ATOMIC ROBO-KID
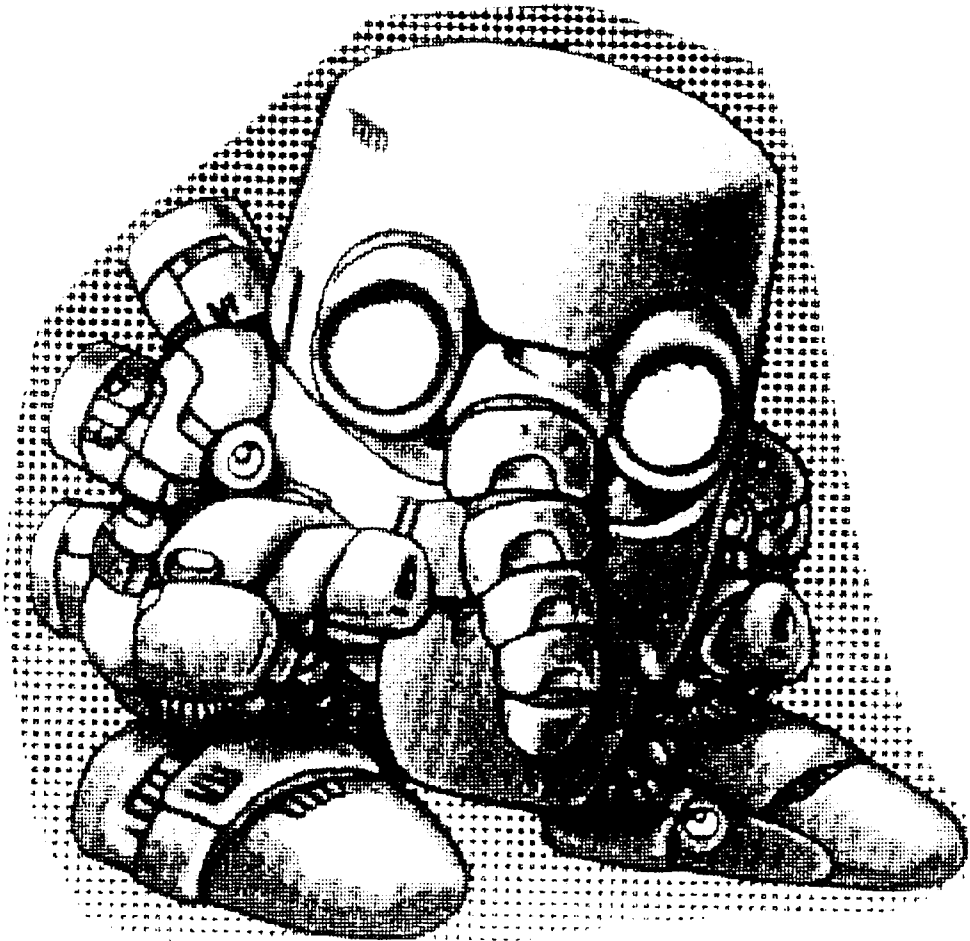
UPL/NIKØM, INC.

ATOMIC ROBO-KID

OPERATING MANUAL WITH SWITCH OPTION SETTINGS (DIPSWITCH), AND SCHEMATICS

Original scan by: ???????

F.C.C. REGULATION COMPLIANCE

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 the F.C.C. rules which are designed to provide reasonable protection against such interference when operated in a commercial environment.

F.C.C. requires that the sticker that comes with this kit must be on the back of the machine or elsewhere visable when inspected.

KIT CONTENTS

1. ATOMIC ROBO KID PC BOARD
2. ATOMIC ROBO KID MARQUEE
3. CONTROL PANEL OVERLAY
4. CONTROL PANEL LABELS, INSTRUCTION CARD
5. CONTROL PANEL PLEXI
6. WIRING HARNESS
7. MONITOR BEZEL
8. JOYSTICK
9. BUTTON AND SWITCH ASSEMBLIES
10. "NEW GAME" SIGN
11. INSTRUCTION MANUAL

MONITOR REQUIREMENTS: This game requires a horizontally mounted raster scan monitor with negative composite sync.

POWER REQUIREMENTS: +5 Volts DC at 7 amps
                            +12 volts DC at 1 amp

CONVERSION PROCEDURE

1. PREPARING THE CABINET

    A. Remove the old circuit board
    B. Remove the control panel, marquee, and any
       side graphics.
    C. Remove the old wiring harness being careful
       to leave the AC wiring to monitor, power supply,
       on/off switches, and transformer circuitry.

    Clean the cabinet thoroughly and repair any visible damage.
Painting the cabinet can give your game a "new game" look and
can enhance the earning power of your game. If the monitor
screen is scratched it should be replaced.

2. KIT INSTALLATION

    A. Securely mount the PC board to the cabinet
    B. Attach the wiring harness to the PC board. The
       connector should be keyed so that it cannot be
       hooked up backwards. Even if the connector is
       keyed, check to make sure the wire inputs were
       connected correctly to the connector, and from
       the connector to the PC board. The JAMMA label
       on the connector should face the component side
       of the PC board.
    C. Route the wires labeled "VIDEO" up to the
       monitor. Attach the wires to the monitor's main
       circuit board as shown below. The color code is
       as follows
                    Red wire -----video red
                    Green wire ---video green
                    Blue wire ----video blue
                    Black wire ---video ground
                    White wire ---negative composite sync

WELLS GARNER   ELECTRO HOME
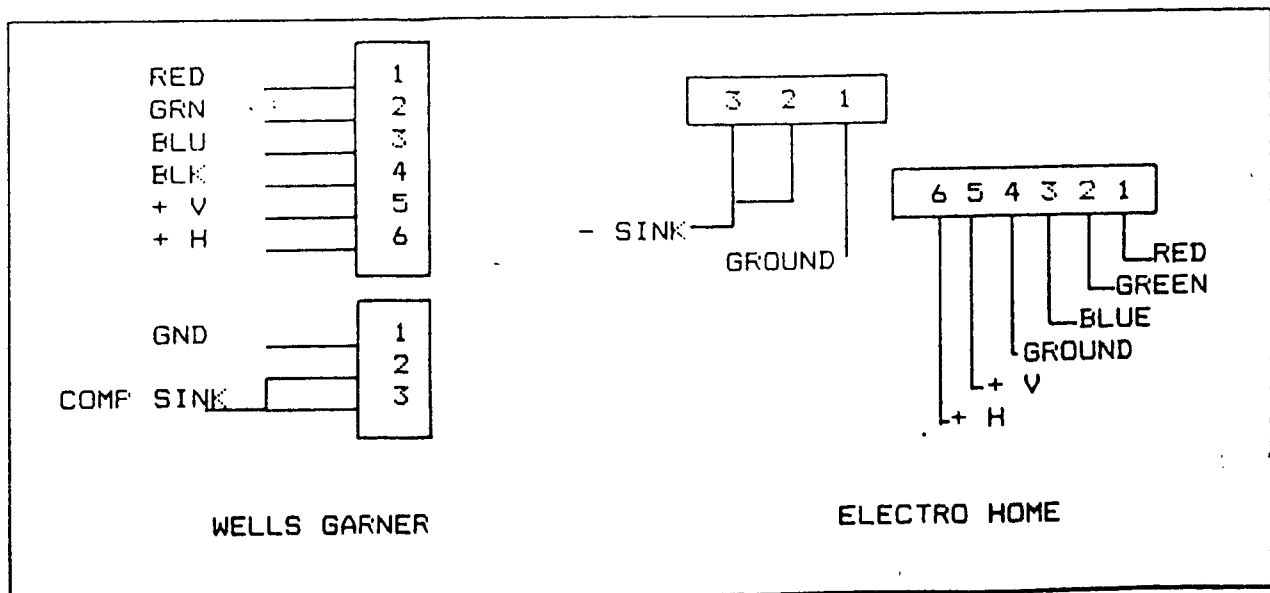
D. Route the wires labeled "POWER" to the power supply. Connect them as follows:

> Red wire ---- +5VDC
> Yellow wire -- +12VDC
> Black Wire --- Ground

The blue wire is for -5VDC which is not required for this game. You can use the -5V to power the coin door lights if desired.

E. Find the two wires labeled "SPEAKER" and connect to the speaker. If the sound is scratchy or distorted try reversing the wires.

F. Find the wires labeled "COIN" and route to the coin door. Coin switch 1 and coin switch 2 are wired to the N.O.(normally open) terminal of the microswitch. A ground wire will go to the common terminal.

3. CONTROL PANEL

A. Remove old control panel buttons and joystick(s). Do not remove the old overlay until the new holes have been drilled.
B. Mark and drill the new holes. File any burrs so that the control panel surface is smooth. Remove the old overlay.
C. Using the control panel as a template, drill the holes for the control panel plexi. To cut the plexi to size, score deeply with a razor knife or a plastic cutter. Break away the excess with pliers.
D. Peel the top half of the protective backing off of the new overlay. Start from the center and smooth the overlay as you go. Leave about one inch of the overlay coming off the top.

SUGGESTED CONTROL PANEL LAYOUT
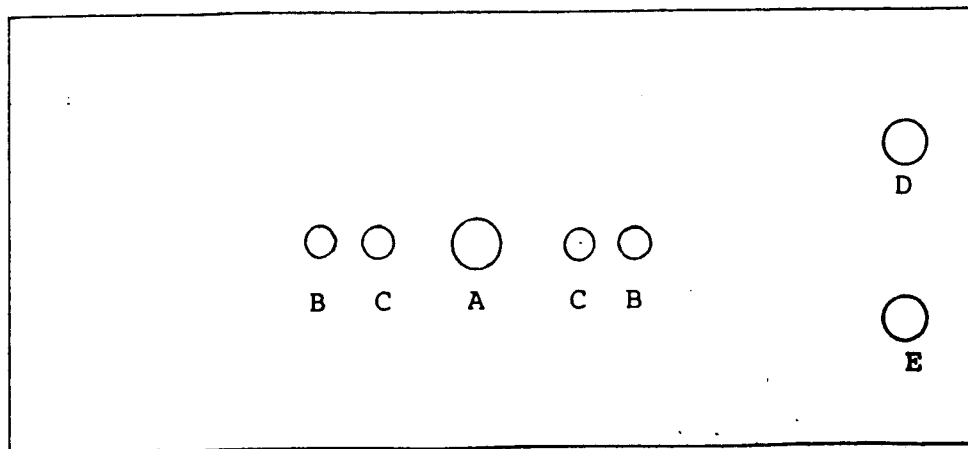
A: JOYSTICK B: WEAPON SELECT C: FIRE
D: PLAYER 1 START E: PLAYER 2 START

E. Adhere the control panel function labels.
F. Install the control panel plexi and mount the new buttons and joystick.
G. Hook up the control panel wires. Use the existing control panel harness if possible.

4. MARQUEE INSTALLATION

A. Use the original marquee as a template. Score the new marquee deeply and break off the excess with pliers. Before installing the new marquee, make sure the light fixture behind the marquee is working.

NOTES:

TROUBLE SHOOTING

1. NO SOUND, NO PICTURE
   * check for +5 volts at pin #4 (red) and pin #1 (black) with a voltmeter.
   * refer to monitor manual and check monitor for proper voltage.

2. GAME HAS SOUND BUT NO PICTURE
   * check AC supply to monitor
   * check 5 wires to monitor: red, green, blue, sync, and monitor ground.

3. GAME HAS PICTURE BUT NO SOUND
   * check the two speaker wires. (pin #10 and L)
   * check for +12 volts at pin #6.
   * make sure both speaker wires are isolated from ground.

4. GARBAGE ON THE SCREEN
   * adjust power supply so that you have exactly +5 volts at pin #4.
   * make sure all socketed EPROMS are securely seated.

5. PICTURE SCROLLS
   * recheck connections of SYNC and GROUND between the monitor and the edge connector.
   * change sync polarity of your monitor by using a 74LS-04 inverter.

6. PICTURE UPSIDE DOWN
   * turn the picture tube 180 degrees, or switch the two horizontal yoke wires and then the two vertical wires.
   * see dip switch settings in this manual for screen inversion.

E. Adhere the control panel function labels.
F. Install the control panel plexi and mount the new buttons and joystick.
G. Hook up the control panel wires. Use the existing control panel harness if possible.

4. MARQUEE INSTALLATION

A. Use the original marquee as a template. Score the new marquee deeply and break off the excess with pliers. Before installing the new marquee, make sure the light fixture behind the marquee is working.

NOTES:

"ATOMIC ROBO KID" DIP SW INSTRUCTION

D I P S W 1		1	2	3	4	5	6	7	8
ROBO KID, NUMBER OF LIVES	3	OFF	OFF						
	2	OFF	ON						
	4	ON	OFF						
	5	ON	ON						
DEMO SOUND	OFF			OFF					
	ON			ON					
TABLE TYPE					OFF				
UP-RIGHT TYPE					ON				
FREE PLAY	OFF					OFF			
	ON					ON			
DIFFICULTY	NORMAL						OFF		
	HARD						ON		
BONUS 50K, every 100K								OFF	
~~BONUS 50K ONLY~~ No Bonus								ON	
SCREEN INVERSION									OFF
									ON

D I P S W - 2	1	2	3	N O U S E
1 COIN 1 PLAY	OFF	OFF	OFF	
1 COIN 2 PLAY	OFF	OFF	ON	
1 COIN 3 PLAY	OFF	ON	OFF	
1 COIN 4 PLAY	OFF	ON	ON	
2 COIN 1 PLAY	ON	OFF	OFF	
3 COIN 1 PLAY	ON	OFF	ON	
4 COIN 1 PLAY	ON	ON	OFF	
5 COIN 1 PLAY	ON	ON	ON	

UPL COMPANY LIMITED

ATOMIC ROBO KID

SOLDER SIDE			COMPONENT SIDE
GND	A	1	GND
GND	B	2	GND
+ 5 V	C	3	+ 5 V
+ 5 V	D	4	+ 5 V
	E	5	
+ 1 2 V	F	6	+ 1 2 V
	H	7	
	J	8	
COIN COUNTER 2	K	9	COIN COUNTER 1
SPEAKER (−)	L	10	SPEAKER (+)
	M	11	
VIDEO (GREEN)	N	12	(RED)
VIDEO (SYNC)	P	13	(BLUE)
	R	14	(GND)
	S	15	
COIN SW 2	T	16	COIN SW 1
START SW 2	U	17	START SW 1
2P CONTROL 1 UP	Y	18	1P CONTROL 1 UP
2P CONTROL 2 DOWN	W	19	1P CONTROL 2 DOWN
2P CONTROL 3 LEFT	X	20	1P CONTROL 3 LEFT
2P CONTROL 4 RIGHT	Y	21	1P CONTROL 4 RIGHT
2P CONTROL 5 PUSH 1	Z	22	1P CONTROL 5 PUSH 1
2P CONTROL 6 PUSH 2	a	23	1P CONTROL 6 PUSH 2
	b	24	
	c	25	
	d	26	
GND	e	27	GND
GND	f	28	GND

COMMAND ENTRY INSTRUCTION

The COMMAND ENTRY feature allows the player the opportunity to start a game at an advanced level. WRITE DOWN THE COMMAND ENTRY CODE FOR FUTURE USE. It is the flashing number shown at the end of games finishing at ACT 5 or higher. To access COMMAND ENTRY follow these instructions:

* INSERT COIN
* HOLD DOWN FIRE BUTTON
* PRESS PLAYER 1 START
* USE JOYSTICK AND FIRE BUTTON TO ENTER CODE. (example: CPF-1842)

ATOMIC ROBO-KID

- Collect power-up crystals to enhance Robokids firepower.

- When more than one crystal has been captured, use weapon select button to choose desired weapon.

- 40 different stages in all.

PLAYER 2

PLAYER 1

FIRE

WEAPON SELECT

FIRE

WEAPON SELECT