Mad Wave Motion Theater

USER MANUAL

Version 2.0—April 2006

Triotech Amusement Inc.
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Dear valued customer,

Congratulations and thank you for purchasing a Mad Wave Motion Theater from TRIOTECH AMUSEMENT. We are certain you will not be disappointed with your purchasing decision. Your 2-seat motion theater is coin-operated and does not require any attendance. It features a 5.1 Digital sound system, a bright 1500 LUMENS projector for the 55" screen and a dual-actuator motion platform, which features the most realistic simulation available in coin-op. The built-in LED display and marquee header are sure to attract a crowd.

You can also offer your players a selection of 10 Motion Rides by purchasing additional ride films. Contact your distributor today for more information on these rides!

Sincerely,

TRIOTECH
ATTENTION ALL GUESTS
READ IMPORTANT SAFETY INFORMATION
AND FOLLOW INSTRUCTIONS OF ATTENDANTS

RIDE DESCRIPTION: MODERATE
A movie ride with intense back and forth and side to side movement of the seats.

MOTION THEATER
Do not ride if you have any of the following conditions:
- Recent surgery or Illness
- Heart Conditions
- Poor Back or Lower-Back pain
- Pregnancy
- High Blood Pressure or Anemia
- Under the influence of Drugs or Alcohol

For your safety, you should be in good health to ride. Only you know your physical conditions or limitations. If you suspect your health could be at risk for any reason, or you could aggravate a pre-existing condition of any kind, DO NOT RIDE!

RIDE RULES
- Secure all loose articles (glasses, cameras, cell phones, hats, wallets, keys, etc.) or leave them with a non-rider
- Cameras and video equipment are not permitted on the ride
- Smoking is not permitted on the ride
- Chewing gum, candy, food and drinks are not permitted on the ride
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**Technical Support:** 888-465-4634
Mad Wave Motion Theater Installation

CAUTION
Mad Wave Motion Theater requires a dedicated 15 amp circuit or the machine may experience sporadic technical difficulties. Your Mad Wave Motion Theater should not be plugged in with other deluxe or motion based cabinets.

Determine Optimum Location
The game location must be free of exposure to direct sunlight, high humidity, dust, salt mist, high heat, or extreme cold. If installed in an unusually hot location, allow additional clearance between ventilation slots in the game and any structure or object that would tend to restrict air circulation.

Madwave Motion Theater Ships in two (2) crates

CRATE 1
INCLUDES MAIN CABINET AND MARQUEE HEADER

CRATE 2
MOTION SEAT MODULE

Technical Support 1-888-465-4634
Assembling main cabinet

You will need the following hardware:
8 bolts (1/4”-20 X 1/2”) and washers
4 bolts (1/4”-20 X 1 1/4”)
3 persons will be needed for this operation

1. Insert one of the two side panels (A) on side of cabinet.
2. Rotate insert (B) clockwise with Philips screwdriver.
3. Repeat step 1 with remaining panel.
4. Unfold the projector panel (C) until it sits on top of the two plastic supports (you may have to slightly open the two side panels to let the projector panel fit between the two panels until it reaches its upright position)
5. Install 2 bolts (1/4”-20 X 1 1/4”) and washers on each side of the cabinet (D) to hold the projector panel in the upright position.
A. Remove projector cover plate
B. Slide wires from header into plastic tube.
C. Connect the Phone cable to the outlet.
D. Connect the two 120V cords to the outlet.
E. Connect the Speaker wire to the connectors (Make sure the number on the wire match with those beside the connector plate).
F. Unscrew Screw.
G. Pull plastic tube out.
H. Close projector cover plate.
I. Position tube so both screws are positioned inside wood panels and screw both screws to prevent tube from sliding.
Seat Assembly

You will need the following hardware:
6 bolts and washers (⅜" - 13 X 2 ½"

CAUTION
CAREFUL NOT TO DAMAGE THE ATTACHED WIRES WHILE HANDLING THE SEAT MODULE

1. Remove seat platform from CRATE 2
2. Insert wires through the hole while positioning the seat module.
3. Attach seat module to the theater cabinet with the 6 bolts (1/2-13"x21/2") and washers.

Stabilize Unit
The movement of the seats produces force on the machine that can cause the entire game to move. Before operating the theater, make sure all levellers are down and resting firmly on the floor.

Technical Support 1-888-465-4634
- Proceed to rear cabinet
- Open the lower rear door (key on hook in coin mech door)
- Take wires from the opening and connect as follows:
  A. Connect the RG-45 cables to the terminal block;
  B. Connect the speaker wire to the terminal; (Be sure to match the numbers that are on the speaker wires to the numbers indicated below the terminal block)
  C. Connect the power cord from the seat.

From the back service door re-route the main power cord to the outside of the machine through the circular opening beside the door.
Projector adjustment
Viewsonic PJ-501

1
Projection is pre-adjusted at the factory but minor adjustments may be required.
(1) Vertical adjustment (Tilt) To center the image horizontally on the screen, loosen the large knob on both sides of the projector and tighten it when it is adjusted properly.

2
Zoom Adjustment:
Turn the zoom knob.
Focus Adjustment:
Turn the Focus Ring.

3
Horizontal Adjustment:
To rotate the projector find the two adjustment bolts at the top of the machine (pictured here) loosen them, adjust view then tighten.

Technical Support 1-888-465-4634
**Projector adjustment**

**Epson PowerLite S3**

1. **Projection**
   - Projection is pre-adjusted at the factory but minor adjustments may be required.
   - Vertical adjustment (Tilt) To center the image horizontally on the screen, loosen the large knob on both sides of the projector and tighten it when it is adjusted properly.

2. **Zoom Adjustment**
   - Hit the WIDE and TELE buttons to adjust to the proper size.

3. **Horizontal Adjustment**
   - To rotate the projector, find the two adjustment bolts at the top of the machine (pictured here) loosen them, adjust view then tighten.

4. **Focus adjustment**
   - Rotate focus knob on lens to adjust focus.
Factory projector adjustments Projector

1. Invert image: press Menu-projector-rear/ceiling
2. Image shape: press Menu-setting-keystone, and set to –22
4. Image color: press menu-image-color mode-presentation
5. Image position: press menu-signal-position
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Dollar Bill Validator Information 2-3
Operator Setting
Continued

Factory setting is set at 12 coins per ride

To access the operator settings interface, open the coin mechanical door and push the small micro switch on the inside door as shown below (while in attract mode only). If you push the micro switch once, you will get the statistic mode.
To access the statistic mode screen, press the micro switch once (or toggle micro switch until you reach this screen).

1. Amount of credits inserted into game in lifetime.
2. Amount of money inserted into game in lifetime.
3. Value of one credit
4. Actuator usage time since game installed
5. Actuator usage time since game installed
6. Revenue from each movie installed

**Statistic mode:**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUNTER</td>
<td>40 CREDITS</td>
</tr>
<tr>
<td>REVENUE</td>
<td>$10.00</td>
</tr>
<tr>
<td>CREDIT VALUE</td>
<td>$0.25</td>
</tr>
<tr>
<td>MOTION USAGE SERVICE</td>
<td>0000 hr 18 min</td>
</tr>
<tr>
<td>MOTION USAGE TOTAL</td>
<td>0000 hr 18 min</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Movie Title</th>
<th>Credits</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haunted Mine</td>
<td>16 cr.</td>
<td>($4.00)</td>
</tr>
<tr>
<td>Fantasy Rider</td>
<td>8 cr.</td>
<td>($2.00)</td>
</tr>
<tr>
<td>Mad Fury</td>
<td>8 cr.</td>
<td>($2.00)</td>
</tr>
<tr>
<td>Hyper speedway</td>
<td>8 cr.</td>
<td>($2.00)</td>
</tr>
</tbody>
</table>
Operator Setting
Continued

Use the large dash selection buttons 1 through 6 to change configurations. To change any of the options, press the appropriate button until the desired setting is reached. To return to a previous setting, keep toggling the button until it reaches the end of the settings; then it will restart the settings from the beginning.

- Amount of credits needed to start game. Set to 0 for free play (Press 1)
- Choose to display credits or money on screen. (Press 2)
- Value of one credit. (Press 3)
- Sound volume in attract mode. (Press 4)
- Sound volume in menu mode. (Press 5)

Hit the appropriate button on the header to change variables

- Maintenance mode:

  Configuration Elements:

  (1) cost per game (credit) : 8
  (2) cost display : credits
  (3) credit value ($) : $0.25
  (4) volume (demo) : 2
  (5) volume (menu) : 66

Press on the appropriate button

Technical Support 1-888-465-4634
CAUTION
If the movie volume is not set high enough, it will dramatically reduce the experience! Sound level must be set loud to get the maximum effect.

Sound settings

Movie volume is controlled by knob on amplifier. Recommended setting is between 35 and 40

Subwoofer settings

Recommended setting of 4
THE MAD WAVE MOTION THEATER does not ship equipped with a DBV, however it is pre-wired to accept one and we suggest the installation of one of the models recommended below. This game uses the Happ Controls Over Under Wide Bill Validator, part number 40-2000.00. This door accepts Mars upstacker bill validator with compact fitted Bezel (up to 7" deep).

Accepts both bills and coins

Fitted with full metal cash box enclosure

Fitted with two $.25 U.S. Coin

FACTORY SUGGESTED PRICING PER RIDE IS $3.00

Upstacker Bill validator fits these Models amongst others

MARS AE-2651-U3E
MARS AE-2651-U5E

Technical Support 1-888-465-4634
### Part 3: Maintenance

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Replacing projector lamp
Epson PowerLite S3

Before replacing the lamp, you need to remove the projector.

A Remove the projector and disconnect the video and power cable.

B Remove projector lamp cover, unscrew 2 holding screws from lamp and pull lamp out.

A When inserting new lamp, make sure to re-install the light sensor cable behind lamp.

Technical Support 1-888-465-4634
Cleaning projector air filter
Epson PowerLite S3

The air filter should be cleaned as described below at intervals of approximately 3 months. If a message appears asking you to clean filter, turn projector off and clean filter.

A
Remove the projector cover plate

B
Remove and clean filter

- Replace the air filter if contamination cannot be removed, or if it is damaged.
- Do not use the projector with the air filter removed.
- When the air filter is clogged, the power supply is switched OFF automatically to prevent overheating.

Technical Support 1-888-465-4634
Cleaning the projector area filter
Epson Powerlite S3

- Reach top of Game
- Slide out the filter and clean in soapy water
- Insert back in place

Clean filter minimum once a month
Replacing projector lamp

Viewsonic PJ-501

Before replacing the lamp, you need to remove the projector.

A

Remove the light sensor through the projector's fan outlet (use screwdriver to remove the sensor between the plastic pieces).

B

Remove the projector and disconnect the video and power cable.
Replacing projector lamp

Viewsonic PJ-501
Continued

Replacing the Lamp
When the indicator shows that there is zero (0) hours of lamp life remaining, the unit will automatically shut off within 10 minutes. If you see this message, you should replace the lamp. However, you may replace the lamp anytime after the first warning message appears, at approximately 300 hours of remaining lamp life.

1. Switch the projector OFF, remove the power cord from the power outlet, and wait at least 45 minutes for the unit to cool.

2. Prepare a new lamp.
   Check that the projector has cooled sufficiently, and gently turn it upside down.

3. Loosen the two screws as shown in the diagram, and remove the lamp cover.

4. Loosen the one screw, and gently remove the lamp while holding the grips. Touching the inside of the lamp case may result in uneven coloring.

5. Install the new lamp and tighten the one screw firmly.

6. Make sure that the lamp assembly is seated properly before replacing the other screw.

7. Replace the lamp cover in position and tighten the two screws firmly.

8. Gently turn the projector right-side up.

CAUTION!
Ensure that screws are properly tightened.
Screws not fully tightened may result in injury or accidents.
Replacing projector lamp
Viewsonic PJ-501
Continued

CAUTION:
The lamp may explode if handled at high temperatures.
HIGH VOLTAGE - HIGH TEMPERATURE - HIGH PRESSURE

- Dispose of the used lamp according to local regulations.
- Since the lamp is made of glass, do not drop the unit and do not scratch the glass.
- Do not reuse the old lamp. This could cause the lamp to explode.
- Do not use the projector with the lamp’s front glass covering removed.
- If there is a possibility that the lamp has exploded (you heard an explosive sound), disconnect the power plug from the power outlet and ask your dealer to replace the lamp. The lamp is protected by a glass cover, but in rare cases, the reflector and the inside of the projector could be damaged by broken or shattered glass. Broken pieces of glass could cause injury.

Lamp

The estimated lamp life is 4000 hours. Before replacing the lamp, turn the Power Switch OFF, remove the power cord from the power outlet, and wait approximately 45 minutes until the lamp has cooled.

NOTE: The LAMP indicator is also red when the lamp unit reaches a high temperature. Before replacing the lamp, switch the POWER OFF, wait approximately 20 minutes, and switch the POWER ON again. If the LAMP indicator is still red replace the lamp.
Replacing projector lamp
Viewsonic PJ-501

Continued

After replacing the lamp, it is important that you reset the lamp timer. When the lamp has been replaced after the "THE POWER WILL TURN OFF AFTER 10hr." message is displayed, complete the following steps within 10 minutes of switching power ON. The power will be turned off automatically after 10 minutes.

Switch POWER ON.

From the OPTION menu select LAMP TIME with the description of "Adjusting the Projected Image".

Press the RESET button and hold for approximately 3 seconds. The DEFAULT and CANCEL options will display.

Press the Up arrow button to select the DEFAULT. The remaining lamp life is now reset to 2000 hours.

IMPORTANT: Do not reset the lamp timer without replacing the lamp. The message functions will not operate properly if the lamp timer is not reset correctly.

Cleaning the Lens

Gently wipe the lens with lens cleaning paper. Do not touch the lens with your hands.

Make sure the lens is cool before cleaning.
Do not use detergents or chemicals other than those noted above. Do not use benzene or thinners.
Do not use chemical sprays.
Use a soft cloth or lens paper only.

Technical Support 1-888-465-4634
Cleaning projector air filter
Viewsonic PJ-501

The air filter should be cleaned as described below at intervals of approximately 250 hours. When the filter is used for approximately 200 hours, the message "CLEAN THE AIR FILTER" appears when the projector is switched on.

A. Remove the projector cover plate
B. Remove filter and clean
C. Reset filter timer (page 24)
Reset filter timer

Do not reset the filter time without cleaning the filter. The message functions will not operate properly if the filter time is not reset correctly.

1. Take the remote control from inside the cabinet
2. Press MENU on the remote control
3. Select OPTION
4. Select FILTER TIMER
5. Hold the RESET button on the remote control for 5 seconds
6. Select RESET
7. Check that the filter timer is back to 0

- Replace the air filter if contamination cannot be removed, or if it is damaged.
- Do not use the projector with the air filter removed.
- When the air filter is clogged, the power supply is switched OFF automatically to prevent overheating.
Replacing an actuator

A

Unplug all cables from the seat module through the small door opening in the back of the main cabinet.

B

Unbolt the seat module from the main cabinet. Slide the seat module a foot away from the main cabin (being careful not to damage the seat cables).

C

Lift the seat module using the 2” 1x2 metal tubes as handles until the back of the seats touches the floors (fig C).
Replacing an actuator

**Continued**

A. Remove control box cover.

B. Unplug all connectors.

C. Unscrew cable plates.

D. Remove cable plates.
Replacing an actuator
Continued

Remove the bolts using 7/16” socket with bolts #1, ½” socket with bolts #2 and 5/32 hex key with bolts #3

NOTE: The left and right plates are not the same. Do not mix them if you are removing the two actuators.

IMPORTANT: When reinstalling the plates, slide them toward the outside of the machine.
Replacing a drive assembly

Remove drive assembly from motor. Shipping a drive assembly is the cheapest way to get the actuator repaired as you save on shipping (weight).
Replacing a drive assembly
Continued

1/16" between couplers

If positioned too close the heat
and pressure will damage the bearings.
You can adjust spacing by repositioning
the coupler on the motor with the set screw.
Replacing control box

A. Remove control box cover.
B. Unplug all connectors.
C. Unscrew cable plates.
D. Remove cable plates.
E. Remove and replace control box.
## Troubleshooting

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## 4-1 Actuator / drive assembly (motion)

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<td>Motion is not synchronized</td>
<td>4-1-3</td>
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<tr>
<td>Game plays without motion</td>
<td>4-1-4</td>
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<tr>
<td>One seat rises when starting and other does not</td>
<td>4-1-5</td>
</tr>
<tr>
<td>Noise coming from seat</td>
<td>4-1-6</td>
</tr>
<tr>
<td>Motion is too strong</td>
<td>4-1-7</td>
</tr>
</tbody>
</table>

Technical Support 1-888-465-4634
Diagnostic screen and error codes

Choose one of the following options

A
If your serial number ends with the last 3 digits between 001 and 241 (example MT-03-04-018), go to page 34.

B
If your serial number ends with the last 3 digits 242 or above (example MT-05-04-596), go to page 35.
Motion Theater Diagnostic Mode: [Seat 5]:com3

- Synchronized: No problem reported with this actuator
- Synchronizing: Move to box below
- Not Responding: Go to page 43

- Software (overweight)
- Software (travel)
- Software (overpos)
- Software (fail hall)
- Software (fail encoder)
- Software (Timeout)
- Command OverRun
- Software

Technical Support: 1-888-465-4634
Diagnostic screen and error codes
Continued

Motion Theater Diagnostic Mode: [Seat 5]:com3

General status (com) : Synchronizing

Motor 1 (left) status : Unknown
Motor 1 (right) status : Unknown
Motor 1 (left) error : OK
Motor 1 (right) error : OK

Motion error. Press any selection button to retry.

- Synchronized: No problem reported with this actuator
- Syncronizing: Move to box below
- Not Responding: Goto page 43

- Software (overweight) Command OverRun Fail State
- Software (travel) Command OverRun Fail State
- Software (full half) Command OverRun Fail State
- Software (overpos) Command OverRun Fail State
- Software (Timeout)
- Command OverRun Fail State
- Software Command OverRun Fail State

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Technical Support 1-888-465-4634
## Diagnostic screen and error codes

### Software (Travel)

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<tr>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mechanical fault</td>
<td>- Unplug Motion Theater.</td>
</tr>
</tbody>
</table>

### Software (overweight)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mechanical fault</td>
<td>- Lift speaker bars on sets to check if they move freely.</td>
</tr>
</tbody>
</table>

### Software (overweight) Command OverRun Fail State

<table>
<thead>
<tr>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mechanical fault</td>
<td>- Re-rotate actuator on side the error appeared (diagnostic screen). <strong>Do not tighten center bolt too hard.</strong></td>
</tr>
</tbody>
</table>

### Software (OverPos)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mechanical fault</td>
<td><strong>DOES NOT MOVE FREELY</strong></td>
</tr>
</tbody>
</table>

- Replace DRIVE ASSEMBLY

If no change, replace whole actuator.

---

Technical Support 1-888-465-4634
## Diagnostic screen and error codes

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<table>
<thead>
<tr>
<th>Software (Fail Hall)</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Electrical fault</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software (Fail encoder)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Replace whole ACTUATOR on side error appears. Section 3-3.</td>
</tr>
</tbody>
</table>
### Software (Timeout)

<table>
<thead>
<tr>
<th><strong>Cause</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuators have not received data from computer for more than one minute</td>
</tr>
</tbody>
</table>

#### A
- Unplug machine
- Wait 6 minutes
- Re-plug machine

#### B
- Get mouse and keyboard
- Press ESC on keyboard
- Double Click MOTION THEATER icon on computer desktop.
Diagnostic screen and error codes
Continued

Command OverRun

<table>
<thead>
<tr>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Same side Actuators are installed on Motion Theater</td>
</tr>
</tbody>
</table>

**A**

I have not replaced an actuator.

Call Tech Support @ 1-888-465-4634

**B**

I just replaced an actuator.

- Remove actuator you just installed.
- Open actuator.

Call Technical Support 1-888-465-4634
4-1-1 Diagnostic screen and error codes

Software Command OverRun Fail State

**Cause**
- Machine is sharing breaker with other devices.
- Machine is not receiving at least 115volts.

- **Verify voltage**
  - I have more than 114volts.
  - I have less than 115volts.

  Go to **Step B**

  Plug machine into other outlet with at least 115volts. If you do not have the minimum requirements, call an electrician.

- **Verify if machine is alone on breaker.**
  - It is alone
  - It is not alone

  Use another breaker or unplug all other games.

Technical Support 1-888-465-4634
Diagnostic screen and error codes
Continued

Software (overPos) Command OverRun Fail State
Software (fail hall) Command OverRun Fail State

Causes
- Mechanical, electrical and/or software fault

A
- Remove seats from game
- Remove Control Box
- Verify software version.

Version is > 3.10
Go to step B

Version is not > 3.10
Call Tech Support to order new version of box.

B
- Remove Actuator from the side error appears on. (Sec 3-3)
- Verify condition of Coupler (small) aluminum cylinder
- Linking Drive Assembly and Motor.

Coupler is in perfect condition
- Good

Coupler is loose or broken
- If coupler is loose, use HEX key to tighten.
- If coupler is broken, call Tech Support @ 1-888-465-4634 to get replacement.

Technical Support 1-888-465-4634
<table>
<thead>
<tr>
<th>Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4-1-1</strong></td>
</tr>
<tr>
<td><strong>Continued</strong></td>
</tr>
</tbody>
</table>

### Diagnostic screen and error codes

**Command OverRun Fail State**

- When error appears as is, without the word *software*, no problem is detected on *this* actuator.

`Technical Support 1-888-465-4634`
Diagnostic screen and error codes
Continued

Not Responding

Cause
- No communication or no power going to actuators.

Step 1
- Open service door on bottom left in the back of the game.
- Look inside at Actuator control Board.

Light is RED or GREEN (LED)
- Go to next step

No light (LED)
- Check power on board power cord.

There is power
- Replace Actuator control board.

There is power
- Replace Power Cord between Power Supply and Actuator Control Board.

There is power
- Replace Power Supply.

There is no power
- Verify power input on Power supply (red LED).

Continued next page
Diagnostic screen and error codes

Continued

Not Responding

Step 2
- Open service door on bottom left in back of the game.
- Look inside and test power on Power Outlet

There is Power
- Remove seat assembly
- Connect another power cord directly to actuators or Control Box (if equipped with control box)
- Reset computer

There is no power
- Open outlet and repair connections.

Still Have Error
- Open control box and verify if capacitors are burned, damaged or have broken legs.

There is Movement
- Replace power cord(s)

If capacitors are ok, call technical support, if damaged, replace box.
## Motion stops and restarts during ride

### Cause
- One or more Actuator is faulty, but does not generate an error in the Diagnostic Screen.

### Troubleshooting
- Get mouse and keyboard out.
- Press ESC.
- Go to WINDOWS EXPLORER.
- Copy C:\Motion Theater\Motion_Theater.log on floppy disk.
- Email file at SERVICE@TRIO-TECH.COM
- Wait 10 minutes and call Tech Support @ 1-888-465-4634
Troubleshooting

4-1-3 Motion is not synchronized

**Cause**
- Wrong version of the USB to Serial converter (computer cable)
- Replace computer with version that does not use such a cable (new cables are not compatible).
Game plays without motion

**Cause**
- Wrong version of the USB to Serial converter (computer cable)

- Replace computer with version that does not use such a cable (new cables are not compatible).

Technical Support 1-888-465-4634
### Troubleshooting

**4-1-5**

**One seat rises when starting and other does not**

<table>
<thead>
<tr>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>- One or more Actuator is faulty, but does not generate an error in the Diagnostic Screen.</td>
</tr>
</tbody>
</table>

- Take mouse and keyboard out.
- Press ESC.
- Go to `WINDOWS EXPLORER`.
- Copy `C:\MotionTheater\Motion_Theater.log` on floppy disk.
- Email file to `SERVICE@TRIO-TECH.COM`
- Wait 10 minutes and call Tech Support @ **1-888-465-4634**
Motion is too strong

Cause
- All games have the same motion strength

- Get mouse and keyboard
- Open WINDOWS EXPLORER
- Access c:\MotionTheater\MotionTheater_Movie_config.txt
- Open file
- Modify the motion volume for the rides you think are too strong.
- Set motion between 70 and 100

Technical Support 1-888-465-4634
## Troubleshooting

### 4-2 Video (picture, image and projector)

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video (Picture, image and projector) Table of contents</td>
<td>4-2</td>
</tr>
<tr>
<td>No image</td>
<td>4-2-1</td>
</tr>
<tr>
<td>Blue or purple screen</td>
<td>4-2-2</td>
</tr>
<tr>
<td>Message on screen</td>
<td>4-2-3</td>
</tr>
<tr>
<td>Projector remote control does not respond</td>
<td>4-2-4</td>
</tr>
</tbody>
</table>

---

*Technical Support 1-888-465-4634*
**Troubleshooting**

**No image**

**4-2-1**

**Cause**
- Lamp is defective
- Projector is defective
- No power to projector

**Step 1**
- Is lamp light on?
  - Light is on: Change lamp
  - Light is off: Go to next step

**Step 2**
- Does projector turn on (any sign of power)
  - Yes: Replace projector
  - No: Check power, if no power replace projector.

---

Techline Support 1-888-465-4634
<table>
<thead>
<tr>
<th>Troubleshooting</th>
<th>4-2-2 Blue or purple screen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
<td></td>
</tr>
<tr>
<td>• Projector ballast is defective</td>
<td></td>
</tr>
</tbody>
</table>

-Replace projector
### Message on screen 4-2-3

**Cause**
- Computer problem
- Projector control board problem
- Projector filter needs cleaning
- Projector lamp timer to reset
- Wrong input selected on projector

<table>
<thead>
<tr>
<th>Reason</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer uses USB to SERIAL cable</td>
<td>- USB to SERIAL cable not connected</td>
</tr>
<tr>
<td>Regular filter cleaning</td>
<td>- Clean air filter on side of projector and reset timer</td>
</tr>
<tr>
<td>Projector control board (behind projector) is not detecting projector</td>
<td>- Check light sensor on projector control board, insert in grill. If inserted, replace board</td>
</tr>
<tr>
<td>Wrong input source on projector</td>
<td>- Using remote control, set input to RGB or press INPUT on projector</td>
</tr>
<tr>
<td>Lamp has reached the end of its expected life</td>
<td>- Replace lamp and replace when your fail</td>
</tr>
</tbody>
</table>

**Technical Support 1-888-465-4634**
### Projector remote control does not respond

<table>
<thead>
<tr>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Batteries are dead</td>
</tr>
<tr>
<td>• Remote control is defective</td>
</tr>
</tbody>
</table>

- Replace batteries
- Replace remote control
Buttons do not respond

4-3

Cause

- Bad connection in wiring
- Bad connection to computer

Restart computer after each step below

- Ensure keyboard encoder board wires are pushed in tight. (use knife)

- Make sure PS2 extension that runs between keyboard encoder board and computer is on tight. (turn computer off, reseat cable and restart computer)

- Try shorting wires with ground to verify if board detects connection.
  Look at example below:

Ex: Button NO. 1 does not Respond. Short button 1 wire and ground

Technical Support 1-888-465-4634
Troubleshooting

Coin door
(credits not recognized)

**Cause**
- Connectors or wires came loose

- Verify that red connectors are pushed in tight.
- Verify that wires in connectors are secure.
- Verify that problem does not come from keyboard encoder board. (section 3)
Computer error codes

**Cause**
- Hard drive not ON
- USB to SERIAL connector (cable in back is not connected)
- Actuator problem

- If you get this error at boot-up, Check ON/OFF switch on outside of hard drive case. Button should be to the left and green light should be on.
- If light is on and same error appears, remove hard drive from tray and connect it directly on IDE cable inside computer.

- If this error appears, call technical support at 1-888-465-4634

- If this screen appears, refer to section 4-1 page 33.

Technical Support 1-888-465-4634
Battery backup

-The battery backup has 7 outlets. 4 are battery-powered and 3 are direct.

-If START bar appears during game play, battery did not shut down computer properly.
- Unplug game from wall and wait 15 minutes before replugging. Problem will be solved.

-If battery keeps on beeping, unplug game from wall and wait 15 minutes before replugging. Problem will be solved.

-If battery does not turn on, replace battery.

Technical Support 1-888-465-4634
### Led sign Troubleshooting 4-7

<table>
<thead>
<tr>
<th>Trouble</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some lights not functioning</td>
<td>Replace SIGN</td>
</tr>
<tr>
<td>Lines not lighting</td>
<td>Replace SIGN</td>
</tr>
<tr>
<td>Message changes</td>
<td>Call Triotech 1.888.465.4634 for update</td>
</tr>
<tr>
<td>Does not store message in memory</td>
<td>Replace SIGN</td>
</tr>
<tr>
<td>Customizing message</td>
<td>Call Triotech 1.888.465.4634 for update</td>
</tr>
<tr>
<td>Does not power ON</td>
<td>Replace SIGN</td>
</tr>
</tbody>
</table>

**Technical Support** 1-888-465-4634
### Audio sound

**Trouble**

- No sound to 1 or more surround speakers.
- No sound at all

---

**Step 1**

Reset Amplifier settings in the following order:

- Press DVD
- Press Input digital
- Press Surround

---

**No sound to 1 or more surround speakers**

If no sound, disconnect all surround speakers and test them one at the time. If one or more do not work, replace it (them).

---

**No sound at all**

If no sound, check power. If you have power, reset settings and restart computer. Replace coaxial cable linking computer and amplifier. If all else fails, replace amplifier.

---

*Technical Support 1-888-465-4634*
Part 5: Parts List

- Seat assembly parts 5-1
- Seat assembly parts 5-2
- Seat fiberglass parts 5-3
- Header parts 5-4
- General parts 5-5
Seat assembly

<table>
<thead>
<tr>
<th>Item</th>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD-250-0021</td>
<td>Fixed frame</td>
</tr>
<tr>
<td>2</td>
<td>SD-450-0003</td>
<td>Pivot</td>
</tr>
<tr>
<td>3r</td>
<td>SD-250-0020</td>
<td>Piston bracket right</td>
</tr>
<tr>
<td>3l</td>
<td>SD-250-0019</td>
<td>Piston bracket left</td>
</tr>
<tr>
<td>4</td>
<td>SD-250-0018</td>
<td>Mobile frame</td>
</tr>
<tr>
<td>5</td>
<td>SD-1000-0001</td>
<td>Actuator assembly</td>
</tr>
<tr>
<td>6</td>
<td>SD-450-0013</td>
<td>Actuator control box</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Wood seat frame</td>
</tr>
</tbody>
</table>

Technical Support 1-888-465-4634
### Seat assembly

#### Parts

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD-150-0019</td>
<td>RA45 cable</td>
</tr>
<tr>
<td>2</td>
<td>SD-150-0022</td>
<td>18 Ga speaker wire</td>
</tr>
<tr>
<td>3</td>
<td>SD-450-0003</td>
<td>Pivot</td>
</tr>
<tr>
<td>4</td>
<td>SD-1000-0001</td>
<td>Actuator complete assembly</td>
</tr>
<tr>
<td>5</td>
<td>SD-250-0020</td>
<td>Piston bracket right</td>
</tr>
<tr>
<td>6</td>
<td>SD-250-0019</td>
<td>Piston bracket left</td>
</tr>
<tr>
<td>7</td>
<td>SD-250-0021</td>
<td>Fixed frame</td>
</tr>
<tr>
<td>8</td>
<td>SD-250-0018</td>
<td>Mobile frame</td>
</tr>
<tr>
<td>9</td>
<td>SD-450-0013</td>
<td>Actuator control box</td>
</tr>
</tbody>
</table>

---

Technical Support 1-888-465-4634
Seat assembly (fibreglass)

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>SD-250-0010</td>
<td>Fiberglass seat</td>
</tr>
<tr>
<td>02</td>
<td>SD-500-0003</td>
<td>Head Cushion</td>
</tr>
<tr>
<td>03</td>
<td>SD-250-0024</td>
<td>Right Speaker Support</td>
</tr>
<tr>
<td>04</td>
<td>SD-250-0010</td>
<td>Holder Bar</td>
</tr>
<tr>
<td>05</td>
<td>SD-250-0023</td>
<td>Left Speaker Support</td>
</tr>
<tr>
<td>06</td>
<td>SD-350-0006</td>
<td>Fiberglass back</td>
</tr>
<tr>
<td>07</td>
<td>SD-350-0004</td>
<td>Fiberglass right side</td>
</tr>
<tr>
<td>08</td>
<td>SD-350-0003</td>
<td>Fiberglass left side</td>
</tr>
<tr>
<td>09</td>
<td>SD-250-0025</td>
<td>Foot Rest</td>
</tr>
<tr>
<td>10</td>
<td>SD-350-0001</td>
<td>Right Fiberglass base</td>
</tr>
<tr>
<td>11</td>
<td>SD-400-0002</td>
<td>Center Foot Plastic</td>
</tr>
<tr>
<td>12</td>
<td>SD-250-0011</td>
<td>No Step Plate</td>
</tr>
<tr>
<td>13</td>
<td>SD-350-0002</td>
<td>Left Fiberglass base</td>
</tr>
<tr>
<td>Item</td>
<td>Part No.</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>01</td>
<td>SD-700-0020</td>
<td>Speakers</td>
</tr>
<tr>
<td>02</td>
<td>SD-350-0007</td>
<td>Header</td>
</tr>
<tr>
<td>03</td>
<td>SD-250-0026</td>
<td>Speaker grille</td>
</tr>
<tr>
<td>04</td>
<td>SD-550-0003</td>
<td>Neon Light 4</td>
</tr>
<tr>
<td>05</td>
<td>SD-550-0002</td>
<td>LED Sign</td>
</tr>
<tr>
<td>06</td>
<td>SD-400-0005</td>
<td>Fropl Plastic</td>
</tr>
<tr>
<td>07</td>
<td>SD-600-0002</td>
<td>Mirror</td>
</tr>
<tr>
<td>08</td>
<td>SD-600-0004</td>
<td>Mirror holder</td>
</tr>
</tbody>
</table>
## General parts

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-00-0001</td>
<td>ACTUATOR ARM 1 LEFT</td>
</tr>
<tr>
<td>20-00-0002</td>
<td>ACTUATOR ARM 1 RIGHT</td>
</tr>
<tr>
<td>20-00-0003</td>
<td>ACTUATOR ARM 2</td>
</tr>
<tr>
<td>20-00-0006</td>
<td>DRIVE ASSEMBLY 1 LEFT</td>
</tr>
<tr>
<td>20-00-0007</td>
<td>DRIVE ASSEMBLY 1 RIGHT</td>
</tr>
<tr>
<td>20-00-0008</td>
<td>HELMET BRACKET</td>
</tr>
<tr>
<td>20-00-0009</td>
<td>COMPUTER</td>
</tr>
<tr>
<td>20-00-0010</td>
<td>PROJECTOR REMOTE CONTROL</td>
</tr>
<tr>
<td>20-00-0011</td>
<td>PROJECTOR CONTROL BOARD</td>
</tr>
<tr>
<td>20-00-0012</td>
<td>PROJECTOR LAMP F1-25G</td>
</tr>
<tr>
<td>20-00-0013</td>
<td>READER ENCODER BOARD</td>
</tr>
<tr>
<td>20-00-0014</td>
<td>ACTUATOR CONTROL BOARD</td>
</tr>
<tr>
<td>20-00-0015</td>
<td>UPS BATTERY BACKUP</td>
</tr>
<tr>
<td>20-00-0016</td>
<td>STREIFER</td>
</tr>
<tr>
<td>20-00-0017</td>
<td>SURROUND SPEAKER</td>
</tr>
<tr>
<td>20-00-0018</td>
<td>ROUTE LCD P PANEL</td>
</tr>
<tr>
<td>20-00-0019</td>
<td>HELMET WIRELESS COMM CABLE</td>
</tr>
<tr>
<td>20-00-0020</td>
<td>VALUE SELECTION BUTTON</td>
</tr>
<tr>
<td>20-00-0021</td>
<td>RED BUTTON</td>
</tr>
<tr>
<td>20-00-0022</td>
<td>MIRRORS GLASS</td>
</tr>
<tr>
<td>20-00-0023</td>
<td>START SWITCH</td>
</tr>
<tr>
<td>20-00-0024</td>
<td>HEAD CUSHION</td>
</tr>
<tr>
<td>20-00-0025</td>
<td>ACTUATOR BRACKET LEFT</td>
</tr>
<tr>
<td>20-00-0026</td>
<td>ACTUATOR BRACKET RIGHT</td>
</tr>
<tr>
<td>20-00-0027</td>
<td>AMPLIFIER MOUNTING PLATE</td>
</tr>
<tr>
<td>20-00-0028</td>
<td>SIDE DECKS</td>
</tr>
<tr>
<td>20-00-0029</td>
<td>SPEAKER HOUSING BAR (LEFT)</td>
</tr>
<tr>
<td>20-00-0030</td>
<td>SPEAKER HOUSING BAR (RIGHT)</td>
</tr>
</tbody>
</table>

Technical Support: 1-888-465-4634
Table of content

Part 6: Schematics
- Electrical (back of game) 6-1
- Computer 6-2
- Audio/video 6-3
- Electrical 6-4
6-1 Electrical (back of game)

MWMT Electrical Schematics: Physical view (back)
Technical Support

109 Des Industries
Lavaltrie, Quebec
Canada J5T 3R2

1-888-IN-LINE-4
Fax: 450.586.0299
www.trio-tech.com
info@trio-tech.com
LIMITED WARRANTY

With the exception of drive assemblies and projector bulbs (parts causing motion of the seats), Triotech warrants to the buyer, for a period of (1) one year starting on the day of product delivery, all parts against any manufacturer's defect. During this warranty period, Triotech agrees to replace defective parts. Installation costs onsite are at the charge of the buyer.

Triotech warrants to the buyer, for a period of (3) three months starting on the day of product delivery, all parts and labor against any manufacturer's defect of drive assemblies (parts causing motion of the seats) and projector bulb. During this warranty period, Triotech agrees to replace defective parts. Installation costs onsite are at the charge of the buyer.

Ground Freight costs for replacement parts are at the charge of Triotech, if Air freight is requested it will be at the charge of the buyer. The buyer agrees to send back defective parts to Triotech within (30) thirty days and freight costs will be at his charge.

The warranty is limited to manufacturer's defects.
As for parts or components not manufactured by Triotech, the only valid warranty is that of the manufacturer's.
Triotech assumes no liabilities for any loss of revenue, damage or inconvenience of any type resulting from a defect of any part of the system and will not assume the temporary replacement of the system during the period of repair.
Triotech is not liable of any late delivery of the system.
Any apparent defect or non-delivery of a part of the system shall be notified in writing within 5 days of delivery.
Defective parts covered by the warranty will be replaced at Triotech's discretion either by new or rebuilt parts with the same or with a replacement model of the same parts. Warranty on replacement parts ends on the same date as the original part warranty.
No warranty is valid if the defect is the result of a misusage, or contrary to the norms of instruction or user manuals, or the result of improper maintenance.
Using spare parts that do not fit specifications will void the warranty. Removing serial numbers and/or bar codes from product or component will void the warranty.
Triotech is only liable to the replacement, in a reasonable delay, of the defective parts.
No warranty is granted on the productivity of the system sold or on the result of its use.

Technical Support 1-888-465-4634