U.S. Update

New Program with Easier Game Play for Asteroids Deluxe™

The read-only memories (ROMs) in this kit contain a new program that changes the Asteroids Deluxe™ game play. To attract new players, the game play is now operator-adjustable to be either easy for approximately the first 30,000 points or hard through-out the game.

The technical manual describes the game play correctly if the game PCB option switch at R5 is set to "hard." If you set the switch to "easy", then the following game-play changes happen:

- Four large asteroids begin the game. The second wave of asteroids begins with five, and the subsequent waves start with six through nine large asteroids. In addition, the asteroids move much more slowly across the screen. (If the option switch is set to hard, the waves begin with six to nine large asteroids.)

- The large ships (“death stars”) when shot will break up into three slowly-moving diamonds. (If the option switch is set to hard, diamonds would immediately begin chasing the player's spaceship at high speed.)

After installing these five ROMs, we recommend you set your game to easy game play. To do so, refer to the figure that follows. You should note also that the self-test now displays an additional 0 or 1 to represent your game difficulty selection.

Game Option Settings

To change toggle positions on the switch assemblies, you need not remove the game PCB. The switches, usually colored blue, are easily accessible when the Asteroids Deluxe™ Game PCB is mounted in place.

When changing the options, verify proper results on the monitor display by performing the self-test. Note that changing an option on any of the following eight toggles will cause an immediate change on the monitor screen during the self-test.

<table>
<thead>
<tr>
<th>Option</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>English language</td>
<td>On</td>
<td>On</td>
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<tr>
<td>German language</td>
<td>On</td>
<td>Off</td>
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<tr>
<td>French language</td>
<td>Off</td>
<td>On</td>
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<tr>
<td>Spanish language</td>
<td>Off</td>
<td>Off</td>
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<tr>
<td>Game starts with 2 ships</td>
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<td>Game starts with 3 ships</td>
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<td>Game starts with 4 ships</td>
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<td>Game starts with 5 ships</td>
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<tr>
<td>1-play minimum</td>
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<td></td>
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<tr>
<td>2-play minimum</td>
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<td></td>
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<tr>
<td>Easier game play for first 30,000 points</td>
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<tr>
<td>Hard game play throughout game</td>
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<tr>
<td>Bonus ship at every 10,000 points</td>
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<td></td>
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<tr>
<td>Bonus ship at every 12,000 points</td>
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<tr>
<td>Bonus ship at every 15,000 points</td>
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<tr>
<td>No bonus ship</td>
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</tr>
</tbody>
</table>

$ Manufacturer's suggested settings

Continued on reverse side
Self-Test Procedure, continued

- **Coin Bonus Adder**
  - 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*

- **Left Mech Multiplier**
  - 0 = Left coin mech × 1
  - 1 = Left coin mech × 2

- **Right Mech Multiplier**
  - 0 = Right coin mech × 1
  - 1 = Right coin mech × 4
  - 2 = Right coin mech × 5
  - 3 = Right coin mech × 6

- **Game Price**
  - 0 = Free play
  - 1 = 1 coin* for 2 plays
  - 2 = 1 coin* for 1 play
  - 3 = 2 coins* for 1 play

  *In the U.S. a "coin" is defined as 25¢. In Germany a "coin" is 1 DM.

- **Game Language**
  - 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

  (See graphic display in third line for exact number of ships)

- **Minimum Number of Plays**
  - 0 = 1-play minimum
  - 1 = 2-play minimum

- **Game Difficulty**
  - 0 = Easy
  - 1 = Hard

- **Bonus Ship**
  - 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 no bonus ship)**
To install the five new ROMs in this kit, refer to the drawing and parts list that follow:

Asteroids Deluxe™ Game PCB Assembly
A036471-03 and -04

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>(Reference Designations and Locations in Bold)</th>
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</thead>
<tbody>
<tr>
<td>036430-02</td>
<td>Read-Only Memory (D1)</td>
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</tr>
<tr>
<td>036431-02</td>
<td>Read-Only Memory (E/F1)</td>
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<tr>
<td>036432-02</td>
<td>Read-Only Memory (H1)</td>
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<tr>
<td>036433-03</td>
<td>Read-Only Memory (J1)</td>
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<tr>
<td>036800-02</td>
<td>Read-Only Memory (R2)</td>
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</tr>
</tbody>
</table>

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