## CARNIVAL PARK



In order to prevent any problems arising from improper operation, you must carefully read this manual before installation and use machine, pay attention to the items marked in this book.

Please keep this book in good condition for future reference.

## Summary

> Transportation, installation
$\triangleleft$ How to operate
$\triangleleft$ How to adjust Cost of play and Time of play
« Scheduled Maintenance
$\triangleleft$ Troubleshooting
$\diamond$ Parts list
$\triangleleft$ Circuit Wiring Diagram

## Safety Attentions

1) Certain parts of the game is with high voltage (110/ 220 AC). Maintenance should only be performed by trained technician. Do not open the game door unless maintenance or parts replacement is required.
2) Please switch off the power before performing any maintenance.
3) Please switch off the power before opening the game door.

## Installation

The game must be located properly to avoid damages.
DO NOT USE OUTSIDE OR IN WET ENVIROMENT.

## INDOOR USE ONLY

1) The voltage range of the game should be $105 \mathrm{~V} \sim 115 \mathrm{~V} / 215 \mathrm{~V} \sim 225 \mathrm{~V}$. The specific voltage for your game is noted on the date plate on the bottom access door of the game.
2) The plug must be plugged tightly to control box.
3) Please properly adjust the coin mech and the game settings when use at the first time. Check Dip switches on control box to confirm settings.
4) Please regularly check all the functions of the game when in operation

## Notes of Maintenance

1) Be sure to check and maintenance the game regularly.
2) Switch off the power before replacing the parts of the game.
3) The parts for replacement should be the same model as the old one.
4) Please check the connection and voltage output after replacing the power supply.
5) The voltage of the PCB should be $5.1 \mathrm{~V} \sim 5.4 \mathrm{~V}$.
6) Check whether the game has Proper input voltage (A/C) and the output (D/C) voltages before repairing the PCB

## Cleaning Instructions

1) Please use clean and soft cloth to clean the game.
2) Prevent damaging the surface of the game, please do not use the following cleanser:

- Abrasive Cleaners (Buffing compounds, waxing compounds)
- Acidic Cleaners; (degreasers, detergents)
- Insecticide, alcohol or other chemical cleaners


## PLAYING INSTRUCTIONS

Sit on the seat. Insert coin and wait several seconds then it will start to run automatically. It will turn around and the horse will go up and down. Please sit down and hold steadily. If there is an emergency, please press the RED STOP button on the central pillar to stop the ride.


## PARAMETERS

Voltage: AC220V / 110V (50/60 HZ)
Max. Current: 3A / 6A
(Note: The proper voltage and current used accords to the nameplate at the back door of the game.)

Max. Power: 650W
Power for standby mode: 60W
Coin size: $\varphi$ 21mm $\sim \varphi$ 31mm(diameter)
$1.2 \mathrm{~mm} \sim 2.5 \mathrm{~mm}$ (thickness)
Capacity of coin box: about 1500 pcs with coin size $\varphi 25 \mathrm{~mm} * 1.5 \mathrm{~mm}$
Location required: indoor use; temperature: $-5 \sim 40^{\circ} \mathrm{C} ; \mathrm{RH}>90 \%$; no contact with any corrosive, greasiness and dirt.

Dimensions for Whole Game: D1680mm*H2350mm


## Accessories:

| $\#$ | DRAWING | NAME | SPEC./MODEL | QTY |
| :---: | :---: | :--- | :--- | :---: |
| 1 |  | LED light | red | 2 |
| 2 | micro switch |  | 2 |  |
| 3 | key | $1285 \#$ | 2 |  |
| 4 | key | $1396 \#$ | 2 |  |
| 5 | power cord |  | 1 |  |

## INSTALLTION

Please follow the steps of installation at the first time.

1) Place the machine with the same type of others according to its play classification and appearance.
2) Please refer to the suggested position and dimension below to place machine. Make an enough space for daily normal operation and ensure customers can play comfortably.


Fix the machine: Adjust the leg leveler down to keep the machine from rolling on it's wheels. Do not raise the machine so the wheels are any higher than 5 mm off the floor.


Check connection before power input

1) Check the internal structure of the machine for any looseness caused by transportation. The wire connector terminals should not fall out of the port.
2) Check the ground wire is connected to the ground.
3) Check the machine's power input at both ends of the impedance to the ground.
4) Adjust coin mech to accept proper tokens
5) Connect the power cord


A Do not put heavy stuff on the power cable. That could cause a short circuit, even a fire. The wire cannot be forced to stretch and bend. Do not expose the wire to near the stuff with high temp. Do not put wire where to be kicked or touched easily.


B When unplugging the power cable from the socket, please pull out by holding the plug, do not hold the wire.

Do not pull the plug with wet hands.


Power input

1) Ensure machine's input voltage is same as the nameplate.
2) Turn on the power switch after inputting the power.
3) Insert the sample token into the coin acceptor, put the coin into the coin acceptor and confirm that inserting coin is normal.
4) Check all LED display and lights are ok.
5) Set the game setting including coin qty, play time.
6) Start to play game and ensure the movement of machine is without any problem.
7) Ensure the sound is ok.

## Check before operation

To ensure the machine can work properly and safety concern, it is necessary to do daily inspection before the operation.

Check the items below:

1) Power input wiring is fixed well and no damage
2) Ensure machine is fixed well.
3) Confirm there's no damage on the appearance.
4) Ensure there's no stain on machine and labels are fixed well.

## Daily operation

1. Turn on the power switch
2. Inspect the LED display by visual checking.
3. Check background music works properly
4. Check the movements of rides and button can work properly.

Collect coins and account

1. Open the coin box and collect coins after turning off machine.
2. Open the door to check the number of coin meter.


## GAME SETTING

1. Open the door on the chassis of the game and you will see below setting board:

2. Setting chart:

| DIP SW1 <br> SETTING |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of coin per play | 1 coin | OFF | OFF |  |  |  |  |  |  |
|  | 2 coins | ON | OFF |  |  |  |  |  |  |
|  | 3 coins | OFF | ON |  |  |  |  |  |  |
|  | 4 coins | ON | ON |  |  |  |  |  |  |
| Game time per play | 150 seconds |  |  | OFF | OFF |  |  |  |  |
|  | 180 seconds |  |  | ON | OFF |  |  |  |  |
|  | 240 seconds |  |  | OFF | ON |  |  |  |  |
|  | 300 seconds |  |  | ON | ON |  |  |  |  |
| Waiting time for playing background music | 120 seconds |  |  |  |  | OFF | OFF |  |  |
|  | 180 seconds |  |  |  |  | ON | OFF |  |  |
|  | 90 seconds |  |  |  |  | OFF | ON |  |  |
|  | 60 seconds |  |  |  |  | ON | ON |  |  |

No. of coin per play: this setting decides how many pcs of coins for each play.
Game time for each play: this setting decides how long each play will last.
Waiting time for playing background music: this setting decides how long the waiting time will be for automatically playing background music.

## ADJUSTMENT

## Coin selector adjustment



Adjustment:

1) Remove the plastic coin in slot and replace the using coin.
2) Loosen the screw at the back of coin slot and adjust the fixing piece according to the coin size to avoid the larger coin is stuck at the coin selector.
3) Set COIN switch at NO (COIN signal line to ground normally open). Remark: this switch can be used as coin switch when machine is operating.
4) Adjust COIN signal wavelength to 50MS.
5) Adjust the token tolerance resistor according to the photo above, turn clockwise to adjust the sensitivity of the token tolerance increases, the range of acceptable tokens has larger tolerances; turn counterclockwise to adjust the sensitivity of the token tolerance to reduce the acceptable range of small coin tolerance.

Volume adjustment

1. Open the service door to find the sound board. There is a volume potentiometer on the sound
board.


## 2. Adjust the volume by turning the potentiometer.

## $\triangle$ Attention

Please turn the volume potentiomenter slowly. Do not turn to the rightmost position at one time to prevent the sudden increase of the volume output current and burn the speaker.

## MAINTENANCE

- Non-professional technicians do not check and maintain to avoid personal injury and damage to the machine.
- Ensure to turn off the power then do the maintenance

Do not pot tools or other object in machine to avoid any malfunction.

- After inspection, please install all parts and tighten the screws.

Daily inspection

| ITEM | INSPECTION |
| :---: | :--- |
| Coin selector | Check if the coin selector can work properly. |
| STOP button | Check if the STOP button can work properly. |
| Sound | Check if the volume is proper. |
| Motor | Check if the motor can work properly. |
| Temp./Humidity | Check temp. and humidity of the surrounding environment <br> is too high or not. |

Daily maintenance

| ITEM | MAINTENANCE |
| :---: | :--- |
| Cabinet | Clean the cabinet with clean water and absorbent paper. |
| Lifting bar | Add lubricating oil to the joint of lifting bar and mounted <br> bearings. |
| PCB | Use a small brush to clean the dust and dirt. |

## TROUBLESHOOTING

| PART | PROBLEM | CAUSE | SOLUTION |  |
| :---: | :---: | :---: | :---: | :---: |
| coin selector | Coin inserted is invalid. | No sample coin in the coin selector. | Install the sample coin. |  |
|  |  | The sensitivity for coin is too high. | Adjust the sensitivity. |  |
|  | Coin in coin box is invalid. | Signal wire is loose. | Check the connection of coin selector. |  |
|  |  | Coin selector is bad. | Repair or replace the coin selector. |  |
| turnplate | The turnplate can not move. | Solid relay is bad. | Replace the solid relay. |  |
|  |  | The port for motor of the main board is had | Replace the main board. |  |
|  |  | Bad connection of the motor. | Reconnect the wire of motor. |  |
|  |  | The motor is bad. | Replace the motor. |  |
| horse | The lifting is not steady. | The horse is loose. | Fix the horse on the lifting bar. |  |
|  |  | No lubricating oil at the joint of the liftino hard and hearing | Add lubricating oil. |  |
| speaker | No sound. | Speaker is bad. | Replace the speaker. |  |
|  |  | The wire of speaker is loose. | Reconnect the wire of speaker. |  |
|  |  | Volume is too low. | Adjust the volune. |  |
|  |  | Main board is bad. | Repair or replace the main board. |  |
| power | No reaction after switching on the machine. | No AC110V/220V power input. | Check the power connection. |  |
|  |  | Fuse is burnt | Replace the fuse. |  |
|  |  | No voltage output from power sunnlv | Repair or replace the power supply. |  |
|  |  | nnwer sunnlv | Adjust the output voltage from power supply to 5.2 V |  |
|  |  | Main board is bad. | Replace the main board. |  |
|  |  |  |  |  |

## PARTS LIST

## Marquee



Central pillar


| NO. | PARTS NAME | QTY |
| :---: | :--- | :---: |
| 01 | pillar | 1 |
| 02 | fiberglass | 1 |
| 03 | button | 2 |
| 04 | LED light | 2 |
| 05 | coin door | 1 |
| 06 | lock \#1285 | 1 |
| 07 | coin selector | 1 |
| 08 | meter | 1 |
| 09 | button | 1 |
| 10 | lock 1396 | 1 |

Fiberglass horse


| NO. | PARTS NAME | QTY |
| :---: | :--- | :---: |
| 01 | fiberglass horse | 3 |
| 02 | metal parts | 3 |
| 03 | pedal | 6 |
| 04 | rubber cover | 3 |
| 05 | lifting bard cover | 3 |
| 06 | chassis fiberglass | 1 |
|  |  |  |
|  |  |  |



PCB assembly


| NO. | PARTS NAME | QTY |
| :---: | :--- | :---: |
| 01 | circuit breaker | 1 |
| 02 | power supply | 1 |
| 03 | solid relay 25A | 1 |
| 04 | main board MP30 | 1 |


| NO. | PARTS NAME | QTY | NO. | PARTS NAME |
| :---: | :--- | :---: | :---: | :--- |
| 01 | mounted bearing LK F205 | 3 | 11 | carbon brush |
| 02 | turnplate | 1 | 12 | carbon brush holder |
| 03 | drive sprocket | 1 | 13 | chassis |
| 04 | motor 400W 1400r/min | 1 | 14 | caster 63 |
| 05 | rotating wheel assembly B | 1 | 15 | leg leveler M16 |
| 06 | rotating wheel assembly A | 1 |  |  |
| 07 | rotating wheel assembly C | 1 |  |  |
| 08 | mounted bearing LK F205 | 1 |  |  |
| 09 | conducting ring assembly | 2 |  |  |
| 10 | carbon brush bracket | 1 |  |  |

Chassis assembly B, C


| NO. | PARTS NAME | QTY |
| :---: | :--- | :---: |
| 01 | mounted bearing MZD P204 | 2 |
| 02 | wheel sleeve | 2 |
| 03 | rotating wheel | 2 |
| 04 | spring | 2 |
| 05 | driven wheel holder | 2 |
| 06 | mounted bearing MZD P204 | 2 |
| 07 | driven shaft | 2 |
| 08 | lifting bar | 2 |
| 09 | bearing | 2 |

## Chassis assembly A




| NO. | PARTS NAME | QTY | NO. | PARTS NAME | QTY |
| :---: | :--- | :---: | :---: | :--- | :---: |
| 01 | spring | 1 | 11 | driven sprocket | 1 |
| 02 | drive wheel holder | 1 | 12 | chain | 1 |
| 03 | drive wheel shaft | 1 | 13 | mounted bearing MZD P204 | 1 |
| 04 | lifting bar | 1 |  |  |  |
| 05 | mounted bearing MZD P204 | 1 |  |  |  |
| 06 | wheel sleeve | 1 |  |  |  |
| 07 | mounted bearing MZD P204 | 1 |  |  |  |
| 08 | drive shaft |  |  |  |  |
| 09 | driven shaft |  |  |  |  |
| 10 | mounted bearing MZD P204 | 1 |  |  |  |

SCHEMATIC DIAGRAM


