

*Zero Target*



# INSTRUCTIONS



**DATA EAST CORPORATION**

4-41-10, MINAMI-OGIKUBO, SUGINAMI-KU, TOKYO "167"  
PHONE(03)331-5441 FAX(03)335-3741 TELEX2322124 "DATA J"

## **ZERO TARGET**

CONTROL YOUR PLANE AND SHOOT DOWN ENEMY.

USE JOYSTICK FOR CONTROL.

USE BUTTON TO SHOOT.

AVOID ENEMY FIRE (RED FLASH ON SCREEN).

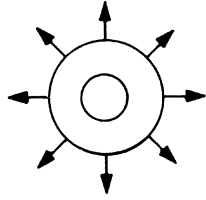
FOR BONUS POINTS, LAND SAFELY AT AIRPORT AS INSTRUCTED.

## 1. INSTALLATION

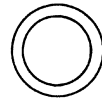
### 1-1 CRT MONITOR

Horizontal Screen

### 1-2 CONTROL PANEL



8-way Joystick

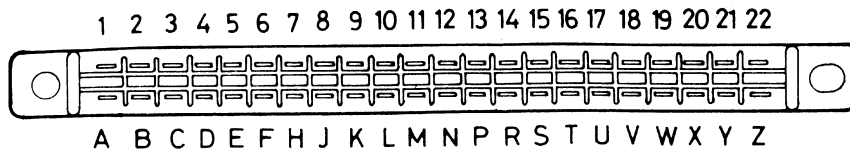


Shoot Button

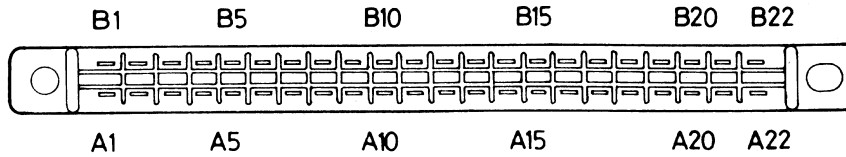
## 2. HARNESS CONNECTION

### 2-1 TERMINAL NUMBERING

a) CONNECTOR CR7E-44DA-3.96E (HRS) 3.96mm Pitch



b) CONNECTOR 1168-044-009 (KEL) 3.96mm Pitch



### 2-2 SIGNALS TO TERMINAL

PARTS SIDE			SOLDER SIDE		
Pin No.		Signal	Pin No.		Signal
HRS	KEL		HRS	KEL	
1	B1	1P DOWN	A	A1	2P DOWN
2	B2	1P UP	B	A2	2P UP
3	B3	1P LEFT	C	A3	2P LEFT
4	B4	1P RIGHT	D	A4	2P RIGHT
5	B5		E	A5	
6	B6		F	A6	
7	B7		H	A7	
8	B8	SERVICE	J	A8	
9	B9	1P SHOOT	K	A9	2P SHOOT
10	B10		L	A10	
11	B11	1P GAME START	M	A11	2P GAME START
12	B12	COIN 1	N	A12	COIN 2
13	B13	COIN COUNTER 1	P	A13	COIN COUNTER 2
14	B14	TV. B	R	A14	TV. G
15	B15	SYNC.	S	A15	TV. R
16	B16		T	A16	
17	B17	SPEAKER +	U	A17	SPEAKER -
18	B18	+12V	V	A18	
19	B19	+5V	W	A19	+5V
20	B20	+5V	X	A20	+5V
21	B21	TV GND	Y	A21	GND
22	B22	GND	Z	A22	GND

### 3. POWER SUPPLY

+5V	±2%	4.0A
+12V	±2%	1.0A

### 4. OPERATION ENVIRONMENTS

	TEMPERATURE	HUMIDITY
OPERATION	5 ~ 35°C	20 ~ 80%
STORAGE	-15 ~ 65°C	10 ~ 90%

### 5. CRT MONITOR

#### 5-1 COLOR SIGNALS R.G.B. SEPARATE

BLACK            0 ~ +2V  
IMAGE SIGNAL   +2.5V ~ +4V

#### 5-2 SYNCHRONIZE SIGNAL COMPOSITE OR HORIZ/VERT SEPARATED

0            0 ~ 0.5V  
1            +3V ~ +5V

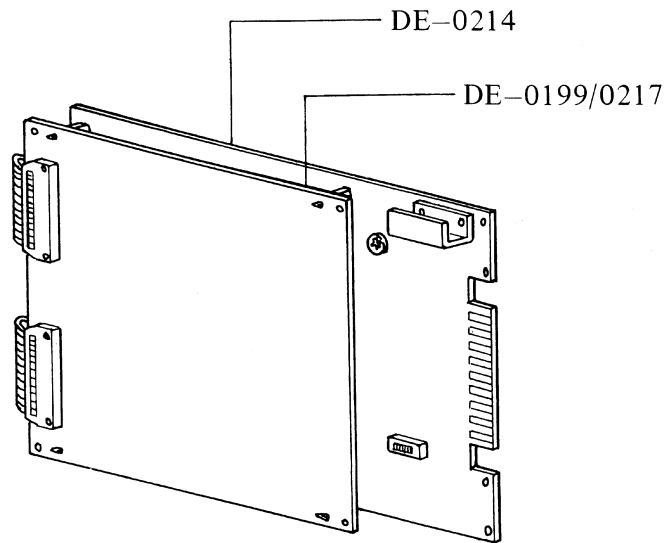
#### 5-3 SCREEN IMAGE SIZE

Image can be shrunk both horizontally and vertically by 10%. Adjust monitor to widen the screen image.

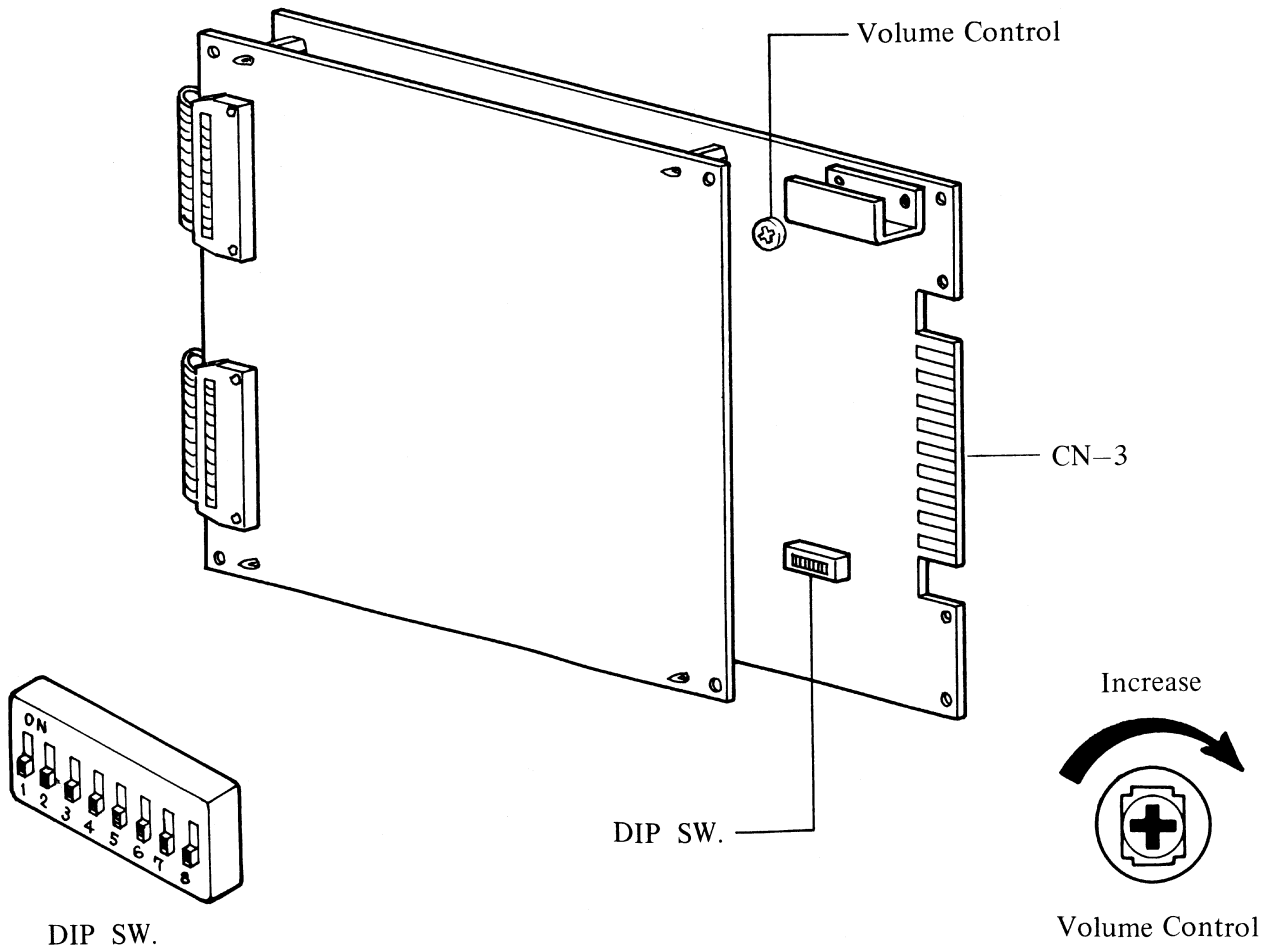
**6. DIMENSION**

DE-0214→280mm x 390mm

DE-0199/0217→280mm x 310mm

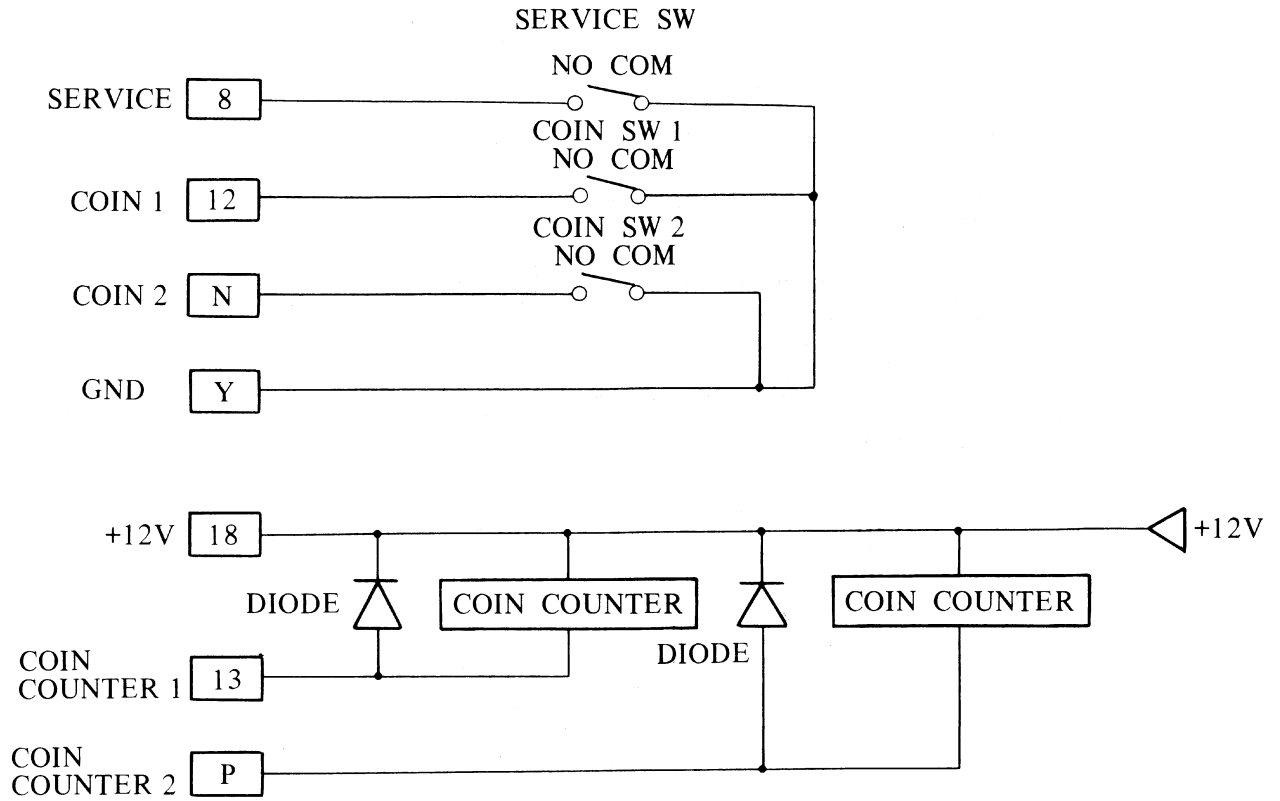


Connectors: CR7E-44DA-3.96E (CN-3) ..... (HRS)  
 (1168-044-099) ..... (KEL)

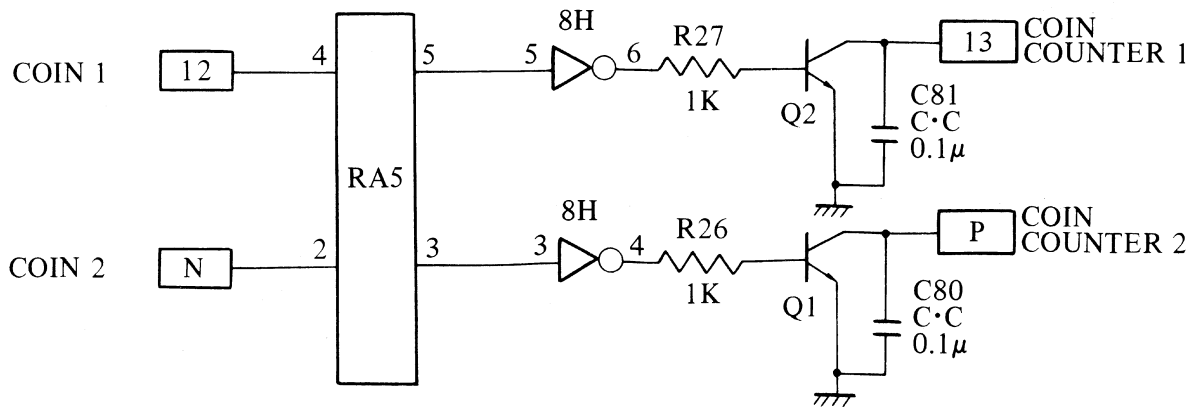


## 7. EXAMPLE OF STANDARD CONNECTION

### 7-1 (2 COIN SWITCHES CAN BE INSTALLED)



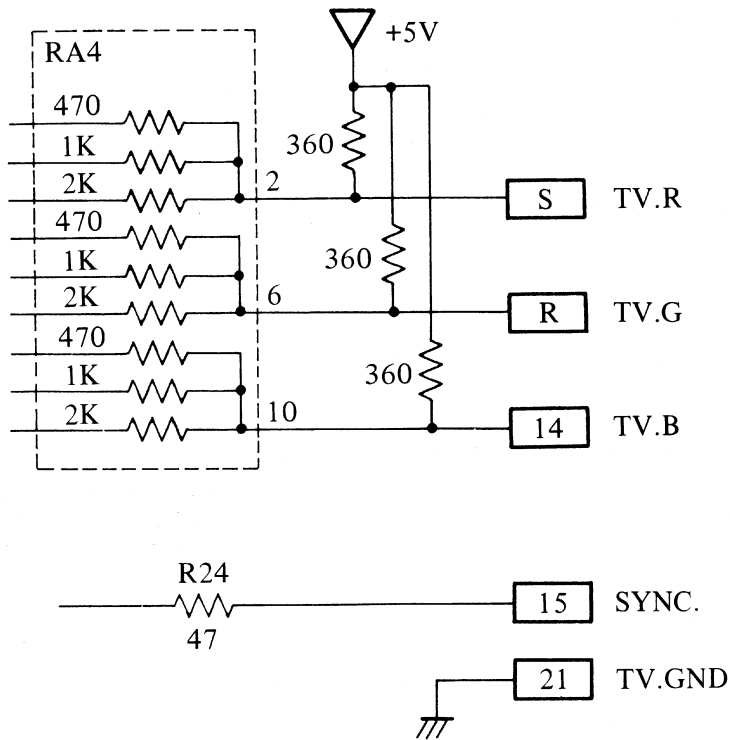
### 7-2 COIN COUNTER-DRIVE CIRCUIT



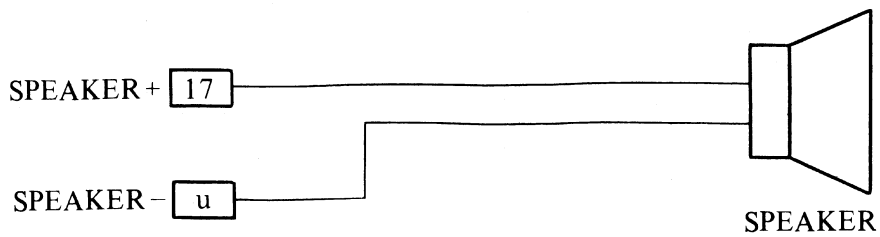
## 8. MONITOR CONNECTION

Monitor input composite signals—Horiz/Vert on +5V can be connected.

Circuit diagram of each signal shown below.



## 9. SPEAKER CONNECTION





## 10. DIP SWITCH SETTINGS

DIP SWITCH					
No.	SETTING				REMARKS
1	OFF	ON	OFF	ON	GAME CHARGE TABLE
	OFF	OFF	ON	ON	
2	1 COIN 2 PLAY	1 3	1 4	1 6	RIGHT SELECTOR
	OFF	ON	OFF	ON	
3	OFF	ON	OFF	ON	GAME CHARGE UPRIGHT
	OFF	OFF	ON	ON	
4	1 COIN 1 PLAY	2 1	3 1	4 1	LEFT SELECTOR
	OFF	ON	ON	OFF	
5	OFF		ON		C/T U/R MODE
	TABLE		UPRIGHT		
6	OFF		ON		DIFFICULTY
	EASY		DIFFICULT		
7	OFF		ON		NUMBER OF AIR CRAFTS
	3		5		
8	OFF		ON		BONUS POINTS
	30,000 pts only		30,000 & 100,000		

