WARNING "CHEQUERED FLAG" is an original game developed by KONAMI Industry Co. Ltd. KONAMI Industry Co. Ltd. reserves all the copyrights, trademarks and other industrial property rights with respect to this game.
Self Test (1)

When powered on, a memory test automatically starts.
Normal: "OK" will be displayed, and then the game will start.
Abnormal: "BAD" will be displayed and self test will repeat.

Self Test (2)

Use a test switch on the cabinet or the SW3 of the DIP SWITCH No.3 on the PCB (turn SW3 ON and OFF while in the game mode).

1) MEMORY CHECK
Memory test results are displayed after 30 seconds.

2) MAIN SELF TEST
I/O, SOUND AND COLOUR CHECK
- Turn the brake pedal, start switch, service switch and coin switch ON and OFF.
- Operate the shift lever to check LOW and HIGH.
- Step on the accelerator to check for a high value of 90H or more, and release to check for a low value of 3CH or less.
- Turn the steering wheel fully clockwise to check for a high value of AOH or more.
- Turn counterclockwise to check for a low value of 60H or less. Release and make sure it shows between 7CH and 84H.
- The start switch should always be flashing.
- Check steering wheel vibration by using shift lever.
- Press the start switch to change the sound code.
  - When the figure is between 01H and 0CH, seat vibration is functional.
- Check the DIP switch settings.
- Insert a coin to check the coin counter.
- Adjust monitor brightness so that the second colour bar from the left can faintly be seen.

3) CROSS HATCH TEST
Press the test switch or turn ON and OFF DIP SW3 after going through the above main self test, and the screen shows a cross hatch pattern. Check distortion.
Press test switch or turn DIP SW3 ON and OFF to return to game attract mode.

Play Instruction

- Deposit coin.
- Press start switch.
  - Drive your car about the circuit and finish the race within the given time, while avoiding crashing into other cars or side barriers.
  - When your car is damaged, that part of the car affected will flash. Make a pit stop for repairs.
  - This game consists of 3 stages. When you cross the finish line, you progress to the next stage and a new car.
  - The number of the laps in each stage is as follows:
    1st stage ..... 3 laps
    2nd stage ..... 4 laps
    3rd stage ..... 3 laps
  - And the game ends after you have won all 3 stages.
- The game is over when:
  1) the timer shows '0' before you cross the finish line.
  2) your fuel runs out.
  3) your car explodes.
- You will be scored according to the distance covered.

Bonus points will be awarded according to your position at the finish line of each stage.

1st place .................. 100,000 points
2nd place .................. 50,000 points
3rd place .................. 20,000 points
4th place .................. 10,000 points
5th place .................. 5,000 points
6th place .................. 1,000 points
7th and worse ............... 0 points
Technical Information

1) Required Power Capacity
   GND - Vcc 5V4A or more
   * Check voltage on the edge connector of the PCB
     and make sure it shows +5.0 volts.
   GND - (+12V)
   * See Wiring Diagram

2) Output
   R(red) analog positive
   G(green) analog positive
   B(blue) analog positive
   SYNC H V complexed TTL level, negative

3) Use the volume knob on the PCB to adjust sound level. Turn clockwise for increased loudness.

4) Handle with care.

Cabinet Information

Use a cabinet with a vertical monitor, a volume-controlled steering wheel, a volume-controlled accelerator, a brake pedal, a shift lever (LOW/HIGH) and a light switch for start.

It is recommended that a service switch and a test switch should also be equipped.

1) DIGITAL INPUT
   a. BRAKE PEDAL ...... Brake is effective when the switch is ON.
   b. SHIFT LEVER ...... OFF: LOW, ON: HIGH

2) ANALOG INPUT
   Use a volume with resistance value between 1kΩ and 5kΩ, directly proportional to the turning degree.
   The volume level should show the following figures in the test mode.
   a. STEERING WHEEL VOLUME
      Neutral position: between 7CH and 84H
      Fully clockwise from neutral position (approximately 140 degrees): AOH or more
      Fully counterclockwise from neutral position (approximately 140 degrees): 60H or less
   b. ACCELERATOR VOLUME
      When stepped on: 90H or more
      When released: 3CH or less

3) LIGHT SWITCH
   Use a switch with the light of DC 12V, consuming electricity 500mA or less.

4) STEERING VIBRATION FUNCTION
   This mechanism vibrates the steering wheel when the player crashes into other cars or drives on the shoulder of the road.
   1. Equivalent circuit and specifications

   ![Circuit Diagram]

   a) Voltage between DCIN and GND
      DC +5V to DC +30V
   b) Input current capacity for OUT 1 and OUT 2
      Maximum 2A for each port
   c) Vibration signal timing

   ![Signal Timing Diagram]

   2. Example

   ![Example Diagram]

5) SEAT VIBRATION FUNCTION
   When a cockpit type cabinet is built, the seat vibration function is available by utilizing an AMP board which must be obtained separately.
   Refer to the wiring diagram.
### DIP SWITCH No.1 SETTINGS

1. **COIN SWITCH No.1 SETTINGS**

<table>
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<th>3</th>
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<tbody>
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**FREEPLAY:** You can play games without coins.

### DIP SWITCH No.2 SETTINGS

1. **DIFFICULTY OF THE GAME**

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2. **SOUND IN ATTRACTIVE MODE**

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*SW1 thru SW5 are not used.*

### DIP SWITCH No.3 SETTINGS

1. **TITLE DISPLAY**

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2. **CHANGE OF MODE**

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*SW3 thru SW4 are not used.*

O shows recommended settings.