

# OPERATING MANUAL 

NJ version

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## SPECIFICATIONS

POWER
DIMENSIONS

120VAC @ 60Hz USA \& CANADA
Width: 24 " ( 600 mm )
Height: $48^{\prime \prime} \quad(1215 \mathrm{~mm})$
Depth: $38^{\prime \prime} \quad(960 \mathrm{~mm})$

WEIGHT
146 lb
( 66 kg )


## SPECIFICATIONS (CONT.)

## LIMITED WARRANTY

Sammy USA Corp. warrants all products to be free from defective materials and workmanship for a period of thirty (30) days from the Sammy USA Corp. invoice date unless otherwise specified in writing by Sammy USA Corp. The extent of this warranty applies to all electronic assemblies only, and does not include lamps and fuses.

This limited warranty is invalid for any product that upon examination is deemed to have been subject to misuse, improper repair or installation, neglect or violation of specification or other instructions published by Sammy USA Corp. There are no additional warranties described above. The limited warranties described above shall be in lieu of any other warranty, expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

## HANDLING AND INSTALLATION

## PLEASE TAKE A MOMENT TO READ THE FOLLOWING BEFORE YOU TURN ON YOUR NEW GAME.

The Mighty Driver redemption game is an indoor game machine. It is not designed for outdoor use. Avoid installing the game in the following locations:

- Locations subject to rain or water damage
- Locations in direct sunlight
- Locations subject to extreme heat
- Locations near hazardous or flammable liquids or chemicals

You will need the following minimum dimensions for egress into your location:

- 60 inches in height
- 25 inches in width


## INSTALLATION

Unpack your game carefully. Be careful of the shipping staples. They can be sharp.
Your game is assembled and should not need any assembly.
Level your game using enclosed Leg levelers. Prizes will then fall properly.
The standard voltage for U.S. and Canada 120V / 125V - 3A; Europe 220V / 240V - 2A.
Use of extension cords is prohibited.
Use only a grounded outlet. YOUR GAME MUST BE GROUNDED!!!
The minimum space required for operation in your locations should be:

- 80 " high
- 30 " wide
60 " depth

THE GAME MUST BE LEVEL. IF THE GAME IS NOT ON A LEVEL SURFACE, THE TILT SYSTEM WILL MALFUNCTION. USE A LEVEL TO AVOID NEEDLESS ADJUSTMENTS.

## SAFETY PRECAUTIONS

- Be sure to turn the power off or unplug the game before working on the unit.
- Do not unplug game by pulling on the line cord.
- Replace line cord if the insulation is damaged in any way with one of equal quality. Replace open fuses with same type and rating.
Re-check and re-seat all harness connections.


## GAME PLAY, GAME SETTING MODE AND DIPSW SETTING

## GAME PLAY

- Insert coin(s) or token(s) .
- Control the Car using steering wheel to hit the FLAGS.
- More FLAGS, more tickets.


## GAME SETTING MODE

HOW TO ENTER THE GAME SETTING MODE
Re-power on while pressing and holding the RESET Switch which is located inside of front door. Digits of 88 are shown first. Then
 release the RESET switch OFF to show the $\mathbf{- 1}$ on 2 digits LED display on Marquee box.

## HOW TO SELECT AND DECIDE EACH CONTENTS

After entering GAME SETTING mode, press SERVICE switch to move the number of FUNCTIONS. (2 digits will be changed by pressing the SERVICE switch.) Press RESET switch to select it. After selecting, display shows each setting numbers.
Press SERVICE switch to move the number of SETTINGS. (2 digits will be changed by pressing the SERVICE switch) Press RESET switch to select it.

## RETURN TO PREVIOUS MENU

Change FUNCTIONS and SETTINGS to selection "00". Select these Digits then press RESET switch to return to previous menu.

## RETURN TO GAME MODE

After selecting any SETTINGS, re-power on the game.

For the FUNCTIONS and SETTINGS, please refer to the setting table on next page.

## DIP SW SETTING

Payout setting is set by DIPSW on Main PCB. Please refer below table.

| DIP SWITCH 1 |  | SWITCH POSITION |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FUNCTIONS | SETTING | NOTE | 1 | 2 | 3 |
| PAYOUT | REDEMPTION GAME | Ticket payout. | OFF | OFF | OFF |
|  | CARD PAYOUT | Use Asahi Seiko Card Dispenser. | ON | OFF | OFF |
|  | EXTEND GAME | No Ticket, No Card Payout. Extend game play. | ON | ON | OFF |
|  | OFF | Only game play. No payout. | OFF | OFF | ON |

ATTEMTION!!! PLEASE KEEP OFF OTHER SWITCHES. (SW 4, 5, 6, 7 AND 8)

## TABLE OF SETTING FUNCTIONS (MIGHTY DRIVER, USA)

| FUNCTION\# <br> (2 Digits LED) | FUNCTION | SETTING\# <br> (2 Digits LED) | SETTING | NOTE |
| :---: | :---: | :---: | :---: | :---: |


| -1 | COIN CHUTE | 11 | 1 COIN / 1 PLAY | \$0.25 per play (or \$1.00 coin per 1 play) |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 12 | 2 COINS / 1 PLAY | $\$ 0.50$ per play |
|  |  | 13 | 3 COINS / 1 PLAY | \$0.75 per play |
|  |  | 14 | 1 COIN / 2 PLAYS | \$0.25 per 2 plays (or $\$ 1.00$ coin per 2 plays) |
|  |  | 15 | 3 COINS / 2 PLAYS | \$0.75 per 2 plays |
|  |  | 16 | 2 COINS / 3 PLAYS | \$0.50 per 3 plays |
|  |  | 17 | 3 COINS / 4 PLAYS | \$0.75 per 4 plays |
|  |  | 18 | 3 COINS / 5 PLAYS | \$0.75 per 5 plays |
|  |  | 19 | FREE PLAY | Spin the Steering Wheel to start the game |
|  |  | 00 | RETURN TO PREVIOUS |  |




| -4 | AUTO | 41 | OFF |  |
| :---: | :---: | :---: | :---: | :--- |
|  | CAR FINDING | 42 | ON | Start to search for Magnet of Car Assy when |
|  |  | 00 | RETURN TO PREVIOUS | Magnet Base is off. |


| -5 | ATTRACT | 51 | OFF |  |
| :--- | :---: | :---: | :---: | :---: |
|  | SOUND | 52 | ON |  |
|  |  | 00 | RETURN TO PREVIOUS |  |


| -6 | ATTRACT | 61 | OFF |  |
| :---: | :---: | :---: | :---: | :---: |
|  | CAR MOVING | 62 | 3 MINUTES |  |
|  | (Waiting time) | 63 | 5 MINUTES |  |
|  |  | 64 | 10 MINUTES |  |
|  |  | 00 | RETURN TO PREVIOUS |  |
|  |  |  |  |  |


| -7 | CARD PAYOUT | 71 | 1 PC |
| :---: | :---: | :---: | :---: |
|  | SETTING | 72 | 2 PCS |
|  | 73 | 3 PCS |  |
|  | 74 | 4 PCS |  |
|  |  | 75 | 5 PCS |
|  |  | 00 | RETURN TO PREVIOUS |

TABLE OF SETTING FUNCTIONS (MIGHTY DRIVER, USA)


| -A | SCORE SETTING PER 1 TICKET PAYOUT | A1 | 1 FLAG |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A2 | 2 FLAGS |  |
|  |  | A3 | 3 FLAGS |  |
|  |  | A4 | 4 FLAGS |  |
|  |  | A5 | 5 FLAGS |  |
|  |  | A6 | 6 FLAGS |  |
|  |  | A7 | 7 FLAGS |  |
|  |  | A8 | 8 FLAGS |  |
|  |  | A9 | 9 FLAGS |  |
|  |  | AA | 10 FLAGS |  |
|  |  | Ab | 11 FLAGS |  |
|  |  | AC | 12 FLAGS |  |
|  |  | Ad | 13 FLAGS |  |
|  |  | AE | 14 FLAGS |  |
|  |  | AF | 15 FLAGS |  |
|  |  | 00 | RETURN TO PREVIOUS |  |


| -b | MERCY TICKET | b1 | OFF | Payout before start game. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | b2 | 1 TICKET |  |
|  |  | b3 | 2 TICKETS |  |
|  |  | b4 | 3 TICKETS |  |
|  |  | b5 | 4 TICKETS |  |
|  |  | b6 | 5 TICKETS |  |
|  |  | b7 | 6 TICKETS |  |
|  |  | b8 | 7 TICKETS |  |
|  |  | b9 | 8 TICKETS |  |
|  |  | bA | 9 TICKETS |  |
|  |  | bb | 10 TICKETS |  |
|  |  | 00 | RETURN TO PREVIOUS |  |


| -C | EXTEND GAME <br> PLAY SETTING <br> Not used when <br> Ticket \& Card payout is active. | C1 | Up to 1 GAME | Used when player gets 30 flags |
| :---: | :---: | :---: | :---: | :---: |
|  |  | C2 | Up to 2 GAMES |  |
|  |  | C3 | Up to 3 GAMES |  |
|  |  | C4 | Up to 4 GAMES |  |
|  |  | C5 | Up to 5 GAMES |  |
|  |  | 00 | RETURN TO PREVIOUS |  |


| -D | Do not use | D1 | OFF |  |
| :--- | :--- | :--- | :--- | :--- |
| $-E$ | Do not use | E4 | OFF |  |


| -0 | RESET | 01 | RESET TO DEFAULT |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | 00 | RETURN TO PREVIOUS |  | "FACTORY INSTALLED" SETTING

## TEST MODE

You can check 3 tests in this mode.

## HOW TO ENTER THE TEST MODE

Re-power on while pressing and holding the SERVICE Switch which is located inside of front door. Digits of 88 are shown first. Then release the SERVICE switch OFF to show the 1- on 2 digits LED display on Marquee box.


## HOW TO SELECT AND DECIDE CONTENTS

After entering TEST MODE, press SERVICE switch to move the number of contents. (2 digits will be changed by pressing the SERVICE switch.) Press RESET switch to select it. After selecting, display shows each function numbers.

## TEST MENU FUNCTION NUMBER

- I/O \& DISPLAY TEST >>> Display shows 1-
- MECHANISM TEST >>> Display shows 2-
- SOUND TEST


## RETURN TO PREVIOUS MENU

Each test function has the number "OO", select this and press RESET switch. If you want to quit the test during testing, press RESET switch when the LED Display does not show any numbers.

## - I/O \& DISPLAY TEST

Display shows 1- then press SERVICE switch to select following TEST menu. There are 3 kinds as below. (11, 12 and 13)

STEERING WHEEL TEST (Press SERVICE switch to select 11 then press RESET switch)
Check the Optic sensor functions on Steering Wheel Assy. LED Display shows digits from 0 to 48 when the Optic sensor is activate. Spin the wheel to move the digits, this means the Optic sensor works fine.

SWITCH TEST (Press SERVICE switch to select $\mathbf{1 2}$ then press RESET switch)
Check the Coin switch and Magnet under the CAR Assy.
If the Magnet is positioned properly and Coin Switch is OFF, Display shows " 0 ".
When the Coin Switch is ON, Display shows "1" then Lamp \#1 on the Marquee will be ON. Lock out coin of Coin mech will work, too.
When the Magnet is OFF, Display shows " 2 " and Lamp \#3 on the Marquee will be ON.

LAMP TEST (Press SERVICE switch to select 13 then press RESET switch)
Check the 9 Lamps and LED Display PCB on the Marquee. They automatically Light up and count up.

## MECHANISM TEST

Display shows 2- then press SERVICE switch to select following TEST MENU. There are 3 kinds as below. (21, 22 and 23)

X-MECH. UNIT TEST (Press SERVICE switch to select 21, then press RESET switch.)
X-MECH is controlling the CAR Assy by Magnet base and Motor. Spin the Steering Wheel to move the Magnet base with Car Assy left and right. When the Left \& Right Limit Sensor in the XMECH is activated, Lamp \#1 or \#9 on the Marquee will light up. Display will show Moving Digits when the Motor is moving.

## LAMPS ON THE MARQUEE (9 POSITIONS)



- BELT MECH. TEST (Press SERVICE switch to select 22, then press RESET switch.)

Spin the Steering Wheel clockwise to move the BELT forward. Spin the Steering Wheel counter clockwise to move the BELT backward. Spin more to make the BELT move faster. Each Lamp on Marquee shows the function of each Sensor on BELT MECH.

Lamp \#1: Positioning sensor
Located Right bottom of BELT from back side view. 2 pcs per set. (Receiver and Sender.)
Count the hole on left side of Belt.

## Lamp \#3: Adjusting sensor

Located Left bottom of BELT from back side view. Counts the 5 Holes on the Belt.
Lamp \#5 \& 7: Photo. Reflector
Located Left top of BELT from back side view. Reading the Black and White marks on Right side of Belt.


VENDING DEVICE TEST (Press SERVICE switch to select 23, then press RESET switch.)
Press SERVICE switch to payout Ticket or Card when the setting is Ticket or Card Payout.

## - SOUND TEST

Display shows 3- then press SERVICE switch to go to SOUND TEST.
Press RESET switch to count up the number on Display and output the sound. Press \& hold to skip thru the numbers faster.
Press SERVICE Switch and Display shows O0, then press SERVICE Switch again to return to previous menu.

## RETURN TO GAME MODE

After TESTING, re-power on the game.

## ERRORS

| Display Shows | Contents of ERROR | Cause of problem and Solution. |
| :---: | :---: | :---: |
| CE | Card or Ticket Empty | Check the Card or Ticket Dispenser. If empty, re-fill the Cards or Tickets and press RESET switch to payout remaining number of Cards or Tickets. Do not power off because remaining number will be cleared. |
| CJ | Jamming of Card or Ticket Dispenser | Check the Card or Ticket Dispenser, clear the jam of Cards or Tickets and re-power on the game. |
| $E 1$ | Coin Switch Error | Check the Coin Mech. Any jamming in the coin or token in there or not? Correct and re-power on the game. |
| E2 | Magnet Error | This is error code when the Magnet base is off from the X-Mech. Unit. Open Playfield dome and check the Car Assy mounting. |
| E3 | EP-ROM Error | Data writing Error. Press RESET switch to clear. If error is not cleared, need to exchange the Main PCB. |
| E4 | Malfunction of X Mech. | Check wiring and pin connection of $X$ Mech. connector. Or Check output for Power supply assy. |
| E5 | Malfunction of Belt Unit | Problem with Belt Unit. Check if motor is turning or not. Check harness of Belt motor Assy. |
| E6 | Card or Ticket Dispenser Error | Check the Card or Ticket Dispenser harness, connection...etc. Or exchange the Unit. |
| E7 | Belt Home positioning or Adjustment Sensor Error | Check the sensor connector, harness and wiring. Or exchange those sensors. |
| E8 | X-Limit Sensor Error | Check the Harness or Limit switch of Xmech. Unit. Or exchange the X-Limit Sensor. |
| EG | Switch Error | This error code appears when the SERVICE and RESET switches are kept on over 10 sec . after powering on the game. Check those switches continuity. |
| $E A$ | Belt speed Error | If EA error appears after game over, check Photo Reflector. (Dirty, scratch on Sensor or broken.) |

Press RESET switch to clear error code. If Error still exists, check above again.

## PART NUMBERS

| PARTS NAME | Parts number | PARTS NAME | Parts number |
| :--- | :---: | :--- | :---: |
| Mighty Driver, Main CPU Board | $41-10-001$ | Belt Assy, MD | $41-70-911$ |
| 2 digits LED Board, MD | $41-20-010$ | Gear Head, Conveyor Belt, MD | $41-60-336$ |
| Rope Light Assy, MD | $41-60-250$ | DC Motor, X-Mech. 24V, MD <br> DME34BML30B (1P/rev D-cut) | $41-60-337$ |
| Marquee, MD | $41-30-120$ | DC Motor, Conveyor Belt. MD <br> DME60B6HFPB | $41-60-338$ |
| Decal, TICKET, MD | $41-30-225$ | Motor PCB, MD, TA8428K (X-Mech.) | $41-20-176$ |
| Sticker, Inst, MD | $41-30-221$ | Motor PCB, MD, TA8429H (Conveyor <br> Belt) | $41-20-177$ |
| Decal, Front MD | $41-30-226$ | Car Assy, MD | $41-50-550$ |
| Side Decal, MD | $41-30-200$ | Photo Sensor, LG-217D-3 (Limit <br> Switch, X-Mech.), MD | $41-60-557$ |
| Steering Wheel only, MD | $41-50-500$ | Photo Sensor, KB1240-AA, MD <br> (Positioning and Adjusting sensors) | $41-60-558$ |
| Steering Wheel Assy, MD | $41-50-501$ | Photo Reflector, KR291-AA, MD | $41-60-559$ |
| Opto. Sensor, Steering Wheel, <br> MD | $41-60-556$ | Electrical Coin Mech. Assy | $99-70-183$ |
| Playfield Dome, MD | $41-70-450$ | Ticket Dispenser, Entropy, 963CR | $99-70-051$ |

## ELECTRICAL WIRING DIAGRAM (USA \& CANADA)



