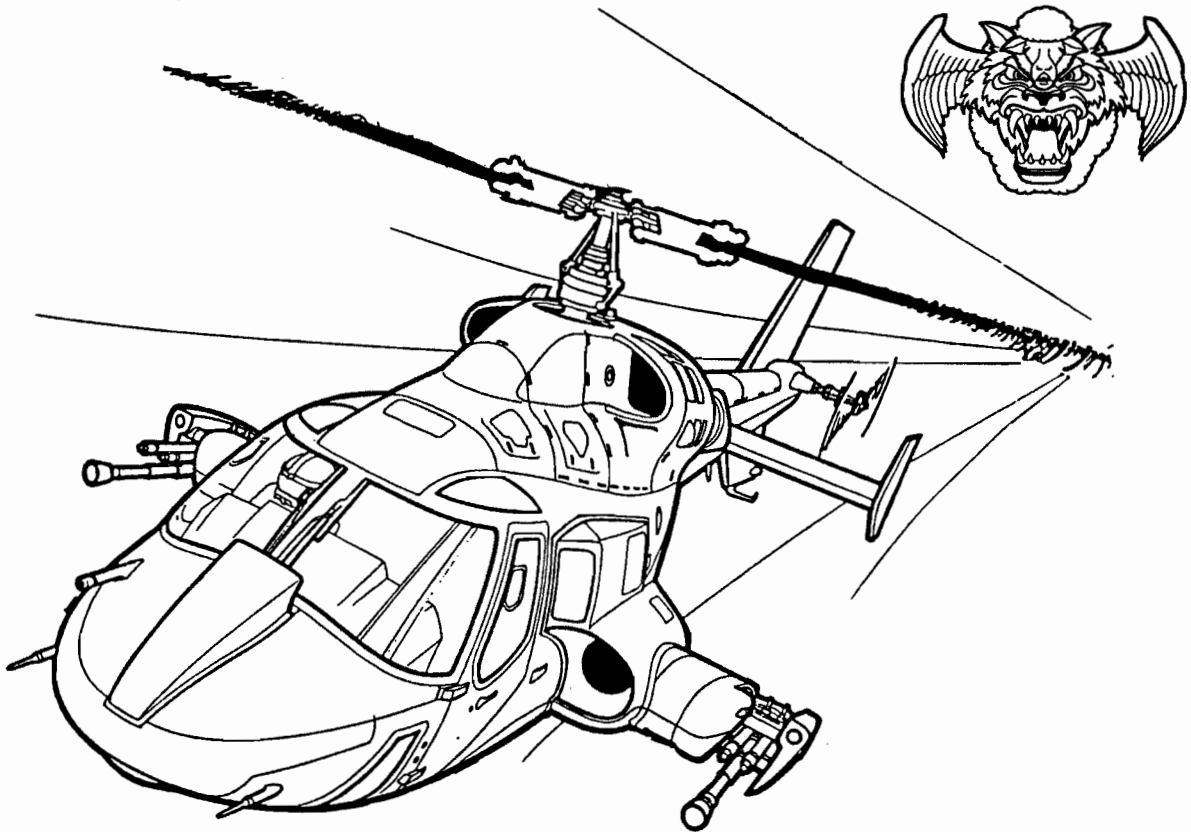


# Flight Instruction MANUAL

# AIRWOLF™

© 1984 Universal City Studios, Inc. All Rights Reserved.  
\*A trademark of and licensed by Universal City Studios, Inc.



© 1987 Kyugo Trading co., Ltd.  
MCA © 1984 Universal City Studios, Inc.  
All Rights Reserved  
A Trademark of and licensed by  
Universal City Studios, Inc.

ALL AMERICAN RIGHTS HELD BY:  
UNITED ARTISTS THEATRE AMUSEMENTS  
PALM SPRINGS, CALIFORNIA



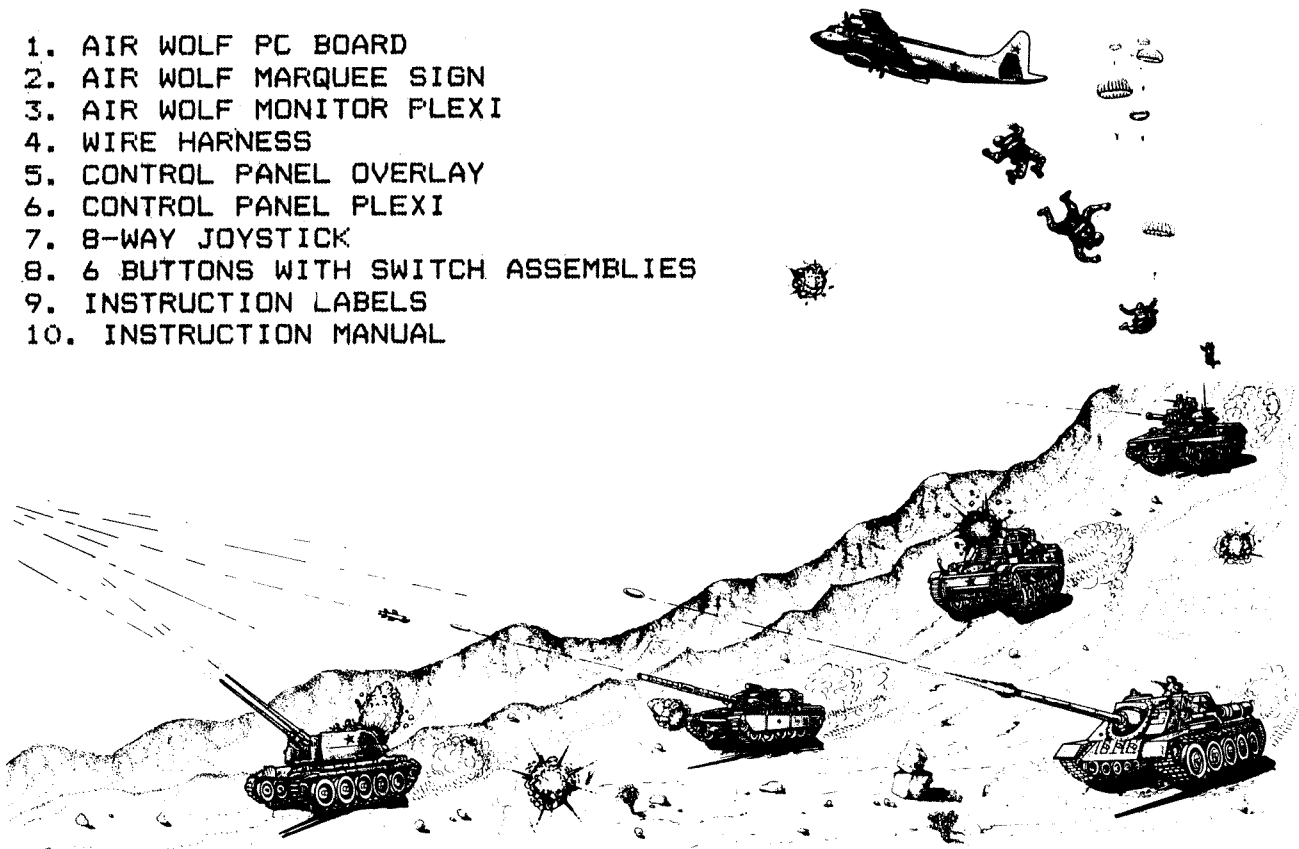
**UNITED AMUSEMENTS**

1975 RIVERSIDE DRIVE  
LOS ANGELES, CA 90039

# 1 800 722 8258

## KIT CONTENTS

1. AIR WOLF PC BOARD
2. AIR WOLF MARQUEE SIGN
3. AIR WOLF MONITOR PLEXI
4. WIRE HARNESS
5. CONTROL PANEL OVERLAY
6. CONTROL PANEL PLEXI
7. 8-WAY JOYSTICK
8. 6 BUTTONS WITH SWITCH ASSEMBLIES
9. INSTRUCTION LABELS
10. INSTRUCTION MANUAL



## IMPORTANT F.C.C. WARNING

### W A R N I N G

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 F.C.C. 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.

## PREPARING THE CABINET

### STEPS:

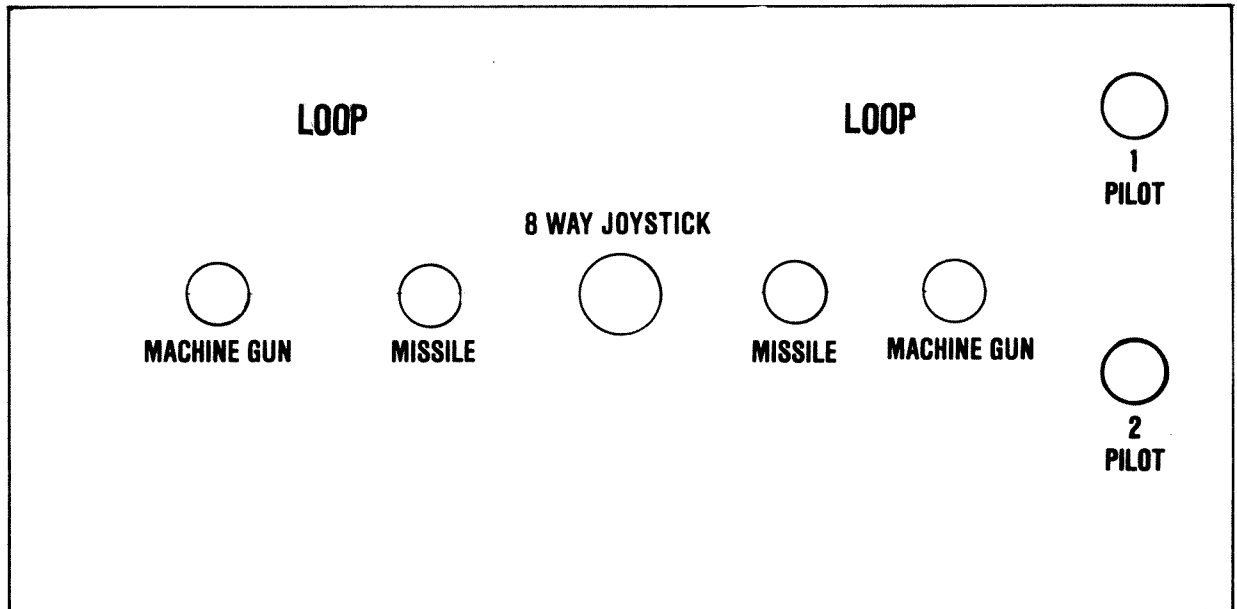
1. Remove the old P.C. board
2. Remove the control panel
3. Remove the marquee sign
4. Remove front or side decals
5. Remove the old wire harness

Leave all the A.C. wiring to monitor, power supply, flourescent lamps, fuses, on/off switches, and transformer circuitry intact. Remove all remaining wiring from the cabinet.

Clean the cabinet thoroughly and repair any visible damage. Using a coat of paint on an older cabinet can restore a "like new" appearance. If needed, painting should be performed at this time.

A little extra time and effort spent now on enhancing a cabinet's appearance will definitely result in increased earning power later!

### SUGGESTED CONTROL PANEL LAYOUT



HORIZONTAL MONITOR MOUNTING

+5, +12, — VOLTS REQUIRED

## **SPECIAL REQUIREMENTS**

---

### TV MONITOR:

This game is designed to be used with a

horizontally   
vertically

mounted R.G.B. monitor, with the PCB as a negative polarity video and sink signals.

Your new game requires one sink wire connection called "composite sink". Tie the horizontal and vertical wires together, this signal is negative. Most monitors have supply positions for both negative and positive sink.

### POWER SUPPLY:

The power supply requirements are as follows:

+5 VDC at 7 amps   
+12 VDC at 1 amps

If the power supply in the game does not meet these requirements, it should be replaced prior to beginning the conversion procedures.

### CONTROL PANEL:

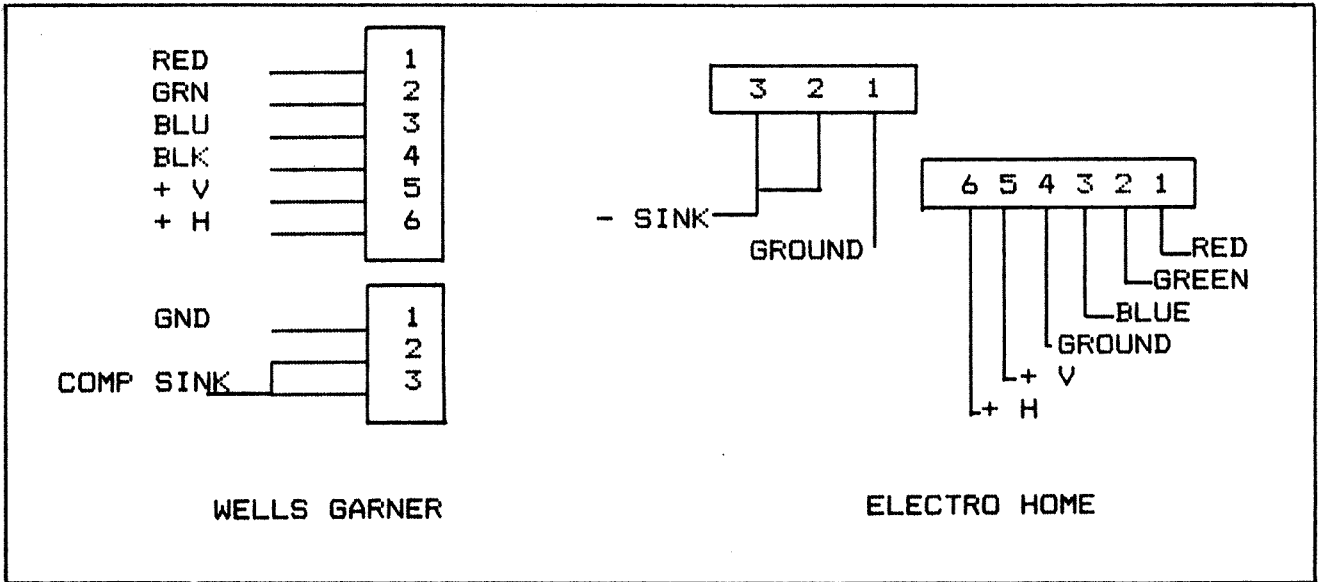
The control panel on the game to be converted can be either metal or wood. When selecting a game to convert consider the placement of joystick, push buttons and the monitor position.

Route the wires labeled control 1 (for upright) to your control panel. Cut this down to the required length. Strip and solder the wires to the joystick, and push buttons according to the pin-out assignments.

# MONITOR WIRING:

Route the wires labelled "VIDEO" or "MONITOR" up to your monitor and cut the excess wire. Refer to the pin-out assignment at the back of this manual for video outputs. 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 COMP. SINK



## POWER SUPPLY WIRING:

Attach the wire harness connector to the main logic PCB.  
\*\*\* CAUTION: Sometimes the connector is not keyed and it is very easy to install it reversed on the logic board. Double check that it is wired and connected properly.  
The label with the game name should face the component side of the PCB.

Separate the bundle of wires labeled "POWER" and route them to your power supply. Strip about 1/2 " off the insulation and attach them to the power supply screws. The color code is:

RED wire # 18	-----	+ 5 VDC
GREEN wire # 18	-----	+ 12 VDC
BLACK wire	-----	GROUND

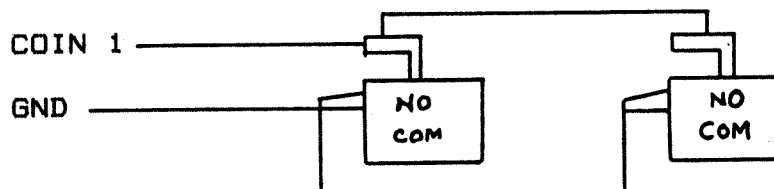
### NOTE:

You can use the -5 VDC to power the lights to the coin door or the lighted push buttons.

## COIN SWITCHES:

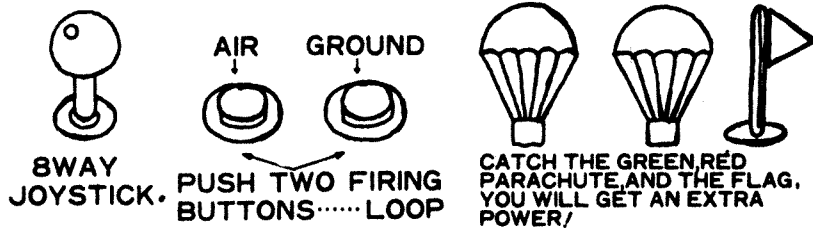
Most games have two coin outputs. Coin 1 must go to the N.O. (normally open) terminal of the microswitch, (same as with coin 2) and a ground wire will go to the common terminal of the microswitch.

If you wish to use a coin meter for both coin mechanisms, connect only one coin output to both coin switches. This will save you the use of two coin meters.



# <CONNECTION OF HARNESS>

PARTS	SIDE		SOLDER	SIDE
GND		1	GND	
GND		2	GND	
		3	GND	
SP OUT		4	SERVICE	
+12V		5	+12V	
		6		
		7		
1P SHOT-2		8	COIN 2	
+5V		9	+5V	
1P DOWN		10	2P UP	
2P SHOT-2		11	1P UP	
2P SELECT		12	2P DOWN	
1P SELECT		13	COIN 1	
1P RIGHT		14	1P SHOT-1	
1P LEFT		15	RED	
BLUE		16	2P RIGHT	
GREEN		17	2P LEFT	
SYNC		18	2P SHOT-1	



DIP SW No. 1

SWITCH NO.		1	2	3	4	5	6	7	8
NQ OF FIGHTERS	3							OFF	OFF
	4							OFF	ON
	5							ON	OFF
	6							ON	ON
TYPE	TABLE		OFF						
	UP RIGHT		ON						
STOP	NORMAL OFF	ON							
SOUND TEST	NORMAL OFF			ON					
FREE PLAY	NORMAL OFF				ON				
CONTINUE PLAY	NORMAL OFF						ON		

DIP SW No.2

SWITCH NO.		1	2	3	4	5	6	7	8
COIN 1	1PLAY/1COIN						OFF	OFF	OFF
	2PLAY/1COIN						OFF	OFF	ON
	3PLAY/1COIN						OFF	ON	OFF
	4PLAY/1COIN						OFF	ON	ON
	6PLAY/1COIN						ON	OFF	OFF
	1PLAY/2COIN						ON	OFF	ON
	2PLAY/3COIN						ON	ON	OFF
	FREE PLAY						ON	ON	ON
	1PLAY/1COIN			OFF	OFF	OFF			
COIN 2	2PLAY/1COIN			OFF	OFF	ON			
	3PLAY/1COIN			OFF	ON	OFF			
	4PLAY/3COIN			OFF	ON	ON			
	1PLAY/2COIN			ON	OFF	OFF			
	1PLAY/3COIN			ON	OFF	ON			
	1PLAY/4COIN			ON	ON	OFF			
	1PLAY/5COIN			ON	ON	ON			