



CAPCOM U.S.A.

# **WARNING**

# THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

WARNING: This equipment generates, uses and can radiate radio frequency energy and if not 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 and PART 15 of FCC RULES, which are designed to provide reasonable protection against such interference when operated in a commercial environment. 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 required to correct the interference.



# "WINNERS DON'T USE DRUGS"

William S. Sessions, Director, FBI

\*IN COOPERATION WITH THE AAMA AND FBI ANTI-DRUG CAMPAIGN\*

# CAPCOM, USA INC.

INVITES YOU TO USE

OUR SERVICE NUMBER FOR
SERVICE INFORMATION CONCERNING THIS GAME, OR ANY
OTHER CAPCOM GAME YOU NOW HAVE ON LOCATION.
PLEASE HAVE GAME SERIAL NUMBERS AND CABINET NUMBERS READY.

CALL US FOR PROMPT, COURTEOUS ANSWERS TO YOUR PROBLEMS.

**Direct Number** 

(408) 727-0400

# **Installing Your New**



**New Game Package** 

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# **Dip Switch Tables**

# **Optimize Your Profits**

Thorough Research shows that two and a half minute games both satisfy players and also keep the quarters flowing.

If games aren't running about two and a half minutes long, then collections probably aren't at their peak. You'll want to tailor your game to your location. The trick is to adjust a few DIP switches. (See the chart in this book.) It's easy!

### DIP SW (A)

ITEM	DESCRIPTION	1	2	3	4	5	6	7	8
	1 COIN 1 CREDIT	OFF	OFF	OFF					
	1 COIN 2 CREDITS	ON	OFF	OFF					
	1 COIN 3 CREDITS	OFF	ON	OFF					
COIN 1	1 COIN 4 CREDITS	ON	ON	OFF					
	1 COIN 6 CREDITS	OFF	OFF	ON					
	2 COINS 1 CREDIT	ON	OFF	ON					
	3 COINS 1 CREDIT	OFF	ON	ON					
	4 COINS 1 CREDIT	ON	ON	ON					
CONTINUE	NORMAL							OFF	
COIN	CONTINUE	-)(-						0N	

<sup>\*</sup>IF CONTINUE COIN MODE IS ON. GAME STARTS WITH 2COINS AND CONTINUES WITH 1 COIN.

### DIP SW (B)

ITEM	DESCRIPTION	1	2	3	4	5	6	7	8
	EASY	OFF	OFF	OFF					
	<b>A</b>	ON	OFF	OFF					
	1	OFF	ON	OFF					
İ	NORMAL	ON	ON	OFF					
DIFFICULTY	1	OFF	OFF	ON					
LEVEL	. ↓	ON	OFF	ON					
	DIFFICULT	OFF	ON	ON					
		ON	ON	ON					
COIN	3 COINS					OFF			
SELECTOR	1 COIN					ON			

<sup>3</sup> COIN MODE AND 2 PLAYERS MODE MAY NOT BE USED TOGETHER

### DIP SW (C)

ITEM	DESCRIPTION	1	2	T	3	4	5	6	7	8
SCREEN PAUSE	NO YES					OFF				
SCREEN FLIP	NO YES						OFF ON			
DEMON- STRATION SOUND	NO YES							OFF ON		
CONTINUE	NO YES								OFF ON	
MODE	GAME MODE TEST MODE					1				OFF ON

<sup>\*</sup>HIGHLIGHTED CHARACTER INDICATES FACTORY SETTING. \*RE-START WHEN DIP SW RESET.



# HELPFUL HINTS IN CASE OF DIFFICULTY

# PROBLEM/CAUSE-CURE

### No Raster/No Video

-Check A.C. line cord

-Check line fuse

-Check monitor brightness

-Check power switch and/or interlock switch

-Check all solder connections on line filter and transformer

-Check for proper orientation of the PCB connector

Raster/No Video

-Check all PCB to monitor connections

-Check power supply voltage on PCB

No Video/Game sounds can be heard

-Check monitor brightness

-Check all PCB to monitor connections

Wrong Colors

-Monitor needs degaussing

-Check for proper wiring between PCB and monitor

-Check monitor adjustment and adjust if necessary

Wavy Picture

-Check monitor ground is properly connected to monitor

-Be certain sync inputs are properly connected to monitor

-Check horizontal hold adjustment

Horizontal/Vertical Roll

-Check horizontal and/or vertical hold adjustments

-Check for proper wiring of sync from PCB to monitor

No Sound

-Check for -5 volts on edge connector of PCB

-Check volume control potentiometer adjustment

-Check for +12 volts on edge connector of PCB

-Check wiring from PCB to speaker

-Check speaker for low resistance between the "+" and "-" tabs

**Bad Sound** 

-Check wiring to speaker for bad solder connections

-Check sound with another speaker

No Switch Input

-Check ground connection to switch/es

-Check wiring between PCB and switch/es for proper connection

-Check switch/es with an ohmmeter to verify proper operation

Switch Operates Incorrect Function

-Check wiring between PCB and switches for proper orientation

-Check wiring for shorts between switch inputs

No Coin Meter

-Check wiring to coin meter

-Check that +5 volts is on "+" side of meter

-Verify a +5 volt meter is used

When coin switch is made and meter pulses, the screen blanks out and/or game resets

-Verify that a meter with a diode is used

-If no diode is built in meter, a IN4004 can be used across the meter.

Cathode to "+" side of meter and anode to "-" side of meter

Also see CAUTIONS under section "Before You Get Started"

# **SETTING EXPLANATION**

**PCB CONNECTOR** 

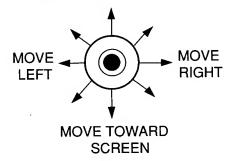
JAMMA STANDARD

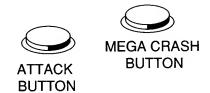
**CRT MONITOR** 

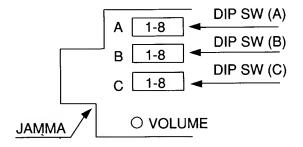
**VERTICAL SCREEN** 

**CONTROL PANEL** 

MOVE AWAY FROM SCREEN





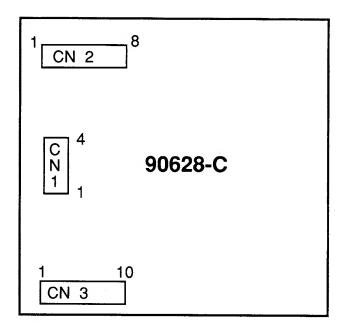


SOLDER SIDE			COMPONENT SIDE
GND	Α	1	GND
GND	В	2	GND
+5V	С	3	+5V
+5V	D	4	+5V
N.C.	Е	5	N.C
+12V	F	6	+12V
	Н	7	
COIN COUNTER 2.	J	8	COIN COUNTER 1
(COIN LOCKOUT 2)	K	9	(COIN LOCK OUT 1)
SP (-)	L	10	SP ( + )
N.C.	М	11	N.C.
VIDEO GREEN	N	12	VIDEO RED
VIDEO SYNC	P	13	VIDEO BLUE
SERVICE SW	R	14	VIDEO GND
	s	15	TEST SW
COIN SW 3	Т	16	COIN SW 1
START SW 3	U	17	START SW 1
3P UP	٧	18	1P UP
3P DOWN	W	19	1P DOWN
3P LEFT	X	20	1P LEFT
3P RIGHT	Υ	21	1P RIGHT
3P PUSH 1	Z	22	1P PUSH 1
3P PUSH 2	а	23	1P PUSH 2
3P PUSH 3	b	24	1P PUSH 3
N.C.	С	25	N.C.
N.C.	d	26	N.C.
GND	е	27	GND
GND	f	28	GND
L	L	<u> </u>	

# **MAIN HARNESS CONNECTIONS**

Wire Color	Solder Side			Parts Side	Wire Color
Black	Ground	A	1	Ground	Black
Black	Ground	В	2	Ground	Black
Red	+5VDC	С	3	+5VDC	Red
Red	+5VDC	D	4	+5VDC	Red
White	Not Used	E	5	Not Used	White
Yellow	+12VDC	F	6	+12VDC	Yellow
	Key	Н	7	Key	
Brown	Coin Counter 2	J	8	Coin Counter 1	Brown
Red	(Coin Lockout 2)	K	9	(Coin Lockout 1)	Red
Black	Speaker (-)	L	10	Speaker (+)	White
Blue	Not Used	М	11	Not Used	Blue
Green	Video Green	N	12	Video Red	Red
Gray	Video Sync	Р	13	Video Blue	Blue
Red	Service SW	R	14	Video Gnd	Black
Brown	Not Used	S	15	Test Switch	Brown
White	Coin SW 2	T	16	Coin SW 1	White
Gray	2P Start	U	17	1P Start	Gray
Violet	2P Up	V	18	1P Up	Violet
Blue	2P Down	W	19	1P Down	Blue
Green	2P Left	X	20	1P Left	Green
Yellow	2P Right	Υ	21	1P Right	Yellow
Orange	2P Fire	Z	22	1P Fire	Orange
Red	2P Sp. Weapon	а	23	1P Sp. Weapon	Red
Brown	Not Used	b	24	Not Used	Brown
Blue	Not Used	С	25	Not Used	Blue
Blue	Not Used	d	26	Not Used	Blue
Black	Ground	е	27	Ground	Black
Black	Ground	f	28	Ground	Black

# 2nd-PLAYER SPEC.



# 4 PIN

GND	1	BLACK
GND	2	BLACK
12V	3	YELLOW
12V	4	YELLOW

## **INPUT PIN**

CONNECT WITH JAMMA CONNECTOR GND AND 12V PIN.

3	B PIN	١
N.C.	1	
(COIN LOCK 3)	2	PURPLE
LAMP 1	3	GRAY
LAMP 2	4	WHITE
LAMP 3	5	BROWN
12V	6	YELLOW
12V	7	YELLOW
12V	8	YELLOW

# **OUTPUT PIN**

FOR USE WITH LIGHTENED START BUTTON.
\* NOT TO BE OUTPUT THE CASE WITHOUT FROM CN1.

12V ELECTRIC POWER FOR LAMPS

# **10 PIN**

GND	1	BLACK
GND	2	BLACK
2P RIGHT	3	PURPLE
2P LEFT	4	GRAY
2P DOWN	5	WHITE
2P UP	6	BROWN
2P PUSH 1	7	ORANGE
3P PUSH 2	8	GREEN
(COIN SW 2)	9	BLUE
START SW 2	10	PURPLE

# THIRD PLAY CONTROLLER INPUT

# **NOTES:**

# **CAPCOM GAME OWNER:**

Please fill out card and register for Free drawing at COIN-OP SHOWS. YOU NEED NOT BE PRESENT TO WIN.

Remember to fill in S/N of PCB (S/N IS REQUIRED FOR DRAWING).

# REGISTER FOR FREE DRAWING

-9

FROM:			
T T TOWN.			

PLACE STAMP HERE

CAPCOM U.S.A., INC.

3303 Scott Boulevard Santa Clara, CA 95054



3303 Scott Boulevard Santa Clara, CA 95054 (408) 727-0400

AST NAME	FIRST NAME
ADDRESS	
CITY	STATE ZIP CODE AREA CODE/PHONE NO.
PRODUCT PURCHASED	
	DATE OF PURCHASE
PURCHASED FROM:	MONTH DAY YEAR
S/N AAMA NO.	
HOW WOULD YOU RATE THIS GAME: EXCELLENT	VERY GOOD   FAIR   POOR
HOW DID YOU HEAR ABOUT THIS GAME:	
MAGAZINE   FRIEND   OTHER	
OO YOU OWN ANY OTHER CAPCOM ARCADE GAMES?	YES   NO   PLAN TO BUY IN NEAR FUTURE
WHAT TYPE OF ROUTE DO YOU OWN:	
ARCADE   SMALL ROUTE   LARGE ROUTE   HOV	
VHAT CAPCOM ARCADE GAMES ARE YOU FAMILIAR WITH	: CAPCOM BOWLING  GHOULS N' GHOSTS  STRIDER  FORGOTTEN WORLDS
	UN SQUADRON   FINAL FIGHT   1943   STREET FIGHTER   OTHER
COMMENTS:	