TIME PILOT '84

FURTHER INTO UNKNOWN WORLD

TIME PILOT '84 CONVERSION KIT

INSTRUCTION MANUAL

Konami, Inc.

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CONTENTS OF CONVERSION PACK

1 - Main Printed Circuit Board, P.C. Board Cage
1 - Wiring Harness
1 - Marquee Overlay (Header)
1 set - Side Panel Graphics (Left and Right)
1 - Control Panel Overlay
1 set - Control Button Decals
  (1 player, 2 player, lever, play instructions, copyright seal)
1 - Joystick
2 - Push Buttons
1 - Technical Instruction Manual
1 - Registration Card
INTRODUCTION

This instruction manual has been specifically designed for your use. It will provide you with enough information to convert your old game as simply as possible. These are general points necessary for operating "TIME PILOT’84" safely and securely.

BEFORE CONVERTING

(1) Be sure that you have all the necessary parts.
(2) The wiring diagram for “TIME PILOT’84” is exactly the same as those for some of Konami games such as "GYRUSS", "TIME PILOT", "ROC’N ROPE" and "SUPER COBRA". So you only need to insert the new P. C. Board in case your game is one of them. However, close attention should be paid to the wiring diagram if you are not converting a Konami game.

QUESTIONS AND ANSWERS

Q. What machines can be converted?
A. Any game with color raster monitor can be converted with this kit.

Q. Will it be necessary to change the power supply?
A. If present power supply cannot handle the following current parameters, it will be necessary.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>+5V</td>
<td>7.0A</td>
<td>MAIN BOARD</td>
</tr>
<tr>
<td>+12V</td>
<td>2.0A</td>
<td>SOUND BOARD</td>
</tr>
</tbody>
</table>

Q. How much wiring is involved?
A. Relatively very little.
By using the old wiring, you can save time by soldering the new connecting wires to the old ones. These old wires show exactly where to connect the new wires (See the wiring diagram).

Q. Will it be necessary to replace the present joystick and buttons?
A. Yes. This kit includes the most suitable joystick and buttons for this game.
There is one very important thing for you to know. That is, whether your monitor’s sync. is positive or negative.

SYNC. OF THIS P.C. BOARD APPEARS IN THE NEGATIVE PULSE IN THE TERMINAL

(1) If your TV monitor requires tuning, adjustment must be made. Adjustment means altering composite sync. by using the IC chips known as 7404 or 74LS04. For your information, in case of this P.C. Board, the signal on this pin is a method which is a combination of HSYNC and VSYNC.

(2) Separate Sync, modification for "TIME PILOT'84". If your monitor has "Separate Sync" input, for example "Electro home made" and "Wells-Gardner made".

Still the picture is not stable.

2 Step 2
Prepare Hook-up wire. For example "Electro home made"
OPERATOR INFORMATION

WARNING

F. C. C. REGULATION COMPLIANCE

The P. C. Board cage supplied with this conversion kit must be used and grounded at the time of installation.

This is required to avoid radio frequency radiation and to comply with the limits for a class "A" computing device pursuant to Subpart "J" of Part 15 of F. C. C. Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

The operation of this equipment in a residential area, is likely to cause interference - in which case the user will be required to take whatever measures are necessary to correct the interference at his own expense.
Before returning the P.C. Board for repair, the following should be checked (a video game is composed of these three main blocks and a P.C. Board).

CONTROL

- The joystick does not work in a specific direction.
- The shooting button does not work.
  - Check the condition of the joystick and button.
  - Check the contact of the wiring harness.

MONITOR

- The screen is dead.
- The picture does not stand still.
- The picture is either too big or too small.
- The picture is contorted.
- Colors are wrong.
  - Check if something is wrong with the monitor.
  - Check conditioning of the monitor.
  - Check the contact of the wiring harness.

POWER SUPPLY

- The power supply is dead.
- No sound (+12V)
- It intermittently moves wrong.
- It sometimes becomes reset.
  - Check +5V and +12V
  - Check stability of voltage.
  - Check the contact of wiring harness.
TIME PILOT’84: DIP SWITCH SETTING

DIP SW 1 SET

<table>
<thead>
<tr>
<th>COIN 2 SW SET</th>
<th>COIN 1 SW SET</th>
<th>PLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
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<td>OFF</td>
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<td>ON</td>
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<tr>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>

(ATTENTION) Free play means the situation, you can play without putting any COINS in.

DIP SW 2 SET

1. THE NUMBER OF PLAYER

<table>
<thead>
<tr>
<th>SW</th>
<th>2</th>
<th>1</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

2. SWITCH FOR CHANGE OF TABLE OR UP RIGHT

<table>
<thead>
<tr>
<th>SW</th>
<th>3</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>TABLE: using I/O for 1 or 2 player</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>UP RIGHT: using I/O for only 1 player</td>
<td></td>
</tr>
</tbody>
</table>

3. BONUS SET

<table>
<thead>
<tr>
<th>SW</th>
<th>5</th>
<th>4</th>
<th>BONUS POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>1:0000 POINTS AND AFTER EVERY 50000 POINTS</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>2:0000 POINTS AND AFTER EVERY 60000 POINTS</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>3:0000 POINTS AND AFTER EVERY 70000 POINTS</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>4:0000 POINTS AND AFTER EVERY 80000 POINTS</td>
<td></td>
</tr>
</tbody>
</table>

4. DIFFICULTY OF THE GAME

<table>
<thead>
<tr>
<th>SW</th>
<th>7</th>
<th>6</th>
<th>DIFFICULTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>1 (EASY)</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>4 (DIFFICULT)</td>
<td></td>
</tr>
</tbody>
</table>

5. SOUND IN ATTRACTIVE MODE

<table>
<thead>
<tr>
<th>SW</th>
<th>8</th>
<th>SOUND IN ATTRACTIVE MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>SOUND</td>
<td>OFF</td>
</tr>
<tr>
<td>ON</td>
<td>SOUND</td>
<td>ON</td>
</tr>
</tbody>
</table>

VR is for adjustment of sound volume. The volume is decreased by turning VR counter-clockwise.

DIP SW2

DIP SW1
[NOTE]
In the case of "UP-RIGHT TYPE".
No need to use the following terminals on a connector.

- C: 2P SHOOT 1
- D: 2P LEFT
- 3: 2P SHOOT 2
- 4: 2P RIGHT
- 6: 2P UP
- 9: 2P DOWN

Follow this instruction for (+12V) the power supply capacity.

<table>
<thead>
<tr>
<th>SPEAKER</th>
<th>REQUIRED POWER CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>8Ω 6W</td>
<td>12V 1A</td>
</tr>
<tr>
<td>8Ω 6W</td>
<td>12V 2A</td>
</tr>
<tr>
<td>4Ω 12W</td>
<td>NOT APPLICABLE</td>
</tr>
</tbody>
</table>

Color Code:
- ORANGE / GREEN
- RED / GREEN
- RED / BROWN
- BLUE / BROWN
- BLACK / ORANGE
- PINK / BROWN
- GREEN / BROWN
- VIOLET / YELLOW
- ORANGE / BROWN
- ORANGE / WHITE
- VIOLET / WHITE
- RED / YELLOW
- BROWN / YELLOW
- BROWN / WHITE
- BLACK / WHITE
- ORANGE / WHITE
- PINK / WHITE
- GRAY / YELLOW
- YELLOW / WHITE
- BLUE / WHITE
- GREEN / WHITE
- BLACK / GREEN
- RED / WHITE
- YELLOW / GREEN
- RED / GREEN
- RED / RED
- +5V

WIRING HARNESS

TIME PILOT '84: GENERAL WIRING DIAGRAM

CONNECTOR KEL 1168-036-009
SELF TEST
This P.C.Board has a function to check if there is anything wrong with the cabinet or P.C.Board itself. When the power is switched ON, the board will always check the basic block and if normal, indicate "OK" on the monitor and then will start the game. If not normal, it will indicate "BAD" and the picture will stop.

MANUAL TEST
(a) How to Start
Switch on the power while pressing both 1P and 2P buttons until the cross hatch appears on the screen. Switch off the power once, before starting the game.
(b) How to Select the Test Item
  ○ Test items will change in the following order as you push 1P button each time. When Item 6 is over, Item 1 will come back.
  ○ Each item will last until you push 1P button.
(c) Test Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Conditioning of Picture Contortion</td>
<td>Cross hatch will appear all over the screen.</td>
</tr>
<tr>
<td>2 Color Conditioning</td>
<td>16 blocks will show the colors. Adjust the monitor.</td>
</tr>
<tr>
<td>3 Control Check</td>
<td>Names of all the switches (lever, COIN SW, etc.) will be on the screen. As you turn on each of them, &quot;0&quot; on its right will turn to &quot;1&quot;.</td>
</tr>
<tr>
<td>4 Coin Counter Check</td>
<td>To check the coin counter, counts up Coin Counter 1 and then Coin Counter 2 eight times each. Then move on to Item 5.</td>
</tr>
<tr>
<td>5 DIP SW SET</td>
<td>DIP SW SET will be displayed on the screen. DIP SW condition will be read into computer only when the power is switched ON.</td>
</tr>
<tr>
<td>6 Sound Check</td>
<td>There will be sounds for testing purpose. There will be automatically 8 seconds interval between one sound and next. The cycle of sounds will repeat.</td>
</tr>
</tbody>
</table>
THE FOLLOWING PROCEDURE IS RECOMMENDED BY THE GRAPHICS MANUFACTURER IN APPLYING THE SIDE PANEL DECALS AND MARQUEE OVERLAY ONLY.

1. REMOVE PROTECTIVE BACKING FROM DECALS.

2. LAY OUT DECALS, ADHESIVE SIDE UP, AND SPRAY EVENLY WITH A FOAMING AEROSOL SUCH AS "WINDEX".

3. USING THE SAME SPRAY, SPRAY THE AREA OF THE CABINET AND MARQUEE WHERE DECALS ARE TO BE APPLIED.

4. POSITION THE DECAL INTO PLACE.

5. USING A SOFT SQUEEGEE OR PIECE OF CARDBOARD, BEGINNING AT THE CENTER OF THE DECAL, SLOWLY AND EVENLY PRESS OUT THE EXCESS FOAM UNTIL YOU ACHIEVE A SMOOTH FINISH.

6. ALLOW TO SET APPROXIMATELY 2 TO 3 HOURS.

THIS PROCEDURE HAS BEEN FOUND TO BE THE MOST EFFECTIVE WAY OF ENSURING THE PROPER POSITIONING OF THE DECALS AS IT CREATES MANEUVERABILITY OF THE DECAL AND IS AN ADDED PROTECTION AGAINST THE DECAL COMING LOOSE OR CREASING DURING APPLICATION.

NOTE: THE PLAYER INSTRUCTION PANEL AND BUTTON LABELS ARE MADE OF A DESTRUCTIBLE ACRYLIC MATERIAL DESIGNED SPECIFICALLY TO KEEP THE PLAYER FROM PEELING THEM OFF.

IT IS RECOMMENDED THAT ALL DECALS AND STICKERS BE ALLOWED TO SET FOR 24 HOURS AFTER APPLICATION FOR MAXIMUM ADHERENCE.