



Wizard Fire

Installation and Service Manual

Manufactured by DATA EAST USA, INC
1850 Little Orchard St.
San Jose, CA 95125-1045



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TABLE OF CONTENTS

Installation & Operation

Disclaimers and Safety Guide	1
Notice Regarding Non-Data East Parts	2
Game Specifications	3
Game Description	3
Operator Selectable Options	5

Installation & Operation

Appendix A — Replacement Parts

Replacement Parts List	9
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Appendix A
Replacement Parts

Appendix B — Wiring Diagrams

JAMMA Connector Wiring	14
Location of Controls and Connectors on PCB.....	15
Cabinet Harness Wiring Diagrams	16

Appendix B
Wiring Diagrams

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Wizard Fire

Installation & Operation

INSTALLATION & OPERATION

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DISCLAIMERS & SAFETY GUIDE

The following safety precautions apply to all game operators and service personnel. Specific warnings and cautions will be found in this manual whenever they apply.

WARNING

Properly Ground the Game

Players may receive an electrical shock if this game is not properly grounded! To avoid electrical shock, do not plug in the game until it has been inspected and properly grounded. This game should only be plugged into a grounded three-wire outlet. If you have only a two-wire outlet, we recommend you hire a licensed electrician to install a three-wire grounded outlet. If the coin door is not properly grounded, players may receive an electrical shock! After servicing any part on the doors, check that the grounding wire is firmly secured to the inside of the control panel. After you have verified this, lock up the game.

AC Power Connection

Before you plug in the game, be sure that the game's power supply can accept the AC line voltage in your location. The line voltage requirements are contained within this manual.

Disconnect Power During Repairs

To avoid electrical shock, disconnect the game from the AC power before removing or repairing any part of the game. The power supply capacitors retain energy for a period of time even after AC power is removed. Use care when working near them or on any circuitry connected to them.

Use the Proper Fuses

To avoid electrical shock, use replacement fuses which are specified in the parts list for this game. Replacement fuses must match those replaced in fuse type, voltage rating, and current rating. In addition, the fuse cover must be in place during game operation. Refer to the Power Supply wiring diagram for more information.

CAUTION**Properly Attach All Connectors**

Make sure that the connectors on each printed circuit board (PCB) are properly plugged in. The connectors are keyed to fit only one way. If they do not slip into place easily, do not force them. If you reverse a connector, you may damage your game and void your warranty.

NOTICE REGARDING NON-DATA EAST PARTS**WARNING**

Use of non-DATA EAST parts or modifications of any DATA EAST game circuitry may adversely affect the safety of your game, and may cause injury to you and your players.

Note: This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of Federal Communications Commission (FCC) Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area or modification to this equipment is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference. If you suspect interference from a DATA EAST game at your location, check the following:

- All ground wires in the game are properly connected as shown in the game wiring diagram.
- The power cord is properly plugged into a grounded three wire outlet.

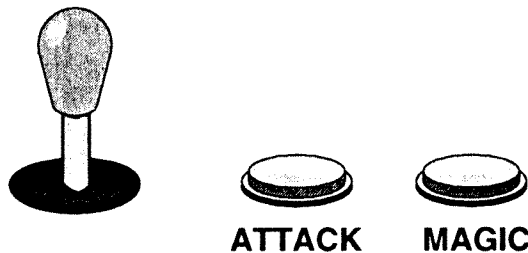
GAME SPECIFICATIONS

Characteristic	Specifications
Power Consumption	250 VA 110 V RMS
Temperature	+5 to +50° C (+37° to +122° F)
Humidity	Not to exceed 95% relative
Line Voltage	102 – 137 VAC 60 Hz (U.S. Games)
Width	30"
Depth	36"
Height	72"
Weight	300 lbs.

Table 1 Game Specifications

GAME DESCRIPTION

Wizard Fire is a 1 or 2 player game. Each player has an 8-way joystick, an ATTACK button and a MAGIC button.



The players play alone or work together as a team to battle their way through the multiple levels of the game, finally completing the game by defeating the last enemy.

The players select the character they wish to operate at the beginning of the game. There are 5 different characters to choose from: Knight, Bard, Dwarf, Elf or Wizard. Each character has his or her own strengths and weaknesses:

Knight	Physically strongest, immune to disease, slowest movement speed.
Bard	Most balanced character, also high resistance to poison.
Dwarf	Very strong, high resistance to confusion.
Elf	Fastest movement speed.
Wizard	No special strength or weakness.

The player uses the joystick to move the character, and presses the ATTACK button to strike at an enemy. Each character attacks in a different way; the Wizard shoots fire, the Bard uses a spear, etc. Delaying pressing the ATTACK button for a few seconds causes the Knight, Wizard, and Dwarf to deliver a stronger attack when the button is pressed. Pressing the ATTACK button rapidly many times causes the Elf and Bard to deliver a wide-spread constant attack.

In addition to the ATTACK button, each player has a MAGIC button. Each monster that the character defeats adds to the character's Magic Power Meter. When the Magic Power Meter is full, pressing the MAGIC button causes the character to be transformed into a more powerful form, such a unicorn, fire lizard, etc. The new form is indicated by the picture which is displayed on the Magic Meter Spellbook at the time that the player presses the MAGIC button. The new form lasts only for a limited time, between 6 and 12 seconds, after which the character returns to his normal form.

During the course of the game, the player finds magic items in treasure chests that increase the character's capabilities while the magic lasts. Most such items operate only a number of times, and then disappear.

These items are:

- Boots of speed
- Power Gauntlet (attacking strength)
- Invincible armor
- Anti-flame amulet
- Anti-ice amulet
- Poison/madness antidote
- Power Serum (replenishes lost life energy)
- Enemy annihilator (destroys all on-screen enemies)
- Spell power increase (adds to the spell meter)

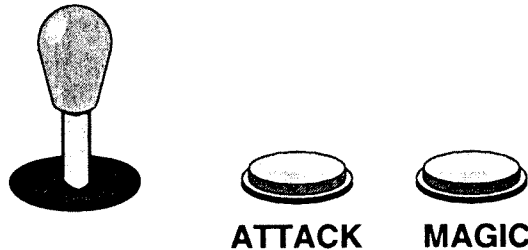
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OPERATOR SELECTABLE OPTIONS

DIP SWITCH 1										
FUNCTION		SWITCH SETTING								REMARKS
		1	2	3	4	5	6	7	8	
GAME CHARGE	1 COIN = 1 CREDIT	OFF	OFF	OFF						COIN/CREDIT COIN MECH 1
	1 COIN = 2 CREDIT	ON	OFF	OFF						
	1 COIN = 3 CREDIT	OFF	ON	OFF						
	1 COIN = 4 CREDIT	ON	ON	OFF						
	1 COIN = 5 CREDIT	OFF	OFF	ON						
	1 COIN = 6 CREDIT	ON	OFF	ON						
	2 COIN = 1 CREDIT	OFF	ON	ON						
	3 COIN = 1 CREDIT	ON	ON	ON						
GAME CHARGE	1 COIN = 1 CREDIT				OFF	OFF	OFF			COIN/CREDIT COIN MECH 2
	1 COIN = 2 CREDIT				ON	OFF	OFF			
	1 COIN = 3 CREDIT				OFF	ON	OFF			
	1 COIN = 4 CREDIT				ON	ON	OFF			
	1 COIN = 5 CREDIT				OFF	OFF	ON			
	1 COIN = 6 CREDIT				ON	OFF	ON			
	2 COIN = 1 CREDIT				OFF	ON	ON			
	3 COIN = 1 CREDIT				ON	ON	ON			
SCREEN ROTATION	NORMAL							OFF		
	REVERSE							ON		
CONTINUE COIN	1 COIN START/1 CONT.								OFF	
	2 COIN START/1 CONT.								ON	
FACTORY SETTINGS		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	

DIP SWITCH 2										
FUNCTION		SWITCH SETTING								REMARKS
		1	2	3	4	5	6	7	8	
PLAYER LIFE VALUE	NORMAL	OFF	OFF							
	MOST	ON	OFF							
	LESS	OFF	ON							
	LEAST	ON	ON							
GAME DIFFICULTY	NORMAL			OFF	OFF					
	EASY			ON	OFF					
	HARD			OFF	ON					
	HARDEST			ON	ON					
MAGIC GAUGE INCREASE SPEED	NORMAL					OFF	OFF			
	FAST					ON	OFF			
	SLOW					OFF	ON			
	VERY SLOW					ON	ON			
FACTORY	DO NOT CHANGE							OFF		DO NOT CHANGE
ATTRACT MODE SOUND	NO								OFF	
	YES								ON	
FACTORY SETTINGS		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	

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Wizard Fire

REPLACEMENT PARTS

NOTE: *The following parts lists contain DATA EAST Part Numbers for only the major replaceable parts for each assembly. If a required part is not listed, contact the DATA EAST Customer Service Department.*

REPLACEMENT PARTS LIST

Part Number	Description
001-0016-00	Switching regulator, Power Plus, 150
010-0009-00	Isolation Transformer, 1 amp @ 115 VAC
031-0007-00	Speaker, 5 X 7, 16 , Oval (#M2757A)
036-0319-00	Harness, Marquee Lamp
036-0320-00	Harness, Main, CA&A
040-0003-00	Tie wrap 4, thin
055-0017-00	Wire Joint, 18-16 AWG
055-0025-00	Quick disconnect terminals
165-0004-01	Lamp, incandescent, 40W
170-0002-00	Fixture, light bulb, 660W 250V
231-0001-10	Bolt, 1/4-20 X 1-3/4, hex
232-0002-01	Screw, Panhd #8 Phillips 5/8 SMS
232-0004-03	Screw,#10 X 1 Phillips Panhead
232-0007-07	Screw,#6-32 x 1-1/4, Phillips Panhead
233-0001-00	Screw,#8 X 5/8 Phillips flat hd SMS
233-0001-03	Screw, Flathd, Phillips, #8 X 1-1/4 SMS
237-0008-00	Screw,#8 X 5/8 Phil Pan Washer hd Blk AB
242-0016-00	Flat washer, SAE, 9/32 ID X 5/8 OD
242-0024-00	Washer Black #6
242-0026-00	Washer, Fender #10 O.D.=1
244-0002-00	Washer split lock 1/4 ID
365-0027-00	Cabinet Assy 1US52-4P-39.5
366-0101-00	Rear door, Model 1US52-4P-39.5
366-0102-00	Wood bezel, Model 1US52-4P-39.5
380-0005-00	Bezel,Black 25
406-0180-27	Button ID Tag Left Player
406-0180-28	Button ID Tag Right Player
406-0180-16	Button ID Tag Attack

REPLACEMENT PARTS CONTINUED

Part Number	Description
406-0002-00	Label Warning FBI
406-0003-00	Label Warning FCC
406-0004-00	Label Serial # Data East
406-0472-00	Caution label
406-0543-00	Label, Game & PCB serial #
510-0190-00	Monitor, universal, 25, Wells Gardner
510-0232-00	Coin door 4 slot with box, lid & frame
036-0318-01	Harness,control panel
040-0003-00	Tie wrap 4 thin
180-0024-00	Pushbutton assy, black, w/microswitch
180-0024-02	Pushbutton assy, red, w/microswitch
180-0024-06	Pushbutton assy, blue, w/microswitch
234-0013-04	#10-24 x 1 1/4 buttonhead ms,black
239-0001-00	#10-24 nut, kep captive lck 10-24
242-0010-00	#10 flat washer, black
366-0137-00	Control panel base, model 1USxx-2p-30
366-0136-00	Control panel top, model 1USxx-2p-30
450-0015-51	Joystick, 8 way, unassy, Super
535-0196-00	Retainer, control panel
800-0063-00	Overlay,control panel
520-0144-00	PCB, Wizard Fire
535-0082-00	Plate,switch mounting
180-0023-00	Switch, toggle,dpst
036-0278-00	Harness,switch plate
036-0321-00	Harness,service panel
090-0002-00	Coin/ticket counter meter w/ diode
123-0008-11	Pot wire wound 100 4 watt
232-0021-07	Screw, #4-40 X 1/2 inch panhead ms

REPLACEMENT PARTS CONTINUED

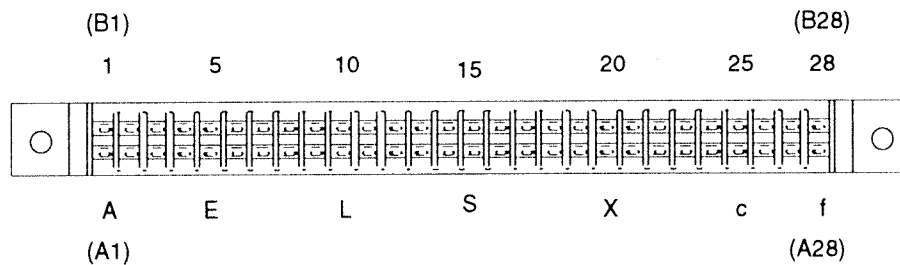
<u>Part Number</u>	<u>Description</u>
406-0180-26	Button ID Tag Magic
406-0096-00	Label, volume
535-0232-01	Service panel bracket
535-0195-00	Retainer,plex,top
535-0201-00	Retainer, plex, bottom
660-0003-00	Fish paper 4 x 8, used on power supply
660-0014-03	Plex, clear, mon, 27-7/16 X 25-5/16 X 3/16
780-0219-00	Manual
810-0059-00	Underlay, monitor
820-0040-00	Decal,side Generic
830-0065-00	Marquee
406-0542-00	Label, Instruction
400-0003-00	Leg Levelers, 3/8 X 1-1/4"

Wizard Fire

WIRING DIAGRAMS

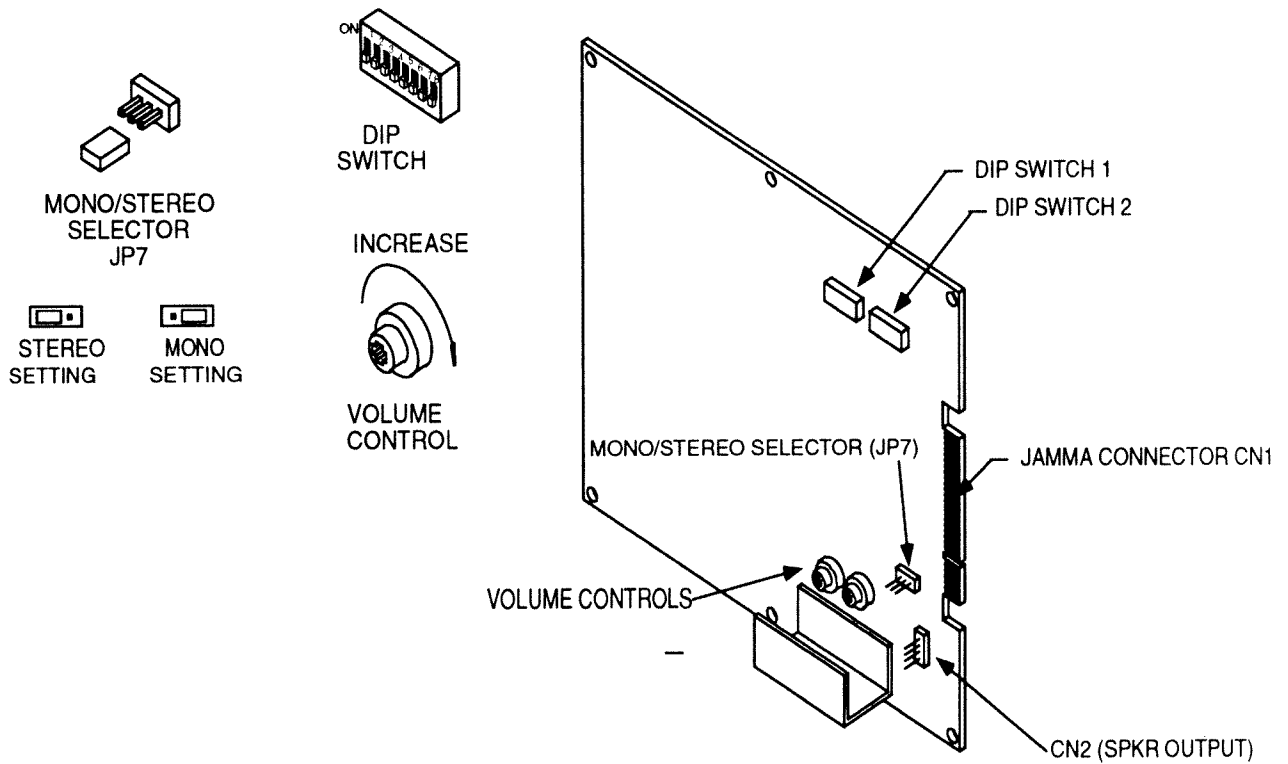
JAMMA CONNECTOR WIRING

SOLDER SIDE			COMPONENT SIDE		
COLOR	PIN	SIGNAL	COLOR	PIN	SIGNAL
BLK	A	GROUND	BLK	1	GROUND
BLK	B	GROUND	BLK	2	GROUND
RED	C	+5VDC	RED	3	+5VDC
RED	D	+5VDC	RED	4	+5VDC
YEL	E	-5VDC	N/C	5	-5VDC
ORN	F	+12VDC	ORN	6	+12VDC
N/A	H	BLOCKING KEY	N/A	7	BLOCKING KEY
BLU/GRN	J	COIN COUNTER 2	RED/GRN	8	COIN COUNTER 1
N/C	K		N/C	9	
N/C	L	SPEAKER (-)	N/C	10	SPEAKER (+)
N/C	M	AUDIO (GND)	N/C	11	AUDIO (+)
GRN/BLK	N	VIDEO GREEN	RED/BLK	12	VIDEO RED
WHT	P	VIDEO SYNC	BLU/BLK	13	VIDEO BLUE
ORN/BLK	R	SERVICE SWITCH	WHT/BLK	14	VIDEO GND
N/C	S		N/C	15	TEST SWITCH
GRN/BLU	T	COIN SWITCH 2	RED/BLU	16	COIN SWITCH 1
RED/YEL	U	START SWITCH 2	RED/WHT	17	START SWITCH 1
GRN/YEL	V	2P CONTROL 1 UP	GRN/WHT	18	1P CONTROL 1 UP
BLU/YEL	W	2P CONTROL 2 DOWN	BLU/WHT	19	1P CONTROL 2 DOWN
BLK/YEL	X	2P CONTROL 3 LEFT	BLK/WHT	20	1P CONTROL 3 LEFT
VIO/YEL	Y	2P CONTROL 4 RIGHT	VIO/WHT	21	1P CONTROL 4 RIGHT
BRN/YEL	Z	2P CONTROL 5 PUSH 1	BRN/WHT	22	1P CONTROL 5 PUSH 1
WHT/YEL	a	2P CONTROL 6 PUSH 2	YEL/WHT	23	1P CONTROL 6 PUSH 2
N/C	b		N/C	24	
N/C	c		N/C	25	
N/C	d		N/C	26	
BLK	e	GROUND	BLK	27	GROUND
BLK	f	GROUND	BLK	28	GROUND

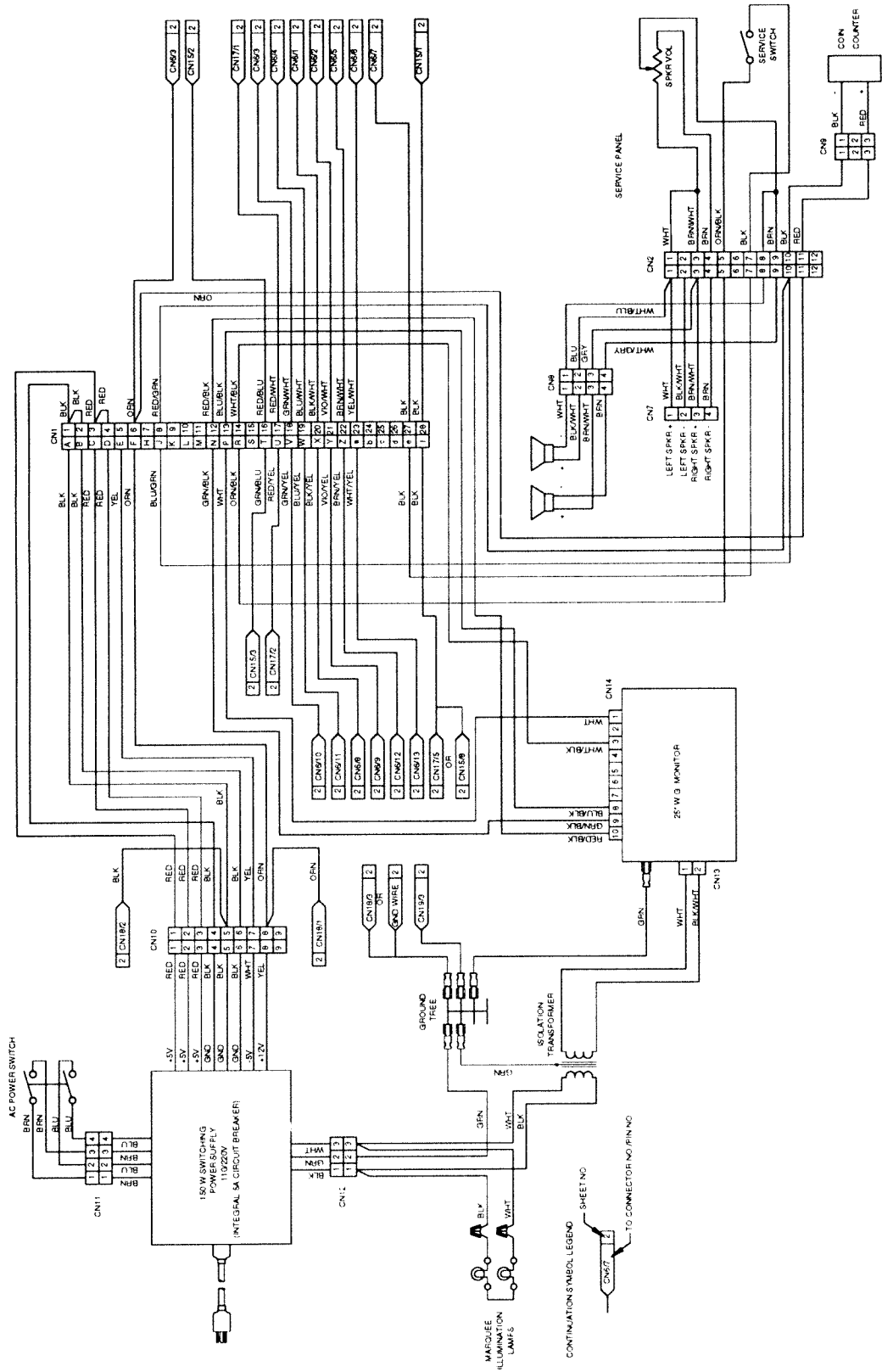


CONNECTOR PIN NUMBERING

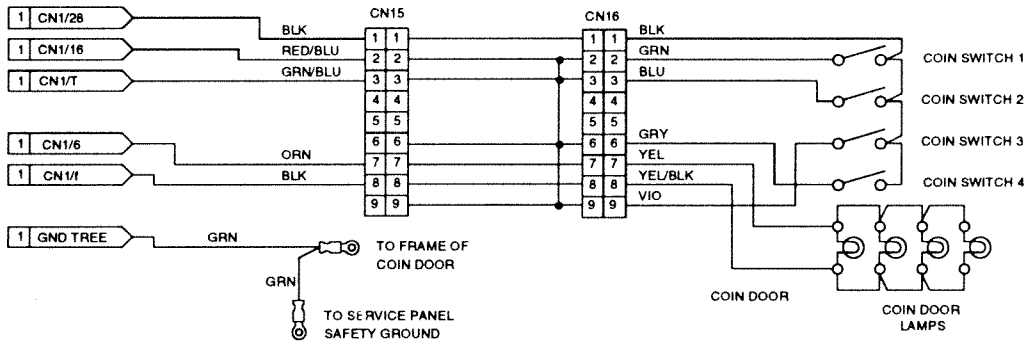
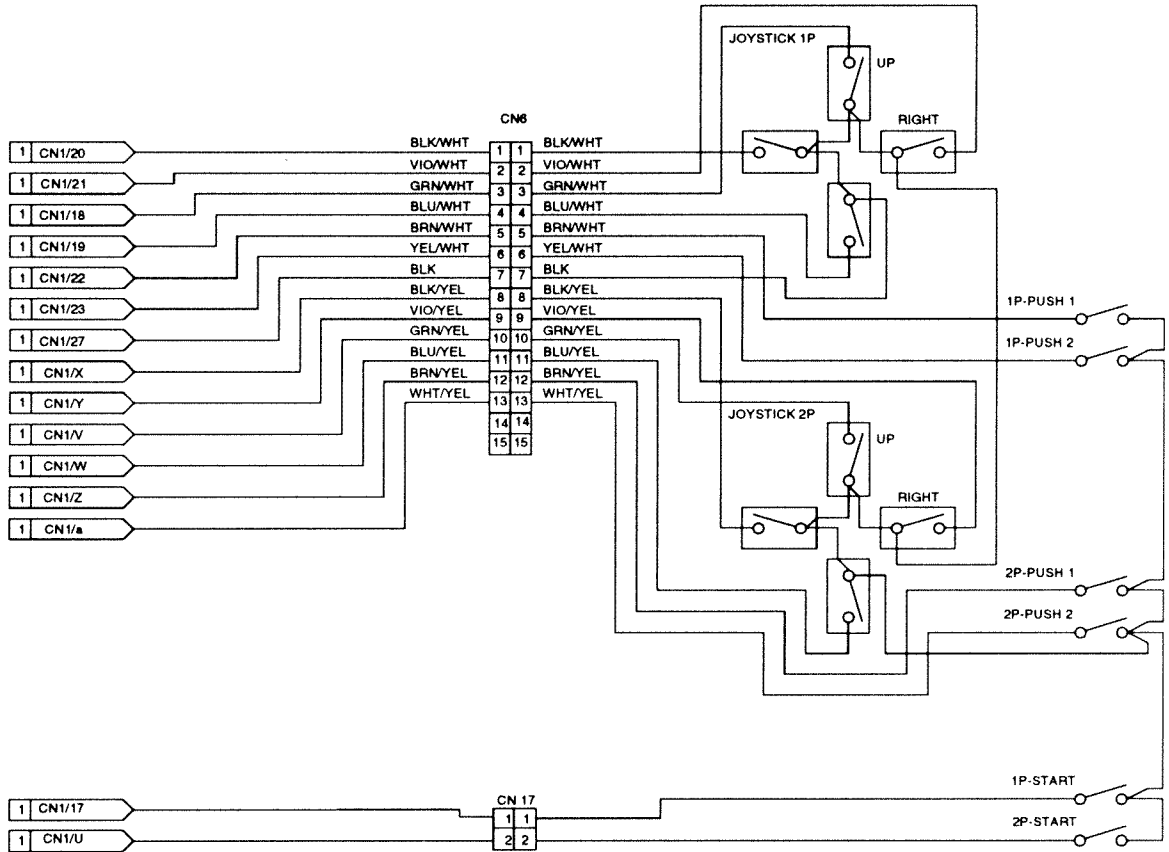
LOCATION OF CONTROLS ON GAME PCB



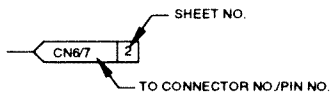
WIRING DIAGRAM SHEET 1 OF 2



WIRING DIAGRAM SHEET 2 OF 2



CONTINUATION SYMBOL LEGEND:



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WARRANTY INFORMATION

DATA EAST USA, INC, ("Seller"), warrants to the original purchaser ("Buyer"), of its products that the terms listed below are free from defects in materials and workmanship under normal use and service for the period specified:

GAME LOGIC PRINTED CIRCUIT BOARD(S) 90 DAYS

No other parts of the Seller's products are warranted.

Warranty periods are effective from date of initial shipment from Seller to Buyer. Seller's sole liability shall be, at its option, to repair or replace products which are returned to Seller during the warranty period specified, provided:

1. Seller is notified promptly upon discovery by buyer that stated products are defective.
2. Such products are properly packaged and then returned freight pre-paid, to a place specified by seller.

This warranty does not apply to products damaged during shipment and/or due to improper handling, or due to improper installation or usage, or alteration. In no event shall Seller be liable for any anticipated profits, loss of profits, loss of use, accidental or consequential damages, or any other losses incurred in connection with the purchase of a Data East USA, Inc. product.

Except as specifically provided in a written contract between seller and buyer, there are no other warranties, expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose.

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