



PLOT TING

OPERATING MANUAL



TAITO AMERICA CORPORATION
660 S. Wheeling Road
Wheeling, IL 60090
Telephone (312) 520-9280
Fax (312) 520-1309

Part No. 170-208007

T A B L E O F C O N T E N T S

	Page Numbers
GAME DESCRIPTION & INSTRUCTIONS	2
GENERAL INFORMATION & PARTS LISTING.....	3 - 4
GAME PREPARATION & CONVERSION INSTRUCTIONS	5 - 6
OPTION DIP-SWITCH SETTINGS	7 - 8
WIRING DIAGRAMS	9
CONTROL PANEL LAYOUT	10

GAME INSTRUCTIONS

GAME DESCRIPTION:

PLOTTING is a game of elimination demanding strategy in a series of carefully orchestrated moves. It can be played by one or two players independently. The object of the game is to systematically eliminate a formation of blocks by tossing their matching counterparts into them. And all within a specified time limit. The controls include a joystick and button.

Using a joystick, the player moves his character up and down the formation until lined up with the matching block or string of blocks to be eliminated. Then, with the press of a button, the block is tossed. As the block enters the formation, it passes through and eliminates each of the matching blocks until reaching an unmatched block. It then bounces the unmatched block into the players arms and replaces it in the formation. The player, in possession of the new and different block must now locate its matching counterparts. The game continues as long as the player successfully eliminates enough blocks to qualify for the next stage. The game ends when the player has exhausted all possible moves before qualifying. Plotting is made up of 60 stages, each increasingly more puzzling.

Plotting features a Continue Play option for those players who are determined to complete its brain-teasing puzzle.

This manual will guide you in the conversion of your color monitor upright video game into a "PLOTTING" game. We strongly urge you to read through the instructions carefully before beginning the conversion.

WARNINGS AND NOTICES

For safety and reliability, Taito America Corporation does not recommend nor authorize any substitute parts or modifications of Taito America Corporation equipment. In addition, any substitute parts or equipment modifications may void FCC compliance.

Use of non-Taito America parts and/or modifications of game circuitry may adversely affect game performance and safety.

Since "PLOTTING" is protected by Federal copyright, trademark and patent laws, unauthorized altered versions of this game are illegal under Federal Law. This also applies to unauthorized facsimiles of Taito America equipment, logos, designs, publications, assemblies and/or games (or features not deemed to be in the public domain) whether manufactured with Taito America components or not.

NOTICE

Certain parts salvaged from your old game are required to complete your kit. These salvaged parts MUST operate properly to insure the performance and safety level of this game. Always repair circuit board malfunctions and cabinet damage before conversion is attempted.

Check the parts supplied in this kit against the parts list included in this manual.

CAUTION

FOR SAFE OPERATION IT IS STRONGLY RECOMMENDED THE CABINET BE PROPERLY GROUNDED. IF YOUR GAME IS EQUIPPED WITH A THREE CONDUCTOR POWER CABLE, THE THIRD PRONG (round in shape) SHOULD AUTOMATICALLY GROUND THE GAME WHEN PLUGGED INTO A PROPERLY GROUNDED THREE PRONG RECEPTICAL. IF IT BECOMES NECESSARY TO USE AN ADAPTOR, THE GROUNDING LUG OR WIRE ON THE ADAPTOR MUST BE PROPERLY GROUNDED TO ASSURE SAFE OPERATION.

NOTICE

This kit is not intended for use with X-Y monitors. Suitable monitors are the horizontal raster-scan with inputs for red, green and blue video as well as composite negative sync. (These should be compatible with TTL logic levels.)

Note: "PLOTTING" USES A COLOR MONITOR IN THE HORIZONTAL POSITION.

NOTICE

Be sure the power supply from your old game is capable of +5 vdc regulated at 7A, -5vdc regulated at 1A and +12vdc regulated at 1A. These operating voltages are necessary for your kit. Please note the enclosed warning with the PC Board Assembly.

TAITO AMERICA CORPORATION KIT PARTS PROVIDED

QTY.	DESCRIPTION	REF NO.	PART NO.
1	MARQUEE WITH ARTWORK AND GAME INSTRUCTIONS		170-208001
1	MONITOR BEZEL		170-208002
1	CONTROL PANEL OVERLAY		170-208004
1	OVERHEAD TENT WITH GAME INSTRUCTIONS		170-208016
1	BLUE JOYSTICK		170-201011
1	RED JOYSTICK		170-201010
2	BUTTONS		170-201014
1	WIRING HARNESS (STANDARD JAMMA TYPE)		170-205002
1	ADHESIVE GAME INSTRUCTIONS		170-208005
1	"PLOTTING" MAIN LOGIC PCB		170-298000
1	OPERATING MANUAL		170-208007
1	R.F. CAGE FOR F.C.C. COMPLIANCE		170-208013
1	PACKING CARTON		170-299002

TOOLS AND SUPPLIES REQUIRED

- | | |
|---|---|
| <input type="checkbox"/> Screwdriver | <input type="checkbox"/> Phillips Screwdriver |
| <input type="checkbox"/> Pliers | <input type="checkbox"/> Wire Cutters |
| <input type="checkbox"/> Hex Driver | <input type="checkbox"/> X-Acto Knife |
| <input type="checkbox"/> Grease Pencil Or Marker | <input type="checkbox"/> Electric Drill W/Bits |
| <input type="checkbox"/> Soldering Iron And Solder | <input type="checkbox"/> 180-Grit Sandpaper |
| <input type="checkbox"/> Hacksaw, Jigsaw Or Tablesaw
With Carbide-Tipped Blade | <input type="checkbox"/> Electrical Tape Or
Heat-Shrink Tubing |

All games require a certain amount of maintenance to remain in good operating condition. A periodic check of mechanical controls would be beneficial to guarantee the profitability of your game.

GAME PREPARATION

CLEANING

The exterior of the game, all metal parts and all plastic parts can be cleaned with non-abrasive cleaner. Caution should be used when cleaning the plastic. A dry cloth can cause scratches and result in a foggy worn appearance. Plexiglas cleaner on a soft cloth is suggested to maintain and keep your monitor crt cover looking new.

Inspect your cabinet for any gouges or items stuck on the cabinet like chewing gum. Remove all foreign objects and fill in the gouges with any type of quick hardening wood putty. Sand to ensure a smooth surface. Wipe the outside of the old cabinet clean. Remember the reason you are converting your old game is to have the increased earnings of a new game. Making your game look like a new game will spark new player-interest.

NOTICE

Please make sure you clean the coin mechanisms. It is important that you service them in order for this game to achieve the maximum possible earnings.

CONVERSION INSTRUCTIONS

GAME TITLE MARQUEE

Remove the new "PLOTTING" Marquee from the kit. This new Marquee provided with your kit is specifically designed for ease of handling. Place and center the old Marquee on top of the new Marquee. Place masking tape on the area where you intend to cut the new Marquee. Using an X-Acto knife, score the new Marquee and simply break at this score. If your old Marquee is made of glass, remove the paint of the old Marquee and attach the new Marquee behind this glass. If your old Marquee is made of Plexiglas, it is recommended a new clear Plexiglas be used to best provide the brilliance of your new Marquee.

MONITOR BEZEL

Remove the new "PLOTTING" monitor bezel from the kit. Place the bezel around the existing monitor. Using an X-Acto knife, trim the new monitor bezel to neatly fit around the monitor.

CONTROL PANEL

Remove the old control panel lexan decal, buttons and joysticks. Refer to the template provided in this kit to design the best possible positioning for your joystick(s), buttons and control panel instructions.

Leave your 1 and 2 player start buttons where they are on the old control panel. (Use the enclosed 1 and 2 player button labels if needed.) Drill holes as needed for installation of the joysticks and buttons. Clean any burrs from around holes. Any hole that is no longer needed we suggest plugging with wood putty or epoxy.

NOTE: Although the joysticks provided in your kit are capable of functioning in 8 directions, they will be used in "PLOTING" for the up and down directions ONLY.

Cut the new "PLOTING" lexan to the appropriate size needed to cover the panel. Leave enough lexan to wrap a small lip around the top and bottom of the panel.

Remove the backing from the "PLOTING" lexan and apply it over the old control panel being careful to avoid air pockets.

After the lexan is securely applied, cut the holes on the control panel with an X-Acto knife or razor blade. Install the new joysticks, buttons, button labels and any necessary hardware previously removed from the control panel. Tighten and secure all hardware.

WIRING PROCEDURES

INSTALLING INTERBOARD WIRING

This game comes with a color-coded cable for easy installation. Refer to the wiring diagram included in this manual for quick connections.

Disconnect the old wiring harness from the old cpu board and carefully remove old circuit boards and FCC cages from the game.

Using the diagrams from your old game, carefully note the function of each wire.

Leaving several inches of wire from the old wiring harness at each connector, cut the wires near the game's coin door, monitor, control panel, power supply and speaker wires. Install the new wiring harness to those points following your wiring diagram. Use electrical tape or heat-shrink tubing to insulate all splices.

Install your FCC cage where the old board set was.

Mount the "PLOTING" PCB assembly with mounting blocks in the center of the FCC cage. Plug the wiring harness onto the PCB and close the cage securely. The board cage in this kit must be properly installed and terminated to ground.

Check and clean the input jack on the power supply board. Replace any burned or damaged pins.

DIP SWITCH SETTINGS

The following option switch settings were designed to allow the customizing of PLOTTING's various game features to suit different environments. If used wisely, the flexibility they offer can maximize game performance and increase potential earnings.

DIP SWITCH A

FUNCTION	SETTING	1	2	3	4	5	6	7	8
PLAY STYLE	*2P MODE 1P MODE	OFF ON							
SCREEN INVERSION	*NORMAL INVERTED		OFF ON						
TEST MODE	*NORMAL TEST			OFF ON					
ATTRACT SOUND	*ENABLED DISABLED				OFF ON				
PLAY PRICING	*1 CO = 1 PL 2 CO = 1 PL 3 CO = 1 PL 4 CO = 1 PL					OFF ON OFF ON	OFF OFF ON ON		
CONTINUE PRICING	*SAME PRICING 1 CO = CONT 2 CO = CONT 3 CO = CONT							OFF ON OFF ON	OFF OFF ON ON

* = FACTORY RECOMMENDED SETTINGS

PLAY STYLE - THIS SWITCH ALLOWS YOU TO CHANGE THE WAY A TWO PLAYER GAME IS PLAYED. WITH THIS SWITCH "OFF" (P2 MODE), BOTH PLAYERS PLAY THE GAME AT THE SAME TIME ON A SPLIT SCREEN. WITH THIS SWITCH "ON" (1P MODE), THE PLAYERS TAKE TURNS PLAYING ON A FULL SCREEN.

SCREEN INVERSION - THIS SWITCH ALLOWS YOU TO INVERT THE IMAGE ON THE SCREEN, WITHOUT HAVING TO REMOUNT YOUR COLOR MONITOR.

DIP SWITCH SETTINGS (cont.)

DIP SWITCH B

FUNCTION	SETTING	1	2	3	4	5	6	7 #1	8
GAME DIFFICULTY	*MEDIUM EASY HARD HARDER	OFF ON OFF ON	OFF OFF ON ON						
NONE	MUST REMAIN IN "OFF" POSITION			OFF	OFF				
NUMBER OF WILD BLOCKS	* 2 1 3 4					OFF ON OFF ON	OFF OFF ON ON		
CONTINUED PLAY	*ENABLED DISABLED							OFF ON	
NONE	MUST REMAIN IN "OFF" POSITION								OFF

* = FACTORY RECOMMENDED SETTINGS

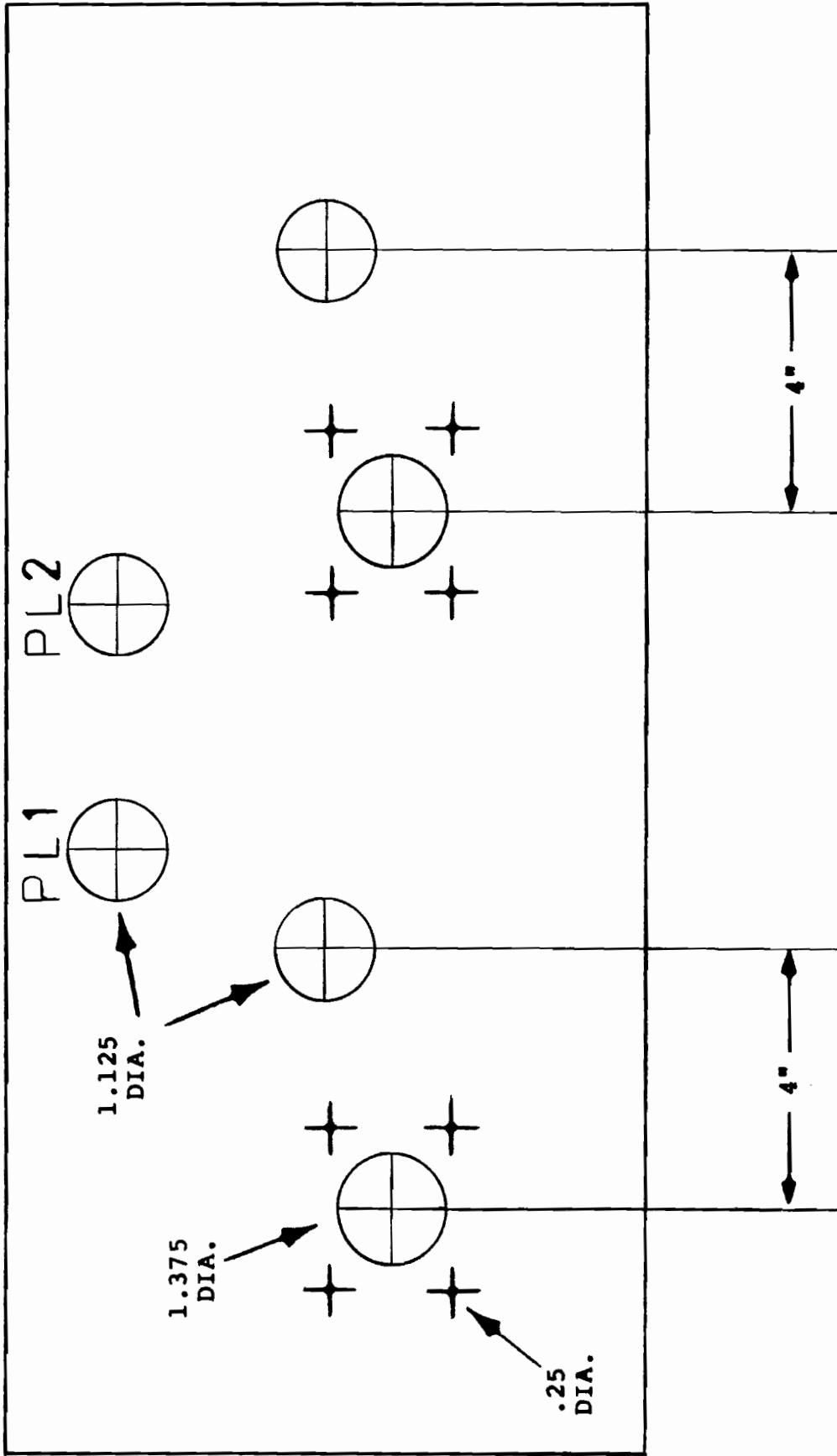
WIRING DIAGRAM FOR "PLOTTER" KIT HARNESS ASSEMBLY

SOLDER SIDE

COMPONENT SIDE

GND	BLK	A	1	BLK	GND
GND	BLK	B	2	BLK	GND
+5VDC	RED	C	3	RED	+5VDC
+5VDC	RED	D	4	RED	+5VDC
-5VDC	BRN	E	5	BRN	-5VDC
+12VDC	BLU	F	6	BLU	+12VDC
KEY		H	7		KEY
COIN METER B	WHT/VIO	J	8	BLU/BRN	COIN METER A
COIN LOCKOUT B		K	9		COIN LOCKOUT A
SPEAKER (-)	BLK	L	10	WHT/BLK	SPEAKER (+)
		M	11		
VIDEO GREEN	GRN	N	12	RED	VIDEO RED
VIDEO SYNC	WHT	P	13	BLU	VIDEO BLUE
SERVICE SW.	BRN/WHT	R	14	BLK	VIDEO GND
TILT SW.	WHT/BRN	S	15	YEL	
COIN B	GRN/YEL	T	16	WHT/YEL	COIN A
2PL START	RED/BLK	U	17	PNK/BLK	1PL START
2PL UP	BRN/BLU	V	18	ORG/BLU	1PL UP
2PL DOWN	ORG/WHT	W	19	GRN/ORG	1PL DOWN
NOT USED	ORG/GRN	X	20	GRN/BLU	NOT USED
NOT USED	WHT/ORG	Y	21	RED/YEL	NOT USED
2PL ACTION	BRN/BLK	Z	22	RED/WHT	1PL ACTION
NOT USED	YEL/WHT	a	23	WHT/RED	NOT USED
NOT USED	BRN/GRN	b	24	YEL/BLK	NOT USED
		c	25		
		d	26		
GND	BLK	e	27	BLK	GND
GND	BLK	f	28	BLK	GND

SUGGESTED CONTROL PANEL LAYOUT



**IF POSSIBLE, DO NOT
OBSTRUCT ARTWORK**