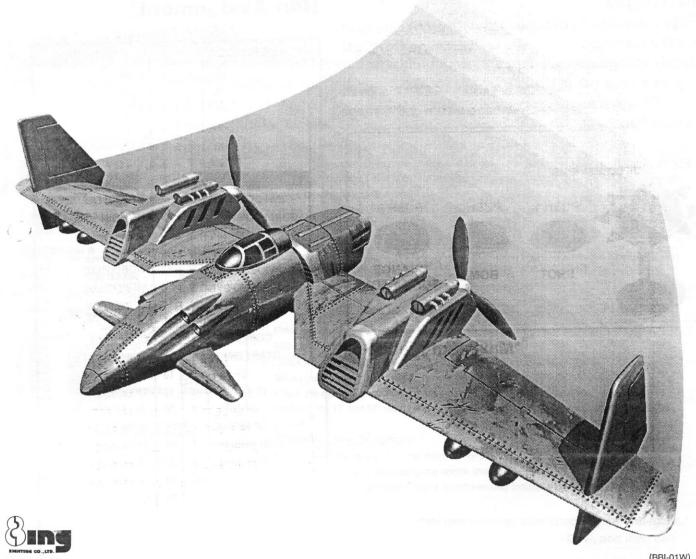


# **OPERATOR'S MANUAL**



## [Important Safety Instructions]

- Turn off power before installation and removal of the circuit board.
- Turn off power before changing the setting of any DIP switch.
- · Use board edge connectors that conform to the JAMMA standard.
- Do not touch the heat sink or components when you hold the board since the heat sink and some components are very hot.
- · Set the board so that the heat sink is always well ventilated.
- · Avoid strong physical shock on the board and do not get it wet.
- · Do not disassemble or rebuild the board.

### [Contents]

Manual

(BBI-01W)

1 copy

Instruction card

(BBI-02W)

1 copy

· Circuit board

1 board

## [Settings]

· Edge connector on circuit board JAMMA Standard

Monitor Direction

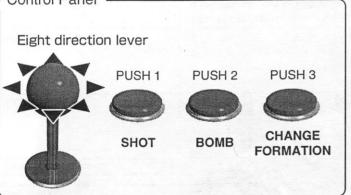
**VERTICAL SCREEN** 

· Supply voltages to the board

+5V(2A or greater) +12V(1A or greater)

(Maintain each voltage within  $\pm 5\%$  range.)

· Control Panel -



\*Maximum credits-9.

168

## [Pin Assignment]

JAMMA Standard

JAIVIIVIA Statidard									
SOLDER SIDE			PARTS SIDE						
GND	Α	1	GND						
GND	В	2	GND						
+5V	С	3	+5V						
+5V	D	4	+5V						
N.C.	E	5	N.C.						
+12V	F	6	+12V						
	Н	7							
COIN COUNTER 2	J	8	COIN COUNTER 1						
(COIN LOCK OUT 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	Р	13	VIDEO BLUE						
SERVICE SW	R	14	VIDEO GND						
N.C.	S	15	一般场所						
COIN SW 2	Т	15	COIN SW 1						
START SW 2	U	17	START SW 1						
2P UP	V	18	1P UP						
2P DOWN	W	19	1P DOWN						
2P LEFT	Х	20	1P LEFT						
2P RIGHT	Y	21	1P RIGHT						
2P PUSH 1	Z	22	1P PUSH 1						
2P PUSH 2	a	23	1P PUSH 2						
2P 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						

## [Test Mode]

To enter test mode, set DIP switch 1-1 on the board ON, and then turn on power.

Caution: Turn off power before changing the setting of any DIP switch.

Select a test item by moving the 1P lever to the appropriate vertical position and press the 1P PUSH1. The screen for the selected test item appears.

#### BATTLE BAKRAID

> GAME MODE
DIP SWITCH SETTING
TEXT TEST
OBJECT TEST
CHARACTER TEST
MAP TEST
SOUND TEST
EEPROM INITIALIZE

#### <Test Menu>

1.GAME MODE

Brings you to the game screen for checking.

2.DIP SWITCH SETTING

Allows you to perform input tests, DIP switch setting tests, and monitoring screen checking.

3.TEXT TEST

Allows you to check text to be used during the game.

4.OBJECT TEST

Allows you to check the objects to be used during the game.

5.CHARACTER TEST

Allows you to check the characters to be used during the game.

6.MAP TEST

Allows you to check the maps to be used during the game.

7.SOUND TEST

Allows you to check the sound to be used during the game.

8.EEPROM INITIALIZE

Clears the contents of the SAVE data.

Caution: Selecting this mode clears the backed-up SAVE data and returns to the initial state.

## [DIP Switch Settings]

Allows you to perform input tests, DIP switch setting tests, and monitoring screen checking. Selecting this mode on the TEST MENU screen initiates the ROM RAM CHECK. On the screen after the ROM RAM CHECK, pressing the 1P and 2P start buttons simultaneously brings you to the IO CHECK screen.

		and the second	
	DIP SWI	TCH SETTIN	NG
	TEST MO		
DIP SWI 1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 7 OFF 8 OFF	TCH 2 START RANK TIMER RANK PLAYER COUNTS EXTRA PLAYER		NORMAL NORMAL 3 2000000 EACH
DIP SWI 1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 7 OFF 8 OFF	SCREEN DEMO S STAGE I CONTINI INVINCII SCORE I	OUND EDIT UE PLAY	OFF
		P & 2P STA	

2.DIP SWITCH SETTING screen

#### 1.IO CHECK screen

Lets you test switches, buttons, and the lever of the machine.

If the screen changes from OFF to ON after you press a switch, a button, and the lever, the machine is verified as normal.

Pressing the 1P and 2P start buttons simultaneously brings you to the DIP SWITCH SETTING screen.

2.DIP SWITCH SETTING screen

Lets you check the settings of the DIP switches on the board, such as the type of coin and the degree of difficulty.

(See the table of DIP switch settings for each setting.)

Caution: Turn off power before changing the setting of any DIP switch.

Check the settings only on the DIP SWITCH SETTING screen.

Pressing the 1P and 2P start buttons simultaneously brings you to the COLOR CHECK screen.

3.COLOR CHECK screen

Allows you to check color shades and brightness of the screen using each color bar.

Adjust the machine screen using the above check results as guidelines.

Pressing the 1P and 2P start buttons simultaneously brings you to the SCREEN CHECK screen.

4.SCREEN CHECK screen

Allows you to check the size and distortion of the screen using the cross-hatched screen. Adjust the machine screen using the above check results as guidelines.

Pressing the 1P and 2P start buttons simultaneously initiates return to the MENU screen.

If you want to return to a normal game screen after checking the test mode, turn off power before turn DIP switch 1-1 on the board OFF, and then turn on power again.

# [BATTLE BAKRAID DIP SWITCH]

DIP SWITCH1		1	2	3	4	5	6	7	8
TEST MODE	NORMAL PLAY	OFF					s Maa		
	TEST PATTERN	ON							
STARTING COIN	1 CREDIT	STATE OF	OFF						
	2 CREDITS	· Finite	ON	DOLDE	15	2.00			
	1 COIN 1 CREDIT			OFF	OFF	OFF			
	1 COIN 2 CREDITS			ON	OFF	OFF			
g - ***	1 COIN 3 CREDITS			OFF	ON	OFF	1		
COIN 1	1 COIN 4 CREDITS			ON	ON	OFF			
00111	2 COINS 1 CREDIT			OFF	OFF	ON			
,	3 COINS 1 CREDIT	- 14XE =		ON	OFF	ON	- man		
		11000		OFF	ON	ON	1		
	4 COINS 1 CREDIT	-		OFF	ON	ON	OFF	OFF	OFF
	1 COIN 1 CREDIT						-	OFF	OF
	1 COIN 2 CREDITS						ON	-	-
	1 COIN 3 CREDITS						OFF	ON	OFF
COIN 2	1 COIN 4 CREDITS						ON	ON	OFF
	2 COINS 1 CREDIT						OFF	OFF	ON
disherentany, of the se	3 COINS 1 CREDIT						ON	OFF	ON
	4 COINS 1 CREDIT	7.0					OFF	ON	ON
FREE PLAY				ON	ON	ON	ON	ON	ON
DEFAULT SETTING		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OF
DIP SWITCH2	7.51.4.71	1	2	3	4	5	6	7	8
START RANK	NORMAL	OFF	OFF						
V2-23 0 (-1992 - 290 - 60 - 62	EASY	ON	OFF	1					
(Game start difficulty setting)	A Section 1	OFF	ON	1					
	HARD		_	301		1	1.4		
	VERY HARD	ON	ON			1	-6.14-		Aug. Per
	If the customer is not playing the change the game start difficulty to	game due an easie	e to it's o	difficulty nore diff	setting	j, it is us ttina.	eful to		
TIMER RANK	NORMAL		OH W	OFF	OFF		17102218	1 415 5	
	LOW	in descri		ON	OFF	adl ni		P REAL	
(How the difficulty rate				OFF	ON	1 3		- 40,00	
increases during the game)	HIGH					14.5		T. C. British	
	HIGHEST ON ON ON If the playing time per customer is to long, it is useful to change the difficulty								
	If the playing time per customer is increase rate to a higher rate and	if the play	it is use ying tim	e is to s	nange ti short to	lower th	ne rate.		
PLAYER COUNTS	3					OFF	OFF		
Litteriodolitio	A second of the	HA.				ON	OFF		
	2	a siste				OFF	ON		
	1					ON	ON		
EVEDA DI AVED	2,000,000 EACH		TOPO		-	Oit	10.1	OFF	OF
EXTRA PLAYER								ON	OF
	3,000,000 EACH							-	-
	4,000,000 EACH	E CENTR						OFF	ON
DEFAULT OFFINO	NO EXTRA	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OF
DEFAULT SETTING		1011	1011	1 1	rine s		10 1 4 1		
DIP SWITCH 3	The First Actions and the Control of Manager Action of the Control	1	2	3	4	5	6	7	8
SCREEN FLIP	OFF	OFF	9,6108		13	7.3	19 M		
	ON	ON	icas	h [			11 May 14 M	A	
DEMO SOUND	ON	of store	OFF	724		3 157	1.23	7.	
	NO SOUND	id can lett	ON	F 208	17 SW	S JANE	ENG!	love f	
STAGE EDIT	DISABLE	9 ditt po		OFF	T X	20	TELES	1821	
	ENABLE		MANUTOR 1	ON	7 79	<b>1</b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	41-41	Enge	194
CONTINUE PLAY	ENABLE	alden	14172	S. Allensen	OFF	- Indiana	and participated		
a second	DISABLE	and the same			ON	100000	11130	10/2/41	CGG
INVINCIBLE	OFF particulant phase remaintents	ser ant as	124-1-1			OFF			
	ON attached and the world and a site in	4 4 4 10 4	FIRST			ON	17 192	ME	
SCORE BANKING				10,11		1 3.4	OFF		
SCORE RANKING	SAVE						ON		
NO LICE	NO SAVE	AL (1978) 8	NA FRA	153		-	LOIN	OFF	OF
NO USE	Late of the season from the MARKE	- 4 Allo	no m	OFF	OFF	OFF	OFF	OFF	OF
DEFAULT SETTING		OFF	OFF					1 ()	