Mad Wave Motion Theater

USER MANUAL

Version 2.0– April 2006
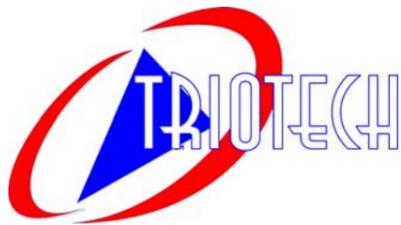
Triotech Amusement Inc.
190 Des Industries Lavaltrie, Quebec (Canada)
J5T 3R2
Tel.: **450.586.5009**
Toll free: **1-888-IN-LINE-4**
Fax: **450.586.0299**
e-mail: **service@trio-tech.com**

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 coditions:

Recent Surgery or Illness	Heart Conditions	Neck, Back or Bone Alliments	Pregnancy	High Blood Pressure or Aneurysms	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

Table of Contents

Technical Support 1-888-465-4634

Installation

1-1

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
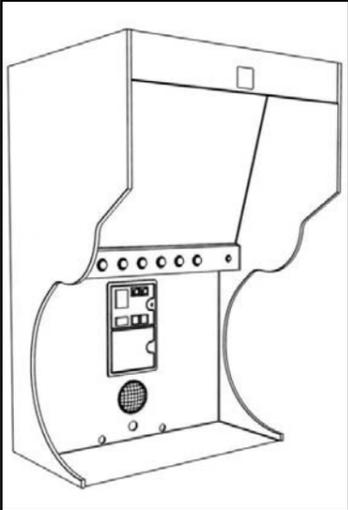
CRATE 1
INCLUDES MAIN CABI-
NET AND MARQUEE
HEADER
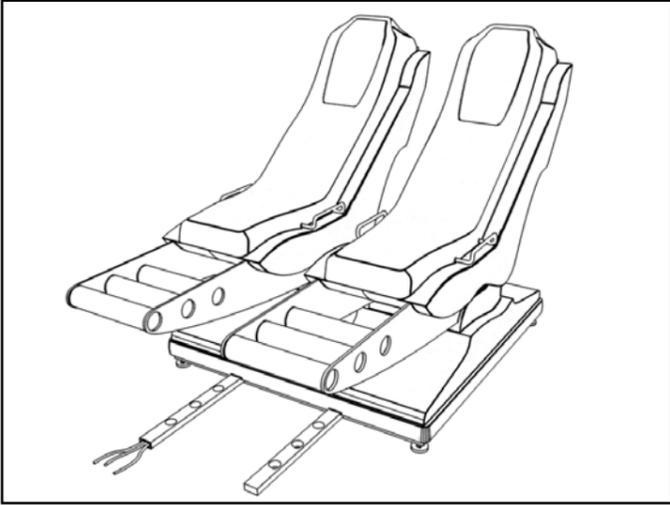
CRATE 2
MOTION SEAT MODULE

Installation

Assembling main cabinet

1-2

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 support fit between the two panels until it reaches its upright position)

5. Install 2 bolts (1/4"-20 X1 1/4") and washers on each side of the cabinet (D) to hold the projector panel in the upright position.
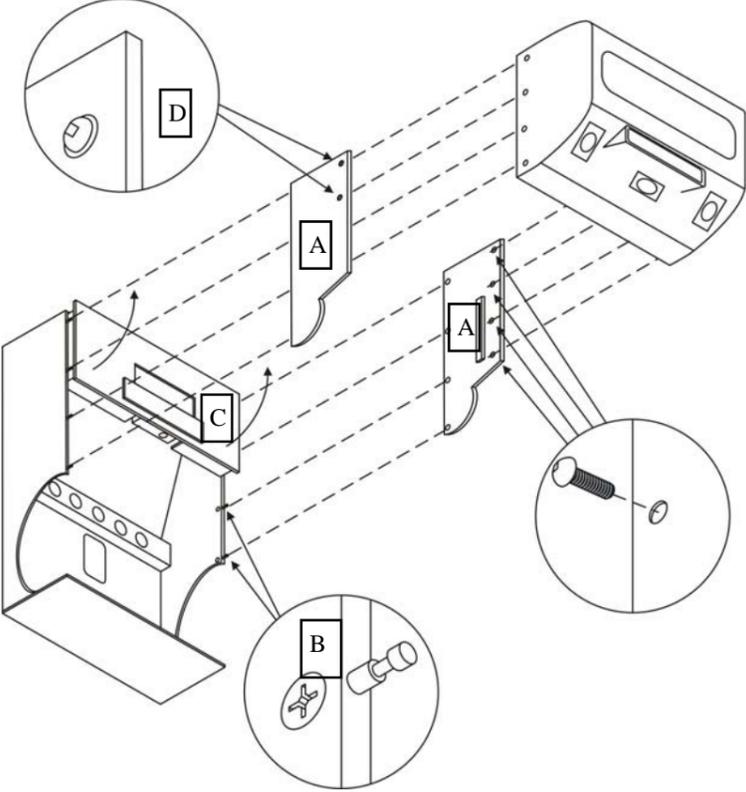
Installation

1-3 Header Wiring

A. Remove projector cover plate
B. Slide wires from header into plactic 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

Installation

1-4
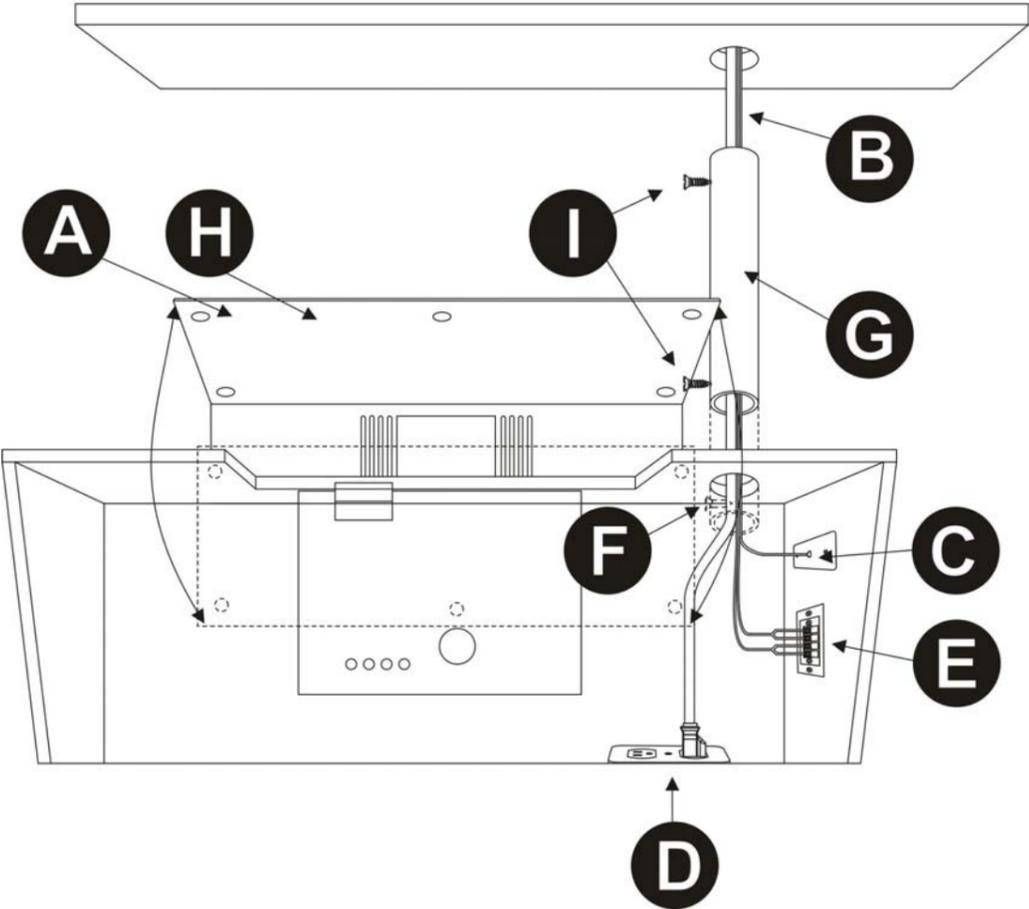
You will need the following hardware:
6 bolts and washers (½" - 13 X 2 ½")

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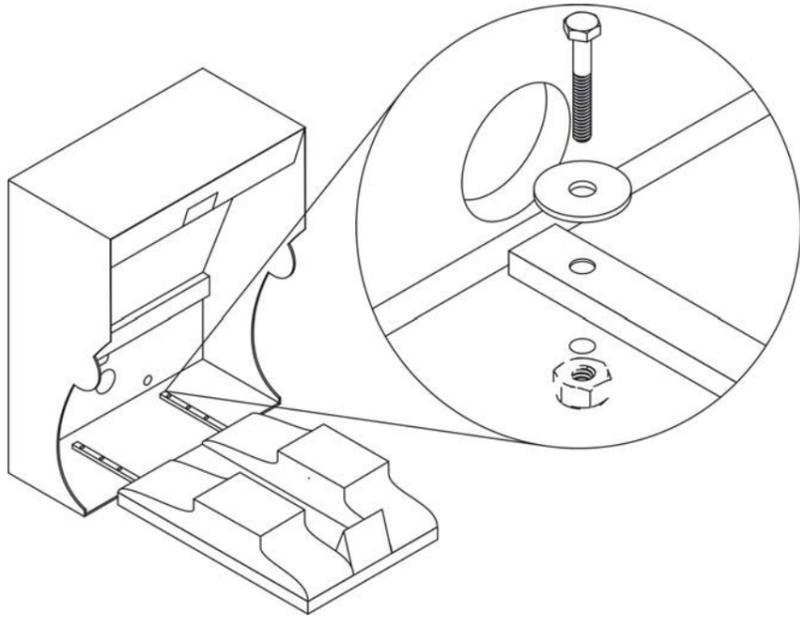
Stabilize Unit
The movement of the seats produces force on the machine that can cause the entire game to move. Before operating the theater, make sure all levellers are down and resting firmly on the floor.

Installation

1-5 Seat wiring

-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.**
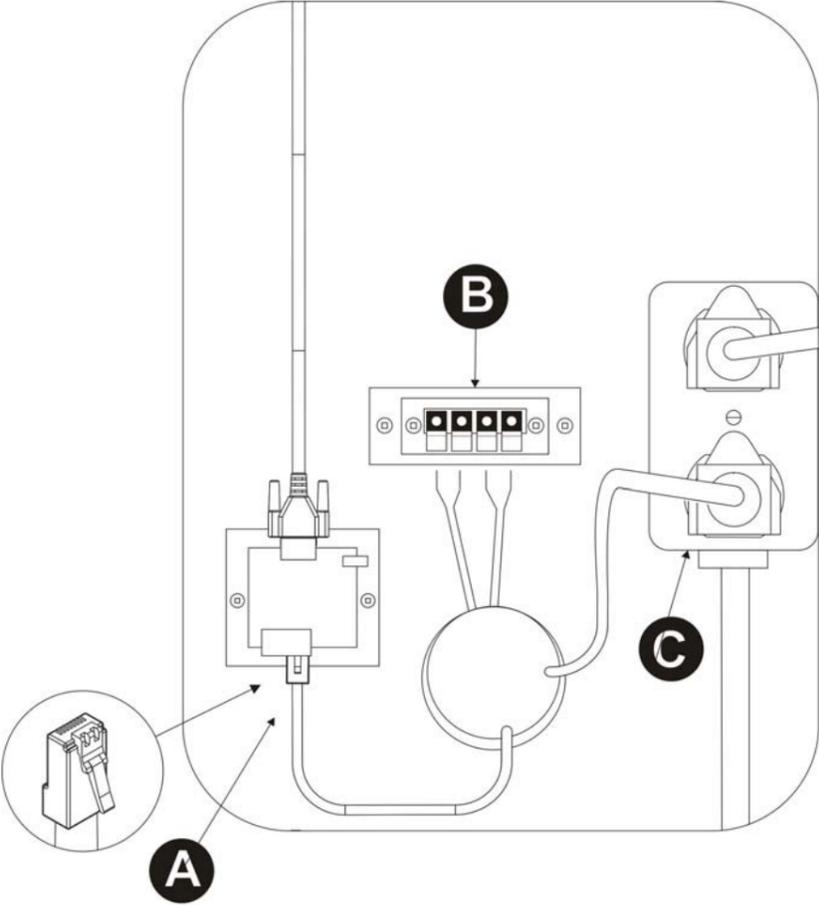
Projector adjustment
Viewsonic PJ-501

Installation

1-6

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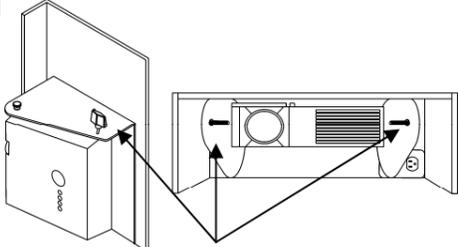
Projection is pre-adjusted at the factory but minor adjustments may be required.
(1) Vertical adjustment (Tilt) To center the image horizontally on the screen, loosen the large knob on both sides of the projector and tighten it when it is adjusted properly.

2

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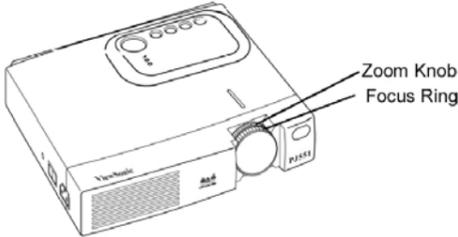
Zoom Adjustment:
Turn the zoom knob.
Focus Adjustment:
Turn the Focus Ring.

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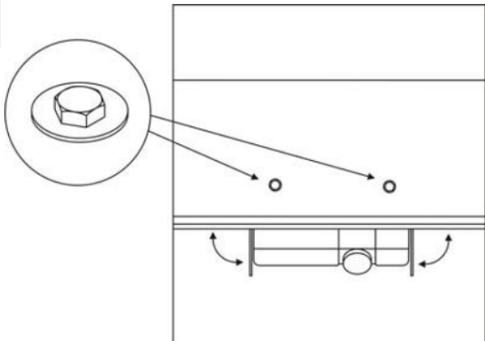
Horizontal Adjustment:
To rotate the projector find the two adjustment bolts at the top of the machine (pictured here) loosen them, adjust view then tighten.

Installation

1-7

Projector adjustment
Epson PowerLite S3

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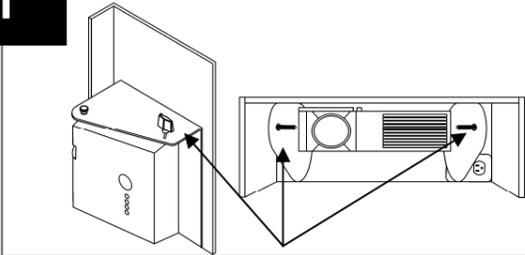
Projection is pre-adjusted at the factory but minor adjustments may be required.
(1) Vertical adjustment (Tilt) To center the image horizontally on the screen, loosen the large knob on both sides of the projector and tighten it when it is adjusted properly.

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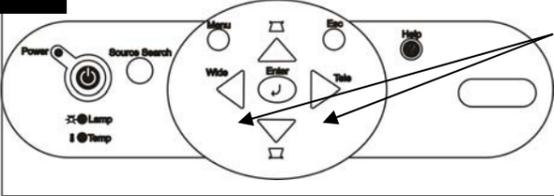
Zoom Adjustment:
Hit the WIDE and TELE buttons to adjust to the proper size.

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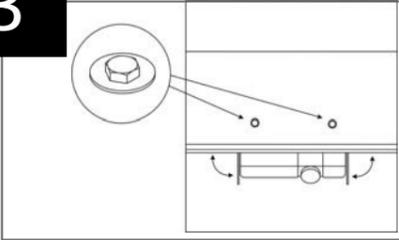
Horizontal Adjustment:
To rotate the projector, find the two adjustment bolts at the top of the machine (pictured here) loosen them, adjust view then tighten.

4
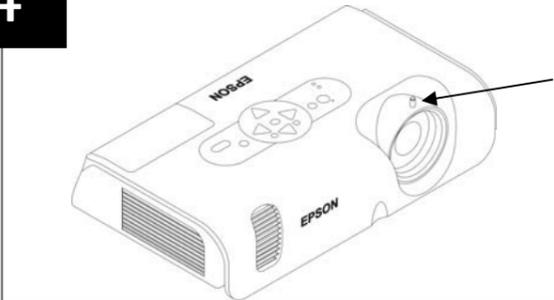
Focus adjustment:
Rotate focus knob on lens to adjust focus.

Technical Support 1-888-465-4634

Projector adjustment
Epson PowerLite S3
Continued

Installation

1-7

Factory projector adjustments Projector

1. Invert image: press **Menu-projector-rear/ceiling**
2. Image shape: press **Menu-setting-keystone, and set to –22**
3. Brightness: press **Menu-setting-brightness control-low**
4. Image color: press **menu-image-color mode-presentation**
5. Image position: press **menu-signal-position**
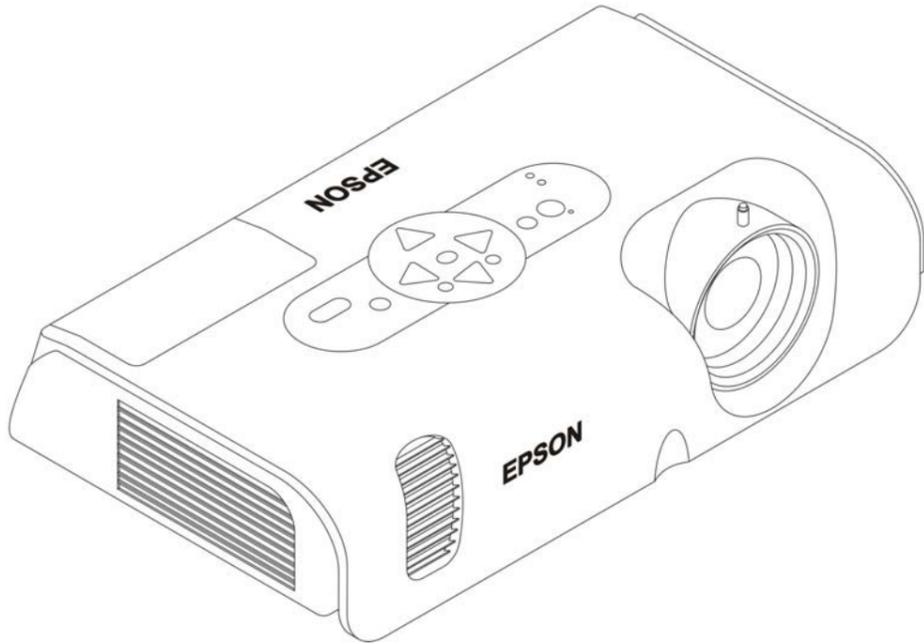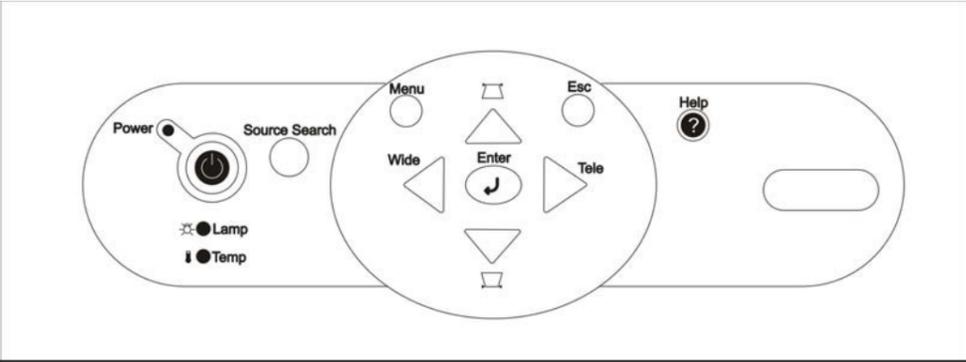
Table of contents

Configuration

2

Configuration

2-1

Operator Setting
Continued

**Configuration
2-1**

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.
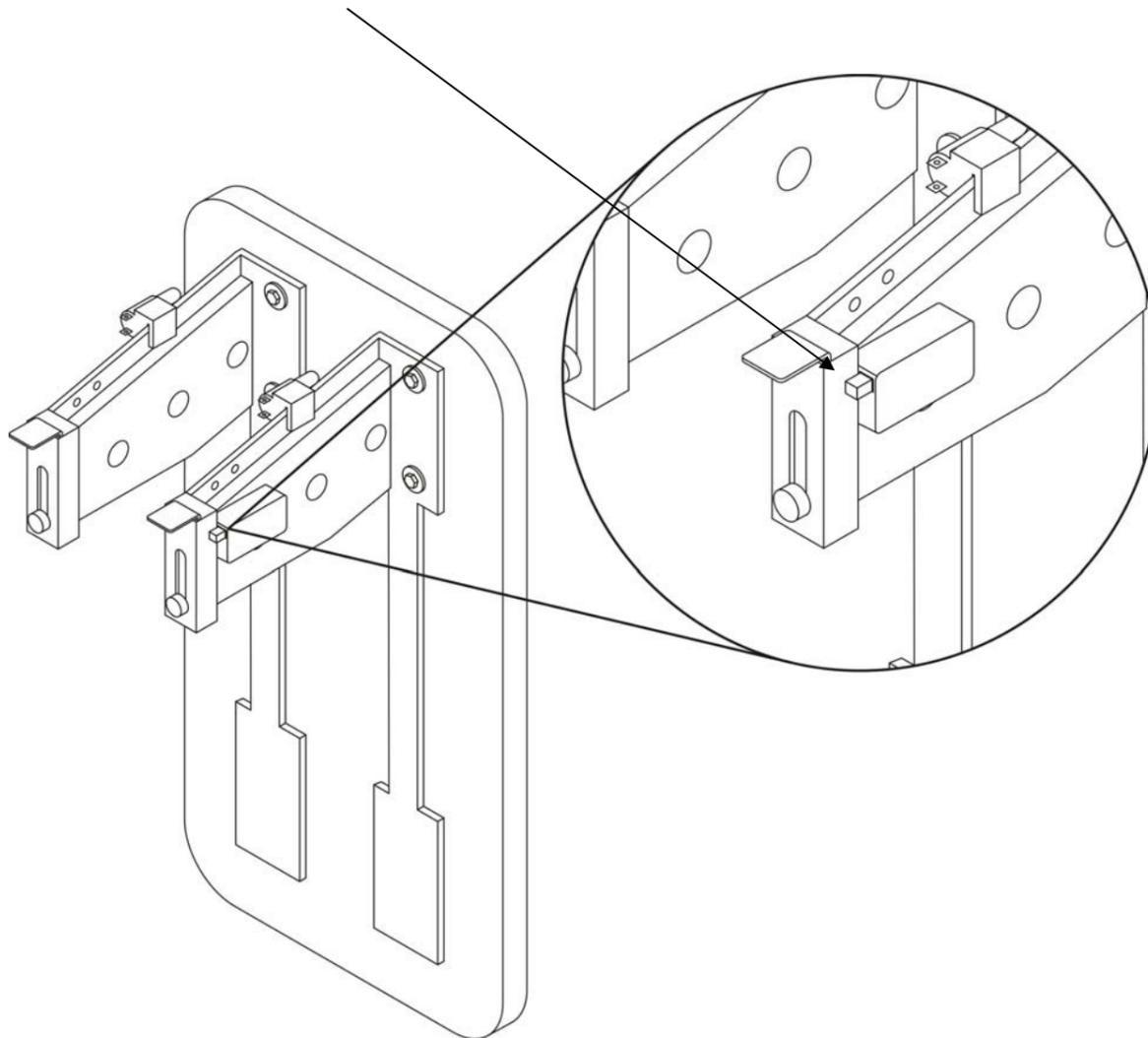
Operator Setting
Continued

Configuration

2-1

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 :


COUNTER                  :   40 CREDITS
REVENUE                  :   $10.00
CREDIT VALUE             :   $0.25
MOTION USAGE SERVICE :   0000 hr 18 min
MOTION USAGE TOTAL   :   0000 hr 18 min


   Movie Title   Credits (Revenue)

 Haunted mine   [========================] 16 cr. ($4.00)
Fantasy rider   [============] 8 cr. ($2.00)
   Road fury    [============] 8 cr. ($2.00)
Super speedway  [============] 8 cr. ($2.00)
```
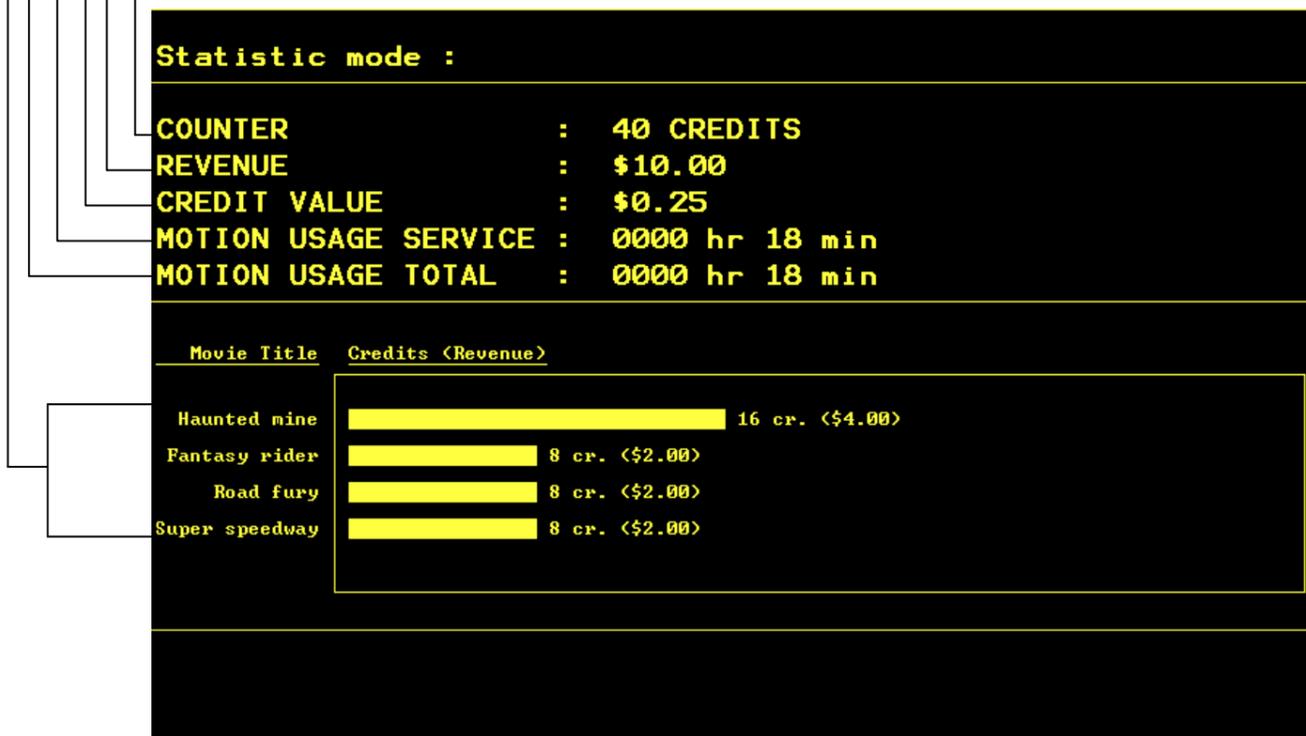
Configuration 2-1	Operator Setting
	Continued

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

STOP   (1) (2) (3) (4) (5) (6)   STOP
PLAYERS SELECT YOUR MOTION RIDE HERE
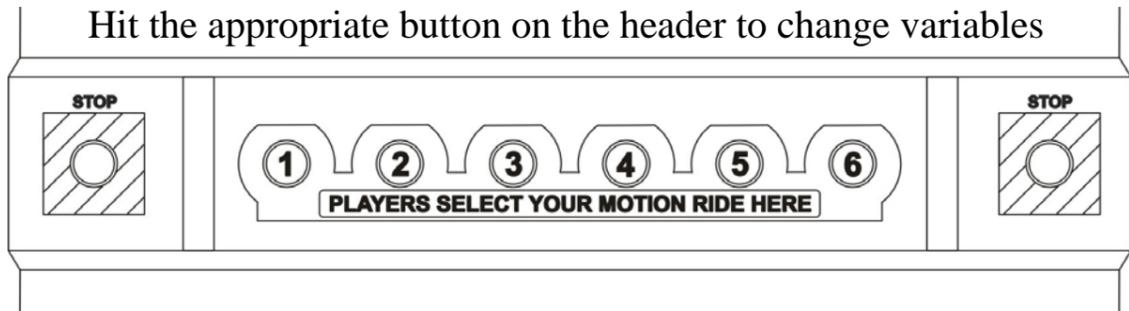
```
Maintenance mode :

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
                                    ver. 1.10 Oct 14 2003 13:19:10
```

| Audio adjustments | **Configuration**
 # 2-2 |

⚠️ **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

R L
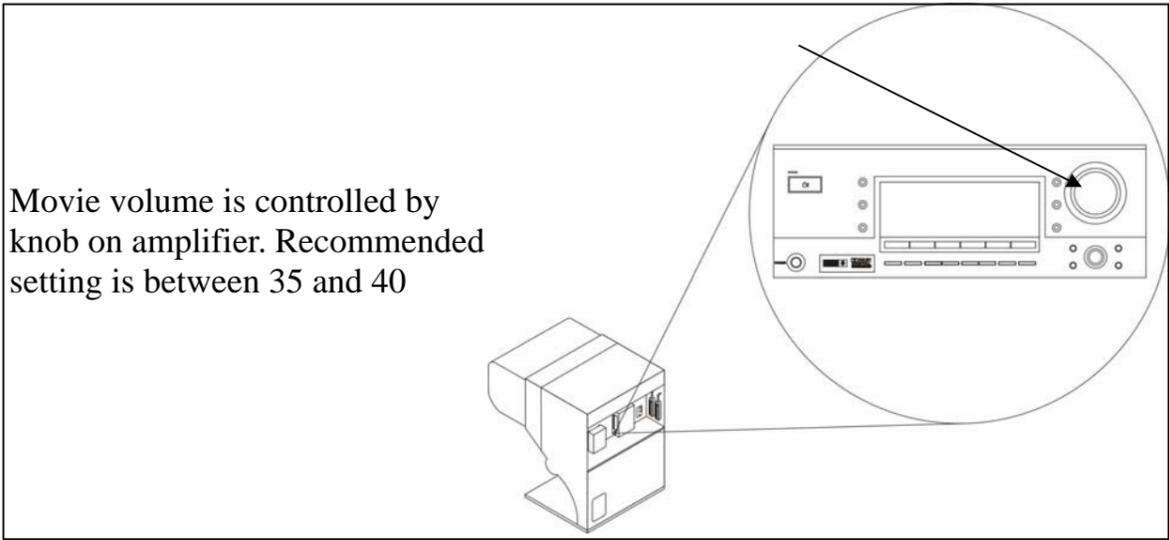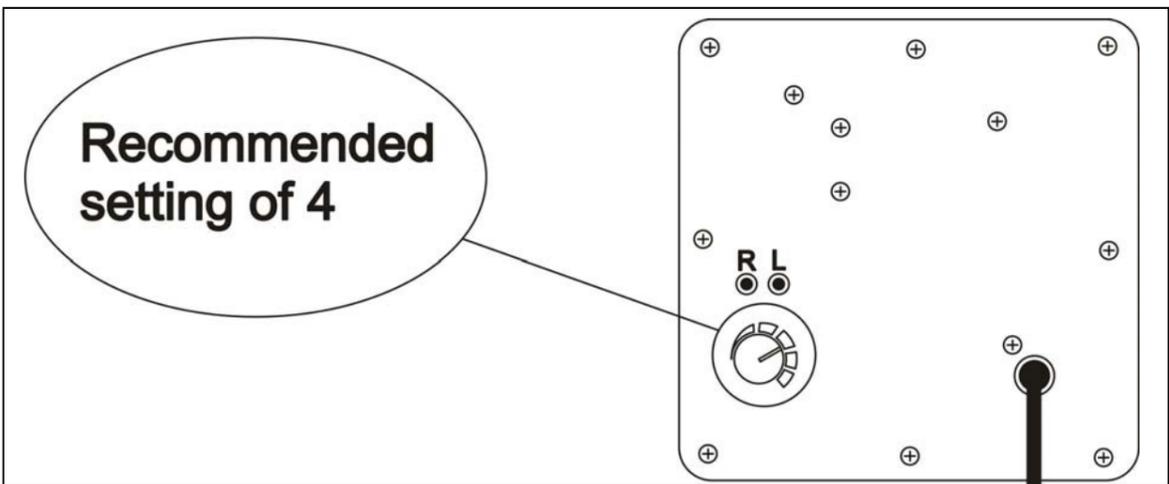
Configuration

2-3 Dollar bill validator information

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)
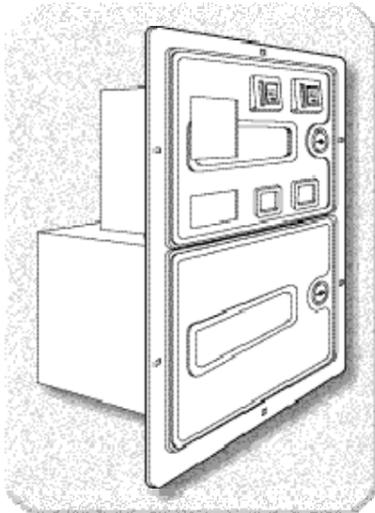
Accepts both bills and coins

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

	Maintemance
Table of contents	**3**

Maintenance
3

Part 3: Maintenance

Maintemance 3-1	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.
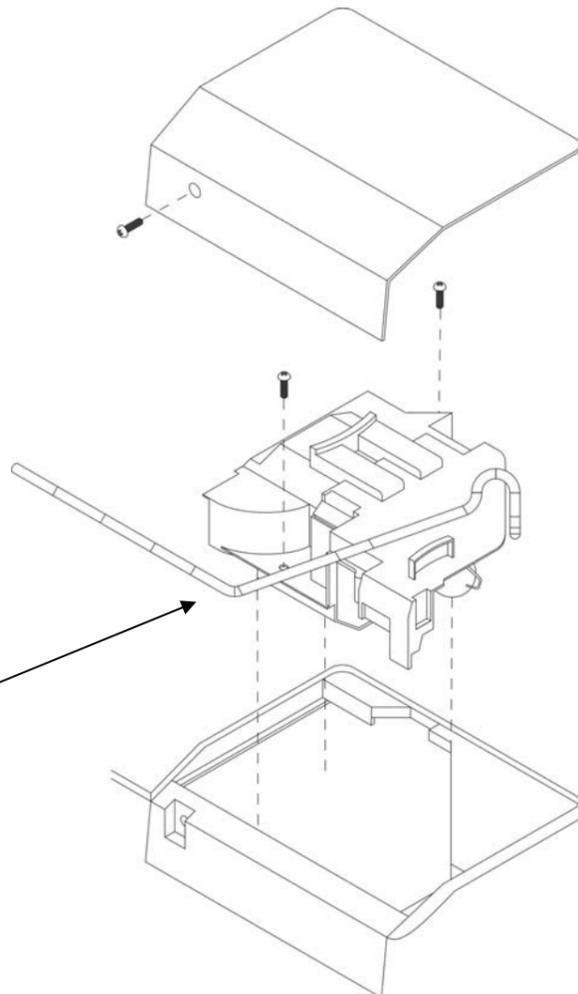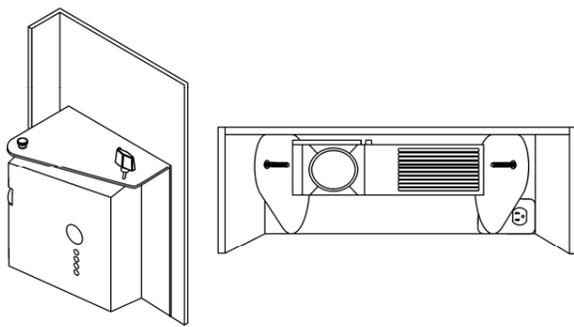
A When inserting new lamp, make sure to re-install the light sensor cable behind lamp.

Cleaning projector air filter
Epson PowerLite S3

Maintenance

3-2

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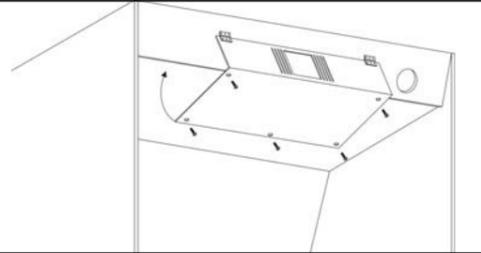
B   Remove and clean filter
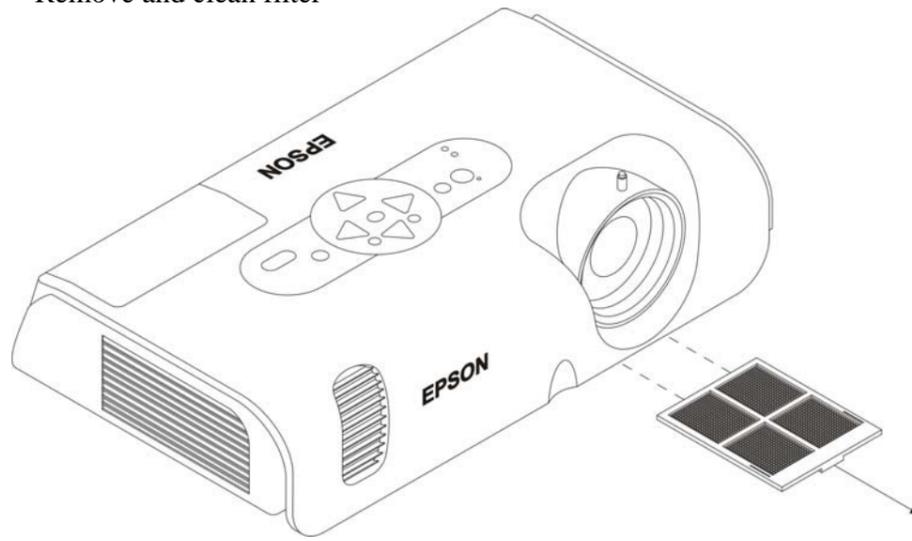
- **Replace the air filter if contamination cannot be removed, or if it is damaged.**
- **Do not use the projector with the air filter removed.**
- **When the air filter is clogged, the power supply is switched OFF automatically to prevent overheating.**

**Maintenance
3-2**

Maintemance 3-3	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

TOP VIEW

Rear

Filter   Fan

Left   Right
Side   Side

Front
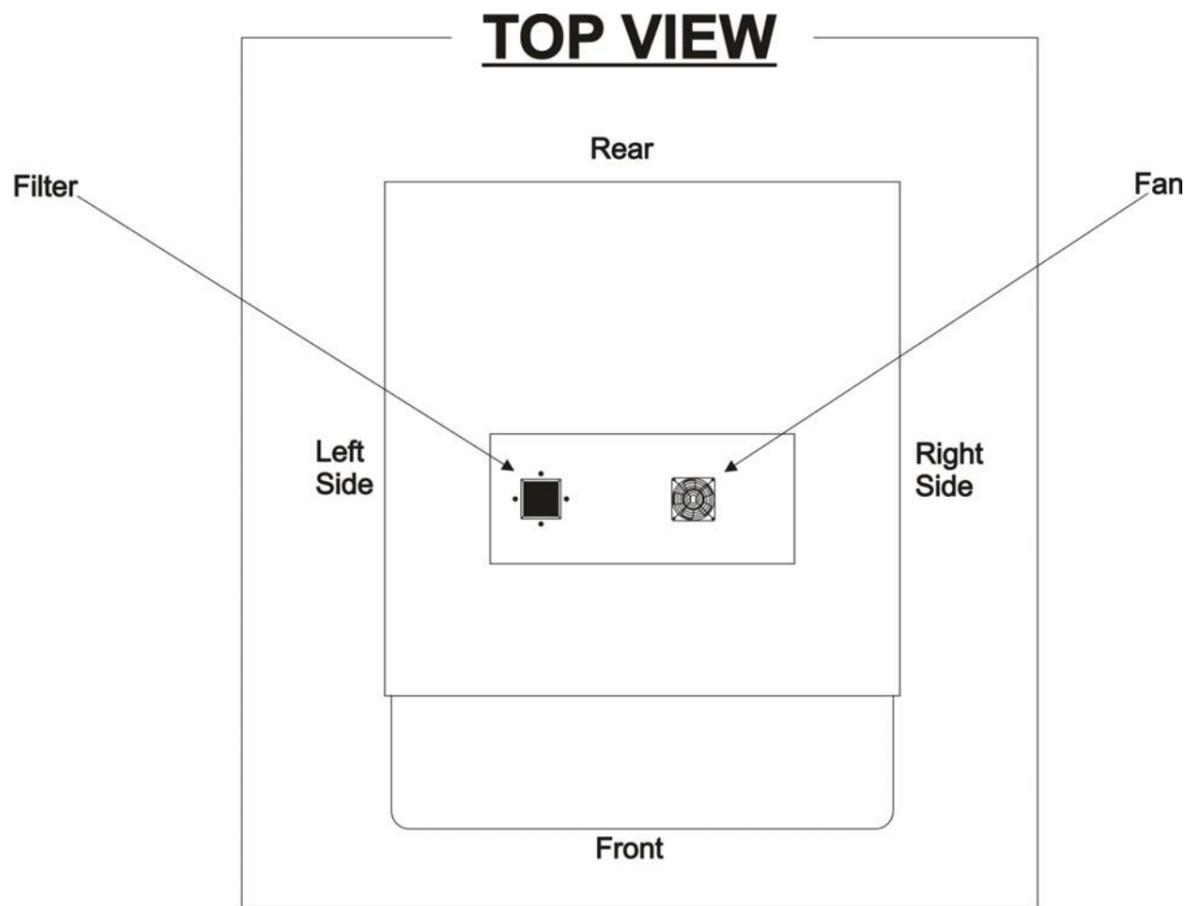
Clean filter minimum once a month

Replacing projector lamp Viewsonic PJ-501	Maintemance 3-4

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.

Maintemance	Replacing projector lamp
3-4	**Viewsonic PJ-501**
	Continued
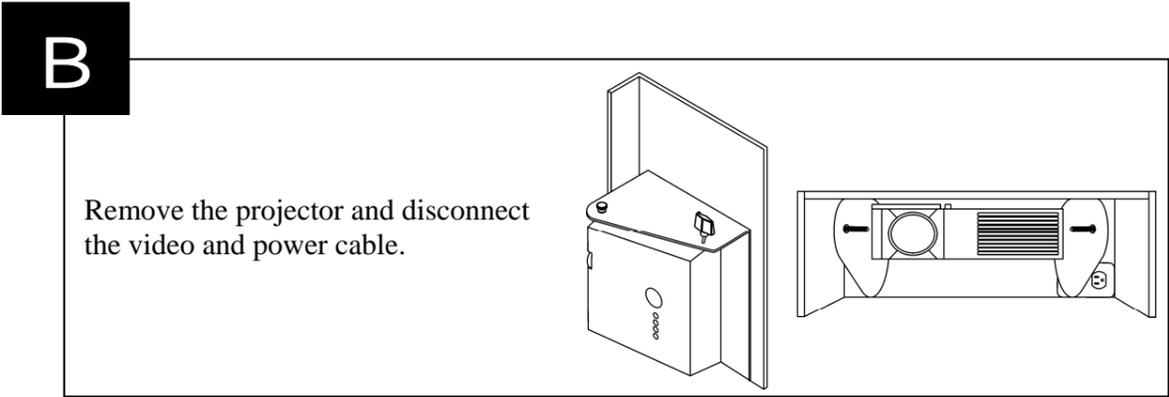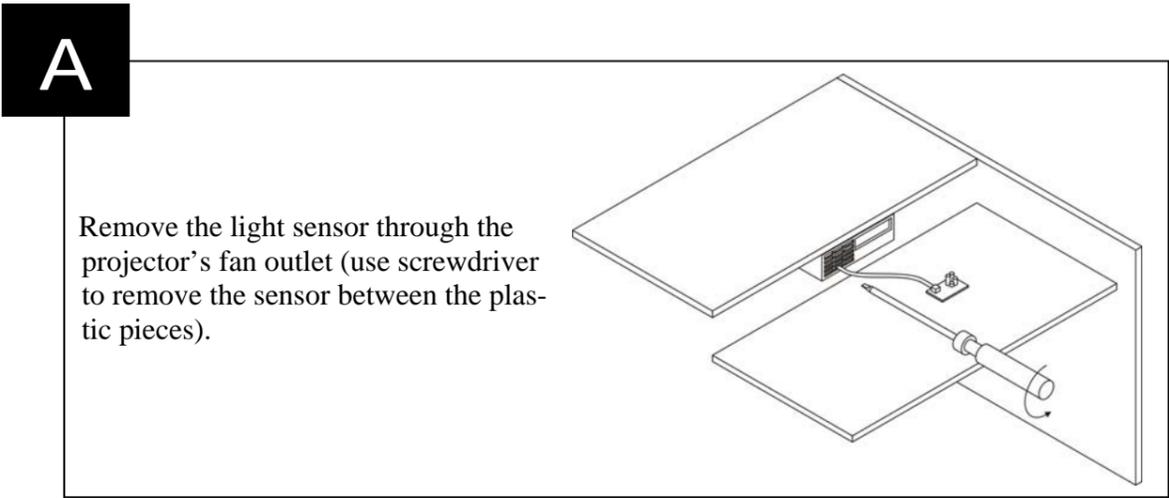
Maintenance 3-4

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.
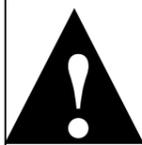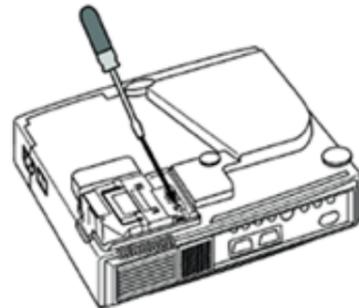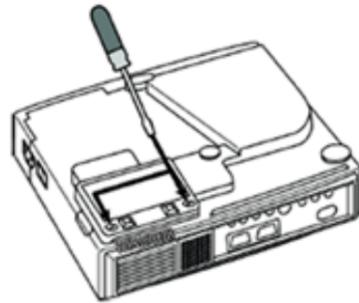
> ⚠ CAUTION!
> Ensure that screws are properly tightened .
> Screws not fully tightened may result in injury or accidents.

Replacing projector lamp
Viewsonic PJ-501
Continued

Maintemance

3-4

⚠ **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), discon-nect 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 un-til the lamp has cooled.

NOTE: The LAMP indicator is also red when the lamp unit reaches a high tempera-ture. Before replacing the lamp, switch the POWER OFF, wait approximately 20 min-utes, and switch the POWER ON again. If the LAMP indicator is still red replace the lamp.
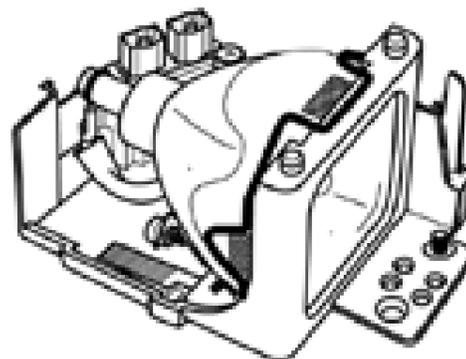
| Maintemance
3-4 | **Replacing projector lamp**
Viewsonic PJ-501
Continued |

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 0hr." 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. |

Maintenance 3-4

Cleaning projector air filter
Viewsonic PJ-501

Maintenance

3-5

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 FIL-TER" appears when the projector is switched on.

      A. Remove the projector cover plate
      B. Remove filter and clean
      C. Reset filter timer (page 24)
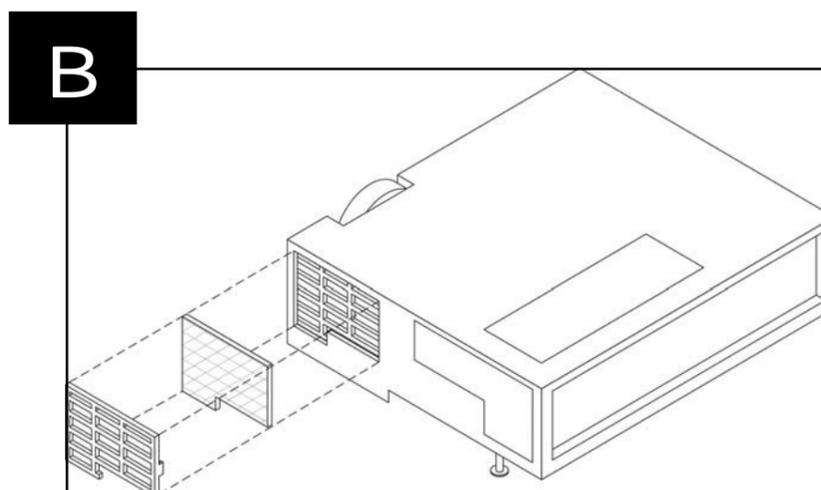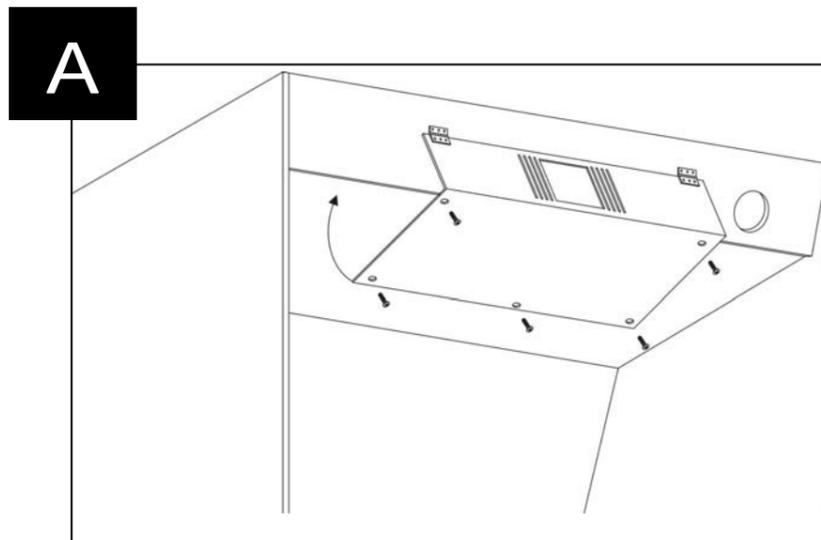
Maintenance 3-5

Maintenance	Reseting projector air filter Timer
3-6	**Viewsonic PJ-501**

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

**Maintenance
3-6**

> ⚠ • **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

Maintenance

3-7

A

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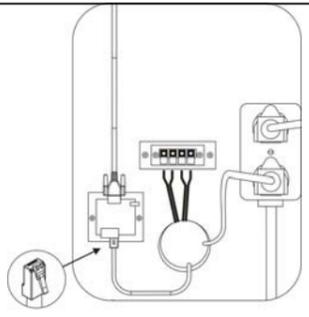
B

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)
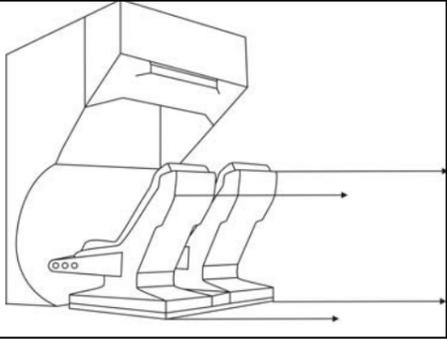
C

Lift the seat module using the 2" 1x2 metal tubes as handles until the back of the seats touches the floors (fig C)
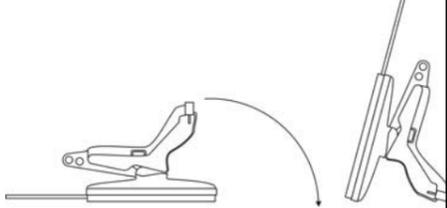
Maintenance

3-7

Replacing an actuator
Continued

A

Remove control box cover.

B

Unplug all con-nectors.

C

Unscrew cable plates.

D

Remove cable plates.

| **Replacing an actuator** **Continued** | Maintenance **3-7** |

D

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.
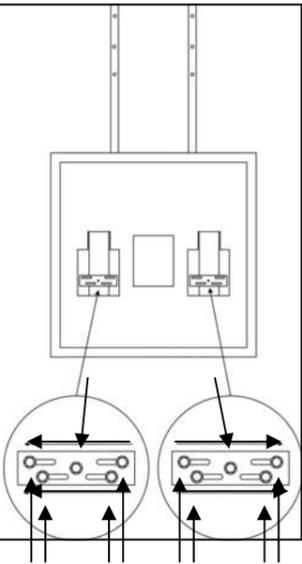
Maintenance 3-7

IMPORTANT: When reinstalling the plates, slide them toward the outside of the machine.

Maintenance

3-8 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).
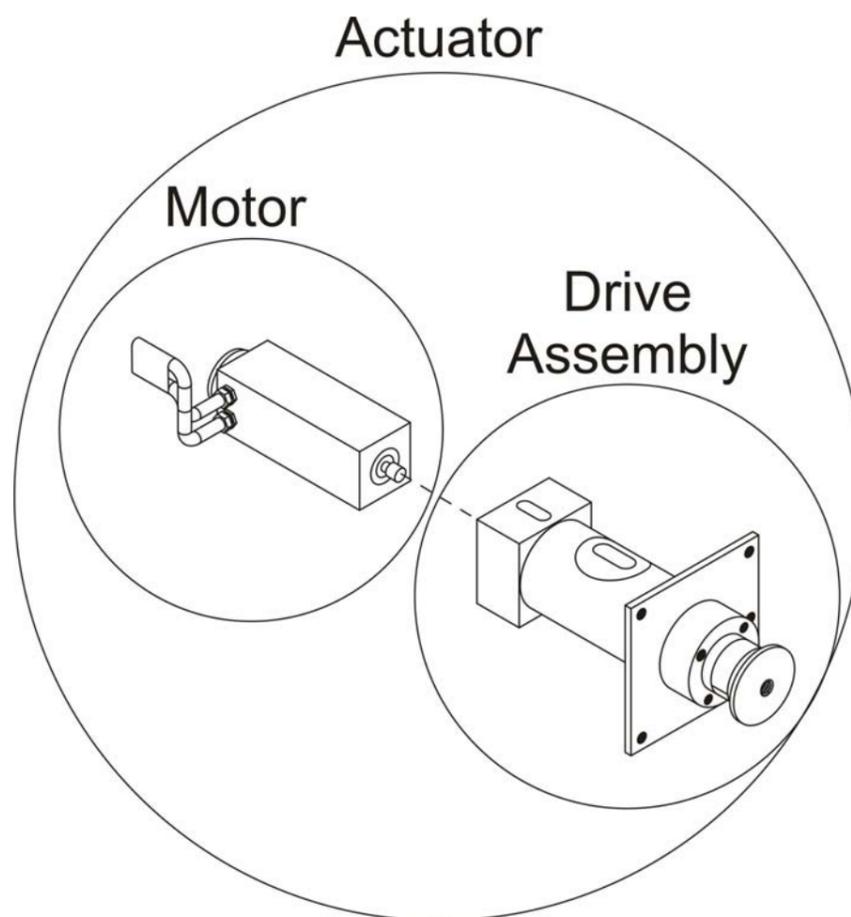
Replacing a drive assembly
Continued

⚠ **1/16"**
between couplers
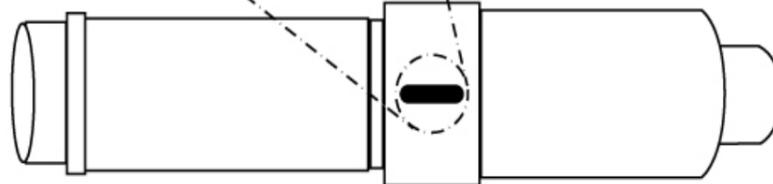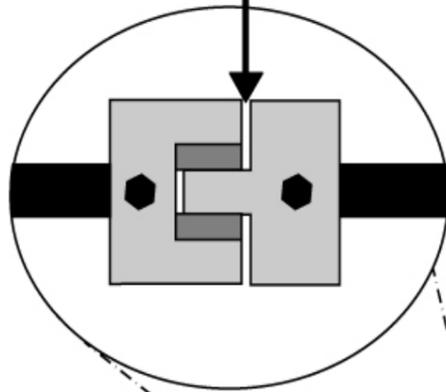
⚠ If positioned too close the heat
and pressure will damage the bearings.
You can ajust spacing by repositionning
the coupler on the motor with the set screw.

Maintenance

3-9 Replacing control box

Maintenance 3-9

A	**B**	**C**	**D**
Remove control box cover.	Unplug all con-nectors.	Unscrew cable plates.	Remove cable plates.
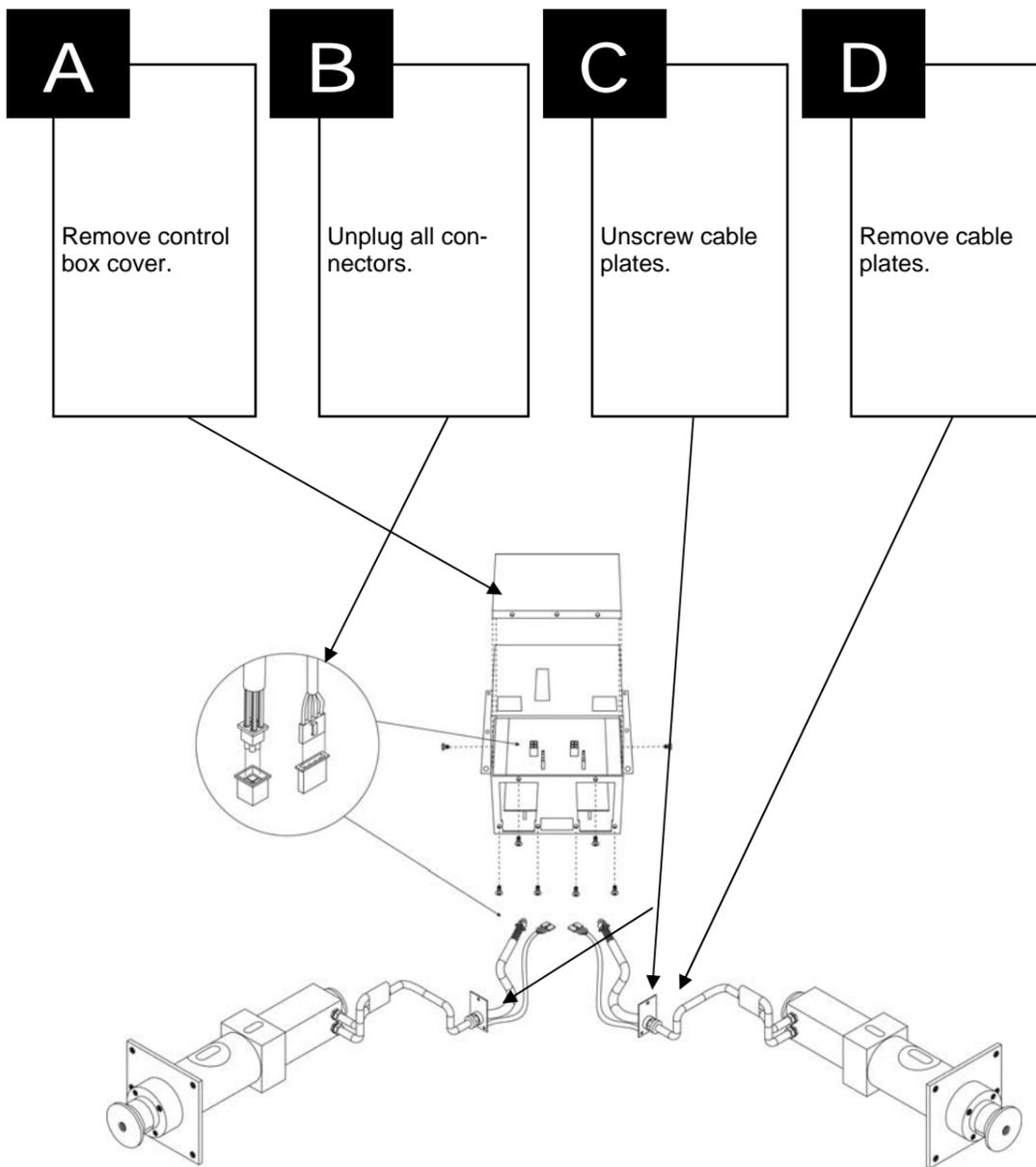
E Remove and replace control box.

Troubleshooting
Table of Contents

Troubleshooting

4

Part 4: Troubleshooting

Troubleshooting

4

Troubleshooting	Actuator / drive assembly (motion)
4-1	**Table of content**

Troubleshooting 4-1

Diagnostic screen and error codes	**Troubleshooting** **4-1-1**

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.

Troubleshooting

4-1-1

Diagnostic screen and error codes Continued

```
Motion Theater Diagnostic Mode : [Seat 5]:com3

General status (com3) : Synchronizing
actuator 2 (left) status : Unknowned
actuator 3 (right) status : Unknowned
actuator 2  (left) error : OK
actuator 3  (right) error : OK


           Motion error. Press any selection button to retry.

                                                    ver. 2.01 Mar 31 2004 14:00:29
```
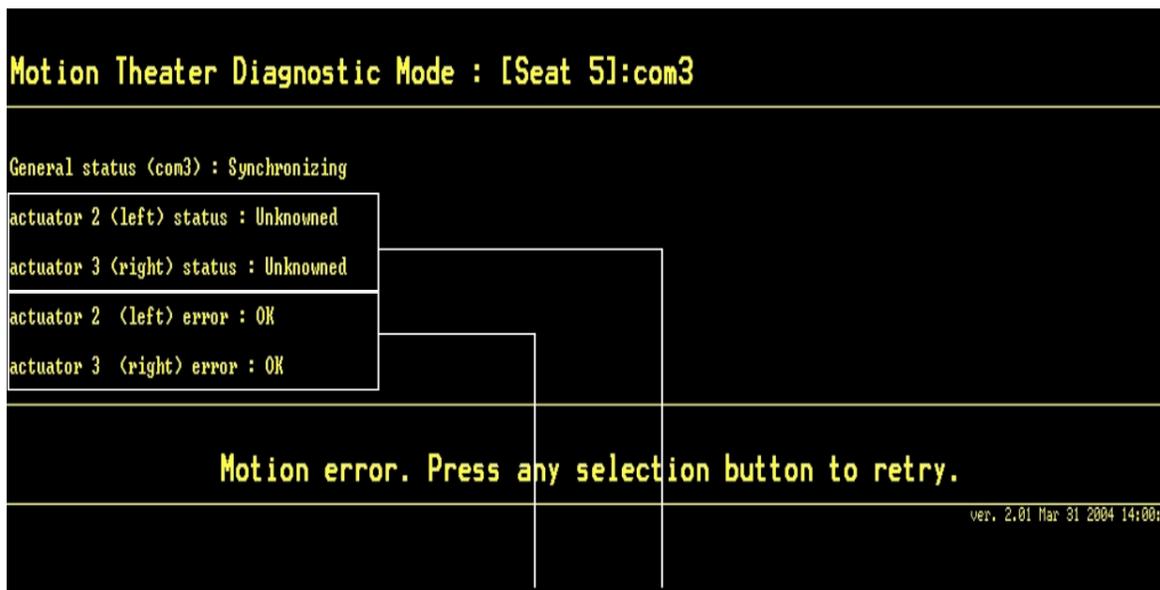
Troubleshooting 4-1-1

•	***SYNCRONIZED***	No problem reported with this actuator
•	***SYNCRONIZING***	Move to box below
•	***NOT RESPONDING***	Goto page 43

•	*Software (overweight)*	Go to page 36
•	*Software (travel)*	Go to page 36
•	*Software (overpos)*	Go to page 36
•	*Software (fail hall)*	Go to page 37
•	*Software (fail encoder*	Go to page 37
•	*Software (Timeout)*	Go to page 38
•	*Command OverRun*	Go to page 39
•	*Software*	Go to page 40

Diagnostic screen and error codes Continued

```
Motion Theater Diagnostic Mode : [Seat 5]:com3

General status (com3) : Synchronizing
actuator 2 (left) status : Unknowned
actuator 3 (right) status : Unknowned
actuator 2  (left) error : OK
actuator 3  (right) error : OK



         Motion error. Press any selection button to retry.

                                          ver. 2.01 Mar 31 2004 14:00:29
```

- ***SYNCRONIZED***   No problem reported with this actuator
- ***SYNCRONIZING***   Move to box below
- ***NOT RESPONDING***   Goto page 43

- ***Software (overweight)Command OverRunFail State***   Goto page 36
- ***Software (travel)Command OverRunFail State***   Goto page 36
- ***Software (fail hall)Command OverRunFail State***   Goto page 41
- ***Software (overpos)Command OverRunFail State***   Goto page 41
- ***Software (Timeout)***   Goto page 38
- ***Command OverRunFail State***   Goto page 42
- ***Software Command OverRunFail State***   Goto page 40

Troubleshooting 4-1-1	Diagnostic screen and error codes Continued

Software (Travel)

Software (overweight)

Software (overweight) Command OverRun Fail State

Software (OverPos)

Software (Travel) Command OverRun Fail State

Cause

- Mechanical fault

Troubleshooting 4-1-1

-Unplug Motion Theater.
-Lift speaker bars on sets to check if they move freely.

MOVES FREELY
-Re-seat actuator on side the error appeared (diagnostic screen). **Do not tighten center bolt too hard**.

DOES NOT MOVE FREELY
-Replace DRIVE ASSEMBLY

If no change, replace whole actuator.
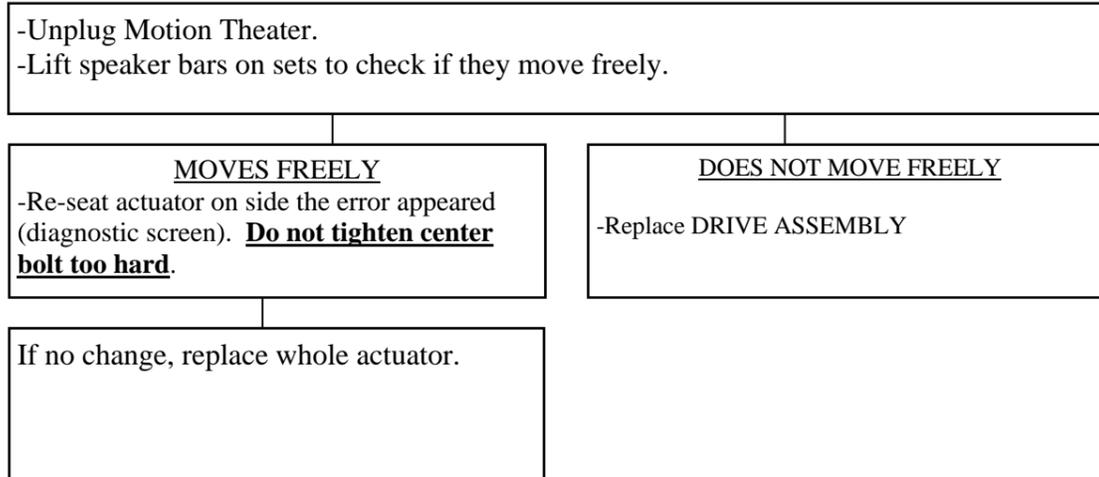
Diagnostic screen and error codes Continued	Troubleshooting **4-1-1**

Software (Fail Hall)

Software (Fail encoder)

Cause
- Electrical fault

-Replace whole ACTUATOR on side error appears.
 Section 3-3.

Troubleshooting

4-1-1

Diagnostic screen and error codes
Continued

Software (Timeout)

Cause
- Actuators have not received data from computer for more than one minute

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

Troubleshooting

4-1-1

Command OverRun

Cause
- Same side Actuators are installed on Motion Theater

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

Troubleshooting

4-1-1

Diagnostic screen and error codes
Continued

Software

Software Command OverRun Fail State

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

Troubleshooting 4-1-1

-Verify voltage

↓ ↓

I have more then 114volts.	I have less then 115volts.

↓ ↓

| Go to **Step B** | Plug machine into other outlet with at less 115volts. If you do not have the minimum requirements, call an electrician. |

B

-Verify if machine is alone on breaker.

↓ ↓

It is alone	It is not alone

↓

Use another breaker or unplug all other games

↓

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

Diagnostic screen and error codes Continued	Troubleshooting 4-1-1

Software (overPos) Command OverRun Fail State

Software (fail hall) Command OverRun Fail State

Cause
- Mechanical, electrical and/or software fault

A

-Remove seats from game

-Remove Control Box

-Verify software version.

SOFT VERSION
AC6-AKM24D-2B32
V 3.10
Made in Canada by D-BOX

Version is v3.10	Version is not v3.10
-Go to step B	-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	Coupler is loose or broken
-Good	-If coupler is loose, use HEX key to tighten. -If coupler is broken, call Tech Support @ 1-888-465-4634 to get replacement.

Troubleshooting **4-1-1**	**Diagnostic screen and error codes** **Continued**

Command OverRun Fail State

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

Troubleshooting
4-1-1

Diagnostic screen and error codes Continued	Troubleshooting 4-1-1

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.

-Verify power output on Power Supply (top right of the back of the game).

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

There is no power
-Verify power Input on Power supply (red LED),

There is power
-Replace Power Supply.

There is no power
-Replace Power Cord going to Power supply.

Continued next page ➡

Maintenance
4-1-1

Troubleshooting

4-1-1

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

**Troubleshooting
4-1-1**
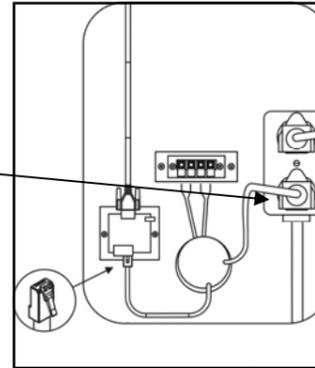
There is Power	**There is no power**
-Remove seat assembly -Connect another Power cord directly to Actuators or Control Box (IF EQUIPPED WITH CONTROL BOX) -Restart computer	-Open Outlet and repair connections.

Still Have Error	**There is Movement**
-Open control box and verify if capacitors are burned, damaged or have broken legs.	-Replace Power Cord(s)
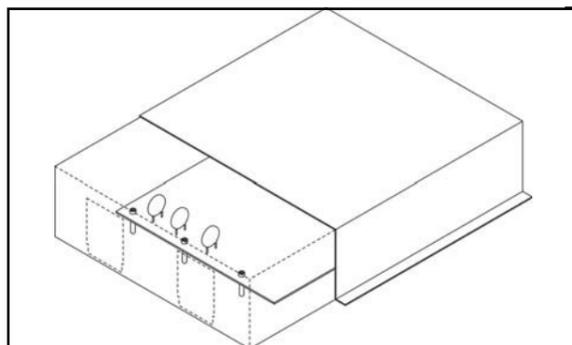
If capacitors are ok, call technical support, if damaged, replace box.

Motion stops and restarts during ride	**Troubleshooting** **4-1-2**

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

-Get mouse and keyboard out.
-Press ESC.
-Go to WINDOWS EXPLORER.
-Copy **C:\MotionTheater\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).

**Troubleshooting
4-1-3**

Game plays without motion

Troubleshooting

4-1-4

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).

**Troubleshooting
4-1-4**

Troubleshooting 4-1-5	One seat rises when starting and other does not

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

-Take mouse and keyboard out.
-Press ESC.
-Go to WINDOWS EPLORER.
-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**

Troubleshooting 4-1-5

	Troubleshooting
Motion is too strong	**4-1-6**

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

```
MotionTheater_Movie_config.txt - Bloc-notes

Fichier  Edition  Format  Affichage  ?

id.movie.1                    toy_coaster
motion.1.001                  90      ←
starting.frame.motion.1       140

id.movie.2                    haunted_mine
motion.2.001                  100     ←
starting.frame.motion.2       240

id.movie.3                    fantasy_rider
motion.3.001                  100     ←
starting.frame.motion.3       80

id.movie.4                    road_fury
motion.4.001                  90      ←
starting.frame.motion.4       140

id.movie.5                    arctic_run
motion.5.001                  100     ←
starting.frame.motion.5       140
```
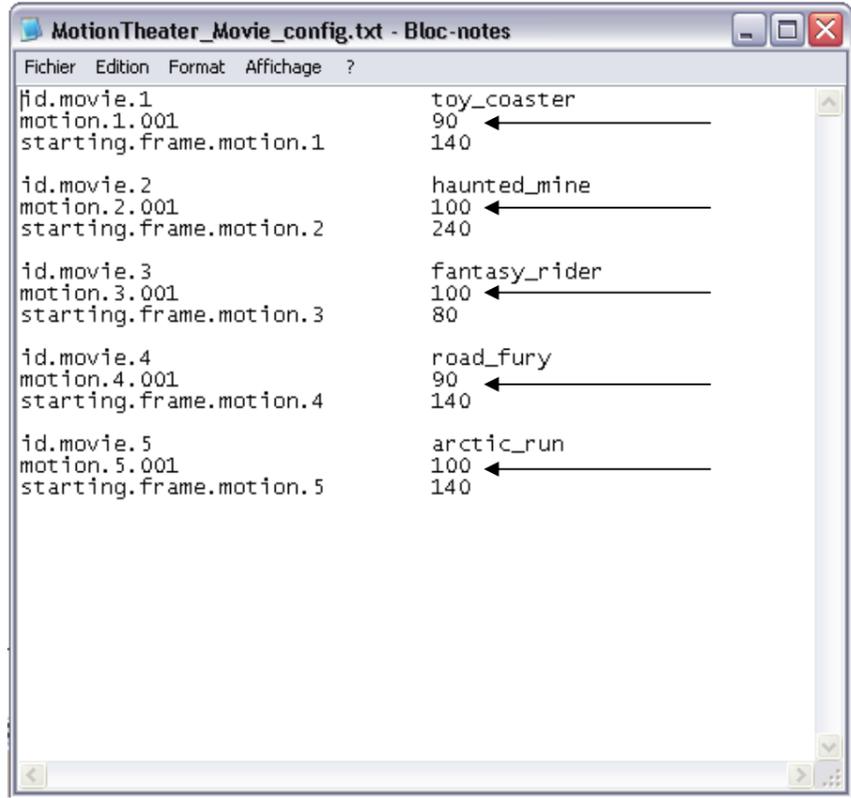
Troubleshooting

4-2 Video (picture, image and projector)

Troubleshooting 4-2

Troubleshooting

No image 4-2-1

Cause

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

Step 1
   -Is lamp light on?

LAMP ○
TEMP ○
POWER ○

STANDBY/ON   INPUT   KEYSTONE   RESET   MENU

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.
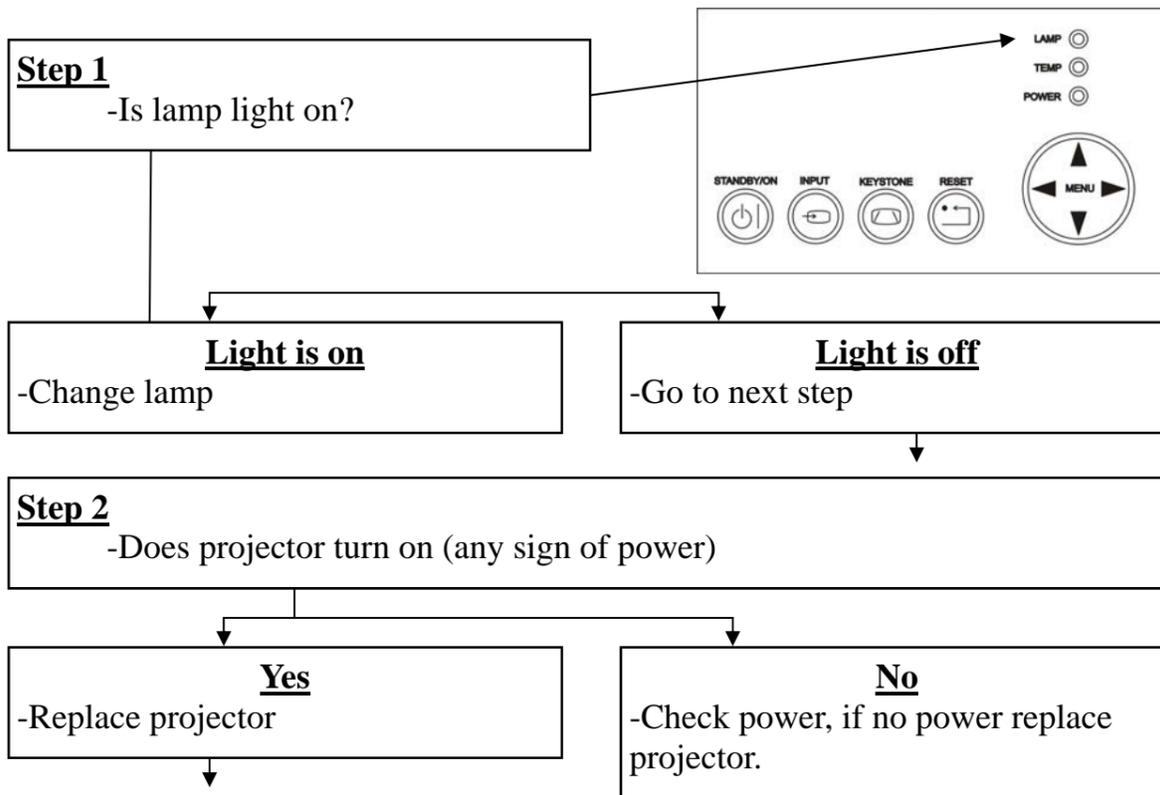
Troubleshooting

4-2-2 Blue or purple screen

<u>**Cause**</u>
- Projector ballast is defective

-Replace projector

Troubleshooting
4-2-2

Troubleshooting

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

Error ☒ ❌ Cannot open the serial device 1 on 2! [OK]	**REASON** -Computer uses USB to SERIAL cable **SOLUTION** -USB to SERIAL cable not connected
CLEAN THE AIR FILTER AFTER CLEANING AIR FILTER, RESET THE FILTER TIMER.	**REASON** -Regular filter cleaning **SOLUTION** -Clean air filter on side of projector and reset timer
Power off? Yes; Please press Φl button again. No; Please wait.	**REASON** -Projector control board (behind projector) is not detecting projector **SOLUTION** -Check light sensor on projector control board, insert in grill. If inserted, replace board
ViewSonic® NO INPUT IS DETECTED ON VIDEO	**REASON** -Wrong input source on projector **SOLUTION** -Using remote control, set input to RGB or press INPUT on projector
REPLACE LAMP AFTER REPLACING LAMP, RESET LAMP TIMER	**REASON** -Lamp has reached the end of its expected life. **SOLUTION** -Purchase spare lamp and replace when yours fails -Reset lamp timer using menu button on remote control

Troubleshooting **4-2-4**	**Projector remote control does not respond**

<u>**Cause**</u>

- Batteries are dead
- Remote control is defective

-Replace batteries
-Replace remote control

<table>
<tr><td></td><td>Troubleshooting</td></tr>
<tr><td>Buttons do not respond</td><td>4-3</td></tr>
</table>

<u>Cause</u>
- 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

| Troubleshooting

4-4 | **Coin door**

(credits not recognized) |

Cause

• Connectors or wires came loose
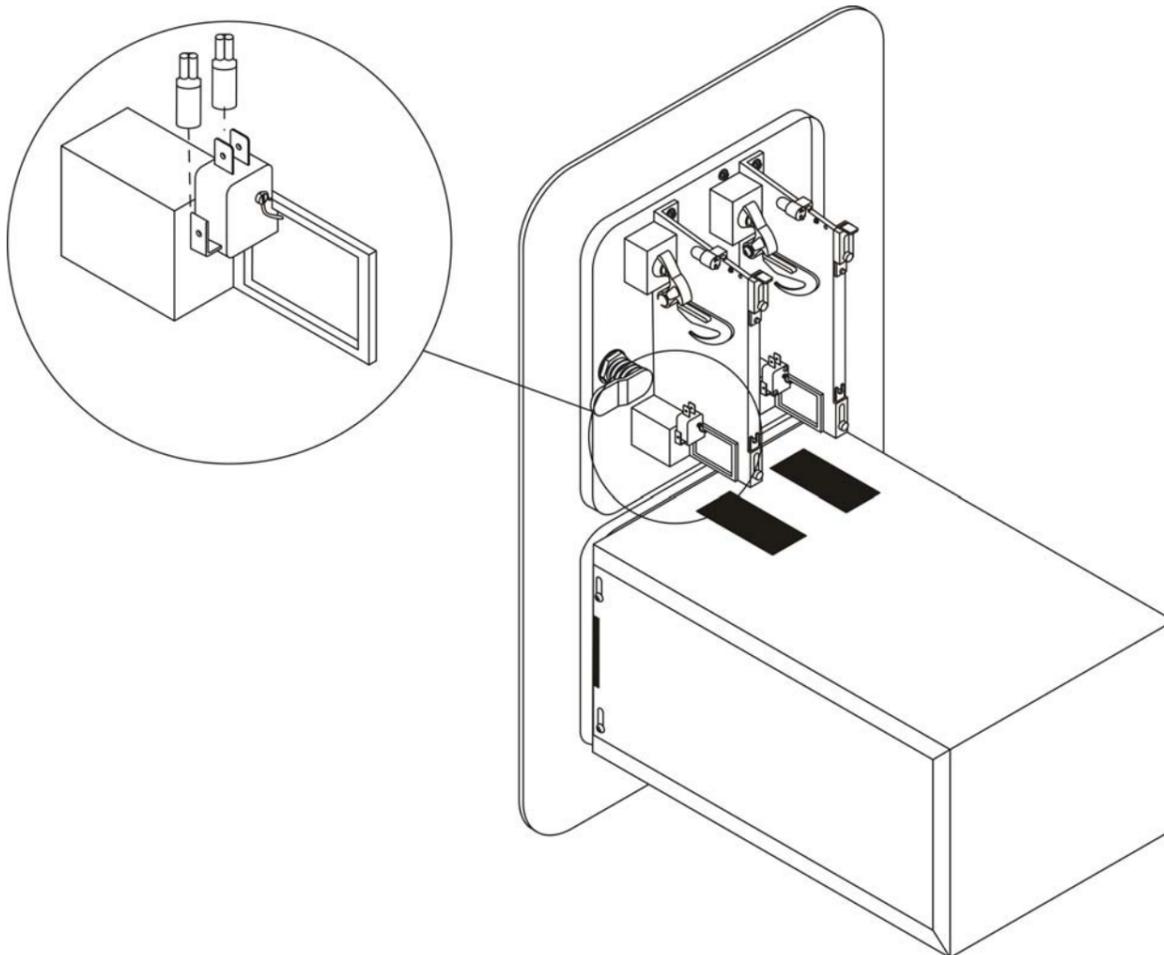
-Verify that red connectors are pushed in tight.
-Verify that wires in connectors are secure.
-Verify that problem does not come from keyboard encoder board. (section 3)

Troubleshooting

Computer error codes

4-5

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.

```
Intel UNDI, PXE-2.0 (build 082)
Copyright (C) 1997,1998,1999  Intel Corporation
VIA VT6102 Rhine II Fast Ethernet Adapter
PXE-E61: Media test failure, check cable

PXE-M0F: Exiting Intel PXE ROM.

Non-System disk or disk error
Replace and strike any key when ready
```

Troubleshooting
4-5
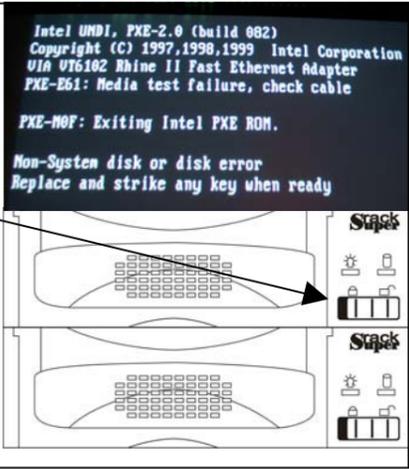
-If this error appears, call technical support at 1-888-465-4634

```
Error                               [X]
 (X)  Cannot open the serial device 1 on 2!

              [  OK  ]
```

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

```
Motion Theater Diagnostic Mode : [Seat 5]:com3

General status (com1) : Synchronizing
actuator 2 (left) status : Unknown
actuator 3 (right) status : Unknown
actuator 2 (left) error : OK
actuator 3 (right) error : OK

        Motion error. Press any selection button to retry.
                                        ver. 2.01 Mar 31 2004 14:00:2
```

Troubleshooting

4-6 Battery backup
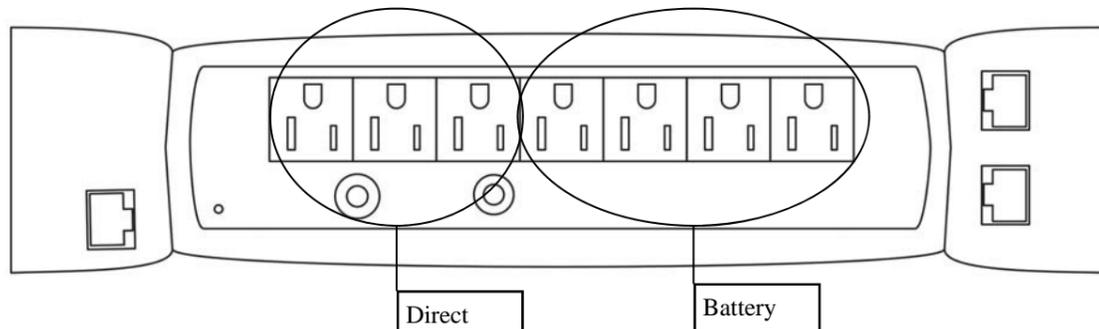
Direct

Battery

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

-If <u>START</u> 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.

Troubleshooting

Led sign 4-7

Trouble

- Some lights not functioning
- Lines not lighting
- Message changes
- Does not store message in memory
- Customizing message
- Does not power on

Some lights not functioning

-Replace SIGN

Lines not lighting

-Replace SIGN

Message changes

Call Triotech 1.888.465.4634 for update

Does not store message in memory

-Replace SIGN

Customizing message

-Call Triotech 1.888.465.4634 for update

Does not power ON

-Replace SIGN

Troubleshooting

4-8 Audio sound

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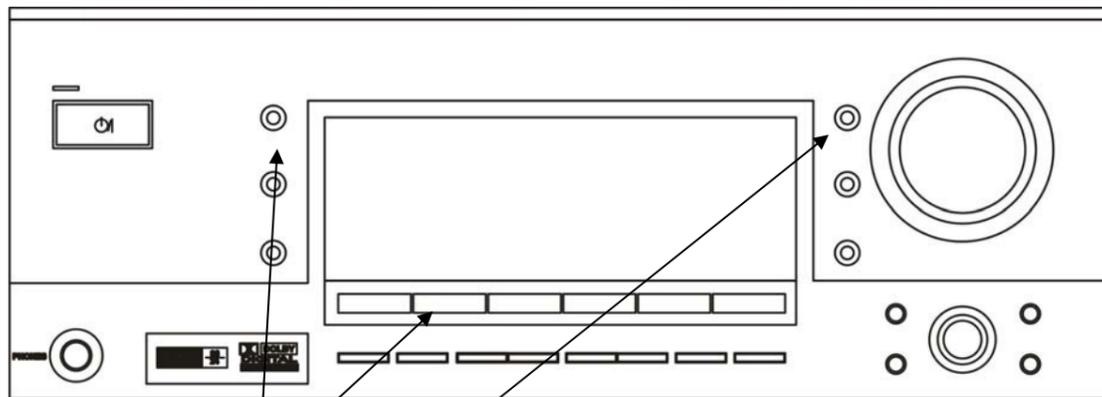
Step 1

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.

Parts

Parts 5

Part 5 :Parts List

Parts
5

Parts

5-1 Seat assembly
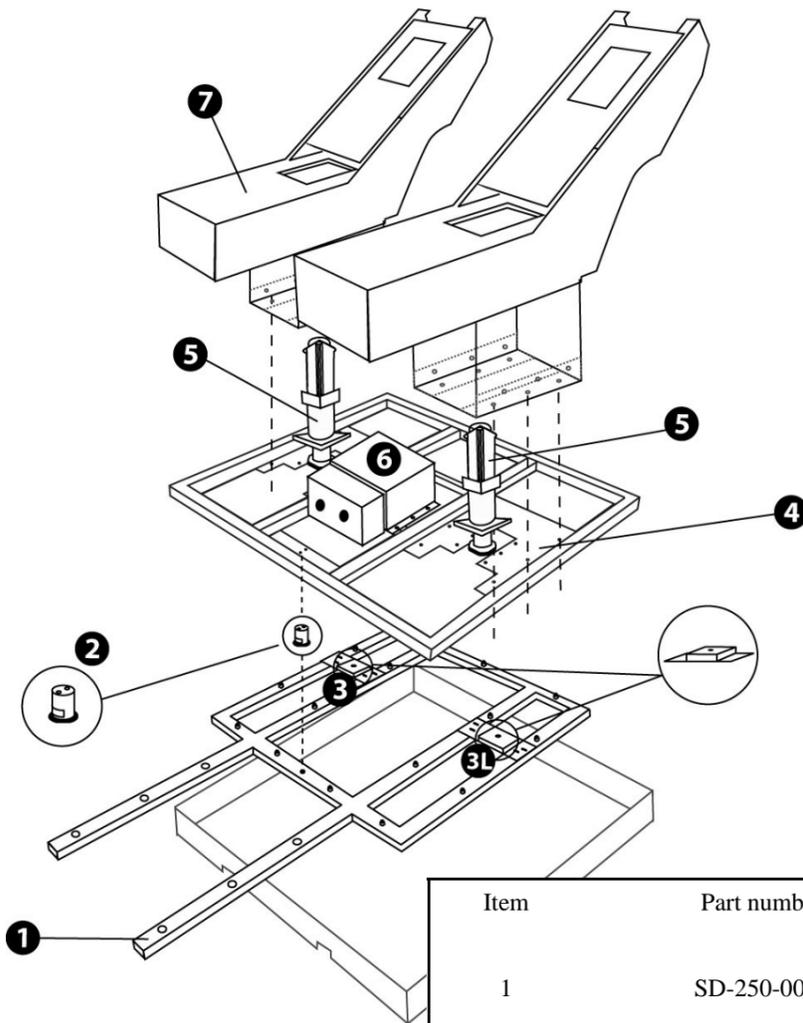
Item	Part number	Description
1	SD-250-0021	Fixed frame
2	SD-450-0003	Pivot
3r	SD-250-0020	Piston bracket right
3l	SD-250-0019	Piston bracket left
4	SD-250-0018	Mobile frame
5	SD-1000-0001	Actuator assembly
6	SD-450-0013	Actuator control box
7	——————	Wood seat frame

Parts

Seat assembly 5-2

MT-AC6 Actuator complete assembly

01 MT-AC6-2 Actuator Motor
02 MT-AC6-1 Actuator Mechanical Assembly
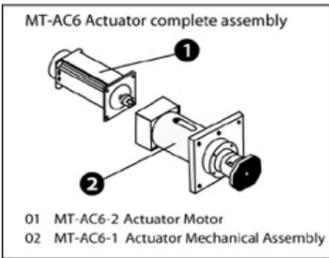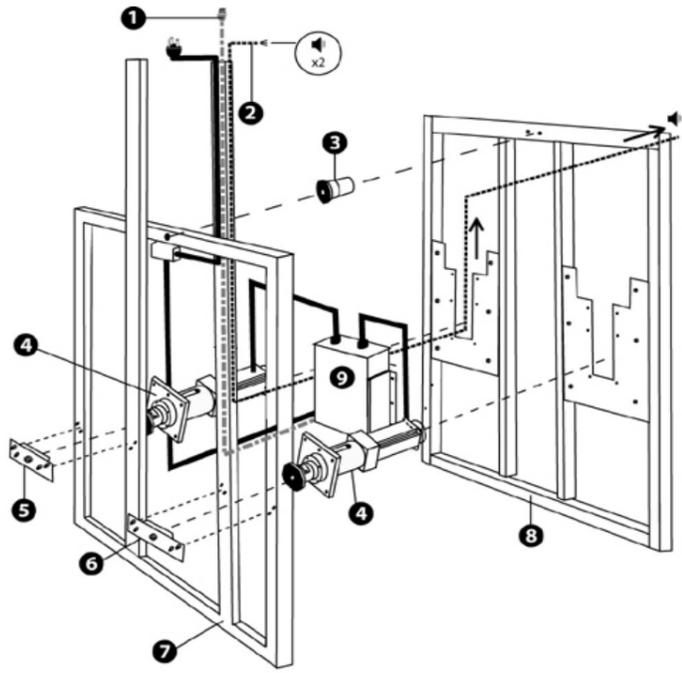
Item	Part No.	Description
1	SD-150-0019	RJ45 cable
2	SD-150-0022	18 Ga speaker wire
3	SD-450-0003	Pivot
4	SD-1000-0001	Actuator Conplete assembly
5	SD-250-0020	Piston bracket right
6	SD-250-0019	Piston bracket left
7	SD-250-0021	Fixed frame
8	SD-250-0018	Mobile frame
9	SD-450-0013	Actuator contol box

Parts 5-2

Parts

5-3 Seat assembly (fibreglass)
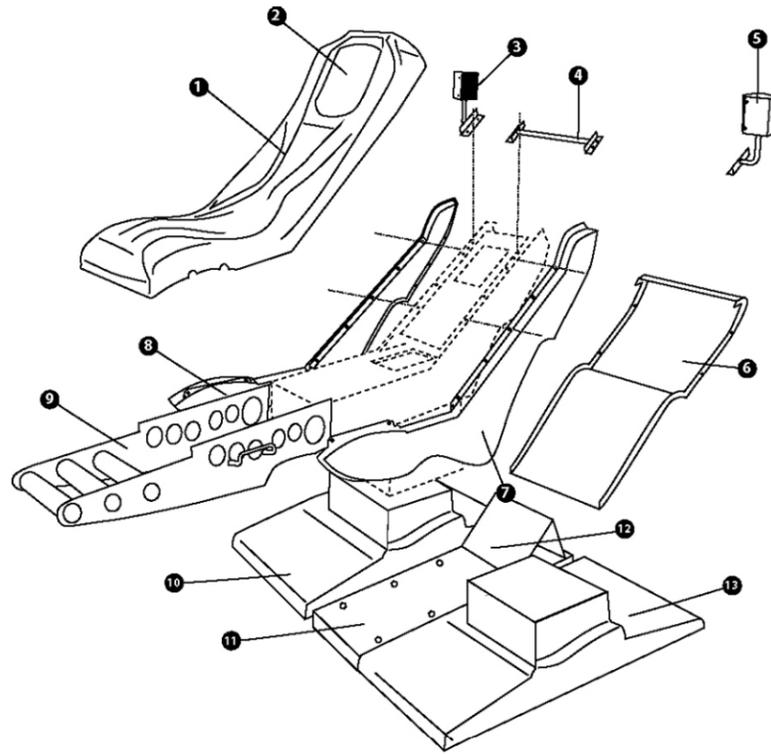
Item	Part No.	Description
01	SD-250-0010	Fiberglass seat
02	SD-500-0003	Head Custom
03	SD-250-0024	Right Speaker support
04	SD-250-0010	Holder Bar
05	SD-250-0023	Left Speaker support
06	SD-350-0006	Fiberglass back
07	SD-350-0004	Fiberglass right side
08	SD-350-0003	Fiberglass left side
09	SD-250-0025	Foot Rest
10	SD-350-0001	Right Fiberglass base
11	SD-400-0002	Center floor plastic
12	SD-250-0011	No Step Plate
13	SD-350-0002	Left Fiberglass base

<table>
<tr><td></td><td>Parts</td></tr>
<tr><td>Header</td><td>5-4</td></tr>
</table>
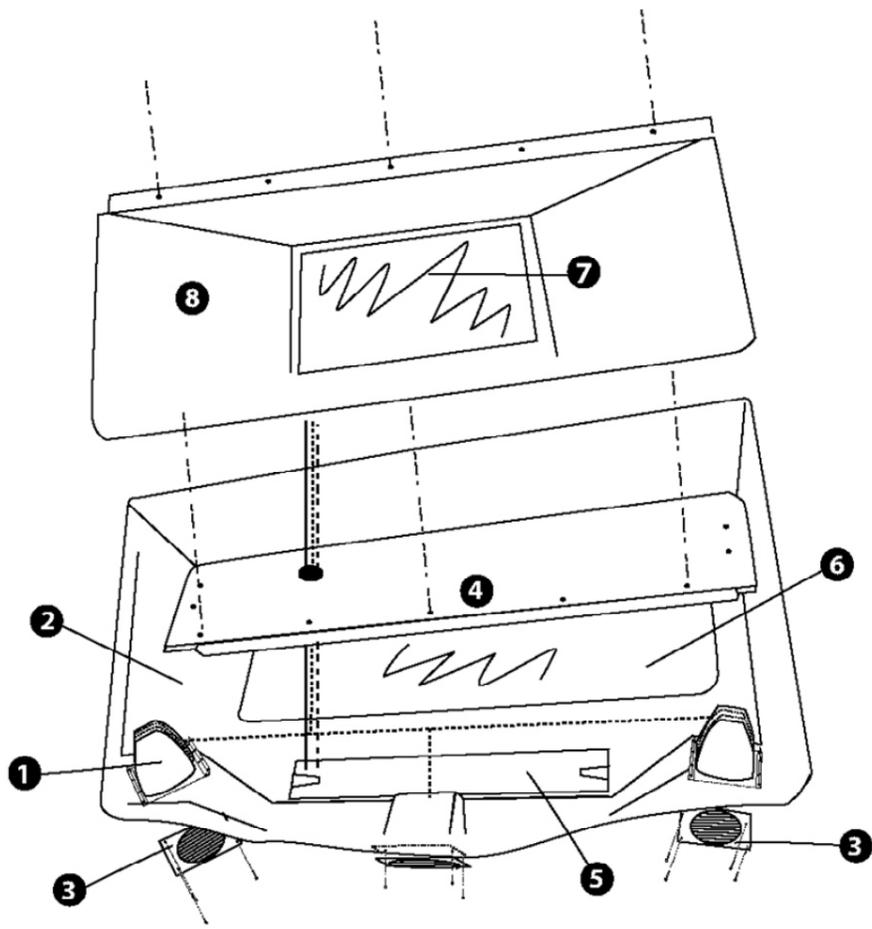
Item	Part No.	Description
01	SD-700-0020	Speakers
02	SD-350-0007	Header
03	SD-250-0026	Speaker grill
04	SD-550-0003	Neon Light 4'
05	SD-550-0002	LED Sign
06	SD-400-0005	Front Plastic
07	SD-600-0002	Mirror
08	SD-400-0004	Mirror holder

Parts 5-4

Technical Support 1-888-465-4634

Parts

5-5 General parts

THEATER		
	PART NUMBER	NAME
	MECANICAL	
MECANICAL	SD-450-0002	ACTUATOR AV 1.15 LEFT
	SD-450-0002	ACTUATOR AV 1.15 RIGHT
	SD-1000-0001	ACTUATOR AC 6
	SD-450-0004	DRIVE ASSEMBLY AV 1.15
	SD-450-0005	DRIVE ASSEMBLY AC 6
		PIVOT BRACKET
	SD-900-0004	ACTUATOR COUPLER

COMPUTER		
COMPUTER	SD-300-0002	COMPUTER
	SD-300-0008	MAXTOR HARD DRIVE 40GB
	SD-300-0017	SEAGATE HARD DRIVE 80GB
	SD-300-0007	COMPUTER VIA MOTHERBOARD
	SD-300-0018	MEMORY CARD 256 MEG SDRAM
	SD-300-0022	CD-ROM DRIVE
	SD-300-0024	COMPUTER POWER SUPPLY MINI ATX
	SD-300-0014	FLOPPY READER

ELECTRONICS		
ELECTRONICS	SD-150-0098	12V POWER SUPPLY
	SD-900-0018	PROJECTOR AIR FILTER
	SD-700-0002	PROJECTOR
	SD-700-0042	PROJECTOR REMOTE CONTROL
	SD-300-0004	PROJECTOR CONTROL BOARD
	SD-900-0014	PROJECTOR LAMP PJ-501
	SD-900-0016	PROJECTOR LAMP PJ-550
	SD-300-0001	KEYBOARD ENCODER BOARD
	SD-150-0024	ACTUATOR CONTROL BOARD
	SD-300-0003	UPS BATTERY BACKUP
	SD-950-0001	AMPLIFIER
	SD-700-0003	SUBWOOFER SPEAKER
	SD-700-0020	SURROUND SPEAKER
	SD-550-0002	PROLITE LCD PANEL
	SD-150-0019	ACTUATOR RJ45 SHIELDED NETWORK CABLE

MISC		
MISC	SD-150-0030	BLUE SELECTION BUTTON
	SD-150-0029	RED BUTTON
	SD-350-0005	FIBERGLASS SEAT
	SD-150-0099	CHERRY SWITCH
	SD-500-0003	HEAD CUSHION
	SD-250-0019	ACTUATOR BRACKET LEFT
	SD-250-0020	ACTUATOR BRACKET RIGHT
	SD-250-0017	AMPLIFIER MOUNTING PLATE
	SD-650-0001	SIDE DECALS
	SD-250-0023	SPEAKER HOLDING BAR (LEFT)
	SD-250-0024	SPEAKER HOLDING BAR (RIGHT)

Parts 5-5

Schematics

Table of content

6

Schematics

Part 6 : Schematics

Schematics

6

Schematics

6-1 Electrical (back of game)

MWMT Electrical Schematics: Physical view (back)

NEON Light (NEON)
LCD Panel (LCD)
Right Speaker
Left Speaker
Front Mural 120V (Front120)
RJ-11 Extension
Center Speaker
Projector (PJCT)
Projector Control Board (PCB)
Top View (in front of unit)
UPS
FAN
Compute Relay Board (CRB)
PC
Audio Amplifier (AA)
SubWoofer (SUB)
Power strip (PS)
Keyboard Encoder Board (KEB)
Mouse
Keyboard
Transformer (XFO)
Selection Button
Button 6
Button 5
Button 4
Button 3
Button 2
Button 1
Selection Button
Coin door assembly
Surround Speaker Connectors
Actuator Control Board (ACB)
SubWoofer Speaker
Back Left side
Back of unit
Main Power
Back Mural 120V (BACK120)
Back Right side
Botttom (Seats of unit)
Surround Right Speaker
Ethernet-1 Ethernet-2
Seats Power
Surround Left Speaker

Technical Support 1-888-465-4634

Schematics

Computer 6-2

MWMT Electrical Schematics: PC
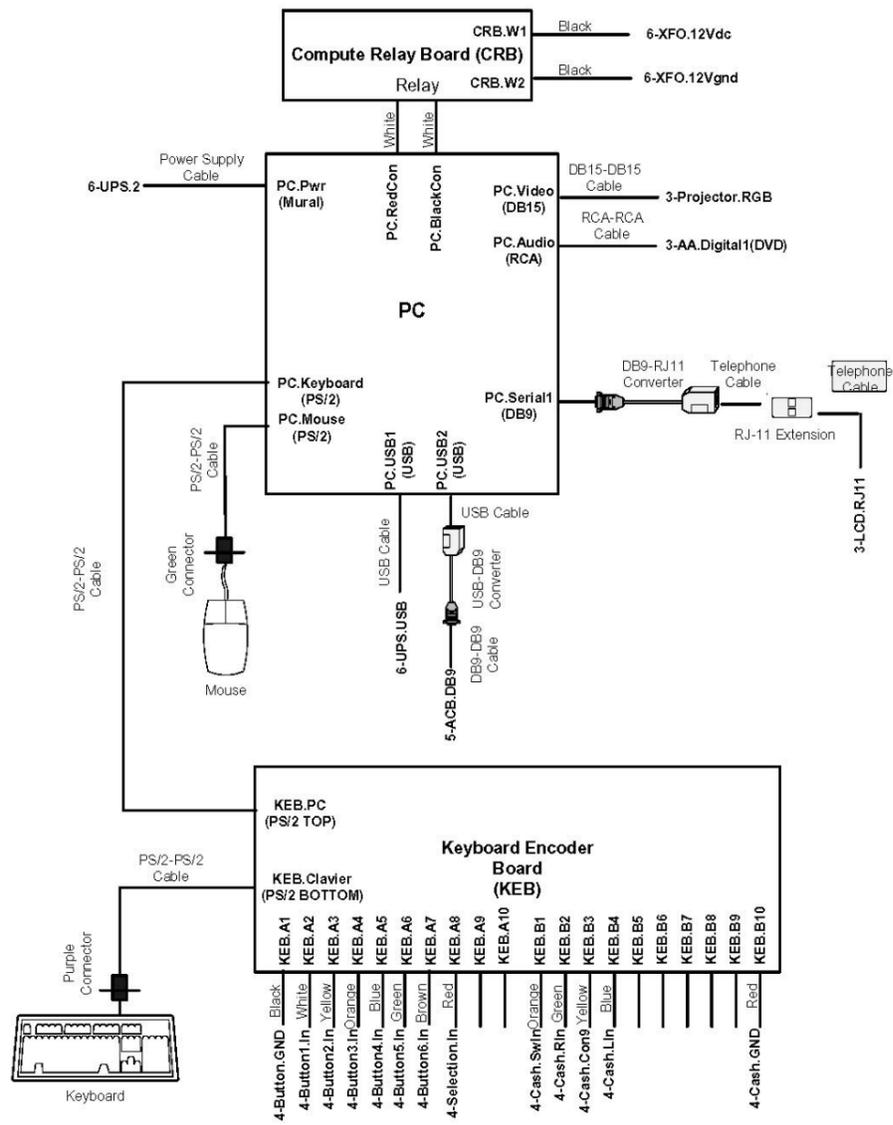
Schematics

6-3 Audio / Video

MWMT Electrical Schematics: Audio/Video
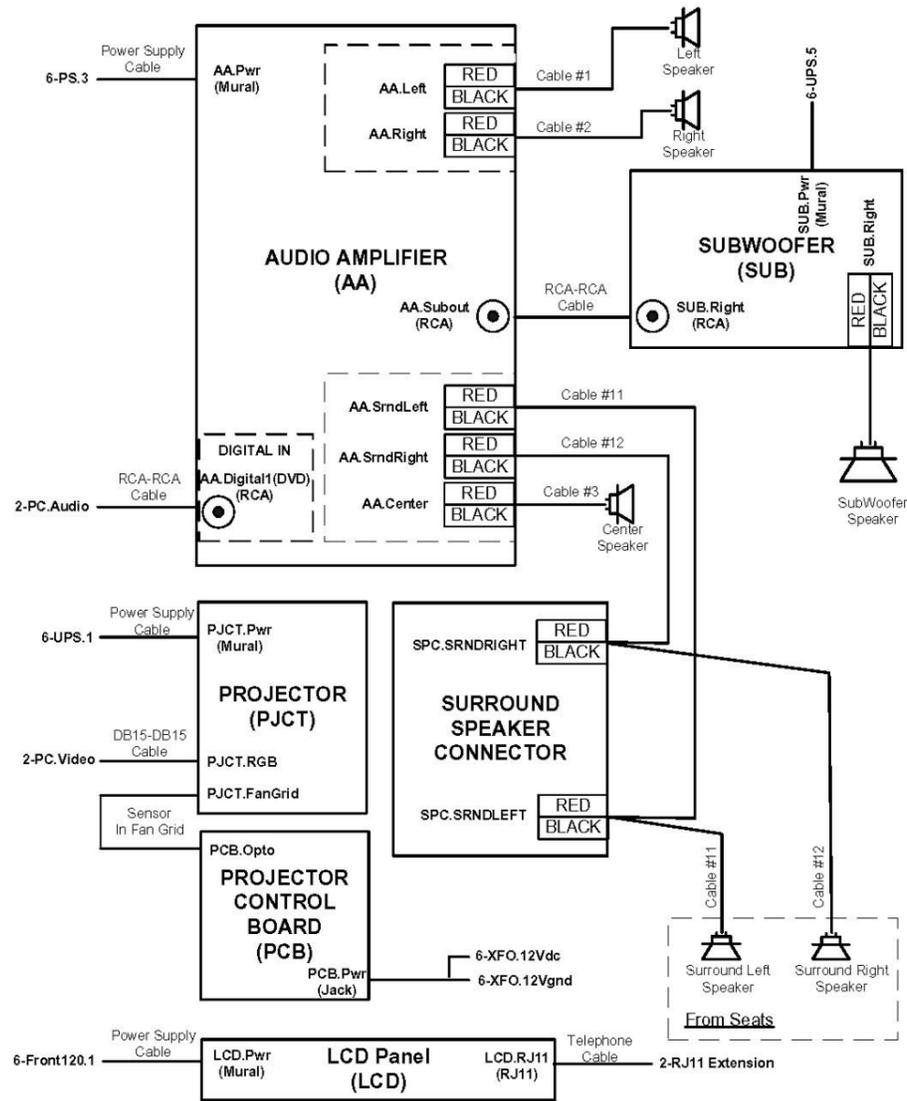
Schematics

Electrical 6-4

MWMT Electrical Schematics: Alimentation

**Schematics
6-4**
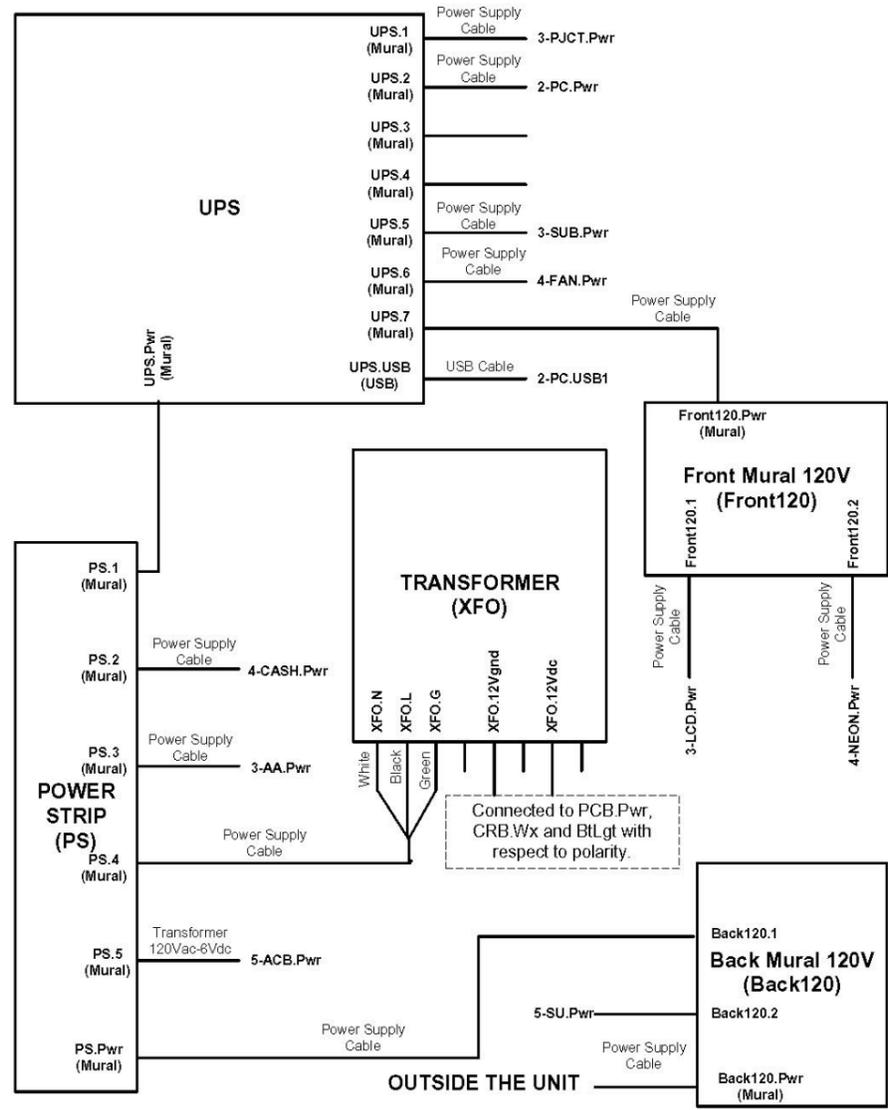
Technical Support

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 on-site 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.