
**DARKMIST™
INSTRUCTION
MANUAL**



**World Games
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**WORLD
GAMES™**

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REQUIRED TOOLS

1. Screw Drivers
2. Wire Cutters
3. Drill and Drill Bits
4. Soldering Iron and Solder
5. Pliers
6. Hex Head Drivers
7. X-Actor Knife
8. Heat Shrink Tube
9. Jigsaw or Tablesaw
10. 1 1/8" Hole Saw and/or Chasis Punch

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.

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

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, -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 until you can identify the +5, -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 current connectors to save them for future use.

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

INSTALLING THE NEW GAME

1. Attach the included mounting hardware to the Dark Mist P.C. board, and attach it to the cabinet as far away from the power supply as possible.
2. Connect the wire harness to the P.C. board. Making sure the side labeled "Parts Side" is facing up.

NOTE: The Dark Mist wire harness is divided into six smaller bundles. These bundles are all labeled for easy reference.

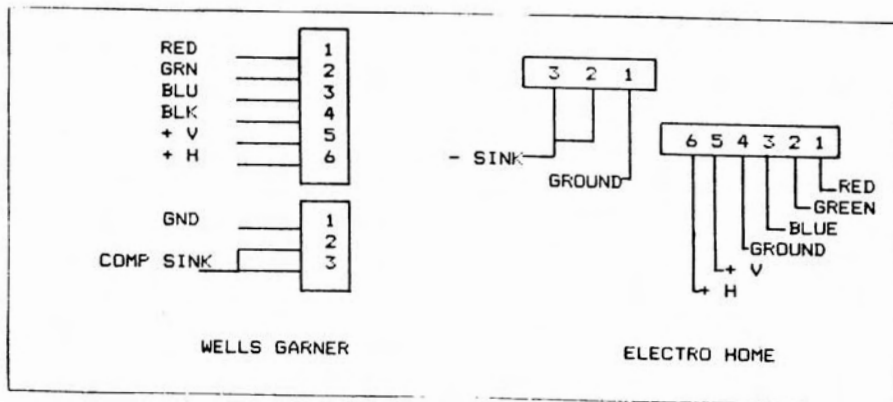
3. Find the bundle labeled power and connect the wires to the Power Supply

1. Red wire to +5 V.D.C.
2. Yellow wires to +12 V.D.C.
3. Blue wires to -5 V.D.C.
4. Black wires to ground.

4. Next find the bundle labeled video and connect the wires to the Monitor

1. Red wire to red input
2. Green wire to green input
3. Blue wire to blue input
4. Black wire to ground input
5. Pink wire to sync input

NOTE: Dark Mist generates a negative composite sync signal. Composite means there will be only one sync wire supplied. If the monitor in your game requires two sync wires, you will need to splice the one sync wire into two parts and connect one part each to the horizontal and vertical sync inputs. Further, if the monitor can accept both a positive and a negative sync signal, then connect the sync wires to the negative section only. If further help is needed please refer to the following diagram.



INSTALLING THE NEW GAME

5. **Speakers** Now find the small two wire bundle labeled speakers, and connect them to the two speaker wires from the cabinet. If you notice a hum in the sound of your Dark Mist game you may want to reverse the connection on these two wires to reduce the hum.

6. **Coin Door** Next find the bundle labeled coin door and connect it to the coin door in this manner.

1. Black wire to the ground or common side of the coin switch(s).
2. Violet wire to the other side of the coin switch. If the coin switch on your game has 3 terminals make sure to connect this wire to the terminal marked N.O.
3. The tan wire is a second coin switch wire. This should be hooked up in the same manner as the first coin wire if you wish to use two separate coin switches. In most cases, both coin switches on a game would be wired together thus making this wire unnecessary.
4. The red wire is a +5 volt line. If you wish to use a coin meter make sure to use a 5 or 6 volt meter. Connect the +5 to one side of the meter and connect another wire providing a coin "pulse" to the other side.

NOTE: Always make sure to use a diode when connecting a coin meter to prevent any chance of damage to the P.C. board.

7. **Control Panel**

1. Remove the old joystick and buttons.
2. Make the position for any new holes, if necessary.
3. Drill the new holes.
4. Using the control panel as a template, cut the included lexan to the correct size, and mark the location of the button holes.

NOTE: It is advisable to include some 3/16" or 1/4" holes towards the outside corners of the plexi. These will be used to help secure the plexi to the control panel to avoid any chance of breaking in the future.

5. Drill the holes.

6. To remove any burrs from the new holes use a fine toothed file.
7. Now remove the old control panel overlay from the panel, and install the new World Games overlay.
8. Locate and install the button labels and instructions in their correct places.
9. Place the new cover over the panel and install the new buttons and joystick which are included in the kit.

NOTE: The buttons contained in the Dark Mist kit have self-contained points, so it will not be necessary to use any outside switches.

10. To connect the control panel, now locate the portion of the wire harness labeled. Cont. #1 and connect it in this manner.
 1. Black wire to one side of the buttons, (it doesn't matter which sides). You must now make a continuous loop. With this ground wire between all of the buttons.
 2. Brown to the one player start button.
 3. Red to the two player start button.
 4. Blue to the joystick RIGHT POINT.
 5. Green to the joystick LEFT POINT.
 6. Orange to the joystick UP POINT.
 7. Yellow to the joystick DOWN POINT.
 8. Violet to the sword button.
 9. Gray to the magic button.
8. Control Panel #2.

These wires are to be used only for cocktail games. Please follow the same wire colors.
9. Marquee Installation.
 1. Using the old marquee sign as a template, cut the Dark Mist marquee to the proper size. This may be done on a table saw, or with a jigsaw with a plexi glass blade, or by deeply scoring the marquee with a razor knife and breaking it on the corner of a table.

DARK MIST
EDGE CONNECTOR

| Wire Color | Solder Side | No. | No. | Component Side | Wire Color |
|------------|---------------------|-----|-----|---------------------|------------|
| BLACK | GND | A | 1 | GND | BLACK |
| BLACK | GND | B | 2 | GND | BLACK |
| RED | +5V | C | 3 | +5V | RED |
| RED | +5V | D | 4 | +5V | RED |
| BLUE | -5 | E | 5 | -5 | BLUE |
| YELLOW | +12V | F | 6 | +12V | YELLOW |
| | (POST) | H | 7 | (POST) | |
| | | J | 8 | | |
| | | K | 9 | | |
| BLACK | SPEAKER (-) | L | 10 | SPEAKER (+) | WHITE |
| | | M | 11 | | |
| GREEN | VIDEO - GREEN | N | 12 | VIDEO - RED | RED |
| PINK | VIDEO - SYNC | P | 13 | VIDEO - BLUE | BLUE |
| | | R | 14 | VIDEO - GND | BLACK |
| | | S | 15 | | |
| TAN | COIN SWITCH - 2 | T | 16 | COIN SWITCH - 1 | VIOLET |
| RED | COIN SWITCH - 2 | U | 17 | COIN SWITCH - 1 | BROWN |
| ORANGE | 2P CONTROL-1 UP | V | 18 | 1P CONTROL-1 UP | ORANGE |
| YELLOW | 2P CONTROL-2 DOWN | W | 19 | 1P CONTROL-2 DOWN | YELLOW |
| GREEN | 2P CONTROL-3 LEFT | X | 20 | 1P CONTROL-3 LEFT | GREEN |
| BLUE | 2P CONTROL-4 RIGHT | Y | 21 | 1P CONTROL-4 RIGHT | BLUE |
| VIOLET | 2P CONTROL-5 PUSH 1 | Z | 22 | 1P CONTROL-5 PUSH 1 | VIOLET |
| GRAY | 2P CONTROL-6 PUSH 2 | a | 23 | 1P CONTROL-6 PUSH 2 | GRAY |
| | | b | 24 | | |
| | | c | 25 | | |
| | | d | 26 | | |
| BLACK | GND | e | 27 | GND | BLACK |
| BLACK | GND | f | 28 | GND | BLACK |

DARK MIST
DIP SWITCH 1

| SWITCH# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | FACTORY SETTING |
|-----------|-----|-----|-----|-----|-----|-----|----|-----|-----------------|
| COIN 1 | 1/1 | OFF | OFF | OFF | | | | | * |
| | 2/1 | ON | OFF | OFF | | | | | |
| | 1/3 | OFF | ON | OFF | | | | | |
| | 4/1 | ON | ON | OFF | | | | | |
| | 1/2 | OFF | OFF | ON | | | | | |
| | 3/1 | ON | OFF | ON | | | | | |
| | 1/5 | OFF | ON | ON | | | | | |
| | 5/1 | ON | ON | ON | | | | | |
| COIN 2 | 1/1 | | | | OFF | OFF | | | * |
| | 2/1 | | | | ON | OFF | | | |
| | 1/2 | | | | OFF | ON | | | |
| | 2/3 | | | | ON | ON | | | |
| TEST OFF | | | | | | OFF | | | |
| MODE ON | | | | | | ON | | | |
| ALWAYS ON | | | | | | | ON | | * |
| FREE OFF | | | | | | | | OFF | * |
| PLAY ON | | | | | | | | ON | |

DIP SWITCH 2

| SWITCH# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | FACTORY SETTING |
|-------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----------------|
| UPRIGHT | | OFF | | | | | | | * |
| TABLE | | ON | | | | | | | |
| DIFFICULTY EASY | | OFF | OFF | | | | | | |
| LEVEL | NORMAL | ON | OFF | | | | | | |
| | HARD | OFF | ON | | | | | | |
| | VERY HARD | ON | ON | | | | | | |
| NUMBER OF PLAYERS | 1P | | | OFF | OFF | | | | |
| | 2P | | | ON | OFF | | | | |
| 3P | | | | OFF | ON | | | | * |
| | 4P | | | ON | ON | | | | |
| EXTRA LIVES | 10/20 | | | | | OFF | OFF | | |
| | 20/40 | | | | | ON | OFF | | * |
| | 30/60 | | | | | OFF | ON | | |
| | 40/80 | | | | | ON | ON | | |
| DEMO OFF | | | | | | | | OFF | * |
| SOUND ON | | | | | | | | ON | |

Power supply

BROWN - AC
Red - +5
BLK - GND
BLU - -5
Yell - +12