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**Ver 1.00 2016-10-31**

# 1、Brief introduction

Twin hoops is one new indoor amusement game machine which with attractive appearance,improved gameplay.

# 2、Caution

## 2-1. **Notice for installation**

- This machine is for indoor use only (not outdoor).
- The game should be placed on flat floor to maintain its stability.
- Do not disassemble the machine without technical guidance.
- Make sure to turn off the power and pull out the plug before moving the machine.
- Put the machine on the flat floor,the location should be not slippery or shaken
- The machine should not be put in places of high temperature or near flammable equipment
- Should not put any heavy equipment on the top of the cabinet or the wiring of the game.
- Wirings of the machine should not be exposed to open air for a long time.

## 2-2. **Notice for operation**

- Check whether the power plug and power wire are in good conditions.
- Checks whether the power plug and power wire are in good conditions.
- Switch off the power before you perform any inspections.
- Only experienced electricians and technicians are allowed to check the electrical parts for the game.
- Appropriate technical parts should be used for all replacement.
- Hold the plug instead of the wire to unplug the power cord.
- Do not plug or unplug the plug with wet hand, do not pull or twist the power wire

# 3、**ACCERSSORIES**

Check whether the machine is packed with the following Accessories:**:**

| Name | Qty | Remark |
|---|---|---|
| Manual | 1 | |
| key | 6 | TY18（4PCS） TY16(2PCS） |
| Power line | 1 | |
| Ribbon | 20 | |
| Small basketball | 10 | |

| | | |
|---|---|---|
| Inflatable needle | 1 | |
| Screw | 1bag | |

## 4、How to play

- Press the button to start the game；
- Throw the basketball to basket within limited time；
- More goals, higher scores .

## 5、Parameter

Model：CP.MZLQ

Indoor temperature： –10℃～+40℃

Dimension：1570D mm × 1400W mm× 2300H mm

Weight：140 KG

Power：70W

Players：2

## 六、**Machine outlook**

Time digital display：Shows the play time

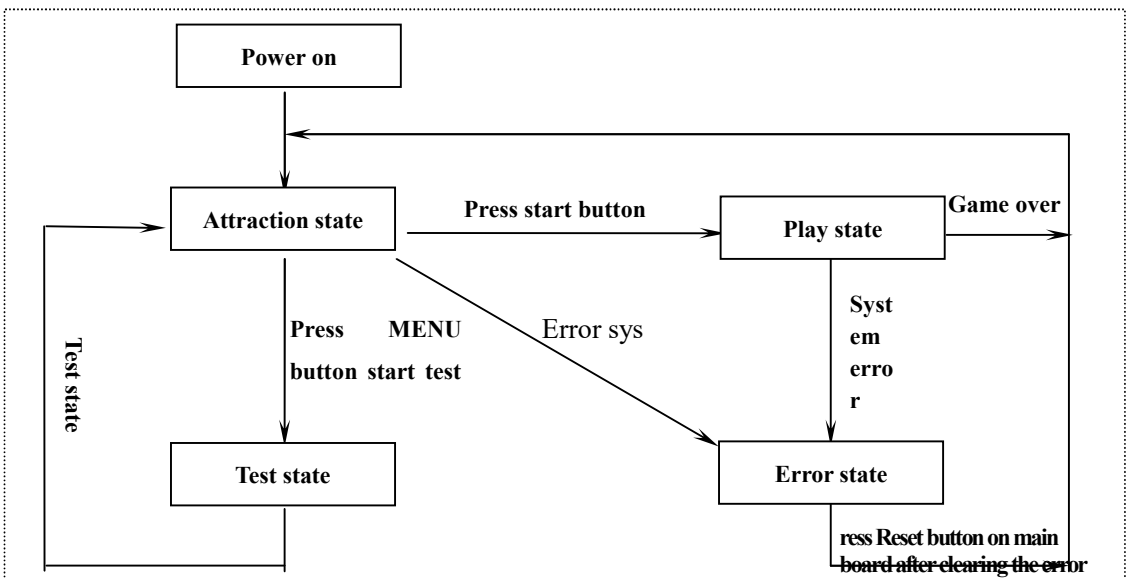
Score digital display：Shows player’s score

Power supply：Supply +5V/+12V DC power

Main Board：Main programme system and control all parts work

## 七、Operation

When the machine is on need insert coin state,there are 4 states ：Attraction state、test state、play state、error state。Below Flow chart illustrates the above four status when machine is in coin play mode：



### 7-1.Switch on the power

**Check the plug and cord. Make sure that it has been set to corresponding to the voltage for the machine, and then switch on the power.**

## 7-2.Play state

The score digital display shows the current score;The time score digital display shows balance time.

## 7-3.Attraction state

During attraction mode,the digital display  is always changing with music. Please MENU button 0.5 second and enter test state,press service button the machine enter to play state.

## 7-4.Test state

During test state,this state can repair System and other input/output terminal and music normal work. Press MENU button,music stop the machine enter to test state.

## 7-5.Error state

When machine works ,when system error ,the alarm sounds, machines shows error code EX and the X means code:1,2,3,4,5..6.7.8.9.10.11.12You can check the code with manual explanation and solve the problem;All problem was fixed and restart machine.Error code list for your reference.

# 8、Appendix

### 8-1.DIP connection on main board

| Plug code | Pin code | Pin color | Function | I/O code | Function of I/O |
|---|---|---|---|---|---|
| | PIN 1 | 0.3—Brown | Speaker + | ----- | |
| | PIN 2 | 0.3—White | Speaker - | ----- | |
| | PIN 3 | 0.3—Yellow | +12V Output | ----- | +12V power supply |
| | PIN 4 | 0.3—Yellow | +12V Output | ----- | +12V power supply |
| | PIN 5 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 6 | 0.3—Yellow | +12V Output | ----- | |

| | | | | | |
|---|---|---|---|---|---|
| J2 | PIN 7 | | | ----- | |
| | PIN 8 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 9 | | | ----- | |
| | PIN 10 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 11 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 12 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 13 | 0.3—Yellow | +12V Output | | |
| | PIN 14 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 15 | 0.3—Yellow | +12V Output | | |
| | PIN 16 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 17 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 18 | 0.3—Yellow | +12V Output | ----- | |
| | PIN 19 | 0.3—Green | Serial Output CLK | ----- | Display board output（CLK） |
| | PIN 20 | 0.3—Brawn | Serial Output DAT | ----- | Display board output（data）<br>Wire connect order：<br>1、1P play time<br>2、1 P play score<br>3、High score<br>4、2P Play score<br>5、2P play time |
| | PIN 21 | 0.3—White | Serial Output LATCH | ----- | Display board output（memory） |
| | PIN 22 | 0.3-Black | GND | ----- | GND power supply |
| | PIN 23 | 0.3-Black | GND | ----- | GND power supply |
| | PIN 24 | 0.3-Black | GND | ----- | |
| | PIN 25 | 0.3-Black | GND | ----- | |
| | PIN 26 | 0.3-Black | GND | ----- | |
| | PIN 27 | 0.3—Brown | Output | OUT0 | Coin enter meter |
| | PIN 28 | 0.3—Pink | Output | OUT1 | Ticket meter |
| | PIN 29 | 0.3—Orange | Output | OUT2 | Ticket drive #1 |
| | PIN 30 | 0.3—SkyBlue | Output | OUT3 | Ticket drive #2 |
| | PIN 31 | 0.3—Green | Output | OUT4 | Start button #1 light |
| | PIN 32 | 0.3—Blue | Output | OUT5 | Start button #2 light |
| | PIN 33 | 0.3—Purple | Output | OUT6 | |
| | PIN 34 | 0.3—Gray | Output | OUT7 | |
| | PIN 35 | 0.3—Brown | Output | OUT8 | |

| | | | | | |
|---|---|---|---|---|---|
| J2 | PIN 36 | 0.3—Pink | Output | OUT9 | J4 pin power charge control(12V relay ) avoid electrify |
| | PIN 37 | 0.3—Orange（ | Output | OUT10 | Start button light(red) |
| | PIN 38 | 0.3—SkyBlue | Output | OUT11 | Start button light(yellow) |
| | PIN 39 | 0.3—Green | Output | OUT12 | Start button light(blue) |
| | PIN 40 | 0.3—Blue | Output | OUT13 | |
| | PIN 41 | 0.3—Purple | Output | OUT14 | |
| | PIN 42 | 0.3—Gray | Output | OUT15 | |
| | PIN 43 | | | | |
| | PIN 44 | | | | |
| | PIN 45 | 0.3—Orange | STXD0 | ----- | |
| | PIN 46 | 0.3—SkyBlue | SRXD0 | ----- | |
| | PIN 47 | 0.3—Green | Output | | Console LED(red) |
| | PIN 48 | 0.3—Blue | Output | | Console LED(green) |
| | PIN 49 | 0.3—Purple | Output | | Console LED(blue) |
| | PIN 50 | | | | |
| J3 | PIN 1 | 0.3—Brown | Keypad CLK output | ----- | KEYPAD CLK |
| | PIN 2 | 0.3—Pink | LCD order/DATA control output | ----- | LCDOder/data control output |
| | PIN 3 | 0.3—Orange | LCDOption control output | ----- | LCD option control output |
| | PIN 4 | 0.3—SkyBlue | LCDReset control output | ----- | LCD reset control output |
| | PIN 5 | 0.3—Purple | Keypad serial input | ----- | KEYPAD data input |
| | PIN 6 | 0.3—Brown | Keypad memory control output | ----- | KEYPAD Lock save control output |
| | PIN 7 | 0.3—White | LCD Serial data output | ----- | LCDserial data output |
| | PIN 8 | 0.3—Green | LCD Serial CLK output | ----- | LCD serial CLK output |
| | PIN 9 | 0.3—Purple | RS232 TX | ----- | |
| | PIN 10 | 0.3-Green | RS485 TR+ | ----- | |
| | PIN 11 | 0.3-Gray | RS232 RX | ----- | |
| | PIN 12 | 0.3—Blue | RS485 TR- | ----- | |
| | PIN 13 | 0.3-Brown/white | Input | IN0 | #1 Up score sensor signal |
| | PIN 14 | 0.3-Red/white | Input | IN1 | #1 Down score sensor signal |
| | PIN 15 | 0.3-Orange/white | Input | IN2 | #2 Up score sensor signal |
| | PIN 16 | 0.3-Yellow/white | Input | IN3 | #2 Down score sensor signal |
| | PIN 17 | 0.3-Green/white | Input | IN4 | # Strobe open |
| | PIN 18 | 0.3-Blue/white | Input | IN5 | # Strobe close |
| | PIN 19 | 0.3-Purple/white | Input | IN6 | |
| | PIN 20 | 0.3-Gray/white | Input | IN7 | |

| | | | | | |
|---|---|---|---|---|---|
| J3 | PIN 21 | 0.3-Brown/white | Input | IN8 | #1 Ticket feedback signal |
| | PIN 22 | 0.3-Red/white | Input | IN9 | #2Ticket feedback signal |
| | PIN 23 | 0.3-Orange/white | Input | IN10 | #1 Start button signal |
| | PIN 24 | 0.3-Yellow/white | Input | IN11 | #2Start button signal |
| | PIN 25 | 0.3-Green/white | Input | IN12 | #1 Coin enter signal |
| | PIN 26 | 0.3-Blue/white | Input | IN13 | #2 Coin enter signal |
| | PIN 27 | 0.3-Purple/white | Input | IN14 | |
| | PIN 28 | 0.3-Gray/white | Input | IN15 | |
| | PIN 29 | 0.3-Brown/white | Input | IN16 | |
| | PIN 30 | 0.3-Red/white | Input | IN17 | |
| | PIN 31 | 0.3-Orange/white | Input | IN18 | |
| | PIN 32 | 0.3-Yellow/white | Input | IN19 | |
| | PIN 33 | 0.3-Green/white | Input | IN20 | |
| | PIN 34 | 0.3-Blue/white | Input | IN21 | |
| | PIN 35 | 0.3-Purple/white | Input | IN22 | |
| | PIN 36 | 0.3-Gray/white | Input | IN23 | |
| | PIN 37 | 0.3-Brown/white | Input（signal）(MCU) | IN24 | |
| | PIN 38 | 0.3-Red/white | Input（signal）(MCU) | IN25 | |
| | PIN 39 | 0.3-Orange/white | Input（signal）(MCU) | IN26 | |
| | PIN 40 | 0.3-Yellow/white | Input（signal）(MCU) | IN27 | |
| | PIN 41 | 0.3-Green/white | SPI_CLK' (MCU) | | |
| | PIN 42 | 0.3-Blue/white | SPI_MOSI' (MCU) | | |
| | PIN 43 | 0.3-Purple/white | SPI_CS' (MCU) | | |
| | PIN 44 | 0.3-Gray/white | SPI_MISO' (MCU) | | |
| | PIN 45 | 0.3-White | +3.3V Output； | ----- | LCD power VDD |
| | PIN 46 | 0.3-Black | GND | ----- | LCD power GND |
| | PIN 47 | 0.3-Red | +5V Output； | ----- | KEY PAD power +5V |
| | PIN 48 | 0.3-Black | GND | ----- | Key pad power GND |
| | PIN 49 | 0.3-Red | +5V Output | ----- | |
| | PIN 50 | 0.3-Black | GND | ----- | |
| J5 | PIN 1 | 0.3—Brown | Output | LED24 | |
| | PIN 2 | 0.3—Pink | Output | LED23 | |
| | PIN 3 | 0.3—Orange | Output | LED22 | |
| | PIN 4 | 0.3—SkyBlue | Output | LED21 | |
| | PIN 5 | 0.3—Green | Output | LED20 | |
| | PIN 6 | 0.3—Blue | Output | LED19 | |
| | PIN 7 | 0.3—Purple | Output | LED18 | |
| J5 | PIN 8 | 0.3—Gray | Output | LED17 | |

| | | | | | |
|---|---|---|---|---|---|
| | PIN 9 | 0.3—Brown | Output | LED16 | |
| | PIN 10 | 0.3—Pink | Output | LED15 | |
| | PIN 11 | 0.3—Orange | Output | LED14 | |
| | PIN 12 | 0.3—SkyBlue | Output | LED13 | |
| | PIN 13 | 0.3—Green | Output | LED12 | |
| | PIN 14 | 0.3—Blue | Output | LED11 | |
| | PIN 15 | 0.3—Purple | Output | LED10 | |
| | PIN 16 | 0.3—Gray | Output | LED9 | |
| | PIN 17 | 0.3—Brown | Output | LED8 | |
| | PIN 18 | 0.3—Pink | Output | LED7 | |
| | PIN 19 | 0.3—Orange | Output | LED6 | |
| | PIN 20 | 0.3—SkyBlue | Output | LED5 | |
| | PIN 21 | 0.3—Green | Output | LED4 | |
| | PIN 22 | 0.3—Blue | Output | LED3 | |
| | PIN 23 | 0.3—Purple | Output | LED2 | |
| | PIN 24 | 0.3—Gray | Output | LED1 | |
| | PIN 25 | 0.3—Yellow | +12V connect 1K resistance | ----- | |
| | PIN 26 | 0.3—Yellow | +12V connect 1K resistance | ----- | |
| | PIN 27 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 28 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 29 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 30 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 31 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 32 | 0.3—Brown | +12V connect 1K resistance | ----- | |
| | PIN 33 | 0.3—Brown | +12V Output | ----- | |
| | PIN 34 | 0.3—Brown | +12V Output | ----- | |
| | PIN 1 | 0.3—Brown | Output | OUT16 | Strobe motor |
| | PIN 2 | 0.3—Yellow | PWM_EX | ----- | +12V power supply |
| | PIN 3 | 0.3—Orange | Output | OUT17 | |
| J4 | PIN 4 | 0.3—Yellow | PWM_EX | ----- | |
| | PIN 5 | 0.3—Green | Output | OUT18 | #1Top light box LED(red) |
| | PIN 6 | 0.3—Yellow | PWM_EX | ----- | |
| | PIN 7 | 0.3—Purple | Output | OUT19 | #1Top light box LED(green) |
| | PIN 8 | 0.3—Yellow | PWM_EX | ----- | |
| | PIN 9 | 0.3—Brown | Output | OUT20 | #1Top light box LED(blue) |
| | PIN 10 | 0.3-Black | PWM_GND | ----- | |
| | PIN 11 | 0.3—Orange | Output | OUT21 | #2Top light box LED(red) |
| J4 | PIN 12 | 0.3-Black | PWM_GND | ----- | |

| | | | | | |
|---|---|---|---|---|---|
| | PIN 13 | 0.3—Green | Output | OUT22 | #2Top light box LED(green) |
| | PIN 14 | 0.3-Black | PWM_GND | ----- | |
| | PIN 15 | 0.3—Purple | Output | OUT23 | #2Top light box LED(red) |
| | PIN 16 | 0.3-Black | PWM_GND | ----- | GND power supply |

## Parameter set description:

## （1）Mini keypad

UP:system parameters+； VOL-: EXIT : CLEAR:

DOWN:system parameters-；VOL+: ENTER: confirmed MODE: mode change

## Parameter settings description:

Press the CLEAR DATA button anytime and clear all the data(Remark: Clear the coin QTY,ticket QTY and the system without any change)

Attraction state,Press MENU button and enter test state, and back to attract mode by entering mode.

Menu option, down means come o next page, up means come to last page. Parameter settings, up means+, down means-.

Attract mode, VOL+ means turn vol up, VOL+ means turn vol down, if no operation within 2 seconds, it will return to attract mode.

Attract mode, UP means lighten the LCD, down means weaken the LCD

Menu display as below:

1. **System info (can not be changed)**
   - **Serial Number**
   - **Date of MFG**
   - **Game Audits**
     - (1)、coin QTY
     - (2)、Ticket QTY

2、**Game Setting（set all the item value）**

1、X coin X game （free ，1-9coins/game）

2、game ticket QTY（no ticket,1-20 score/ticket）

3、Play time（1-5 rounds can set each round play time，The set unit is S and from 30-60）

4、Pass round score（1-5round can set each rounds score，from10-200）

5、The last 10 s plus score(on or off

6、Each ball get scores(1-2score)

7、Pass round award tickets(0-20tickets)

8、The max round setting (1-5 rounds，3 round is factory setting)

9、ON/OFF Attraction mode music(no music，1-10 minutes play one time,loop playing)

10、Link mode

**3、I/O test（input、output）**

1. Test All Inputs (showing all input terminal, black means valid, blank invalid. )
2. Test All Outputs (showing all output terminal, black means valid, blank invalid. )
3. Test all LED (not valid in this machine)

**4、Burn test**（not valid in this machine）

**5、Time setting**（Modify the current time,note the main board need a battery）

**6、Music option**（EN/CN changing-over use UP/DOWN）

# Errors and Solutions

**E01 :1P Coin selector problem**

**E02 :1P Ticket dispenser problem**

**E03 :1P Up score sensor problem**

**E04 :1P Down score sensor problem**

**E05 :1P ticket shortage** (Feed ticket to dispenser or set the machine is with no ticket)

**E06 :Strobe open sensor problem**

**E07 : Strobe close sensor problem**

**E08 :2P Coins selector problem**

**E09 :2P Ticket dispenser problem**

**E10 :2P Up score sensor problem**

**E11 :2P Down score sensor problem**

**E12 :2Pticket shortage** (Feed ticket to dispenser or set the machine is with no ticket)