Standard Jamma pinout

Parts side	Pin		Solder side
Gnd	1	A	Gnd
Gnd	2	B	Gnd
+5vdc	3	C	+5vdc
+5vdc	4	D	+5vdc
-5vdc	5	E	-5vdc
+12vdc	6	F	+12vdc
	7	H	
Coin counter 1	8	J	Coin Counter 2
	9	K	
Speaker +	10	L	Gnd (speaker)
	11	M	
Video Red	12	N	Video Green
Video Blue	13	P	Video Sync
Gnd (Video)	14	R	Service Switch
	15	S	
Coin Sw. 1	16	T	Coin Sw. 2
Start 1	17	U	Start 2
1P Up	18	V	2P Up
1P Down	19	W	2P Down
1P Left	20	X	2P Left
1P Right	21	Y	2P Right
Push 1	22	Z	Push 1
Push 2	23	a	Push 2
Push 3	24	b	Push 3
Spare 1	25	c	Spare 1
Spare 2	26	d	Spare 2
Gnd	27	e	Gnd
Gnd	28	f	Gnd

Escape from the Planet of Robot Monsters pinout

Parts side	Pin		Solder side
Gnd	1	A	Gnd
Gnd	2	B	Gnd
+5vdc	3	C	+5vdc
+5vdc	4	D	+5vdc
-5vdc	5	E	-5vdc
+12vdc	6	F	+12vdc
	7	H	
Coin counter 1	8	J	Coin Counter 2
	9	K	
Speaker +	10	L	Gnd (speaker)
	11	M	
Video Red	12	N	Video Green
Video Blue	13	P	Video Sync
Gnd (Video)	14	R	Service Switch
	15	S	
Coin Sw. 1	16	T	Coin Sw. 2
	17	U	
Duck	18	V	Duck
	19	W	
Jump	20	X	Jump
	21	Y	
Fire	22	Z	Fire
	23	a	
	24	b	
PL.1 Left & Rt.	25	c	PL.2 Left & Rt.
PL.1 Up & Dn.	26	d	PL.2 Up & Dn.
Gnd	27	e	Gnd
Gnd	28	f	Gnd

Player 1	Pin		Player 2	Pin		
*Jump (run jumper to pin 17 and pin 24	17	U	*Jump (run jumper to pin U and pin b	17	U	
Jumper Up & Dn and connect to pin 25	18	V	Jumper Up & Down and connect to pin c	18	V	Duck
	19	W		19	W	
Jumper Left & Rt and connect to pin 26	20	X	Jumper Left & Right and connect to pin d	20	X	Jump
	21	Y		21	Y	
Fire	22	Z	Fire	22	Z	Fire
Duck	23	a	Duck	23	a	
*Jump	24	b	*Jump	24	b	
**Connect to Hall Ef. Pcb pin 4 (Y)	25	c	** Connect to Hall Ef. Pcb pin 4 (Y) & -->	25	c	PL.2 Left & Rt.
***Connect to Hall Ef. Pcb pin 1 (X)	26	d	***Connect to Hall Ef. Pcb pin 1 (X) & -->	26	d	PL.2 Up & Dn.

You will need 2 Hall Effect PCbs (one per player side)

You will have to run a +5vdc wire to replace the ground wire on the joystick "up and left" micro switches for both player 1 and 2 joysticks unless you add the relays mentioned below

Hall Effect pcb pin out
***pin 1 = X
pin 2 = +5vdc
pin 3 = ground
**pin 4 = Y

This is an inter-connect harness that goes between this Logic board and a standard Jamma harness

The Hall Transistors will have to be replaced with a 10k trim pot.
and lastly, you will need to calibrate the joystick by entering into the test mode
and the first screen you see is the calibration screen. First, reset the joystick
data by pressing the 2nd player FIRE and JUMP at the same time. NOW, you need to adjust the Pots
on the Hall Effect PCBs until the red background colors around the "up, down, left ,and right" disappear. That's all!

To circumvent the + 5 wire to the joysticks: purchase 4) +5vdc SPDT or SPST relays (Radio Shack) and wire the "+"
side of the control coil and the "normally open" pin to +5vdc from the jamma harness on all 4 relays.
Now, on both 1 and 2 player, the UP and LEFT need to go to the relay (each pin has a separate relay) CONTROL COIL
ground terminal on the relays. Now, a wire needs to be connected from the COMMON terminal of the relay back to
the respective pin on the jamma adapter.   It's important to know that to run these jumpers, it is easiest to cut the trace
on the Jamma finger board *and the trace* that leads to the wire harness going to the cabinet switches, etc… is the wire
that is connected to the relay control coil ground. And the wire that comes **from** the relay *Normally Open* terminal is
 the one that returns to the other-side of the cut trace on the Jamma finger board.
With the relays, it is not necessary to run any wires to the joysticks. The "Jamma adapter" is self contained.
I use Silicone household glue and glue the relays on the Jamma finger board after they were connected.
I am sure that there is a transistor that would do the job just as well, but this is beyond my technical skills.