



Commitment To Excellence

COUGAR IQ MANUAL
4 Player
IQ-A-RB-ENG





Dear Valued Customer:

Welcome to the world of Valley Electronic Darts! I'm sure you will find the added player feature 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 toll free at 800-331-5420.

National Service Manager

COUGAR IQ Manual

4 Player

IQ-A-RB-ENG

Part Number and Revision Number

P/N 219-0319-3 Rev 3.0, February 19, 1997

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Product Recommendations

- **BitFax** is not recommended for use under Microsoft Windows™ 95 (for older users).
- **BitWare** is recommended for use in Microsoft Windows™ 95.
- Purchase of **modems** is recommended through Valley Recreation Products, Inc., to assure proper IQ and/or LMW performance.
- Paddle Board (Memory Expansion Card) to be used to load one game at a time.

Manual Development

Valley Recreation Products, Inc.
Product Support Group
320 North Avenue
Sycamore, IL 60178
(815) 895-8188

Precautions and Safety



THIS GAME CONTAINS A LITHIUM BATTERY. PLEASE CONTACT YOUR LOCAL WASTE HAULER FOR PROPER DISPOSAL OR RECYCLING POLICIES.



ONLY AUTHORIZED PERSONNEL MAY USE KEYS TO ACCESS SERVICE AREAS.



LOCATE GAME CLOSE TO POWER OUTLET. IN CASE OF FIRE HAZARD, UNPLUG POWER CORD FROM OUTLET.



MAKE SURE POWER CORD IS NOT TRAPPED BETWEEN TOP AND BOTTOM CABINET WHEN GAME IS IN ITS UPRIGHT POSITION.



DO NOT BLOCK VENT HOLES.

ALTERATION TO ANY PART OF THE GAME IS PROHIBITED.

DUPLICATION OF THIS DOCUMENT IS NOT PERMITTED WITHOUT AUTHORIZATION.

COUGAR IQ Manual

<i>Part Number and Revision Number</i>	i
<i>Copyright</i>	i
<i>Product Recommendations</i>	i
<i>Manual Development</i>	i
PRECAUTIONS AND SAFETY	ii
LIMITED WARRANTY	1
NOTICE	2
MODELS & CONVENTIONS / SYMBOLS	3
MODELS	3
THREE BUTTON PRESS	3
LAST ERROR MESSAGE	3
CONVENTIONS / SYMBOLS	4
LMW LEAGUE MACHINE FOR WINDOWS SOFTWARE™	4
GAME SETUP	5
SPECIFICATIONS AND INSTALLATION	6
LINE CORD ROUTING	7
STABILITY ASSURANCE KIT INSTALLATION	8
PARTS LIST	8
TOOLS NEEDED	8
ATTACHMENT OF THE CHAIN TO THE WALL	8
ATTACHMENT TO HOLLOW WALL, PLASTER, DRYWALL, ETC.	10
ATTACHMENT TO CONCRETE, BRICK OR STONE WALL	10
<i>Wood Stud Mounting</i>	11
ATTACHMENT TO THE FLOOR	11
<i>Concrete floor</i>	11
<i>Wood floor</i>	11
GAME FEATURES	12
NEW TIME HANDICAP GAME OPTION FOR '01, AND ALL PRACTICE SKILL GAMES EXCEPT STOP WATCH™	12
NEW FLEXIBLE AD SCREEN OPTIONS	12
NEW DIGITAL AUDIO SOUNDS	12
WIPE OUT™ "SHOOT-AT" PROMPT	12
14" COLOR VGA MONITOR	12
PROGRAMMABLE DORMANT TIME OUT	12
LEAGUE INTERFACING CAPABILITY	12
CARD READER (IF EQUIPPED)	12
FAX/MODEM (OPTIONAL)	12
GAME-TO-GAME COMMUNICATION	13
NDA/ADA HANDICAPPING	13
PLAYER PROGRAMMABLE BULLSEYE	13
TEAM PLAY	13
LEAGUE PLAY (REQUIRES LMW(LEAGUE MACHINE FOR WINDOWS™))	13
ERNIE	13
FEATS READOUT	13
INFRARED SENSOR	13
TRU-SCORE® AND TRU-SCORE® II	13

COUGAR IQ Manual

DIDDLE DARTS	13
PROGRAMMING SETTINGS	13
BOOKKEEPING	14
SLEEP MODE (PROGRAMMABLE)	15
SCREEN SAVER	15
MISSED DART DETECTOR AND INFRARED BODY SENSOR	16
TRU-SCORE® AND TRU-SCORE® II	16
AUTOMATIC PLAYER CHANGE / INFRARED MOTION SENSOR.....	17
GAMES.....	18
SCREEN MENUS	18
PRESS SELECT FOR OPTIONS, ERNIE AND TEAMS	19
ERNIE OPTIONS.....	20
SELECT DART LEAGUE UNDER GAME TYPES.....	20
GAME FEATS	21
'01 GAME FEATS	21
CRICKET FEATS	22
PLAYING INSTRUCTIONS FOR EACH GAME	23
'01 GAMES	23
301.....	23
501 701 901.....	23
Wipe Out™.....	24
Wipe Out™ 103.....	24
Double In.....	24
Double Out.....	24
Double In/Out.....	24
Masters Out.....	25
Double In/Masters Out.....	25
CRICKET GAMES	25
<i>Traditional Cricket</i>	25
<i>ChanceIt</i>	25
Cut Throat.....	26
Mark-21.....	26
Limit 201.....	26
Masters.....	26
PRACTICE AND SKILL GAMES.....	27
<i>Shanghai</i>	27
<i>High Score</i>	27
<i>Low Score</i>	27
<i>Introducing Split Score™</i>	28
<i>Introducing Rapid Fire™</i>	28
<i>Introducing Stop Watch™</i>	28
DART LEAGUE GAME PLAY	30
COMPLETE STEP BY STEP INSTRUCTIONS.....	31
MAIN MENU'	31
DART LEAGUE PLAY	31
<i>Start Match</i>	31
Select Players.....	33

COUGAR IQ Manual

Add a Player	34
Start Game.....	34
Visiting Team	35
View Rotation.....	36
Main Menu	36
SECONDARY OPTIONS MENU	36
Team Play.....	37
101 Games	37
4 Player, 2 Position	38
Wipe Out™ and Wipe Out™ 103 Team Play.....	38
Cricket.....	38
4 Player, 2 Position	38
4 Player, 4 Position	38
NDA	39
Spot Darts.....	39
ADA Neutralizer	41
Points Per Dart (PPD)	41
INTRODUCING TIME HANDICAP.....	43
Introducing Auto Adjust	44
<i>Standings and Schedules Reports</i>	<i>45</i>
Standings & Schedules Screen Types	45
Standings Screen.....	45
Schedule Screen.....	45
Standings & Schedules Game to Game Communication.....	46
START OF GAME PLAY.....	46
END OF GAME PLAY	46
SERVICE MODE.....	47
TEST MODE	47
Upper Display Test (if installed).....	48
Sound Test.....	48
Target/Switches Test.....	48
Player Detector Test	48
Card Reader Test (if installed)	49
Comm 485 Test	49
PROGRAMMING MODE.....	49
To Enter Programming Mode.....	49
Setup Games	51
Price	51
Round Limit.....	52
Bullseye.....	52
Bookkeeping (Players / Credits).....	52
One Step	52
Language.....	54
Coin Channel (Bookkeeping).....	54
Setup Ernie	61
Set Time & Date.....	62
Set Window Times	63
Set Advertising.....	65
OPERATOR CODES MODE	66
Operator Security Code & Machine Identification Code	66
Operator Identification Code & Peripheral Identification Code	68
COMMUNICATION	69
League Machine For Windows™ & Network	69
To Enter Communications Mode	69
PDA Send to IQ.....	69

COUGAR IQ Manual

<i>IQ Send to PDA</i>	70
<i>Match Send</i>	71
<i>Send Roster</i>	71
<i>Setup Numbers</i>	73
Caller ID Phone Number & FAX Results Phone Number.....	73
Modem Answer in Window Only & FAX Poll Answer.....	75
Communications Start Time & Communications Stop Time.....	76
<i>Send Program</i>	77
CARD ACTIVATION.....	77
<i>To Enter Card Activation Mode (For Use with Debit Cards Only)</i>	77
CARD TYPES.....	78
SERVICE CARD.....	78
<i>Master Service Barcode (bottom)</i>	78
<i>Game Reset Barcode (top)</i>	78
SEND MATCH RESULTS CARD.....	78
SPECIALTY CARD TYPES.....	78
<i>League Player Card</i>	78
<i>Communications Card</i>	78
<i>Debit Card</i>	79
Activator Cards.....	79
Debit Report Card.....	79
GENERAL MAINTENANCE.....	80
LAMP & FUSE REPLACEMENT.....	80
<i>To replace Lamps in the Upper Display</i>	80
<i>Replacing Fuses</i>	80
REPLACEMENT LAMP INFORMATION.....	81
TARGET CLEANING.....	82
<i>To remove debris and tips from the target</i>	82
INSTALLATION OF EPROM.....	82
TROUBLESHOOTING.....	83
TRU-SCORE® II MISSED DART SENSOR ADJUSTMENT PROCEDURE.....	86
TARGET PROBLEMS.....	87
<i>Target Not Registering During Game and Test Mode</i>	87
RELATED SEGMENTS IN GROUPS OF FOUR.....	88
<i>Matrix/Controller Pin Layout</i>	88
UPPER DISPLAY PROBLEMS.....	88
<i>Displays Garbled, Dead, or Random Lamps</i>	88
COIN MECHANISM PROBLEMS.....	88
<i>Game Functioning but not giving Credit</i>	88
AUTOMATIC PLAYER CHANGE PROBLEMS.....	89
<i>Game Not Changing Players Automatically</i>	89
SOUND PROBLEMS.....	89
<i>No Sound</i>	89
<i>Garbled Sound</i>	89
<i>Constant Humming Sound</i>	89
BOOKKEEPING-CASH / PLAY PROBLEMS.....	90
<i>Credits Per Game Not Matching Factory Setting</i>	90
MONITOR PROBLEMS.....	90
<i>Picture Does Not Appear</i>	90
<i>The Screen is not Synchronized</i>	90

COUGAR IQ Manual

<i>Screen Position Not Centered</i>	90
<i>Screen is too Bright or too Dark</i>	90
<i>Screen is Shaking</i>	90
PARTS LISTS	92
CABINET PARTS LIST	94
LIGHTHOOD AND UPPER DISPLAY ASSEMBLY PARTS LISTS	96
STATIONARY MATRIX PARTS LISTS.....	98
UPPER ELECTRONICS PARTS LIST.....	100
PEDESTAL / LOWER ELECTRONICS PARTS LIST	102
PUSH BUTTON SWITCHES	104
CABLES AND HARNESSES PARTS LIST.....	106
SCHEMATICS	101
APPENDICES	119
APPENDIX A: MODEM INSTALLATION	121
APPENDIX B: NETWORKS AND BROADCASTING.....	122
APPENDIX C: BUILDING NETWORK CABLES & NETWORK INSTALLATION	123
<i>To connect two or more IQ games to create a network</i>	123
APPENDIX D: LEAGUE DATA TRANSFER	124
<i>Automatic Transmissions</i>	124
<i>How to move data from League Machine for Windows™ (LMW) to the IQ game</i>	124
PDA Operation	124
Downloading match results by PDA from a Cougar IQ dart game.....	124
Reviewing PDA match data.....	125
Entering the PCLINK mode on the OZ5600.....	125
Clearing the data from the PDA.....	125
Data deletion on the 6500 PDA	125
Moving data from LMW to the PDA.....	126
Moving data from the PDA to the IQ Game	126
Using a Fax/Modem to Transfer League Data	127
At the Computer(LMW):.....	127
<i>How to move data from IQ game to League Machine for Windows™ (LMW)</i>	127
Manually Sending Match Results Via FAX/MODEM.....	128
Via FAX—Automatic League Data Send.....	128
To Recognize a FAX in BITWARE:	128
To Import Data into LMW.....	129
Via LMW	129
Via PDA	129
Accessing and processing results in LMW	129
To use your IQ for League Play	130
How to add League Players to Teams	130
How to view the Player Rotation	130
How to add a player to the existing Player Roster	130
To start League Game	131
Next Game Advance	131
After each game	131
At the end of a match	131
<i>Sharp Wizard PDA Summary Document</i>	132
Service, parts and dealer phone numbers	132
Sharp Literature Distribution.....	132
APPENDIX E: FACTORY DEFAULT SETTINGS	133
<i>In Test Mode</i>	133
<i>In Programming/Coin Channels</i>	133
<i>In Programming/Setup Features</i>	133

COUGAR IQ Manual

<i>In Programming Setup Ernie</i>	134
<i>In Programming/Set Window Times</i>	134
<i>In Programming/Set Advertising</i>	135
<i>In Programming Operator Codes</i>	135
<i>In Communication Setup Numbers</i>	136
<i>In Programming Games</i>	136
APPENDIX F: PRODUCTS AVAILABLE FOR USE WITH THE COUGAR IQ GAME	139
<i>Four Player Cougar IQ Game</i>	139
<i>League Machine for Windows Software™</i>	139
<i>TRMNL Kit</i>	139
<i>Ad Star Kit</i>	139
LIST OF FIGURES	140
INDEX	141

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 not authorized in writing 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 this product and will not be liable for consequential damages.

Warranty service is available through your distributor.



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 lower right side of the upper cabinet near the hinge.)

NOTICE

NOTICE

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 in writing by VALLEY RECREATION PRODUCTS, INC., 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 be left in the locks or be accessible in any way to unauthorized personnel.



This MANUAL is subject to change at any time. Updated manuals 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

Three Button Press

The Three Button Press is initiated by pressing the *Red, Blue and Gray buttons* simultaneously. The new Three Button Press displays the following box for general error detection.

- You may be interested in:
- (1) the current software version number, (2.9 in the example below).
 - (2) Last Bios Version for Upgrades.
 - (3) Ad screens currently loaded (identified by the date and time stamp).
 - (4) Last Error Message.

Version 2.9
 Coreleft = 95792
 CommID 118
 Reset Count = 2
 BIOS Version 225
 SRAM Status OK
 SRAM Unique OK
 Largest Alloc 32768
 Recent Alloc 32768
 Stack Avail = 0xF08
 Ad file: 12-21-96 12:33p
 Last Error Message:
 None

←

←

←

←








Last Error Message

Should any message appear below this line, please write it down and report it to the Valley Service Department. Chances are it will not affect game play.

Should an error box appear, in addition to the message, the error is serious. In this case please report it immediately to the Valley Service Department. Game use should be avoided until you have spoken to a representative.

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>	• Denotes specific button to be pushed on the IQ Game.
Courier New typeface	• Screen menu or option which appears on the screen.
	• A procedure using buttons on the IQ Game.
	• A caution or warning. Pay special attention to the note. The bomb is a stronger warning.
	• Additional information on this subject elsewhere in the manual is referenced.
	• A step requiring a phone call or talking about phone lines.
	• Steps using the mouse on the computer (LMW).
	• A procedure using the LMW software.
	• A step requiring you to write something down.

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.



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

GAME SETUP

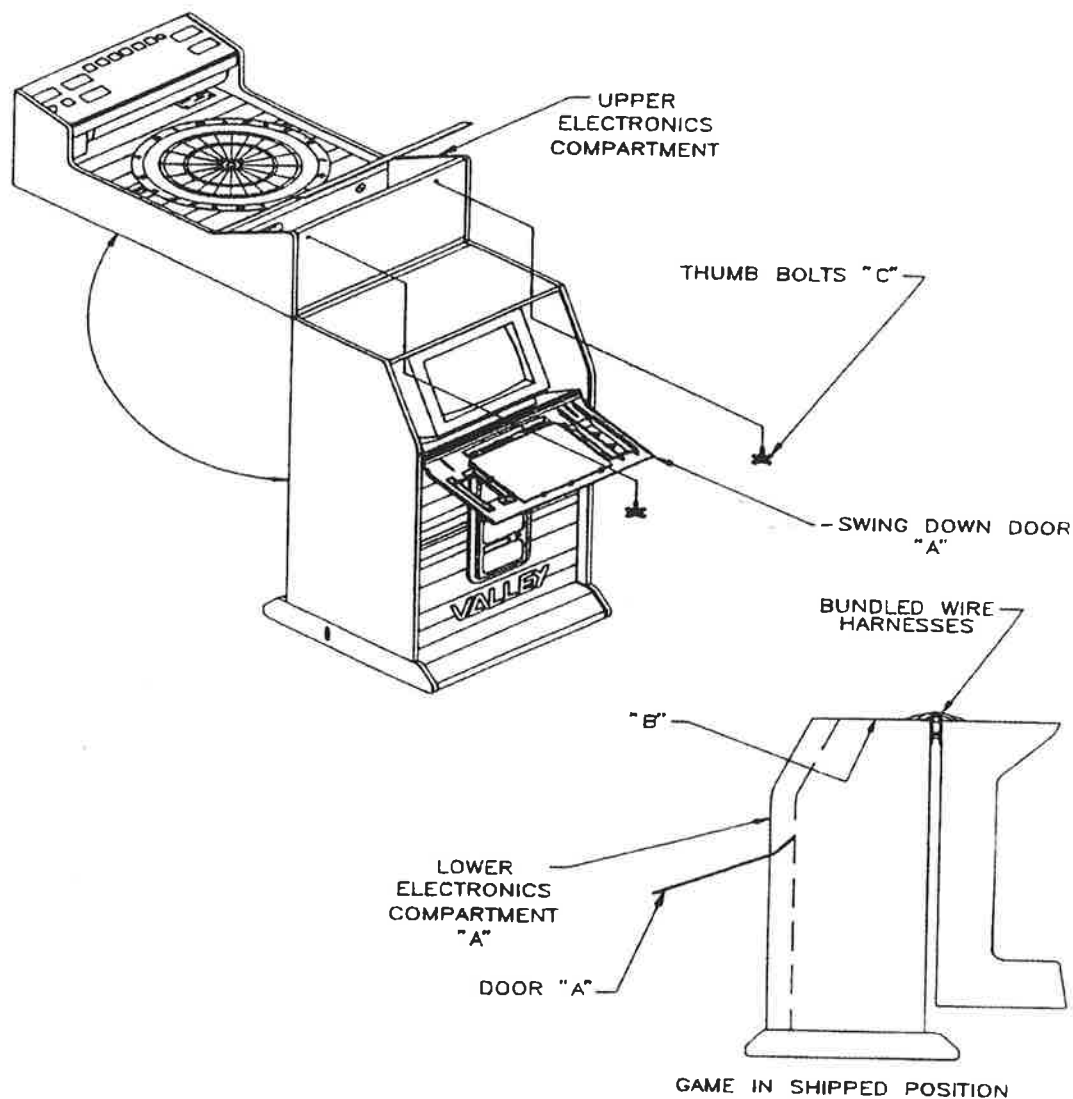


Figure 1. Game setup



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

Keys:

Six keys are stapled to the top cabinet of the game in its fold down position. Two each for the upper electronics cover, coin door and cash box drawer. Keys for the upper electronics cover also fit the target door and the league door.

Installation:

NOTE

To install this game, a working area of approximately 6' x 4' with a 90" ceiling 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. 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.

LINE CORD ROUTING

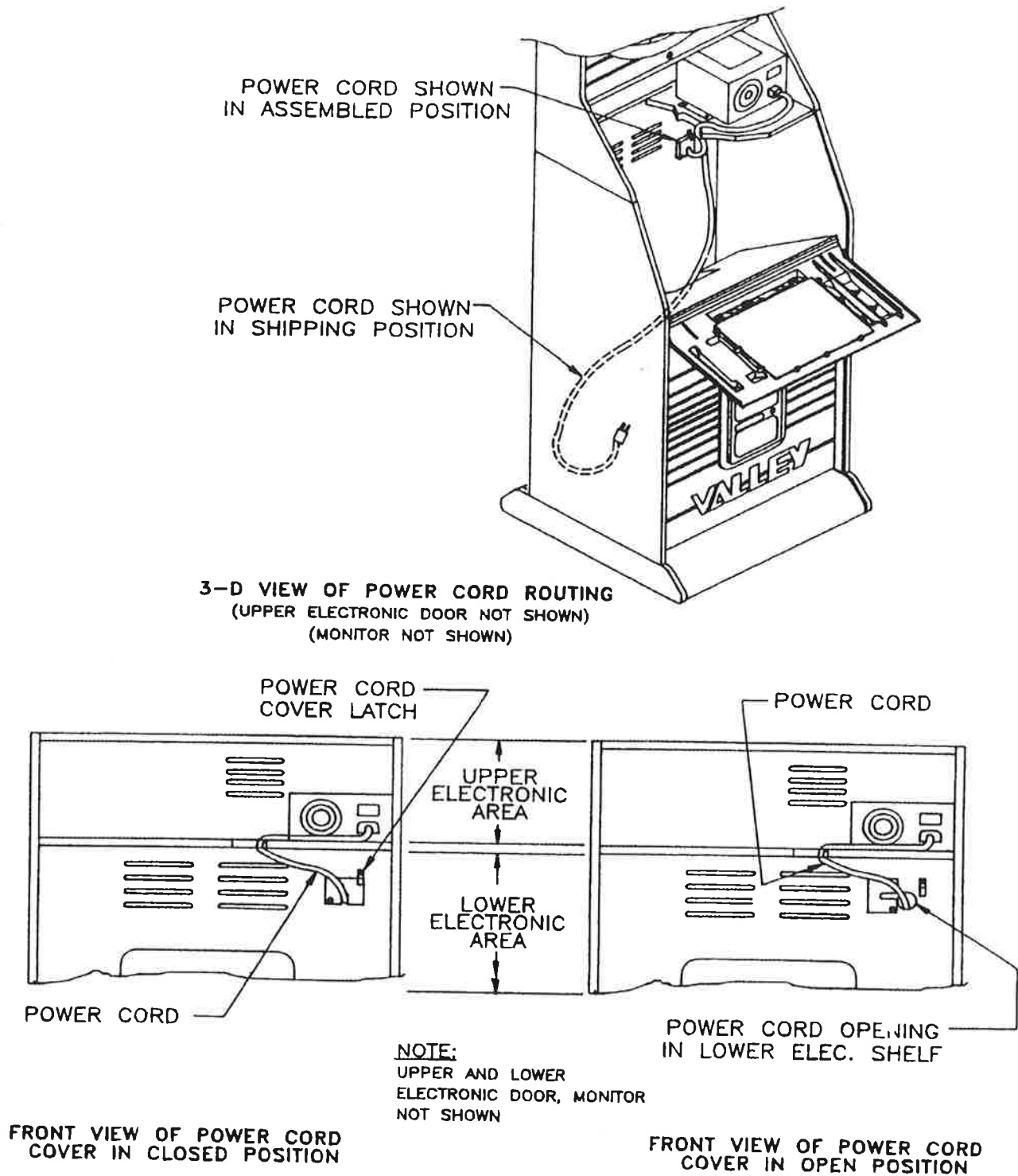


Figure 2. Line cord routing figures

STABILITY ASSURANCE KIT INSTALLATION

Parts List

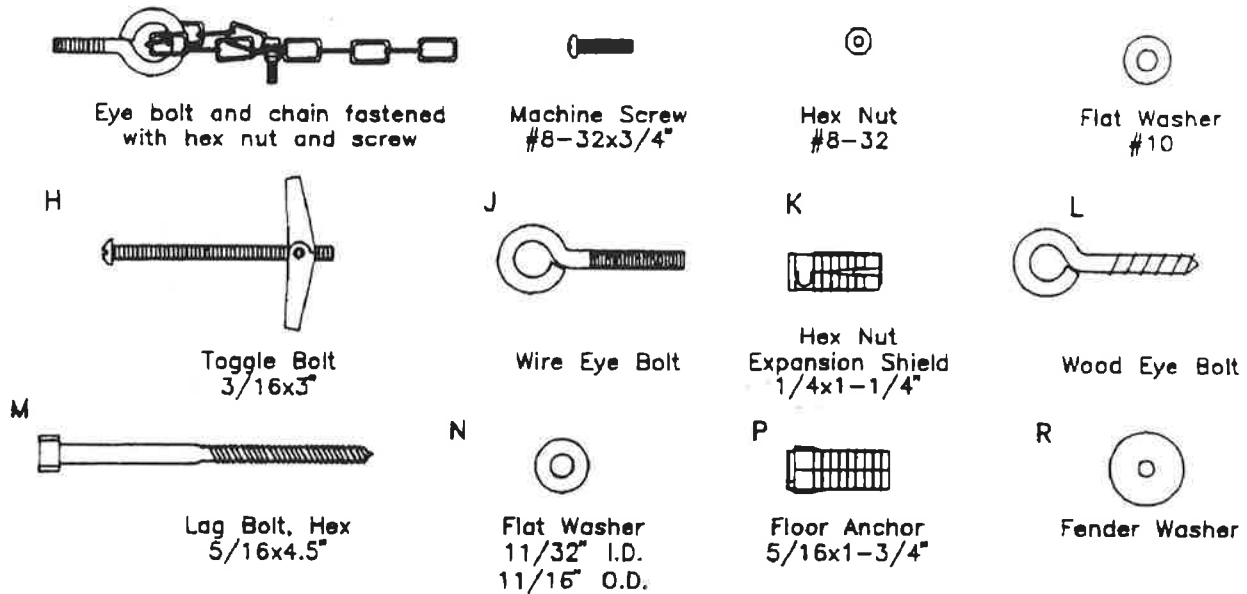


Figure 3. Stability assurance kit

Tools Needed

- Measuring tape
- Small screwdrivers (Phillips and Flathead)
- Pliers or Crescent wrench
- Drill with:
 - 1 / 2" bit to secure the game to the 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.

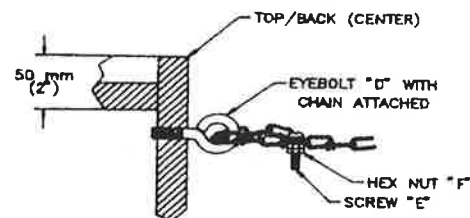
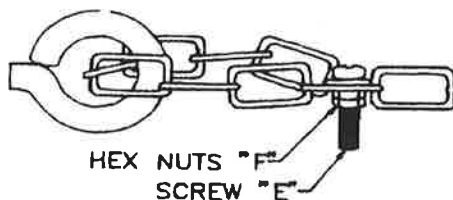


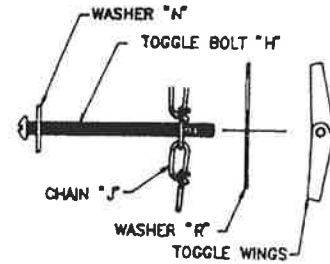
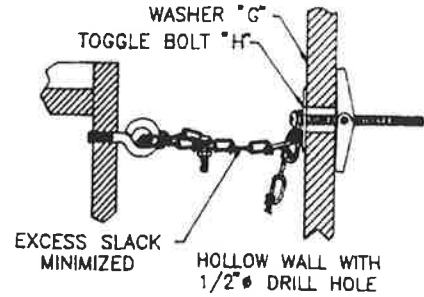
Figure 4. Eye Bolt & chain fastened to game

Figure 5. Close-up Hex nuts

Step 2: Fasten to the wall according to the following instructions.

Attachment to hollow wall, plaster, drywall, etc.

1. With the game in the location 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 flat washer (N) 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.
- Slide a fender washer (R) on the toggle bolt (H) and screw the wings back on.
6. Push the toggle bolt (H) into the drilled hole in the wall.
 7. 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.



Attachment to concrete, brick or stone wall

1. With the game in the location 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.

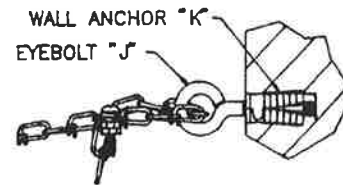
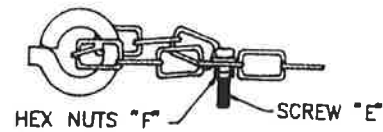
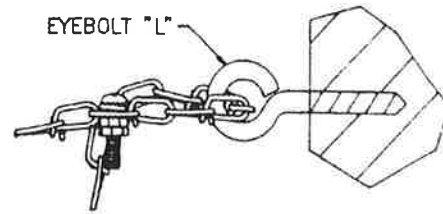


Figure 6. Wall attachments

STABILITY ASSURANCE KIT INSTALLATION

Wood Stud Mounting

1. With the game in the location 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.

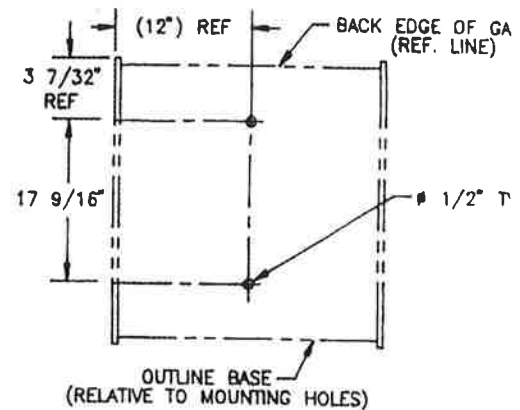


Attachment to the Floor

Fasten to the floor according to the following instructions .

Concrete floor

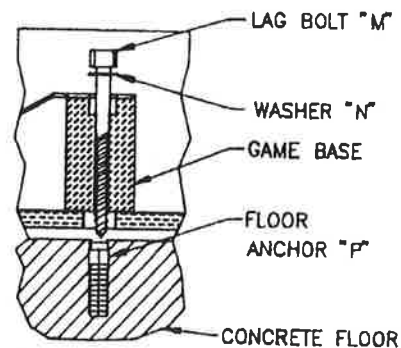
1. Mark two spots on the floor according to the diagram.
2. Drill the two holes at the marked spots $\frac{1}{2}$ " diameter X $1\frac{3}{4}$ " deep.
3. Pound in the floor anchors (P).
4. Align the holes in the base of the game with floor anchors (P).
5. Secure the game with the flat washers (N) and lag bolts (M).
6. Tighten the lag bolts until flush with the bottom of the counter-bored 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 $\frac{1}{8}$ " diameter pilot hole may be used to start the lag bolt.



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

Figure 7. Floor attachments

GAME FEATURES

NEW Time Handicap Game option for '01, and all Practice Skill Games except Stop Watch™

This new feature may be selected with any '01, Shanghai, High Score, Low Score, Slit Score™ or Rapid Fire™ game with any options (except Team play or the Handicap round). Each player selects their own time handicap by following the instructions on the monitor. Second and third darts must be thrown before the time is up!

NEW flexible Ad Screen Options

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.

NEW Digital Audio Sounds

Three new sounds have been added in Attract and Game modes: (1) "Arrow sound" when a hit is made in Split Score™, (2) "Bullet sound" when a hit is made in Rapid Fire™, and (3) "Ricochet sound" when a designated segment is missed in Rapid Fire™.

Wipe Out™ "Shoot-at" Prompt

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

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.

Programmable Dormant Time Out

An inactive game may be programmed to end in 15 minute increments.

League Interfacing Capability

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.

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) for use in the League Machine for Windows™ 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. Operators MUST buy their modems from Valley Recreation, Inc.

GAME FEATURES

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 at a location, to use debit cards, select game settings, ad screens and promotions, etc.

NDA/ADA Handicapping

Select either handicapping method for team play. Use NDA spot darts handicapping, or ADA points per dart handicapping.

Player Programmable Bullseye

Players can choose either single (50 pts. at all times) or double (25 pts. for outer Bullseye and 50 pts. for inner) Bullseye scoring.

Team Play

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

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

Refer to the documentation for your version of LMW.

ERNIE

Your favorite cyber competitor ERNIE is available for all games. Note handicap play and time handicap are not available in conjunction with ERNIE. ERNIE's default skill level and price are programmable.

Feats Readout

Game Feats are displayed on the monitor and the Upper Display after the game finishes.

Infrared Sensor

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

Tru-Score® and Tru-Score® II.

Anti-Flighting Software and Missed Dart Detection.

Diddle Darts

After credits are deposited, 12 darts are allowed to practice or to "diddle" for position.

Programming Settings

Each game (including options) can be programmed for different Round Limits, Prices, and Bullseye settings (the exceptions being Rapid Fire™ and Split Score™ which will end at a maximum of 7 and 9 rounds respectively).

Bookkeeping

Allows the operator to keep a record of total credits collected and credits used per game. To access Bookkeeping see "SERVICE MODE - Programming Mode / Setup Games and Programming Mode / Coin Channel" later in this manual. In Service Mode "Prices" can be operator set per game. A counter keeps track of all "Credits" received per game. The counter is maintained until cleared by the operator.

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 (4 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.

MISSED DART DETECTOR AND INFRARED BODY SENSOR

Tru-Score® and Tru-Score® II

The Cougar IQ Dart game is equipped with two specialized hardware and software systems. Tru-Score® accurately scores those darts which hit within a target segment. Tru-Score® II properly registers any hit outside the target with the help of an impact sensor to detect darts which bounce off the door or hit the dart catching ring. Missed darts are indicated by a short tone. Because the IQ tracks each dart thrown, it can tell the player when to remove 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. Operators may elect to disable the feature in the game.

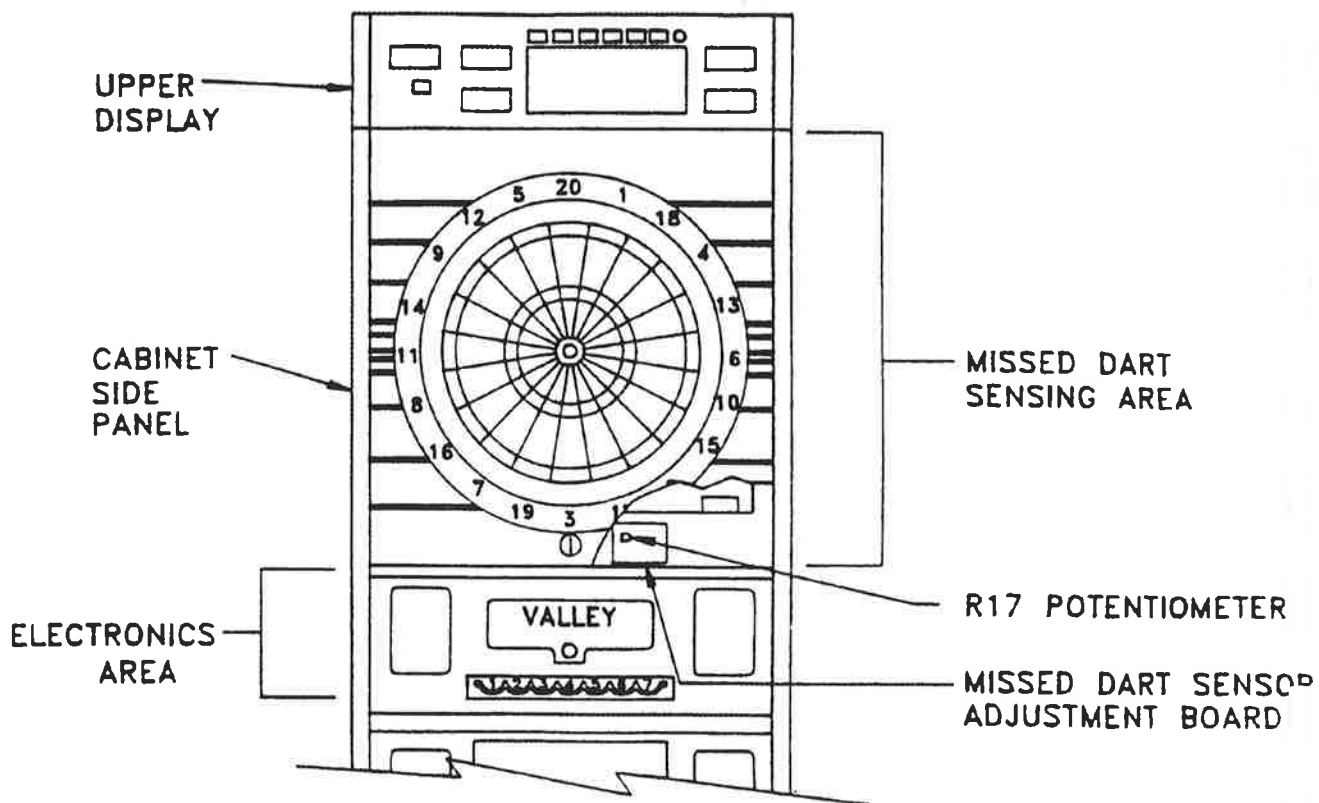


Figure 8. Missed dart sensing areas

AUTOMATIC PLAYER CHANGE / INFRARED MOTION SENSOR

The Cougar IQ dart game is equipped with an infrared sensor to detect a player removing darts from the target at the end of his turn.

The infrared sensor (IR) is activated 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 removing darts.

However, if all darts have not been counted, such as when a dart misses the game completely or when Tru-Score® II is disengaged, the infrared body sensor will not activate and it will be necessary to press the *Player Change button*.

NOTE The infrared sensor's effectiveness may be reduced by a player wearing dark clothing.

GAMES

Screen Menus

Press SELECT →
for options, Ernie and Teams

Game Types
→ 01 Games
Cricket Games
Practice / Skill
Dart League

Games
→ 301
501
701
901

Options
→ None
Wipe Out™
Wipe Out™ 103
Double In
Double Out
Double In/Out
... More...
Masters Out
Dbl In/Masters Out

Game Types
01 Games
→ Cricket Games
Practice / Skill
Dart League

Games
→ Cricket
Chancelt
YouPickIt

Options
→ Traditional
Cut Throat
Mark-21
Limit 201
Masters

Game Types
01 Games
Cricket Games
→ Practice / Skill
Dart League

Games
→ Shanghai
High Score
Low Score
Split Score™
Rapid Fire™
Stop Watch™

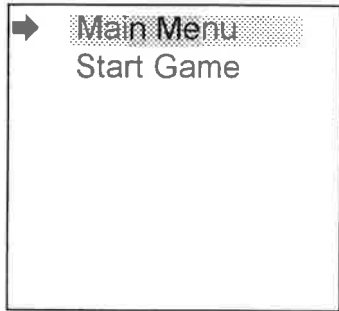
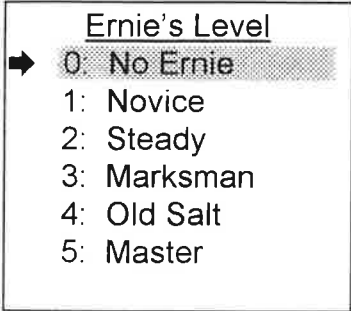
Game Types
01 Games
Cricket Games
Practice / Skill
→ Dart League

Press SELECT →
to set up match

Press SELECT for options, Ernie and Teams

'01 and Cricket (all games, all options)

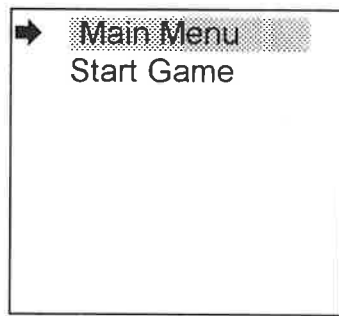
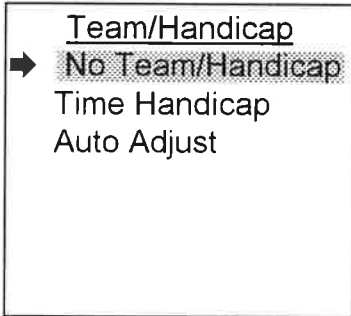
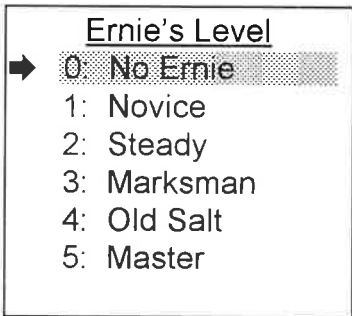
If you highlight No Team/Handicap, Team Play, Time Handicap or Auto Adjust



If you highlight: NDA or ADA Neutralizer gray menu changes to:



Practice / Skill Games: Shanghai, High Score, Low Score, and Split Score™



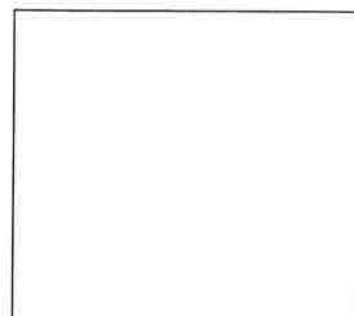
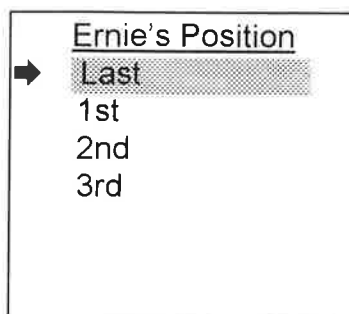
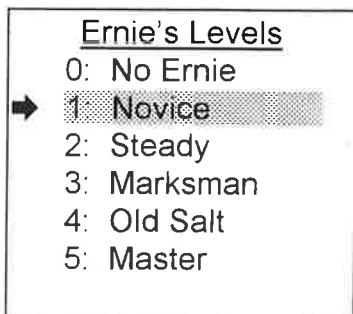
Practice / Skill Game: Rapid Fire™ has the following Team/Handicap menu, while Stop Watch™ offers no Team/Handicap options at all.



ERNIE Options

Ernie's Levels

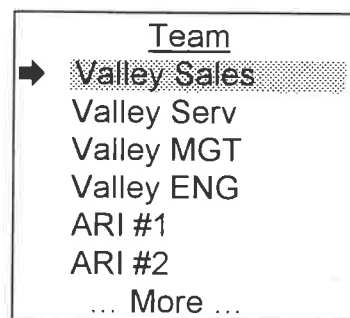
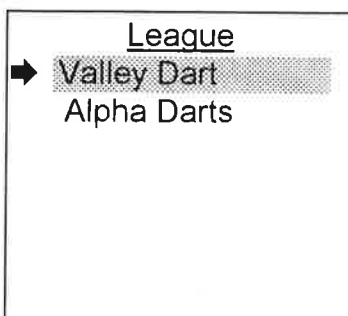
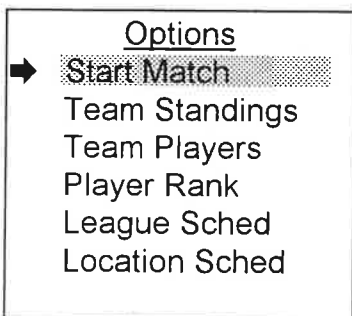
If you highlight Novice - Master. (No Ernie will produce no position options.)



Select Dart League under Game Types

Dart League

If you highlight Start Match and press SELECT (and a League or League(s)) have been exported from LMW.



Press SELECT to setup match

If you highlight one of the 5 reports, Team Standings through Location Sched, the Team menu is blank and the Select button says the following:

Press SELECT to view report

GAME FEATS

'01 Game Feats

Game Winner	PLAYER 3			
Assist To	PLAYER 1			
Player Name	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
High Ton	0	0	0	0
Low Ton	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

- 6th Dart Out (301) A win in 6 darts
- 7th Dart Out (301) A win in 7 darts
- 8th Dart Out (301) A win in 8 darts
- 9th Dart Out (301/501) A win in 9 darts
- 10th Dart Out (501) A win in 10 darts
- 11th Dart Out (501) A win in 11 darts
- 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

- * Points Per Round Average points per round per player
- * Points Per Dart Average points per dart per player
- Assist An assist while playing "Team"
- Hat Trick 3 Bullseyes in one turn
- TON A score of 100 to 150 in one turn
- High TON A score of 151 or greater in one turn
- Total Darts Number of darts thrown during the game
- Total Rounds Number of rounds thrown during the game.
- Total Points Number of points thrown during the game.

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 Bullseye.

* Not shown when using NDA handicap.

GAME FEATS

Cricket Feats

Game Winner	PLAYER 4			
Assist To	PLAYER 2			
Player Name	PLAYER 1	PLAYER 2	PLAYER 3	PLAYER 4
Marks/Round	1.2	1.4	1.6	3.4
Hat Trick	0	1	0	0
White Horse	0	0	0	0
Nine Mark	0	0	0	0
Eight Mark	0	0	0	0
Seven Mark	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.
WIN	Winning the Game.
Assist	An Assist while playing 'team' with a partner.
8 Dart Out	A Win in 8 darts.
9 Dart Out	A Win in 9 darts
9 Mark	9 marks in one round
8 Mark	8 marks in one round
7 Mark	7 marks in one round
6 Mark	6 marks in one round
5 Mark	5 marks in one round

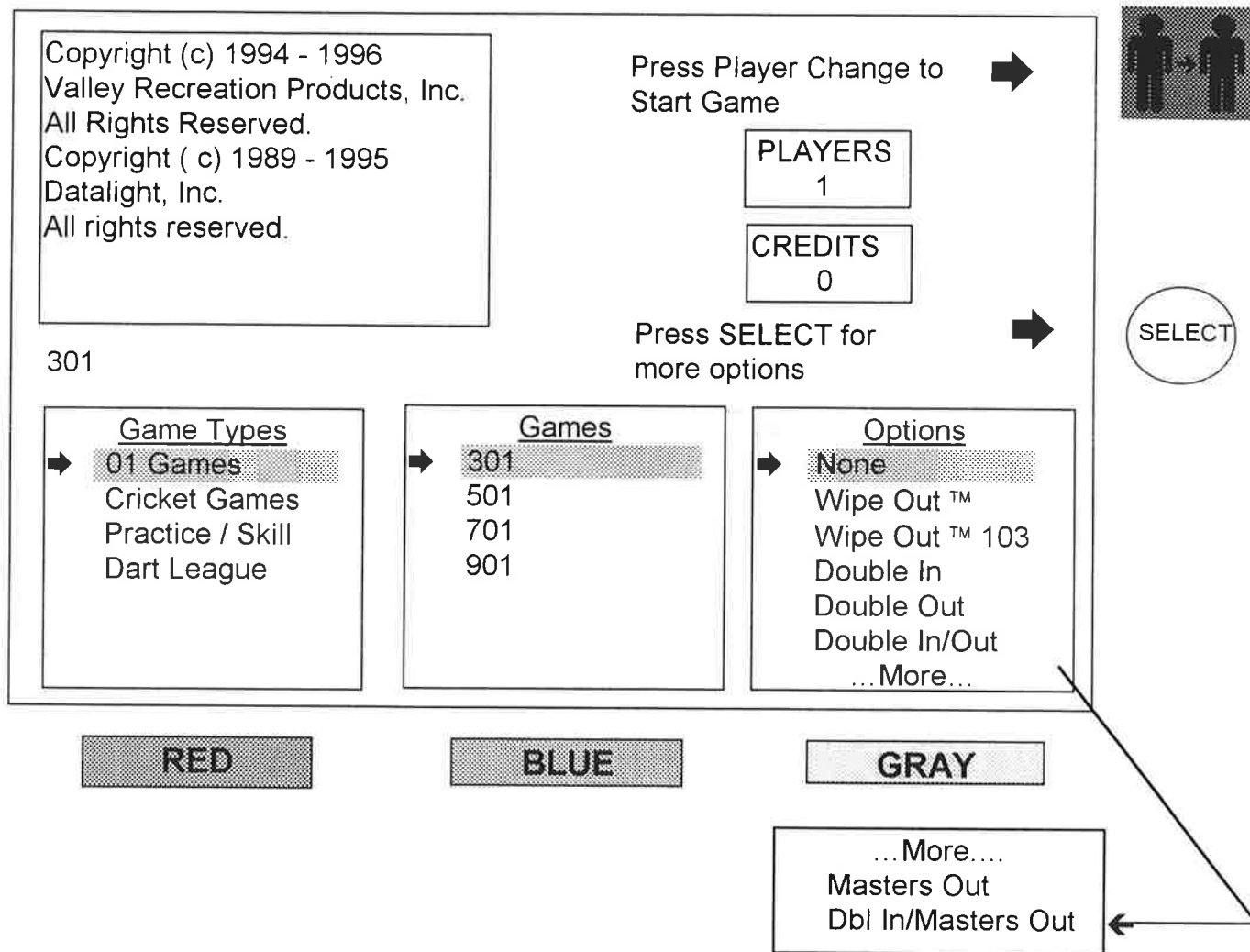
Total Marks	Number of marks made per game per player.
Total Darts	Number of darts thrown per game per player.
Total Rounds	Number of rounds thrown in a game per player.
Total Points	Number of points scored in a game per player.
White Horse	Marking 3 different unmarked triples in one round.
Hat Trick	Marking 3 Bulls eyes in one round.

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

* Not shown when using NDA handicap.

PLAYING INSTRUCTIONS FOR EACH GAME

'01 Games



NOTE

The "Credit(s) per Player" and "Rounds" shown are only examples and change according to the game options being played and operator changes to factory default settings.

301

1 Credit per Player	1 to 4 Players	12 Rounds
---------------------	----------------	-----------

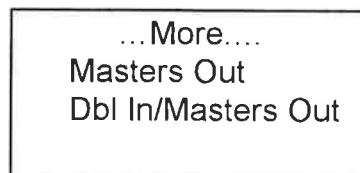
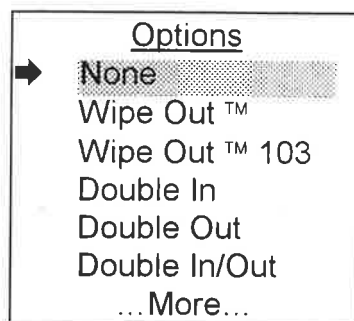
501 / 701 / 901

2 Credits per Player	1 to 4 Players	20 Rounds
----------------------	----------------	-----------

- Beginning with a score of 301(501/701/901), player(s) must score down to exactly 0. The first player to reach 0 wins.
- Any points scored exceeding the point total needed to reach 0 will result in a BUST. The player forfeits any remaining darts in that round. Player's score will return to the score at the beginning of the round.

PLAYING INSTRUCTIONS FOR EACH GAME

'01 Options



Wipe Out™

Wipe Out™ is played the same as other '01 games with the addition of a player having the opportunity of sending other player's score back to its original starting value by matching that player's score.

Each player can wipe out other players by matching their scores with any or all of the three darts thrown.

EXAMPLE: Player 1 has a score of 80 points, Player 2 has a score of 40 points, Player 3 has a score of 70 points, Player 4 has a score of 10 points. Player 1 shoots a 10 with his first dart for a score of 70. This matches Player 3's score so Player 3's score returns to 301. Player 1 shoots again and hits a Double 15 for a score of 40. This matches Player 2's score, and sends her to 301. Player 1 shoots a third dart and hits another Double 15, bringing the score to 10 which matches Player 4's score. Player 4's score returns to 301.

The first player to reach 0 exactly within the round limit or the player with the lowest score after the round limit is the winner.

Wipe Out™ 103

Wipe Out™ 103 is played the same as other '01 games with the addition of a having the opportunity of adding 103 points to another player's score by matching that player's score. If **WIPE OUT™** 103 is set in the previous example, the players' scores will be as follows: Player 2 = 143, Player 3 = 173, and Player 4 = 113.

Double In

A player must hit a double point value segment or an inner Bullseye before they can begin earning points. Darts thrown prior to the first scoring, cannot score points.

Double Out

A player must reach 0 exactly by scoring a double point value segment or an inner Bullseye. A score of 1 will automatically bust a player in this game.

Double In/Out

This is a combination of Double In and the Double Out games.

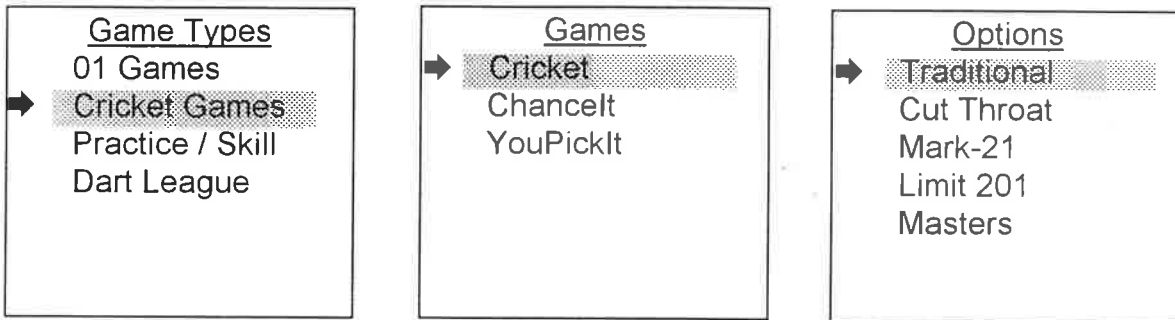
Masters Out

This is played the same as Double Out, but the player can also go out by hitting a triple point value segment or the bullseye.

Double In/Masters Out

This is a combination of Double In and the Masters Out games.

Cricket Games



Traditional Cricket

3 Credits per Player	1 to 4 Players	35 Rounds
----------------------	----------------	-----------

In Traditional Cricket, the object is to close numbered segments by hitting each one the equivalent of three times.

EXAMPLE

To close segment #20, a player must either:

- throw three darts in the single 20
- dart in the single 20 and one dart in the double 20
- dart in the triple 20

- This game is played using segments 20, 19, 18, 17, 16, 15, and the bullseye.
- The player who closes a segment may score on that segment until it is closed by all other players.
- On the upper display, the number of a closed segment will be replaced by dashes (--). If the bullseye is closed, bullseye LEDs will go out.
- The game ends when one player has closed out all the segments from 20 through the bullseye and has the highest score or is tied for the highest score.

Chancelt

3 Credits per Player	1 to 4 Players	35 Rounds
----------------------	----------------	-----------

- Ernie picks 6 segments at random (and the Bullseye) which players then close as in a Traditional Cricket game.
- All the usual Cricket rules apply.

PLAYING INSTRUCTIONS FOR EACH GAME

YouPickIt

3 Credits per Player	1 to 4 Players	35 Rounds
----------------------	----------------	-----------

- Players pick 6 segments at random (and the Bullseye) which they then close as in a Traditional Cricket game.
- All the usual Cricket rules apply.

Cricket Options

	Options
→	Traditional
	Cut Throat
	Mark-21
	Limit 201
	Masters

Cut Throat

3 Credits per Player	1 to 4 Players	35 Rounds
----------------------	----------------	-----------

Cut Throat is played the same as Traditional Cricket except that the player with a closed number adds points to those opponents with the number still open.

Mark-21

2 Credits per Player	1 to 4 Players	25 Rounds
----------------------	----------------	-----------

Mark-21 is played the same as Traditional Cricket but there is no scoring. The first player to close all numbers.

Limit 201

2 Credits per Player	1 to 4 Players	25 Rounds
----------------------	----------------	-----------

Limit 201 is played the same as Traditional Cricket except that player's total score cannot exceed 201 points over the closest opponent's score.

Masters

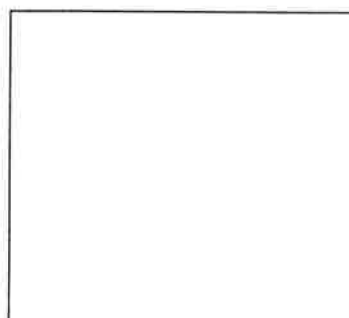
3 Credits per Player	1 to 4 Players	35 Rounds
----------------------	----------------	-----------

Masters is played the same as Traditional Cricket, except that a player can only score points on darts when closing. After a player has closed all his numbers and the Bullseye, the player may then score points on any opponents' open numbers. The player who has closed all numbers and has the highest score wins.

Practice and Skill Games

<u>Game Types</u>	
	01 Games
	Cricket Games
➔	Practice / Skill
	Dart League

<u>Games</u>	
➔	Shanghai
	High Score
	Low Score
	Split Score™
	Rapid Fire™
	Stop Watch™



Shanghai

1 Credit per Player	1 to 4 Players	7 Rounds
---------------------	----------------	----------

- Player(s) begin by throwing three darts per round.
- The object is to hit each segment in sequence beginning with segment #1, working up to segment #20, and ending with the Bullseye. The player with the highest score after 7 rounds or a Shanghai wins the game.
Game will prompt player for next segment during each round.
- A “Shanghai” is an automatic win achieved by throwing 3 consecutive scoring darts consisting of a single, a double, and a triple segment in any order.

EXAMPLE

Player is shooting for 4, 5, 6 in round 4 of a game. Player hits a triple 4 segment, then a single 5 segment, then a double 6 segment: this qualifies as a “Shanghai.”

High Score

1 Credit per Player	1 to 4 Players	10 Rounds
---------------------	----------------	-----------

- Each player throws three darts per round.
- Highest score at the end of ten rounds wins the game.

Low Score

1 Credit per Player	1 to 4 Players	10 Rounds
---------------------	----------------	-----------

- Each player throws three darts per round.
- Lowest score at the end of ten rounds wins the game.
- 50 points awarded for each dart missed.

Introducing Split Score™

2 Credits per Player	1 to 4 Players	9 Rounds
----------------------	----------------	----------

- Each player begins with 40 points.
- Each player throws 3 darts per round at the segment designated by the game.
- Each time the designated segment is hit, the value of the segment is added to the score. (Including double or triple point values). The “Arrow sound” occurs when a “hit” is made. Digital audio sounds are programmable and may be disabled in Service Mode.
- If the designated segment is not hit at least once during the round, the player’s score is split in half.
- The designated segments are 15, 16, any Double, 17, 18, any Triple, 19, 20 and Bullseye.
- Highest score at the end of 9 rounds wins the game.

Introducing Rapid Fire™

1 Credit per Player	1 to 4 Players	7 Rounds
---------------------	----------------	----------

The object of Rapid Fire™ is to hit the designated segment shown on the display before your time expires. Each player selects their own Time Handicap before starting the game.

- Following the instruction on the setup screen, each player selects their own individual time handicap.
- Any number of timer ticks between 1 and 21 may be selected.
- The timer begins when the first dart hits the door. The 2nd and 3rd darts must be thrown before the timer ticks down to zero.
- 3 segments are designated each round. To score you must hit the segments, in the order they are shown.
- The ‘live’ segment will be flashing in the upper display and appears in white on the monitor. This segment advances with each dart thrown.
- Each sector of the target is designated once during the game.
- The highest score after 7 rounds wins.
- A “Bullet sound” occurs when the designated segment is hit. A “Ricochet sound” occurs when the designated segment is missed. Digital audio sounds are programmable and may be disabled in Service Mode.

Introducing Stop Watch™

1 Credits per Player	1 to 4 Players	25 Rounds
----------------------	----------------	-----------

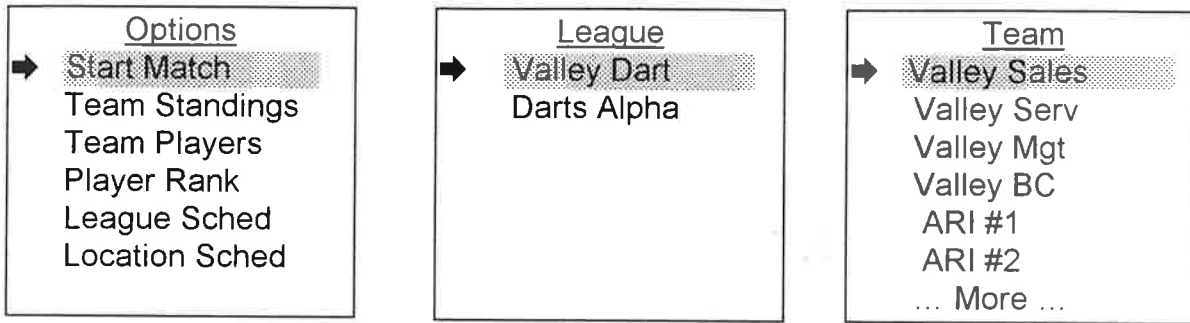
The object of Stop Watch is to obtain the highest score before time expires. Each player has the same amount of time to score as many points as possible. Each player’s Stop Watch runs only during their turn.

- Each player begins the game with 21 “ticks” of time in which they may play the game. On the upper display, one “tick” is removed each time the pendulum reaches the end of the LEDs. On the monitor, a clock ticks down the time remaining.
- The timer automatically begins when the first dart hits the target or the operator may select “tone mode” in which case a tone sounds when the timer begins.
- Each player throws 3 darts per round for the highest score. Unused time is carried over to the next round.
- The maximum time allowed for any round is programmable under setup features. The range is from 2 - 9 “ticks”. Each player’s round ends after the third dart is scored, or upon elapse of maximum ticks—whichever occurs first.

- Play continues until each player has used all of his time. Players are eliminated as their time expires.
- When all players' times have expired, player with the highest score is the winner.

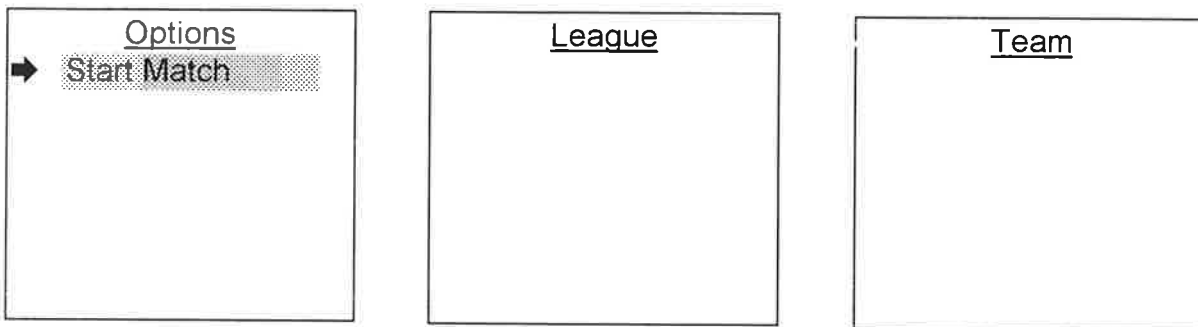
Dart League Game Play

Press the *Select* button from the Main Menu to setup match. League Play requires League Machine for Windows™ software. If Leagues have been exported, the following menus appear (information appearing in the League and Team menus is determined by the individual database, the following is an example of two Valley databases). The five reports showing are all the available reports. Depending on the information exported from LMW the Reports showing in Menu Options will vary.

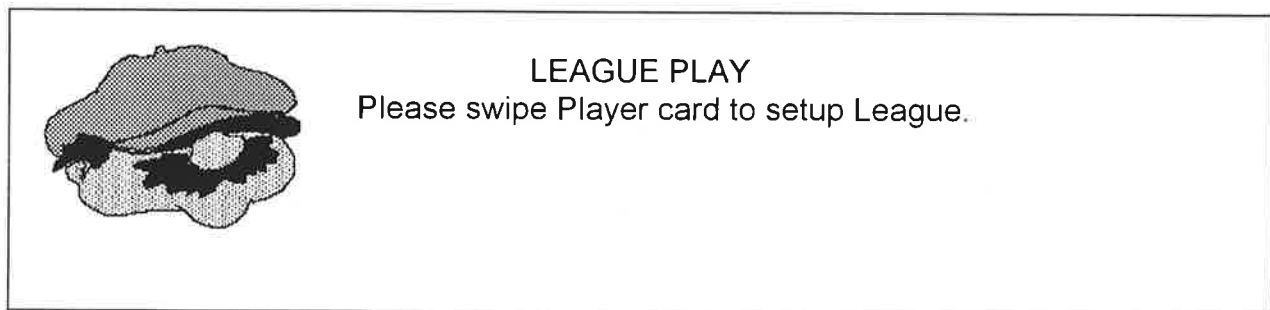


If you do not have LMW, you may purchase it from the Valley Sales Department. See the "Complete Step by Step Instructions" section of this manual for more information.

If no League information is loaded, the following menus appear:

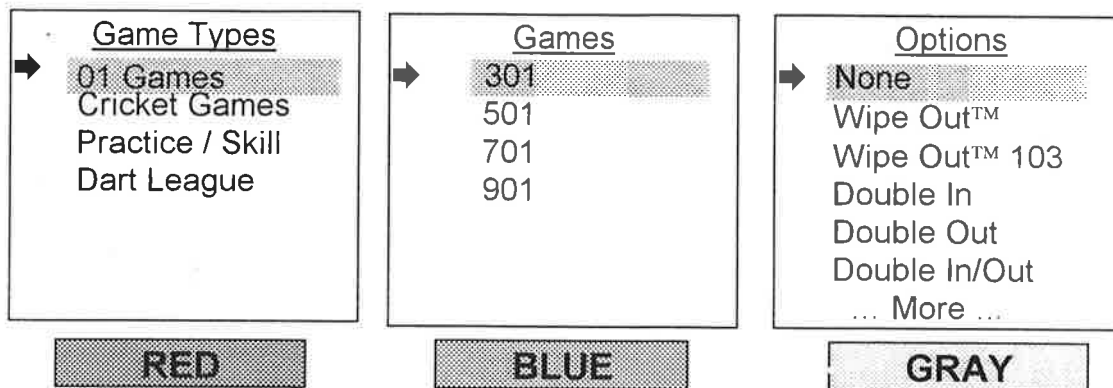


- Press the *Select* button. The following message appears.



Swipe a League Player card through the card reader.

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's Level* or *Team/Handicap*).
- If *Player Setup Mode* is set to manual, insert correct number of coins for desired number of players. If it is set to automatic, the game sets the maximum number of players allowed by the amount of credits available. To change number of players, press the *Player Change button* or add more credits and start again.
- Press *Player Change button* once. (this is a setup feature you can set to manual or automatic, see Appendix E). You must press the *Player Change button* once for each player.
- Press the *Select button* to return to the *Secondary Options Menu*.

Dart League Play

Start Match

- Press the *Red button* to highlight *Dart Leagues* in the *Game Types Menu*.
- Press the *Select button* to set up the match.

If you have *League Machine for Windows™ (LMW)* software and the *League Roster* and reports have been exported from LMW to the IQ game, a screen similar to the one below will appear.

Leagues, teams and players depend upon your database. Depending on what the operator selects when LMW is exported, none, some or all of five available reports can appear on the IQ game screen.

DART LEAGUE OPTIONS
Please press SELECT or swipe player card to setup a league match –
OR
Use Red button to point to other options (if shown) then press SELECT

Start Match Valley Dart

Options

→ Start Match

Team Standings

Team Players

Player Rank

League Sched

Location Sched

League

→ Valley Dart

Darts Alpha

Team

→ Valley Sales

Valley Serv

Valley Mgt

Valley BC

Valley Eng

ARI #1

... More...

Press Player Change to Cancel

PLAYERS
1

CREDITS
0

Press SELECT to setup match

RED

BLUE

GRAY

- Press the *Red button* to highlight Start Match in the Options Menu..
- Press the *Blue button* to highlight a specific League.
- Press the *Gray button* to highlight the Team.
- Press the *Select button* to setup the match. The following Ernie box will appear.

Will You Be Playing on the HOME team or VISITING team?

Highlight your choice and press SELECT.

HOME:

↓

RED

VISITOR:

↓

GRAY

- Press the *Red or Gray button* to assign HOME or VISITOR status to the selected Team.
- Press the *Select button*. The following screen appears.

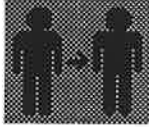
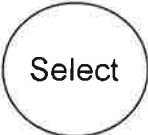
The screenshot shows a game menu for 'Valley Eng'. At the top left, it lists positions: HOME: Valley Eng, 1st, 2nd, 3rd, 4th. To the right, there are two boxes: 'PLAYERS 1' and 'CREDITS 0'. Below these are instructions: 'Press Player Change to Cancel' with a right arrow, and 'Press SELECT to setup match' with a right arrow. On the far right, there is a 'SELECT' button in a circle and an icon of two people. At the bottom, there are three buttons: 'RED', 'BLUE', and 'GRAY'. The main menu area is titled 'Start Match Valley Dart' and contains three sub-menus: 'HOME' (with '1st' highlighted), 'PLAYER' (with 'R Nicholson' highlighted), and 'Select Players' (with 'Select Players' highlighted). The 'Select Players' menu lists: Add a Player, Start Game, Visiting Team, View Rotation, and Main Menu.

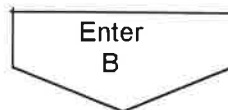
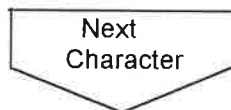
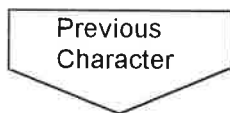
Select Players

- Press the *Gray button* to highlight *Select Players*.
 Press the *Red button* to highlight the players position.
 Press the *Blue button* to highlight the player assigned to that position.
 Press the *Select button*. Your assignment will appear in the game description box.
 Repeat these steps until all positions are assigned.
 Repeat all steps for the other team.

Add a Player

- Press the *Gray button* to highlight Add a Player in the gray menu box.
- Press the *Select button*. The following screen will appear to allow you to add the players initials to the team roster.
- You will be returned to the League Menu. You must select the home and visitor teams, assign players and player positions to each before you may select Start Game.


Enter Your Three Initials										 CANCEL
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press SELECT to save or Player Change to Cancel.										
									B	 Select SAVE
A	B	C	D	E	F	G	H	I	J	
K	L	M	N	O	P	Q	R	S	T	
U	V	W	X	Y	Z	1	2	3	4	
5	6	7	8	9	0	Delete	Space			



- Press the *Red* and *Blue buttons* to highlight a letter or number. Press the *Gray button* to enter your selection. It will appear on the bar above the alphabet. Repeat until the player is identified.
- Press the *Select button* to save and return to the League menu.

Start Game

- Press the *Gray button* to highlight Start Game.
- Press the *Select button*. If you have not set up all the necessary information for league play, the following screen will appear.

	Two full Teams are necessary to start a game.
---	--

Visiting Team

Select Players
Add a Player
Start Game
➔ Visiting Team
View Rotation
Main Menu

- Press the *Gray button* to highlight Visiting Team.
- Press the *Select button*.

GRAY

<u>Team</u>
VALLEY SALES
VALLEY SERV
VALLEY MGT
Valley BC
➔ VALLEY ENG
ARI #1
... More

- Press the *Gray button* and highlight the team which will be the Visiting Team. The team's name and blank positions will appear in the game description box under the Home team (if one has already been selected).
- Press the *Select button*.

GRAY

HOME: VALLEY ENG
1st Rick Nicholson
2nd Phil Smith
3rd Billy Adams
4th Brian Jones
VISITOR: ARI#1
1st
2nd
3rd
4th

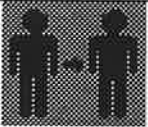
The game description box will appear as follows. (Assuming the Home Team has been selected and assigned positions).

- Assign positions to each player on the visitor's team using the same procedure as you did for the home team under "Select Players" earlier in this section.

View Rotation

- Press the *Gray button* to highlight View Rotation.
- Press the *Select button*. The following screen appears.

Home	Valley Eng	Home1	Home 2	Home 3	Home 4
Visit	ARI#1	Visitor 1	Visitor 2	Visitor 3	Visitor 4
Num	Game Type	Position1	Position 2	Position 3	Position 4
1	301	Home 1	Visitor 1	Home 2	Visitor 4
2	501	Visitor 3	Home 3	Visitor 4	Home 4
3	Cricket	Home 1	Visitor 2	Home 3	Visitor 4



Select

Press Player Change or Select to EXIT and go back to the menu.

Page 1 of 1

- If the Player Rotation consists of several pages, press the *Select button* to view the next page.
- Press the *Player Change button* or the *Select button* to return to the previous screen.

Main Menu

To exit from League Setup and return to the Main Menu

- Press the *Gray button* to highlight Main Menu.
- Press the *Select button* to return to the Main Menu any League play information you have setup will be lost.

Secondary Options Menu

Ernie's Level

➔ 0: No Ernie

1: Novice

2: Steady

3: Marksman

4: Old Salt

5: Master

RED

Team/Handicap

➔ No Team/Handicap

Team Play

Time Handicap

Auto Adjust

NDA

ADA Neutralizer

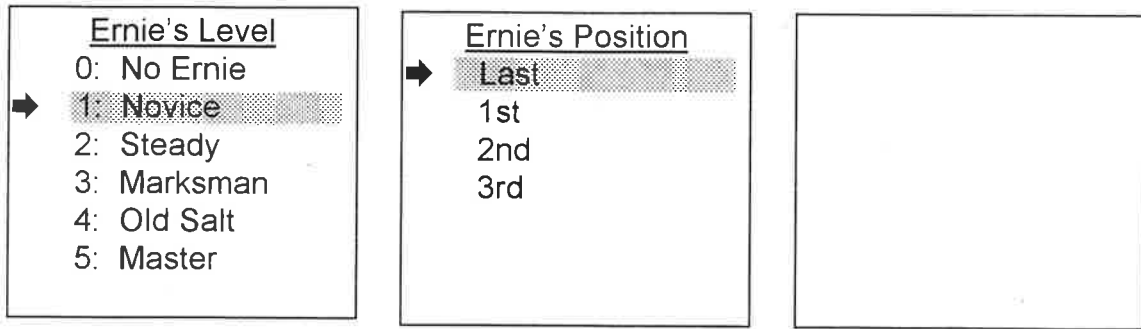
BLUE

➔ Main Menu

Start Game

GRAY

- Press the *Red button* to scroll through the menu options and highlight Ernie's Level.
- If a skill level for Ernie has been highlighted, the screen will display the following menu.
- Press the *Blue button* to highlight Ernie's position. The options are Last, 1st, 2nd, or 3rd.

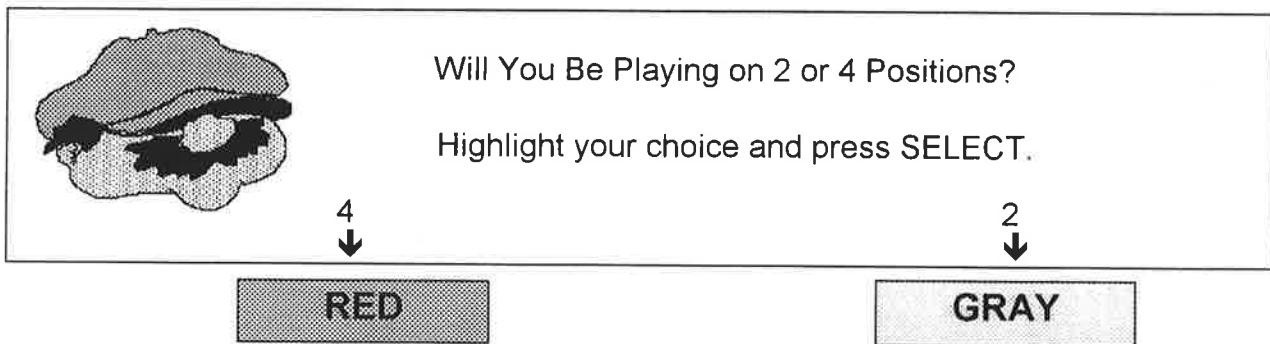


- Press the *Select* button and return to the Secondary Options Menu.

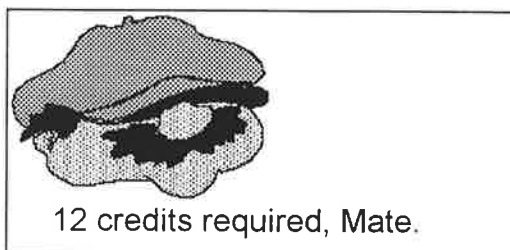
Team Play

Team play tracks and stores Avg. Marks per round per player.

- Press the *Blue* button in the Team/Handicap Options. Highlight Team Play.
- Press the *Gray* button to highlight Start Game.
- Press the *Select* button. The following message appears.



- Press the SELECT button. If you have not inserted the correct amount of coins Ernie will appear.



Enter the requested number of coins and the game will begin.

'01 Games

Team play is available in all '01 games. all options except when playing under NDA. In 4-Player '01 games, you can play on either 2 positions or 4 positions.

A player cannot win the game if his partner's score is greater than the opposing team's combined score. This situation causes that player to be "frozen". For example: if the partner's score is 50 and the opposing team players have scores of 15 and 10, totaling 25 points, then you cannot win.

If a player is “frozen” and reaches 0, the game will cause this player to bust when “frozen team loss” is disabled in the default settings. When “frozen team loss” is enabled, it causes the player to lose the game.

4 Player, 2 Position

- This option is only valid for 2 teams and can be chosen when there is enough credits for a 2 player game.
- Players 1 and 3 are Team “A” and their score appears on the Player 1 display. Players 2 and 4 are Team “B” and their score appears on the Player 2 display.
- This option can only be chosen when there are enough credits to start a 4 player game.
- Players 1 and 3 are Team “A”. Players 2 and 4 are Team “B”.

Wipe Out™ and Wipe Out™ 103 Team Play

- Players cannot wipe out a team member if they match their team member’s score.
- If both members of a team have the same score, an opposing team member could knock both player’s scores back to the starting score should he match their score.
- The team with the first player to reach 0 before the round limit is the winner as long as the cumulative score of the winning team is less than the cumulative score of the other team. A team player reaching 0 without having the lowest cumulative team score could (1) cause the player to “Bust”, and his score will return to that of the previous round or (2) lose the game depending on how the “frozen team loss” feature is set.
- If the round limit is reached, the team with the lowest cumulative score is the winner.

Cricket

Team play is available in all Cricket, all options, except when playing under NDA. In 4-player Cricket, you can play on either 2 positions or 4 positions.

A player is “frozen” when he cannot score and mark. A player cannot score when all his segments plus the Bullseye are closed out but his partner’s are open. If his partner has a closed segment which is still open in one of the opposing teams players, he can score on that segment and is not frozen.

If a player is “frozen” and “Skip Frozen Cricket Player” is enabled then the game skips the player. If it is disabled then the player may throw but cannot score or mark, he may choose to press the *Player Change button* instead.

4 Player, 2 Position

- This option is only valid for 2 teams and can be chosen when there is enough credits for a 2 player game.
- Players 1 and 3 are Team “A” and their score appears on the Player 1 display. Players 2 and 4 are Team “B” and their score appears on the Player 2 display.

4 Player, 4 Position

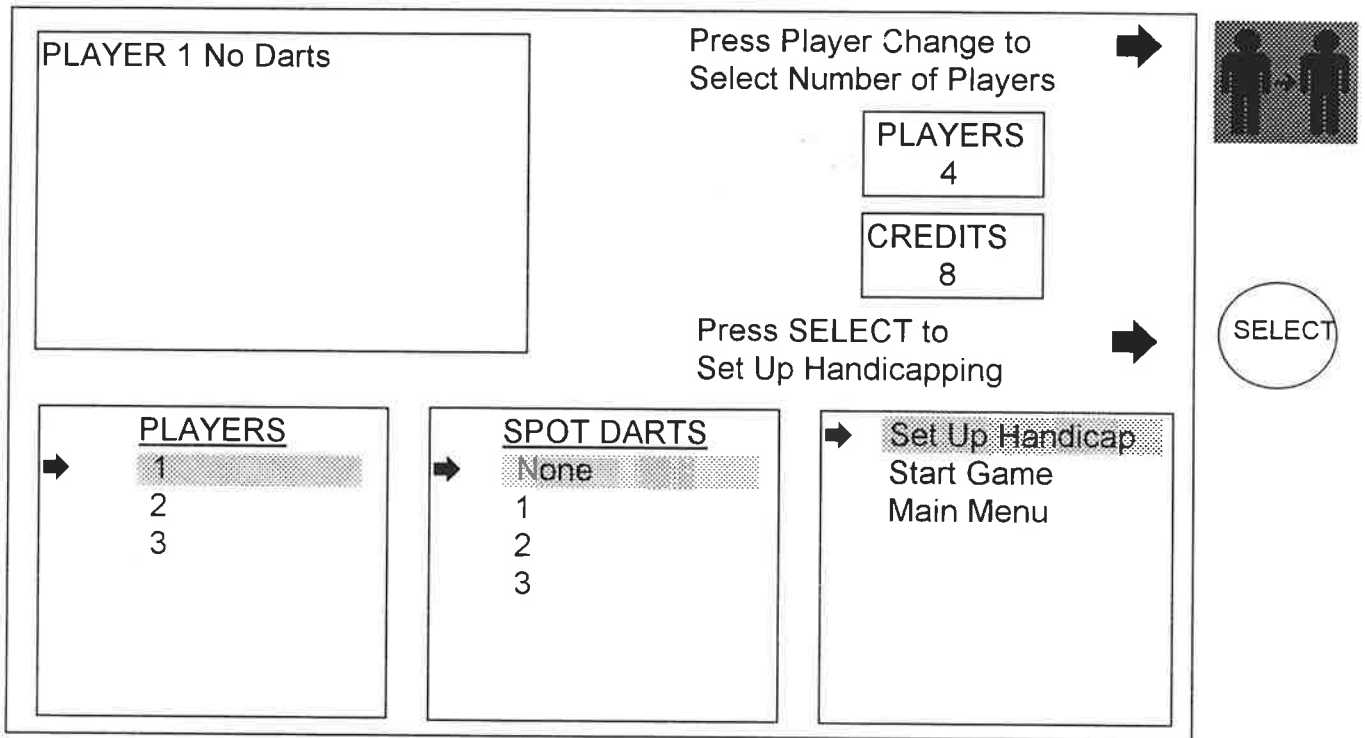
- This option can only be chosen when there are enough credits to start a 4 player game.
- Players 1 and 3 are Team “A”. Players 2 and 4 are Team “B”.

NDA

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

Spot Darts

- Press the *Blue button* in the Team/Handicap menu and highlight NDA.
- Press the *Gray button* to highlight Setup Handicap.
- Press the *Select button*.
- The Red menu will display one player. Press the *Player Change button* until the correct number of players appears in the Player box. (Example: 1.2.3.4).



- Press the *Red button* to highlight the player number.
- Press the *Blue button* to highlight the # of spot darts (None, 1, 2, 3) for this player.
- Press the *Gray button* to Highlight Set Up Handicap.
- Press the *Select button* to record the handicap. The handicap appears in the box in the upper left.
- Repeat steps until each player has been assigned spot darts.
- Press the *Gray button* to highlight Start Game.
- Press the *Select button* to begin play.

NOTE: The game will start with the handicap round as round 0 in the upper display.

NDA (a method set by the National Dart Association) is available in '01 and Cricket games (all games, all options). ADA Neutralizer (a method set by the American Darters Association) is available in a no option 301 game and a Traditional Cricket games only. Handicapping is not available during Team Play.

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	
1 st	PR	Points Remaining
2 nd	TDT	Total Darts Thrown Using Actual Darts
3 rd	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)
NDA Option: 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:

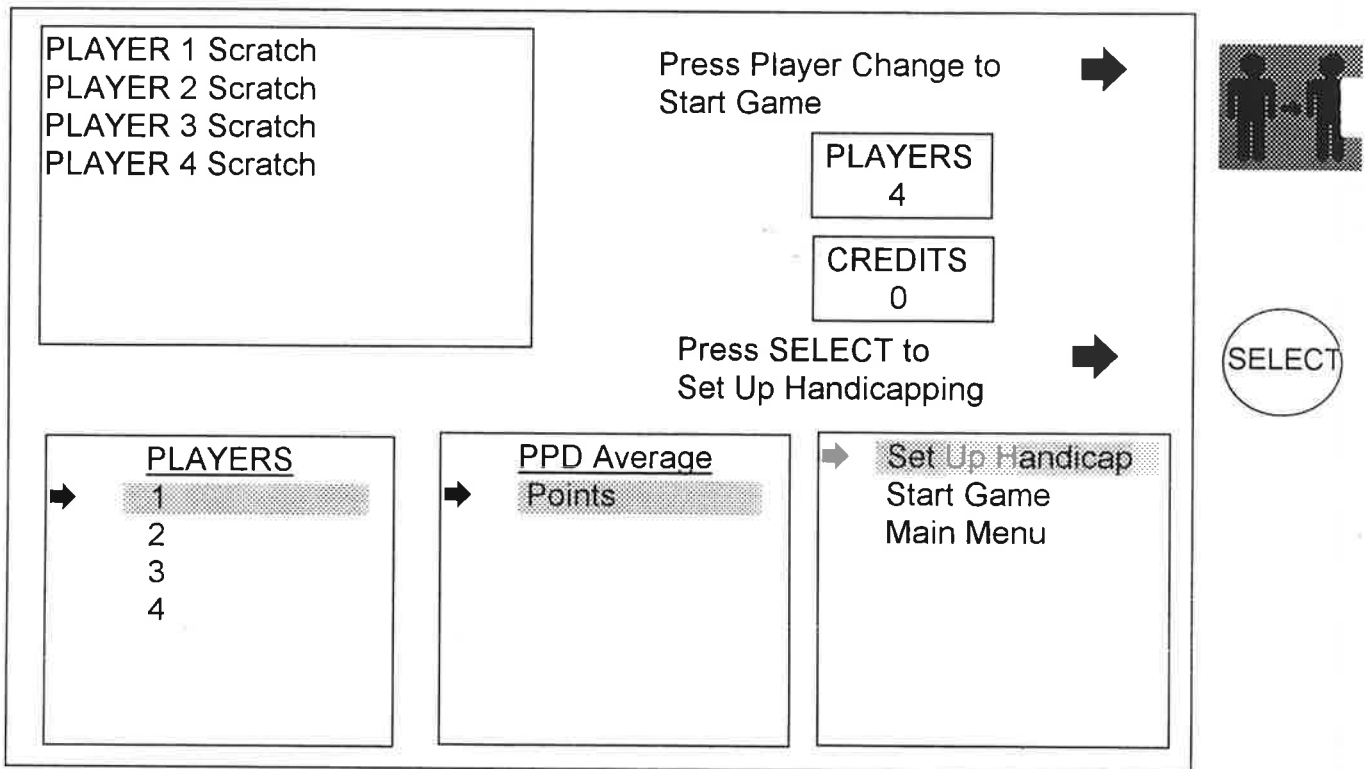
Feat Readout	Feat	
1 st	TM	Total Marks Scored
2 nd	TDT	Total Darts Thrown Using Actual Darts

- 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)
NDA Option: 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.

ADA Neutralizer

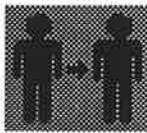
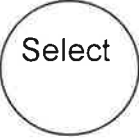
ADA Neutralizer handicapping is available only for 4 Player 2 position Traditional Cricket no options and 2 Player 301 no options.

- Average Points Per Dart have a valid range of 10 to 30. If you assign a PPD greater than 30 the system will automatically record it as the maximum allowable (30).
- Press the *Blue button* in the Team/Handicap menu to highlight ADA Neutralizer. Press the *Select button*. The following screen appears.



Points Per Dart (PPD)

- Press the *Red button* to highlight a specific player. Press the *Select button* to set up the player's points per dart (PPD). The following screen appears (using Traditional Cricket's screen as an example).

Enter Points per Dart Average 10-30										 CANCEL
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press SELECT to Save or Player Change to Cancel.										
									2	Select  SAVE
1	2	3	4	5	6	7	8	9	0	
Delete										

Previous
Number

Next
Number

Enter
2

- Press the *Red* and *Blue* buttons to highlight a number.
Press the *Gray* button to enter the number (it will appear in the 3rd row of the screen).
- Press the *Select* button to return to the previous screen. The PPD's you assigned will be displayed in the game description window.
- Use the *Red* button to highlight another player. Continue until PPD's have been assigned to each player.
- Press the *Gray* button to highlight Start Game.
Press the *Select* button to begin game play.

If you do not have enough credits deposited an Ernie message will tell you how many credits are needed. Drop the necessary coins into the coin slot.

In Traditional Cricket you may select Marks on the handicap darts by pressing target segments. How many marks are allowed is based on the Points per Dart (PPD) average of each player. 301 automatically figures the amount of points to spot the player with the lowest PPD average. When applicable, the following screen appears.

The screenshot shows a darts game interface. At the top left, a box displays 'Marks 8'. In the center is a dartboard with numbers 1 through 20. To the right of the dartboard is a vertical menu with a 'START GAME' button (accompanied by a player icon), a 'Select' button (a circle with the word 'Select' inside), and a 'MAIN MENU' button. Below the dartboard is a text box with instructions: 'Use target or left and right buttons to place your marks. You can have only two marks per segment. Use PLAYER CHANGE to start game.' At the bottom left is a 'NEXT SEGMENT' button, and at the bottom right is a 'SELECT SEGMENT' button.

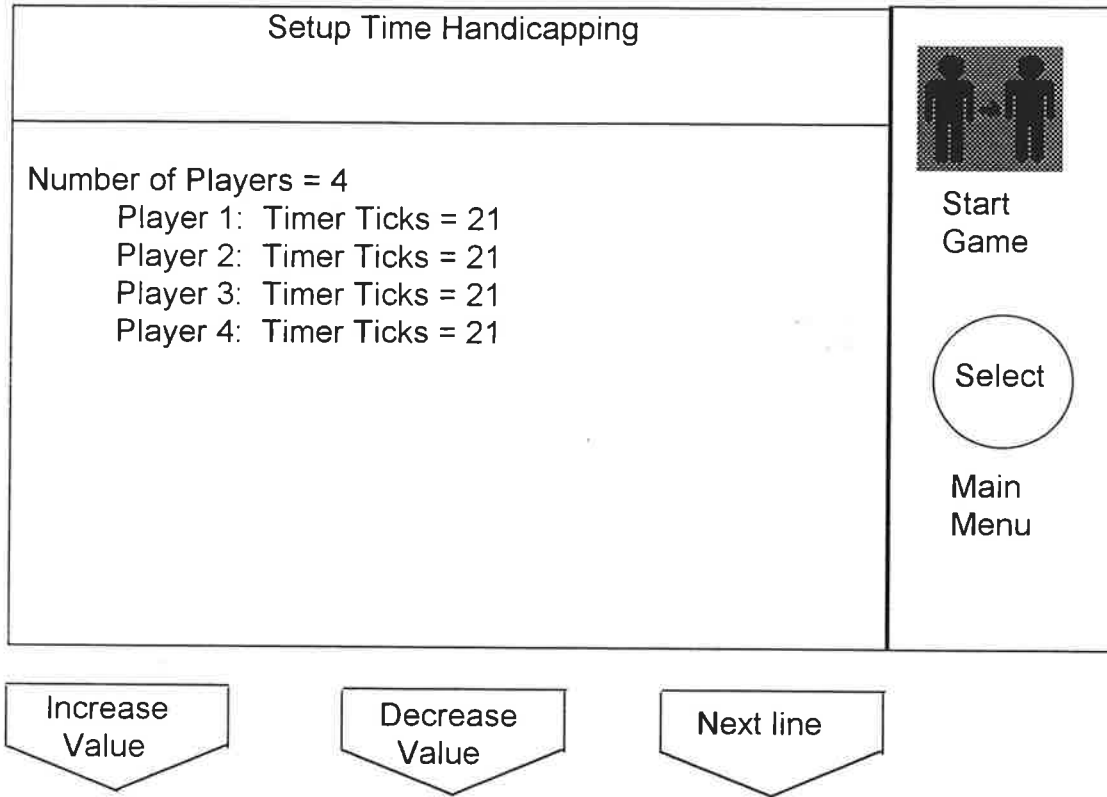
- Press the target to select the marks. Whether you press a single, double or triple, you will only get one Mark.
- Press the *Player Change* button when you are done. The Traditional Cricket game will begin.

Introducing Time Handicap

Time Handicap may be selected with any '01 or Practice Skill game except Stop Watch™. Time Handicap is not available during team play or when Ernie or handicapping is used.

- Following the instructions on the setup screen, each player selects their own individual Time Handicap.
- Any number of timer ticks between 1 and 21 may be selected.
- The timer begins when the first dart hits the board.
- The 2nd and 3rd darts must be thrown before the time ticks down to zero.
- Each player's round ends after the third dart is scored by pressing the *Player Change* button, or upon elapse of the timer - whichever occurs first.

- Press the *Blue button* to highlight Time Handicap in the Team / Handicap menu.
- Press the *Gray button* to highlight Start Game.
- Press the *Select button*.
- The Time Handicap screen appears. It assumes 1 player with the maximum number of ticks (21). Press the *Red button* until the appropriate number of players is displayed.



- Press the *Red, Blue* and *Gray buttons* to set a Time Handicap for each player.
- Press the *Player Change button* to Start Game or the *Select button* to return to the Main Menu.

Introducing Auto Adjust

Auto Adjust can be used with any game which has Time Handicap. Auto Adjust is a Time Handicap game where the number of timer ticks will be adjusted after each round depending on a player's performance. Better players will have timer ticks removed while other players may have timer ticks added.

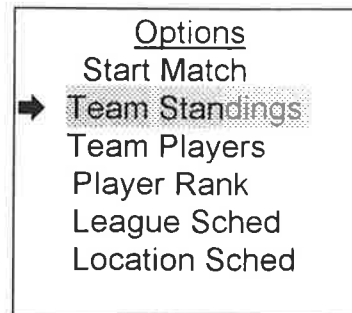
- Press the *Blue button* to highlight Auto Adjust in the Team / Handicap menu.
- Press the *Gray button* to select Start Game.
- Press the *Select button*. The Time Handicap screen will appear, if these values have already been set, press the *Player Change button* to begin game play.

Standings and Schedules Reports

The red Dart Leagues menu allows the player to choose between starting a match as we have discussed above, or viewing a report.

None or all of the 5 reports can be displayed on the IQ dart game depending on what LMW exports.

- Press the *Red button* to highlight the report.
- Press the *Blue button* to highlight League.
- Press the *Select button* to view the report. All of the reports are capable of being multiple page depending on the exported data. Follow the instructions on the buttons to see (more standings, more teams or more matches) whichever is true.
- Press the *Player Change button* or the *Select button* to leave the report and return to the Dart Leagues menu.



Standings & Schedules Screen Types

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

- Each game dynamically handles many columns and rows of information .
- If all columns cannot be displayed on one screen, a Gray button appears at the bottom of the screen. Press the *Gray button* to view additional columns of data. For clarity, row labels remain unchanged.
- If all rows can not be displayed on one screen, a Blue button appears at the bottom of the screen. Press the *Blue button* to view additional Teams.

Standings Screen

The standings screen displays the following 3 reports:

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

- The left most column of the screen display contains the row's label, usually team or player name.
- The remaining eight columns contain data about the row.

Schedule Screen

The schedule screen displays the 2 Schedule reports:

League Schedule
Location Schedule

- The left two columns of the screen display contains the row's label, usually two team names.
- The remaining columns contain data about the row.

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 LMW, reports are downloaded at the same time, (if selected in LMW Export Data). 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.
- 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.

NOTE Reports of Standings and Schedules cannot be downloaded using the PDA.

Start of Game Play

While the 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. You may return to the Main Menu by pressing the *Blue button*. If you return to the Main Menu all options will be cleared.
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.

Throw the first dart to start the game.

NOTE Some game options in Leagues, have pre-set bullseye 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 the *Player Change button* before removing darts.

End of Game Play

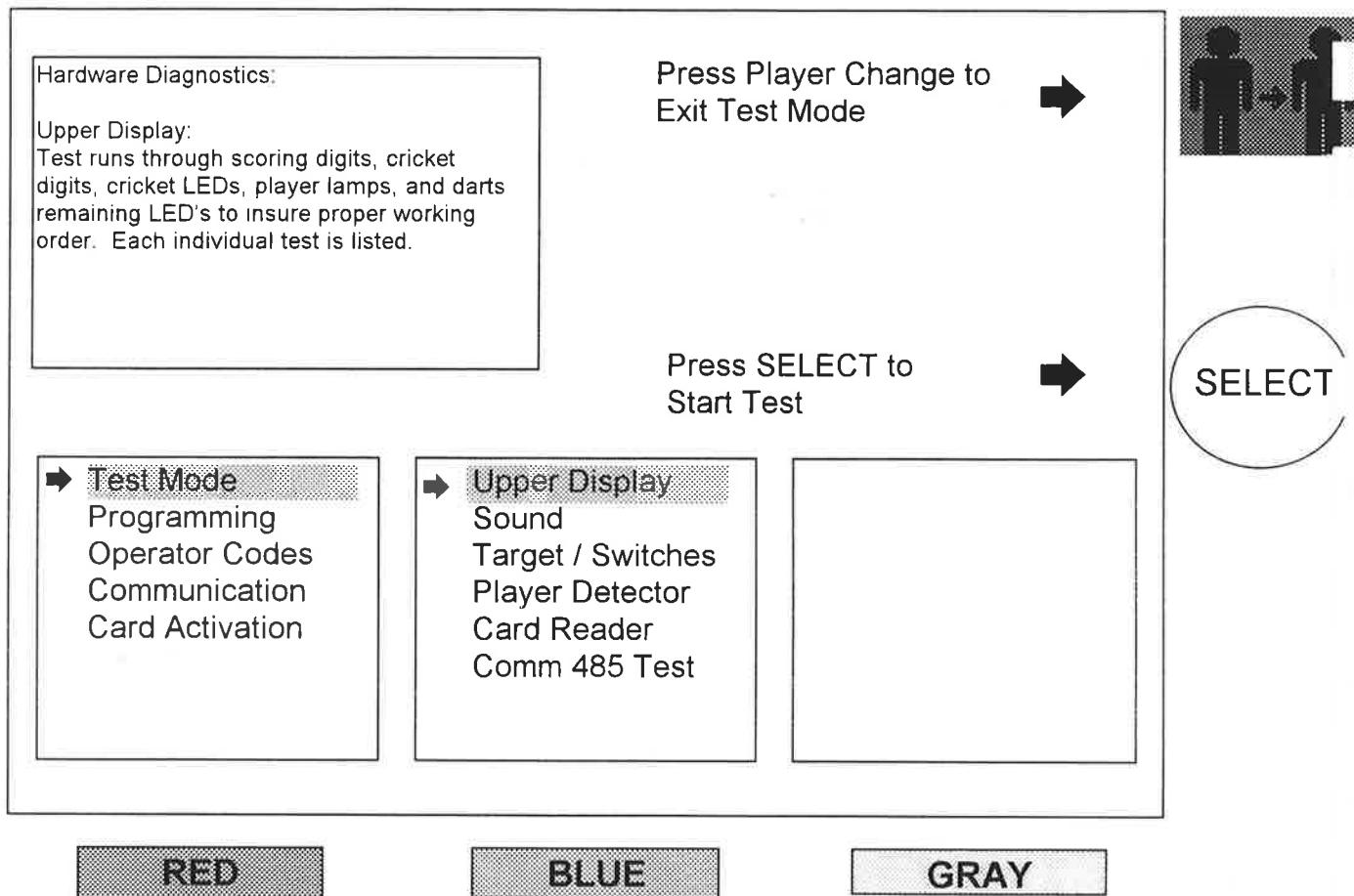
1. A feat screen is displayed on the monitor at the end of the game for a short period. (up to 2 minutes)
2. If credits remain or are added during feats readout, a new game with the same setup may be started by pressing the *Select button* or the *Player Change button* before the feat screen times out. Press the *Red button* to return to the menu.
3. 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 during casual play.


SERVICE MODE

Test Mode

TEST MODE is the section of the dart game software that allows you to test the basic functions of the games hardware. This mode can be entered two different ways.

1. Swipe the Master Service card through the card reader.
2. Press the *Test button*. The Test button is one of 2 push button switches on the controller board. The Test button is the one labeled test which sits closest to the back of the game.



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

- Press the *Red button* to scroll through the options and select Test Mode, Programming, Operator Code, Communications, or Card Activation.

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)
• Card Reader	(if installed)
• Comm 485 Test	(to test networking between games)

Once the appropriate test has been selected press the *Select button* to start the test. Press 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 game volume (sound effects & tunes), the dart alarm and the attract mode sound effects separately. Use gray button to choose from Game Volume, Alarm Volume or Attract 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 each volume.

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, 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 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 its sight range.

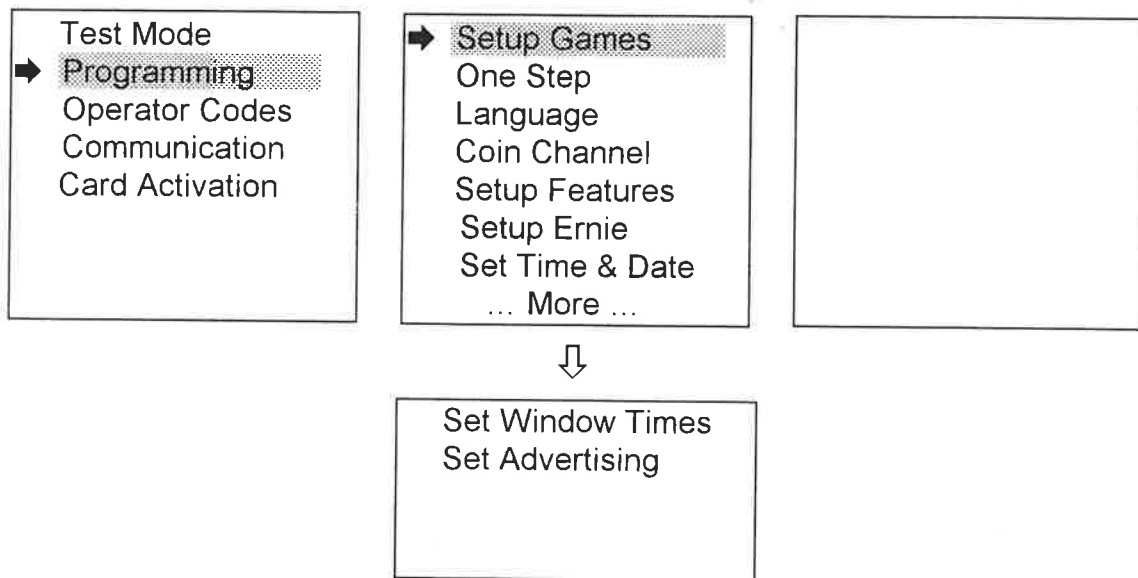
Card Reader Test (if installed)

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 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*.
- 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 setups. Do you wish to update games on the Network?"

- Press the *Red button* to select NO.
- Press the *Gray button* to select YES.
- Press the *Select button*.

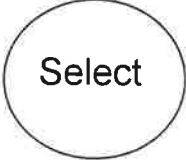
Setup Games

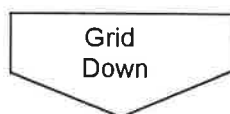
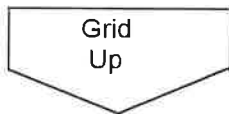
Set credits, rounds to limit and bullseye value for each game.

- Press the *Red button* to highlight Programming.
- Press the *Blue button* to highlight Setup Games.
- Press the *Select button* to Setup Games. The following screen appears.

The Players and Credits columns are for viewing only. The game records these 'bookkeeping' items. While the operator may not change these settings he may clear the bookkeeping settings, sending them all back to 0.

There are 7 pages of game options: 301, 501, 701, 901, Cricket, Cricket options and Practice & Skill games.

Page 1 of 7	Price	Round Limit	Bullseye	Players	Credits	
301	1	12	Single	4	4	 EXIT  CHANGE Page 1 of 7
Wipe Out™	1	12	Single	2	2	
Wipe Out™ 103	1	12	Single	2	3	
DB In	2	20	Single	3	7	
DB Out	2	20	Single	1	3	
DB I/O	2	20	Single	2	5	
MS Out	2	20	Single	3	7	
DI/MO	2	20	Single	1	3	



Price

Set the number of credits necessary per player per game play.

- Press the *Red button* (Grid up) and the *Blue button* (Grid down) to highlight the game/option.
- Press the *Select button*.
- Press the *Red button* (Increase Value) and the *Blue button* (Decrease Value) to set the Price. Press the *Gray button* (Advance) to move down the row to the next game/option.
- Press the *Select button* to save the game/option values.

SERVICE MODE

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 games on the Network?"

- Press the *Red button* to select No.
- Press the *Gray button* to select Yes.
- Press the *Select button*.

To get from *Price* to *Round Limit* or *Bullseye* (jump from one column to another), press the *Gray button* (Advance) until you reach the last line in the column then it will jump to the 1st line of the next column.

Round Limit

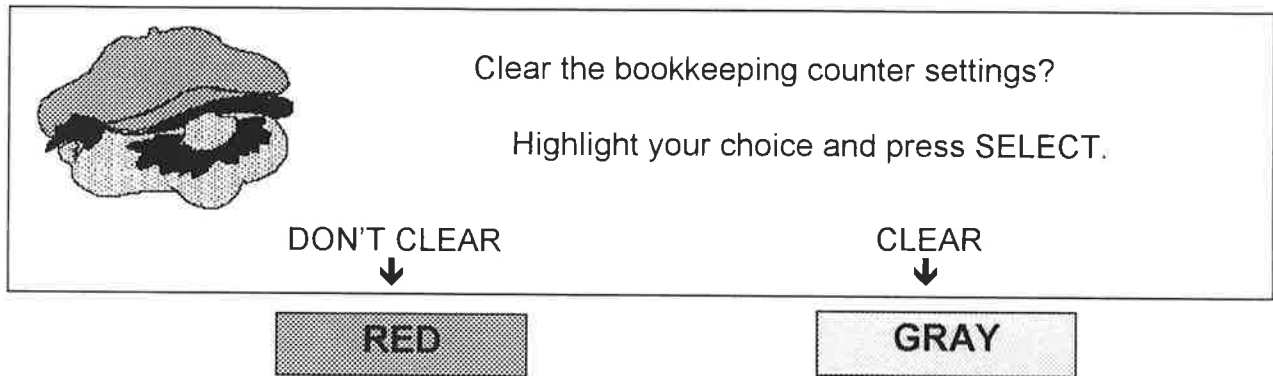
The operator may set the number of rounds which make up a game/option. Use the same instructions for *Price*. 99 is the maximum. Press the *Blue button* (Decrease Value) at 1 to get 99. Press the *Red button* (Increase Value) at 99 to get 1.

Bullseye

The operator may set the Bullseye as single or double. A single bullseye scores 50 for both the inner and outer ring. A double bullseye scores 25 for the outer ring and 50 for the inner ring. Use the same instructions for *Price* to toggle between single and double bullseye.

Bookkeeping (Players / Credits)

Press the *Player Change button* to exit Programming mode. The following Ernie window appears:



One Step

One step allows the operator to return to factory default settings, NOT including Security Codes, Operator Codes and items marked with an asterisk in Appendix A.

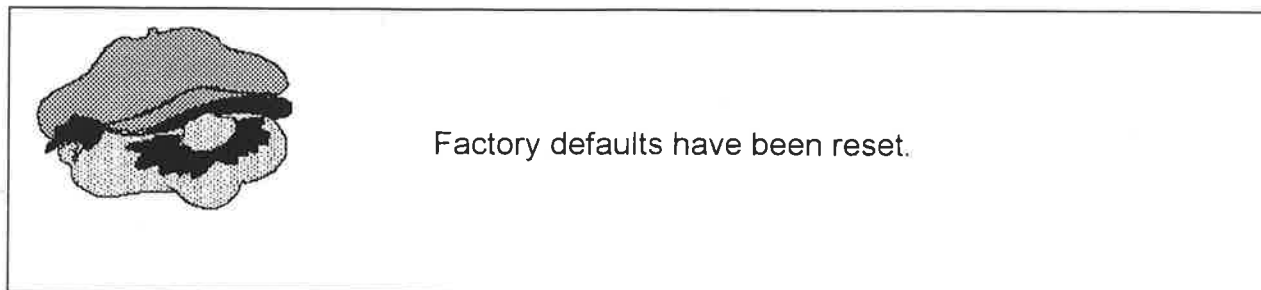
- Press the *Blue button* to highlight One Step.
- Press the *Gray button* to highlight Current Settings or Factory Default.
- Press the *Select button* to enable changes. The following screen appears.

The game description window 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* or press the *Gray button* to highlight *Current Settings*, to keep the current settings.
- Press the *Select button*. The following message appears.



If you selected current settings, the message would read "Prior Settings were maintained."

- Press the *Player Change button* to return to the *Service Main Menu*.

Language

Allows the operator to select the game language. The languages available depend upon the version of software.

- Press the *Blue button* to highlight *Language*.
- Press the *Gray button* to highlight a language listed in the gray window.
- Press the *Select button* to choose the highlighted language.
- Press *Player Change button* to return to the *Service Main Menu*.

If changes were made to a game on the 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 record your selection.

Coin Channel (Bookkeeping)

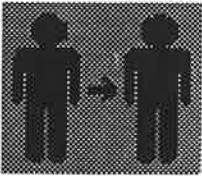
The Coin Channel option allows you to set the amount of credits per coin inserted. It also keeps track of the number of coins dropped through each channel.

Although the dart game can have as many as 6 coin channels, factory standard IQ 4 Player games come with 2 coin channels. Channel 1 is the left slot. Channel 2 is the right slot.

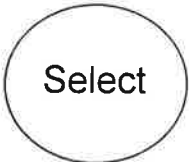
- Press the *Blue button* to highlight *Coin Channel*.
- Press the *Select button* to change the values. The following screen appears.

SERVICE MODE

Coin Channel	Credits Given	Channel Value	Count
1	1	1	25
2	1	1	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
Total Receipts:			25
Debit Cards	1		0

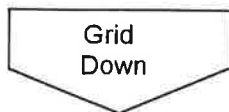


EXIT



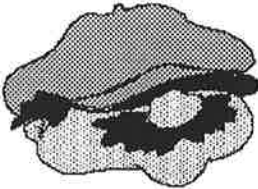
Select

CHANGE



Debit Cards: the number displayed under Credits Given for debit cards responds to the relationship of 1 debit to credits in the game. In our example there is a 1 to 1 relationship. One debit credit is equal to 1 game credit. The number under Count in the Debit Cards row is the number of debits that have been used. In our example none. Values range from 0 to 99. The currently selected grid will appear lime green.

- Press the *Blue button* (Grid Down) to scroll through and highlight a coin channel.
- Press the *Select button* to change the value.
- Press the *Red button* (Increase Value) or the *Blue Button* (Decrease Value).
- Press the *Gray button* to Accept the value as it appears and jump down the column to the next coin channel.
- Press the *Select button* to accept all of the entered values.
- Press the *Player Change button* to exit and return to the Service Mode Menu. The following screen appears.



Clear the coin channel counters?

Highlight your choice and press SELECT.

DON'T CLEAR

↓

RED

CLEAR

↓

GRAY

- Press the *Red button* to highlight *Clear* or press the *Gray button* to choose *Don't Clear*.
- Press the *Select button* to accept your choice. The screen will return to *Service Main Menu*.

If changes were made to a game on a network, Ernie will say

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

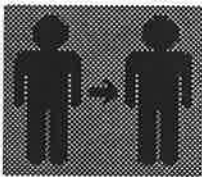
- Press the *Red button* to select *NO*.
- Press the *Gray button* to select *YES*.
- Press the *Select button* to accept your selections.

Setup Features

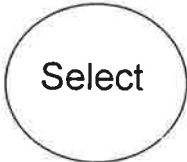
Allows the operator to setup the options similar to what we did in our previous models using 'dip switches'.

- Press the *Blue button* to highlight *Setup Features*.
- Press the *Select button* to enable changes. The following screen will appear.

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

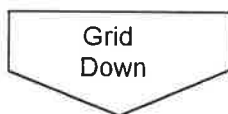
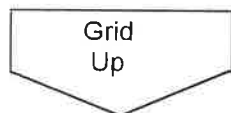


EXIT



CHANGE

Page 1 of 3



- Press the *Red button* (*Grid up*) and the *Blue button* (*Grid down*) to highlight the feature.
- Press the *Select button* to toggle selection or enable changing numeric values.
- Press the *Red button* (*Increase Value*) and the *Blue button* (*Decrease Value*) to change values.
- Press the *Gray button* (*Advance*) to move down the row to the next feature or *Next Page*.
- Press the *Select button*.
- Press the *Player Change button* to exit and return to the *Service Main Menu*.

SERVICE MODE

The following features are available under Setup Features.

Features	Options	Description
Player Setup Mode	Manual	Game will default to one player per any number of credits.
	Automatic	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 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/Double Out	Enabled	Game allows 50 point Bullseye to start/end in Double In/Double Out '01 games.
	Disabled	Game will not allow Bullseye to start/end Double In/Double Out '01 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.
Skip Frozen Cricket Player	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.
Demonstration Mode	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™.
	Disabled	Game cannot receive data via modem.
Rings Before Answer	Default	8 rings.
	Range	2 - 10 rings.
PIR Motion Sensor	Enabled	PIR detects movement of players and changes players automatically.
	Disabled	Game requires manual player change.
Allow Change of Starting Position	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.
	OCR Only	Coded format for use by League Machine for Windows™.
FAX: Minutes between retries.	Default	2 minute.
	Range	1 - 10 minutes. A 0 setting causes an immediate retry.
FAX: Number of Retries.	Default	4 retries.
	Range	0 - 10 retries.
Screen Saver delay (Minutes).	Default	2 minutes
	Range	2 - 60 minutes. An OFF (0) setting disables the Screen Saver.
Ernie's dart path.	Default	Display Tracer Dart.
	Option	Normal Dart Animation.
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 the Advertising images according to Prime, Idle and Game Scripts
	Disabled	Does not display any advertising images..
Play Audio Files.	Enabled	Plays digital audio files.
	Disabled	Does not play digital audio files.

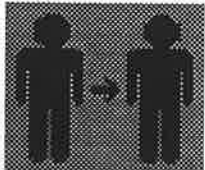

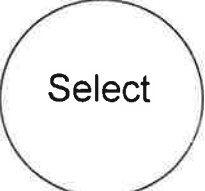
SERVICE MODE

Allow league access without a card.	Enabled	League Matches can be started without swiping a player card.
	Disabled	Requires player card be swiped to set up league match.
Days between ad report send.	Default	0.
	Range	0 - 7. (0 disables Ad report sends.)
Max. seconds/turn Time Handicap.	Default	5.0 (Sets the time it takes to run through all 21 LEDs in a Rapid Fire™ game.)
	Range	2.0 - 9.0 seconds
Stop Watch seconds/sweep.	Default	1.0 (Sets the time it takes to sweep from one end of the LEDs to the other in Stop Watch™.)
	Range	.8 to 2.5 seconds
Stop Watch max. sweeps/turn.	Default	5 (Sets the maximum LEDs removed over each round in Stop Watch™.)
	Range	2-9 LEDs.
Stop Watch Start with tone.	Disabled	Game waits for dart hit after Player Change before starting sweep.
	Enabled	Game starts sweep immediately after Player Change.

Setup Ernie

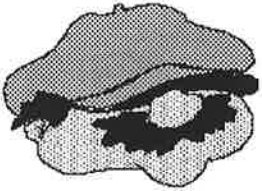
Setup Ernie allows the operator to set Ernie's cost and skill level (as default) and records the number of times Ernie has played.

- Press the *Blue button* to highlight Setup Ernie in the Programming options of the Service Main Menu
- Press the *Select button* to enable changes. The following screen appears.

Ernie's Cost	Play for Me Skill Level	Games Played	 EXIT
1	2: Steady	0	
			 Select CHANGE

Grid
Next

- Press the *Select button* to change Ernie's cost.
 - Press the *Red button* (Increase Value) or the *Blue button* (Decrease Value).
 - Press the *Gray button* (Accept) to accept Ernie's cost as it appears and toggle to the next column option.
 - Press the *Red button* (Increase Value) or the *Blue button* (Decrease Value) to set Ernie's skill level.
 - Press the *Select button* to save any changes.
 - Press the *Player Change button* to exit and return to the Service Main Menu.
- The following screen appears.



Clear the Ernie counter?
Highlight your choice and press SELECT.

DON'T CLEAR

↓

RED

CLEAR

↓

GRAY

- Press the *Gray button* to highlight CLEAR .
- Press the *Select button* to exit.

SERVICE MODE

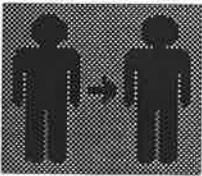
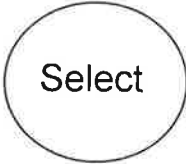
If changes were made to a game on a network, Ernie will say


“You have made changes to your setups. Do you wish to update 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 from the Service Main menu under programming options.
- Press the *Select button* to enable changes. The following screen appears.

Current Date	03/04/97	
Current Time	15:39:37	
Set the System Time and Date		EXIT
Hours	15	
Minutes	39	
Month	March	
Day	4	
Year	1997	



- Use the *Blue button* (Grid Down) to highlight a time or date.
- Press the *Select button* to enable changes.
- Use the *Red button* (Increase Value) and *Blue button* (Decrease Value).
- Press the *Gray button* to accept and advance to next row option.
- Press the *Player Change button* to exit.

If changes were made to a game on a network, Ernie will say

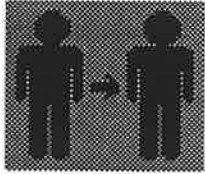
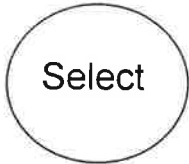
“Update Time and Date on other games on Network? Highlight your choice and press Select.”

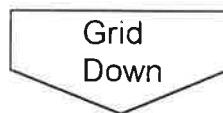
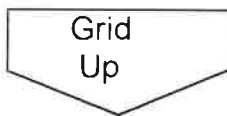
- Press the *Red button* to highlight NO.
- Press the *Gray button* to highlight YES.
- Press the *Select button* to accept your selections.

Set Window Times

Communications stop and start times can be set along with Sleep Mode on or off.

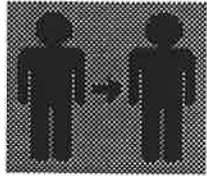
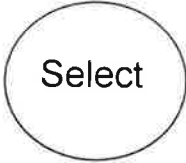
- Press the *Blue button* to highlight Set Window Times from Programming options in the Service Main menu.
- Press the *Select button* to enable changes. The following screen appears.

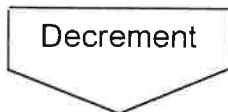
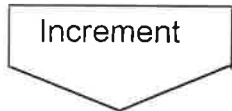
Available Windows	Window Settings	
Communications Start Time	03:00	 EXIT  CHANGE
Communications Stop Time	17:00	
Sleep mode ON	03:00	
Prime time ON	16:00	
Prime time	00:00	
03:00		



- Press the *Red Button* (Grid Up) or the *Blue button* (Grid Down) to highlight the value to be changed.
- Press the *Select button* to enable changes. The following screen appears.

SERVICE MODE

Current Date	03/05/97	 EXIT  CHANGE
Current Time	08:02:01	
Setup the match results transmission start time when attempts to transmit league results will start.		
Set Hours	3	
Set Minutes	0	



- Press the *Gray button* to toggle and highlight one of the two options: Set Hours and Set Minutes.
- Press the *Red button* (Increment) or the *Blue button* (Decrement) to change the hour or minutes.
- Press the *Select button* to return to the Set Window Times menu.



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.

The screen above displays a message which corresponds to Communications Start Time on the Set Windows Times menu

Descriptions of the other options follow:

Communications Stop Time

Setup the match results transmission stop time when attempts to transmit league results will end.

Sleep Mode ON

Set time when sleep mode will automatically start.

Sleep Mode OFF

Set time when sleep mode will automatically stop.

Prime time ON

Set time when prime Ad time will automatically start.

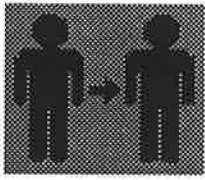
Prime time OFF

Set time when prime Ad time will automatically end.

Set Advertising

Set Advertising allows the operator to enable or disable ads on each of three time periods. Prime time. Idle time or Remove darts time.

- Press the *Blue button* to highlight Set Advertising from Programming options in the Service Main menu.
- Press the *Select button* to enable changes. The following screen appears.

Identifier	Description	Prime	Idle	Game	
AD01	Split Score	Enabled	Enabled	Enabled	 EXIT
AD02	Sweepstakes	Enabled	Enabled	Enabled	
AD03	Hand	Enabled	Enabled	Enabled	
AD04	VIFA	Enabled	Enabled	Enabled	
AD05	Good times	Enabled	Enabled	Enabled	
AD06	CorpLogo	Enabled	Enabled	Enabled	
AD07	Quarter1	Enabled	Enabled	Enabled	
AD08	Quarter2	Enabled	Enabled	Enabled	
AD16	Good times C	Enabled	Enabled	Enabled	
					Page 1 of 2

Grid
Up

Grid
Down

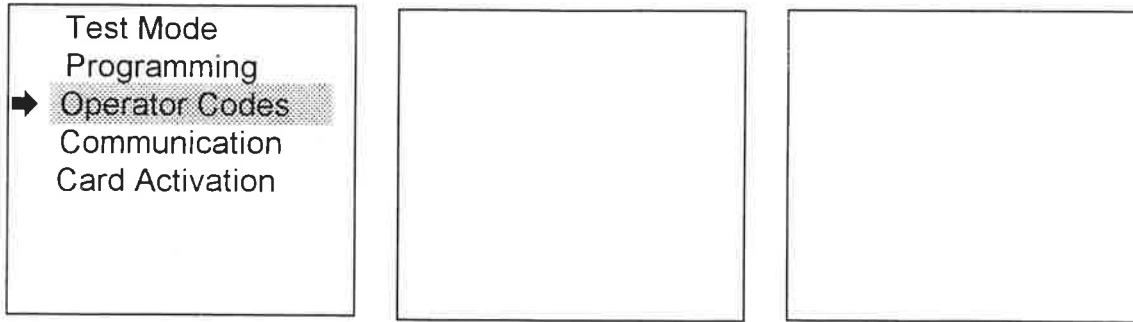
Next
Page

Page two contains two more Ads. they are:

AD17 CorpLogoC
AD18 Quarter/C

- Press the *Red button* (Grid Up) or the *Blue button* (Grid Down) to highlight the grid you want to change.
- Press the *Select button* to enable changes.
- Press the *Red button* (View) to see the Ad screen. You will see the actual graphic as it will appear on the monitor.
Press the *Red button* again to return from viewing.
- Press the *Blue button* (Toggle) to switch the setting between Enabled and Disabled.
- Press the *Gray button* (Advance) to accept your choice and jump to the next grid down.
- Press the *Player Change button* to return to the Service Main Menu.

Operator Codes Mode



Operator Codes allows the operator to set codes for the following:

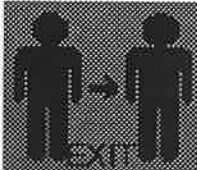
- (1) Operator Security Code: Code to restrict access to the game setup and bookkeeping.
- (2) Operator Identification Code: Code used by an operator for barcode security
- (3) Machine Identification Code: Code used by an operator to identify this machine.
- (4) Peripheral Identification Code: Code used by an operator to identify this machine.

Operator Security Code & Machine Identification Code

Operator Security Code allows you to enter a 1 to 4 digit security code. The Factory Default Code is four zeros (0000).

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. The default machine identification number is the serial number of the game, and it is strongly recommended that it not be changed.

- Press the *Red button* to highlight *Operator Codes* in the *Service Main* menu.
- Press the *Select button* to enable changes. The following screen appears.

Available Operator Codes	Operator Code Contents	
Operator Security Code (4 char)	@@@@	 <div style="border: 1px solid black; border-radius: 50%; width: 60px; height: 60px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> Select </div> <p style="font-weight: bold; margin-top: 10px;">CHANGE</p>
Operator Identification Code (2 char)	VVV	
Machine Identification (8 char)	750	
Peripheral Identification (9 char)	ABC	

Grid
Up

Grid
Down

Operator Security Code (*@@@@*) is encrypted so that no one can read it. The Operator Identification Code says it is 2 characters but displays 3. The first character is always V, the second and third characters are operator selectable.


- Press the *Red button* (Grid up) or the *Blue button* (Grid down) to highlight the feature.
- Press the *Select button* to enable changes. The following screen appears for the Operator Security Code and the Machine Identification Code.

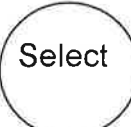
Prior Entry: @@@@									
Operator Security Code (4 char)									
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press Select to save or Player Change to cancel.									
									2
1	2	3	4	5	6	7	8	9	0
Delete									

Previous
Number

Next
Number

Enter
2


 CANCEL


 SAVE

- Press the *Red button* (Previous Number) and the *Blue button* (Next Number) to highlight a number.
- Press the *Gray button* (Enter 2) to choose.
- Press the *Select button* to save changes and return to the Operator Codes screen.

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. This prompt will not occur if the factory default Code is still in effect (0000).



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

Operator Identification Code & Peripheral Identification Code


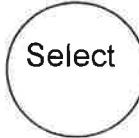
 (Supplied by the Valley Service Department)

- The game must have an Operator Identification Code in order to use Debit Cards.

Operator Identification allows you to enter a 2 digit ID code to appear on all barcode cards.

Peripheral Identification Code allows you to assign an identification number to all attached peripherals.

- When you press the *Select* button to enable changes for the Operator Security Code or the Peripheral Identification Code, the following screen appears.

Prior Entry: VV										 CANCEL
Operator Identification Code (2 char)										
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press Select to save or Player Change to cancel.										
									B	
A	B	C	D	E	F	G	H	I	J	 SAVE
K	L	M	N	O	P	Q	R	S	T	
U	V	W	X	Y	Z	1	2	3	4	
5	6	7	8	9	0	Delete	Space			
Previous Character			Next Character			Enter B				

- Press the *Red* and *Blue* buttons to highlight a letter or number. Press the *Gray* button to enter your selection. It will appear on the bar above the alphabet. Repeat until the code is complete.
- Press the *Select* button to save and return to the Operator Codes screen.

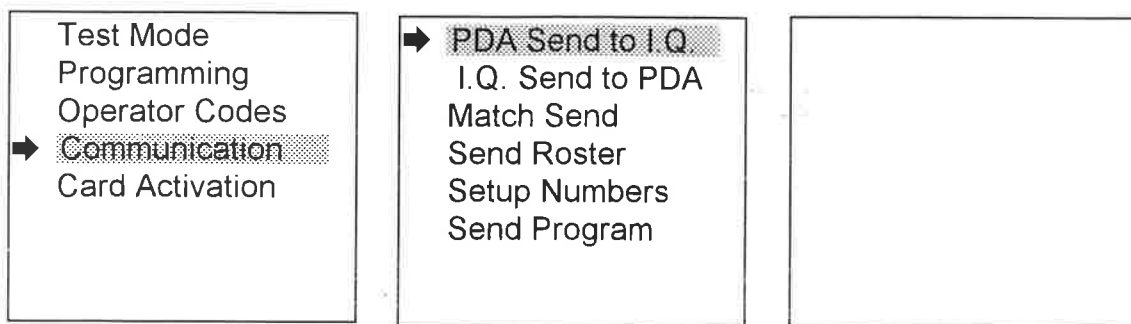
Communication

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 Service Main menu. The following options will appear.



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.

- Press the *Blue button* to highlight an option.
- Press the *Select button* to start.

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.

SERVICE MODE

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.



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.

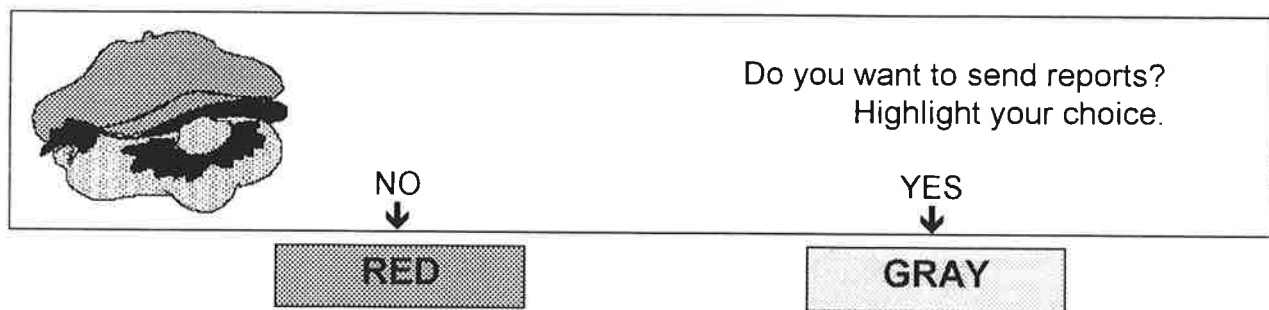
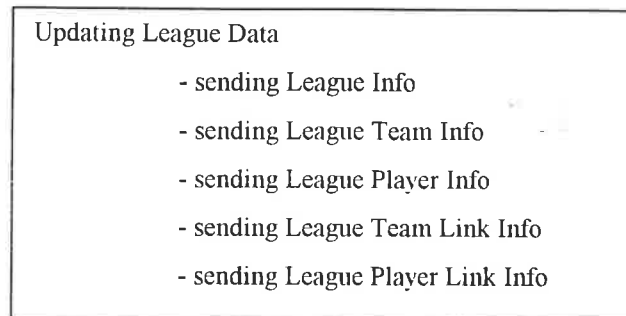
If there are no match results in memory, Ernie will report "No League Match Results To Send."

If no fax/modem is present, Ernie will report "Fax/modem not present! Retry on game with Modem."

- 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.

If successful, the screen reads:



- Press the *Red* or *Gray button*. If you select *Yes*, all IQ games networked to the current game will be updated.
- Press the *Select button* to exit.

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.

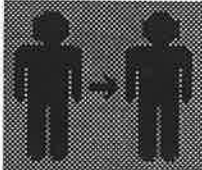
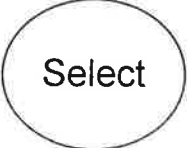
- Press the *Blue button* to highlight Send Roster in the blue window.
- Press the *Select button*.

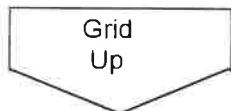
The dark gray description box (in the upper left hand corner) will turn blue and read "Updating League Data." When the screen displays "Complete", the data has been transferred to all networked IQ games.

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*. The following screen appears.

Telephone Options Directory	Abbreviated Directory Contents	
Caller ID Phone Number	(815) 895-2851	 EXIT  CHANGE
FAX Results Phone Number	21	
Modem Initialization String	&F&C1&D3	
Fax Initialization String	&F&C1&D3	
Modem Answer in Window Only	Disabled	
FAX Poll Answer	Disabled	
Communications Start Time	03:00	
Communications Stop Time	17:00	
(815) 895 - 2724		

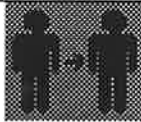
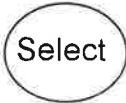





Caller ID Phone Number & FAX Results Phone Number

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 is the fax number that the IQ game is to call with the results of a match.

- Press the *Red button* (*Grid Up*) or the *Blue button* (*Grid Down*) to highlight *Caller ID Phone Number* or *FAX Results Phone Number*.
- Press the *Select button*. The following screen appears.

Prior Entry: (815) 875 - 0356									
Caller Id Phone Num(Max. 40 char)								CANCEL	
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press Select to save or Player Change to cancel.									
								SAVE	
0	1	2	3	4	5	6	7	8	
9	!	*	,	;	=	@	&	A	
D	P	R	S	T	W	Z	Delete	Space	
									

- Press the *Red button* (Previous Character) or the *Blue button* (Next Character) to move through the grid and build the Caller Id Phone Number.
- Press the *Gray button* (Enter X) where X is the grid currently highlighted to save your selection and continue. Repeat these steps until the whole number appears on the row below the instructions.
- Press the *Player Change button* to return to the Setup Numbers menu.


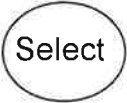
Modem Initialization String & Fax Initialization String

The Modem Initialization String is a code used to initialize modem communications.

The Fax Initialization String is a code used to initialize fax communications.

Different fax/modems use different Initialization strings. Check your fax/modem for proper entries. _

- Press the *Red button* (Grid Up) or the *Blue button* (Grid Down) to highlight Caller ID Phone Number or FAX Results Phone Number.
- Press the *Select button*. The following screen appears.

Prior Entry: &F&C1&D3									 CANCEL  SAVE
Modem Initialization String (Max. 39 char)									
Use the red, blue, and gray buttons to choose and enter characters. When you have finished, press Select to save or Player Change to cancel.									
0	1	2	3	4	5	6	7	8	9
*	!	%	&	+	,	-	/	;	=
		A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q	R
S	T	U	V	W	X	Y	Z	Delete	Space



- Press the *Red button* (Previous Character) or the *Blue button* (Next Character) to move through the grid and build the Modem Initialization String.
- Press the *Gray button* (Enter X) where X is the grid currently highlighted to save your selection and continue. Repeat these steps until the whole number appears on the row below the instructions.
- Press the *Player Change button* to return to the Setup Numbers menu.

Modem Answer in Window Only & FAX Poll Answer

If Modem Answer in Window Only 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.

For FAX Poll Answer 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.

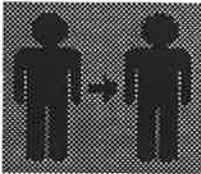
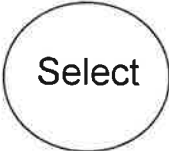
- Press the *Red button* (Grid Up) or the *Blue button* (Grid Down) to highlight Modem Answer in Window Only or FAX Poll Answer.
- Press the *Select button*. The option toggles between Enabled and Disabled.
- Press the *Player Change button* to return to the Setup Numbers screen.

Communications Start Time & Communications Stop Time

The Communications Start Time is the start of the time window when the IQ game is allowed to send match results and receive program information.

The Communications Stop Time is the end of the time window when the IQ game is allowed to send match results and receive program information

- Press the *Red button* (Grid Up) or the *Blue button* (Grid Down) to highlight Communications Start Time or Communications Stop Time.
- Press the *Select button*. The following screen appears.

Current Date	03/06/97	 EXIT  CHANGE
Current Time	12:27:52	
Setup the match results transmission start time when attempts to transmit league results will start.		
Set Hours	3	
Set Minutes	0	

Increment

Decrement

Grid
Down

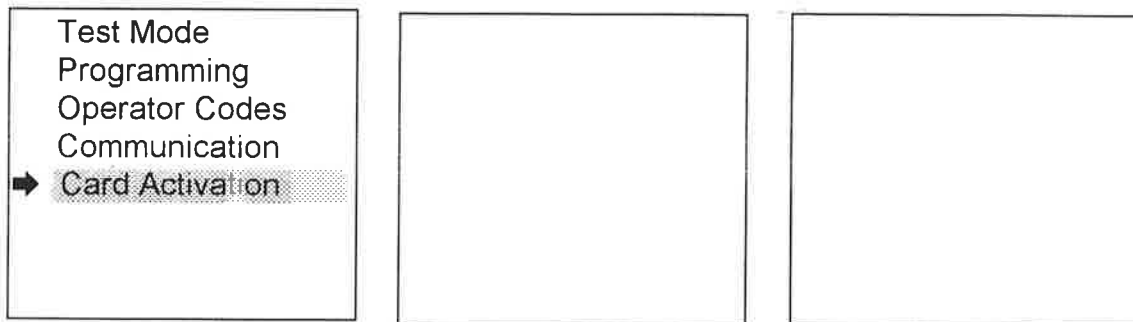
- Press the *Red button* (Increment) or the *Blue button* (Decrement) to change the value of the selected option (Set Hours or Set Minutes).
- Press the *Gray button* (Grid Down) to toggle between the two options.
- Press the *Player Change button* to return to the Setup Numbers menu.

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).

Card Activation



To Enter Card Activation Mode (For Use with Debit Cards Only)

- To enter Test Mode, swipe a Master Service card through the card reader or press 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 slight delay may occur).
- A message will tell you if cards have been activated, or cards are already active. If you get an error message, call Valley Recreation Sales Department.
- Debit card books are obtained from the Sales Department  1 (800) 248-2837
- An activator card accompanies a book of debit cards.

CARD TYPES

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:


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 and eight debit cards.


Activator 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.

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)

GENERAL MAINTENANCE

Lamp & Fuse Replacement

To replace Lamps in the Upper Display

- Tools needed:
 - #1 Phillips screwdriver
 - #2 Phillips screwdriver
- Turn the game off and unplug from the wall outlet.
- Remove the four corner screws holding the Display sub-assembly.
- Slowly pull the Display sub-assembly and turn it over.
- Disconnect the power harness and the ribbon cable.
- Remove the eight screws holding the marquee.
- Replace lamps as necessary.
- Repeat steps in reverse order to re-assemble the display.

Replacing Fuses

<u>Type of Fuse</u>	<u>Location</u>	<u>Replace With</u>
In line Autofuse	Upper Display Harness Controller Board	250v, 3AG, 5Amp F1 or F2 Autofuse (Tan) 32v 5Amp



CAUTION: TURN OFF THE POWER BEFORE REPLACING ANY FUSES!

Replacement Lamp Information

Lamps are located on the Player Change button, the Select button, the upper display and the coin door.

WEDGE BASE

14V, 80 mA, Type 658

Valley Part# 223-1006-0



BI-PIN

14V, 80 mA, Type 5810

Valley Part# 223-0006-0



WEDGE BASE

28V, 60mA, Type 656

Valley Part# 223-1008-0



Figure 9. Lamp replacement information

NOTE Replace lamps with the same type and rating.

Target Cleaning

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.

Installation of EPROM

The EPROM is an integrated circuit which upgrades the performance of system files of your IQ game. Upgrading consists of installing a new EPROM in the Controller card. Follow the instructions listed below, in addition to those included with your EPROM.



CAUTION: The EPROM is static sensitive. To avoid electric shock and damage to this device, exercise care in handling. The preferred technique is to use an anti-static wrist strap connected to ground. If this is not available, be certain to touch a grounded metal surface before handling the EPROM and avoid touching its legs.

Sensitive Electronic Devices

- Turn the power off by removing line cord from wall outlet.
- Take the cover off the Controller Card and access the card using a suitable tool (e.g., IC extractor, small flat-bladed screwdriver, etc.) carefully remove the EPROM from IC location "U37".
- Note location of Pin 1 indicated on both the Controller Card and on the EPROM. (Identified by a dot or notch on the EPROM nearest to Pin 1, the notch shown on the Controller Card, and the socket at location "U37".)
- Fully insert and seat EPROM in socket ensuring that none of the pins are bent during installation.
- Verify the installation by powering up the game.
- Press and hold the *Red*, *Blue* and *Gray* buttons at the same time. An information panel will appear on the screen. Note the Bios Version No in the panel. This version number should match the Bios Version Number included with your EPROM instructions..
- Installation is complete.
- Return the obsolete EPROM (in its original packaging) to Valley Recreation Products, Inc. for exchange.

TROUBLESHOOTING

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 .
DART LEAGUE 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> <ol style="list-style-type: none"> a) swap Piezo element b) swap Piezo board <ul style="list-style-type: none"> • 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 than that of the LMW computer. • The time clocks of the LMW and the IQ game are different. • The IQ game is not set to 'auto answer'. • 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 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.

	<ul style="list-style-type: none"> ▽ Cricket, Double-In, Double-Out, etc. will not score in certain conditions. • Report this information to Valley Service Department. <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.

(NOT) READING FRONT PANEL SWITCHES	<ul style="list-style-type: none"> • Check front panel harnessing. • Check corresponding switch for closure / shorts. • Check Controller board U43. • Check Controller connectors J7. • Check if switch mechanism is snug in plastic housing.
(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 (top left - 3rd box down).

TROUBLESHOOTING

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

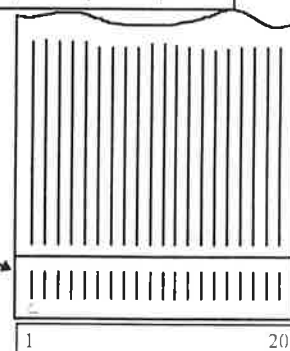
Target Problems

<p>Target Not Registering During Game and Test Mode</p>	<ul style="list-style-type: none"> • Target unplugged at Controller board J1. • Check Controller board U2, U7, U8. • Check matrix switch tail for nicks and cuts.
<p>A Dart Thrown at the Bullseye Does Not Score Properly</p>	<ul style="list-style-type: none"> • Game is not set at desired Bullseye setting. • Check Bull's-eye setting on monitor at the start of the game.
<p>One or More Quadrants not scoring.</p>	<ul style="list-style-type: none"> • Check matrix switch and connections. • Controller board U2, U7, U8, C1, C2, C7, C8. • Check matrix switch tail for nicks and cuts.
<p>Four Related Segments of Target Not Scoring.</p>	<ul style="list-style-type: none"> • Check Matrix Switch and connections. • Check Controller board U2, U7, U8. • Check matrix switch tail for nicks and cuts. <ul style="list-style-type: none"> • 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. <p>Check matrix switch tail for nicks and cuts.</p>

Related Segments in Groups of Four.**Matrix/Controller Pin Layout**

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		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		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 or that it's properly seated.

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, in upper right corner of controller enclosure.

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 connector.
- Check that output level matches input level of game.

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.

PARTS LISTS
DRAWINGS

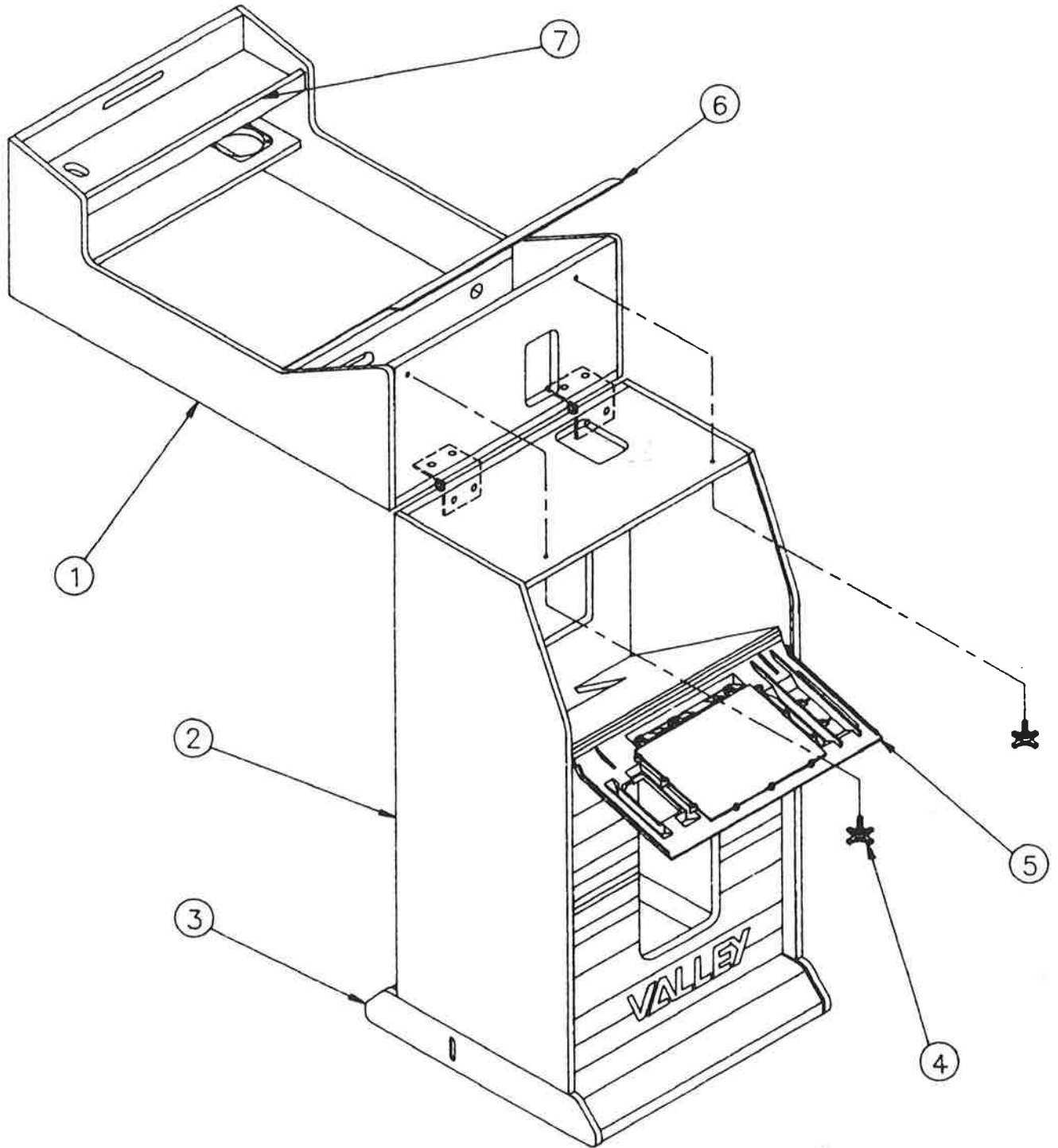


Figure 10. Cabinet parts

Cabinet Parts List

1	AFD-X-00-01	Cabinet top IQ w/o Upper Electronics Cover
2	AFE-X-00-01	Pedestal w/o Lower Electronics Cover
3	AFC	IQ Base
4	202-0112	Thumb Bolts
5	AFB-X-10-01	Lower Electronics Cover Assy.
6	AFA-X-12-01	Upper Electronics Cover Assy.
	205-0783	Lexan Left or Right Panels
	212-0057	Lock
	217-0504	Logo Plate
7	AFA-1-05-01	Marquee Support Assy.

"X" = Revision of the Part.

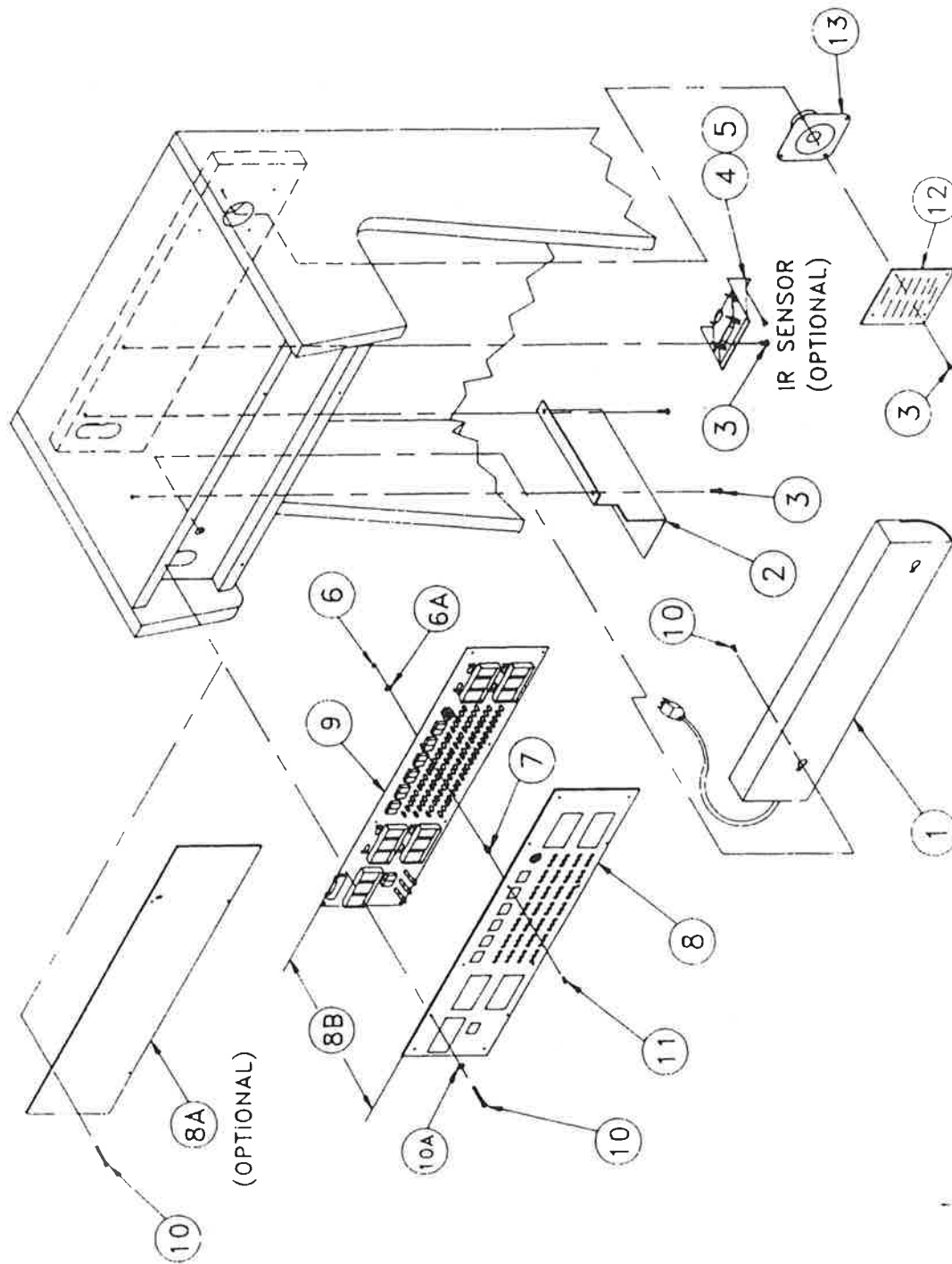


Figure 11. Lighthouse & upper display assembly

Lighthood 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 GD1	Fluorescent Lamp / 8" 15WF15T8 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
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

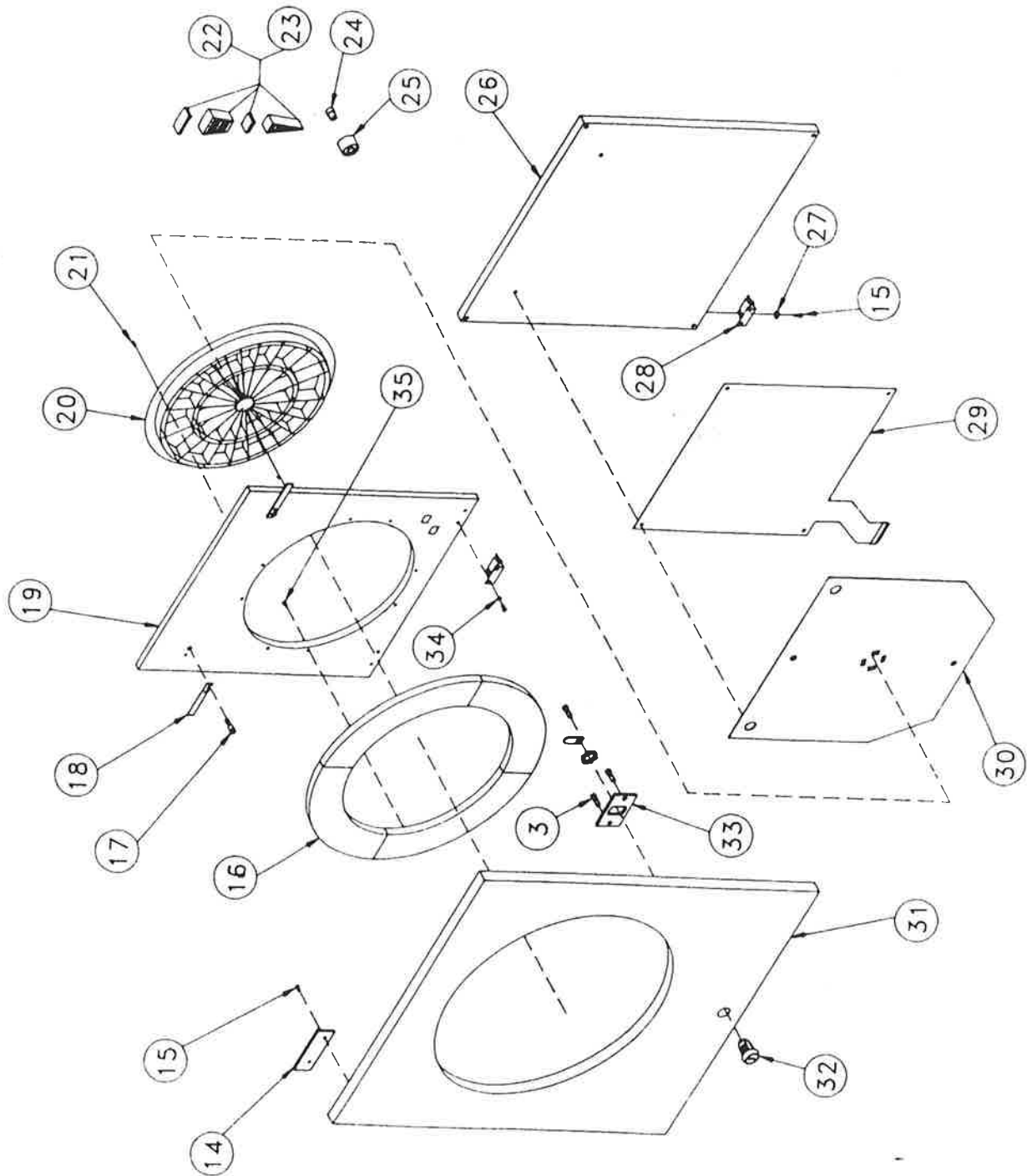


Figure 12. Stationary matrix

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

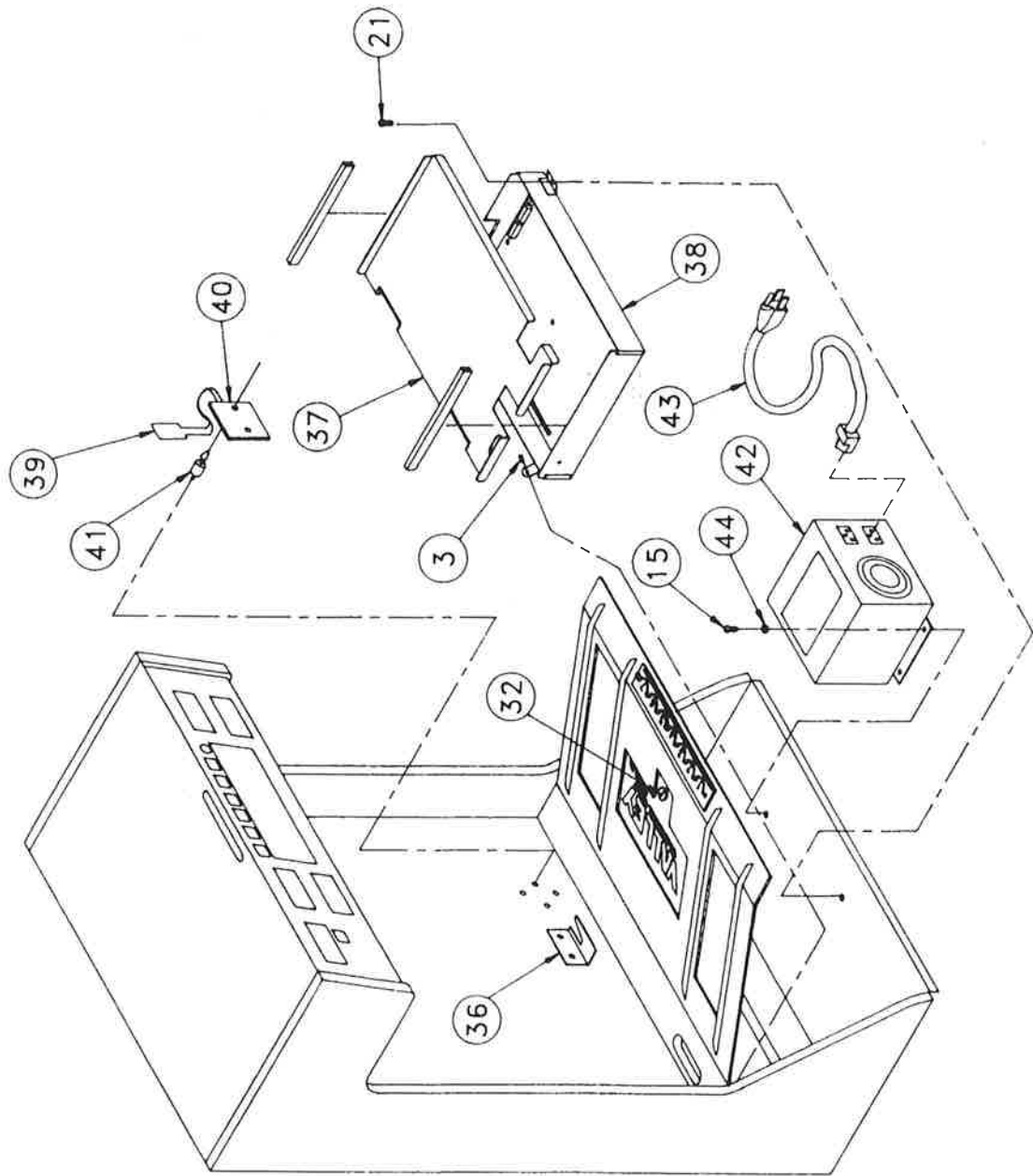


Figure 13. Upper electronics assembly

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, 1/4" Plastic
42	217-0533	Power Supply
43	242-0124	Power/Line Cord
44	204-1014	#8 Flat Washer

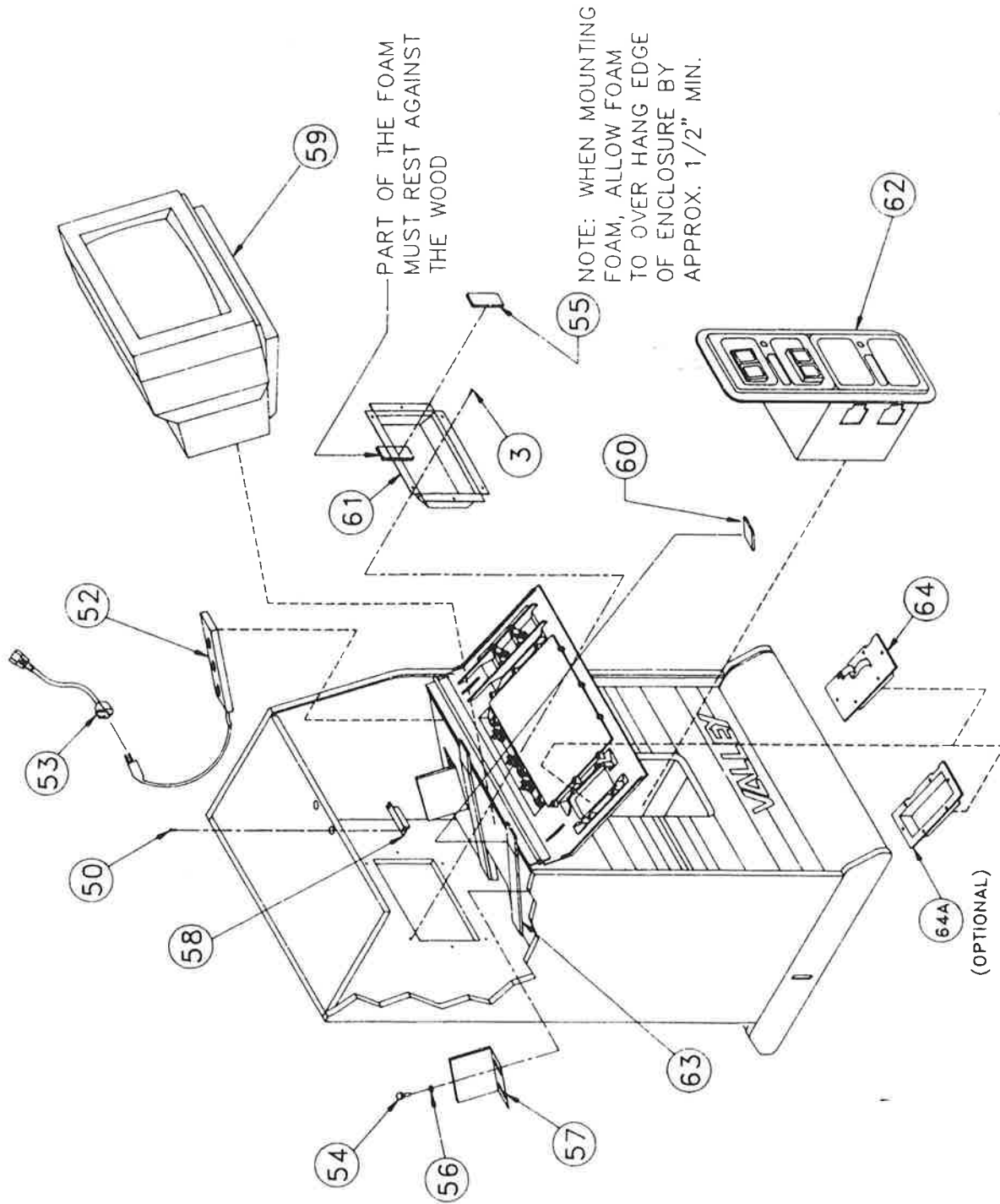


Figure 14. Pedestal / Lower cabinet assembly

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 ¼ " x 1" x 4"
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	217-0635-0	Foam 7/16" x 1" x 2"
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
64	217-0526	Card Reader / PIR (optional)
64A	205-0837	Dummy Card Reader Cover (optional)

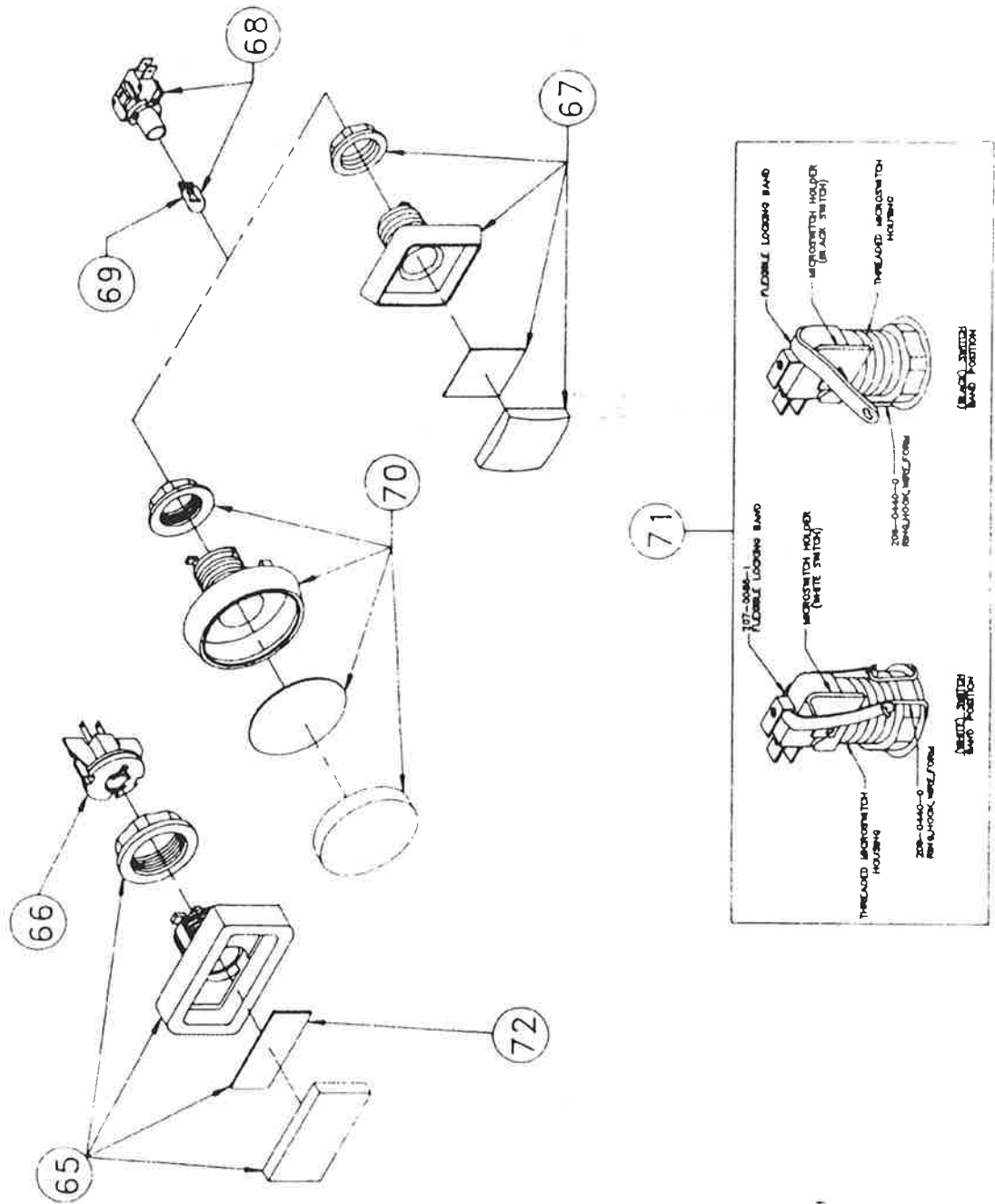


Figure 15. Push button switches assembly

Push Button Switches

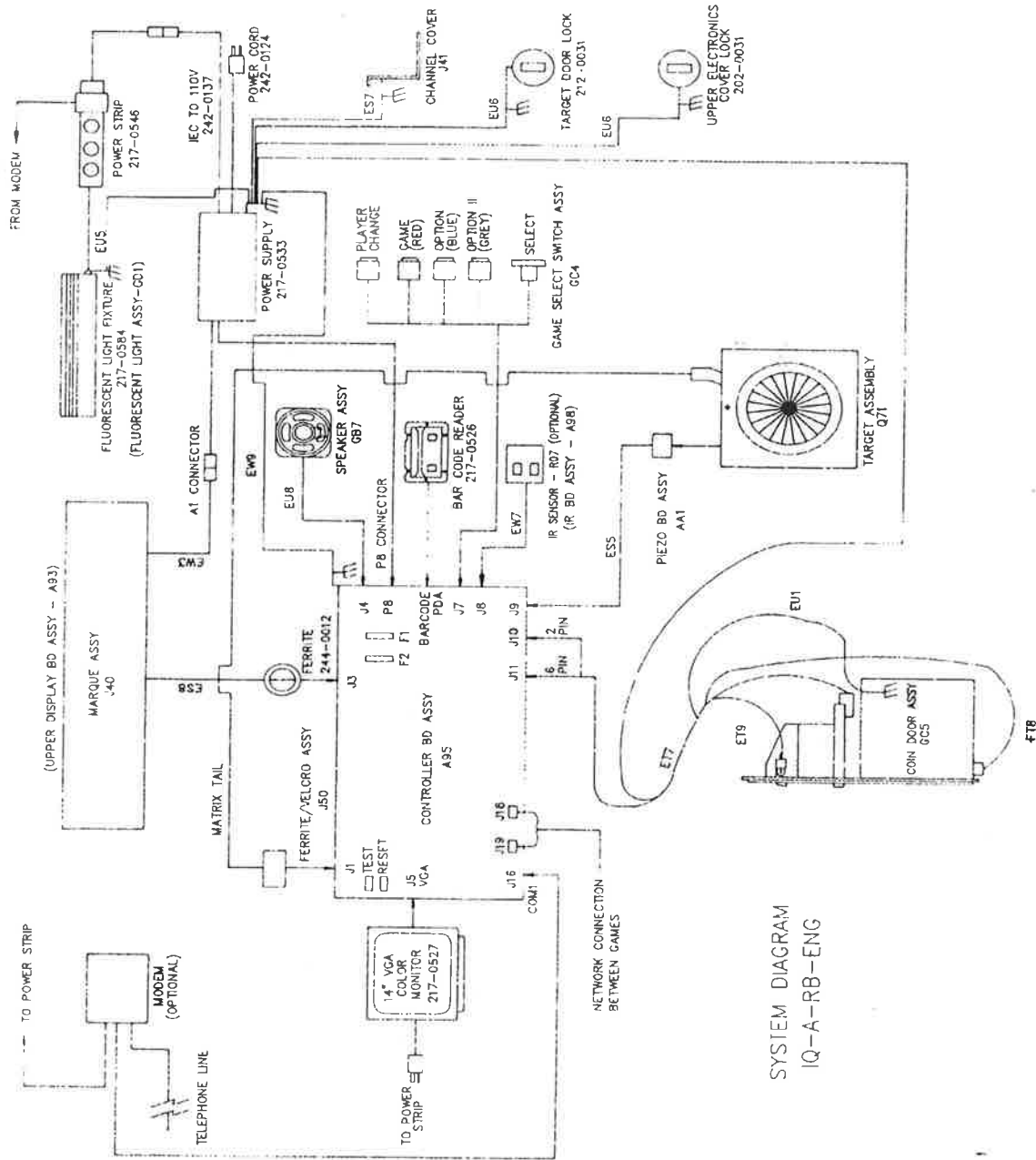
65	205-0790-0	Button Housing Red, VLT, Rect., w/Switch Holder
	205-0791-0	Button Housing Blue, VLT, Rect., w/Switch Holder
	205-0792-0	Button Housing Gray, VLT, Rect., w/Switch Holder
66	227-0047-0	Microswitch, VLT Buttons
67	205-0809	Button Housing, 2" Square Player Change
	205-0296	Legend Player Change, (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
	205-0808	Legend, Select, 2" Round
71	J35	Retainer Assembly
	201-0085-1	Die Cut Urethane Band
	206-0440-0	Wire, Form, Ring, Hook

Cables and Harnesses Parts List

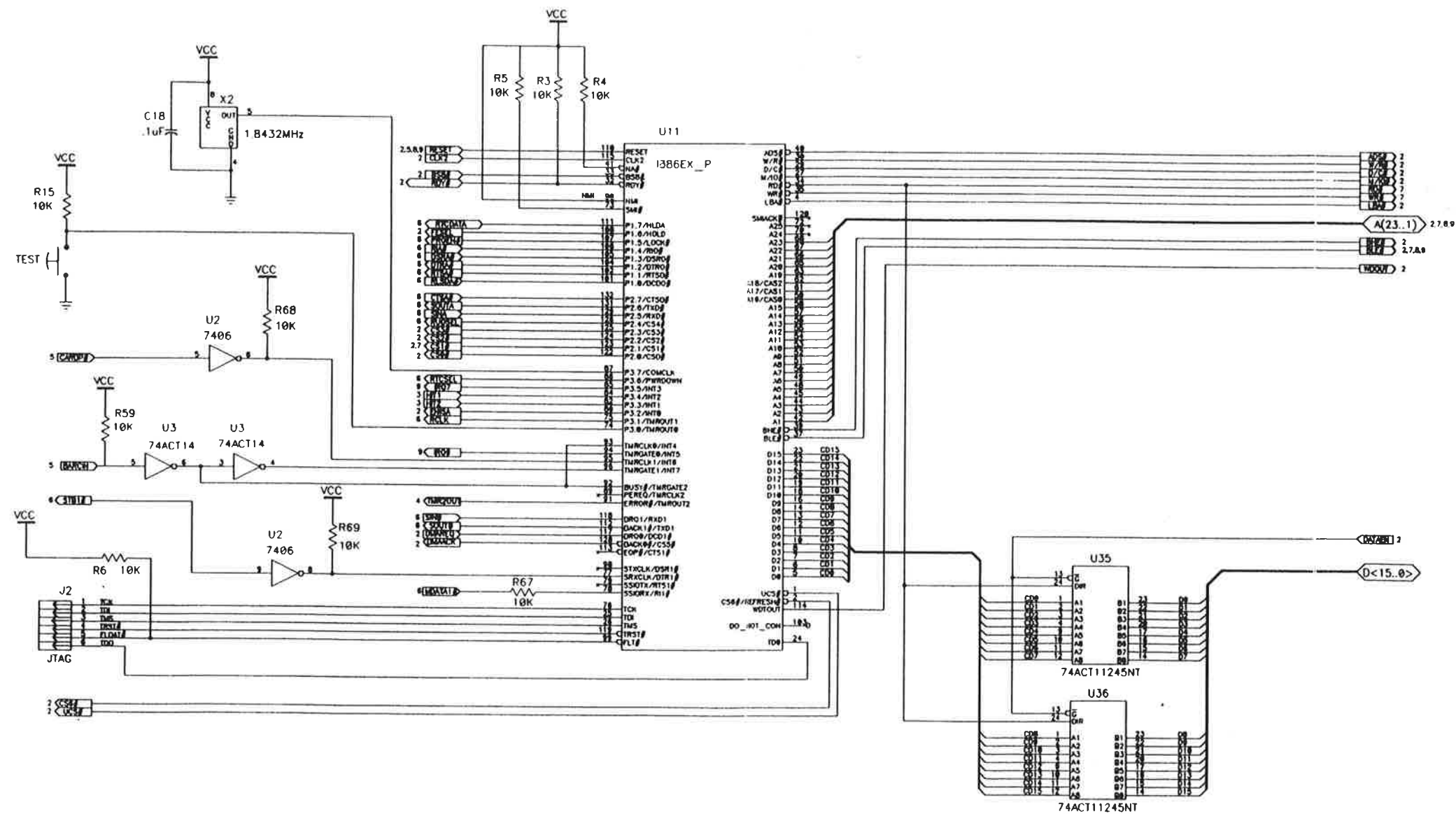
ES5	Piezo Interface Cable
J50	Ferrite/Velcro Assembly for Matrix Tail
GC4	Harness, Game Switches
244-0012	Ferrite Bead, Toroid - for upper display ribbon cable(ES8)
ET7	Harness, Coin Door
ET9	Harness, Coin Door Mech/Door Lamps
244-0003	Ferrite Bead, Large core, 2.4 OD, 1.4 ID
Ferrite	1)
	a) P8 power 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

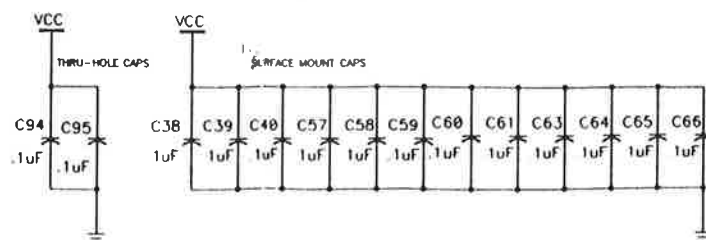
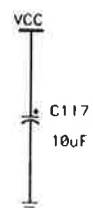
Figure 16. System diagram

SCHEMATICS
LAYOUTS



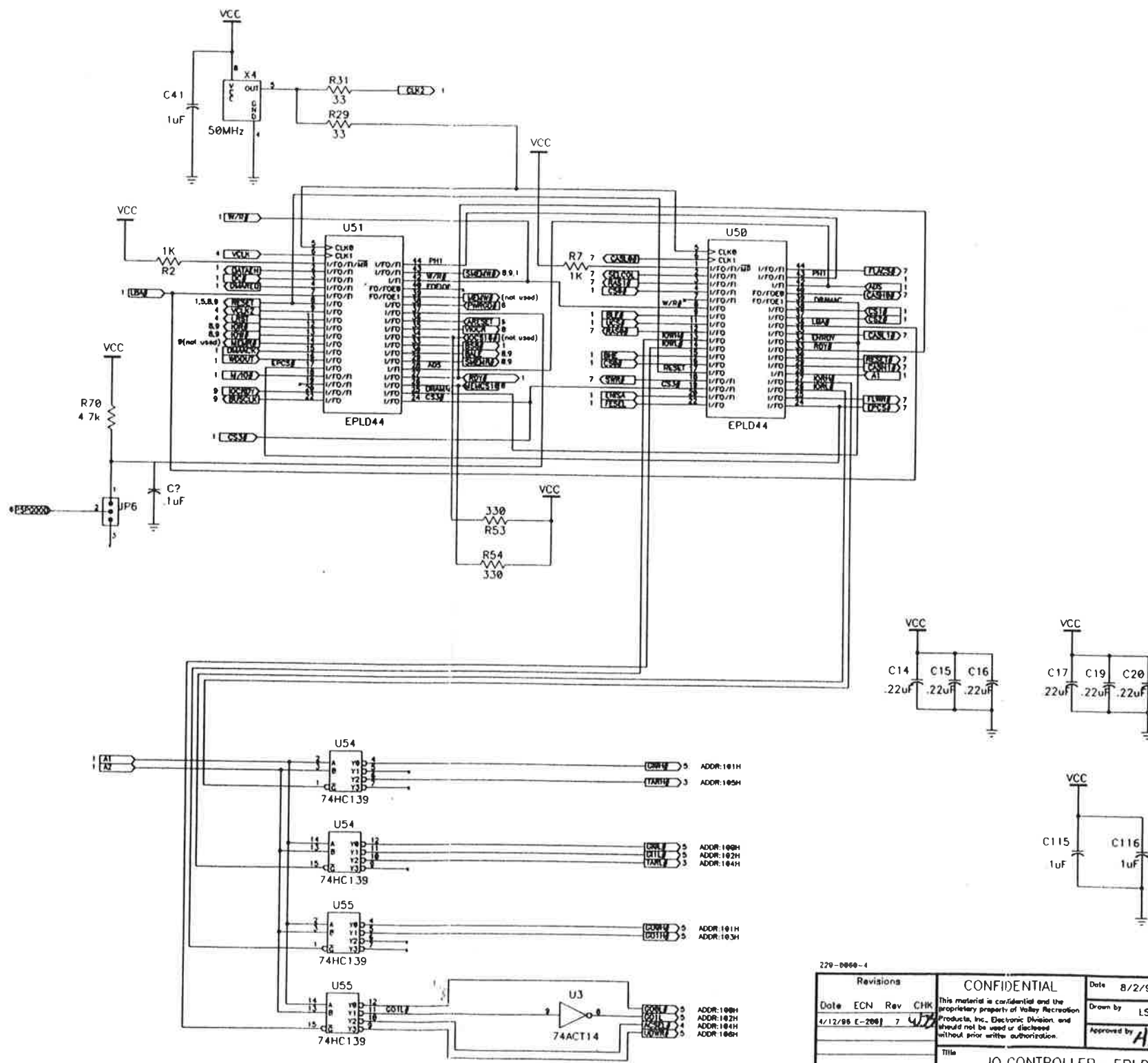
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 U35 18,19
 U36 18,19

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



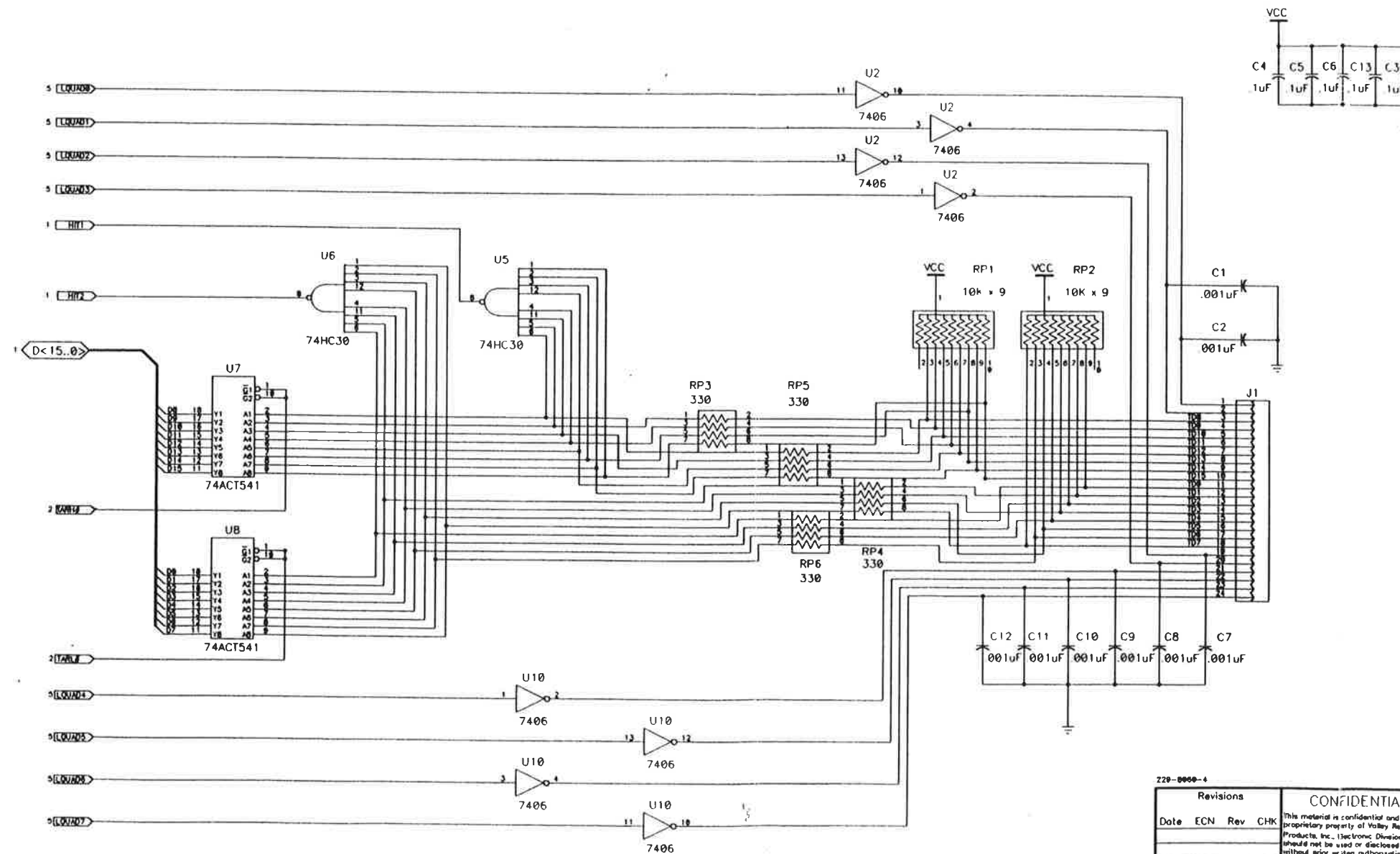
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VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 138 North Avenue, Sparks, N.C. 27342 (815) 865-8188 / FAX (815) 860-2118						Number
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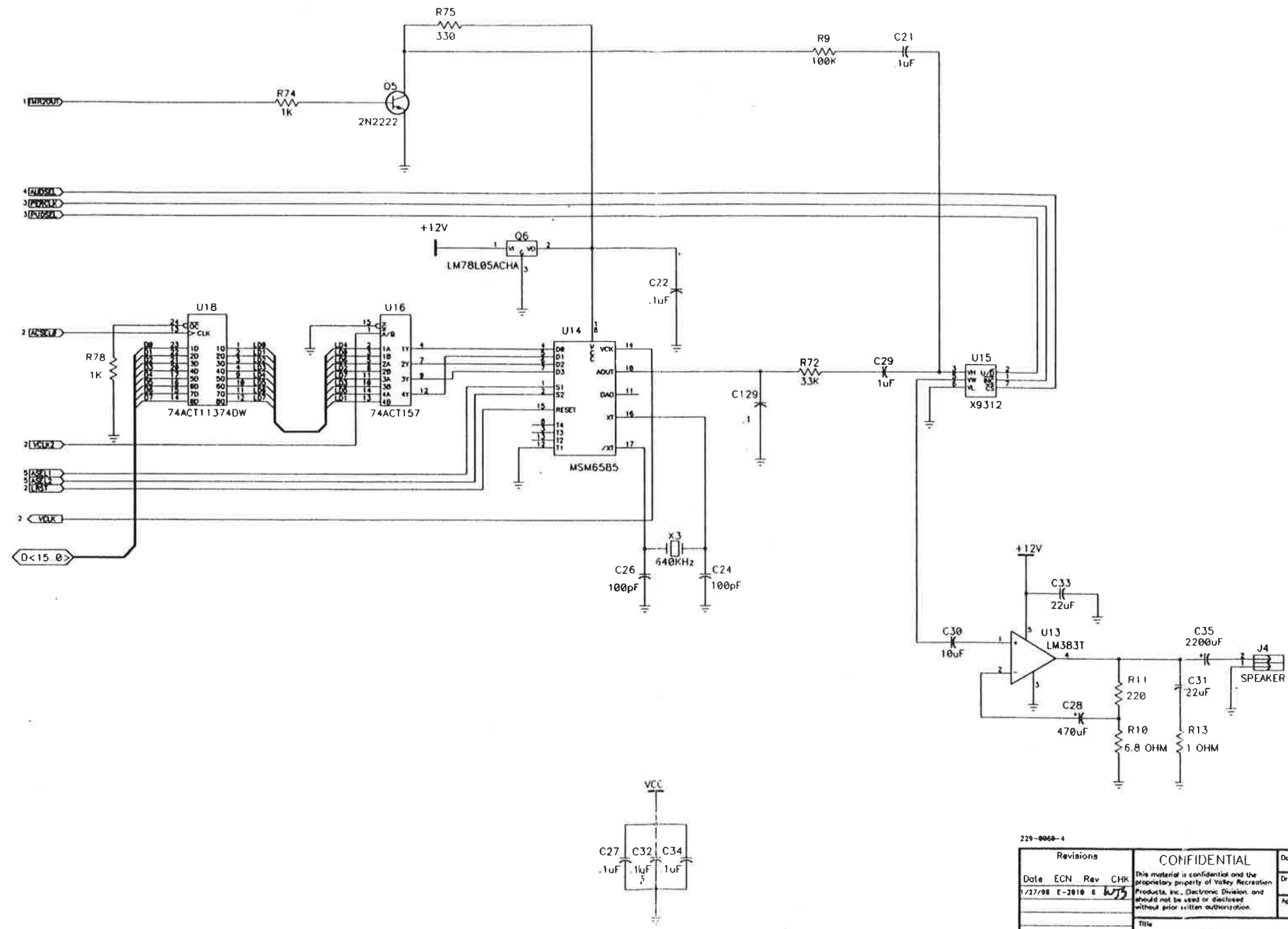
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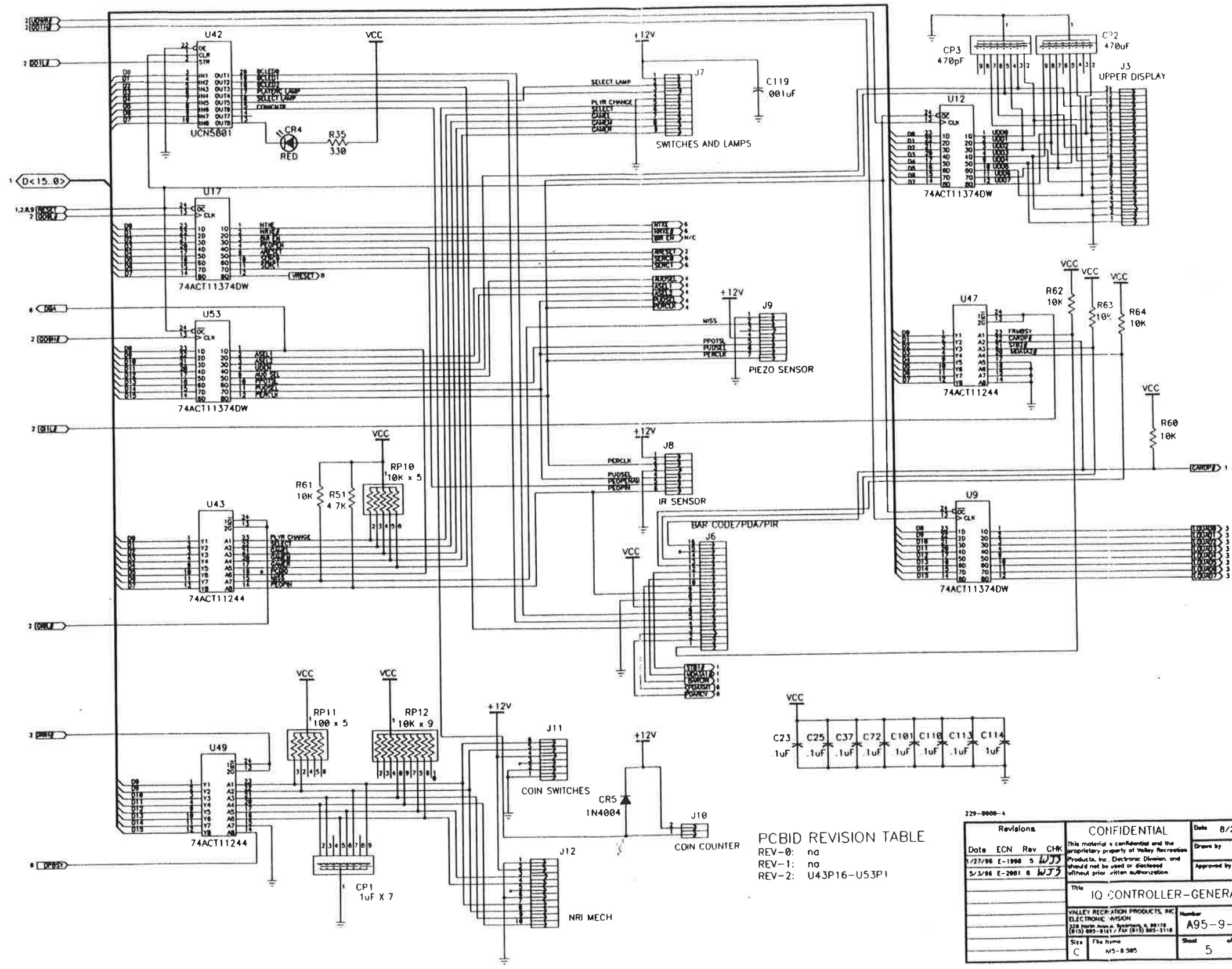
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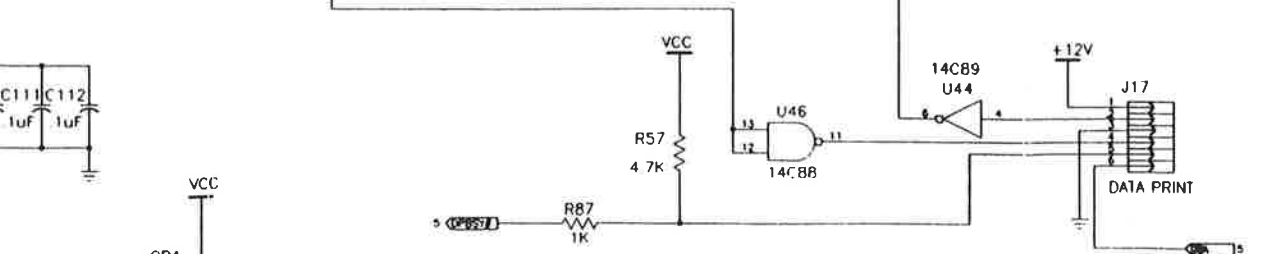
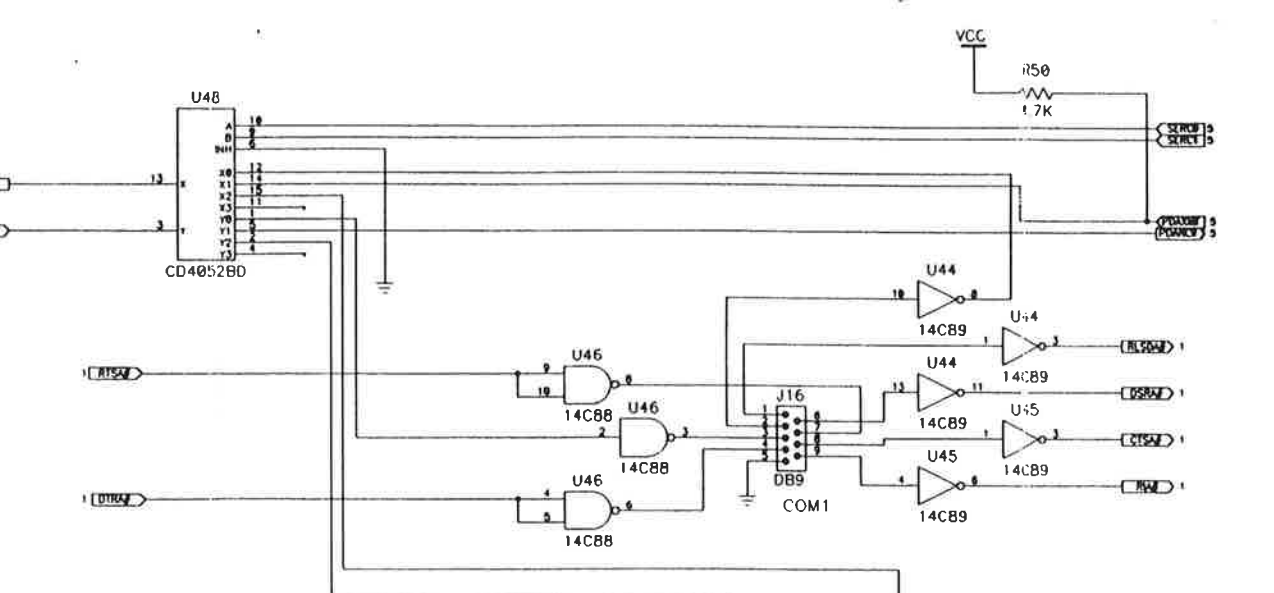
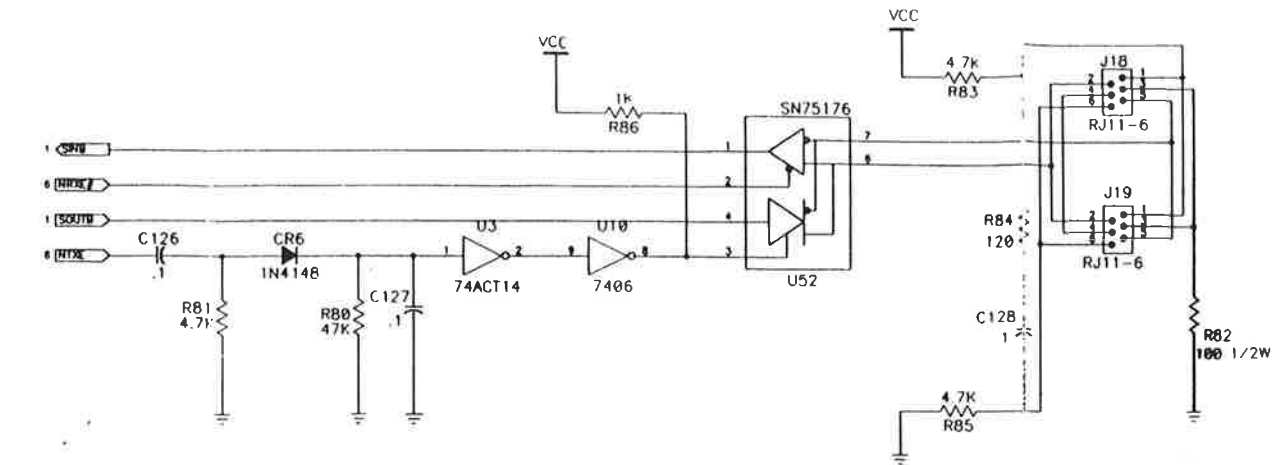
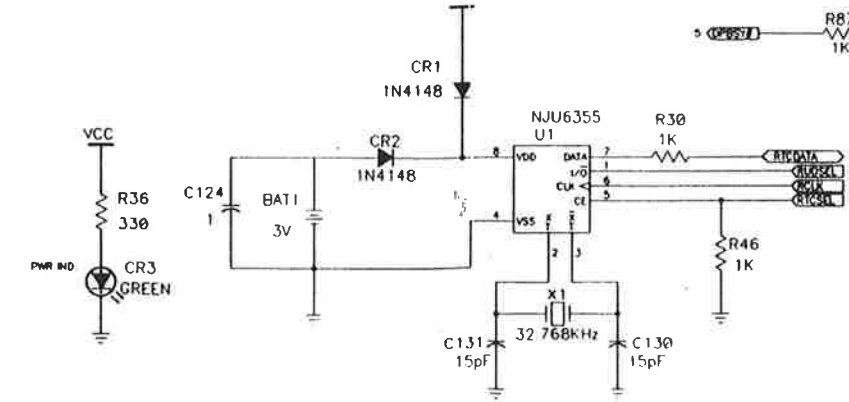
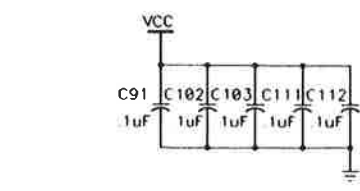
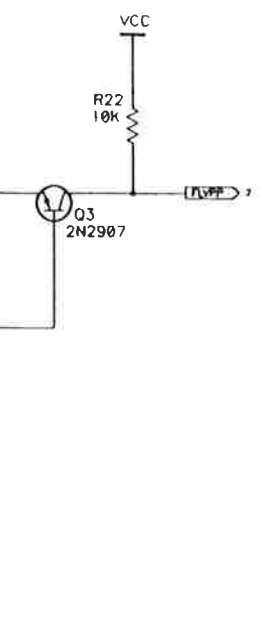
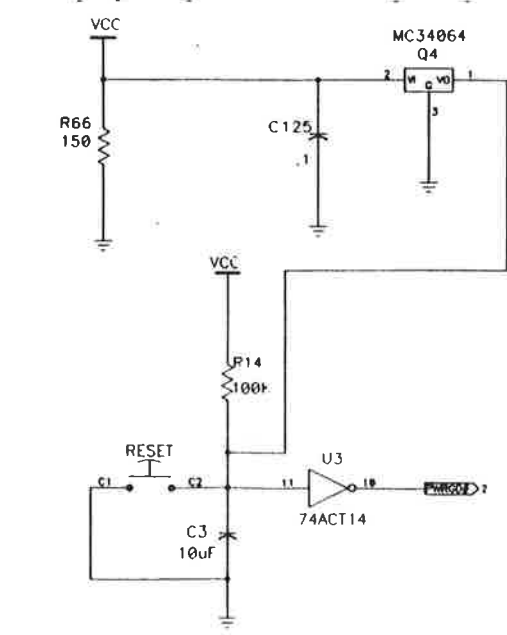
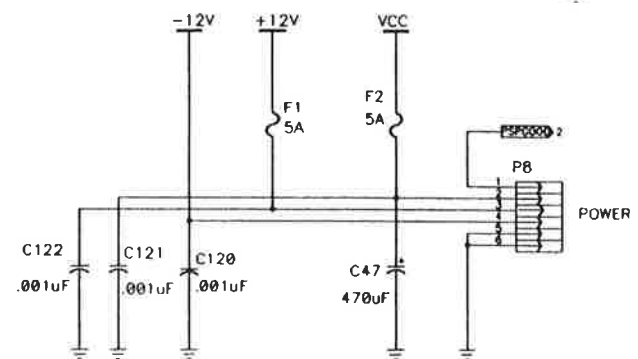
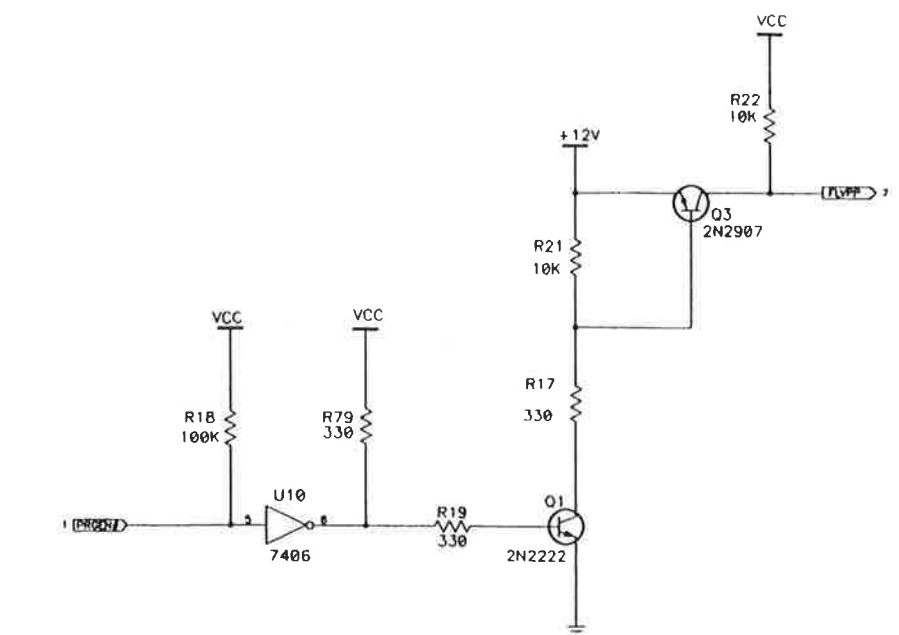
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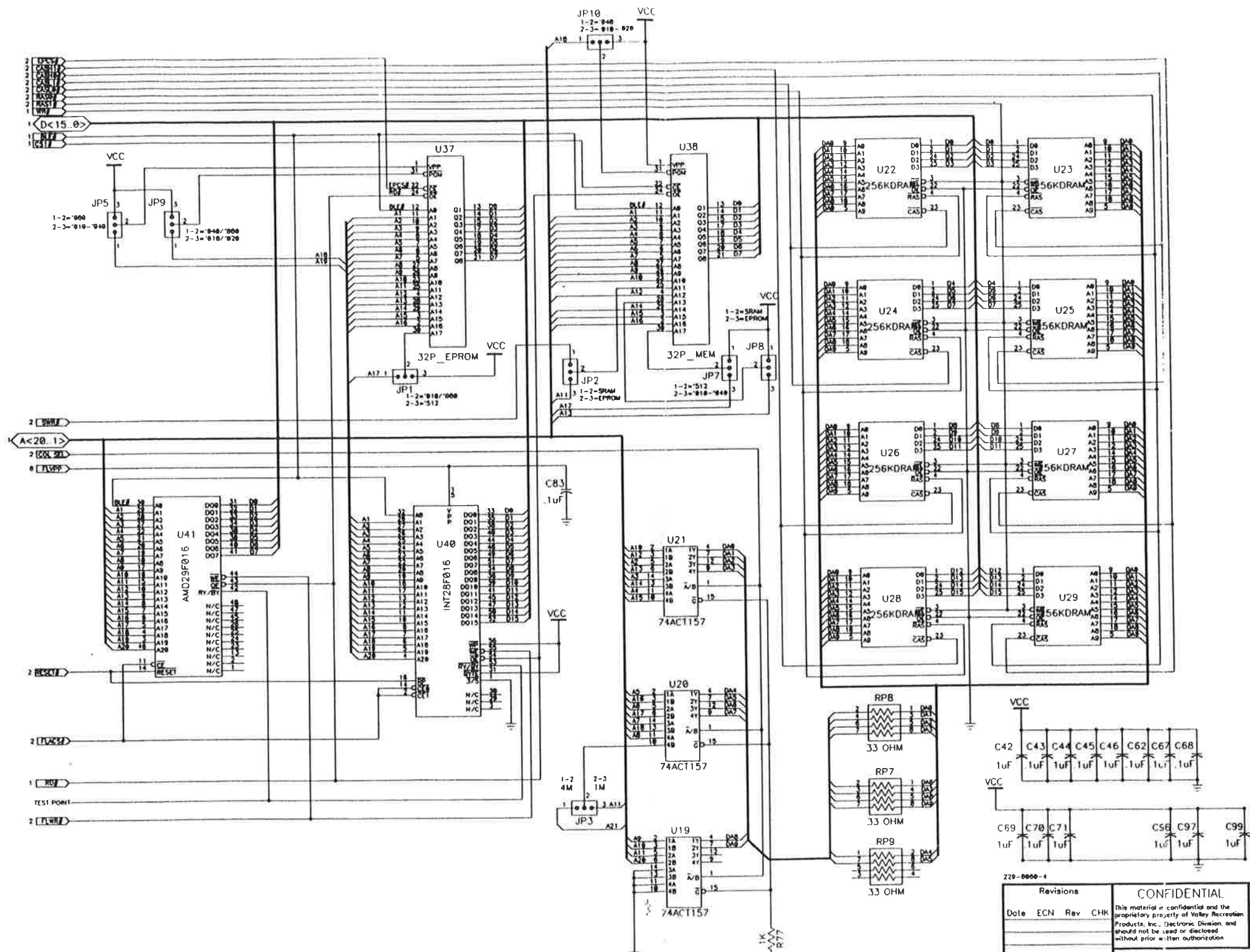
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REV-1:	na
REV-2:	U43P16-U53P1

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5/3/96	E-2001	0	WJS
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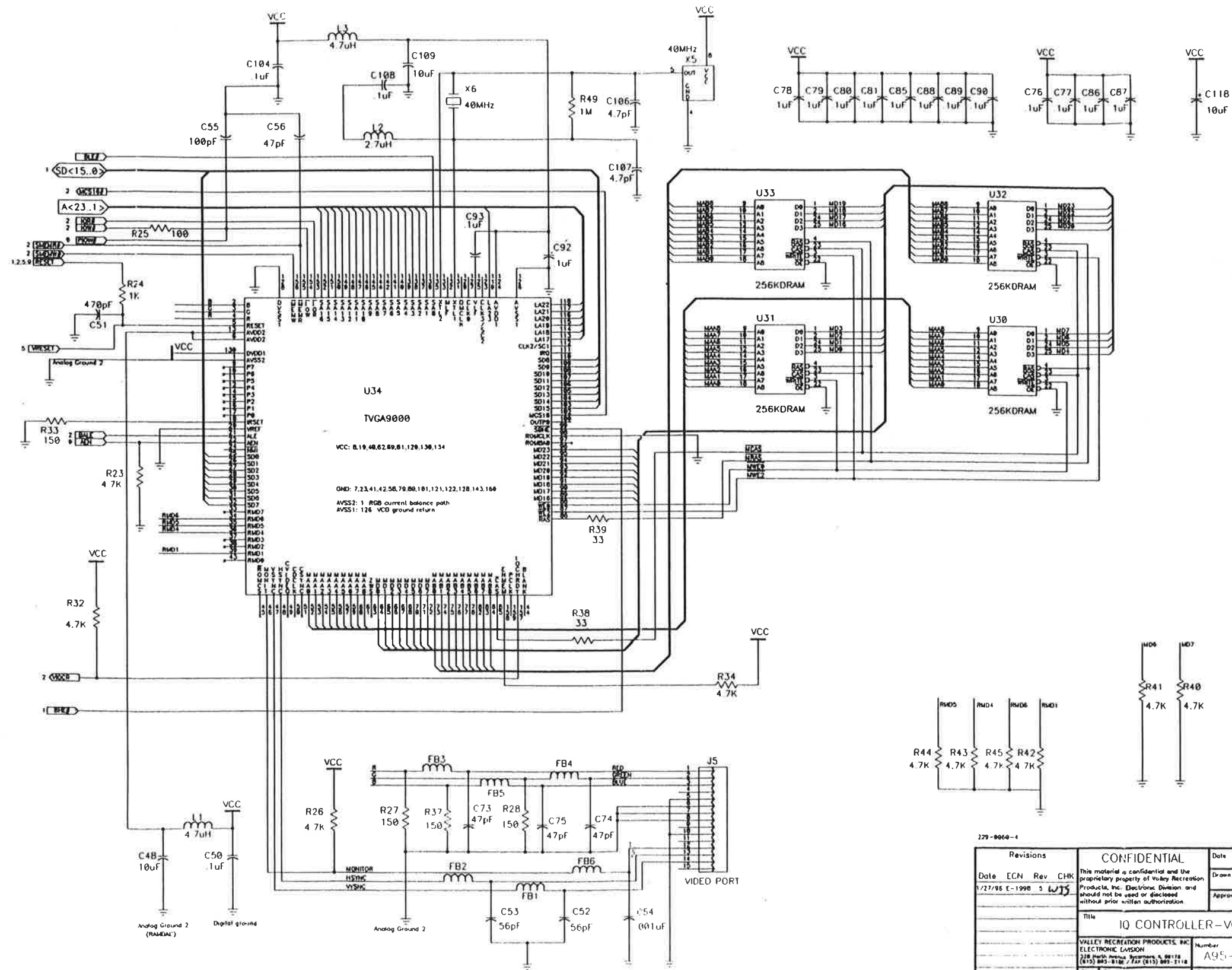


Revisions		CCNFIDENTIAL	Date 8/2/95
Date 4/26/96	ECN E-2113	Rev 0	CHK WJS
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Title		IO CONTROLLER-MISC	
VALLEY RECREATION PRODUCTS, INC.		Number	
ELECTRONIC DIVISION		A95-9-00-00	
318 North Main Street, Sparks, NV 89410		Sheet 6 of 9	
(815) 895-8300 FAX (815) 895-2118		Size	
File Name		A95-9-506	



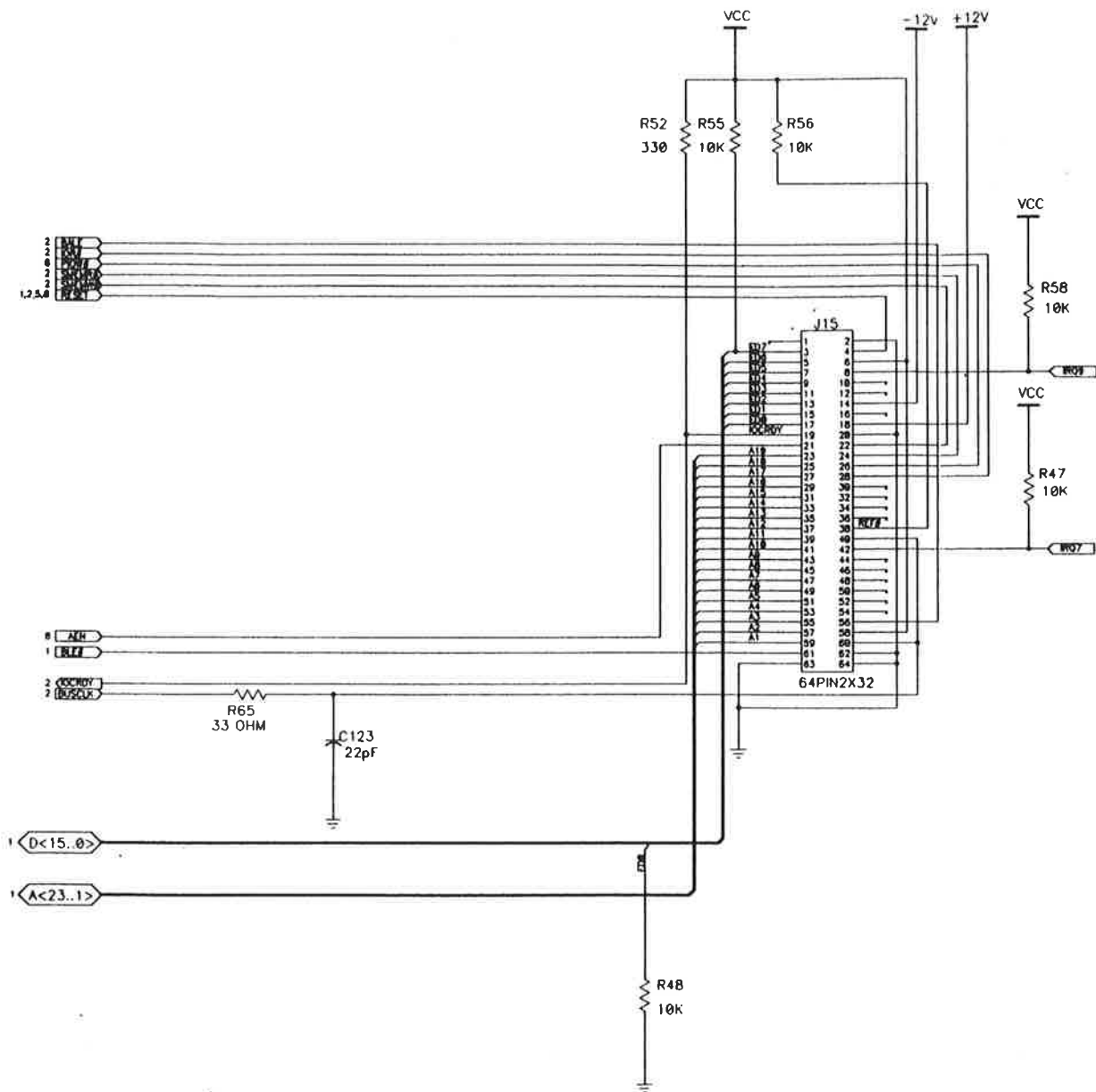
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IQ CONTROLLER-MEMORY			
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 220 North Avenue, Spotswood, NJ 08878 (610) 883-8188 / FAX (610) 883-2118		Number	A95-9-00-00
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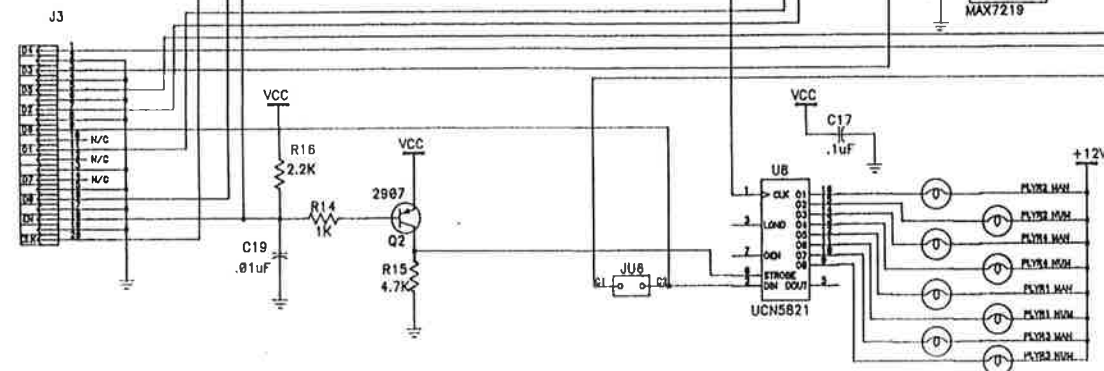
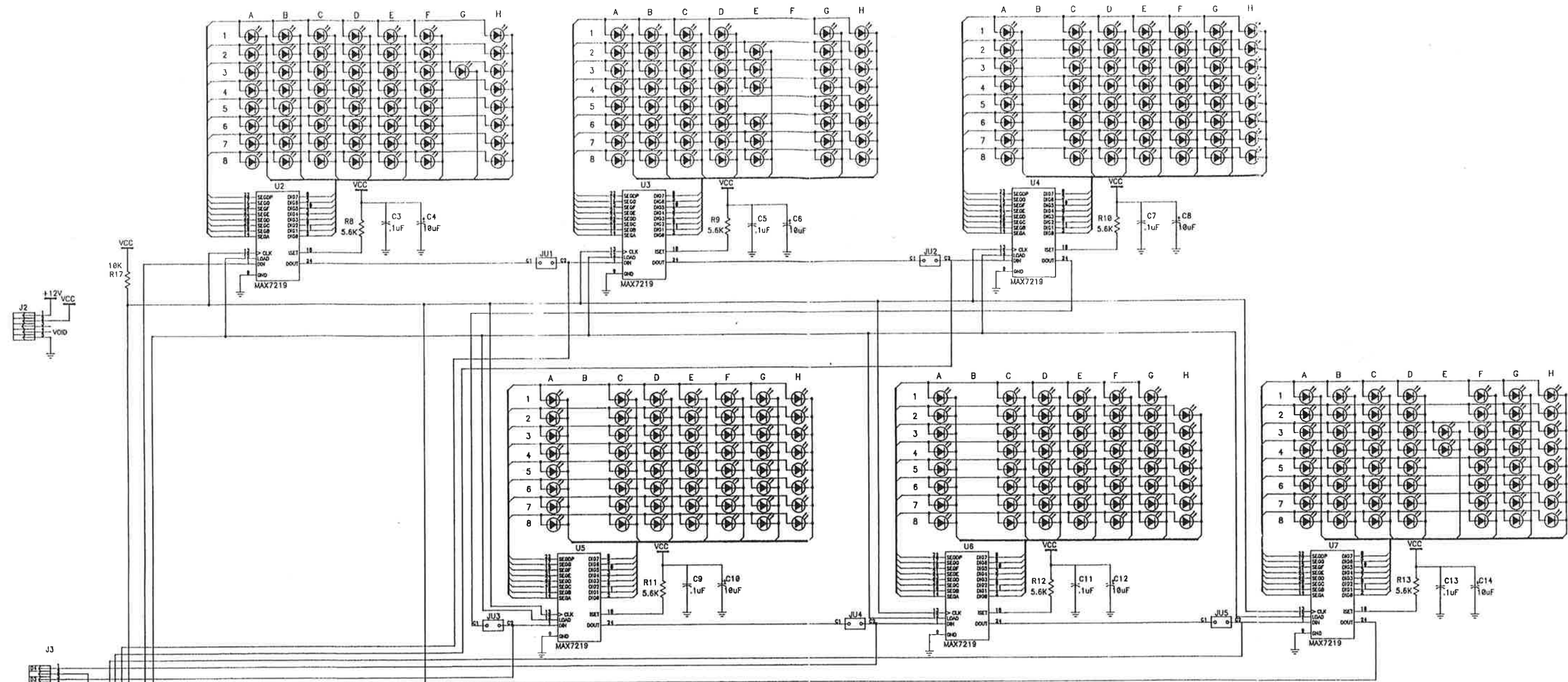
229-0060-4

Revisions		CONFIDENTIAL		Date	8/2/95
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IQ CONTROLLER-VGA					
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 228 South Lewis, Stearns, & Miller (815) 885-8182 / Fax (815) 885-2110				Number	
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229-0066-4

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				Approved by	<i>WTS</i>
Title					
IQ CONTROLLER-PC104 PORT					
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 328 North Adams, Department 4, 88128 (815) 895-8188 / FAX (815) 895-2118				Number	
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C	A95-9 500		9 of 9		



U2

	A (8)	B (9)	C (10)	D (5)	E (7)	F (6)	G (11)	H (3)
1 (23)	DSP17	F	DRT 3C	DSP2	F	DSP4	DSP1	DSP1
2 (17)	DSP17	D	DRT 1C	DSP2	D	DSP4	DSP1	DSP1
3 (18)	DSP17	D	DRT 1B	DSP2	D	DSP4	DSP1	DSP1
4 (21)	DSP17	E	DRT 1A	DSP2	E	DSP4	DSP1	DSP1
5 (23)	DSP17	A	DRT 2B	DSP2	A	DSP4	DSP1	DSP1
6 (28)	DSP17	B	DRT 2A	DSP2	B	DSP4	DSP1	DSP1
7 (18)	DSP17	C	DRT 3A	DSP2	C	DSP4	DSP1	DSP1
8 (14)	DSP17	D	DRT 3B	DSP2	D	DSP4	DSP1	DSP1

U3

	A (8)	B (9)	C (10)	D (5)	E (7)	F (6)	G (11)	H (3)
1 (23)	DSP7	DSP18	DSP8	DSP8	P3 2B A	DSP8	DSP5	DSP5
2 (17)	DSP7	DSP18	DSP8	DSP8	P3 2B A	DSP8	DSP5	DSP5
3 (18)	DSP7	DSP18	DSP8	DSP8	P3 2B A	DSP8	DSP5	DSP5
4 (21)	DSP7	DSP18	DSP8	DSP8	P3 ARROW	DSP8	DSP5	DSP5
5 (23)	DSP7	DSP18	DSP8	DSP8	P3 ARROW	DSP8	DSP5	DSP5
6 (28)	DSP7	DSP18	DSP8	DSP8	P1 2B A	DSP8	DSP5	DSP5
7 (18)	DSP7	DSP18	DSP8	DSP8	P3 2B A	DSP8	DSP5	DSP5
8 (14)	DSP7	DSP18	DSP8	DSP8	P1 ARROW	DSP8	DSP5	DSP5

U4

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2 (17)	P1 1B B	P1 2B C	P1 1B A	DSP28	DSP21	DSP18	DSP18	DSP22
3 (18)	P4 1B A	P4 2B B	P4 1B C	DSP28	DSP21	DSP18	DSP18	DSP22
4 (21)	P2 1B A	P2 2B B	P2 1B C	DSP28	DSP21	DSP18	DSP18	DSP22
5 (23)	P3 1B B	P3 2B C	P3 1B A	DSP28	DSP21	DSP18	DSP18	DSP22
6 (28)	P2 1B B	P2 2B C	P2 1B A	DSP28	DSP21	DSP18	DSP18	DSP22
7 (18)	P3 1B A	P3 2B B	P3 1B C	DSP28	DSP21	DSP18	DSP18	DSP22
8 (14)	P1 1B A	P1 2B B	P1 1B C	DSP28	DSP21	DSP18	DSP18	DSP22

U5

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2 (17)	DSP24	P3 1B B	P3 12 C	P3 17 A	DSP23	DSP23	DSP23	DSP23
3 (18)	DSP24	P3 1B C	P3 1B A	P1 17 B	DSP23	DSP23	DSP23	DSP23
4 (21)	DSP24	P2 1B B	P2 17 C	P1 17 A	DSP23	DSP23	DSP23	DSP23
5 (23)	DSP24	P2 1B C	P2 1B A	P1 17 B	DSP23	DSP23	DSP23	DSP23
6 (28)	DSP24	P1 1B B	P1 17 C	P1 17 A	DSP23	DSP23	DSP23	DSP23
7 (18)	DSP24	P4 1B B	P4 17 C	P4 17 A	DSP23	DSP23	DSP23	DSP23
8 (14)	DSP24	P4 1B C	P4 1B A	P1 17 B	DSP23	DSP23	DSP23	DSP23

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2 (17)	DSP28	P3 1B B	P3 15 C	P3 15 A	DSP27	DSP27	DSP27	BE 3
3 (18)	DSP28	P3 1B C	P3 1B A	P3 15 B	DSP27	DSP27	DSP27	BE 7
4 (21)	DSP28	P2 1B B	P2 15 C	P2 15 A	DSP27	DSP27	DSP27	BE 5
5 (23)	DSP28	P1 1B B	P1 15 C	P1 15 A	DSP27	DSP27	DSP27	BE 2
6 (28)	DSP28	P2 1B C	P2 15 C	P3 15 A	DSP27	DSP27	DSP27	BE 4
7 (18)	DSP28	P4 1B B	P4 15 C	P4 15 A	DSP27	DSP27	DSP27	BE 6
8 (14)	DSP28	P4 1B C	P4 1B A	P4 15 B	DSP27	DSP27	DSP27	BE 1

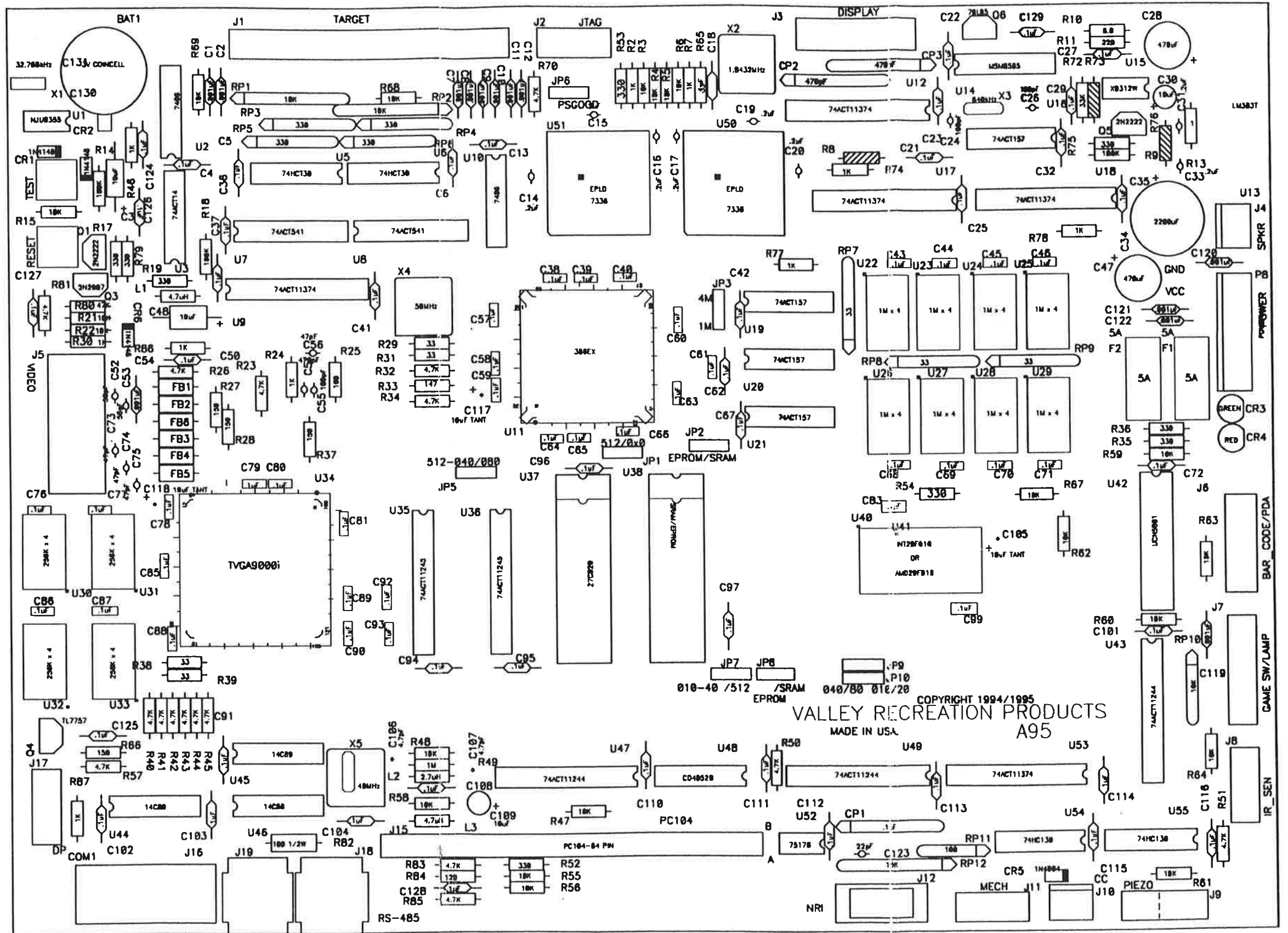
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3 (18)	DSP13	DSP18	DSP14	DSP11	P4 BE B	DSP15	DSP12	DSP12
4 (21)	DSP13	DSP18	DSP14	DSP11	P2 BE B	DSP15	DSP12	DSP12
5 (23)	DSP13	DSP18	DSP14	DSP11	P1 BE B	DSP15	DSP12	DSP12
6 (28)	DSP13	DSP18	DSP14	DSP11	P2 BE C	DSP15	DSP12	DSP12
7 (18)	DSP13	DSP18	DSP14	DSP11	P3 BE C	DSP15	DSP12	DSP12
8 (14)	DSP13	DSP18	DSP14	DSP11	P4 BE C	DSP15	DSP12	DSP12

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Revisions		CONFIDENTIAL	Date
Date	ECN	Rev	CHK
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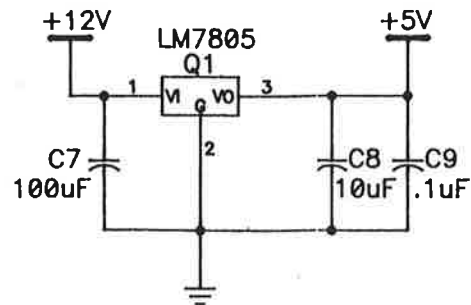
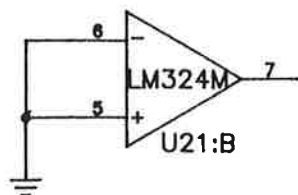
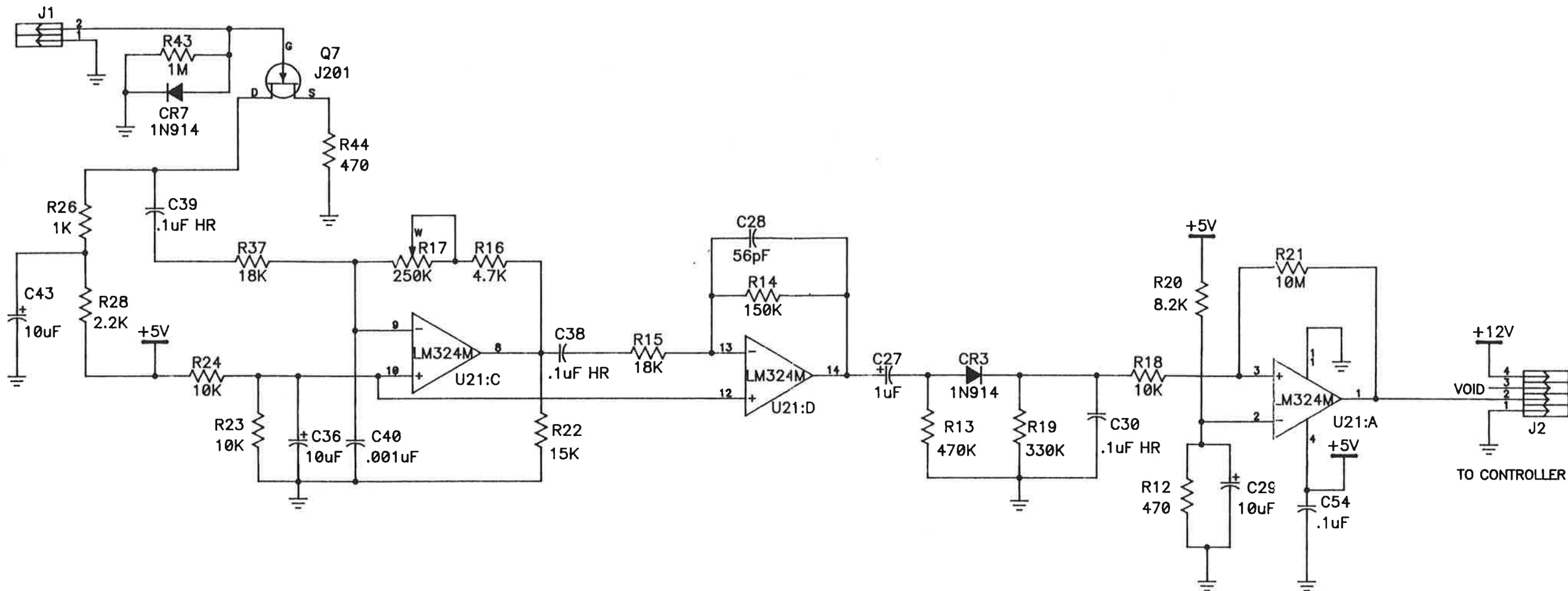
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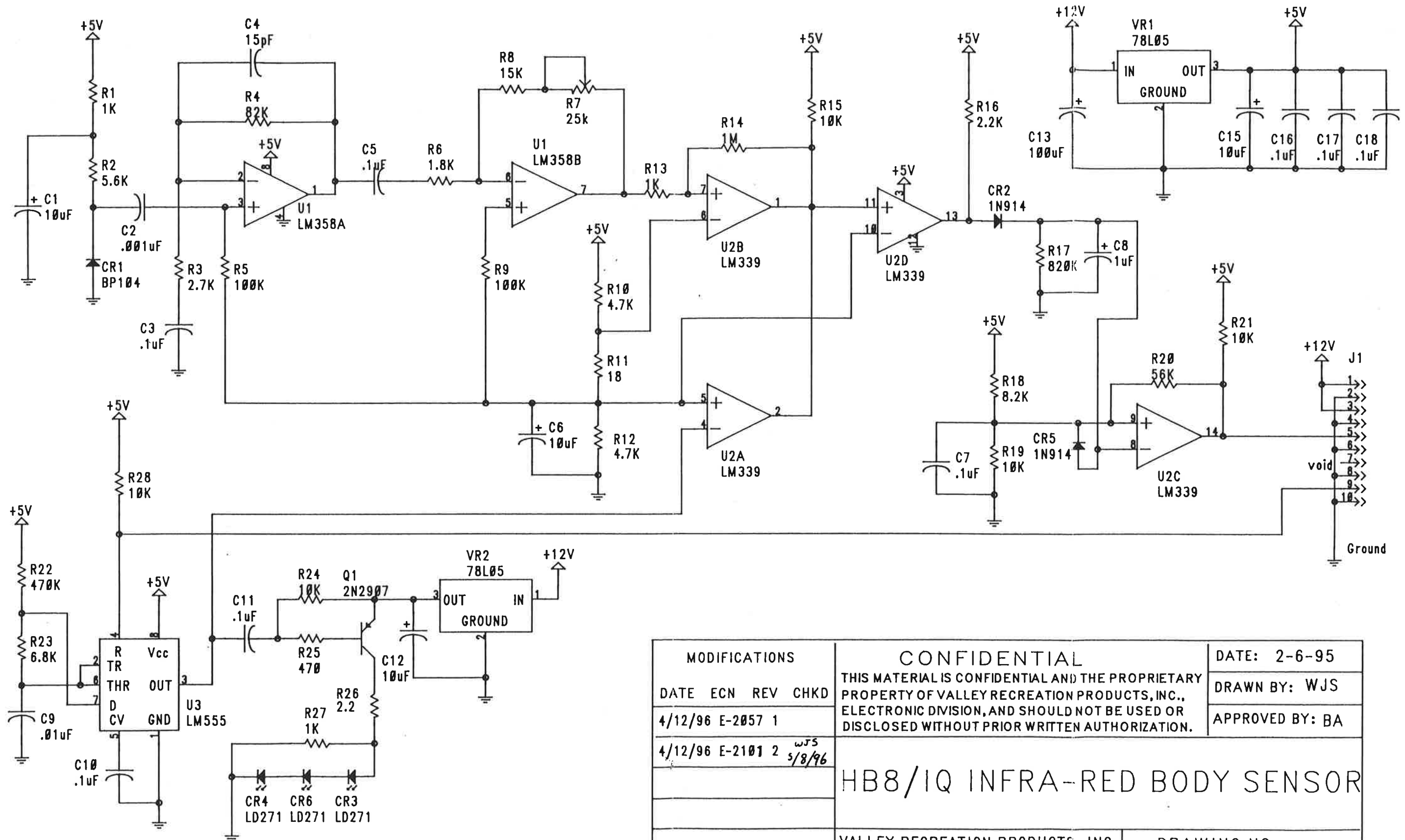
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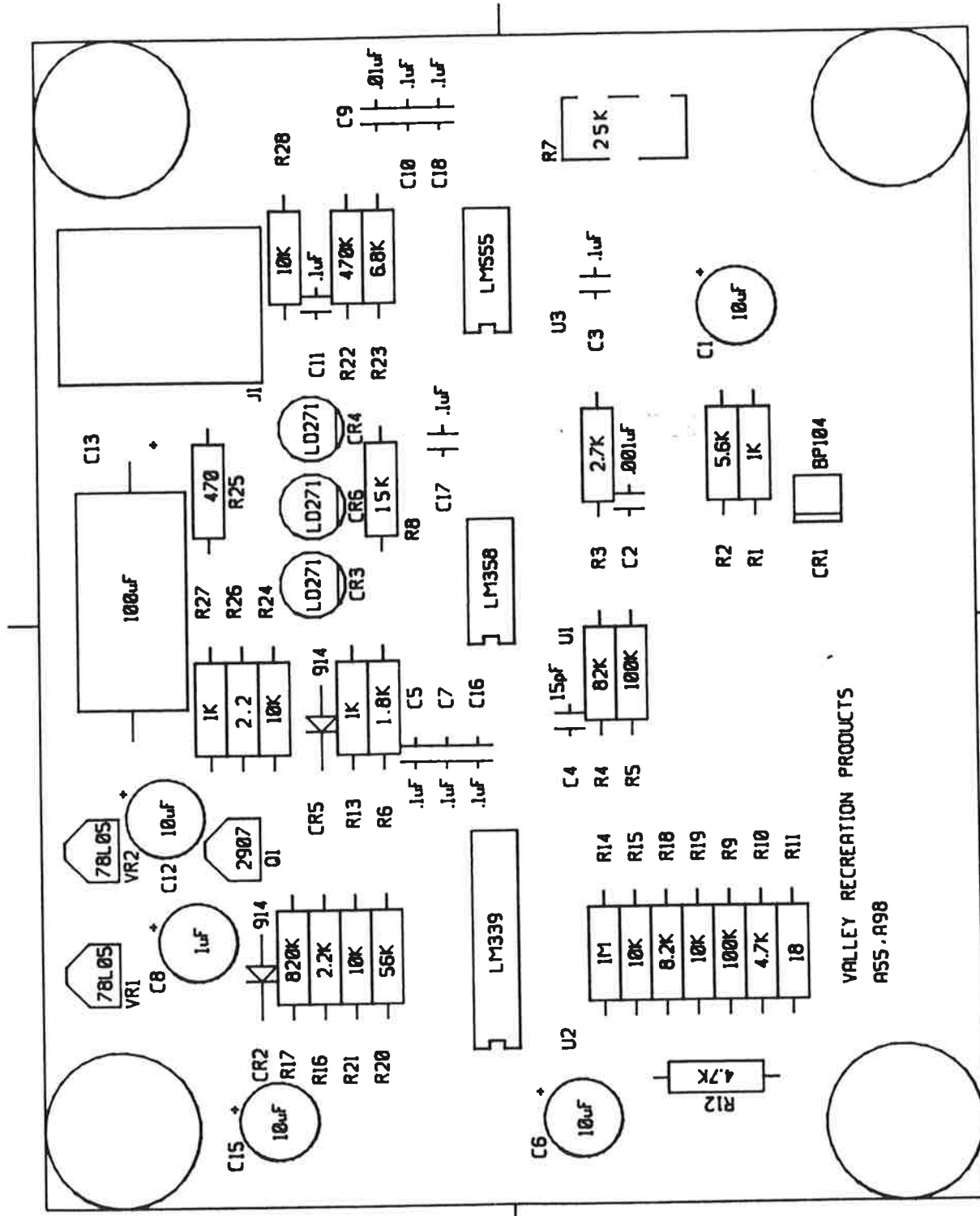


229-8063-6

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6/14/95	E-1924	1	AD	Drawn by LSK			
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Title							
PCB, SM PIEZO CKT							
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 312 North Avenue, Sycamore, IL 60178 (615) 893-8188 / FAX (618) 893-2118						Number	
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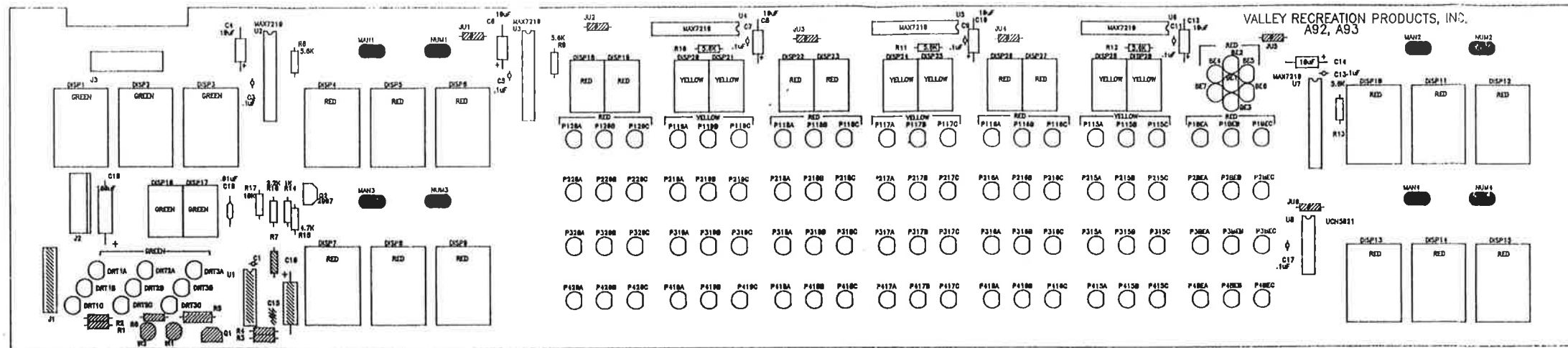


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DATE	ECN	REV	CHKD		DRAWN BY: WJS
4/12/96	E-2057	1			APPROVED BY: BA
4/12/96	E-2101	2	WJS 5/8/96	HB8/IQ INFRA-RED BODY SENSOR	
VALLEY RECREATION PRODUCTS, INC. ELECTRONIC DIVISION 320 NORTH AVENUE, SYCAMORE, IL 60178 (815) 895-8100 / FAX (815) 895-2118				DRAWING NO. A98-2-00-00	

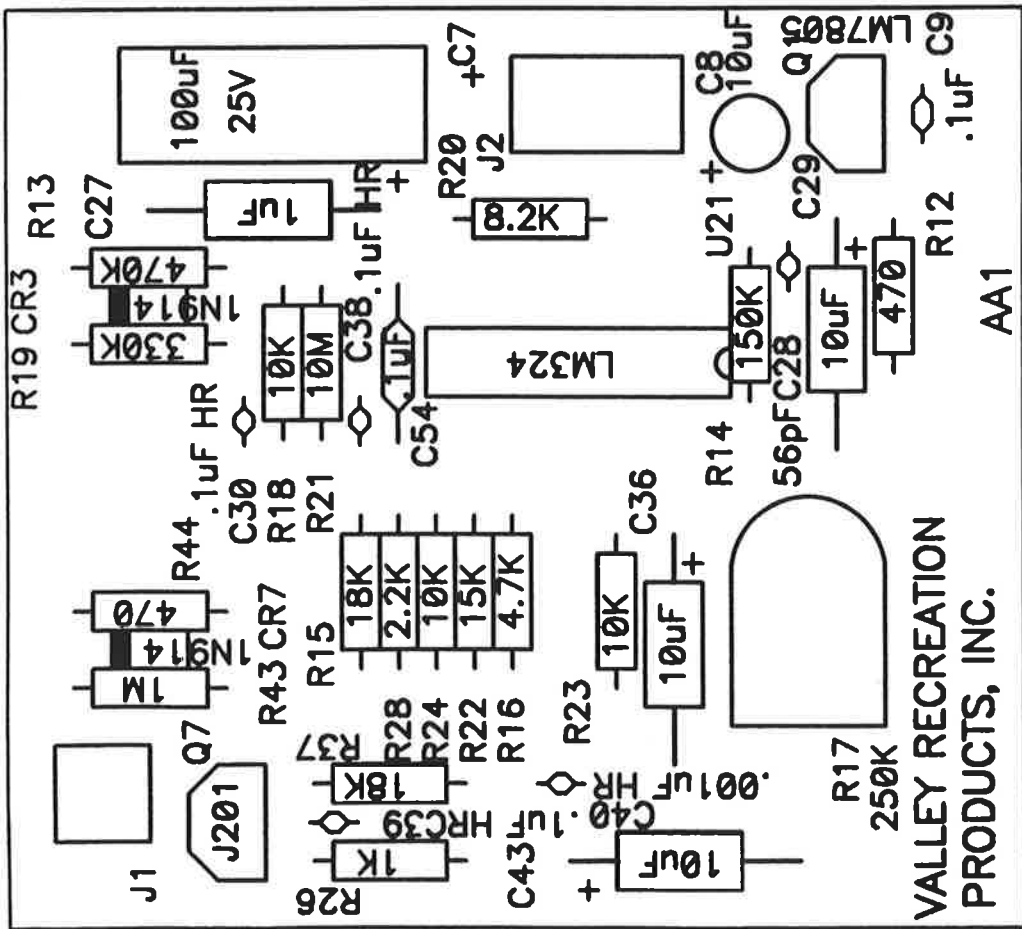


VALLEY RECREATION PRODUCTS
A55.A98

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



COMPONENT LAYOUT
A93-2-00-00



COMPONENT LAYOUT
AA1-1

APPENDICES

APPENDIX A: Modem Installation

Equipment needed for a Fax/Modem installation:

- You **MUST** buy your modems from Valley. 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.

APPENDIX B: Networks and Broadcasting

When two or more IQ Dart Machine games are connected to each other via a network cable, they are referred to as a 'Network'. The first game is called the 'modem' game. It receives information from calls made to its modem. It may be connected to a second game via a network cable, game number 2 may be connected to a third game via a network cable and so on. The modem game can then 'broadcast' its new information to all the other games on the network.

The information passed across the network is no longer done game by game but broadcasted to all games on the network site at the same time much like a radio transmission. This change is embedded in the software and will automatically occur whenever information is sent whether it be League information, Reports or Advertising images.

The Cougar I.Q. Dart Machine game designated as the modem game, automatically checks to see if there are any games on the network, if there are, then broadcasting begins.

You can watch the progress of the broadcasting from the modem game to the games on the network via a time line device called Working: ■■■■ ■■■ notice the small squares are a timing mark while the bigger squares announce when a page has been sent. The two screens will look something like this:

IQ Modem

Updating League Data
Sending League Info
Sending Team Info
Sending Player Info
Sending Team Link Info
Sending Player Link info
Complete

IQ Networked

*** Receiving Dart League Data ***
Received file number 1
Received file number 2
Working: ■■■■ ■■■

Once the Dart League data is received, Report data will be sent and the IQ Networked Games heading will change to *** Receiving LMW Reports ***.

APPENDIX C: Building Network Cables & Network Installation

- Colored Wire Phone Cable.
- RJ-11 Crimpers.
- Phone Connectors (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,

(E1X-IQ Network Terminator Assembly) can be ordered through Valley Service Department **1-800-331-5420**.

There are two types of Network cables

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.

Twisted Pairs

This cable take two of the wires and twists them, then does the same to the remaining two wires (ie. 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 (E1X) is plugged into the end games on a network.

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

APPENDIX D: 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	(2) 1 installed in IQ game 1 installed in computer

Automatic Transmissions



No automatic transmissions are initiated when the Cougar I.Q. Dart Machine game is in Service Mode. This means the game will not send information back to LMW or the BBS for Ads.

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.

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.
- 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 'mmddyyyyttt' 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.

Moving data from LMW to the PDA.



Turn on the PDA.

1. In the LMW program use the mouse to click on **FILE**.
A menu will appear. select **ACTIVITIES**.
Select **EXPORT DATA**.
2. Click on **VIA PDA**.
3. 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**.
4. Next, set the PDA in front of the Infrared Transmitter/Receiver.
5. In LMW, click **OK** to select. Click **OK** again to start the data transfer.
6. 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.

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

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 swipping 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.

At the Computer(LMW):  

1. Start League Machine for Windows™ (LMW).
2. Once in the LMW program, use the mouse to click on FILE MENU. Select SITES.
3. Click 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 COURAR IQ COMMUNICATIONS Start Time. this time must match the time the IQ game is set to receive.
5. Click FILE MENU..ACTIVITIES...EXPORT DATA.
6. Choose the data to transfer to the IQ game:
 - To send specific leagues, click SELECT LEAGUES.
 - To choose the leagues to be sent to the IQ game, or to choose all leagues from a particular site, click SELECT SITES, then choose the site.
7. Click ACROSS PHONE LINES.
Choose USE IQ SITE TIME. Click OK. Click CANCEL to close the window.
8. Select ACTIVITIES and EXPORT MONITOR from the FILE MENU.
Click BROWSE to see a list of pending and completed data transmissions.
9. Highlight an entry using the left mouse button, select it by clicking the right mouse button.
To send data immediately, click SEND NOW.
Click YES to confirm.
LMW will dial out and send league data to selected IQ games.
10. To setup transmission of data to be sent at a later time, click MONITOR MODE.
Leave the computer on, and League Machine for Windows™ will automatically dial out for all sites and download the league information to the sites.

How to move data from IQ game to League Machine for Windows™ (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 SatisFaction 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. BITWARE software is able to recognize and save data for LMW use. (see below under "To recognize a fax in BITWARE")

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 BITWARE:



- Click on the Receive Log icon in the BitWare 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 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 BitWare will convert the fax to a text file. Faxes must be converted to text files so that they can communicate with the League Machine for Windows™ software.
- Repeat the above steps to translate other faxes for League Machine for Windows™ use.

To Import Data into LMW

Via LMW

- In League Machine for Windows™, select ACTIVITIES and IMPORT DATA under the FILES MENU.
- Select IQ FAX, and click on IMPORT. This will transfer all BitWare 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.
- 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 for Windows™, 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 ... MATCHES.
- If NO MATCHES FOUND, click ADD.
If scoresheet pops up, click on + button.
- Click 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.

How 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 Home or Visitor. Select players and positions as above.

How 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.

How to add a player to the 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.

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

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
memory expansion 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%.

APPENDIX E: Factory default settings.

* - 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%
	* Attract Volume	default value is 0%

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

Setup Features Page 1 of 3

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

APPENDIX E: FACTORY DEFAULT SETTINGS

Setup Features Page 2 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 3 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
Max. seconds when time limited.	5.0
Stop Watch seconds/sweep.	1.0
Stop Watch max. sweeps/turn.	5
Stop Watch Start with tone.	Disabled

In Programming Setup Ernie

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

AVAILABLE WINDOWS	WINDOWS SETTINGS
* SLEEP MODE OFF	08:00
* PRIME TIME ON	16:00
* PRIME TIME OFF	00:00

In Programming/Set Advertising

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
AD01	Valley Shoot	Enabled	Enabled	Enabled
AD02	Nice Throw	Enabled	Enabled	Enabled
AD03	Stop	Enabled	Enabled	Enabled
AD04	Join VNEA	Enabled	Enabled	Enabled
AD05	Play Pool	Enabled	Enabled	Enabled
AD06	Drink	Enabled	Enabled	Enabled
AD07	Valley Logo Full	Enabled	Enabled	Enabled
AD08	Split Full	Enabled	Enabled	Enabled
AD09	Split Quarter	Enabled	Enabled	Enabled
AD10	Punish	Enabled	Enabled	Enabled
AD11	Get Revenge	Enabled	Enabled	Enabled
AD12	Menu ADA	Enabled	Enabled	Enabled
AD13	Menu NDA	Enabled	Enabled	Enabled
AD14	No Change	Enabled	Enabled	Enabled
AD15	Use Debits	Enabled	Enabled	Enabled
AD16	Try Debits	Enabled	Enabled	Enabled
AD17	Gold Tour	Enabled	Enabled	Enabled
AD18	WipeOut™ Full	Enabled	Enabled	Enabled
AD19	Don't Throw	Enabled	Enabled	Enabled

In Programming Operator Codes

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

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

In Programming Games

Page 1 Of 7	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	2	20	Single	0	0
DB Out	2	20	Single	0	0
DB I/O	2	20	Single	0	0
MS Out	2	20	Single	0	0
DI/MO	2	20	Single	0	0

Page 2 Of 7	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	3	25	Single	0	0
DB Out	3	25	Single	0	0
DB/IO	3	25	Single	0	0
MS Out	3	25	Single	0	0
DI/MO	3	25	Single	0	0

APPENDIX E: FACTORY DEFAULT SETTINGS

Page 3 Of 7	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	4	30	Single	0	0
DB Out	4	30	Single	0	0
DB I/O	4	30	Single	0	0
MS Out	4	30	Single	0	0
DI/MO	4	30	Single	0	0

Page 4 Of 7	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	5	35	Single	0	0
DB Out	5	35	Single	0	0
DB I/O	5	35	Single	0	0
MS Out	4	35	Single	0	0
DI/MO	5	35	Single	0	0

Page 5 Of 7	Price	Round Limit	Bullseye	Players	Credits
Cricket	3	35	Double	0	0
Cut Throat	3	35	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	3	35	Double	0	0
Cut Throat	3	35	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 7	Price	Round Limit	Bullseye	Players	Credits
You Pick It	3	35	Double	0	0
Cut Throat	3	35	Double	0	0
Mark 21	2	25	Double	0	0
Limit 201	2	25	Double	0	0
Masters	2	25	Double	0	0

APPENDIX E: FACTORY DEFAULT SETTINGS

Page 7 Of 7	Price	Round Limit	Bullseye	Players	Credits
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
Rapid Fire™	1	7	Single	0	0
Stop Watch™	1	25	Single	0	0

APPENDIX F: Products Available for use with the Cougar IQ Game .

Four Player Cougar IQ Game

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 document scanner connected to your computer, or an IQ electronic dart game.

TRMNL Kit

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 is used to update software versions.
- Terminal S can be used to update Software Ads.
- Terminal S is used by Valley Service technicians for diagnostic and debugging purposes. The contents of flash and static RAM (memory) can be read.
- Terminal S is also used when exporting data. It erases Flash areas of previously transmitted Standings and Schedules when the current export is sending the Roster without Standings and Schedules.

Ad Star Kit

Ads are displayed to a script file on the I.Q. machine. This script file is created by you in the Ad Star program.

Ad Star allows you to design and assemble scripts by "dropping and dragging" Ads into a script format. Ads are created in Paint Shop Pro or another graphics program.

All ads are in 16 colors (or less) and are created as a 640 by 480 pixel document and saved as a PCX file.

Ad Star lets you decide which ads will run during "Prime Time", "Idle Time" and "Game Time". Each of these time designations are described within the AD STAR ON LINE HELP text. You will decide how long an Ad will display on the IQ's monitor (duration) and how long it will be until the next AD is displayed (dwell).

LIST OF FIGURES

FIGURE 1. GAME SETUP	5
FIGURE 2. LINE CORD ROUTING FIGURES	7
FIGURE 3. STABILITY ASSURANCE KIT	8
FIGURE 4. EYE BOLT & CHAIN FASTENED TO GAME	8
FIGURE 5. CLOSE-UP HEX NUTS.....	8
FIGURE 6. WALL ATTACHMENTS	9
FIGURE 7. FLOOR ATTACHMENTS	10
FIGURE 8. MISSED DART SENSING AREAS.....	14
FIGURE 9. LAMP REPLACEMENT INFORMATION.....	74
FIGURE 10. CABINET PARTS.....	86
FIGURE 11. LIGHTHOOD & UPPER DISPLAY ASSEMBLY	88
FIGURE 12. STATIONARY MATRIX	90
FIGURE 13. UPPER ELECTRONICS ASSEMBLY.....	92
FIGURE 14. PEDESTAL / LOWER CABINET ASSEMBLY	94
FIGURE 15. PUSH BUTTON SWITCHES ASSEMBLY.....	96
FIGURE 16. SYSTEM DIAGRAM.....	100

INDEX

'01 Games	
4 Player, 2 Position	35
Double In	22
Double In / Double Out	22
Double In / Masters Out	23
Double Out	22
feats readout	37
frozen player	34
handicapping	37
Masters Out	23
team play	34
A	
ADA Handicapping	12
ADA Neutralizer	38
add a player	
league play	31
Ads	
days between ad resport send	54
screens	11
Advertising	
Date screens loaded	3
advertising images	54
attract sounds	51
auto adjust Time Handicap	41
auto files	54
Automatic Player Change	15
Average Marks per Round per Player	34
B	
Bios Version	3
BitFax	
Product Recommendations	i
BitWare	
Product Recommendations	i
bookkeeping	12
Coin Channel	49
Players / Credits	48
prices and credits	47
problems	83
Setup Games screen	47
Bullseye	
how to select double or singer per game	48
programmable	12
single bull double in/double out	51
C	
card activation mode	70
card reader	11, 46
card types	71
activator cards	72
communications card	71
debit card	72
league player card	71
send match results	71
service card	71
Chancelt	23
coin channel	49
coin mechanism problems	81
Comm 485 test	46
Communication	63
Caller ID Phone Number & FAX Results Phone	
Number	66
IQ Send to PDA	64
Match Send	65
Modem Answer in Window Only & FAX Poll Answer68	
Modem Initialization String & Fax Initialization String67	
send roster	65
setup numbers	66
start and stop time	69
Communications Mode	
Caller ID Phone Number & FAX Results Phone	
Number	66
Communications Start Time	69
Communications Stop Time	69
how to enter	63
IQ Send to PDA	64
Match Send	65
Modem Answer in Window Only & FAX Poll Answer68	
Modem Initialization String & Fax Initialization String67	
PDA Send to IQ	63
Send Program	70
send roster	65
Setup Numbers	66
Conventions	4
copyright	i
counts 3 darts per round	51
Cricket	
Team Play	35
Cricket Games	
Chancelt	23
Cut Throat option	24
Feats Readout	37
frozen player	35
Handicapping	37
Limit 201 option	24
Mark-21 option	24
Masters option	24
menus / options	23
skip frozen Cricket player	51
team play, 4 Player, 2 Position	35
Traditional Cricket	23

INDEX

YouPickIt	24	card reader	11
Cut Throat.....	24	diddle darts	12
D		ERNIE	12
dart alarm.....	51	FAX/Modem	11
Debit report card	72	Feats Readout	12
Demonstration Mode	52	Infrared Sensor.....	12
diddle darts	12	League Interfacing Capability.....	11
Double In	22	league play	12
Double In / Double Out	22	NDA/ADA Handicapping	12
Double In / Masters Out	23	Networking	12
Double Out.....	22	new programmable dormant time out	11
E		New Time Handicap.....	11
EPROM.....	75	programming settings.....	12
ERNIE	12	screen saver.....	13
Ernie's dart path.....	53	sleep mode	13
Ernie's levels menu	18	team play	12
set cost.....	55	Tru-Score II	12
set position.....	55	Wipeout "Shoot-at" Prompt	11
Error Detection		Game Play	
last error message	3	ending.....	43
Three Button Press.....	3	starting.....	43
F		Games	
FAX / Modem	11	'01	21
Automatic League Data Send.....	53	'01 playing instructions	21
Caller ID Phone Number & FAX Results Phone		Chancelt	23
Number	66	Cut Throat	24
FAX		High Score	25
minutes between retries	53	Limit 201	24
Output format.....	53	Low Score.....	25
modem auto answer	53	Mark-21	24
Modem Initialization String & Fax Initialization String.....	67	Masters	24
rings before answer	53	more OPTIONS by pressing SELECT	17
fax initialization string	67	practice and skill menus.....	17
fax poll answer	68	Rapid Fire	26
Feats Readout	12	screen menus.....	16
FoxPro	4	Shanghai	25
free play	51	Split Score.....	26
frozen player	34	Stop Watch	26
frozen team loss	51	Traditional Cricket.....	23
frozen team loss.....	51	Wipe Out	22
fuse replacement.....	73	Wipe Out 103.....	22
G		YouPickIt.....	24
Game Feats		General Maintenance.....	73
'01 games.....	19	H	
Cricket feats.....	20	Handicapping	
Game Features.....	11	'01 Games	37
14" color VGA monitor.....	11	ADA Neutralizer.....	38
Ad screens	11	Cricket Games.....	37
Bookkeeping.....	12	Marks Per Round (MPR).....	37
Bullseye.....	12	NDA	36
		options	12
		Points Per Dart (PPD)	38
		Points Remaining (PR).....	37

spot darts 36
 SPRE 36
 Time Handicap 40
 Total Darts Thrown (TDT) 37
 Total Marks Scored (TM) 37
 High Score 25

I

Infrared Sensor 12, 14, 15
 Player Detector test 45
 Installation 6
 attachment of the cahin to the wall 8
 attachment to concrete, brick or stone wall 9
 attachment to hollow wall, plaster, drywall, etc. 9
 to concrete floor 10
 to wood floor 10
 wood stud mounting 10

L

lamp replacement 73
 language 49
 league play 12
 add a player 31
 allow league accesss without card 54
 dart league menu options 18
 home or visitor 29
 menu and options 27
 player card 27
 Player Rotation - View 33
 Points per Dart (PPD) 31
 Secondary Options Menu 33
 selecting player roster 30
 selecting visiting team roster 32
 start game 31
 start match 28
 Limit 201 24
 LMW 63
 FAX/Modem 11
 What is it? 4
 Low Score 25

M

Machine Identification Code 62
 Main Menu 28, 33
 manual copyright i
 Manual Part Number i
 Manual Revision Number i
 Mark-21 24
 Marks Per Round (MPR) 37
 Master Service card 44
 Masters 24
 Masters Out 23
 Matrix / Controller pin layout 81
 Missed Dart Detector 14

Models 3
 WOB 3
 WOU 3
 modem answer in window only 68
 modem initialization string 67
 monitor problems 83

N

NDA 36
 NDA Handicapping 12
 Networking 12
 Comm 485 test 46
 send program 70
 Standings and Schedules reports 43

O

one dart out 51
 Operator Codes Mode
 Machine Identification Code 62
 Operator Indentification Code 62
 Operator Security Code 60
 Peripheral Identification 60

P

Part Number i
 PDA
 send to IQ 63
 Peripheral Identification Code 60
 PIR Motion Sensor 53
 player change problems 82
 Player Detector Test 45
 Player Rotation 33
 player setup mode 51
 Points Per Dart (PPD) 38
 Points Remaining (PR) 37
 power fail 51
 PPD (Points per Dart) 31
 Practice and Skill Games
 High Score 25
 Low Score 25
 menus 25
 Rapid Fire 26
 Shanghai 25
 Split Score 26
 Stop Watch 26
 price
 set price per game 47
 prime time 58
 Programming Mode
 bullseye 48
 coin channel 49
 how to enter 46
 Language 49
 menu 46

INDEX

Players / Credits.....	48	minutes between retries.....	53
round limit.....	48	Output format.....	53
Set Advertising.....	59	free play.....	51
set price.....	47	max. seconds when time limited.....	54
Set Window Times.....	57	modem auto answer.....	53
setup Ernie.....	55	one dart out.....	51
setup features.....	51	PIR Motion Sensor.....	53
setup games.....	47	play audio files.....	54
R		player setup mode.....	51
radio interference.....	2	power fail.....	51
Rapid Fire.....	26	rings before answer.....	53
replacement lamp.....	74	Screen Saver delay.....	53
Revision Number.....	1	single bull double in/double out.....	51
rings before answer.....	53	skip frozen Cricket player.....	51
roster.....	65	Stop Watch max. sweep.....	54
round limit.....	48	Stop Watch seconds sweep.....	54
S		upper display installed.....	53
Safety.....	ii	Shanghai.....	25
FCC Rules.....	2	sleep mode.....	13, 58
line cord routing.....	7	Software	
Lithium Battery.....	ii	current version.....	3
radio interference.....	2	sound problems.....	82
radio noise emissions.....	2	Sound test.....	45
Stability Assurance Kit.....	8	Split Score.....	26
tumb bolts when game is in upright position.....	5	spot darts.....	36
vent holes.....	ii	SPRE.....	36
screen saver.....	13	Stability Assurance Kit	
screen saver delay.....	53	installation.....	8
Secondary Options Menu.....	33	parts list.....	8
Serial Number.....	1	Standings and Schedules	
Service		game to game communication.....	43
fax number.....	1	PDA.....	43
phone number.....	1	Schedules reports.....	42
Service Mode		screen types.....	42
Card Activation Mode.....	70	Standings reports.....	42
Communication.....	63	starting position.....	53
Operator Codes Mode.....	60	Stop Watch.....	26
Programing Options menu.....	46	max. sweep.....	54
Setup		seconds / sweep.....	54
How to setup the game.....	5	Symbols.....	4
Setup Features		T	
advertising images.....	54	Target / Switches test.....	45
allow for change of starting position.....	53	target cleaning.....	75
allow league accesss without card.....	54	target problems.....	80
attract sounds.....	51	team play.....	12, 34
Automatic League Data Send.....	53	'01 Games.....	34
counts 3 darts per round.....	51	'01 Games 4-Player, 2-Position.....	35
dart alarm.....	51	Cricket.....	35
days between ad resport send.....	54	frozen.....	34
Demonstration Mode.....	52	Wipe Out and Wipe Out 103.....	35
Ernie's dart path.....	53	Team/Handicap Options	
FAX		menu.....	33
		Test Mode.....	44

Card Reader46
 Comm 485 test.....46
 main menu.....44
 Player Detector test45
 Sound test45
 Target / Switches test.....45
 Upper Display test.....45
 Three Button Press3
 ticks41
 time and date
 how to set56
 Time Handicap..... 11, 40
 auto adjust41
 max. seconds when time limited54
 ticks.....41
 Total Darts Thrown (TDT).....37
 Total Marks Scored (TM).....37
 Traditional Cricket23
 troubleshooting.....76
 Tru-Score 12, 14, 15
 troubleshooting76

Tru-Score II..... 12, 14, 15
 missed dart sensor adjustment procedure 79
 troubleshooting 76

U

upper display 53
 upper display problems 81
 upper display test 45

W

Warranty 1
 window times
 how to set 57
 Wipe Out 11, 22
 Team Play 35
 Wipe Out 103 22
 Team Play 35

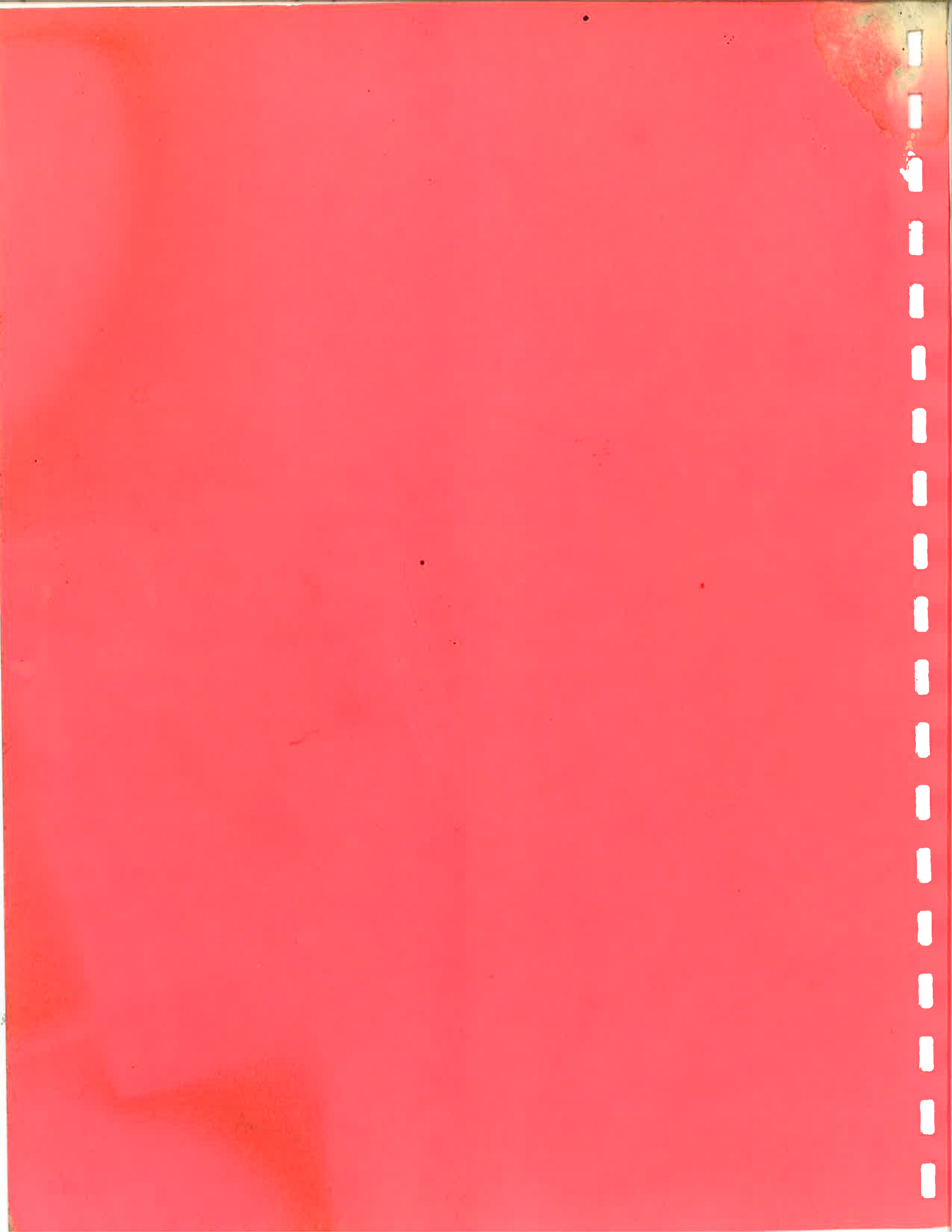
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Thank you for purchasing from the Valley line of recreational products. We value your business and want you to tell us if our products and services are meeting your expectations. Therefore, we will appreciate your completing this Warranty Registration 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!

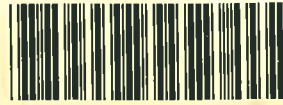
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National Service Department: 1-800-331-5420

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SERVICE CARD



GAME RESET

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Person to contact: _____ Title: _____

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How many Electronic Dart Machines do you operate: _____

Would you like a credit application sent?: _____

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