained in that player's round.
 The Hat Trick can be accomplished on an inner or an outer Bull's-eye.

Cricket Feats

Game Winner	PLAYER 4			
Assist To	PLAYER 2			
Player Name	PLAYER 1	PLAYER 2	PLAYER 3	PLAYER 4
Marks per Round	1.2	1.4	1.6	3.4
Hat Trick	0	1	0	0
White Horse	0	0	0	0
8 Mark	0	0	0	0
9 Mark	0	0	0	0
WIN	0	0	0	0

Main Menu
Press SELECT or PLAYER CHANGE to start a new game with the same setup.
Next Page

CRICKET FEATS

Marks per Round	Average marks per round.	8 Mark	8 marks in one round
WIN	Winning the Game.	7 Mark	7 marks in one round
Assist	An Assist while playing 'team' with a partner.	6 Mark	6 marks in one round
8 Dart Out	A Win in 8 darts.	5 Mark	5 marks in one round
9 Dart Out	A Win in 9 darts	White Horse	Marking 3 different unmarked triples in one round
9 Mark	9 marks in one round	Hat Trick	Marking 3 Bulls eyes in one round

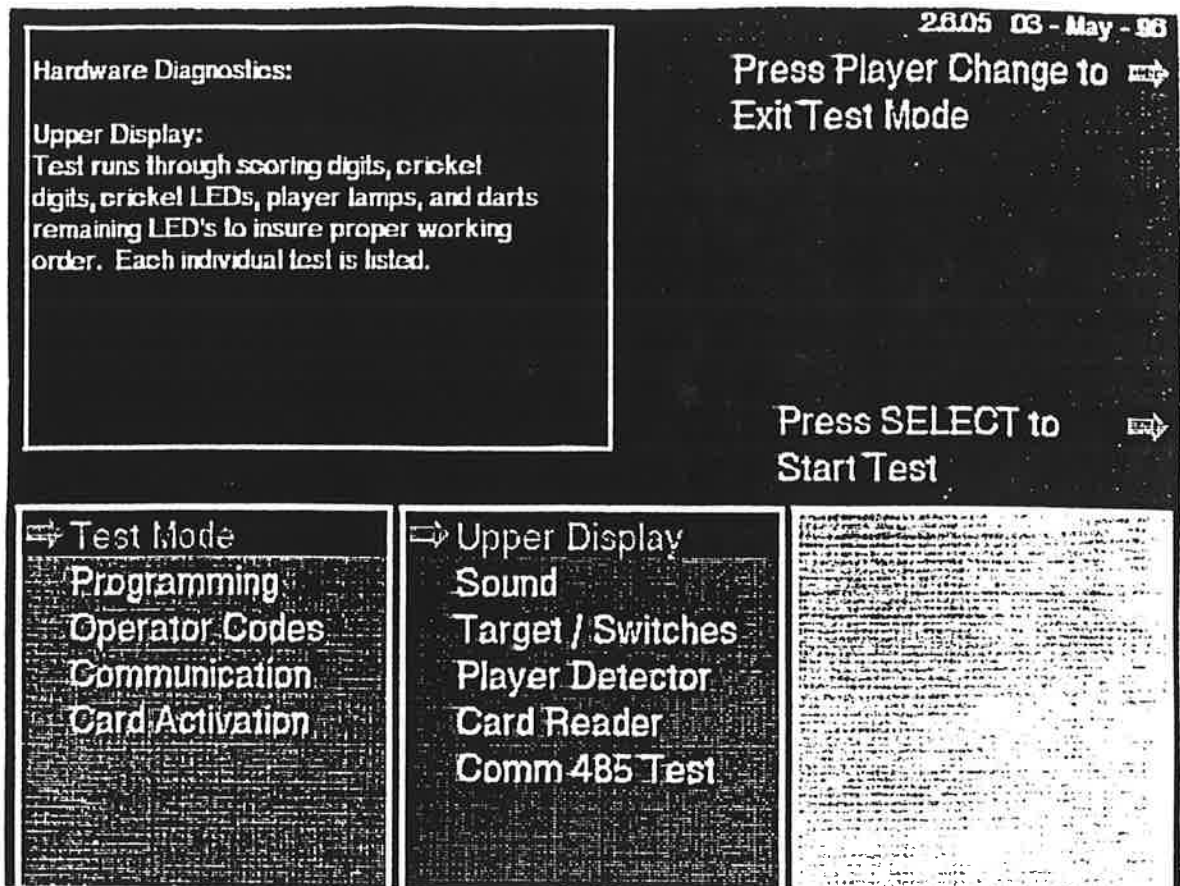
NOTE:
Darts thrown which hit numbered segments closed by all players do not count as marks.

SERVICE MODE

Test Mode

The SERVICE MODE is the section of the dart game software that allows you to maintain, setup, and send manual transmissions. This mode can be entered two different ways.

1. Swipe the Master Service Card through the Card Reader.
2. There are two push button switches located on the Controller Board. Press the *Test Button*.



A Service Mode Menu will appear in the red window. Press the *Red Button* to highlight the desired selection.


Press the *Red Button* to scroll through the options and select **Test Mode**.

Press the *Red Button* to scroll through the options and select **Programming**.

Press the *Red Button* to scroll through the options and select **Operator Code**.

Press the *Red Button* to scroll through the options and select **Communications**.

Press the *Red Button* to scroll through the options and select **Card Activation**.

Test Mode (Continued) 

Each game has built-in diagnostic software. The scope of this software is to test the electronic hardware, verify that the game is functioning properly, indicate problem areas, and set player and dart detection sensors.

While Test Mode is highlighted in the red window, a menu of diagnostic tests will appear in the blue window. Using the *Blue Button* highlight a test, then a description of that test and its usage is described in the gray information box in the upper left hand corner of the screen.

• Upper Display	(if installed)
• Sound	
• Target/Switches	
• Player Detector	(integrated into Card Reader)
• Comm 485 Test	(to test networking between games)
• Card Reader	(if installed)

Once the appropriate test has been selected press the *Select Button* to start the test. Press the the *Player Change Button* to exit a test in progress. The following is a list of the diagnostic tests and a description of the test.

Upper Display Test (if installed)

This test runs through all upper display LEDs and lamps. The tests are performed in the following order: Seven Segment Test (all of the numbers), Cricket LEDs, Bullseye LEDs, Dart LEDs, and Player lamps. Now, the game turns on all of the lamps, to allow for a marquee alignment check (press player change to exit or wait approximately 20 seconds). Next the game will turn on all of the LEDs to check the marquee alignment (press player change to exit or wait approximately 20 seconds). Each test is individually displayed on the monitor.

Sound Test

This test checks the sound level of tunes, sound effects, and the dart alarm. It also allows you to adjust volume level of the main volume (sound effects & tunes) and the dart alarm separately. Use gray button to choose from Main Volume or Alarm Volume. During this test the gray button will increase the volume and the red button will decrease the volume. The current volume setting will be stored when the test is ended for both main and alarm volumes.

Target/Switches Test

This test is used to test the Target. It checks each target segment for accurate scoring, the Tru-Score II Missed Dart Sensor for sensitivity, and the front panel buttons and the coin switches for correct operation.

Player Detector Test

This test checks the Automatic Player Change Detector. The Detector is a Passive Infrared Detector located in the Card Reader. The Monitor will display "IR Detects Nothing!" or "IR Detecting Movement!" if motion is detected or not. The sensor is not adjustable, and detects as heat source in motion. If the IQ game is not equipped with a Card Reader, the sensor is located near the over head lamp, it is adjustable, and detects an object in it sight range.

Card Reader Test (if installed)

This tests the barcode reader's ability to detect and read barcode cards and magstripe cards as they are swiped through the reader. The data encoded on each card will be displayed on the monitor and should match the number / characters printed on the card. The Card Number will appear on screen to verify proper working order.

Comm 485 Test

This test the RS485 communications link between games. This test is for ONLY for IQ games connected together by network cables at one location. When this test is invoked on a game on a network, the other games on the network will indicate on their monitor the receipt of the test message on the network.

Programming Mode**To Enter Programming Mode:** 

Press the *Red Button* to scroll through test mode options. Highlight Programming. The blue window will display the following programming options:

Setup Games	Setup Features
One Step	Setup Ernie
Language	Setup Time & Date
Coin Channel	Set Window Times

Press the *Blue Button* to highlight an option in the blue window.
Press the *Select Button*.

If changes were made to a game on a network, Ernie will say
"You have made changes to your seup. Do you wish to update the games on the Network?"

Press the *Red Button* to select NO.
Press the *Gray Button* to select YES.
Press the *Select Button*.

Setup Games:

Change the number of credits per game, the bull's-eye default setting, and the round limit for all games and variations. Bookkeeping data can be viewed and cleared.

One Step	Return most game settings to factory defaults. <i>See Appendix A in this manual for a complete list of factory default settings.</i>
Language	Select the primary language of the game.
Coin Channel	Set the number of credits per coin inserted, and keep track of the number of coins dropped through each channel. Debit card information is also displayed.
Setup Features	Change operation of features controlled by the dip- switches in previous models.
Setup Ernie	Set ERNIE'S cost, skill level (when playing for an absent player), and view the number of games ERNIE has played.
Set Time and Date	Set the time and date.
Set Window Times	Set the time windows for the use of communications and the Sleep Mode. Sets window start and stop times.

Programming Mode (Continued)

Setup Games

Press the *Gray Button* to see more options. There are six pages of options:
301, 501, 701, 901, Cricket, and Cricket game variations.

Press the *Red Button* (Grid Up).

Press the *Blue Button* (Grid Down) to move the green highlight to the
setting that needs to be changed.

Press the *Select Button* (the green highlight will now turn blue to indicate edit mode).

Press the *Red Button* (Increase Value) or press the *Blue Button* (Decrease Value) to
change the value.

Press the *Gray Button* (Advance) to save the value and move to the next cell on the grid.

Press the *Select Button* to save all changed values.

Press the *Player Change Button* to exit.

An option to clear Bookkeeping Counters will appear.

Press the *Red Button* to highlight **Clear**, if you want to clear the Bookkeeping Counters.

Press the *Gray Button* to highlight **Don't Clear**, if you do not want to clear the Bookkeeping Counters.

Press the *Select Button* to accept your selection.

If changes were made and the game is on a network, Ernie will say

“You have made changes to your setup. Do you wish to update the games on the Network?”

Press the *Red Button* to highlight **NO**.

Press the *Gray Button* to highlight **YES**.

Press the *Select Button* to accept your selections and return to programming mode.

One Step Programming

This option returns the game to *Factory Settings* **NOT** including *Security Codes*, *Operator Codes* and items marked with an asterisk in Appendix A.

Press the *Blue Button* to select **One Step** in the blue window.

Press the *Gray Button* to select **Factory Default** in gray window.

The screen will Caution you with a warning:



CAUTION:

This feature resets the game to original FACTORY DEFAULT settings.

Press the *Gray Button* to re-highlight *Factory Default* in the gray window.

Press the *Select Button*.

Press the *Gray Button* to highlight *Current Settings*, to keep the current settings.

Press the *Select Button*.

Programming Mode (Continued)

If changes were made to a game on a network, Ernie will say
 "You have made changes to your setup. Do you wish to update the games on the Network?"

Press the *Red Button* to highlight NO.
 Press the *Gray Button* to highlight YES.
 Press the *Select Button* to accept your selection.

Language Programming 

- While **Language** is highlighted in the blue window, press the *Gray Button* to highlight a language listed in the gray window. (The languages available depend upon the version of software.)
- Press the *Select Button* to choose the highlighted language.
- If changes were made to a game on a network, Ernie will say "You have made changes to your setup. Do you wish to update the games on the Network?"
 - Press the *Red Button* to highlight NO.
 - Press the *Gray Button* to highlight YES.
 - Press the *Select Button* to accept your selection.

Coin Channel 

- Channel 1 is the left slot, Channel 2 is the right slot.
- Press the *Blue Button* (**Grid Down**) to scroll through the Credits Given per channel and the Channel Value per coin.
- Press the *Select Button* to change the values.
- Use the *Red Button* to **Increase Value** and the *Blue Button* to **Decrease Value**.
- Press *Gray Button* to **Accept** the value for that location and move to the next location.
- Press the *Select Button* to accept all of the entered values.
- Press the *Player Change Button* to exit the **Coin Channel** programming.
- An option to clear coin channel counters settings will appear.
 - Press the *Red Button* to highlight **Clear** or press the *Gray Button* to choose **Don't Clear**.
 - Press the *Select Button* to accept your selections.
 - The screen will return to Service Mode menu.
- If changes were made to a game on a network, Ernie will say "You have made changes to your setup. Do you wish to update the games on the Network?"
 - Press the *Red Button* to select NO.
 - Press the *Gray Button* to select YES.
 - Press the *Select Button* to accept your selections.

Setup Features 

- Press the *Red Button* (**Grid Up**) and the *Blue Button* (**Grid Down**) to scroll through Features.
- Use the *Gray Button* (**Next Page**) to see more features.
- To change a feature:

Programming Mode (Continued)

- Press the *Player Change Button* to exit feature programming.
- If changes were made to a game on a network, Ernie will say "You have made changes to your setup. Do you wish to update the games on the Network?"
 - Press the *Red Button* to highlight NO.
 - Press the *Gray Button* to highlight YES.
 - Press the *Select Button* to accept your selections.

The following Features are available on page 1 of 3 (as shown on the monitor):

Accumulative Mode.

- Enabled: Game will default to one player per any number of credits.
- Disabled: Game will match number of players to number of credits.

Attract Sounds.

- Enabled: Game will use attract sounds during an idle period.
- Disabled: Game remains silent.

Dart Alarm.

- Enabled: Game alarm sounds when dart is thrown at game without credits.
- Disabled: Game will not sound alarm.

Power Fail.

- Enabled: Will return to game in progress if power failure occurs.
- Disabled: Game automatically resets if power failure occurs.

One Dart Out.

- Enabled: Game displays the segment(s) to hit in order to win in 1 dart.
- Disabled: No display occurs.

Counts 3 Darts Per Round.

- Enabled: Game automatically counts 3 darts per round except in handicapping, busting, and winning rounds.
- Disabled: Game only counts darts registered by the target or the dart sensor.

Single Bull Double In.

- Enabled: Game allows Double In 01 games to start on single 50 point bull's-eye.
- Disabled: Game will not allow bullseye to start Double In games.

Frozen Team Loss.

- Enabled: Team loses game, if player is frozen and reaches "0."
- Disabled: Player busts, if frozen and reaches "0." Game continues.

Free Play.

- Enabled: Game needs no coins to play.
- Disabled: Game requires coins.

Programming Mode (Continued)**Skip Frozen Cricket Player (team play).**

- Enabled: Game automatically skips player who is unable to score or mark.
 Disabled: Game does not automatically skip player who is unable to score or mark.

The following Features are available on page 2 of 3 (as shown on the monitor):

Demonstration Mode (used for Setup and Test ONLY).

- Enabled: Game allows operator to test functionality of communication processes using pre-installed sample database.
 Disabled: Game communications operate normally.

Modem Auto Answer.

- Enabled: Game can receive data via modem from League Machine for Windows™ software.
 Disabled: Game cannot receive data via modem.

Rings Before Answer.

- Default: 8 rings.
 Range: 2 - 10 rings.

IR/PIR Motion Sensor.

- Enabled: IR/PIR detect movement of players and changes players automatically.
 Disabled: Game requires manual player change.

Allow Change of Starting Position for Teams.

- Enabled: Game allows change of starting position.
 Disabled: Game will always start at Player 1.

Automatic League Data Send.

- Enabled: Game can send match results via modem at a predetermined time.
 Disabled: Game can only send results manually.

Fax: Output Format.

- Full Visual: Feats Scoresheet format for verification by players and ORC.
 OCR only: Coded format for use by League Machine for Windows™.

Fax: Minutes between Retries.

- Default: 1 minute
 Range: 1 - 10 minutes. A 0 setting causes an immediate retry.

Fax: Number of Retries.

- Default: 2 minutes
 Range: 1 - 10 minutes. An OFF (0) setting disables the Fax Retries.

Screen Saver Delay.

- Default: 6 minutes
 Range: 2 - 60 minutes. An OFF (0) setting disables the Screen Saver.

The following Features are available on page 3 of 3 (as shown on the monitor):

Ernie's Dart Path.

- Default: Display Tracer Dart.
 Option: Normal Dart Animation.

SERVICE MODE

Programming Mode (Continued)

Upper display Installed .

- Yes: Places Upper Display Test Option in the Test Mode Menu Selection.
No: Removes the Upper Display Test Option from the Test Mode Menu Selection.

Advertising Images.

- Enabled: Displays advertising images between player changes.
Disabled: Does not display advertising images between player changes.

Play Audio Files.

- Enabled: Plays audio files.
Disabled: Does not play audio files.
-

Setup ERNIE



- Press the *Blue Button* to highlight **Setup Ernie** in the blue window.
Press the *Select Button* to accept your selection.
- Press the *Select Button* to change Ernie's Cost and Play For Me Skill Level.
 - Press the *Red Button* to Increase Value.
 - Press the *Blue Button* to Decrease Value.
 - Press the *Gray Button (Accept)* to alternate between Ernie's Cost and Play For Me Skill Level.
 - Press the *Select Button* to save the changes.
 - Press the *Player Change Button* to exit.
- Clear Ernie Statistics. The game will ask if the statistics should be cleared.
Press the *Gray Button* to highlight CLEAR .
Press the *Select Button* to exit.
- If changes were made to a game on a network, Ernie will say
"You have made changes to your setup. Do you wish to update the games on the Network?"
Press the *Red Button* to highlight NO.
Press the *Gray Button* to highlight YES.
Press the *Select Button* to accept your selections.

Set Time & Date



- Press the *Blue Button* to highlight **Set Time & Date** in blue window.
Press the *Select Button* to accept.
- Use the *Blue Button (Grid Down)* to scroll through date and time options.
Highlight the value you want to change.
Press the *Select Button* to accept the change.
- Use the *Red Button* to Increase Value and *Blue Button* to Decrease Value.
Press the *Gray Button* to accept and advance to next grid.
Press the *Player Change Button* to exit.

Programming Mode (Continued)

- If changes were made to a game on a network, Ernie will say "You have made changes to your setup. Do you wish to update the Time and Date on the other games on the Network?"
 - Press the *Red Button* to highlight **NO**.
 - Press the *Gray button* to highlight **YES**.
 - Press the *Select Button* to accept your selections.

Set Window Times 

- Communications Stop and Start times can be set along with Sleep Mode On or Off.
- Press the *Blue Button* to highlight Set Window Times in blue window.
Press the *Select Button* to accept.
- Press the Blue Button (Grid Down) to highlight the value to be changed.
Press the *Select Button* to accept.
- An entry screen will appear.
 - Press the *Red Button* to Increment.
 - Press the *Blue Button* to Decrement.
 - Press the *Gray Button* (Grid Down) to advance to next grid.
 - Press the *Player Change Button* to exit.
- Perform these steps until all times are set.

**CAUTION**

DO NOT set a stop time earlier than the start time.
This will cause the Game to answer all calls for up to
24 hours. A one to two hour time frame is usually sufficient.

Operator Codes Mode

To Change Operator Codes:

- Press the *Red Button* to highlight Operator Codes in the red window. Press the *Select Button* to accept.
- Choose from the following options:

Operator Security Codes	Allows you to enter a 1 to 4 digit security code. The Factory Default Code is four zeros (0000).
Operator Identification Code	Allows you to enter a 2 digit ID code to appear on all barcode cards. The game must have an Operator ID Code (assigned by the Valley Service Department) in order to use Debit Cards.
Machine Identification Code	Allows you to assign a machine ID number to all machines in a particular location. This number appears on all league data faxed or sent by modem out of the game.
Peripheral Identification	This allows you to assign an identification number to all attached peripherals.

- Use the *Red Button* (Grid Up) and the *Blue Button* (Grid Down) to scroll through the options.

To Change Operator Security Code:

- Press the *Red Button* (Grid Up) and the *Blue Button* (Grid Down) to highlight the Operator Security Code. Press the *Select Button* to accept and an entry screen will appear.
- The Factory Default Operator Security Code is four zeros (0000).
- Press the *Red Button* (Previous Number) and the *Blue Button* (Next Number) to enter a new 4 digit security code. Press the *Gray Button* to accept the number highlighted or press the *Player Change Button* to exit without saving the changes. Press the *Select Button* to accept your selections.



CAUTION:

- Pick 4 easy to remember numbers. The game will prompt you for the security code every time you enter the Programming Mode. There is no way to get back into the Programming Mode if you forget the numbers.

Operator Codes Mode (Continued)

It would be a good idea to record these numbers in a safe place.

To Change Operator Identification Code:   (Supplied by the Valley Service Department)

- The game must have an Operator Identification Code in order to use Debit Cards.
- Press the *Red Button*(Grid Up) and the *Blue Button* (Grid Down) to highlight Operator Identification Code.
- Press the *Select Button*. An entry screen will appear.
- Enter the new 2 digit Operator Identification Code that was received from the Valley Service Department by using the *Red Button* (Previous Character) and the *Blue Button* (Next Character).
- Press the *Gray Button* to accept the highlighted letter or press the *Player Change Button* to exit without saving the changes.
- Press the *Select Button* to accept your selections.
- If changes were made to a game on a network, Ernie will say "You have made changes to your setup. Do you wish to update the games on the Network?"

Press the *Red Button* to highlight NO.
 Press the *Gray Button* to highlight YES.
 Press the *Select Button* to accept your selections..

To Change Machine Identification Number: 

- Highlight Machine Identification Number Code by using the *Red Button* (Grid Up) and the *Blue Button* (Grid Down).
- The default Machine Identification Number is the Serial Number of the game, and it is strongly recommended that it not be changed.
- Press the *Select Button*. An entry screen will appear.
- Enter a Machine Identification Number (up to 8 digits) using the *Red Button* (Previous Number) and the *Blue Button* (Next Number).
- Press the *Gray Button* to accept the highlighted number or press the *Player Change Button* to exit without saving changes.
- Press the Select Button.

To Change Peripheral Identification Number: 

- Press the *Red Button*(Grid Up) and the *Blue Button* (Grid Down) to highlight Peripheral Identification Code.
- Press the *Select Button*. An entry screen will appear.
- Enter new Machine Identification Number (up to 9 digits) using the *Red Button* (Previous Number) and the *Blue Button* (Next Number).
- Press the *Gray Button* to accept highlighted number then press the *Select Button* or press the *Player Change Button* to exit without saving changes.

Communications Mode

League Machine For Windows & Network

The Communications Mode has two purposes. The first is for transferring league rosters and results to and from League Machine for Windows™. The second is to update programs on the IQ network in a location. The descriptions listed below are brief. later in this section is a more detailed description of the purpose of each function.

To Enter Communications Mode

Press the *Red Button* to highlight Communications in the red window.
A list will appear in the blue window. Below is a brief description of the choices.

PDA Send to IQ	For transferring league information from the Personal Data Assistant (PDA) to the IQ game. (Hand Held Computer)
IQ Send to PDA	For transferring League match results from the IQ game to the Personal Data Assistant (PDA).
Match Send	For immediate transmission of league data (match results).
Send Roster	Transmission of league team and roster information to other IQ games networked at a location.
Setup Numbers	To setup IQ game for automatic transmission (phone numbers, start and stop transmit times, and fax polling).
Send Program	Transmission of IQ software from one programmed game to the other IQ games networked together at a location.

Highlight one of the choices using the *Blue Button*.
Press the *Select Button* to start.



Contact The Valley Recreation Products Service Department, at **1 800 331-5420** for assistance with PDA setup. Before calling make sure you have the manufacturer and model number of the PDA purchased.

PDA Send to IQ

This selection is used for transferring: League, Team, and Player Roster Information from the PDA to the IQ game for League Play.

Press the *Blue Button* to highlight PDA Send to IQ in the blue window.
Press the *Select Button* to accept your selection.
Ernie will ask you to select **Receive** or **Cancel**.
Press the *Gray Button* to cancel.
Press the *Red Button* (Receive) to continue with the transmission.

Communications Mode (Continued)

Line up PDA Infrared transmitter (see PDA instructions under Appendix B (League Data Transfer) for location of transmitter)) with the square window near the top of the IQ Card Reader.

Press the *Select Button* to begin transmitting data.

Once the connection for the PDA to the IQ is established DO NOT MOVE THE PDA.

Hold it very steady until the transmission is complete.

The dark gray description box (in the upper left hand corner) will turn blue and will read:

Card Reader Model XXX

Receiving Roster File

Beginning d:\roster.wiz

...

The IQ monitor will show the status of the transmission, and will report when the transmission is complete. When the status box disappears from the IQ monitor, turn the PDA off.

To check the league data in the IQ Game, return to the Main Menu.

Press the *Red Button* to highlight LEAGUE PLAY in the red window.

Transmitted league data (leagues and teams) will appear in blue and gray Windows.

IQ Send to PDA

This selection is used for transferring Match Information.

Press the *Blue Button* to highlight IQ Send to PDA in the blue window.

Press the *Select Button*.

Ernie will ask you to select Send or Cancel.

Press the *Gray Button* to cancel.

Press the *Red Button* to highlight RECEIVE and continue with the transmission.



Line up PDA Infrared transmitter (see PDA instructions for location of transmitter in Appendix B of this manual) with the square window near the top of the IQ card reader.

Press the *Select Button* to begin transmitting data.

Once the connection for the IQ to the PDA is established DO NOT MOVE THE PDA.

Hold it very steady until the transmission is complete.

The dark gray description box (in the upper left hand corner) will turn blue and will read:

Card Reader Model XXX

Beginning d:\matches.wiz

The IQ monitor shows the status of the transmission, and reports when transmission is complete. When status box disappears from IQ monitor, turn the PDA off.

Match Send

This selection is used for manually sending Match Results to a fax machine, or a computer with a fax/modem and League Machine for Windows™ software.

It will send any previously unsent match results.

If there are no match results in memory, Ernie will report "No League Match Results To Send."

Communications Mode (Continued)

Press the *Blue Button* to highlight **Match Send** in the blue window.
Press the *Select Button*.

The game will dial and send any previously unsent matches.
If the demo mode is enabled (features list in the programming section), Ernie will send back the last two matches played or if there are no matches to send, he will send Sample Result Files.

Send Roster

Send Roster is used for transferring the League, Team, and Player Roster Information from the IQ game to all of the other IQ games on the network.

Press the *Blue Button* to highlight **Send Roster** in the blue window.
Press the *Select Button*

The dark gray description box (in the upper left hand corner) will turn blue and read "Updating League Data."
When the screen displays "Complete", the data has been transferred to all networked IQ games.

Setup Numbers

This is the section of the IQ game that sets up all of the communication numbers.
Press the *Blue Button* to highlight **Setup Numbers** in the blue window.
Press the *Select Button*. A new screen will appear with a list of communications numbers

Communications Mode (Continued)

The following is a brief discription of Communication Numbers.

Caller ID Phone Number	Caller ID is a service provided by your local telephone company that detects the number of an incoming call. If you choose to use this service, the IQ game will answer every call (on the second ring) from the number entered in this location. Call your local phone company for availability of this feature. The modems that are used must also support Caller ID.
FAX Results Phone Number	This is the fax number that the IQ game is to call with the results of a match.
Modem Initialization String	This is a code used to initilize modem communications. Different fax/modems use different Initialization strings.
FAX Initialization String	This is a code used to initialize fax communications. Different fax/modems use different Initialization strings.
Modem Answer in Window Only	If this feature is enabled the modem will only answer an incoming call between the "Communications Start Time" and the "Communications Stop Time." If this feature is disabled, the modem will answer all incoming calls to that number.
FAX Poll Answer	For this feature to function properly the Fax/Modems used must support Fax Polling. Fax Polling is the capability of a computer to call the IQ game and ask for match results. The IQ game would automatically fax the results back..
Communications Start Time	This is the start of the time window when the IQ game is allowed to send match results and receive program information.
Communications Stop Time	This is the end of the time window when the IQ game is allowed to send match results and receive program information.

Send Program

This function copies the software program only to all IQ games connected by the network.

Press the *Blue Button* to highlight Send Program in the blue window.

Press the *Select Button*.

The screen will now turn black with text scrolling down it.

The software creates 'Packets' of software (this takes between three to five minutes depending on the software version) then the game sends the packets to the other games on the network in 'Frames' (this takes between 17 and 25 minutes).

When the program transfer is complete all of the games on the network will reboot.

The games will reboot regardless of whether the transfer was successful or not.

Press the *Red, Blue and Gray Buttons* at the same time.


Verify the software transferred successfully. (Updated Version # on Screen).

SERVICE MODE

Card Activation Mode

To Enter Card Activation Mode (For Use with Debit

Cards Only)

- Enter Test Mode by swipping a Service Card through the card reader or by pressing the test switch on the Controller Board.
- Press the *Red Button* to highlight **Card Activation** in the red window.
- Press the *Select Button* to begin.
- Run activator cards through barcode reader to be activated.
A message will tell you if cards have been activated, or cards are already active.
- Debit Card Books are obtained from the Sales Department  (1 800 247 2837)
- An Activator card accompanies a book of debit cards.

Card Types

The Card Reader can be used to identify league players, charge debit cards, and to access bookkeeping, communications and programming through Service Mode. Each game contains a Master Service Card which provides direct access to the test mode without the need of opening the upper enclosure and pushing the Test Switch.



For ease of bookkeeping, communications and programming operation, *each game comes equipped with two barcode cards.*

Service Card**Master Service Barcode (bottom)**

When swiped through the barcode reader, this card allows the operator direct access to the programming and bookkeeping features of the IQ game. This card puts you in Service Mode without a key and is great for site inspections.

Game Reset Barcode (top)

When Swiped through the barcode reader, this card allows the operator to clear the game in progress. (i.e. any game in process is terminated immediately). This card makes demos easy. Note: It will not work during leagues.


Send Match Results Card:

When swiped through the barcode reader, this card sends all match data that has not been sent previously, both darts and pool. It initiates the fax and terminates any game immediately. It allows a league transmission to be sent immediately and can be used after matches in locations where games must be turned off at night.

Specialty Card Types

These specialty cards are barcode cards that consist of the following type:

Pool Entry Card:

When swiped through the Card Reader, this card allows the pool players to enter their match information. Call the Valley Service Department to order cards. 


League Player Card

Cards for a specific player. Players can use their cards to access league play and set up matches. This card will also allow substitute players to drop in. These cards are created by the operator using LMW software.

Communications Card

A communication card may be used to enter the communication's portion of the test mode.

Debit Card

Promotional barcode cards to get people to play on the game or to eliminate the use of cash and getting change at the game. All money is up front. They are no more difficult to handle and sell than making change, but are more secure because they are less negotiable. They keep the players playing in your location. These cards must be purchased separately from Valley Recreation Product Inc.'s Sales Department.  They come in sheets containing 2

Activator Cards


and eight Debit Cards. The Activator Card and Debit Cards are keyed alike. The Activator Card must be swiped through before the associated Debit Card will work. Debit and Activator Cards are keyed to an operator ID and can only be used on your games. Four types of debit cards exist:

Bring Them In Cards	Game credit for anybody to play.
Bring Them Back Cards	Game credit for that person or persons on their next visit.
Extra Value Cards	Sell cards with 20, 40 etc., credits to keep these people coming back.
Sponsored Free Play Cards	Sponsors buy the cards for specific locations to advertise their products while allowing anyone to play the game. Sponsors purchase the debit cards with the game credit.

Debit cards are purchased in increments called 'Books' where each 'Page' is an actual Debit card. Each card is assigned an expiration date. Expiration dates can be any length, but are commonly associated with a location's promotional periods.

Specialty Card Types

Debit Report Card

Debit Report Cards may also be purchased through Valley Recreation Products, Inc.'s Sales Department.  These cards are keyed with your ID. Swipe them through the Card Reader and they bring up a report screen of Debit Card Books and Pages used on this game.



For Card Activation: Reference SERVICE MODE, *Card Activation* in this manual.



Valley Recreation Products, Inc's. Sales Department: (1 800 247 2837)

To remove debris and tips from the target:

- Turn the game off.
- Open the lock on the Cabinet Top Dart Door.
- Remove the door.
- Flip down the right and left latches in the upper corners of the Spider DCR Board.
- Carefully lower the Spider DCR Board and remove debris and tips. To remove the dart tips: push the tip from the back of the spider. DO NOT pull the tip out from the back of the segment.

General Problems

The following is an alphabetical list of problems you may encounter and their possible origins and/or solutions. Check Index for further information.

TRMNLS is a coined abbreviation for TERMINAL S. Terminal S is a communication program on the PC used for uploading and downloading memory on the IQ Game. Terminal S can work directly with the board or remotely through a modem.

The troubleshooting section provides quick solutions to game problems and guides the more experienced technician in pinpointing possible trouble areas. This section is not intended to be a service guide.

ADS ARE NOT BEING DISPLAYED	<ul style="list-style-type: none"> • Ad screens are not enabled. • Ad screens desired are not loaded into memory. <ul style="list-style-type: none"> ▽ See ad screen creation and loading procedure.
APPEARS DEAD	<ul style="list-style-type: none"> • Sleep mode engaged. press the <i>Player Change Button</i>. • Main power switch off. • Game unplugged. • Check power to outlet. • Check power switch or breaker on power strip. • Cable from power supply to power strip disconnected. • Cable from monitor to power strip disconnected. • Power cord not fully connected to the power supply. • Fuses blown on Controller board (see previous page for replacement). • Check power harness P8 to Controller Board. • Upper display power cable disconnected. • Monitor switched off. • Check VGA connector connected to the Controller board.
CONTINUALLY BEEPS	<ul style="list-style-type: none"> • Matrix Switch faulty. disconnect switch to check . • Stuck game switch. Inspect switch for jamming.
DART LEAGUE MENU WITH NOT PRESENT IN MAIN MENU	<ul style="list-style-type: none"> • The card reader is not plugged in or plugged in after game turned on. • The cardreader ID communication is faulty. • Card reader failure or A95 controller board failure.
DEDUCTING DARTS ERRATICALLY	<p>QUICK CHECK:</p> <ul style="list-style-type: none"> a) swap Piezo element b) swap Piezo board • Sensitivity too high: Refer to the Tru-Score II Dart Sensor Adjustment Procedure contained in this manual. • Music or other noise is causing a malfunction: Refer to Dart Sensor Adjustment Procedure contained in this manual. • Target door not snug against the target. <ul style="list-style-type: none"> ▽ Adjust lock cam. • Check Piezo board U1 • Make sure Piezo element is connected to Piezo board. • Check rubber sheet.
(NOT) DEDUCTING NON-SCORING DARTS	<ul style="list-style-type: none"> • Verify connections to Controller board J9. • Check Controller board U53, U43. • Target door not snug against target: <ul style="list-style-type: none"> ▽ Adjust lock cam. • Check Piezo board U1. • Piezo element: <ul style="list-style-type: none"> ▽ Check for creases in sensor tail.

	<ul style="list-style-type: none"> ▽ Check that sensor is plugged into Piezo board. Refer to Dart Sensor Adjustment Procedure contained in this manual.
DISPLAYS SCORES FROM LAST GAME PLAYED	<ul style="list-style-type: none"> • Use game reset card or hit necessary segments to end game. • Power failure recovery option is enabled.
ENDING BEFORE FINISHED	<ul style="list-style-type: none"> • Round limits enabled. Check Round Limits in the Service Mode of this manual, under the Setup Games option in Programming Mode. • Dorment time out feature automatically ends game after 30 minutes of inactivity.
FAX RESULTS NOT BEING SENT OVERNIGHT.	<ul style="list-style-type: none"> • The IQ game was shut off. ▽ Call location to turn on game. results will be sent right away. • The LMW computer was shut off. • The Modem on the LMW side was not connected. • The IQ game did not have the 'Automatic league data send' enabled. • The time window was not set or set incorrect. • The locations phone line not connected, off hook, in-use, etc.
LMW DOWNLOADS (LMW to IQ) NOT SUCCESSFUL	<ul style="list-style-type: none"> • The IQ game was shut off. • The LMW was not in the monitor mode (all calls still 'pending'). • The time window of the game is different that that of the LMW computer. • The time clocks of the LMW and the IQ game are different. • The IQ game is not set to 'autoanswer'. • The phone line to either the LMW or the IQ is not connected or not functioning. • Check the modems on the LMW and the IQ game. • Someone or another device is answering the phone line prior to the IQ game. • Fax poll feature is enabled when no hook flash is present on the phone service. • Fax poll enabled with a non-fax poll compatible modem. • Some other device (Fax machine, Answering machine, etc...) on the same phone line or features like call waiting are interfering.
LOCKED UP (GAME APPEARS)	<ul style="list-style-type: none"> • Note any message on screen, or unusual screen display. • Note when the lockup occurred (ie. attract mode, Cricket game, Faxing out, etc.). • Report occurance to Valley Service Department. • Reset game or turn it off and on again, may happen automatically..
LOCKS UP. NO RESPONSE FROM COIN GAME SWITCHES OR TARGET or GAME RESETTING AT RANDOM	<ul style="list-style-type: none"> • Grounding problem <ul style="list-style-type: none"> ▽ Be sure game is plugged in a three-wire outlet (earth ground). ▽ Make sure ground wire from coin mechanism is securly fastened to the power supply chassis. ▽ Check power supply harness connections for a clean tight fit. ▽ Check tightness of hardware. ▽ Make sure socket connections on the Controller board are clean and tight.
MIS-SCORES OR NO SCORES	<ul style="list-style-type: none"> • Note if there were any other darts in the target and not their locations. ▽ If possible remember the order of the darts thrown prior to the mis-score. • Remember that certain games may appear not to score. ▽ Cricket, Double-In, Double-Out, etc. will not score in certain conditions. • Report this information to Valley Service Department.

TROUBLE-SHOOTING

	<ul style="list-style-type: none"> ▽ Give the serial number and the version number of the software. • No scoring during the 7th round Ad screen. <ul style="list-style-type: none"> ▽ Update the software. • Single pies scoring as triples. <ul style="list-style-type: none"> ▽ Update the software. • Dart stolen when it hit the target. <ul style="list-style-type: none"> ▽ If dart fell out, it's possible that it only hit the spider. ▽ Update the software. ▽ Check for over-sensitivity of the missed dart sensor.
MODEM PROBLEMS	<ul style="list-style-type: none"> • Confirm that modem in-use is either a ZOOM Model 350, 14.4 or a US Robotics 14.4 Sportster Vi. • Call Valley Service Department for an updated list of compatible modems.
OVERHEAD LAMP OUT	<ul style="list-style-type: none"> • Check fluorescent lamp, starter, or switch on fixture. • make sure light fixture power cord is plugged into power outlet strip. • Check power switch on breaker or power strip.
PLAYER CARD ID's PLAYER BUT BLOCKS PLAYER FROM LEAGUE PLAY.	<ul style="list-style-type: none"> • If for all players, check card reader ID communication (see previous item). • If for a particular player, investigate if that player is attached to a league or team.
PLAYER CHANGE OR SELECT LAMPS NOT LIGHTING.	<p><i>QUICK CHECK:</i></p> <ul style="list-style-type: none"> a) Change Lamps. b) Swap Controller Board. • Check Light Bulb. • Harnesses or connections J7. • Controller board U42.
NETWORK (GAMES NOT COMMUNICATING OVER)	<ul style="list-style-type: none"> • Verify Using the 485 Comm Test. • Network cables not connected. • Phone cables used as network cables. (refer to drawing) • Faulty board. • Faulty network cables: <ul style="list-style-type: none"> ▽ WAIT, the 1 minute wakeup time so that games are on the active list may be malfunctioning.
PDA TRANSFER NOT WORKING.	<ul style="list-style-type: none"> • PDA not setup correctly to receive data. • PDA not initialized. • PDA not lined up with the card reader IR window or too far away. • PDA batteries are dead or low • IQ game not setup for PDA transfer. • Card reader IR port not functioning. • Check that cardreader ribbon cable connections are not loose.
PHONE IS ANSWERING ALL THE LOCATION CALLS.	<p><i>QUICK CHECK:</i></p> <ul style="list-style-type: none"> a) Change Lamps. b) Swap Controller board. • Check light bulb. • Controller board U42.
(NOT) READING FRONT PANEL SWITCHES	<ul style="list-style-type: none"> • Check fron panel harnessing. • Check corresponding switch for closure. • Check Controller board U43. • Check Controller connectors J7. <p>Check if switch mechanism is snug in plastic housing.</p>

TROUBLE-SHOOTING

(WILL NOT) RESUME GAME LOST IN PROGRESS AFTER POWER FAILURE	<ul style="list-style-type: none"> • Power failure recovery disabled. • Check RAM if installed. • Check jumper JP8, must be in the S-Ram position.
SCREEN SAVER NOT WORKING	<ul style="list-style-type: none"> • The screen saver is disabled. • Screen-saver window is set wrong. • Time out is set for a long period of time. • The game was just being played and the timeout is still active.
SECURITY CODE FORGOTTEN LOST or UNKNOWN	<ul style="list-style-type: none"> • Try some common codes: <ul style="list-style-type: none"> ▽ 3333 etc. ▽ Try the serial number. • Call Valley Service Department.
SOUND DISTORTION	<ul style="list-style-type: none"> • Check to see if a NEON sign is posted too close to the game.
"STUCK DART XX" MESSAGE APPEARS	<ul style="list-style-type: none"> • Look at segment number shown. <ul style="list-style-type: none"> ▽ Remove wedged dart. ▽ Press on segments for that number, one at a time. • Investigate target for dart tips, cleanliness, etc. • Matrix SW failure.
TIME DEFAULTS or WRONG TIME or DATE	<ul style="list-style-type: none"> • Incorrectly set. • No battery present or dead battery. • Loose battery contacts. • Shock during shipment jarred battery loose. • Check crystal - "X1".

Tru-Score II Missed Dart Sensor Adjustment Procedure

NOTE:
Set up and test should be done on site.

- Put the game in the TEST MODE either by pressing the *Test Button* on the Controller board or by swiping the *Master Service Card* through the Card Reader.
- Select TEST MODE in the red window, and TARGET/SWITCHES in the blue window. Press the *Select Button* to start test and the *Player Change Button* to stop test.
- Open target door to expose the Missed Dart Sensor Adjustment Board.
- Start with the lowest sensitivity setting on the potentiometer, R17 on the Dart Sensor Adjustment Board), by turning fully clockwise to 10 o'clock.
- Turn the potentiometer, R17, slightly counter-clockwise to the 7 o'clock position.
- Temporarily replace target door cover before testing.
Tap darts against target door or throw bar darts at all areas on the door. (Bar darts have the lightest weight.) Dart detection is indicated by a short tone, the *Select Button* will flash, and a Missed Dart! message will appear on the monitor.

NOTE:
Upper left corner of target door is least sensitive.
Test here first, and then test rest of target door.

- Repeat this procedure, using small increments to turn up the potentiometer R17, counter clockwise until all darts thrown with reasonable force at the door are detected by the Missed Dart Sensor.
- Replace target door. Retest by throwing bar darts from the throw line.



CAUTION: DO NOT OVERSENSITIZE!

An oversensitive Dart Sensor may result in darts being taken away accidentally. In addition, loud music may cause an oversensitive Dart Sensor to deduct darts. However, when properly adjusted, the Dart Sensor can operate correctly up to 110 decibel sound level.

Target Problems

Target Not Registering During Game and Test Mode

- Target unplugged at Controller board, J1.
- Check Controller board U2, U7, U8.
- Check matrix switch tail for nicks and cuts.

A Dart Thrown at the Bullseye Does Not Score Properly.

- Game is not set at desired Bullseye setting.
- Check Bull's-eye setting on monitor at the start of the game.

One or More Quadrants not scoring.

- Check matrix switch and connections.
- Controller board U2, U7, U8, C1, C2, C7, C8.
- Check matrix switch tail for nicks and cuts.

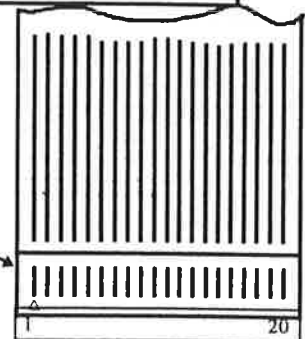
Four Related Segments of Target Not Scoring.

- Check Matrix Switch and connections.
- Check Controller board U2, U7, U8.
- Check matrix switch tail for nicks and cuts.
- **One Segment or Several Unrelated Segments Not Scoring.**
- Bad physical contact between target segment and Matrix Switch
 - ◊ Check for short on Controller board J1.
- Check matrix switch.
- Check matrix switch tail for nicks and cuts.

Related Segments in Groups of Four.

Matrix/Controller Pin Layout																
Pin	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	d12	12	d9	9	d14	14	d11	11	d8	8	X	T12	T14	T9	T11	T8
2	d16	16	d7	7	d19	19	d3	3	d17	17	DBE	T16	T19	T7	T3	T17
19	d2	2	d15	15	d10	10	d6	6	d13	13	BE	T2	T10	T15	T6	T13
20	d4	4	d18	18	d1	1	d20	20	d5	5	X	T4	T1	T18	T20	T5

Matrix Switch Tail (pin 1)



Upper Display Problems

Displays Garbled, Dead, or Random Lamps

QUICK CHECK: Swap Upper Display assembly.

- Controller board U12. U53
- Swipe Reset card through card reader or push reset button on Controller board.
- Check power cable from display; check in-line fuses on display power cable.
- Check ribbon cable from Coller (J3) to Upper Display for nicks.


Coin Mechanism Problems

GAME FUNCTIONING BUT NOT GIVING CREDIT

- Check coin switches.
- Check coin switch harness (Controller Card. J11).
- Coin switches not programmed (see Programming section).
- Controller board J11. J12. U49.

Automatic Player Change Problems

Game Not Changing Players Automatically

- Check that IR feature is enabled in Programming. Setup features.
GAMES WITH CARD READER.
- Check barcode reader harness (Controller card. J6).
- Swap Barcode Reader.
GAMES WITHOUT CARD READER.
- Check IR chassis harness (Controller Card. J8).
- Check active IR assembly adjustment (Refer to 'Infrared Adjustment Procedure' elsewhere in this manual. 

Sound Problems

NO SOUND

- Volume turned down (see *Test Mode* section).
- Speaker harness unplugged (Controller Card. J4).
- Check J4 on the Controller board.
- Check Controller board U13.
- Check for the presence of nylon washer under mounting. not in upper right corner of controller enclosure.

Sound Problems (Continued)**GARBLED SOUND**

- Check speaker.
- Check Controller board U13
- Neon Signs too close.
- Swap Controller

CONSTANT HUMMING SOUND

- Grounding problem. Refer to game locking up or resetting at random.
- Check Controller board U18, Q6.
- Swap Power supply.
- Swap Controller.

Bookkeeping-Cash / Play Problems**Credits Per Game Not Matching Factory Setting .**

- Check Game Setup features in programming mode.

Monitor Problems

QUICK CHECK: Swap Monitor with known functioning unit.

Picture Does Not Appear.

- Check to make sure the signal cable is firmly in socket.
- Make sure the monitor power switch is ON.
- Check to see if game's power is ON.
- Check power strip is turned on.
- Check power cable in the back of the monitor.
- Check that the Brightness Control is not turned down.

The Screen is not Synchronized.

- Check to make sure that the signal cable is firmly in socket.
- Look for bent pins on the cable.
- Check that output level matches input level of game.

Monitor Problems

Screen Position Not Centered.

- Adjust the H-SIZE, H-PHASE, or V-SIZE, V-CENTER control.

Screen is too Bright or too Dark.

- Check brightness control.
- Check that appropriate voltage is supplied.

Screen is Shaking.

- Move all objects which may emit magnetic field away from the monitor.
- Check that specified voltage is applied.
- Check for good ground.
- (Black and White Screen) Check connector for bent pins.

These possible causes and solutions are meant as a guide only.



Please call our *Service Department* at **1-800-331-5420**, if further assistance is needed.

If you have a problem and need to fix something, you reach for a tool in your tool box.

Every IQ Game comes with a tool box. The tools are found in Test Mode, Feature Settings, Communications Programming and Operator Codes. These areas are enabled for you when you press the 'test switch' on the controller board or the 'Service Card' is swiped through the Card Reader.

There is also an external toolbox consisting of the PDA, and the TRMLS software program.

For more information reference the *SERVICE MODE* section of this manual.

Game Tools: (Casual or League)

Main Menu	<p>(Prior to starting a game at other locations) It allows the Player to change at the last minute and start over.</p>
Next Game	<p>(allows this league game to be skipped) <i>Next Game</i> cannot be entered without the "Are you sure?", answered. This is especially useful in demonstrating leagues without having to play all the games. It is also useful for continuing a match from a point where an earlier match left off. This may be necessary due to power outage, malfunctioning target, curfew or any unforeseen circumstance which results in a premature end to a match.</p>

Game On / Off Tools

Tools to make the Game APPEAR to be OFF at Night.	<p>The computer must stay on if it is to be sending its information out during non-business hours, but the operator wants the games off to prevent inviting theft.</p> <ul style="list-style-type: none"> • Fluorescent light switch. • Sleep Mode Window. • To make the screen appear blank, depress all menu buttons and the Select switch at the same time.
Tools to KEEP the Game ON at Night.	<p>To avoid employees forgetting and unplugging or turning off the games over night.</p> <ul style="list-style-type: none"> • Switch Plate Cover. A gentle reminder not to turn off the game. Can be overridden with effort.

Non-League Tools

Tools to accommodate Non-League Machine Software.	<p>An operator wants to continue manual entry, by hand or computer, etc. A score sheet is still need so FAX it.</p> <p>FAX: Output format is OCR (Optical Character Recognition) only or Full Visual. This allows a score sheet to be sent to a Fax which can be understood easily. The OCR version is formatted for a computer to read it, the visual output is made for a person to read it.</p>
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Toolbox (Continue)

Phone Tools

Alternatives when there is no phone available at the Operator's location.

The PDA can transmit and receive match results on-site. The LMW has an IR transceiver module for reading match results in and writing rooster changes and handicaps out. The IQ Game has an IR transmitter on the card reader.

Limited Phone Lines.

If the phone line is answer-only or call-out limited at the location, roosters can be sent easy enough but the match results can not be sent from the location. There are several alternatives:

- Use the Fax Poll from the *Communication Menu*. (Also see *Communications* under *Service Mode* in this manual) With this feature it is possible for LMW to initiate the call and make the game Fax back the information within the same connection. (A reverse Fax)
- Use the PDA.
- Install an 800 number in the operator's office.

Game answers the phone during working hours.

Most of the time phone lines must be shared with the location and conflicts can and will occur in the use of the phone.

- Set the time window (see *Communications-Fax* results transmit start and stop times) so that the window is outside of working hours.
- Make the number of rings greater than 2 by disabling the *Answer after 2nd ring*. This will take it 8 rings for the game to answer. By that time if someone is there, they will answer.

Operator access during working hours.

The operator wants to access the games during working hours but not bother the location and not install another line.

- Operate the communications via *Caller ID*. In the *Communications* section of *Service Mode* there is a caller ID number. If the location's phone is equipped with this feature (available at a nominal fee from the phone company), the game will recognize the incoming phone number and pick it up immediately.

Determining origin of transmission.

Enter in unique machine ID codes. The games have the serial number programmed in them from the factory. Record these numbers when the games are installed.

Update Tools

Memory

The location uses debit cards, but I want to upgrade the memory. Unless otherwise specified due to the scope of the software upgrade, the debit card areas are not affected by the program download.

Program

The program needs to be updated via the phone line and the TRMLS software. After the game with the modem is done, transmission to the other games on the network is an option sent to the game from TRMLS at any time.

Toolbox (Continue)

Settings

The settings need to be updated when the (new) program is loaded. This can be done over the phone as well. Plans are to make the operator's settings permanent in the game once they are set. Settings can be made on one game first for testing and then uploaded to TRMLS and downloaded to other games later. Settings are sent across the phone line after initial downloads to the game with the modem.

Sending Out New Ad Screens

The Operator wants to send out new advertising screens.

This can be done via the phone line and TRMNL.

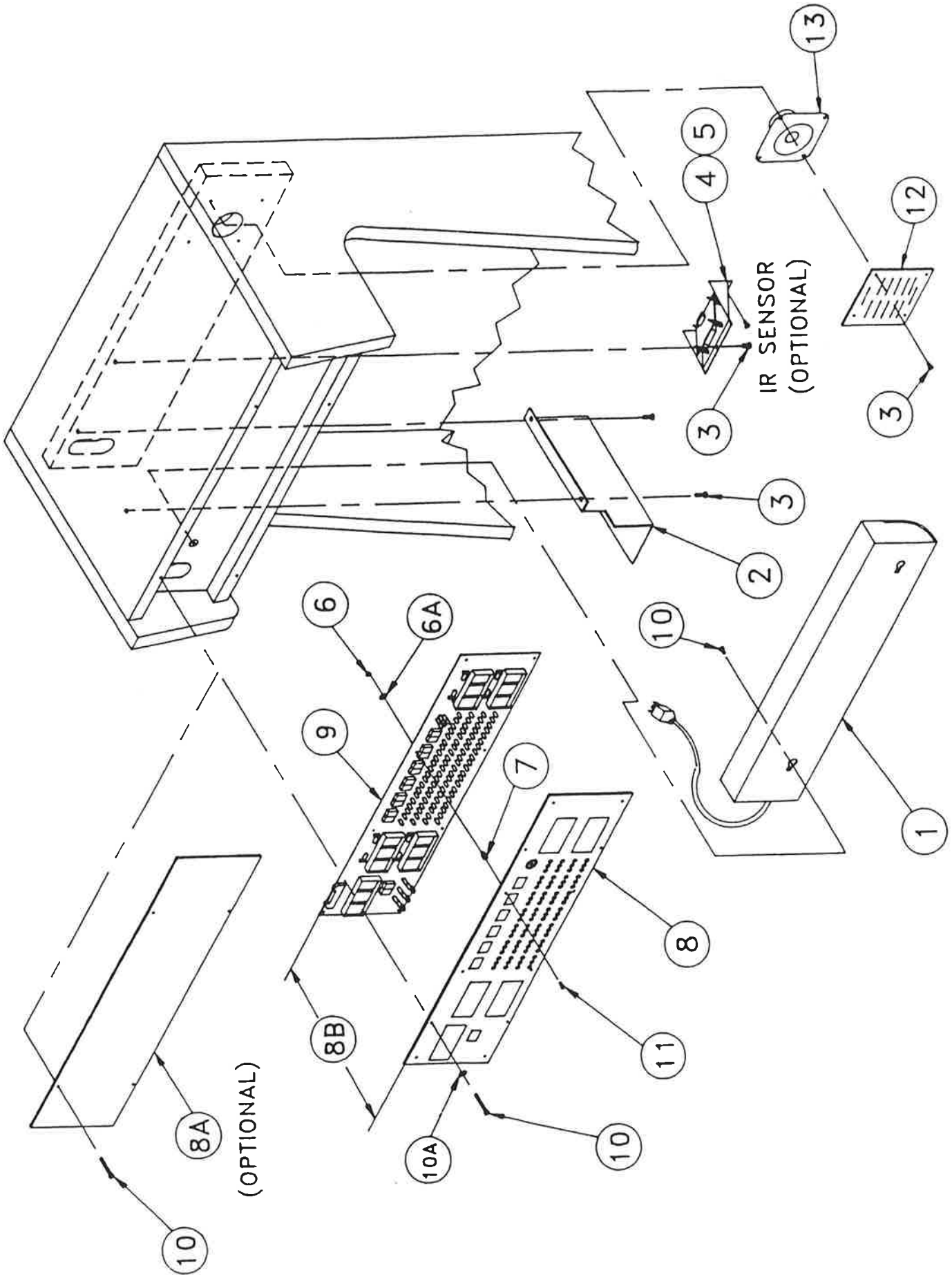
Beginning a Promotion

The Operator wants to begin a promotion.

The program portion of this can be done over the phone line and TRMLS. At the end of the promotion the database can be uploaded for a permanent record of the participants.

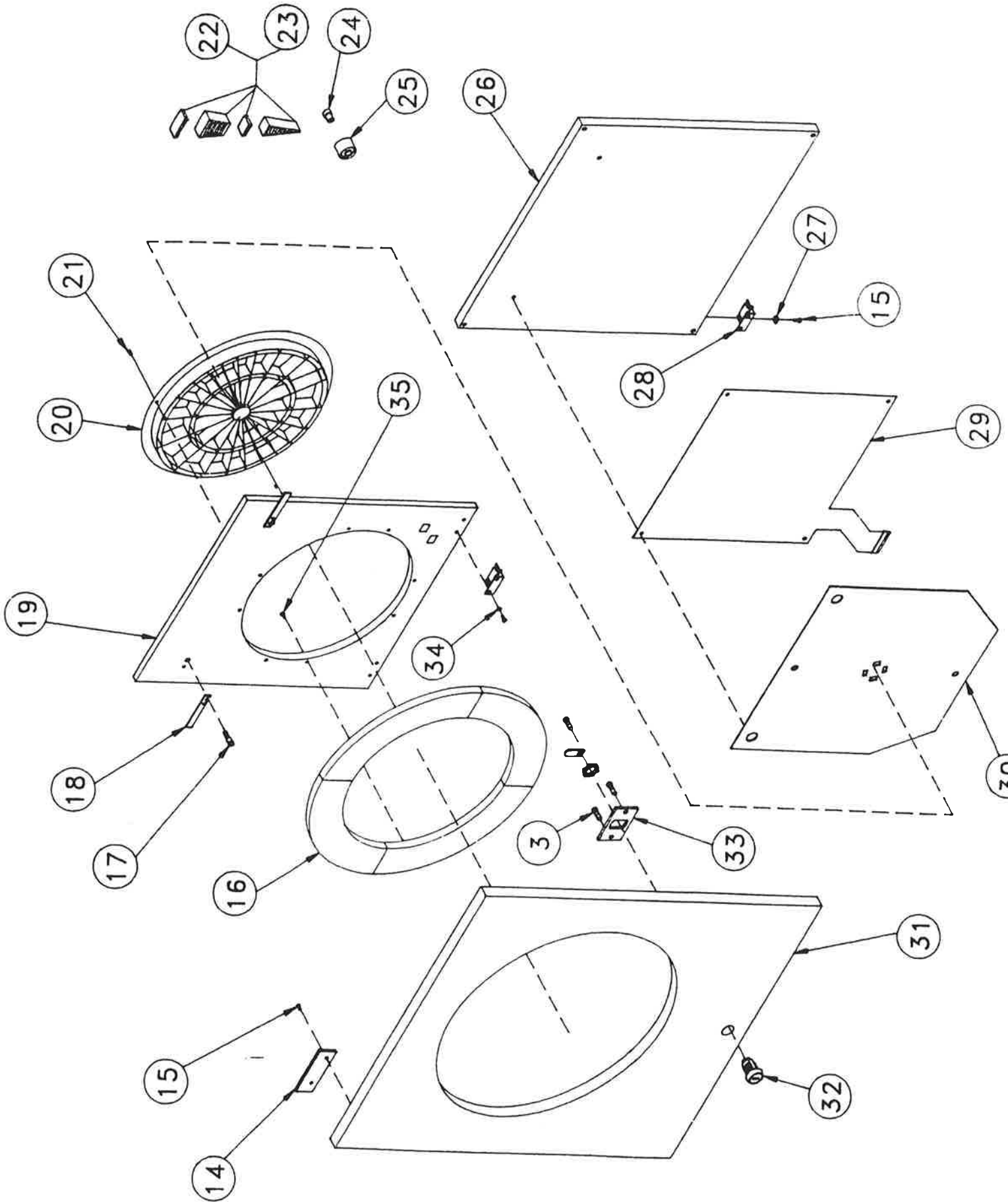
PARTS LISTS
DRAWINGS

SCHEMATICS AND DIAGRAMS



Lighthouse and Upper Display Assembly Parts Lists

1	217-0584	Fluorescent Light Fixture with 8 foot Cord/on-off Switch without Lamp or Ground Wire.
	233-1009	Fluorescent Lamp / 8" 15WF15T8
	GD1	Fluorescent Light Fixture without Lamp. with ground wire - EU5
2	J41	Channel Wire Cover Assembly
	206-0597	Channel Wire Cover, IQ
3	201-0213	#8 x 1/2 Particle Board Screw, Black
4	R07-x-00-03	IR Housing Assembly, IQ (Optional)
5	A98	PCB, IR Sensor
6	203-1001	Kep Nut, 4 x 40
6A	204-1009	#6 Nylon Washer
7	206-0253	Standoff, 4 - 40 x 3/8, M/F 1/4" Steel
8	205-0805	Panel, Marquee, 1 Piece Lexan, w/Cricket, IQ, Smoked
8A	205-0836	Panel, Marquee, Valley, No Electronics(optional)
8B	J40	Marquee Assembly
9	A93	PCB Assembly, Upper Display, IQ
10	201-0056	8 - 32 x 5/8 Pan Head Machine Screw, Black
10A	204-1008	#8 Flat Fiber Washer
11	201-0114	4 - 40 x 3/8 Pan Head Machine Screw, Black
12	206-0593	Speaker Grill
13	GB7	Speaker Assembly, 4 ohm



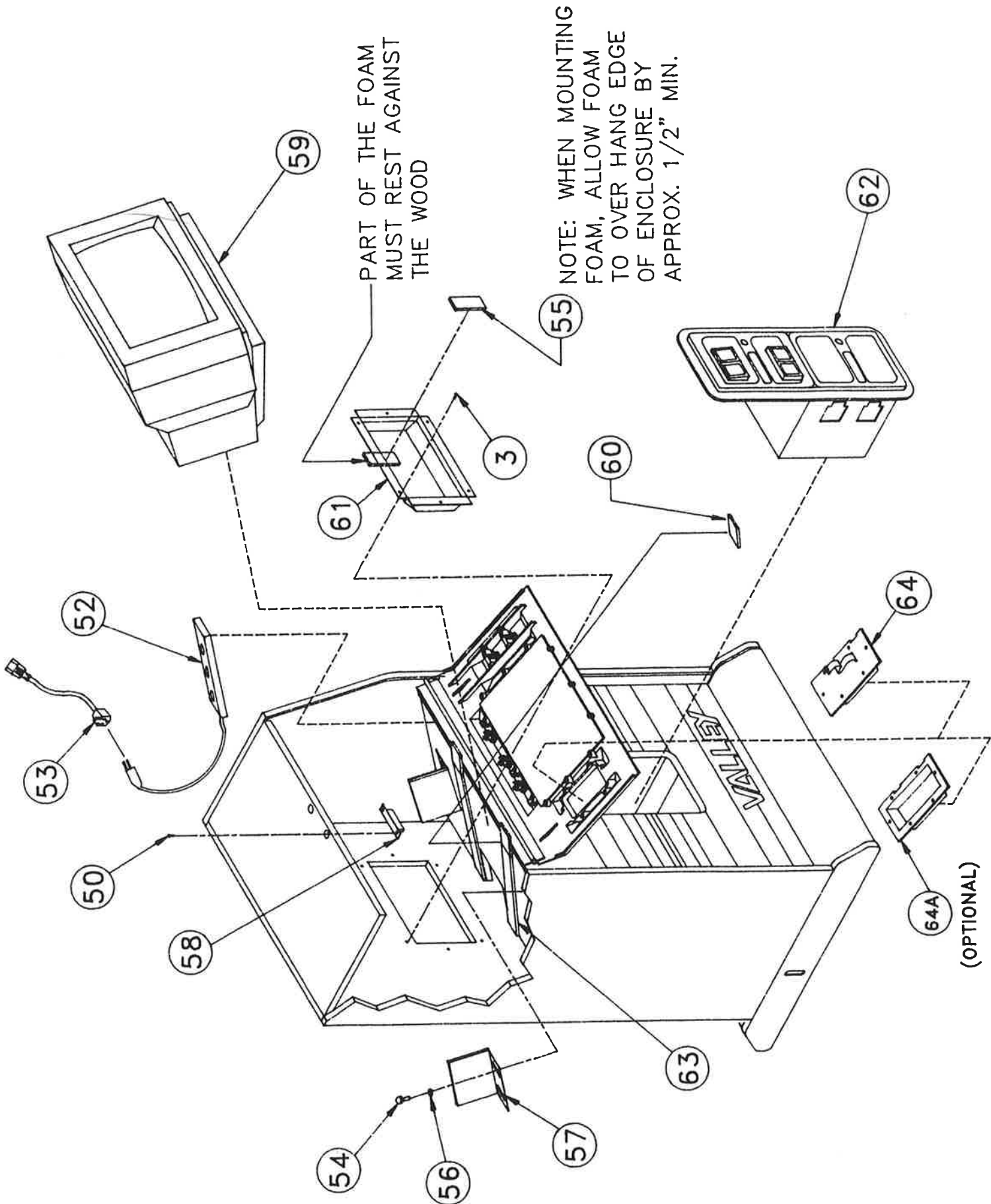
Stationary Matrix Parts Lists

14	206-0274	Dart Door Finger
15	201-1046	8-32 x 1/2 Pan Head Machine Screw, Zinc
16	205-1022	Dart Catching Ring (DCR), American (4 Segments)
17	201-0111	Adjustment Screw, 1/4 - 20 x 1 9/32 Coated
18	206-0279	Latch Matrix Switch
19	AFA-x-14-01	CT American Spider DCR Board
	Q73	Spider DCR Assembly
	Q71 (Kit-NC6)	Target Assembly., TR IQ American
20	205-1222	Spider, American
	Q06	Spider Assembly, American
21	201-1052	8-32 x 3/8 Pan Head Machine Screw, Zinc
22	Q28	Segment Set, 4 Pc, Thin Ribbed, American, Red
23	Q29	Segment Set, 4 Pc, Thin Ribbed, American, Blue
24	205-1221	Inner Bullseye, Red
25	205-0340	Outer Bullseye, Blue
26	AFA-x-15-01	CT Matrix Switch Board, IQ, American
	Q72 (Kit NB5)	Matrix Switch Assembly
27	204-1003	#10 Flat Washer
28	206-0272	Hinge, Target
29	227-0045	Matrix Switch, IQ, American, S Tail
30	207-0048	Rubber Sheet, American
31	AFA-x-13-01	Target Door, IQ
32	212-0031	Lock, #LI550
33	206-0008	Lock Anchor Plate
34	204-0034	Star Lock Washer, #8
35	201-0100	Sheet Metal Screw, 8 x 7/8, Pan Head, Phillips, Type 25

Upper Electronics Parts List

36	206-0620	Lock Plate, Formed Up
37	R10	EMI Cover
38	R08	Controller Card, EMI Enclosure Assembly
39	217-0273	Piezo Element
40	AA1	PCB Piezo
41	205-09010	Standoff, ¼
" Plastic		
42	217-0533	Power Supply
43	242-0124	Power/Line Cord
44	204-1014	#8 Flat Washer

SCHEMATICS AND DIAGRAMS



Pedestal / Lower Electronics Parts List

50	201-0057	#10 - 32 X 7/8" Pan Head Machine Screw
52	217-0546	Power Strip
53	242-0137	Cable, IEC to 110V
54	202-0101	Bolt, 5/16" x 1'
55	217-0529	Foam, Monitor Top 1" x 4" x 1/4" thick
56	204-1007	Washer, 3/8"
57	206-0609	Monitor, Side Bracket
58	206-0595	Monitor Front Bracket
59	217-0527	Monitor, VGA, 14"
60	217-0635	Foam, Front Monitor Base 1" x 2" x 7/16" thick
61	206-0599	Back Enclosure
62	GC5	Coin Door Assembly
	M92	Stability Assurance Kit
	M73	Cougar Dart Tips and Bag
63	217-0528	Monitor Base Foam, 2" x 12" x 1/4" thick
64	217-0526	Card Reader / PIR (optional)
64A	205-0837	Dummy Card Reader Cover (optional)

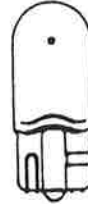
Replacement Lamp Information

NOTE:
Replace lamps with the same type and rating.

WEDGE BASE

14V, 80 mA, Type 658

Valley Part# 223-1006-0



BI-PIN

14V, 80 mA, Type 5810

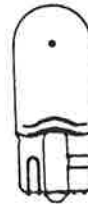
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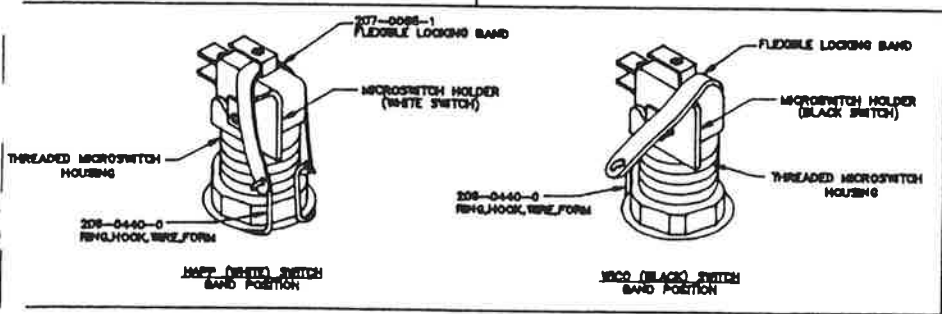
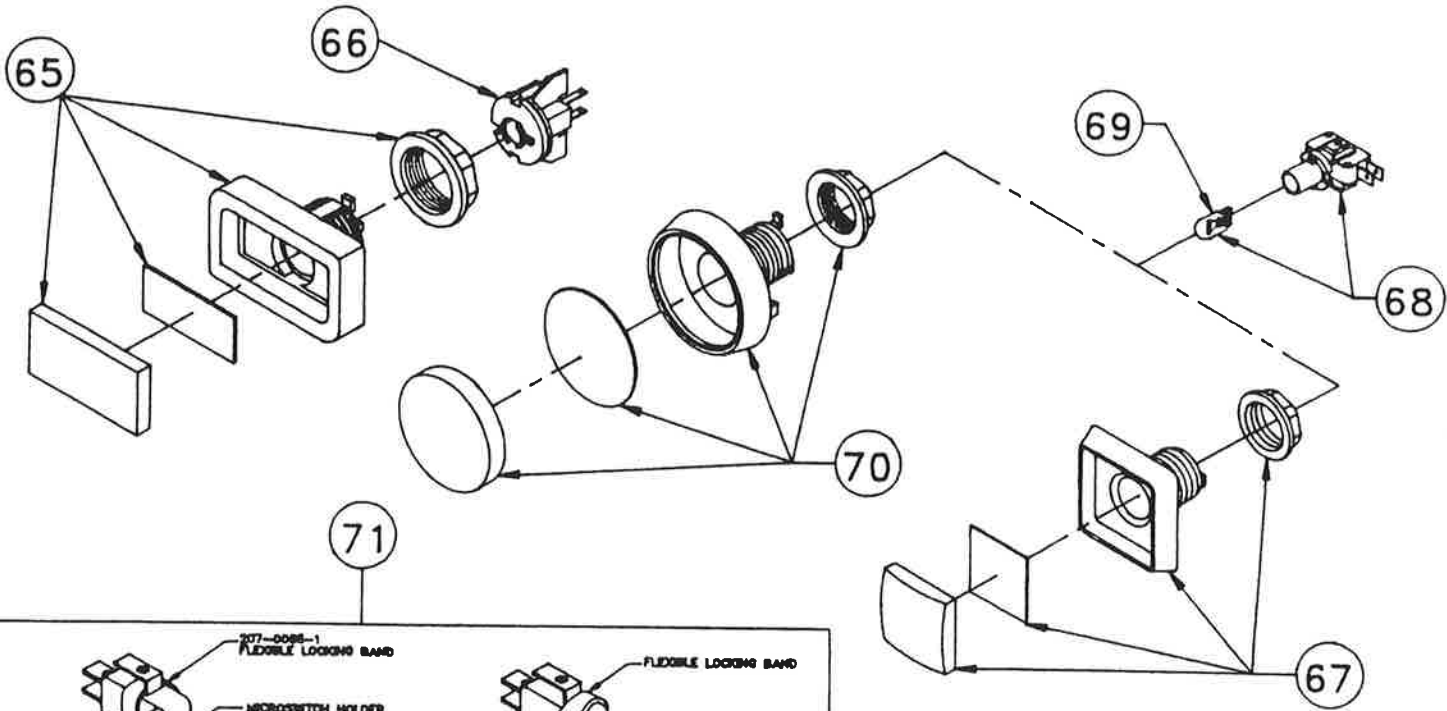


WEDGE BASE

28V, 60mA, Type 656

Valley Part# 223-1008-0





Push Button Switches

65	205-0790-0	Button Housing Red. VLT. Rect., w/Switch Holder
	205-0791-0	Button Housing Blue. VLT. Rect., w/Switch Holder
	205-0792-0	Button Housing Gray. VLT. Rect., w/Switch Holder
66	227-0047-0	Microswitch. VLT Buttons
67	205-0809	Button Housing. 2" Square Player Change
	205-0296	Legend Player Change. (Logo)
68	227-0048	Microswitch. w/Lamp
69	223-1006-0	Lamp. Mini Wedge Base. 14VDC

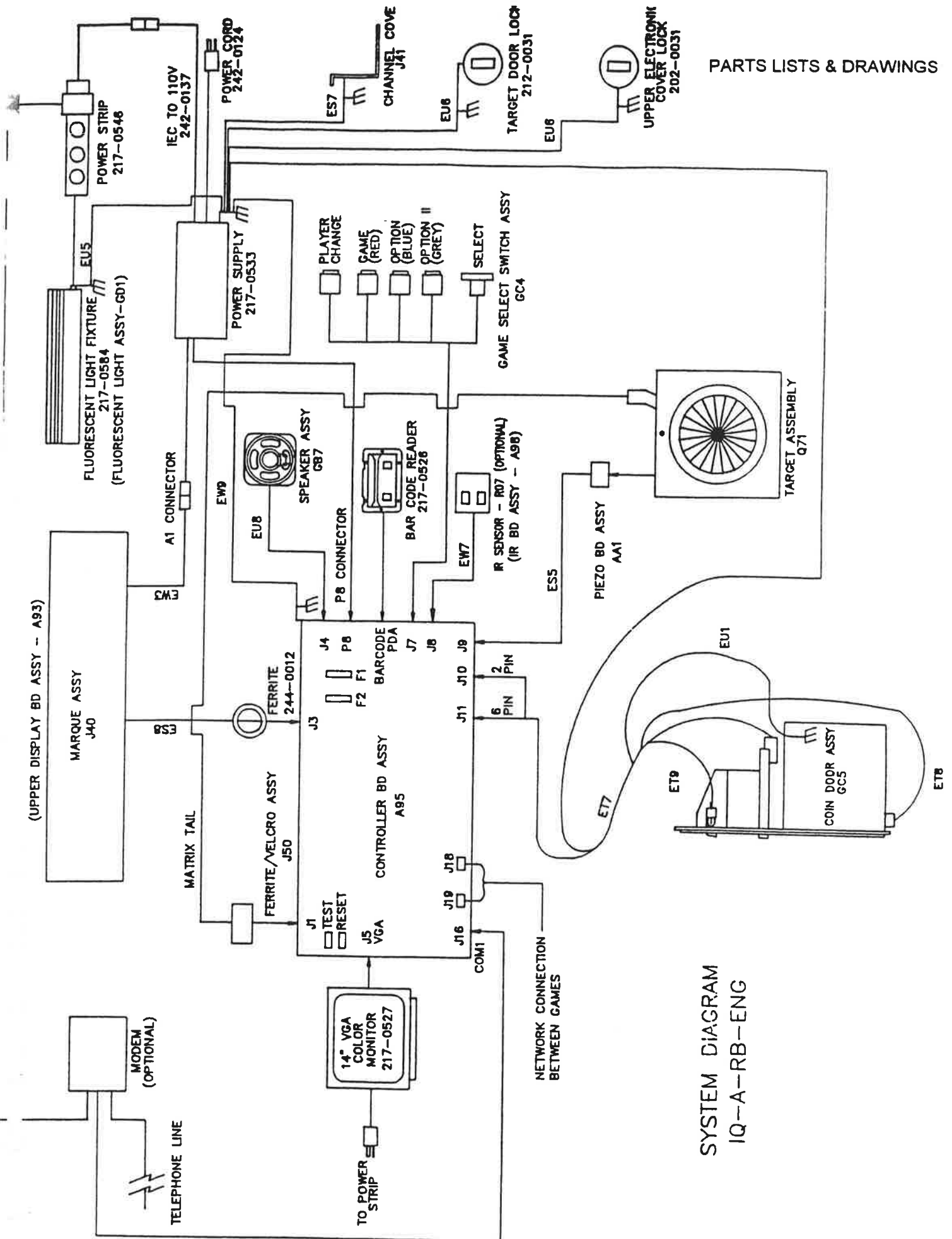
NOTE:

For best operation, replace this lamp only with a GE658 lamp.

70	205-0773	Button Housing. 2" Round. Select
71	J35	Retainer Assembly
	201-0085-1	Die Cut Urethane Band
	206-0440-0	Wire. Form. Ring. Hook

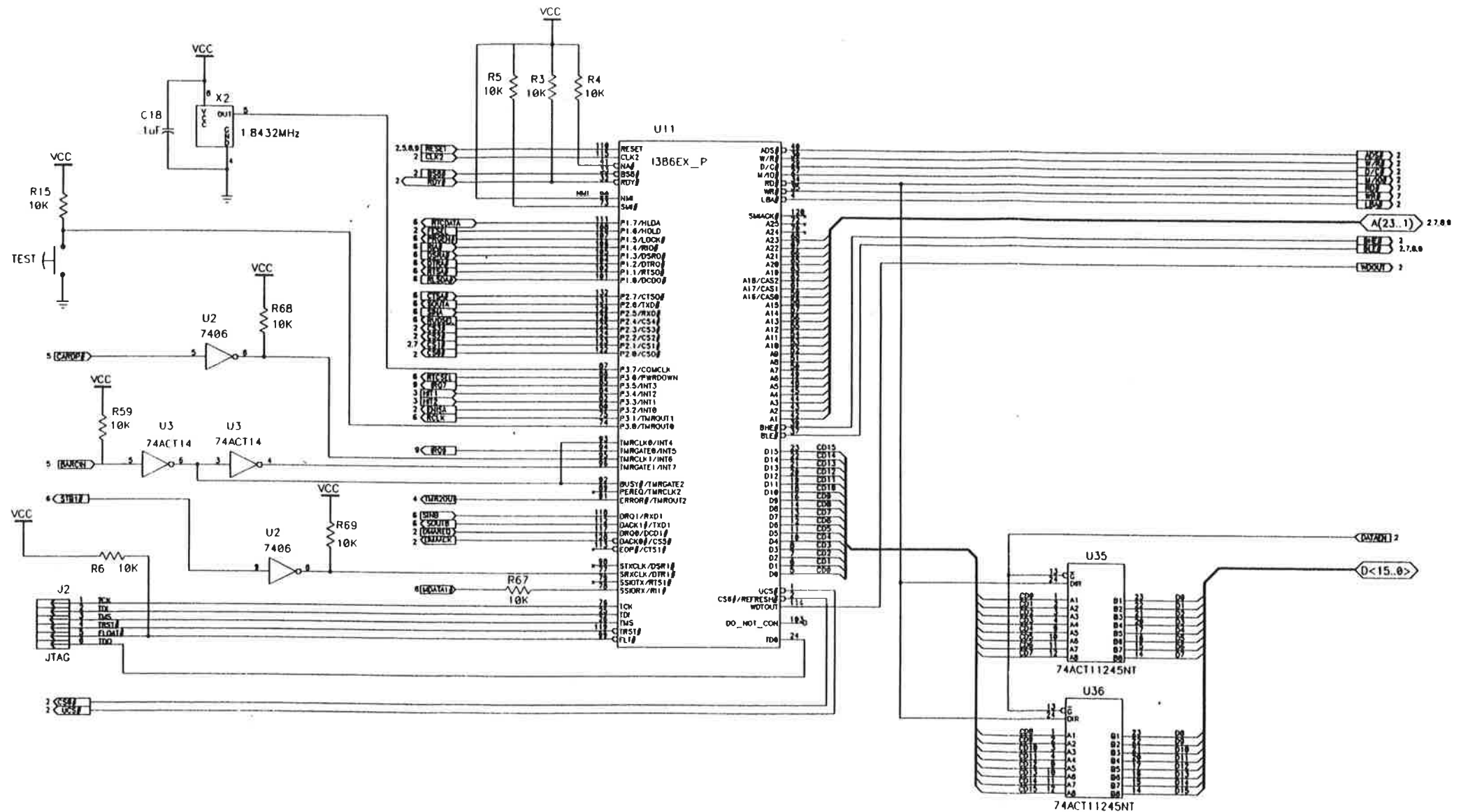
Cables and Harnesses Parts List

ES5	Piezo Interface Cable
J50	Ferrite/Velcro Assembly for Matrix Tail
GC4	Harness, Game Switches
244-0012	Ferrite Bead, Toroid - for upper display ribbon cable(ES8)
ET7	Harness, Coin Door
ET9	Harness, Coin Door Mech/Door Lamps
244-0003	Ferrite Bead, Large core, 2.4 OD, 1.4 ID
	Ferrite 1)
	a) P8 power cable
	b) Speaker Harness(EU8)
	c) IR Ribbon Cable(EW7) (optional)
	d) Barcode Ribbon Cable
	Ferrite 2)
	a) Switch Harness (GC4)
	b) Piezo Harness (ES5)
	c) Coin Door harness (ET9 & ET8)
ET8	Harness, Coin Meter
ES8	Ribbon Cable, Upper Display(optional)
EU1	Harness, Coin Door GND
EW7	Ribbon Cable, IR Sensor
EW3	Harness Power Upper Display(optional)
242-0124	Power/Line Cord
ES7	GND Wire, IR/Channel Cover
242-0113	Cable, IEC to 110V
EU8	Harness Speaker
EU6	GND Harness, Electronic Cover / Target Door
EU5	GND Wire, Fluorescent Fixture Lock



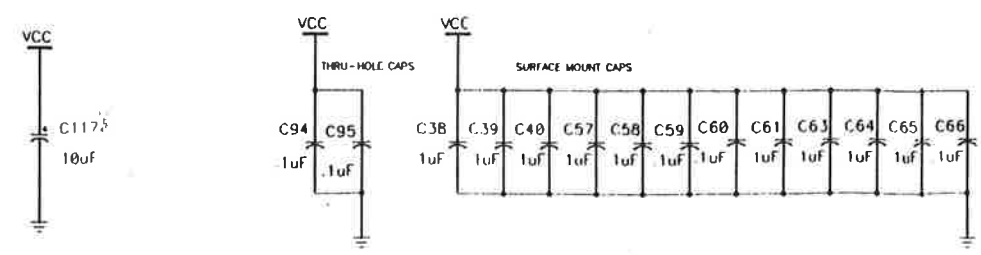
SYSTEM DIAGRAM
IQ-A-RB-ENG

SCHEMATICS
LAYOUTS



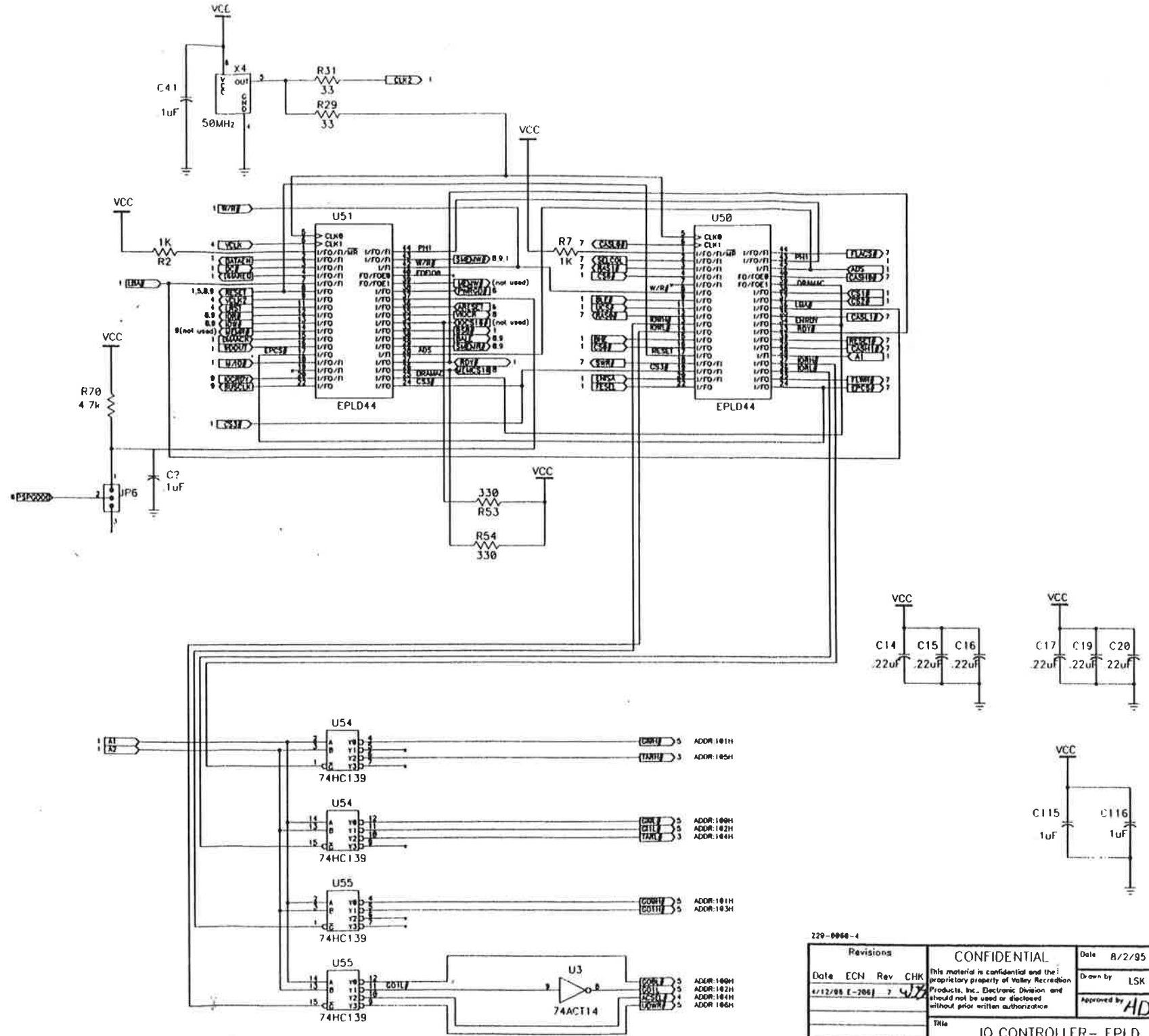
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 U35 18,19
 U36 18,19

HIDDEN GND PINS:
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 U35 5,6,7,8
 U36 5,6,7,8



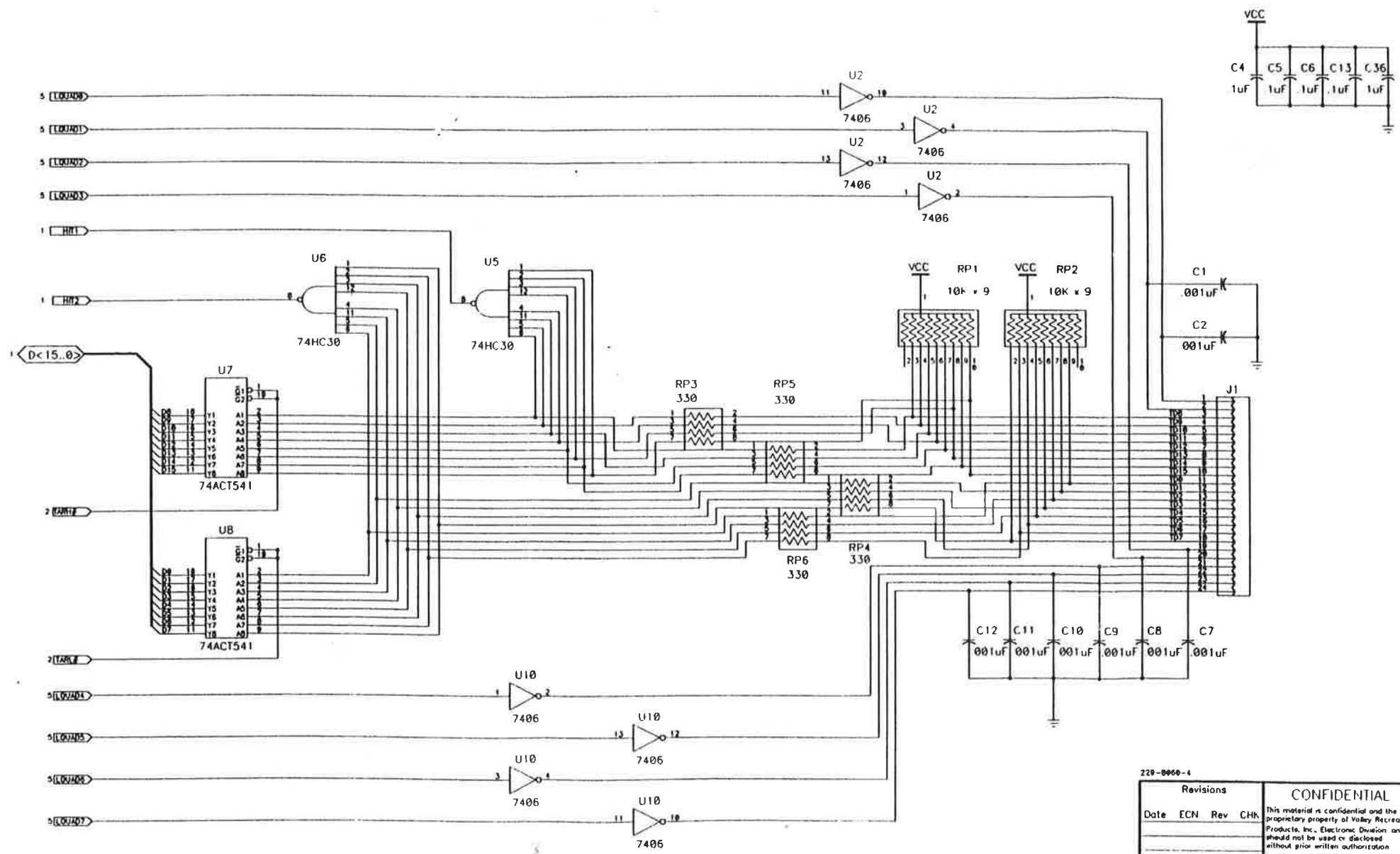
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				Drawn by LSK		
				Approved by <i>WJS</i>		
				Title		
				IO CONTROLLER-CPU, 386EX		
				VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 229 North Avenue, Spencer, MA 01108 (617) 883-8188 / Fax (617) 883-2116		Number
				A95-9-00-00		
				Site	File Name	Sheet
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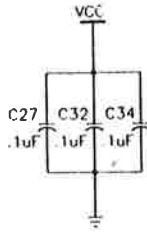
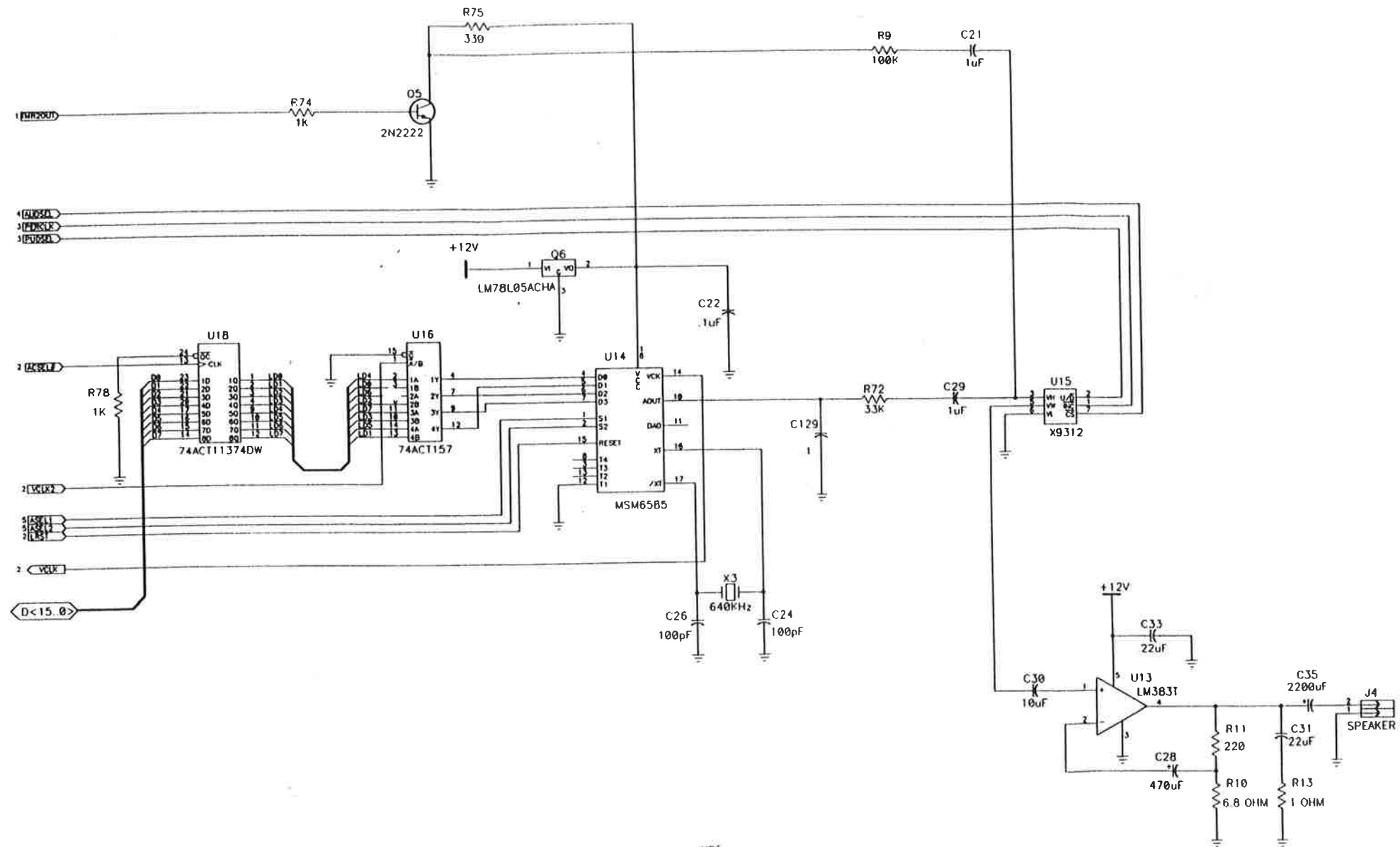
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Title					
IO CONTROLLER - EPLD					
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 228 North Avenue, Stearns, CA 95178 (415) 893-8100 - FAX (415) 893-2118				Number	
				A95-9-00-00	
Size	File Name	Sheet		of	
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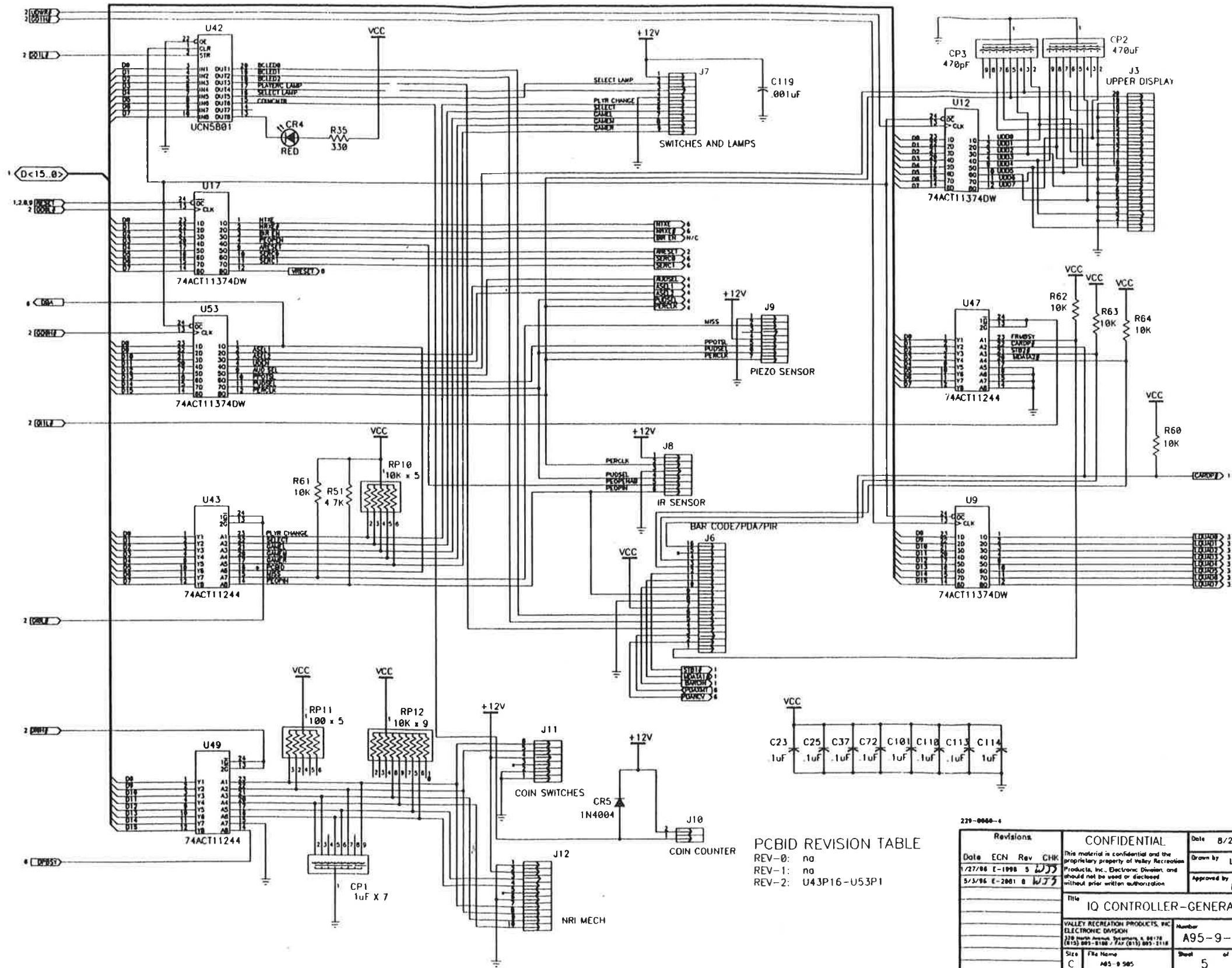
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				Approved by		<i>WJS</i>
				Title		
				IO CONTROLLER-TARGET		
				VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 370 North Avenue, Sparks, N. 89110 (815) 893-8100 FAX (815) 893-2110		Number
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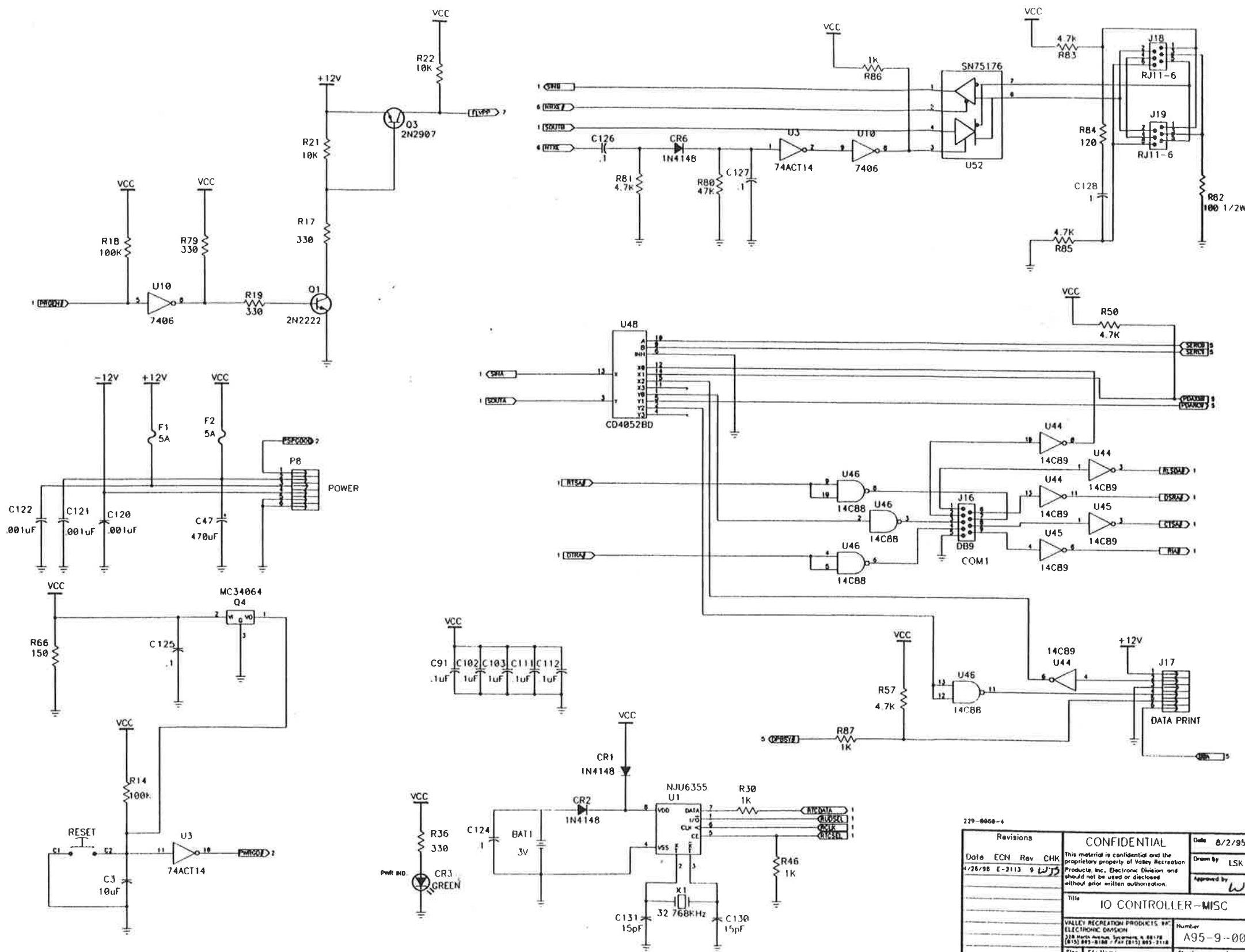
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1/27/95	E-2010	6	WJS	Drawn by	LSK
				Approved by	WJS
Title		IO CONTROLLER-AUDIO OUTPUT			
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION		Number		A95 9-00-00	
229 Wash Avenue, Systems 6, #8118 (815) 885-8188 • Fax (815) 885-2118		Site		Sheet 4 of 4	
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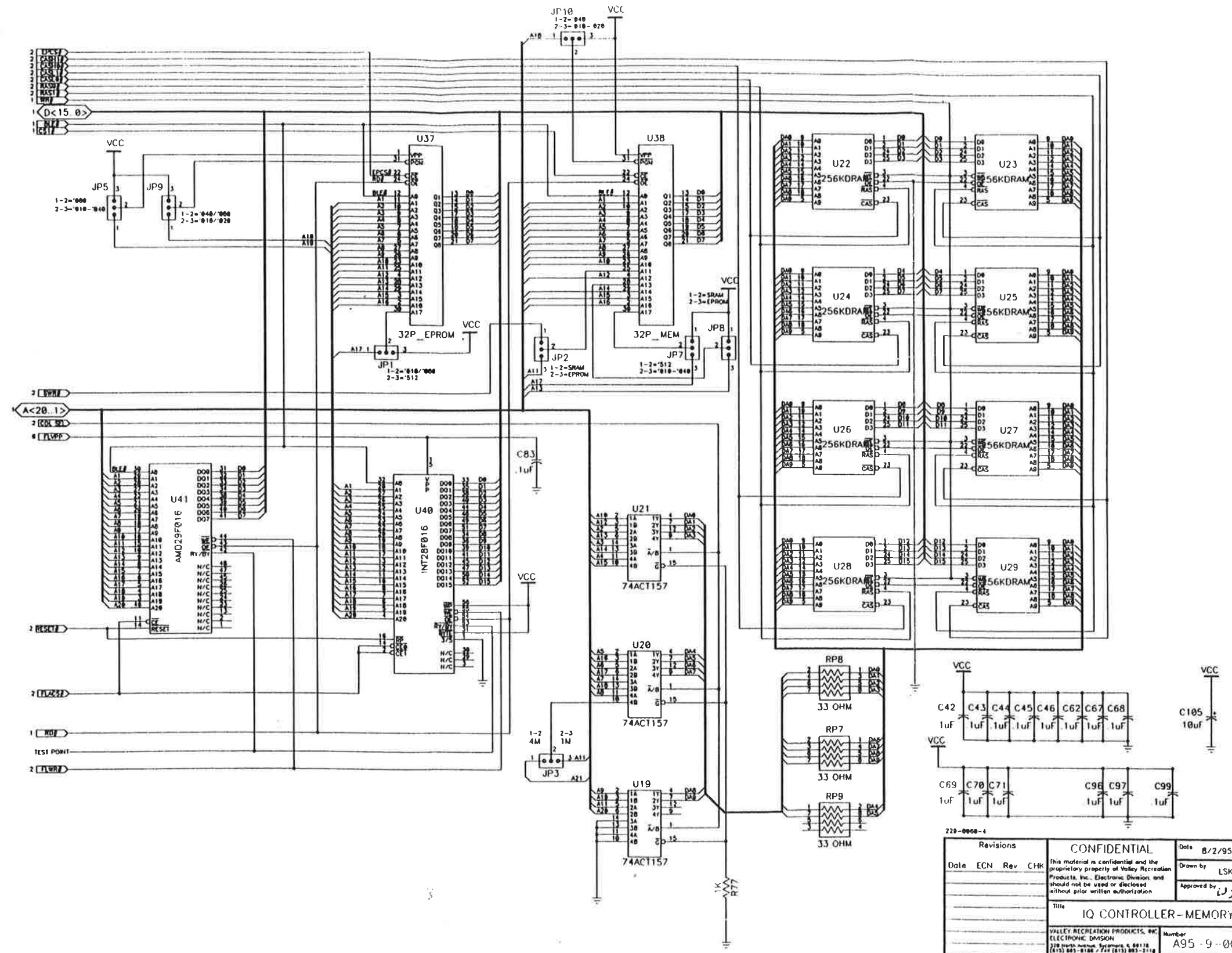


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 REV-1: no
 REV-2: U43P16-U53P1

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1/27/88	E-1998	5	WJS	Drawn by	LSK	
5/3/96	E-2001	0	WJS	Approved by	WJS	
Title				IQ CONTROLLER-GENERAL I/O		
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 378 North Avenue, Steamers, S. 88-18 (415) 895-8188 / Fax (415) 895-2118				Number A95-9-00-00		
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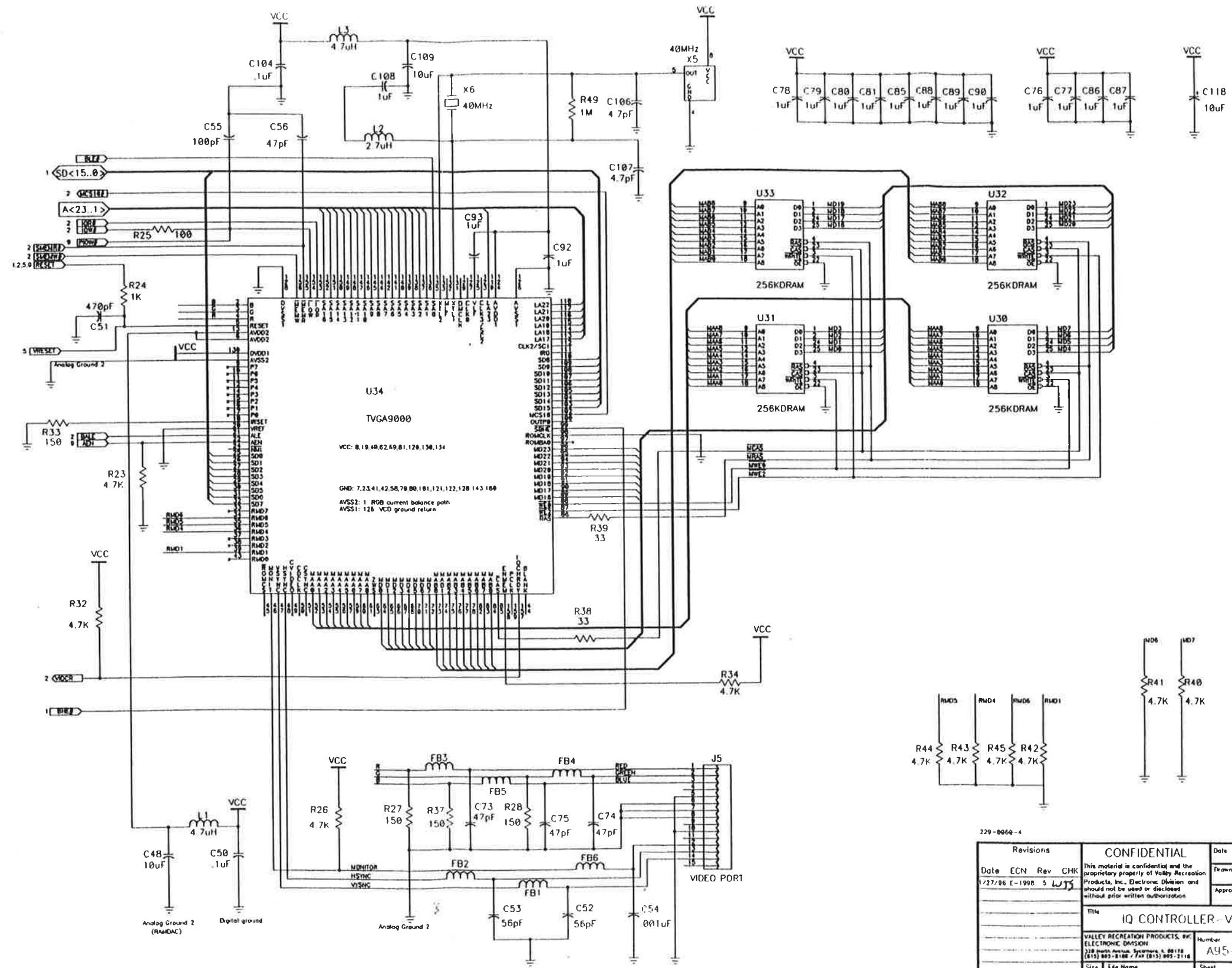


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Title		Approved by WJS	
IO CONTROLLER-MISC			
VALLEY RECREATION PRODUCTS INC. ELECTRONIC DIVISION 328 North American Boulevard, # 80118 (815) 895-8186 Fax (815) 895-2118		Number	
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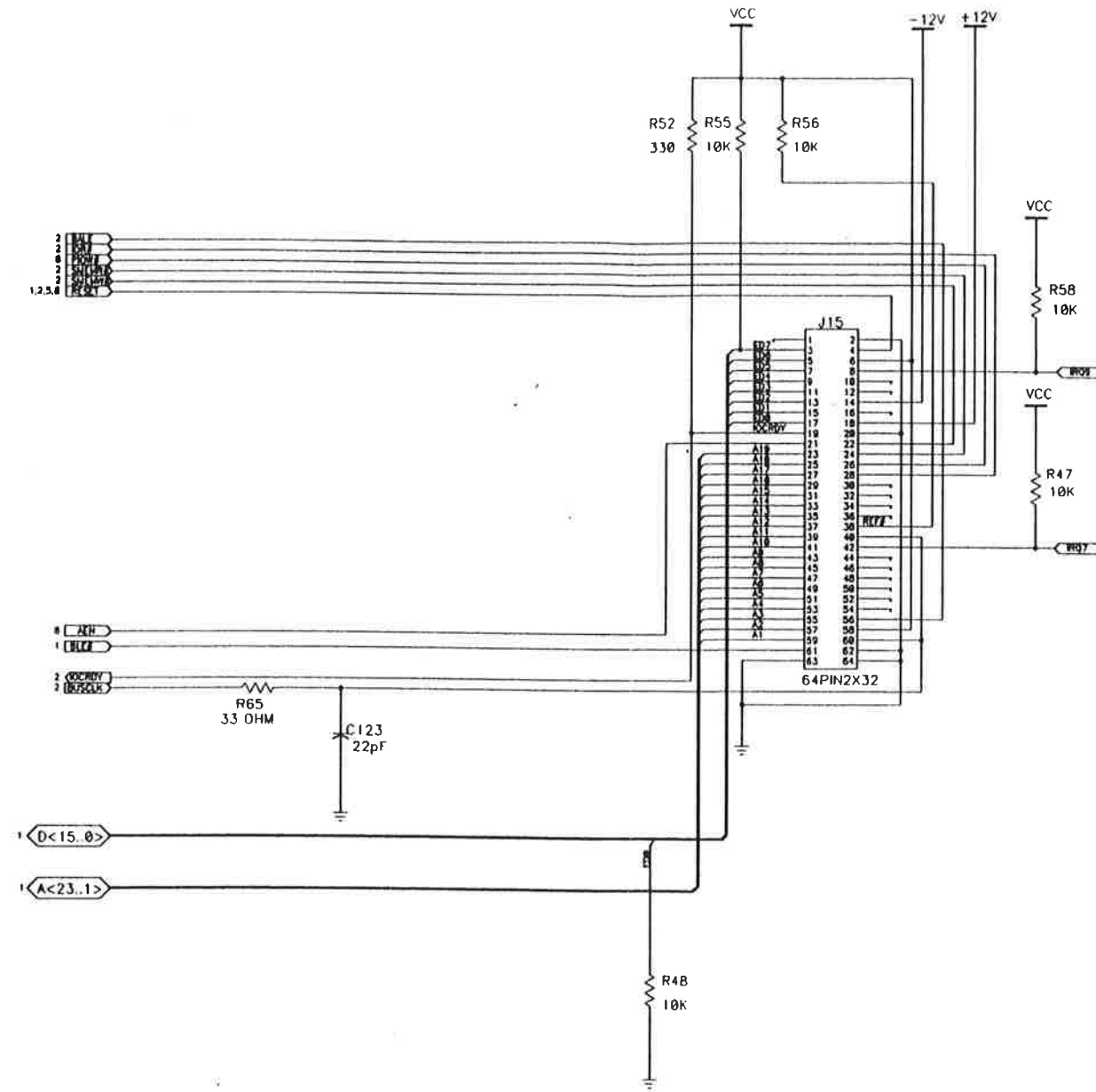
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				VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 218 North Avenue, Sparks, N. 89118 (815) 895-8188 / Fax (815) 895-2118		Number
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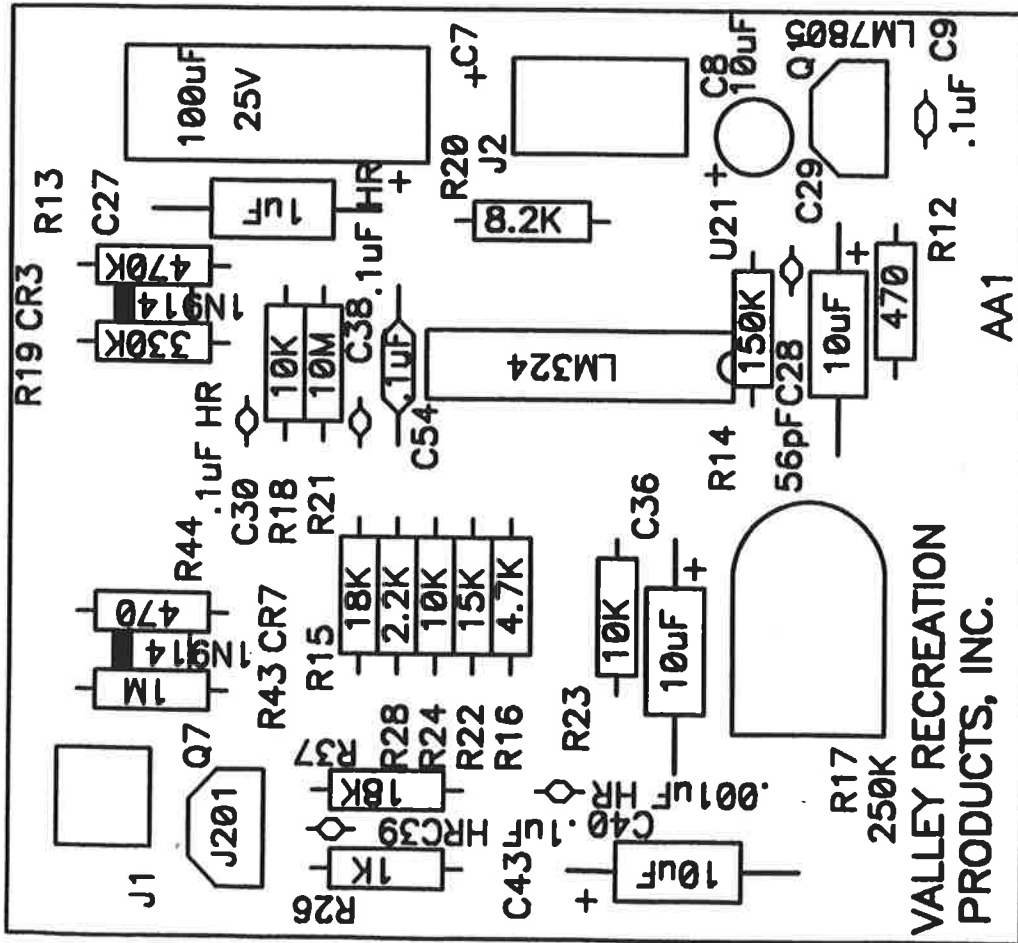
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7/27/95 E-1998 5 WJS		Approved by	WJS
Title		IQ CONTROLLER - VGA	
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229-0050-4

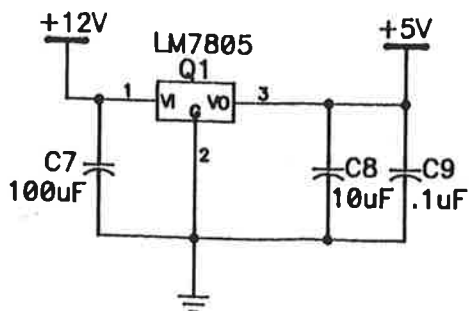
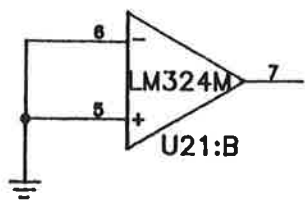
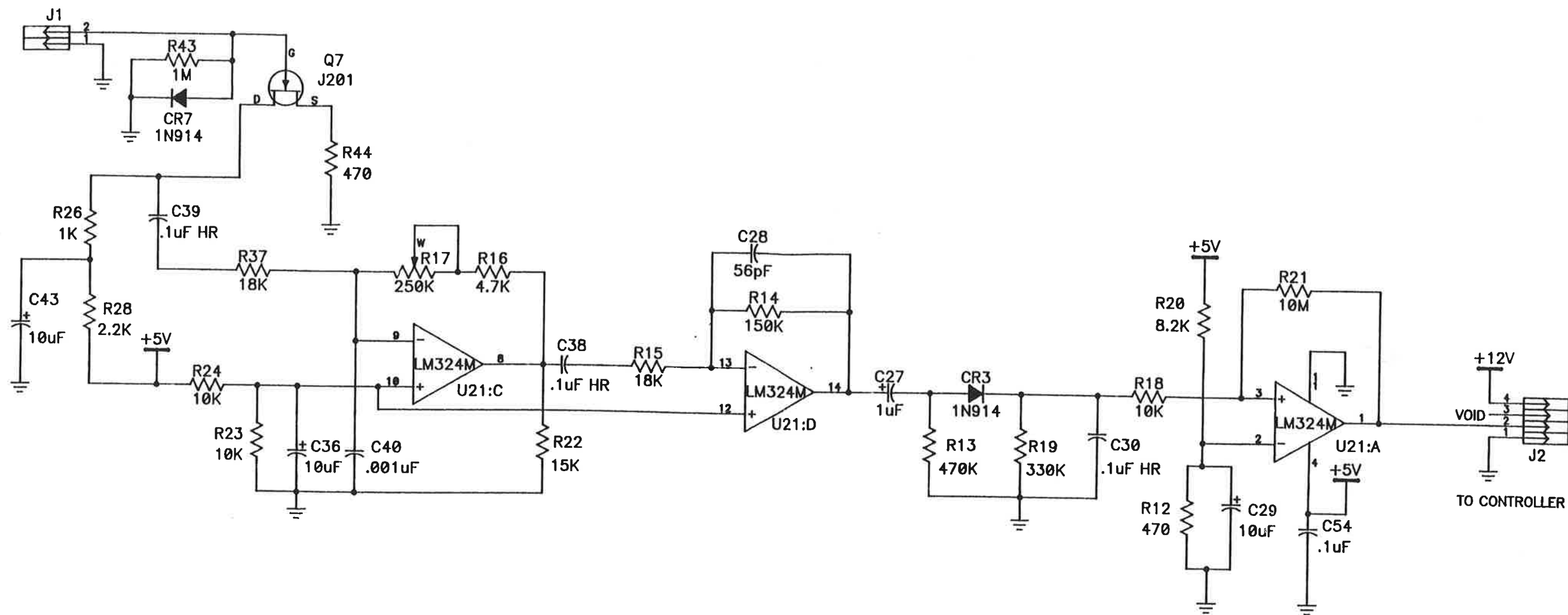
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Date	ECN	Rev	CHK	This material is confidential and the proprietary property of Valley Recreation Products, Inc. Electronic Division and should not be used or disclosed without prior written authorization.		Drawn by LSK	
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				Title IQ CONTROLLER-PC104 PORT			
				VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 278 North Avenue, Sycamore, IL 60178 (815) 807-8100 / Fax (815) 807-2118		Number A95-9-00-00	
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VALLEY RECREATION
PRODUCTS, INC.

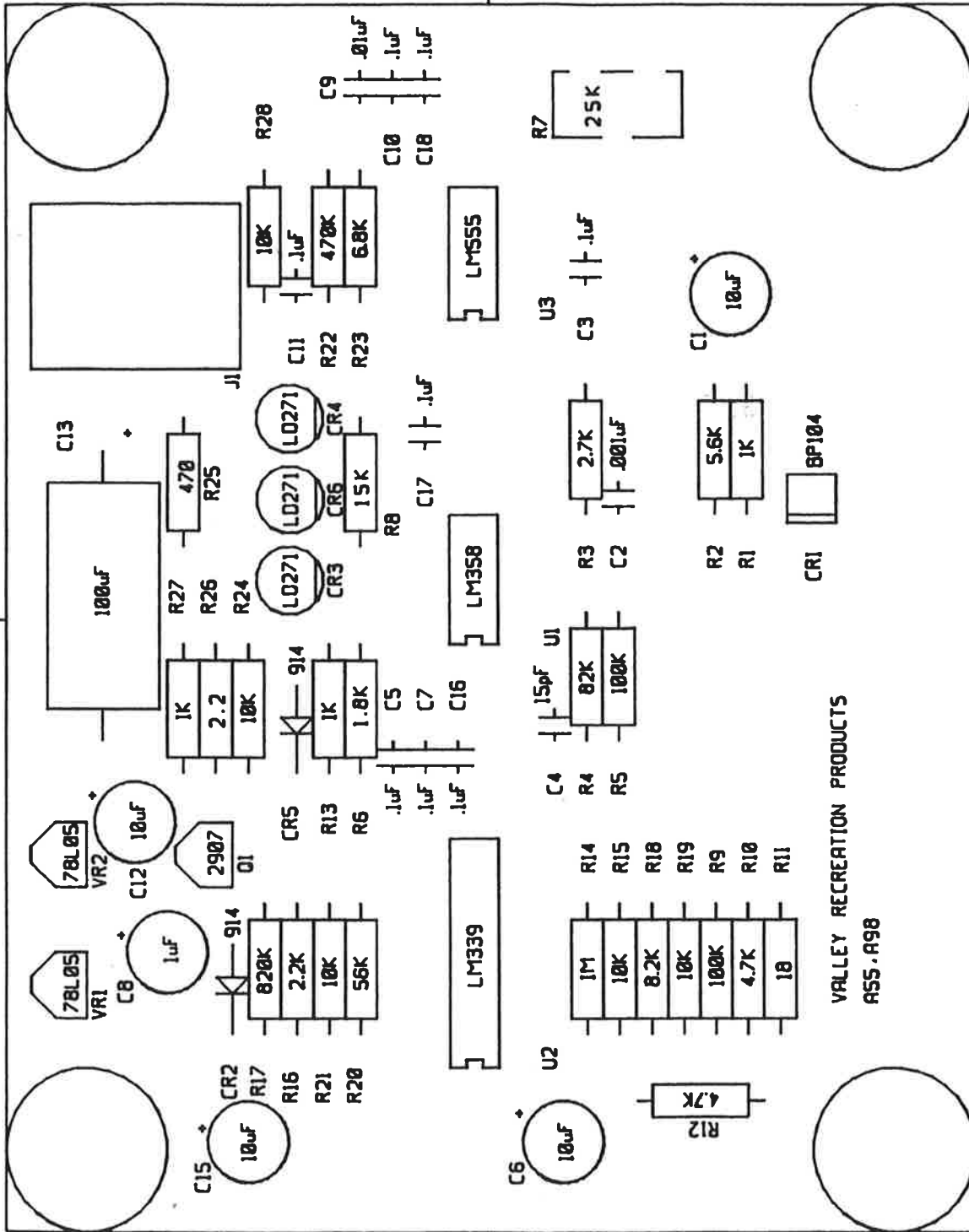
COMPONENT LAYOUT
AA1-1

TO PIEZO ELEMENT



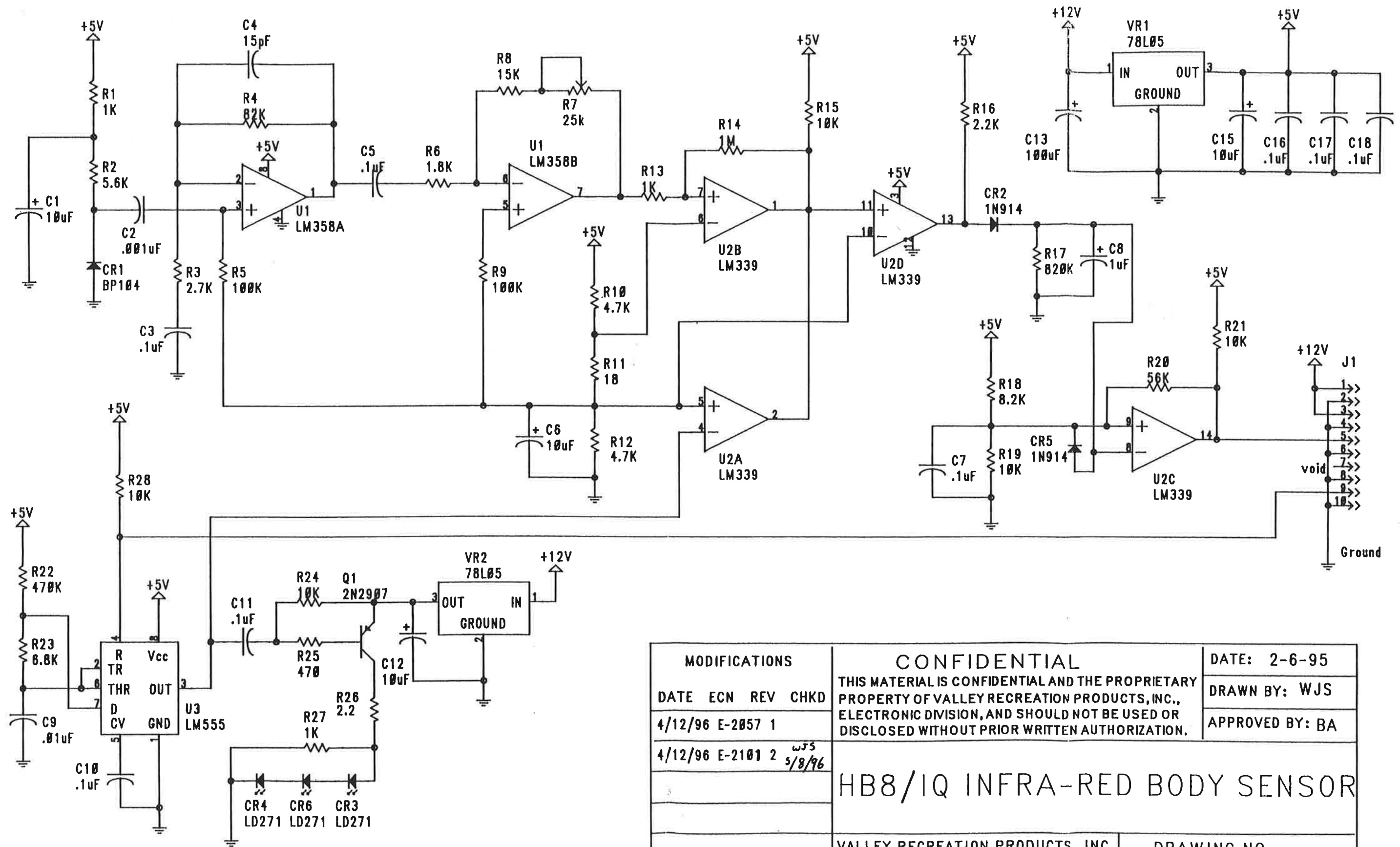
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Date	ECN Rev CHK		Drawn by LSK
6/14/95 E-1924 I AD			Approved by WJS
Title PCB, SM PIEZO CKT			
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 328 North Avenue, Sycamore, IL 60178 (615) 885-8188 / FAX (615) 885-2118		Number AA1-1-00-00	
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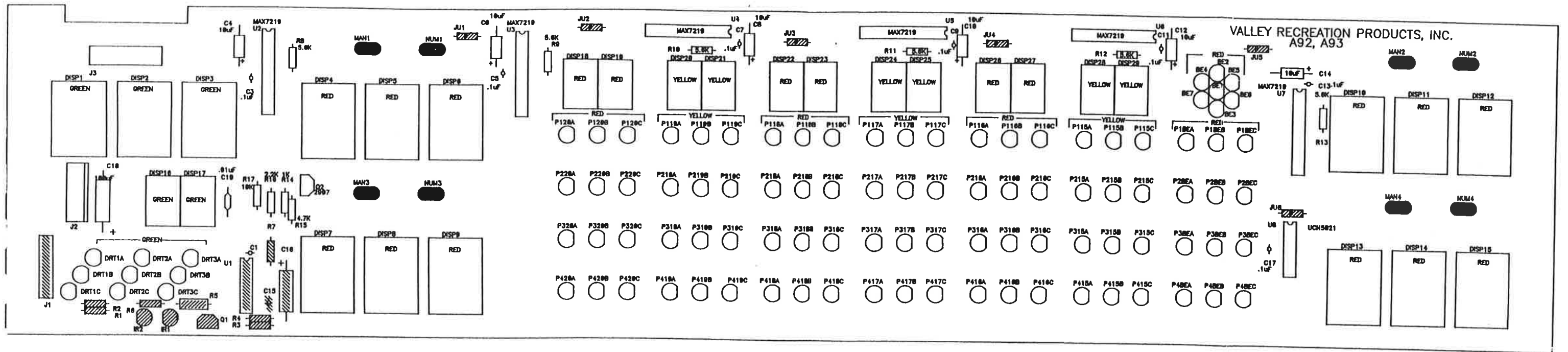


VALLEY RECREATION PRODUCTS
 ASS-A98

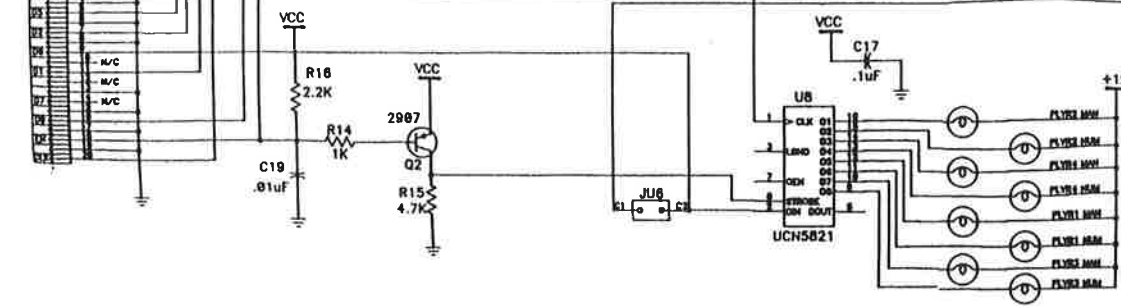
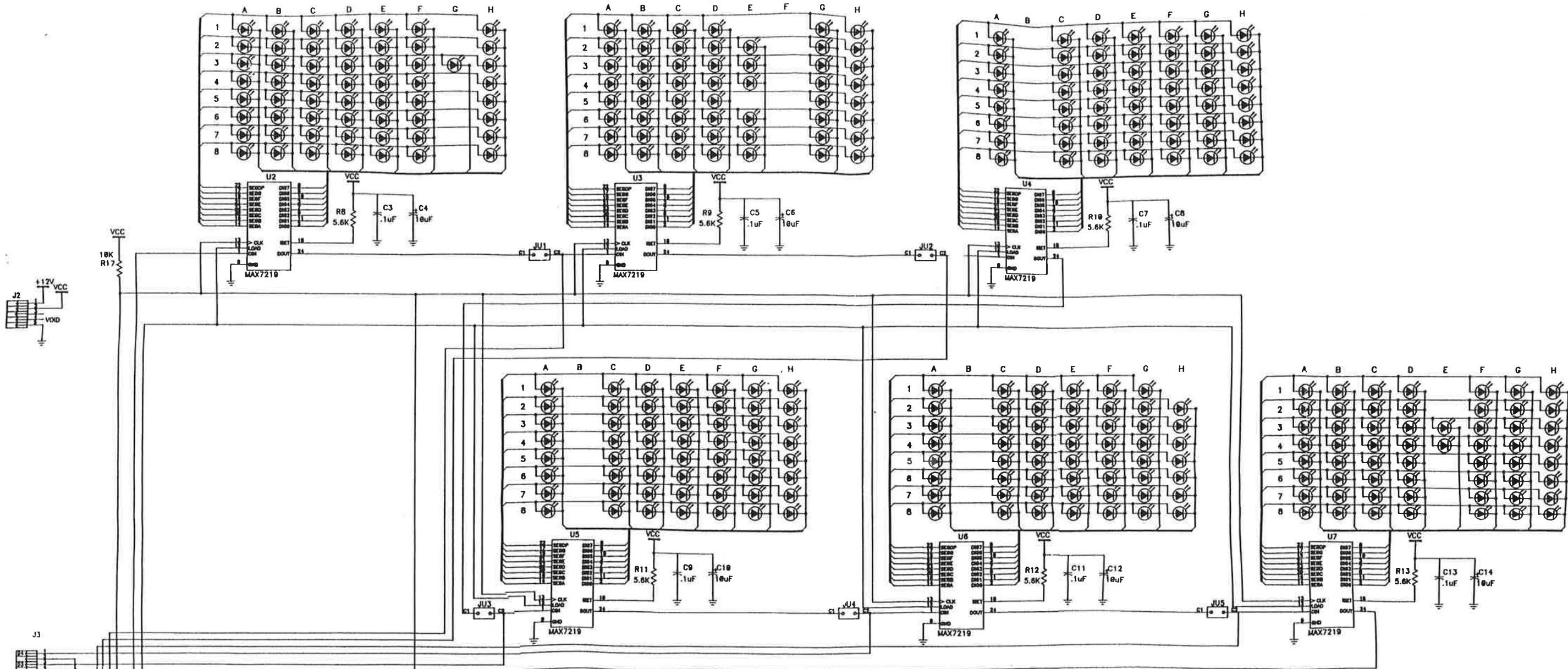
VALLEY RECREATION PRODUCTS
 A98-2-00-00
 COMPONENT LAYOUT
 4/12/96
 WJS 5/8/96



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DATE	ECN	REV	CHKD		DRAWN BY: WJS
4/12/96	E-2057	1			APPROVED BY: BA
4/12/96	E-2101	2	WJS 5/8/96	HB8/IQ INFRA-RED BODY SENSOR	
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 320 NORTH AVENUE, SYCAMORE, IL 60178 (815) 895-8100 / FAX (815) 895-2110				DRAWING NO. A98-2-00-00	



COMPONENT LAYOUT
A93-2-00-00



U2	U3	U4	U5	U6	U7		
A (n)	B (n)	C (1n)	D (n)	E (n)	F (n)	G (1n)	H (n)
1 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
2 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
3 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
4 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
5 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
6 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
7 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
8 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
1 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
2 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
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5 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
6 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
7 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1
8 (12)	DSP17	DSP3	DSP18	DSP10	DSP4	DSP19	DSP1

Revisions		CONFIDENTIAL		Date	02/10/05
Date	ECN	Rev	CHK	Drawn by	LSK
2/10/05	E-1022	1		Approved by	[Signature]
8/20/06	E-1037	2			
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Valley Recreation Products, Inc. ELECTRONIC DIVISION				A93-2-00-00	
Title				Sheet	
D				A932D5P.001	

APPENDICES

The following are the current factory default settings for the IQ Game.

Note:

* - denotes features that are not defaulted when a Factory ONE STEP is performed. The only time these values are changed is if the flash data areas have been erased or the flash data areas have never been initialized.

In Test Mode

Sound:

- * **Main Volume:** default value is 8%.
- * **Alarm Volume:** default value is 20%.

APPENDIX A: FACTORY DEFAULT SETTINGS

In Programming / Setup Games

<u>GAME</u>	<u>PRICE</u>	<u>ROUND LIMIT</u>	<u>BE SETTING</u>
301			
301	1	12	Single
301 wipeout	1	12	Single
301 wipeout 103	1	12	Single
301 dbl in	2	20	Single
301 dbl out	2	20	Single
301 dbl in/out	2	20	Single
301 masters out	2	20	Single
301 dle in/mo	2	20	Single
501			
501	2	20	Single
501 wipeout	2	20	Single
501 wipeout 103	2	20	Single
501 dbl in	3	25	Single
501 dbl out	3	25	Single
501 dbl in/out	3	25	Single
501 masters out	3	25	Single
501 dbl in/mo	3	25	Single
701			
701	3	25	Single
701 wipeout	3	25	Single
701 wipeout 103	3	25	Single
701 dbl in	4	30	Single
701 dbl out	4	30	Single
701 dbl in/out	4	30	Single
701 masters out	4	30	Single
701 dbl in/mo	4	30	Single
901			
901	4	30	Single
901 wipcut	4	30	Single

APPENDIX A: FACTORY DEFAULT SETTINGS

901 dbl in	5	35	Single
901 dbl out	5	35	Single
901 dbe in /out	5	35	Single
901 masters out	5	35	Single
901 dbl in/mo	5	35	Single
CRICKET/CHANCEIT			
Cricket	3	35	Double
Cutthroat	3	35	Double
Mark-21	2	25	Double
Limit 201	2	25	Double
Masters	2	25	Double
Chance-it	3	35	Double
Cutthroat	3	35	Double
Mark-21	2	25	Double
Limit 201	2	25	Double
Masters	2	25	Double
YOU PICK IT / SHANGHAI / HIGH SCORE / LOW SCORE / SHAVE-IT			
YouPickIt	3	35	Double
Cutthroat	3	35	Double
Mark-21	2	25	Double
Limit 201	2	25	Double
Masters	2	25	Double
Shanghai	1	7	Single
High Score	1	10	Single
Low Score	1	10	Single
Shave-It	2	9	Single

In Programming/Coin Channels

Coin Channel	Credits Given	Channel Value
1	1	1
2	1	1
3	0	0
4	0	0
5	0	0
6	0	0

In Programming/Setup Features

Page 1:

- Accumulative Mode: Enabled / Disabled.
- Attract Sounds: Enabled / Disabled.
- Dart Alarm: Enabled / Disabled.
- Power Fail: Enabled / Disabled.
- One Dart Out: Enabled / Disabled.
- Counts 3 Darts Per Round: Enabled / Disabled.
- Single Bull Double In: Enabled / Disabled.
- Frozen Team Loss: Enabled / Disabled.
- Free Play: Enabled / Disabled.
- Skip Frozen Cricket Player: Enabled / Disabled.

Page 2:

- Demonstration Mode: Enabled / Disabled.
- *Modem Auto Answer: Enabled / Disabled.
- *Rings Before Answer: Range from 2 to 10 rings; Default value is 8.
- Pir Motion Sensor: Enabled / Disabled.
- Allow change of Starting Position: Enabled / Disabled.
- *Automatic League Data Send: Enabled / Disabled.
- *Fax: Output Format: OCR ONLY / Full Visual.

Programming/Setup Features (Continued)

***Fax: Minutes Between Retries:** Range from 0 to 10. Default value is 2.

***Fax: Number of Retries:** Range from 0 to 10. Default value is 4.

Screen Saver Delay (Minutes): Range off to 60 minutes; increments of 2.

Default value is 6.

Ernie's Dart Path: Normal dart animation / Display tracer darts.

Upper Display Installed: Yes / No.

Advertising Images: Enabled / Disabled.

Play Audio Files: Enabled / Disabled.

In Programming/Setup Ernie

Ernie's Cost: Range from 0 to 3. Default value is 1.

Play for Me Skill Level: Range 0: No Ernie to 5: Master.

Default value is 2: Steady.

Programming/Set Window Times

Available Windows	<u>Time Setting</u>
Communications Start Time	: 03:00
Communications Stop Time	: 17:00
Sleep Mode On	: 03:00
Sleep Mode Off	: 08:00

In Operator Codes

***Operator Security Code:** Range up to 4 digits. Default value is 0000.

***Operator Identification Code:** Range 3 alpha/numeric characters.

Default value is VV.

***Machine Identification Code:** Range up to 8 digits from 0 to 9.

Default value is 0.

***Peripheral Identification:** Range 9 alpha/numeric characters

Default value is none.

Programming/Set Window Times (Continued)

In Communication

- *Caller ID Phone Number: (815) 895-2724.
- *Fax Results Phone Number: 1(800) 417-4480.
- *Modem Initialization String: &F &C1 & D3.
- *Fax Initialization String: &F &C1 &D3.
- *Modem Answer in window only: Enabled / Disabled.
- *Fax Poll Answer: Enabled / Disabled.
- *Communications Start Time: 3:00
- *Communications Stop Time: 17:00.

League Machine for Windows Software™

League Machine for Windows, a Microsoft FoxPro database application on a PC-compatible clone, tracks fees, and manages information gathered electronically or entered manually. Automated retrieval of information can be performed at any time while the computer is in use for other functions, and processed after retrieval.

LMW allows an operator to add all league information manually or automatically. A site can receive automatically using a fax machine in any location with fax capability, a Scantron document scanner connected to your computer, or an IQ electronic dart game.

Modem Installation

Equipment needed for a Fax/Modem installation:

- External Fax/Modem, contact the Service Department for current recommended Fax/Modems models.
- 6 foot Serial Cable (25 pin to 9 pin).
- Enough Phone Cable to reach the Phone Jack.

Remove the contents of the Fax/Modem box. Verify all of the parts are present. Observe all of the manufacturer precautions during the installation.

Turn the power to the IQ game off. Open the monitor cover door. Plug the power converter into the power outlet strip, on the right hand side of the monitor. Route the power converter cable behind the monitor and out the left side of the monitor.



DO NOT place the power converter cable over the top of the monitor.

Next, route the serial cable. The 9 pin end of this cable connects to the controller card. Locate the hole in the top back of the lower electronics compartment (compartment with the monitor). Take the 9 pin end of the serial cable and feed it up that hole. When it appears in the upper electronics compartment (compartment with the controller & power supply) pull it gently until it reaches the front left side of the controller card. Plug the 9 pin cable into the 9 pin connector on the controller card (use the screws on the connector to ensure a good connection). Again, route the serial cable behind the monitor and out the left side of the monitor.



DO NOT place the power converter cable over the top of the monitor.

Now connect the cables to the Fax/Modem (See Appendix B of this manual). Plug the power cable into the power jack on the back of the Fax/Modem. Then, plug the 25 pin end of the serial cable into the the back of the Fax/Modem (use the screws on the connector to ensure a good connection).

Plug the phone cable into the back of the Fax/Modem. Be sure that the phone line is plugged into the correct jack on the back of the modem (the one with a wall line designation). Refer to the modem manual for proper phone installation.

Turn the power to the Fax/Modem on (usually the switch is on the back). There is a hole in the right hand side back of the lower electronics compartment (compartment with the monitor). Put the other end of the phone cable through the hole, then to the phone wall jack.

Verify all of the connections were made correctly. Turn the power to the IQ game on. Swipe the Master Service Card or press the Test Button to enter Service Mode. Use the *Red Button* to highlight Communications in the red window. Then, use the *Blue Button* to highlight Setup Numbers in the blue window.

Building Network Cables & Network Installation

Equipment needed for a creating Network Cables:

- | |
|---|
| <ul style="list-style-type: none"> • Colored Wire Phone Cable. • RJ-11 Crimpers. • Phone Connecters (RJ-11). |
|---|



Pre-made cables are available by calling Valley Service Department: **1-800-331-5420**

The difference between Network cables and Phone Cables is the pin out on the connector.

Take a phone cable and hold both ends side by side and if both connectors are facing the same direction, the wire colors will be reversed from one end to the other.

The Network Cables are a "one-to-one" pin out. This means if you take a network cable and hold both ends side by side and if both connectors are facing the same direction, the wire colors will be the same all the way across.



Network Terminators are used on the end games of a network. Network Terminators, (EIX-IQ Network Terminator Assembly) can be ordered through Valley Service Department **1-800-331-5420**.

There are two types of Network cables:

1. Flat Ribbon.

Usually the Fax/Modems come with a 6 foot flat ribbon type phone cable. These are called flat ribbon because the wires inside are in a row which causes the cables appearance to be more flat than round. This type of cable should be used for distances of 10 feet or less.

2. Twisted Pairs.

This cable take two of the wires and twists them, then does the same to the remaining two wires (ic. Twisted Pairs). Because the wires are twisted this type of cable is usually round. The twisted pair cable can be purchased from the local hardware store. The twists in this cable are designed to reduce the effects of RF noise (caused by neon signs, radios, etc.). This cable can be used for any distances.

To connect two or more IQ games to create a network:

Plug one end of a Network cable into one of the RJ-11 connectors (phone jacks) on the controller card (front left). Remove the hole plug. Route cable out the hole in the back of the game. The cable should enter the next game the same way it exited the last game. Take the cable and plug it into the one of the RJ-11 connectors (phone jacks) on the controller card (front left). Make sure a Network Terminator (EIX) is plugged into the end games on a network.

If you experience communication problems over the network, you may need the Network Terminator.

League Data Transfer

The IQ game is able to send and receive league data in several ways.
The PDA and Fax/Modem are ordered separately.



Personal Data Assistant	(PDA) Hand Held Computer
League Machine for Windows™	(LMW) Computer Software System
Fax/Modem	to and from LMW

Operators or League Managers can:

- Load this league data into the IQ game via PDA (on site) and via modem (remote).
- Retrieve league data from IQ game via PDA (on site), FAX (using Send Match Cards), and FAX Automatic League Data Send (using automatic start/stop time feature in IQ game.)
- Create leagues (with feats), teams, players, sites, and all rotation information with LMW software.
- Process match results in LMW.

Note:
The following is a brief description of the functions that can be performed.
For more detail, refer to the League Machine for Windows Manual™.

How to move data from League Machine for Windows™ (LMW) to the IQ game.

- **Using a PDA to transfer league data:**  
- A. Move data from LMW to the PDA.
 1. Turn on the PDA.
 2. In the LMW program use the mouse to click on FILE.
A menu will appear. select ACTIVITIES.
Select EXPORT DATA.
 3. Click on VIA PDA.
 4. Click on SELECT LEAGUES.
A list of leagues will appear. Select the league data to be transferred to the IQ games. Once all of the leagues are selected, click OK.
 5. Next, set the PDA in front of the Infrared Transmitter/Receiver.
 6. In LMW, click OK to select. Click OK again to start the data transfer.
 7. LMW will begin transmitting data in 3 separate files:
Roster / Team / and League.
The PDA will read "connected, now receiving." Once the connection from the IQ to the PDA is established.



DO NOT MOVE THE PDA.

8. When export is complete, close all open Windows in LMW.
9. Turn off the PDA.
10. Take the PDA to all of the IQ games needing the data update.

League Data Transfer (Continued)**B. Moving data from the PDA to the IQ Game.** 

1. Turn the PDA on.
Make sure the PDA is in PC Link mode by selecting the **Peripherals MENU**.
Select **PC Link**.
2. Put IQ in *Service Mode/Test Mode* by pressing the **TEST** switch on Controller Board or by swiping the **Master Service Card** through the Card Reader.
3. Press the *Red Button* to highlight **COMMUNICATIONS** in the red window.
Press the *Blue Button* to highlight **PDA SEND TO IQ** in the blue window.
4. Line up the PDA Infrared transmitter with small square window on the IQ Card Reader.
Press the *Select Button* on the IQ game to begin data transmission.
Once the IQ / PDA connection is established.

**DO NOT MOVE THE PDA.**

Hold the PDA very steady until transmission is complete.

5. The IQ Monitor will show the status of the transmission and will report when the transmission is complete.
When the status box disappears from the monitor, turn the PDA off.
6. To check league data in the IQ game exit Service Mode and return to the Main Menu (the game will reboot).
Press the *Red Button* and highlight **LEAGUE PLAY** in the red window.
The transmitted league data will appear in the windows; league names in the blue menu and team names in the gray menu.

- **Using a Fax/Modem to Transfer League Data.**

IQ GAME SETUP: At least one IQ game per location must have a fax/modem and phone line installed. The IQ game must have the **Modem Auto Answer** enabled.

This setting is found in the Service Mode - programming section under features.

A. At the Computer(LMW):  

1. Start League Machine for Windows™ (LMW).
2. Once in the LMW program, use the mouse to click on the **FILE MENU**.
Select **SITES**.
3. Click on **BROWSE** to find the correct site.
Click the left mouse button to select a site, then click the right mouse button to Select it.
4. If the phone number in "DATA NUMBER" is correct, skip this step otherwise, to enter the IQ phone number;
 - Enter the IQ phone number in the **DATA NUMBER** field.
 - Enter the start time **COURAG IQ COMMUNICATIONS** Start Time, this time must match the time the IQ game is set to receive.
5. Use the mouse to click on the **FILE MENU**.
Click on **ACTIVITIES**.
Click on **EXPORT DATA**.

League Data Transfer (Continued)

1. Choose the data to transfer to the IQ game:
 - To send specific leagues, click on **SELECT LEAGUES**.
 - To choose the leagues to be sent to the IQ game, or to choose all leagues from a particular site, click on **SELECT SITES**, then choose the site.
2. Click on **ACROSS PHONE LINES**.
Choose **USE IQ SITE TIME**. Click **OK**. Click **CANCEL** to close the window.
3. Select **ACTIVITIES** and **EXPORT MONITOR** from the **FILE MENU**.
Click on **BROWSE** to see a list of pending and completed data transmissions.
4. Highlight an entry using the left mouse button, select it by clicking the right mouse button.
To send data immediately, click on **SEND NOW**.
Click on **YES** to confirm.
LMW will dial out and send league data to selected IQ games.
5. To setup transmission of data to be sent at a later time, click on **MONITOR MODE**.
Leave the computer on, and League Machine will automatically dial out for all sites and download the League information to the sites.

TO SEND LEAGUE DATA FROM IQ GAME TO LMW

League match results can be retrieved in three ways:

via FAX	(Player FAX RESULTS cards)
via FAX	Automatic League Data send
via PDA	


Manually Sending Match Results Via FAX/MODEM.

- Check that the computer is on and the Satisfaxtion modem board FAX software is set to Auto Answer.
- Players will swipe their FAX RESULTS CARDS through the barcode reader on the IQ game after matches have been played.
- The IQ game will begin processing data and will automatically send data to the computer. BITFAX software is able to recognize and save data for LMW use. (see below under "To recognize a fax in BITWARE")

League Data Transfer (Continued)**Via FAX—Automatic League Data Send**

This mode allows you to send data from IQ to LMW automatically at a predetermined time.

NOTE:
LMW computer must be ON, and FAX software must be set to auto answer.

- To enter SERVICE MODE, press the Test Switch on the Controller Board or swipe a Master Service Card through the Card Reader.
- Enable Automatic League Data Send on the game (see PROGRAMMING under SERVICE MODE in this manual. )
- Highlight COMMUNICATION in the red window.
- Highlight SETUP NUMBERS in the blue window
- Press the *Select Button*.
- Use the Red Button (Grid Up) and the Blue Button (Grid Down) to scroll through the options and set up the phone number to be dialed for fax results.
- Enter a Communication Window Start Time and a Communication Window Stop Time.
- IQ will send the data to the LMW computer software at the time you setup.

To Recognize a FAX in BITFAX:  

- Click on the Receive Log icon in the BitFax Professional group. A list of all currently received faxes will be displayed on the screen.
- Highlight the fax to be recognized (translated to text file) and click on the View Button at top.
- The fax will be displayed on the screen. Under the FILE MENU, select RECOGNIZE FAX.
- Click on OK to accept the recognition settings, and Bitfax will convert the fax to a text file. Faxes must be converted to text files so that they can communicate with the League Machine software.
- Repeat the above steps to translate other faxes for League Machine use.

To IMPORT DATA into LMW:

Via LEAGUE MACHINE  

- In League Machine, select ACTIVITIES and IMPORT DATA under the FILES MENU.
- Select IQ FAX, and click on IMPORT. League Machine will transfer all BITFAX data to the LMW format.
- Click on CANCEL to close window.

Via PDA

- Put the IQ Game in SERVICE MODE by pressing the Test Switch on the Controller Board. Highlight COMMUNICATION in the red window of the IQ Game. Highlight IQ SEND TO PDA.

League Data Transfer (Continued)

- Put PDA in PC Link Mode. Line up the PDA Infrared Transmitter with the small square window on the IQ Game card reader.
- To begin transfer of league match results, press the *Select Button* on the IQ game.
- When transfer is complete, take the PDA to LMW on the computer.
Line up PDA Infrared Transmitter with the Sharp Infrared Module.
- In League Machine, under the FILE MENU,
 - Select ACTIVITIES.
 - Select IMPORT DATA.
 - Click on ATTENDED and PDA.
 - Click on IMPORT.
 - Click YES when ready to transfer.



ACCESSING AND PROCESSING RESULTS IN LMW

NOTE:
All information transmitted to LMW can be retrieved in the same way.

- Under the FILE MENU,
 - Select ACTIVITIES.
 - Select MATCHES.
- If NO MATCHES FOUND, click on ADD.
If scoresheet pops up, click on + button.
- Click on the "Retrieve" button in the window to bring up a list of match files for processing.
- Choose a match from the list. The match scoresheet will be displayed on the screen.

Your IQ game, in conjunction with LMW, can be used to set up, record, and keep track of league games. All league information, including the number of games, game types, player and team information, round limits, etc. can be loaded from LMW and stored in a database in the IQ game. See the Communications Section of this manual under SERVICE MODE, and your LMW Software Manual for more details.

TO USE YOUR IQ FOR LEAGUE PLAY

- Enter league data into your IQ Game using LMW. 
- Load League data via modem FAX, or PDA (see Communications Section of this manual.)
- Select League Play from the red Games Type window on your IQ Game. 
- League and team names are displayed in the blue and gray Windows™.

NOTE:
The IQ will prompt the league player to swipe his PLAYER ID card through the barcode reader.
Please see your LMW manual to print PLAYER ID cards.
IQ LEAGUE CAPABILITY CAN ONLY BE ACCESSED THROUGH PREPRINTED PLAYER
OR OPERATOR ID CARDS.

League Data Transfer (Continued)**TO ADD LEAGUE PLAYERS TO TEAMS** 

- Once the Player ID card has been swiped, Ernie will prompt the player to choose whether his team will be playing at home or as a visitor.
- Highlight your choice, and press the *Select Button* to confirm.
- Your IQ game will display a list of pre-entered players in the blue window.
Possible player positions will be displayed in the red window.
Player and position for both home and visitor teams will be displayed in the gray window.
- Use the *Red Button* and the *Blue Button* to choose player and position.
Press the *Select Button* to confirm.
Highlight the person to play first from the list of available players in the blue window.
Press the *Select Button* to add the player.
Continue choosing all of the players for the match. Game will display player and position in gray window.
- To enter player and positions for the other team (home or visitor), press the *Gray Button* in the gray window and highlight the *Home* or *Visitor*.
Select players and positions as above.

TO VIEW THE PLAYER ROTATION 

To view the player rotation that you've just created:

- Press the *Gray Button* to select *View Rotation* from the options displayed in the gray window.
- The screen will display the league name, the team name, the game type, and each player and player position for each game.

NOTE:
The display is for view purposes only.
To Modify Player Rotation, return to the main menu and repeat
player selection (see previous page).

- Press the *Player Change Button* or the *Select Button* to exit and return to the Main Menu.

TO ADD A PLAYER TO EXISTING PLAYER ROSTER 

- Press the *Gray Button* to highlight *Add a Player* from the options displayed in the gray window.
Press the *Select Button* to accept your selection.
Enter player's three initials using the *Red Button* (*Previous Character*) and the *Blue Button* (*Next Character*).
Press the *Enter Button* to choose a character
- Press the *Select Button* when entry is complete, or press the *Player Change Button* to abort this entry without changing the contents of the previous entry.

League Data Transfer (Continued)

TO START LEAGUE GAME

- Press the *Gray Button* to highlight **Start Game** in the gray window.
Press the *Select Button* to accept your selection.
Ernie will prompt for coins if there are not enough credits to start a game.
- Player position will be displayed on the monitor. Any handicaps will be taken into account the first round.
- First player may throw darts.

NEXT GAME ADVANCE

- Your IQ game allows players to skip a game, or advance to the next game for a number of purposes while retaining previously entered player information and rotation.
To advance to the next league game, press **Next Game**.

AFTER EACH GAME

- After each game, the monitor will display a feats' screen, and players may be prompted to enter more money.

AT THE END OF A MATCH

- At the end of each match, the monitor will display the match results on a separate screen. This display includes all feats accumulated during the match

ADDENDUM



FOR COUGAR IQ DART GAME

Software Upgrade
Version 2.8 S60

November 19, 1996

New NDA Features:

The NDA has moved away from the SPRE to a handicapping system based on points per dart (PPD) or marks per round (MPR). Individual feats can still be tracked and used for specific awards but they are not part of the handicap calculation anymore. The NDA also uses and has used 4 player, 2 position team play for '01 and Cricket Games. The feats will be displayed for the usual 6 seconds each for a total of 2 minutes. Pressing the gray button will speed the advance.

01' GAMES:

- 1) The *Feats Readout* after each '01 Game is displayed on upper display as follows:

Feat Readout	Feat	
1st	PR	Points Remaining
2nd	TDT	Total Darts Thrown Using Actual Darts
3rd	TP	Total Points

- 2) TDT = total darts thrown per player, per game, including darts thrown in the handicapping round.
- 3) TP and TDT are used to calculate each player's NDA cumulative average points per dart, (PPD). $(PPD) = (TP/TDT)$
- 4) PPD (Points Per Dart)
 League Play: PPD average feat not displayed.
 Casual Play: PPD average feat displayed for last game played.
- 5) 4 Player, 2 Position:
 Tracks players individually, displays each player's feats.
 Note: Points remaining, (PR), does not apply for 4 player 2 position.

CRICKET GAMES:

- 1) The *Feats Readout* after each Cricket Game is displayed on upper display as follows:

Feat Readout	Feat	
1st	TM	Total Marks Scored
2nd	TDT	Total Darts Thrown Using Actual Darts

- 2) TM = total marks scored per player per game, including those from darts thrown in the handicapping round.
- 3) Total Marks, (TM) and Total Darts Thrown, (TDT) are used to calculate each player's NDA Marks Per Round cumulative average. $(MPR) = (TM/TDT) \times 3$
- 4) MPR (Marks Per Round)
 League Play: MPR average feat not displayed.
 Casual Play: MPR average feat displayed for last game played.

- 5) 4 Player, 2 Position:
Tracks players individually, displays each player's feats.

New Wipeout "Shoot-at" Prompt:

The IQ dart game now has a new Wipeout shoot-at prompt on the upper display. This new feature coaches each player which segment to hit in order to "Wipeout" an opponent's score.

New Game: Split Score:

The object of Split-Score is to hit the designated segment as shown on the display. The designated segment changes every round. When the designated segment is DOUBLE or TRIPLE, any double or triple segment is valid.

The designated segment must be hit at least once during the round or your score will be split in half. If it is hit more than once, points will be added to your score.

The score will start at 40. High score wins.

2 Credits Per Player
1 to 4 Players
9 Rounds

Standings and Schedules Reports:

IQ Software version 2.8S6 and higher League Machine version 2.6M6 have the capability for displaying five new reports on the IQ dart game. These reports include:

Team Standings
Team Players (Players by team)
Player Rank (Players by league)
League Schedule
Location Schedule

Each report will be created by LMW Version 2.6M6, and downloaded to the IQ game at the time league information is sent. Access to the reports will be provided through the league menu system on the IQ dart game.

NOTE!!

**I.Q. Version 2.8S6 and higher is compatible with LMW Version 2.6M6 ONLY.
It will not work with earlier LMW software versions.**

New Standings & Schedules Menus:

New Main Menu:

The main menu has been changed. When the left menu box is set to Dart Leagues, the middle menu and right menu will no longer show league and team information. The user will need to press the Select

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Button or the Player Change Button to enter the new Dart League Menus.

Dart League Menus:

The Left menu in the Dart League Menu allows the user to choose between starting a match or viewing a report. Starting a match depends on the program feature setting. In order to begin a match, the user will need to swipe a player barcode card.

To display one of the reports the user must select the type of report and the league to be displayed (if available). Reports do not require a league player card or credits.

Standings & Schedules Screen Types:

Two general purpose screens will be used to display the five reports.

Standings Screen - The standings screen will be used to display the following reports:

- Team Standings
- Team Players (Players by team)
- Player Rank (Players by league)

On the Standings Screen, the left most column of the screen display contains the row's label. This will usually be either a team name or a player name. The remaining eight columns contain data about the row. If all columns cannot be displayed on one screen, the right button will appear at the bottom of the screen. By pressing the right button, additional columns of data will be moved onto the screen. The row labels will remain unchanged when the right button is pressed.

If all rows can not be displayed on one screen, the middle button will appear at the bottom of the screen. By pressing the middle button, a whole new set of screen data is displayed.

Schedule Screen - The schedule screen will be used to display the reports:

- League Schedule
- Location Schedule

On the Schedule Screen, the left two columns of the screen display contains the row's label. This will usually be two team names. The remaining three columns contain data about the row. If all columns can not be displayed on one screen, the right button will appear at the bottom of the screen. By pressing the right button additional columns of data will be moved onto the screen. The row labels will remain unchanged when the right button is pressed.

If all rows cannot be displayed on one screen, the middle button will appear at the bottom of the screen. By pressing the middle button a whole new set of screen data is displayed.

Each game will dynamically handle many columns and rows of information. Columns which exceed the limits of the screen can be accessed by pressing the right button. Rows which exceed the limits of the screen can be accessed by pressing the middle button.

Standings & Schedules Game to Game Communication:

Standings and Schedules Reports from LMW are sent to games on the network at the following times:

On Initial Download.

When the modem receives league information from the LMW, reports are downloaded at the same time. Any reports received are stored in FLASH on the modem game and an attempt is made to send the reports across the network to any attached games.

During Roster Send from the Service Mode.

After league rosters have been sent from one game to another, the user will be given the opportunity to send the reports across the network as well.

Reports of Standings and Schedules are not able to be downloaded using the PDA.

New Flexible Options for Advertising Screens:

This new feature allows advertising and promotional images to be displayed on the IQ dart game screen. These images can be displayed within selective time windows to announce upcoming events, promote leagues, or to advertise commercial products. The IQ dart game will track the frequency and duration these screens are displayed. Valley Recreation Products offers a reporting and accounting service to aid user in the accounting of these advertising screens.

The IQ dart game has 2 time periods and 2 events which can be used to display the advertising images. These are Prime Time, Idle Time and Remove Dart Event.

Advertising screens can be any image stored as a PCX formatted file. They can be either full screen images or quarter screen images. The user can "script" files to manage the use of these advertising images. See CUSTOMIZING ADVERTISING SCREENS below for more information.

Advertising Time Periods:

Prime Time: This time period is programmable by the operator. The default time is from 4:00 pm to 12:00 am. During this time period, if the game enters the attract mode, the image files in the Prime Time script file PRIME.SCR are displayed.

Idle Time: This is the time period outside of Prime Time. During this time period, if the game enters the attract mode, the image files in the Idle Time script file IDLE.SCR are displayed.

Sleep Mode: During Sleep Mode, the monitor is off. Sleep Mode overrides the Idle Time, but does not override Prime Time. If the Prime Time "Off Time" is set after the Sleep Mode "On Time", the game will continue to display Prime Time advertising screens until after the Prime Time "Off Time". The game will then go into Sleep Mode.

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Advertising Events:

Remove Darts: During the remove darts time delay in game play, the advertising screens in the REMOVE.SCR script file will be displayed.

End of Round Advertising screens can be displayed between specific rounds. The screens and rounds are set in the file EVENT.TBL.

Programming Advertising Screens:

Setting Prime Time/Idle Time/Sleep Time: In "Programmable Mode", go to the "Set Window times". There are four settings which control the activation of the Prime Time screens, Idle Time screens, and Sleep Mode.

Prime Time: The Prime Time On/Off settings have the highest priority. When the time of day is between the ON and Off times, the Prime Time advertising screens will be displayed when the game enters attract mode.

Sleep Mode: If the time of day is outside the Prime Time window and within the Sleep Mode ON time and Sleep Mode OFF time settings, the game will enter the Sleep Mode. In this mode, the screen will go black and the button lamps will turn off. Press any button and the Game will turn on, displaying the Main Menu.

Idle Time: If the time of day is not in the Prime Time Window or the Sleep Mode Window, the game is within Idle Time. During this period, if the game enters Attract Mode, the Idle Time Advertising screens will be displayed.

Enabling Advertising Screens:

In "Programming Mode", go to the "Set Advertising". In this programming section, each of the individual Advertising screens can be Enabled or Disabled by mode; Prime Time, Idle Time, or Game mode. The screen will display by page, all of the PCX image files loaded into the game. The information displayed is : Identifier - a PCX file identification string; Description - a 12 character description string; and user controlled enable flag for Prime, Idle, and Game. These control flags allow certain advertising screens to be disabled if necessary. For example, if a location does not sell a product for which there is an advertising screen, that specific advertising screen can be disabled on the game in that location.

Viewing Advertising Screens:

While in the "Set Advertising" programming section, highlight one of the enable flags for the screen to be viewed and press the "Select" button. The "Red" button becomes the view button. Pressing the "Red" button will cause the PCX file to be displayed for 5 seconds.

IDENTIFIER	DESCRIPTION	PRIME	IDLE	GAME
Pr0 1	Valley Shoot	Enabled	Enabled	Enabled
Pr0 2	Nice Throw	Enabled	Enabled	Enabled
Pr0 3	Stop	Enabled	Enabled	Enabled
Pr0 4	Join VNEA	Enabled	Enabled	Enabled
Pr0 5	Play Pool	Enabled	Enabled	Enabled
Pr0 6	Drink	Enabled	Enabled	Enabled
Pr0 7	Valley Full	Enabled	Enabled	Enabled
Pr0 8	Split Full	Enabled	Enabled	Enabled
Pr0 9	Split Quarter	Enabled	Enabled	Enabled
Pro0-10	Punish	Enabled	Enabled	Enabled
Pr0 11	Get Revenge	Enabled	Enabled	Enabled
Pr0 12	Menu ADA	Enabled	Enabled	Enabled
Pr0 13	Menu NDA	Enabled	Enabled	Enabled
Pr0 14	No Change	Enabled	Enabled	Enabled
Pr0 15	Use Debits	Enabled	Enabled	Enabled
Pr0 16	Try Debits	Enabled	Enabled	Enabled

Set Advertising

Advertising Screen Reports:

The IQ game keeps data on the number of times each of the Advertising screens are displayed. A report containing this information is generated and sent automatically when enabled to a remote bulletin board. This information can then be used to verify the Advertising screen display times for clients who buy the Advertising screens on the IQ dart game. For more information about selling, setting up accounting services, and implementing Advertising screens on the IQ dart games, contact Valley Recreation Products Service Department at 800-331-5420.

Customizing Advertising Screens:

The Advertising screens can be "programmed" for frequency and duration of display time. This is accomplished by creating script files which define the order in which the screens appear, the duration they are displayed, and the time between each Advertising screen. Custom Advertising screens can be created for displaying special announcements, local advertising, etc. To find out how to create and modify advertising screen PCX files, script files, or how to program the duration and dwell times, etc., contact Valley Recreation Products Service Department at 800-331-5420.

New Defaults:

The following are the new programming defaults the IQ game uses.

Note: * denotes features that are not defaulted when a Factory ONE STEP is performed. The only time these values are changed, is if the flash data areas have been erased, or the flash data areas have never been initialized.

In Programming/Setup Features:

Features	Options
Accumulative Mode	Enabled
Attract Sounds	Enabled
Dart Alarm	Enabled
Power Fail	Enabled
One Dart Out	Disabled
Counts 3 Darts Per Round	Disabled
Single Bull Double In	Disabled
Frozen Team Loss	Enabled
Free Play	Disabled
Skip Frozen Cricket Player	Enabled

Setup Features Page 1 of 3

Features	Options
Demonstration Mode	Disabled
Modem Auto Answer	Enabled
* Rings before Answer	8
PIR Motion Sensor	Enabled
Allow change of starting Position	Disabled
* Automatic League Data Send	Enabled
* FAX: Output Format	OCR only
* FAX: Minutes between retries	2
* FAX: Number of retries	4
Screen Saver Delay (minutes)	2

Setup Features Page 2 of 3

Features	Options
Ernie's dart path	Display tracer darts
Upper display installed	Yes
Advertising images	Enabled
Play audio files	Enabled
Allow league access without a card	Disabled
Days between ad report send	0

Setup Features Page 3 of 3

In Programming Setup Ernie

ERNIE'S COST	PLAY FOR ME SKILL LEVEL	GAMES PLAYED
1	2: STEADY	0
Ernie		

Setup Ernie

In Programming/Set Window Times:

AVAILABLE WINDOWS	WINDOWS SETTINGS
* COMMUNICATIONS START TIME	03:00
* COMMUNICATIONS STOP TIME	17:00
* SLEEP MODE ON	03:00
* SLEEP MODE OFF	08:00
* PRIME TIME ON	16:00
* PRIME TIME OFF	00:00

Set Window Times

ADDENDUM

In Programming/Set Advertising

If Ads are present the following table will appear and only those ads loaded will be displayed provided they are also in the Prime time, Idle time and game script files. Any designated ads in the table can be disabled from showing if so desired.

IDENTIFIER	DESCRIPTION	PRIME	IDLE	GAME
Pr0 1	Valley Shoot	Enabled	Enabled	Enabled
Pr0 2	Nice Throw	Enabled	Enabled	Enabled
Pr0 3	Stop	Enabled	Enabled	Enabled
Pr0 4	Join VNEA	Enabled	Enabled	Enabled
Pr0 5	Play Pool	Enabled	Enabled	Enabled
Pr0 6	Drink	Enabled	Enabled	Enabled
Pr0 7	Valley Full	Enabled	Enabled	Enabled
Pr0 8	Split Full	Enabled	Enabled	Enabled
Pr0 9	Split Quarter	Enabled	Enabled	Enabled
Pr0 10	Punish	Enabled	Enabled	Enabled
Pr0 11	Get Revenge	Enabled	Enabled	Enabled
Pr0 12	Menu ADA	Enabled	Enabled	Enabled
Pr0 13	Menu NDA	Enabled	Enabled	Enabled
Pr0 14	No Change	Enabled	Enabled	Enabled
Pr0 15	Use Debits	Enabled	Enabled	Enabled
Pr0 16	Try Debits	Enabled	Enabled	Enabled

Set Advertising

In Programming Operator Codes

Available Operator Codes	Operator Code Contents
* Operator Security Code (4 characters)	shows @@@@ (prg'd as 0000)
* Operator Identification Code (2 char.)	VVV (1st 'V' is automatic)
* Machine identification (8 char)	(your game's serial number)
* Peripheral Identification (9 char)	(default value is blank)

Setup Numbers

In Communication Setup Numbers

Telephone Options Directory	Abbreviated Directory Contents
* Caller ID: Phone Number	(815) 895-2724
* FAX Results Phone Number	1(800) 417-4480
* Modem Initialization String	&F&C1&D3
* Fax Initialization String	&F&C1&D3
* Modem Answer in window only	Enabled
* Fax Poll Answer	Disabled
* Communications Start Time	03:00
* Communications Stop Time	17:00

Setup Numbers

In Programming Games:

Page 1 Of 6	Price	Round Limit	Bullseye	Players	Credits
301	1	12	Single	0	0
Wipe Out	1	12	Single	0	0
Wipe Out (301)	1	12	Single	0	0
DB In	1	20	Double	0	0
DB Out	1	20	Double	0	0
DB I/O	2	20	Double	0	0
MS Out	1	20	Double	0	0
DI/MO	2	20	Double	0	0

Page 2 Of 6	Price	Round Limit	Bullseye	Players	Credits
501	2	20	Single	0	0
Wipe Out	2	20	Single	0	0
Wipe Out (103)	2	20	Single	0	0
DB In	2	25	Double	0	0
DB Out	2	25	Double	0	0
DB/IO	3	25	Double	0	0
MS Out	2	25	Double	0	0
DI/MO	3	25	Double	0	0

Page 3 Of 6	Price	Round Limit	Bullseye	Players	Credits
701	3	25	Single	0	0
Wipe Out	3	25	Single	0	0
Wipe Out (103)	3	25	Single	0	0
DB In	3	30	Double	0	0
DB Out	3	30	Double	0	0
DB I/O	4	30	Double	0	0
MS Out	3	30	Double	0	0

ADDENDUM

DI/MO	4	30	Double	0	0
-------	---	----	--------	---	---

In Programming Games (continued)

Page 4 Of 6	Price	Round Limit	Bullseye	Players	Credits
901	4	30	Single	0	0
Wipe Out	4	30	Single	0	0
Wipe Out (103)	4	30	Single	0	0
DB In	4	35	Double	0	0
DB Out	4	35	Double	0	0
DB I/O	5	35	Double	0	0
MS Out	4	35	Double	0	0
DI/MO	5	35	Double	0	0

Page 5 Of 6	Price	Round Limit	Bullseye	Players	Credits
Cricket	2	30	Double	0	0
Cut Throat	2	30	Double	0	0
Mark 21	2	25	Double	0	0
Limit 201	2	25	Double	0	0
Masters	2	25	Double	0	0
Chance It	2	30	Double	0	0
Cut Throat	2	30	Double	0	0
Mark 21	2	25	Double	0	0
Limit 201	2	25	Double	0	0
Masters	2	25	Double	0	0

Page 6 Of 6	Price	Round Limit	Bullseye	Players	Credits
You Pick It	2	30	Double	0	0
Cut Throat	2	30	Double	0	0
Mark 21	2	25	Double	0	0
Limit 201	2	25	Double	0	0
Masters	2	25	Double	0	0
Shanghai	1	7	Single	0	0
High Score	1	10	Single	0	0
Low Score	1	10	Single	0	0
Split Score	2	9	Single	0	0

TRM-NLS:

* For versions 2.8 and higher IQ software *
 * TRM-NLS v1.31 and Extend command v1.06 *

What is TRM-NLS?

Commonly referred to as "Terminal S" is a utility or tool used to perform a variety of tasks related to the I.Q. game.

Terminal S manipulates the "flash" for those who want to be more technical. It can be used to erase or to put or pull

images on or off the I.Q. game. Terminal S is used to update software versions. Valley Service technicians use it for diagnostic and debugging purposes by viewing the contents of flash and static RAM (memory).

Terminal S

can be used to update Software Ads. It is also used when exporting data to erase Flash areas of previously transmitted

Standings and Schedules when the current export is sending the Roster without Standings and Schedules.

NOTE: The following instructions assume that TRM-NLS has been installed and configured in C:\terminal directory. Please refer to TRM-NLS install disk and instructions if TRM-NLS has not been installed yet.

Loading Program update (.bin) file onto the computer

- 1) Place Floppy disk containing the update file into the disk drive of the computer.
- 2) At c:\>, type
 copy a:<filename>.bin c:\terminal
 Press <ENTER>
 (where <filename>.bin is the filename of the update (.bin) file. Ex. FLV27.bin.)

Automatic Uploading file: (VIA MODEM)

- 1) Turn on Computer.
- 2) At c:\>, type
 cd terminal
 Press <ENTER>.
- 3) At PC (C:\TERMINAL>), type:
 trmnl
 Press <ENTER>.
 Enter Modem connection by selecting option #3 at the menu.
- 4) This brings up another menu.
 Press option #2, for manual entry.
 Enter the phone number of the IQ game that you are calling.
 Press <ENTER>.
 The TRM-NLS program will now call the game and connect to the maintenance utility.
 The number of rings depends upon the IQ settings.
 Once the game is connected, the Maintenance Utility menu appears.

NOTE:

If other games on the network need their data areas erased before uploading, go to *Erasing Data Areas Across the Net* section before proceeding.

- 5) Type A, to enter the Automated Upload Process.
- 6) Type 1, to select Program.

ADDENDUM

- 7) Type Y, if the version number of the update file is above 1.23.
- 8) Type the following:
- 9) c:\terminal\.bin
(where <filename>.bin is the name of the update file as it appears in the terminal directory.)
Press <ENTER>.
- 10) The terminal program will ask if the data areas need to be erased (*only effective on the modem game*).
Press Y for yes, or N for no.
The upload process now begins.
At the end, a message appears. It tells you if the upload was a success or not.
If the process is not successful, repeat *Automatic Upload* starting at step 5.
- 11) The update is complete when the Maintenance Utility menu reappears in the terminal window.
- 12) To upload program to other games on the network press Y now.
"Upload others via 485 at the end." appears on the screen.
If no other games on the network need uploading, skip to step 15.
NOTE:

To undo selection of "Upload others via 485 at the end."
Press Y again and it will toggle the feature off, which prints the message
"No upload at the end."

- 13) Now type X, to exit.
Press Y to confirm and return to the first TRMNL menu.
At this time, the modem game hangs up the telephone line and starts the uploading process.
The game that was just uploaded to will take approx. 2 min. to get itself ready to transfer the program across the network.
The game begins broadcasting to the other games on the network.
Uploading takes approx. 15 min. to 20 mins..
- 14) Exit the TRMNL program or continue on to another location and repeat the uploading process.

Erasing Data Areas Across the Net: (Remotely or Direct connect)

- 1) While sitting at the Maintenance Utility menu, simultaneously press <ALT><Z>.
This loads the extended command list to the IQ game that you are connected to.
- 2) Once the new menu appears (Extended Commands - Ver 1.06), press the appropriate number (1-4_ for the area that needs to be erased.

These areas include the following:

- 1 - Erase Debit card (8f0000 len 10k) - all machines
- 2 - Erase Report area (900000 len 30k) - all machines
- 3 - Erase League, Ctrs (930000 len 50k) - all machines
- 4 - Erase Static Ram (a00 len 800) - all machines
(NOTE: a00 should read a000000 - the correct address is used for the erasure.)

The maintenance utility prompts:

"Do you wish to erase XXXXXXh on network machines?" (where XXXXXXh is the hex starting address of the area that is being erased.)

To erase the areas across the net, press Y for yes, otherwise press N(o).

Warning!!

Saying yes, will erase any information contained in the areas selected.

- 3) Once the erasure is complete or N was pressed, Maintenance prompts:
 "Do you wish to erase XXXXXXh on host machine?" (where XXXXXXh is the hex starting address of the area that is being erased and Host, is the game with the modem.)
 If you want to erase area on the host machine, press Y for Yes or N for No.
 After erasure is done, the Maintenance Utility returns to the Extended Command menu.

- 4) Repeat steps 2-3 if more than one area needs to be erased.

- 5) Rebooting of Network games:

NOTE: If data areas are erased prior to game upload process then the data areas have changed. It is recommended that the remote games on the network be forced into a Maintenance Mode before the upload process can proceed. This is a safety precaution to keep game in a known state prior to a game to game upload process. To put the remote games into maintenance mode, press M. The Maintenance utility prompts:

"Do you wish to cause all network machines to reboot into maintenance?"

To force machines on the network into maintenance, press Y for Yes, or press N for No.

If Y is pressed, the remote game will reboot itself and go into Maintenance Mode and wait for the game to game upload process to start.

Caution!!

Once the remote games are in this mode you can no longer send any commands to them and they will remain in this mode until the games are manually rebooted or the game to game upload process is complete.

Pressing N causes the maintenance utility to go back to the Extended Command menu.

If no game to game upload of program data needs to be done, then forcing the remote games into Maintenance Mode is not required.

Caution!!

The remote games still have to be rebooted in order for the erased areas to be reinitialized. To reboot remote games on the network, press R and follow the prompts.

- 6) Once erasures are complete, press <ESC> to go back to the Main Maintenance menu and continue with program upload.

Automatic Uploading File: (Direct Connect only)

- 1) At C:> type:
 cd terminal <ENTER>.
 This brings up the Terminal subdirectory.

ADDENDUM

- 2) Type:
Trmnls <ENTER> to start the terminal emulator.
Select option #2 from the menu to enter a direct RS-232 connection.
- 3) Connect a NULL modem cable from COM1 port of PC to COM1 (J16) connector on A95 board.
- 4) In the upper left hand corner of the Upper Electronics Compartment, there is a controller board. On the top left of that board are two switches. One is labeled Reset and the other Test. Press the Reset switch on the A95 board. Hold the Test switch (the button closest to back of the game) down until a Transfer menu appears on the IQ screen. Press the RED BUTTON on the IQ for a direct RS-232 connection. The Maintenance Utility menu will appear.

NOTE:

If other games on the network need their data areas erased before uploading, go to the *Erasing Data Areas Across the Net* section before proceeding.

- 5) To enter the Automated Upload procedure, type A.
- 6) Type 1, for Program.
- 7) Type Y, if the version number of the update file is above 1.23, otherwise type N.
- 8) Type in the <filename>.bin <ENTER>,
(where <filename>.bin is the name of the update file as it appears in the terminal directory).
- 9) The Terminal Program responds;
"Do areas need to be erased?" (effective on modem game only).
Answer (Y)es or (N)o.
- 10) The upload process will begin.
When finished a message will report if the upload was a success or not.
If the process is not successful, repeat Automatic Upload starting at step 5.
- 11) To upload program to other games on the network press Y.
"Upload others via 485 at the end." appears on the screen.
Do this or continue with step 13.

NOTE:

To undo selection of "Upload others via 485 at the end."
Press Y again. It toggles the feature off, printing;
"No upload at the end."

- 12) Type X, to exit.
Type Y to confirm and exit to the TRMNLS menu.
The game disconnects and starts uploading.
It will take approx. 2 min. to get itself ready to transfer the program across the network.
Once broadcasting begins, uploading will take approx. 15 to 20 mins.
- 13) Exit TRMNLS and disconnect the null modem cable.

Note on Remote Retrieval over Networks. Remember:

In Reference to Debit Card Retrieval, Debit Card Restoration, Game Settings Retrieval and Game Settings Placement,

the following procedures will allow you to retrieve or store information via modem from the Host Game ONLY (the game with the modem). You may retrieve information from any game using a direct connection.

Debit Card Retrieval:

- 1} While in Maintenance Utility (TRMNLS), go to DOS by pressing L.
- 2} Log on to the D: drive by typing
D: <ENTER>.
- 3} Type:
memx save <filename>.bin 8f0000 10000 <ENTER>.
(Where <filename>.bin is the name of the file being saved.
For example : Use the locations initials "hang.bin" for Hangtime.)
This command saves the debit card information onto the ram drive of the IQ.
- 4} Hit <ESC>.
- 5} Press D to enter Down Load mode.
- 6} Type:
<filename>.bin <ENTER>.
(Where <filename>.bin is the same name that you used in step 4.)
This transfers the information from the ram drive to the computer's hard drive.
Retrieval is complete.

Debit Card Restoration:

- 1} While in Maintenance Utility, go to DOS by pressing L.
- 2} Log on to the D: drive by typing
D: <ENTER>.
- 3} Type del *.* <ENTER> to clear the ram drive before uploading.
- 4} Press <ESC>.
- 5} Press U to enter upload mode.
Type:
<filename>.bin <ENTER>.
(Where <filename>.bin is the same name that you used in the Retrieval section.)
This places the information onto the ram drive of the IQ.
- 6} When upload is complete, Debit card area on the flash needs to be erased.
This must be done before loading information to that location.
Press <ALT><E>.
Select 2 for Selective Erase.
The erase menu will appear offering various areas to be erased.
Press 2 for the Debit card - area, [8f0000 10000] and follow the terminal prompts.
- 7} At Maintenance Utility, gateway to DOS by pressing L.
- 8} Load debit card information by typing;
memx load <filename>.bin 8f0000 <ENTER>.
(Where <filename>.bin is the same name used in step 5.)
- 9} Once writing to the flash is complete, verify that the CRC's are the same.
If not, redo steps 6 through step 8, reloading information into the flash.
Restoration is complete.

ADDENDUM

Game Settings Retrieval:

NOTE:

When saving, transferring, or restoring game settings, make sure both versions of Vdart are the same.

To find out the current software version on your I.Q. game press the Red, Blue and Gray button at the same time.

- 1) Setup IQ game with the desired settings.
- 2) Enter a direct connection or a remote terminal connection with the IQ game using TRMNLS program.
- 3) At the Maintenance Utility menu. Press L to go to DOS.
- 4) At the A:\> prompt, type:
D: <ENTER>
to log onto the RAM of the IQ game.
- 5) Type:
memx save settings.bin 961400 2800 <ENTER>.
(Where settings.bin is the filename given to the file being saved.)

NOTE:

The .bin extension must be used.

- 6) Press <ESC>.
- 7) Press D to enter the Download Utility.
- 8) Type:
settings.bin <ENTER>.
(Where settings.bin is the filename that was given to the bin file.)
This places the game setting information onto the computer's hard drive.

Game Settings Placement:

- 1) Enter a direct connection or a remote terminal connection with the target IQ game using the TRMNLS program.
- 2) At the Maintenance Utility menu. Press L to go to DOS.
- 3) At the A:\> prompt, type:
D: <ENTER> to log onto the RAM of the IQ.

WARNING!!

Placement will erase any League Results files, any Running Counter Information, and any Transaction History Information.

- 4) Type:
memx erase 960000 10000 <ENTER>.
- 5) Press <ESC>.
- 6) Press U to enter the Upload Utility.
- 7) Type:
settings.bin (or the filename that was used) <ENTER>

- 8) After upload, go to DOS by pressing L.
- 9) Type:
 memx load settings.bin 961400 <ENTER>
 Verify CRC numbers of flash memory and file are the same.
 If they are not the same repeat steps #4 and step #9.
- 10) At this point if settings do not need to be transferred across the network,
 press <ESC> and exit TRMNLS normally.
- 11) If settings need to be sent across the network to other games, type:
 sendset <ENTER>
 before pressing <ESC>, then exit TRMNLS normally.

PDA Operation

Downloading match results by PDA from a Cougar IQ dart game.

When using a PDA to extract match information from an IQ dart game, each game with a match on it will require this procedure. Network communications do not apply to PDA match downloading.

1. On the IQ game, after the match has been played and the screen is in the main menu (not the match results screen), slide the Master Service card and press the red button 3 times until "communication" is highlighted.
2. Press the blue button 1 time until "IQ Send To PDA" is highlighted.
3. Turn on the PDA 6500 and press the 'MENU' button 2 times until "peripherals" is selected.
4. Press 'Enter'. "The PC Link Ready!" screen will be shown on the display.
5. Bring the PDA to the card reader and align the left corner of the PDA with the top of the card reader. The PDA should be about a hands width (6") away.
6. While holding the PDA in the position described above, press the IQ game's SELECT button 2 times.
7. A "Connected" message will appear on the PDA screen and a bar graph on the IQ game will simultaneously appear in the upper left corner of the IQ game's monitor.
8. When both the "connected" message on the PDA and the bar graph on the monitor goes away, the match has been sent.
9. After transmission is complete, in versions of 2.8 S1 and above, you will be given the choice to save or delete the match. This gives you the opportunity to review the PDA to see the data or to wait until the match is loaded into the LMW and processed. To save press the red button (if necessary) to highlight SAVE and then press the SELECT button. To delete press the gray button (if necessary) to highlight DELETE and then press the SELECT button.
10. When complete press the PLAYER CHANGE button to exit the service mode. Press the gray button to highlight YES under the question "Do you really want to exit the service mode?" Press the SELECT button after highlighting your choice.

Reviewing PDA match data

This process is nearly the same on the OZ6500 as the OZ5600.

- Turn the unit on.
- Press the TEL button until "matches" appears on the LCD screen.
- The match(es) will be stored there. In the left hand column there is an "M" which stands for match. The next column will show the code "VVV" which is the factory setting for the operator ID. If the operator changed this, those characters will appear instead. The third column shows the league ID number. Highlight the last match "M" using the up/down arrows and press enter.

ADDENDUM

- The next screen will expand on that match. As shown above the first 3 lines will be the Entity "M", the ID 1 for the operator ID, and the ID 2 for the league ID. The next line is DATE TIME which is shown in the format 'mmdyyt' or month day year and time all bunched together. This information is probably the most important in determining if this was the match you want. It is helpful at this time to know the approximate time and the exact date of the match you want to retrieve.
- The other lines are not as important, but for the record they are: SCORE 1=Home team ID, SCORE 2=Visiting team ID, Score 3=Record version ID, and SCORE 4=Machine ID. The remaining SCORE fields are empty.

Entering the PCLINK mode on the OZ5600

The above procedure is based on the OZ6500 PDA. Below explains how to enter the OZ5600 model into the PCLink mode. If using the OZ5600, replace steps 3 & 4 of the above procedure with the steps below.

- Turn on the PDA
- Press the 2nd button
- Then press MENU button
- (This brings up a decision box asking what kind of connection "IR or Direct Cable"?)
- Highlight "IR" by cursor keys.
- Press 'ENTER' to enter the PCLink Mode.
- To exit press the 'ON' button.

Clearing the data from the PDA.

Before the PDA gets full it will be necessary to clear its contents. It is suggested that this be done periodically but only after the matches have been downloaded to the LMW and successfully processed. Once the old matches are erased they can no longer be recovered.

Data deletion on the 6500 PDA

- Turn the unit on.
- Push the TEL button until the "matches" or "matches" title appears. The match data will be shown below.
- Push "menu" button 2 times and then use the down arrow to select "data deletion". Press ENTER.
- Push the down arrow (if necessary) to highlight "Selected File". Press ENTER.
The screen will say "Do you really want to permanently delete all Telephone 3 entries from the organizer?" Press 'Y' for yes.
- Data deletion is complete.

Sharp Wizard PDA Summary Document

Service, parts and dealer phone numbers



1-800-237-4277

Fax: 1-708-378-9985

Sharp Literature Distribution:

SHARP Electronics
Attn: Literature Distribution
1300 Naperville Dr.
Romeoville, IL 60446

There are 5 PDA models which the IQ game and the LMW software is currently made to operate.

Sharp Model	9500 **	9520 **	6500 **	5600 *	5500
Specification					
Memory size	256K	512K	512K	512k	256K
Usable memory***	135K	391K	442K	462K	135K
mem exp card					
OZ783 (256K)	okay	okay	N/A	N/A	N/A
OZ784 (512K)	okay	okay	N/A	N/A	N/A

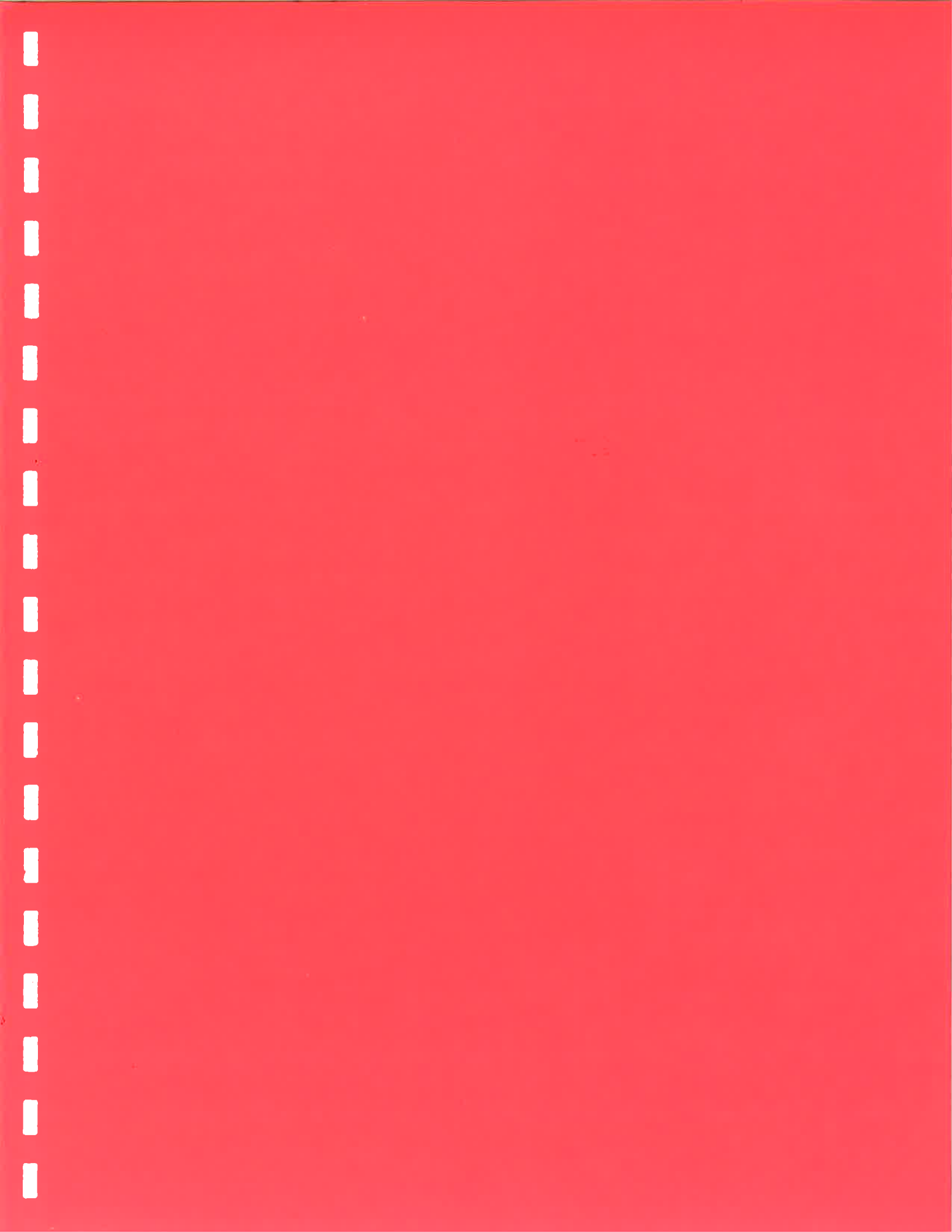
* Recommended for new purchases.

** Not being manufactured but may be available with certain distributors depending on supplies.

*** Memory usage is dynamic in that the entire memory space will be given to one area if necessary. There's a compression factor of about 65%.

Modems Approved for use with the I.Q. Cougar Dart Game

	League data/Faxing	Caller ID	Fax Polling
Zoom 350	X		
DSI Scout model 6500 288V34e	X		
Boca V.34 28.8	X	X	
US Robotics SPORTSTER 14.4 Vi	X	X	X
US Robotics SPORTSTER 28.8 Vi	X	X	X



Register your warranty Today!



AS AN ADDED BONUS, UPON RECEIVING THIS
WARRANTY / SURVEY CARD, VALLEY WILL SEND
YOU A FREE GIFT FOR "EACH" RETURNED CARD.



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UNITED STATES

BUSINESS REPLY MAIL
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POSTAGE WILL BE PAID BY ADDRESSEE

VALLEY RECREATION PRODUCTS, INC.
ATTN: NATIONAL SERVICE MANAGER
320 NORTH AVENUE
SYCAMORE, IL 60178-9932



Protect your investment!



Warranty Registration

Coin-Operated Products



Protect your investment! Register your warranty today!

Thank you for purchasing from the Valley line of recreational products. We value your business and want you to tell us if our products and services are meeting your expectations. Therefore, we will appreciate your completing this Warranty Registration and Questionnaire within 10 days of your purchase. For your convenience, this form becomes a self-addressed, pre-paid mailer if you fold and seal it as shown on the opposite side.

Again, thank you for being a Valley customer!

Contact Name _____ Company Name _____
 Address _____ City _____ State _____ ZIP _____
 Telephone (____) _____ Where Purchased: _____
 Serial Number _____ Model _____ Purchase Date _____

Did the product arrive in satisfactory condition? Yes No On Time? Yes No
 Were assembly instructions and technical information understandable? Yes No
 Is the product meeting your expectations? Yes No

Please answer the following questions to the best of your knowledge:

1. How many do you operate? Pool Tables? _____ Electronic Darts? _____ Foosball? _____
 Table Hockey? _____
2. What percentage are Valley brand products? Pool Tables? _____ Electronic Darts? _____
3. What percentage are Tornado brand products? Foosball? _____ Table Hockey? _____
4. Do you run league programs? Yes No
 If yes, which kind(s)? Pool _____ Electronic Darts _____ Foosball _____
 If no, would you like information about starting leagues? Yes No
 Which type? Pool _____ Darts _____ Foosball _____
5. Valley offers a range of products and promotions. Please circle the one(s) of your choice and a Valley representative will contact you to discuss your special needs.
 - Pool Tables • Electronic Darts • Pool Cues • Foosball
 - Table Hockey • League Machine for Windows
 - Parts Catalog: Pool _____ Darts _____ Foosball _____ Table Hockey _____
 - Valley National 8-Ball Association • Valley International Foosball Association
 - Valley Gold Tour (dart program) • Valley Pro Foosball Tour
6. Overall, how well is Valley meeting your needs? (circle number on a scale from 1 to 10)

Not at all				Somewhat					Extremely Well
1	2	3	4	5	6	7	8	9	10

Other Comments:

Thank you very much for your business and assistance!

Please check the box if you'd like a Valley Representative to contact you.
 Sales Service Best time to call? _____

National Service Department: 1-800-331-5420

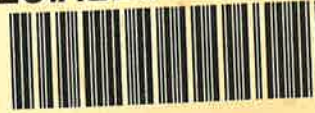
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SEND MATCH RESULTS

219-0363-2



MASTER SERVICE



SERVICE CARD



GAME RESET

219-0362-1

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Valley Cougar Catalog Request Form

Business Name: _____

Address : _____

City: _____ State: _____ Zip: _____

Telephone: () _____ Fax: () _____

Person to contact: _____ Title: _____

Resale Tax #: _____ Yrs. in Business: _____

How many Electronic Dart Machines do you operate: _____

Would you like a credit application sent?: _____

Thank you for filling out the information above.
You should receive your catalog in 5 - 7 days. (617) 581-6035

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Stamp
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