POLARIS
COLOR

SERVICE INSTRUCTIONS
AND PARTS CATALOG

TAITO

TAITO CORPORATION

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5. Play Instructions

- Insert coin(s).
- Select game 1 or 2 players.
- Shoot jet planes ⛽, frigates 🛰️, enemy subs 🛳️, and airplanes 🛩️ for points, while avoiding enemy attack.
- Scoring:

![ship_icon] ??? Pts.  ![ship_icon] ??? Pts. 100 Pts. 50 Pts. 30 Pts. 10 Pts.

- In a two player game, play alternates between the two after each missing.

Additional Information:

- Homing missiles and mines cannot be destroyed.
- When a anti-sub airplane is hit, some mystery points (500, 1000, 1500, or 2000 points) are scored.
- When an enemy sub is hit, some mystery points (300, 500, 700, or 900 points) are scored.
- When score exceeds 5,000 points, one sub is added with music.
- As the frame progresses, the bonus points increase from 1,000 to 9,000 points.
- Game is over when all of player8s subs have been destroyed.
6. Adjustments on Switching Regulator PC Board

(See Fig. 3)

Caution: The line voltages should be set within the limit. Failure to do so may result in destruction of the IC's.

o To check the output voltage, measure them on the G-connector or the T-connector.

(See the cable block diagram, in this manual.)

Fig. 3

-5V VR ... Pot for adjusting -5V DC line voltage
(Adjustable range: +4.5V to +5.5V DC)
Set approx. +5V.

-5V VR ... Pot for adjusting -5V DC line voltage
(Adjustable range: -5.5V to +4.5V DC.)
Set approx. -5V.
When the +5V line has no load, this -5V voltage is not present on the line.

+12V VR ... Pot for adjusting +12V DC line voltage
(Adjustable range: +10.3V to +13.2V DC)
Set approx. +12V.
7. Adjustments on Game PCB (See Fig. 4 and Table 1 - 3)

- To decrease the sounds turn each pot as shown by the arrowhead.

![Diagram of DIP switches]

Fig. 4

* VR1 ... Pot for adjusting the effective sounds; firing sounds, anti-sub airplane nose diving sounds, bomb hit sounds, jet plane hit sounds, and frigate hit sounds.
* VR2 ... Pot for adjusting frigate appearing sounds and enemy sub hit sounds.
* VR3 ... Pot for adjusting the music produced when bonus points are scored or an extended play is awarded.
* VR4 ... Pot for adjusting the total sounds.
* VR5, VR6 ... These pots are for adjusting the solid-state modules, which are for factory adjustments.

Setting of DIP Switches:
DIP SW1
* SW1, SW2 ... Switches for changing the number of player's subs (POLARIS)

<table>
<thead>
<tr>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 1</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>SW 2</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
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Table 1

This number is preset at "3" at the factory.
o SW3 ... Switch for Game Style

<table>
<thead>
<tr>
<th>SW 3</th>
<th>T T Version</th>
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<tbody>
<tr>
<td>ON</td>
<td>Upright Version</td>
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<tr>
<td>OFF</td>
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Table 2
As this game is an upright version, this switch should be set at "ON" position.

o SW4 ... Switch for checking game features
When this switch is set at "OFF" position, no hits are made if bombs hit player's sub.
Normally, this switch should be set at "ON" position.

o SW5 ... Switch for demonstration sounds
Effective sounds for appealing to the customers can be produced. (Polaris sounds)

<table>
<thead>
<tr>
<th>SW 5</th>
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<tbody>
<tr>
<td>ON</td>
<td>No sounds are produced.</td>
</tr>
<tr>
<td>OFF</td>
<td>Sounds are produced.</td>
</tr>
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Table 3

o SW6,SW7 ... These switches are not used in this game, and should be set at "OFF" positions.

o SW8 ... Switch for Preset Mode
When this switch is set at "OFF" position, the check can be mode. When checking, each switch should be set first. Normally this switch should be set at "ON" position.

1 PLAYER START SW ... 1P's points are increased by 50 points.
2 PLAYER START SW ... 2P'S points are increased by 50 points.
1 PLAYER UP SW ....... The levele becomes high.
1 PLAYER FIRE SW .... The game starts.

DIP SW2

o SW1-SW3 ... These switches are not used and should be set "OFF" positions.

o SW4 ... Switch for Screen Inversion
"ON" ... Inversion "OFF" ... No Inversion
Normally, this switch should be set at "OFF" position.
NOTE 3 TRANSISTOR (OSC458)  NOTE 4 TRANSISTOR (OSC061)

NOTE 5 THE RELATION BETWEEN COIN AND CREDIT

<table>
<thead>
<tr>
<th>SW1</th>
<th>SW2</th>
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PARTS LIST

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