Bonus

\$.50 = 1 play\$.75 = 2 plays

\$1.00 = 3 plays

Self-Test Procedure

sound.
±caa /\
$\sqrt{2}$
hand,
sans/

Instruction

1. Set self-test

switch to on posi-

tion (see figure in

center of label).

Example only—detail below explains these four rows of symbols.

2. Activate all 7 As you activate and control-panel switch deactivate each switch, you'll hear a es, the slam switch, and coin door short low beep. Both switches. start switch LEDs will be constantly lit.

The current three highest scores are held in permanent memory, even if the game is

unplugged. These three are marked with spaceship symbols in the high score table. If you want to erase these scores, simultaneously press the rotate left, rotate right, thrust, and fire buttons. The ERASING message near the center of the screen will then

Coin Bonus Adder

Center Mech Multiplier

Right Mech Multiplier  $0 = Right coin mech \times 1$ 1 =Right coin mech  $\times 4$  $2 = Right coin mech \times 5$  $3 = Right coin mech \times 6$ 

= 1 coin\* for 2 plays 2 = 1 coin\* for 1 play 3 = 2 coins\* for 1 play

Game Price 0 = Free play

"coin" is 1 DM.

0 = English 1 = German 2 = French

3 = Spanish

Ships at Game Start

0 = Game starts with 2 to 4 ships 1 = Game starts with 3 to 5 ships

2 = Game starts with 4 to 6 ships

3 = Game starts with 5 to 7 ships

0 = Bonus ship at every 10,000 points

1 = Bonus ship at every 12,000 points 2 = Bonus ship at every 15,000 points

3 = No bonus ship (adds 1 ship at game start)

Graphic display of number of ships per game (up to 7)

Point score at which a bonus ship is granted (blank if

Minimum Number of Plays

0 or 2 = 1-play minimum

1 or 3 = 2-play minimum

0 = Center coin mech x 1

1 = Center coin mech × 2 the left mech in a 2-mech

\*In the U.S. a "coin" is defined as 25¢. In Germany a

(See graphic display in third line for exact number of

door)

0, 5, 6 or 7 = No bonus coins 1 = For every 2 coins\* inserted, game\_logic adds 1 more coin\* 2 = For every 4 coins\* inserted, game logic adds 1 more coin 3 = For every 4 coins\* inserted, game logic adds 2 more coins' 4 = For every 5 coins\* inserted, game logic adds 1 more coin

be displayed for several seconds, until the entire table is erased.

3. Erasing the High Score Table (optional)

4. When satisfied with test, set selftest switch to off

The monitor displays the picture below. The game produces only a

Results if Test Passes

very short beep

RAM FAILURE is indicated by a sequence of low and high beeps. Note the sequence of beeps and determine which RAM(s) may be bad. To restart the sequence, press the reset pushbutton on the game PCB, or set the self-test switch to off, then again to the

Results if Test Fails

Sequence of Beeps	Possible Bad RAM Chip Location(s
1 low	Lİ
2 lows	L1, M1
1 high, 1 low	M٦
2 highs, 1 low	М3
2 highs, 2 lows	M3, R3
3 highs, 1 low	R3
4 highs, 1 low	N3
4 highs, 2 lows	N3, P3
5 highs, 1 low	P3

Any bad RAMs must be replaced before the self-test can continue.

ROM/PROM FAILURE is indicated by the display of the actual PROM or ROM chip location(s) on the center left side of the monitor screen. Both a PROM or its equivalent ROM are inserted into the same socket. Therefore, the displays are correct regardless of whether your game PCB has PROMs or ROMs or a combination of both. If the screen is blank or displays "garbage," the chips at locations N2 and/or J1 are

INVERTING CIRCUITRY FAILURE is indicated by the BANK ERROR message in the lower center part of monitor screen. This circuitry is necessary for the cocktail-table version to function properly, that is, the picture turns 180° with every other ship in 2-player cocktail games.

AUDIO CHIP FAILURE is indicated by the ERROR message at center bottom of the screen. The large audio chip is at location M7/8 on the game PCB.

(Both these settings affect

SAFETY

INTERLOCI

SWITCH

You will not hear a short low beep for the defective switch, or dark LED.

## **Important Note to Operators:**

If the operation, maintenance and service manual was not included in this game when you unpacked it, contact your distributor to get a free copy. (All Atari manuals for coin-operated games also include a complete illustrated parts catalog.)

SWITCH

# Straight 25¢/\$1.00 Door or (1) 25¢/25¢/\$1.00

No bonus

**Game Price Settings** The white block below contains Atari's suggested settings. All numbers 1 thru 8 are toggle settings on the 8-toggle switch at location L8, on the Asteroids Deluxe™ game PCB (the CENTER switch assembly).

50¢ PER PLAY:

\$1.00 = 3 plays

### 25¢ PER PLAY: \$.50 = 3 playsNo bonus \$1.00 = 5 playsOn On On 25¢/\$1.00 Door or 25¢/25¢/\$1.00 8 Door

Circled numbers refer to coin-door labels you should use with each situation (labels are illustrated below).

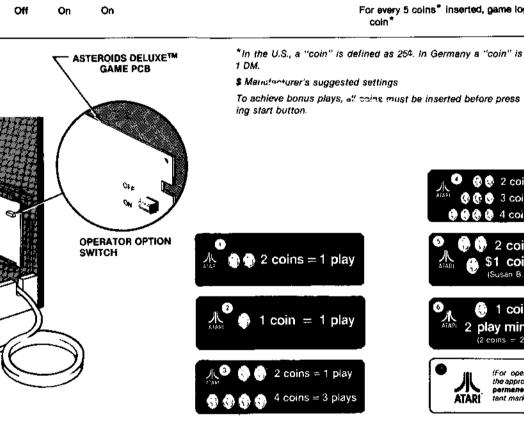
Use the label no. 6 (indicated above with 6) only if you set toggle 5 at PCB switch assembly R5 to off.

For your information, we have defined below the switch settings for those options relating to game price, coin mechanism multipliers, and bonus play. This information is useful in case you need to temporarily set the Asteroids Deluxe<sup>TM</sup> game on free play. or if you have German coin mechanisms in your door.

Toggle Settings of 8-Toggle Switch on Asteroids Deluxe

The label no. 6 shown below should be used only if you set toggle 5 at PCB switch assembly R5 to off.

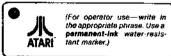
8	PÇB (	at L8—CE	NTER sw	itch when	PCB is in			
	7	6	5	4	3	2	1	Option
						On On Off Off	On Off On Off	Free play 1 coin* for 2 plays 1 coin* for 1 play \$ 2 coins* for 1 play
				On On Off Off	On Off On Off			Right coin mech × 1 Right coin mech × 4 Right coin mech × 5 Right coin mech × 6
			On Off					Center coin mech × 1 \$ (Both these settings affect the left mech in a 2-mech door) .
On	On	On						No bonus coins 3
Qn	On	Off						For every 2 coins* inserted, game logic adds 1 more coin*
On	Off	On						For every 4 coins* inserted, game logic adds 1 more coin*
On	Off	Off						For every 4 coins* Inserted, game logic adds 2 more coins*
Off	On	On						For every 5 coins* inserted, game logic adds 1 more coin*



● 🚷 🐶 2 coins = 1 play ♠ ♠ ♠ ♦ 4 coins = 3 plays







for any currently designed 3-mech

Left, center and right acceptors ac-

tivate 3 coin counters separate-

## Game Option Settings

To change toggle positions on the switch assemblies, you need not remove the game PCB. The switches, usually colored blue, are

When changing the options, verify proper results on the monitor display by performing the self-test. Note that changing an

SELF-TEST

**SWITCH** (U.S.)

**VOLUME CONTROL** 

asily accessible when the Asteroids Deluxe <sup>TM</sup> Game PCB is nounted in place.  Toggle Settings of 8-Toggle Switch on Asteroids Deluxe PCB (at R5—LEFT switch when PCB is in game)							diate o	option on any of the following eight toggles will cause an in diate change on the monitor screen during the self-test.		
8	7	8	5	4	3	. <b>2</b> /	1	Option		
						On On Off Off	On Off On Off	English language \$ German language French language Spanish language		
		Not Used		On On Off Off	On Off On Off			Game starts with 2 ships Game starts with 3 ships Game starts with 4 ships Game starts with 5 ships Game starts with 5 ships		
		Not	On Off					1-play minimum \$ 2-play minimum		
On O:: Off Off	On Off On Off							Bonus ship at every 10,000 points  Bonus ship at every 12,000 points  Bonus ship at every 15,000 points  No bonus ship		

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VOLUME INCREASE:

SELF-TEST SWITCH (EURO-

PEAN GAMES)

TURN CLOCKWISE

### Toggle Settings of 4Toggle Two coin acceptors and a push Two coin acceptors Three coin acceptors Switch on Game PCB (L9) button utility coin switch in the 3 2 in the coin door: in the coin door: Both acceptors activate all coin Do not use this setting. All 3 are same denomination and On On they activate all coin counters sicounters simultaneously. multaneously. Left and center acceptor activate Both acceptors activate 2 count- Do not use this setting. one coin counter; right acceptor acers separately. tivates another coin counter. Not Used On Both acceptors activate all coin Utility coin switch will not acti-Left acceptor activates one coin counter, center and right acceptor counters simultaneously. vate a coin counter, if you do not hook up it up. Both acceptors acactivate another coin counter. Not

neously.

separately.

Both acceptors activate 2 count-

ers separately. \$

tivate all coin counters simulta-

Utility coin switch will not ac-

tivate a coin counter, if you do

not hook it up. Left and right acceptors activate 2 coin counters

**Coin Counter Option Settings** 

[These toggles determine which coin mechanisms activate which counters]

POWER **ON/OFF SWITCH**