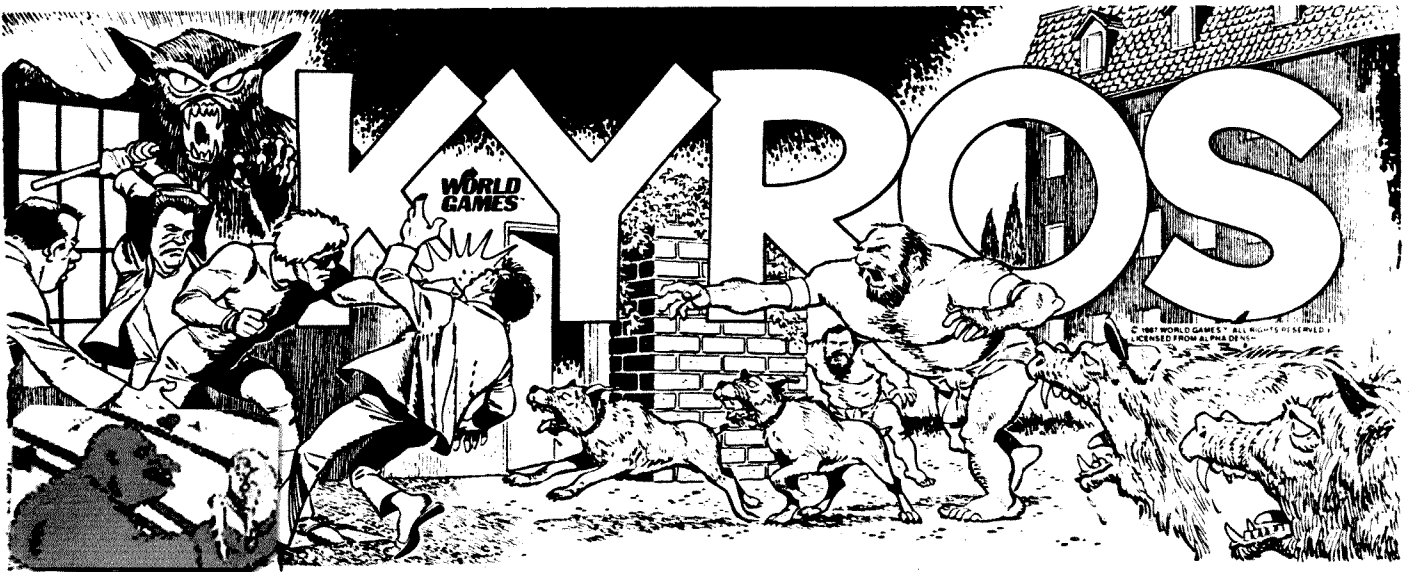


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# KYROS™ INSTRUCTION MANUAL



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**WORLD  
GAMES™**

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## REQUIRED TOOLS AND SUPPLIES

SCREWDRIVER  
WIRE CUTTERS  
DRILL WITH BITS  
SOLDERING IRON AND SOLDER  
PLIERS  
PHILLIPS SCREWDRIVER  
HEX DRIVER  
180' GRIST SANDPAPER  
X-ACTO KNIFE  
HEAT SHRINK TUBE  
JIGSAW OR TABLESAW W/ CARBIDE-TIPPED BLADE

## IMPORTANT F.C.C. WARNING

### WARNING

This equipment generates, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. As temporarily permitted by regulation it has not been tested for compliance pursuant to subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to take whatever measures may be necessary to correct the interference.

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POWER REQUIREMENTS		MONITOR REQUIREMENTS
+ 5 VDC	7 amp minimum	Vertical Mount Raster Scan
+12 VDC	1 amp minimum	Negative Composite Sync

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### PREPARING THE CABINET

1. Remove the old P.C. board
2. Remove the control panel
3. Remove the marquee
4. Remove any other graphics
5. Remove the old wire harness

NOTE: If the power supply in the existing game does not clearly (1) identify the ground, +5, and +12 voltages, you will need to do so. This may be done by following the wire harness to the power supply section of the game and using a volt-ohm meter. With the meter set on the D.C. volt scale, put the black lead on the ground wire, usually the black wire. Add the red lead on the other wires until you can identify the +5, and +12 volts. Label these for further reference.

NOTE: In installing the conversion kit, it will be necessary to (2) splice into the existing wires so we will need to save all existing connections. Cut the wire about six inches back of the currency to save them for future use.

### INSTALLING THE NEW GAME

NOTE: Never under any circumstances perform any portion of the installation with the power on.

1. Install the P.C. board. KYROS comes with the monitor hardware already attached to the P.C. board. Using some sort of wood screws, just attach the board to the inside of the away from the power supply, if possible.
2. Connect the wire harness to the P.C. board. Be careful that the side labeled panel faces up so you can see it when looking at the P.C. board.
3. Connect the power supply using the heavy gauged wires. Connect them like this:
  1. red to +5
  2. orange to +12
  3. black to ground.
4. Connect the monitor in this fashion:
  1. red wire to red
  2. blue wire to blue
  3. green wire to green
  4. black wire to ground
  5. grey wire to sync.

NOTE: This game generates a composite sync. This means if the  
(1) monitor in your game needs + horizontal and A vertical sync signal, you will have to splice the sync wire into two wires hooking one to the horizontal and the other to the vertical sync.

NOTE: Also note that this game generates a negative sync, so if  
(2) your monitor offers a positive and a negative sync placement be sure to use the negative placement.

NOTE: Speakers. There are only two wires used to connect the  
(3) speaker. Generally, if you connect the dark colored wire coming from the wire harness to the dark colored wire coming from the speaker, and the light colored wire from the harness to the light colored wire from the speaker you will get the best sound.

NOTE: Connecting the coin door there are three wires needed  
(4) for the coin door.

1. Connect the black wire to the ground side of the coin switch(s).
2. The coin wire should be connected to the other side of the coin switch, or if there are three terminals connect this wire to the terminal named N.O.
3. The smaller (left over) red wire marked +5 can be used to hook up a coin meter, if necessary. Remember to put a diode in the coin wire if you are going to use a meter.

## CONTROL PANEL

1. Remove the joystick, buttons, and wire harness.
2. Mark the position of any new holes needed.
3. Drill the new holes.
4. KYROS comes with a plexi protective cover for the control panel. Using your panel as a template, cut the plexi to size and mark the position of all holes needed.
5. Drill the plexi.  
NOTE: To avoid chipping and cracking of the plexi make sure your plexi bits and hole saws.
6. Now that the holes are drilled use a fine-toothed file to remove burrs.
7. Remove the old graphics from the panel and install new graphics.
8. Place instruction labels in correct places.
9. Place the plexi cover on top of the panel and install button, and joystick (use the old ones, if possible).
10. If it is not possible to use the old buttons and joystick, install the new ones included in the kit and wire them in this manner.
  1. Establish a common ground between all points.
  2. Connect the appropriate action wires to their correct places.

NOTE: If there is a connection at the control panel, follow the wires from the points to the connection and connect the action wires from the harness to the other side.

## MARQUEE INSTALLATION



PIN ASSIGNMENT

COMPONENT SIZE		SOLDER SIZE	
1A	+5(V)	1A	+5(V)
2A	+5(V)	2A	+5(V)
3A	1P UP	3A	2P DOWN
4A	1P DOWN	4A	2P RIGHT
5A	1P RIGHT	5A	2P LEFT
6A	1P LEFT	6A	2P (PUNCH)
7A	1P (PUNCH)	7A	
8A	1P (JUMP)	8A	
9A		9A	COIN 1
10A	1P START	10A	COIN 2
11A	2P UP	11A	2P (JUMP)
12A	GREEN	12A	
13A	BLUE	13A	2P START
14A	RED	14A	
15A	SYNC	15A	
16A	GND	16A	GND
17A	GND	17A	GND
18A	GND	18A	GND

COMPONENT SIZE		SOLDER SIZE	
1A	+12(V)	1B	+12(V)
2A		2B	
3A	+5 (V)	3B	+5(V)
4A	SPEAKER(+)	4B	
5A	GND SPEAKER(-)	5B	GND
6A	GND	6B	GND