(including new layout photographs)

Magic 636 – 360º HP
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For the best results and for the safety of your clients, please read this Manual carefully. Please pay particular attention to the correct safety, installation and maintenance instructions.

It is important that this Manual stays with the tanning system, particularly if the unit is relocated for any reason.

Note that improper electrical installation of the equipment or unauthorized substitution of electrical components or optical devices (lamps, filters etc.) may invalidate FDA and/or electrical standards (ETL, UL) conformance.

The Magic 636, distributed in North America exclusively by Sun Italia, combines a futuristic Italian design with state of the art components to offer your Salon clients a truly unique tanning experience.

With its breathtaking open design (no claustrophobia for even the most sensitive of customers), adjustable control of each of the high pressure lamps (for a comfortable tan for all skin types and extended lamp life) and 360° all round tanning rays (no need to turn over halfway through the session), your clients are sure to be delighted by the comfort and the effectiveness of their 12 minute tan. And the advanced body cooling, integrated ventilation system ensures a really cool experience.

Magic is the first commercially available sun tanning system to offer individual UV output control of all of the lamps - individually! So by reducing the output of new lamps initially, and increasing the output gradually to compensate for the slowly deteriorating lamps, the Salon owner is able to provide a consistent tanning environment for clients over the useful life of the lamps - plus increase the lamp life substantially by not overdriving the lamps initially.

Further, with the ability of the user to decrease overall lamp output from the standard setting, the differing skin types can fine tune to just the tan desired.

So to recap:

Individual electronic control of the lamp output will increase the useful lamp life and reduce power consumption plus allow all skin types to adjust the output to their individual preferences.

2.0 SAFETY WARNINGS

2.1 Photosensitivity - know the symptoms

Although natural tanning by the sun, and tanning by exposure to ultraviolet lamps is popular throughout the world, there is still a great deal of confusion regarding the risks and benefits of exposure to ultraviolet rays.

What is known however, is that some of us are more susceptible to sunburn than others, and we generally classify this susceptibility by skin type. Type I will burn easily while Type IV is insensitive to the sun and rarely burns.

However, an individual’s sensitivity to ultraviolet light can be heightened by the presence of certain chemicals on the skin - from the use of common skin care products and cosmetics for instance. These chemicals are called photosensitizers and it is important for tanning salon operators to be able to identify them and to recognize the symptoms.

Photosensitivity can cause a variety of symptoms but is usually observed as red or discolored patches on small areas of the body. It can also be seen as blotchy forms which is sometimes caused by heat as well as ultraviolet radiation. Other symptoms include rashes and uneven pigmentation, sometimes accompanied by itching.

Diseases, allergies, medications, cosmetics and lotions can increase photosensitivity, leading to some of the symptoms described. Photosensitizing diseases include Psoriasis (uncontrolled skin cell growth), Porphyria (severe, uncontrolled melanin production) and Lupus Erythematosys (swelling of nerve ends) Medications such as diuretics, birth control pills, antibiotics, tranquilizers and high blood pressure
prescriptions, and other over the counter drugs may affect ones photosensitivity.

The safety and well being of your Salon clients is of the utmost importance, so if there is ever any doubt about an individual's photosensitivity, then please do not allow them to tan. If a reaction is noted or brought to your attention, suggest that your client checks with their physician. Always have your clients read and sign a consent form before a tanning program commences.

3.0 FEDERAL REGULATIONS

3.1 Guidelines for the Salon Owner and Operator

Many States are now actively enforcing Federal Regulations for Sunlamps and Sunlamp Products as defined by the US Department of Health and Human Services publication 21 CFR. These regulations have been in effect for many years and are common sense, minimum safety precautions that all of us in the Tanning Industry should welcome and support.

In the interests of promoting a safe tanning environment for our customers, Sun Italia™ is including a simplified form of these guidelines in all User Manuals, and we are ready to help any Salon in demonstrating compliance in their Salon.

Federal Regulations for sunlamp products require compliance in the following categories:

- Labeling
- Timers
- Protection from UV lamps
- Certified UV lamps
- Protective eyewear
- Photosensitivity information

In addition to these mandatory Federal Regulations, we at Sun Italia™ recommend the following health and safety precautions:

- Warning Posters
- Equipment Maintenance Logs
- Consumer Use Records
- Trained Operators
- Under age 14 prohibition
- Age 14 through 17 restrictions
- Pregnancy prohibition
- Contact Lens removal
- New and yearly client consultations

3.2 LABELING REQUIREMENTS FOR SUNLAMP DEVICES

3.2.1 Warning Labels (21 CFR 1040.20(d)(1))

- Labels must be affixed to all tanning systems in your salon, to inform the user of possible danger in their exposure to ultraviolet radiation.
- DANGER. Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature ageing of the skin and skin cancer.
- WEAR PROTECTIVE EYEWEAR. FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG TERM INJURY TO THE EYES. DO NOT USE THE SUNBED IF ANY OF THE BLUE FILTERS ARE BROKEN
- Medications or cosmetics may increase your sensitivity to ultraviolet radiation. Consult a physician,
before using a sunlamp product, if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product.

- Minimum use distance is 12 inches. Tanning may appear after one session provided your skin is capable of developing a tan. Allow 24 hours between sessions to obtain a base tan, and up to two times per week to maintain appearance. Note the recommended exposure schedule for this product. If you have a base tan you may start at Week 3 of the schedule.

3.2.2 Recommended Exposure Schedule:

<table>
<thead>
<tr>
<th>Skin Type</th>
<th>WEEK 1</th>
<th>WEEK 2</th>
<th>WEEK 3</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitive (I)</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Light (II)</td>
<td>3 Minute</td>
<td>5 Minutes</td>
<td>7 Minutes</td>
<td>10 Minutes</td>
</tr>
<tr>
<td>Normal (III)</td>
<td>5 Minutes</td>
<td>7 Minutes</td>
<td>10 Minutes</td>
<td>12 Minutes</td>
</tr>
<tr>
<td>Dark (IV)</td>
<td>8 Minutes</td>
<td>10 Minutes</td>
<td>12 Minutes</td>
<td>12 Minutes</td>
</tr>
</tbody>
</table>

Skin Type I  Sensitive. Burns easily and severely. Does not tan.
Skin Type II Light. Burns easily and severely. Tans minimally.
Skin Type III Normal. Burns moderately. Average tan.
Skin Type IV Dark. Burns minimally. Tans easily. Above average tan.

3.2.3 Identification Label

Each tanning device in your Salon must have a Manufacturer’s Label affixed to the device and contain the following information:

Name and address of the Manufacturer
Manufacturing Model Number and Serial Number
Date of Manufacture - Month and Year

3.2.4 Certification Label

Each tanning device must have a label certifying that, at the time of delivery of the device, it complied to all applicable standards of the Federal Regulations 21 CFR.

For example:

THIS UNIT IS CERTIFIED TO COMPLY WITH ALL APPLICABLE FEDERAL PERFORMANCE STANDARDS FOR SUNLAMPS AND SUNLAMP PRODUCTS AS DETAILED IN THE UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLICATION NUMBER 21CFR PART 1040.20. ONLY THE FOLLOWING LAMPS ARE CERTIFIED FOR USE IN THIS EQUIPMENT: B.L.V. MHL 1200 23110602.

3.3 Federal Requirements for Timers:
Each tanning device is required to have a timer with a maximum timer interval that does not exceed the Manufacturer’s maximum recommended exposure time. This maximum exposure time is calculated from the results of precise and extensive measurements mandated by the FDA, using the recommended lamps for that particular device.

No timer interval shall have an error greater than 10%. For instance, if the timer is set to 10 minutes, it must time out between 9 and 11 minutes.

Each tanning device is required to incorporate a control that allows the user to manually switch off the lamps at any time during the session, even if the timer has not timed out.

3.4 Protection from Ultraviolet Lamps:

There shall be physical barriers to protect users of the tanning device from injury caused by touching the lamps, or by breakage of the lamps. The Magic™ systems use two polished glass UV filters for safety plus acrylic covers for added protection.

3.5 Certified Ultraviolet Lamps

During the Federal Guidelines conformance process, the tanning device Manufacturer completed an exhaustive and precise evaluation of radiation safety using the UV lamps and optical filters designed for use with your particular tanning device.

The only way to ensure an equivalent lamp (and to protect your clients) is to compare that lamp with the original, by accurately plotting radiation output against wavelength. This comparison is the responsibility of the alternate lamp manufacturer and the FDA, and certification of the new lamp is provided only if the lamp is a true equivalent.

Use of non equivalent lamps is a safety hazard to your Clients, and it is the Tanning Salon owner’s responsibility to ensure that only original equipment lamps are used, or true FDA certified equivalents.

The surest way to ensure the safety of your customers is to request the lamp manufacturer to provide the FDA conformance number, and for the Manufacturer or Importer of the tanning device to confirm equivalent lamps in writing.

This is probably the most important aspect of tanning safety in your salon, as the wrong lamps (or filters) could change completely the tanning pattern of your device - maximum exposure times and recommended initial exposure times etc. Please take the time to make an informed decision when your lamps need replacing.

3.6 Protective Eyewear

The FDA guidelines require that protective eyewear, that meets or exceeds the requirements of 21 CFR 1040.20, shall be provided for your clients.

It is the responsibility of the Salon Owner to provide each client with properly sanitized protective eyewear before each tanning session, with instructions for its mandatory use. There should be documentation in the salon to verify that the protective eyewear conforms to these Federal standards.

Protective eyewear must be properly sanitized before each use, using an effective sanitizing agent at the right temperature and for the correct length of time. A test kit or other device to measure the concentration of the sanitizing solution (at least daily) is recommended.

3.7 Prescription and non prescription drug information
Your Salon should maintain a list of common photosensitising agents available for inspection by your Clients.

Abnormal or increased sensitivity or burning may be caused by certain foods, medications, cosmetics or skin care products. Some prescription and non prescription drugs, including but not limited to tranquilizes, diuretics, anti biotics, hypertension medication and birth control pills may cause this effect.

Posters and leaflets are available from the Sun Tanning Association for Education. Telephone number (301) 698 9707.

4.0 INSTALLATION REQUIREMENTS & GUIDELINES

4.1 Space Requirements

The sunbed is 86" long, 65" deep and 81" high. However, for installation and maintenance of the bed, there should be a minimum clearance of 12 inches from the rear of the bed to the wall, and 18 inches clearance at both ends.

The recommended room size is 12 ft by 12ft with a minimum of 9ft by 9ft if necessary.

The minimum door size is 36 inches wide. Note that the bed is assembled in the room.

A step up transformer is supplied with the sunbed. This may be placed near the sunbed without blocking access to the rear of the bed and the electronics tray at the base, or in another room. The dimensions of the transformer are 24 inches by 14 inches by 24 inches tall. The Sun Italia™ supplied disconnect box is normally mounted on the transformer. There should be a minimum clearance of 6" from the transformer side covers to any wall.

The ventilation system uses 2 twelve inch diameter, flexible exhaust tubes, attached to the rear of the bed and exiting through the ceiling of the room or directly to the outside air through the wall if available. 2 twelve inch fans exhaust air through the flexible tubes. The integral body cooling system includes a coupling to allow the salon to, optionally, connect cool air to the system.

Note that the construction of the room should allow for a make up air flow of 3,000 cubic ft per minute (cfm). If the room is airtight, this will prevent the proper flow of exhausted hot air.

4.2 Electrical Requirements

The supply voltage required is 208 to 240 Volts, 3 Phase and Ground. At 208V the load is 100 Amps per Phase and at 240V it is 87 Amps per Phase. The equipment draws approximately 55 Amps per phase on the secondary side (380V) of the supplied transformer. For a 240 VAC supply, use a 100 amps per phase circuit breaker, and a 125 amps per phase circuit breaker for a 208 VAC supply.

The customer is required to supply the appropriate 3 phase, 208/240V power and ground connections, the circuit breakers, and the wiring to the Sun Italia™ supplied power transformer. Sun Italia™ supplies the wiring from the secondary of the transformer (380V, 3 Phase plus Ground plus Neutral) to the Sun Italia™ supplied, transformer mounted, Emergency Disconnect Box, only if the transformer is in the same room as the Magic 636. The customer supplies this transformer secondary wiring if the transformer is not in the same room.

Sun Italia™ will supply a 10ft, 380V, 3 Phase Neutral and Ground, flexible cable from the base of the sunbed to the Sun Italia™ supplied, Emergency Disconnect box which is activated by the Emergency Stop Button or the back up timer on the Sunbed.

4.3 Ventilation Requirements

The hot air generated by the high pressure lamps is exhausted from the tanning room by two high efficiency fans (supplied by Sun Italia™) located at the exhaust outlets.
Two, wire reinforced, opaque plastic tubes are connected at the rear of the unit, and are fed through the tanning room ceiling, exhausting the forced hot air directly outside (roof or wall mounting), or simply to the ventilated space. Care must be taken to allow approximately 3,000 cubic feet per minute of make up air back into the tanning room. If the make up air is blocked from entering the room, the partial vacuum created will reduce the efficiency of the hot air exhaust system.

4.4 Equipment Check List

Magic 636
Accessories Case including:

Technical Manual
CD Remote Control with Batteries
Antenna
Sponge Air Filters (2)
Box of Fuses - 10 Amp (2), 16 Amp (2) and 25 Amp (2)
Eye Protection Goggles (2 pairs)
Cobalt Blue Filter (2)
Clear Filter (1)

After unpacking, check for any visible damage that may have been caused during delivery of the equipment. Please retain the packing materials to support your claim for any damages.

4.5 Step by Step Installation Instructions

Refer to the separate Magic 636, Step by Step installation Instructions with photographs

5.0 USER INSTRUCTIONS

5.1 Fundamental precautions:

- Do not touch or work on the equipment with damp or wet hands.
- Do not pull the power cables to help move the equipment.
- Do not allow moisture to damage the equipment.
- Do not allow the equipment to be used by children or without trained supervision.
- Do not switch on the equipment while unattended.
- Be aware that some of the internal electrical and optical components operate at high temperatures. So wait a few minutes, after switching off and before removing protective covers, to allow for the components to cool before touching them.
- During normal operation, the cooling fans will remain on for a period after the lamps are turned off. Do not interrupt this cooling cycle or components may be damaged and the effectiveness of the lamps reduced.
- The use of protective goggles is mandatory as is adherence to the posted exposure schedule.

5.2 Instructions for Use

- Lie down comfortably on the acrylic, with your head supported by the headrest.
- Protect your eyes with the supplied goggles (remove any contact lenses)
- Press START to begin the tanning session. (The salon may use an external timer such as T MAX, in which case the Start Button will not be used)
- Push the DOWN arrow to lower the canopy (use auto or manual buttons)
You may push the stop button at any time to end the session.
Adjust the cooling to your comfort by pressing VENT and then the + or - buttons.
Adjust the lamp power by pressing LAMPS and using the + or - buttons.
At the end of your session the lamps will switch off automatically and the canopy will be raised. Note that the equipment cooling lamps will continue to run for a time after the lamps are switched off.
There is also an EMERGENCY RED PUSH BUTTON which will instantly remove electrical power from the equipment. To raise the canopy under battery control, simply push the Emergency Button one more time.

LAMP: To regulate lamp power
AUDIO: Select audio
START: Ignite lamps
OK: confirmation
ESC: escape and programming
▲: move canopy UP manually
AUT▼: move canopy DOWN automatically
AUT▲: Move canopy UP automatically
+: increase values
▼: move canopy DOWN manually
-: decrease values
VENT: Regulate cooling fans
M: programming
STOP: End session

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5.3 USER CONTROLS

Note that the session time, and the start of the session are normally controlled by an external timer.

CANOPY MOVEMENT (only effective during a session)

To control the movement of the canopy:

▲ AUTO: Opening Canopy automatically on the display: UP
▼ AUTO: Closing Canopy automatically on the display: DOWN
▲: Canopy Up manually on the display: UP
▼: Canopy Down manually on the display: DOWN

LAMP POWER ADJUSTMENT (only effective during a session)

Based upon the Skin Type of the client, this exclusive feature allows the client to adjust the lamp power down from the maximum setting by about 30%.

Press the LAMP button and then the + or - buttons to increase or decrease the power output of all of the lamps.

LEVEL LAMPS

Exit automatically after several seconds or press the Esc button.

BODY COOLING (only effective during a session)

The speed of the body cooling fans is adjusted by pressing the VENT button and then increasing (+) or decreasing (-) the air flow through 8 levels.

Adjust the air vents manually to control the direction of the cooling air.

VENTILATION

Exit automatically after several seconds or press the Esc button.

RADIO AND CD PLAYER (this can be adjusted before the sunbed session starts)

Pressing the AUDIO button will step through the following options:

VOLUME Ignore this. Volume is controlled on the CD Player/Radio in the USA and Canadian Models

Press the AUDIO button for the next choice.
Select Radio or CD Player, or switch off all audio:

<table>
<thead>
<tr>
<th>Source</th>
<th>Use keys + or - to select the source</th>
<th>Source</th>
<th>Use keys + or - to select the source</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADIO</td>
<td></td>
<td>CD</td>
<td></td>
<td>Neither</td>
</tr>
</tbody>
</table>

ALWAYS SELECT THE CD PLAYER AS THE SOURCE ON USA AND CANADIAN MODELS

Exit automatically after several seconds or press the Esc button. Then go to the controls on the CD Player/Radio to select CD or Radio with the Function Button, and to control the CD Player or the radio tuning and volume etc.

EMERGENCY PUSH-BUTTON

In case of any emergency, pushing the Emergency Stop Button will remove all power from the sunbed. The lamps will extinguish immediately, the body and cooling fans will stop and the canopy will raise automatically under battery power.

Reset the Emergency Stop Button, and the wall mounted Ground Fault Interruption circuit breakers to start a new session.

If there is a power failure during a session, again all power will be removed from the equipment. However, to raise the canopy under battery power requires that the Emergency Push Button is activated.

QUICK CHECK OF EQUIPMENT USAGE

Press the buttons below to check some of the equipment parameters. This is done with the bed in standby mode (power applied to the bed but lamps off) and it may be necessary at times to hit the button more than once.

<table>
<thead>
<tr>
<th>LAMP</th>
<th>TOTAL HOURS LAMPS IGNITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>VENT</td>
<td>TOTAL MINUTES</td>
</tr>
<tr>
<td>MASS</td>
<td>TOTAL SESSIONS</td>
</tr>
</tbody>
</table>

It exits automatically after 5 seconds.

CHECK HOURS TO NEXT MAINTENANCE EVENT

It is possible to set the number of hours of use (entered by the technician) before the next maintenance event, for instance, the number of hours before the lamps should be replaced. When the number of hours used is reached then the following message appears as a reminder:

SERVICE HOURS CHECK

HOURS TO MANDATORY SERVICE BLOCK

This is similar to the CHECK HOURS but in this case the equipment cannot be operated once the hours to the mandatory service (entered by the technician) have been reached. The BLOCK HOURS must be entered by the technician (after the mandatory maintenance has been completed) to start using the equipment again.

SERVICE HOURS BLOCKED

Once the bed is blocked after reaching TOTAL HOURS of 990, it is necessary to reset TOTAL HOURS to zero for continuing operation of the bed.

To reset TOTAL SESSIONS - in the Service Programming Mode, with the TOTAL SESSIONS displayed, press the AUDIO and VENT buttons simultaneously for 10 seconds.
EMERGENCY TIMER OVERRIDE

In case of a failure of the external session timer, or the internal digital timer, the equipment includes an emergency mechanical timer that will shut the bed off if the session time exceeds the maximum allowed time of 12 minutes.

6.0 PROGRAMMING

6.1 Lamp Adjustment.

There are 3 levels of lamp adjustment:

1. From the Standby Mode of the sunbed - Service Programming by the Technician.

**ESC, OK and AUT DOWN.** Step through with AUT UP until Lamp Level 1 which shows 8 levels. Increase or decrease with + or -, stepping through the 30 lamps (some are paired) with the ESC button. Refer diagram to show position of lamp being adjusted. Hold in START button to exit this programming mode.

2. From the Lamps On mode of the sunbed - Service Programming by the Technician.

**ESC, OK and AUT DOWN.** Step through with AUT UP until Phase Adjustment. Step through R then S then T and adjust each phase from 0 (Maximum output) to 255 (Minimum output). Hold in START button to exit this programming mode.

3. From the Lamps On mode of the sunbed - User Control of the lamps output (all at once).

The user can only reduce lamp output from the Technician settings. During the session, press the LAMPS button and adjust with the + and - buttons. After a few seconds, the sunbed will automatically exit from this mode.

**Note:**

You will not get the full range of control of the lamps unless the three phases, R, S, and T, are in the right sequence from the secondary of the external transformer. The User control of the lamps (3 above) should vary the output by approximately 30%, say from 180 to 120 mw/cm². If the variation is much less than this, try switching two of the phases on the secondary (380V) side of the external transformer.
6.2 PROGRAMMING BY THE TECHNICIAN

To initiate the Technician Programming Mode (Service Programming), press and hold in the following buttons:

ESC, OK and AUT

The SERVICE PROGRAMMING box will be displayed and you can now press the AUT button to step through each of the programming functions.

**MAX TIME BODY MINUTES**
Set with the + and - buttons (1 - 40)

Normally set to 12 which prevents the Salon Operator from programming a session greater than 12 minutes. Press the AUT button to step to the next function.

**BLOCK HOURS**
Set with the + and - buttons (10 - 990)

Normally set to 990 which prevents the lamps being switched on after 990 hours of use, until the BLOCK HOURS are reset. This function is useful if the sunbed is leased and payment is due after so many hours. When the TOTAL HOURS used reaches 990 hours, it will be necessary to reset the TOTAL HOURS to zero (see below) to release the block and allow the bed to be switched on.

**CHECK HOURS**
Set with the + and - buttons (10 - 990)

Normally set to 100 to remind the Technician of the next service event, for instance, cleaning the UV filters. When the 100 hours is reached, there will be a reminder on the display.

**LANGUAGE**
Press ESC to select language for display

**MACHINE CODE**
Set with the + and - buttons (0 - 9 and A - Z)

Not used in the USA Models

**TIME OF SECOND START IN SECONDS**
Set with the + and - buttons (2 - 180 even #’s)

Normally set to 14 or 16 seconds which is the delay before the second set of lamps ignites.

**COOLING TIME**
Set with the + and - buttons (1 - 10)

Normally set at 3 which is the number of minutes that the lamp cooling fans stay on after the lamps switch off at the end of a session.

**LAMP LEVEL**
Set with the + and - buttons (1 to 8)

Select the pair of lamps (refer lamp numbering diagram in this manual) by stepping through from 1 to 15 with the ESC button, and adjusting the lamp output (from a low of # to a high of #########) with the + and - buttons.

**TOTAL HOURS**
Read only. Total hours recorded.

To reset TOTAL HOURS - in the Service Programming Mode, with the TOTAL HOURS displayed, press the AUDIO and VENT buttons simultaneously for 10 seconds
CHECK HOURS  Read only. Set by Technician for next service.

TOTAL MINUTES  Read only. Add to total hours for total time used.

To reset TOTAL MINUTES - in the Service Programming Mode, with the TOTAL MINUTES displayed, press the AUDIO and VENT buttons simultaneously for 10 seconds

TOTAL SESSIONS  Read only. Number of sessions recorded.

To reset TOTAL SESSIONS - in the Service Programming Mode, with the TOTAL SESSIONS displayed, press the AUDIO and VENT buttons simultaneously for 10 seconds

RADIO SET UP  Not used in USA. Use CD/Radio unit controls.

MOTOR SET UP msec/cm  Set with the + and - buttons (10 to 2,500)

Normally set to 260 ms/cm which is the speed of the lift mechanism for the canopy.

Press the START button once to exit from the Service Programming mode and record the changes.

6.3 PROGRAMMING BY THE SALON OPERATOR

To initiate the Salon Programming Mode (Operator Programming), press and hold in the following buttons:

ESC, ▲ (manual up) and ▼ AUT

The OPERATOR PROGRAMMING box will be displayed and you can now press the ▲ AUT button to step through each of the programming functions.

MAX TIME BODY MINUTES  Set with the + and - buttons (1 - 40)

Normally set to 12 which sets a maximum session time of 12 minutes. The Front Desk cannot set a session time to more than the MAX TIME BODY MINUTES using the External Timer (T-Max). Press the ▲ AUT button to step to the next function.

SESSION TIME  Set with the + and - buttons (1 - XX)

Normally set to 12 but the maximum value XX is limited by the MAX TIME BODY MINUTES programmed by the technician.

CHECK HOURS  Read only.

This is the current value of the check service time set by the technician.

TOTAL SESSIONS  Read only.

The recorded number of sessions on this equipment.

SERIAL NUMBER  Set with the + and - buttons (1 - 99)
Not normally used in the USA Model.

RADIO SET UP

Not used in USA. Use CD/Radio unit controls.

Press the START button once to exit from the Operator Programming mode and record the changes.

7.0 PREVENTIVE MAINTENANCE AND CLEANING

Disconnect electrical power from the equipment before working on any part of the sunbed.

- To clean the external structure use only a soft cloth, clean water and neutral soap if necessary. Never use alcohol or chemicals or abrasives of any kind.
- Clean the UV filters only with alcohol or proprietary glass cleaners. Never use abrasives. After cleaning, check that the UV filter microswitch is activated.
- Do not touch the lamp glass, even when cold. Remove touch prints with a clean soft cloth moistened with alcohol if necessary. Clean the lamps and reflectors with a dry, soft brush or lint free cloth.
- Check the uninterrupted flow of cooling air.

1. The lamps should be replaced approximately every 1,000 to 1,500 hours of operation based upon the UV readings. 130 mW/cm² reducing to about 90 mW/cm² provides an effective yet comfortable session.
2. Periodically verify the operation of the lamp cooling fans.
3. Do not obstruct air vents with towels etc.
4. Do not interrupt the 3 or 4 minute cooling cycle between sessions.
5. Periodically lubricate all moving parts including the canopy hinge and lift motor and gas shock supports.
6. Check and log the lamp output weekly.
7. Periodically check the correct operation of the Emergency Push Button, the override timer and the calibration of the external timer.

7.1 BEFORE EACH TANNING SESSION. SANITIZE

- Thoroughly clean and sanitize the unit, particularly the body acrylic and the head rest.
- Clean the 6 horizontal acrylics.
- Clean the Control Panel.

7.2 EVERY 50 HOURS (WEAR PROTECTIVE GOGGLES) LOG UV OUTPUT

- Measure and log the power output of each lamp at the maximum reading points along the horizontal body acrylics. Compare with the readings at installation.
- Check that there are no broken or misaligned clear or cobalt blue filters. Replace immediately if any are broken. Note that there is a micro switch on each filter to detect broken or misaligned filters. If one of these micro switches is activated, the lamps will not ignite and a red warning LED (to the right of each lamp assembly will light up)

7.3 EVERY 200 HOURS - CLEANING THE UV FILTERS

- Carefully remove each horizontal lamp acrylic by removing the two plastic end caps on each lamp assembly (secured by one screw each). Slide the acrylic to the left or right if you have room, or bend each acrylic, and remove it from the front of each lamp assembly.
- The filter housings in each assembly are secured with one screw. Simply loosen this screw and push the individual filter assembly to the right and pull each assembly forward. Each filter assembly slots into two holes so by mowing the assembly to the right you allow the filter assembly to be released.
- Slide out the clear filter first and then the blue filter from their spring loaded slots. Gently clean both with an alcohol moistened soft cloth and replace in the housing.

- Take this opportunity to clean each reflector and lamp with a soft brush or alcohol moistened soft cloth. Do not touch the glass of the lamps. Remove any accidental finger prints from the lamps with the alcohol moistened soft cloth.

- Replace the filter housing by engaging the slots at the back of the filter housing and moving the whole assembly to the left. Tighten down on the previously loosened screw. Make sure that the micro switch for each filter is activated as you replace the filter housings.

- Replace acrylics carefully and replace the plastic end caps. Wear protective goggles before starting the unit to check ignition on all lamps and the integrity of all filters.

### 7.4 REPLACEMENT OF THE LAMP ACRYLICS

- Carefully remove the horizontal lamp acrylic by removing the two plastic end caps on the lamp assembly (secured by one screw each). Slide the acrylic to the left or right if you have room, or bend each, and remove it from the front of the lamp assembly.

- Replace the new acrylic carefully and replace the plastic end caps. Wear protective goggles before starting the unit to check ignition on all lamps and the integrity of all filters.

### 7.5 REPLACEMENT OF THE UV FILTERS

- Carefully remove the appropriate horizontal lamp acrylic by removing the two plastic end caps on the lamp assembly (secured by one screw each). Slide the acrylic to the left or right if you have room, or bend the acrylic, and remove it from the front of each lamp assembly.

- The filter housings in each assembly are secured with one screw. Simply loosen this screw and push the individual filter assembly to the right and pull each assembly forward. Each filter assembly slots into two holes so by mowing the assembly to the right you allow the filter assembly to be released.

- Remove the filter to be replaced. Gently clean both with an alcohol moistened soft cloth and insert the replacement filter.

- Replace the filter housing by engaging the slots at the back of the filter housing and moving the whole assembly to the left. Tighten down on the previously loosened screw. Make sure that the micro switch for the filter is activated as you replace the filter housing.

- Replace the acrylic carefully and replace the plastic end caps. Wear protective goggles before starting the unit to check ignition on all lamps and the integrity of all filters.

### 7.6 LAMP REPLACEMENT

- Remove the appropriate filter assembly as in 7.5

- Remove the two screws securing the lamp and reflector. Note that the reflector is positioned INSIDE the housing.

- Unscrew the two terminal screws securing the two lamp wires to the white ceramic block.

- Insert the new lamp in the reflector clips, and secure the wires to the ceramic block.

- Replace the reflector and lamp assembly inside the housing and secure with the two screws.

- Replace the filter assembly and the lamp acrylic. Secure the two end caps.
7.7 CERTIFIED ULTRAVIOLET LAMPS

During the Federal Guidelines conformance process, the tanning device Manufacturer completed an exhaustive and precise evaluation of radiation safety using the UV lamps and UV filters designed for use with your particular tanning device.

The only way to ensure an equivalent lamp (and to protect your clients) is to compare that lamp with the original, by accurately plotting radiation output against wavelength. This comparison is the responsibility of the alternate lamp manufacturer and the FDA, and certification of the new lamp is provided only if the lamp is a true equivalent.

Use of non equivalent lamps is a safety hazard to your Clients, and it is the Tanning Salon owner’s responsibility to ensure that only original equipment lamps are used, or true FDA certified equivalents.

The surest way to ensure the safety of your customers is to request the lamp manufacturer to provide the FDA conformance number, and for the Manufacturer or Importer of the tanning device to confirm equivalent lamps in writing.

This is probably the most important aspect of tanning safety in your salon, as the wrong lamps (or filters) could change completely the tanning pattern of your device — maximum exposure times and recommended initial exposure times etc. Please take the time to make an informed decision when your lamps need replacing.
## MAINTENANCE LOG SHEETS

1) Date: __________________________  

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2. Check lamp cooling fans
3. Check external timer
4. Check UV Filters
5. Lubrication of moving parts
6. Check air filters
7. Exhaust system
8. Push-button Emergency
9. Clips connection
10. Timer emergency

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**1) Date:**

**hours operation:**

**Technician**

**Manager**

**Important notes:**

- Ensure all parts are in good condition before use.
- Keep a record of all maintenance performed.
- Regular cleaning is essential for optimal performance.

**Contact Information:**

Distributed exclusively in North America by Sun Italia, Inc.
2020 Elkhart Road, Goshen, IN. 46526
www.sunitalia.com
8.0 T-MAX CONNECTIONS

Connect the T-MAX timer to pins 4 and 5 as shown. DIP Switch 2 should be ON if an external timer, such as the T-MAX is installed. Refer to the table below for the other DIP switch options.

Earlier versions of the Magic 636 connect the T-MAX timer to pins 8 and 13.

---

**DIP SWITCHES - FUNCTION**

<table>
<thead>
<tr>
<th>Switch</th>
<th>Function</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OFF</td>
<td>PC Communication (old)</td>
<td>Set to OFF</td>
</tr>
<tr>
<td>1 ON</td>
<td>PC Communication (new)</td>
<td></td>
</tr>
<tr>
<td>2 OFF</td>
<td>No External Timer</td>
<td></td>
</tr>
<tr>
<td>2 ON</td>
<td>External Timer</td>
<td>Set ON for TMAX</td>
</tr>
<tr>
<td>3 OFF</td>
<td>Italian Version</td>
<td></td>
</tr>
<tr>
<td>3 ON</td>
<td>USA Version</td>
<td>Set to ON</td>
</tr>
<tr>
<td>4 OFF</td>
<td>3 Messages for Mattress Version</td>
<td>Set OFF for Platinum</td>
</tr>
<tr>
<td>4 ON</td>
<td>2 Messages for 360° Version</td>
<td>SET ON for Magic</td>
</tr>
</tbody>
</table>
9.0 TECHNICAL SPECIFICATIONS

Model Number  
Magic 636

Dimensions  
86" long by 65" deep by 81" high

Tanning Surface  
77" by 39"

Minimum Room Dimensions  
9' by 9' (Recommend 12' by 12')

Total Power  
36 KW

UV Lamps  
30 x 1,200W  B.L.V. MHL 1200 23110602.

Power Supply  
208 - 240 VAC, 3 Phase + Ground, 50 - 60 Hz

Load  
100 Amps per phase at 208V, 87 Amps at 240V
Approximately 55 Amps per phase at 380V on the secondary side of the transformer.

External Transformer  
208/240 to 380V 3 Phase Transformer. 24" x 14" x 24" 250lbs

Make up air required  
3,000 cubic ft/min

UV Filter (blue)  
Euroelectrika 240 x 270 mm. Tonianticato 3mm

UV Filter (clear)  
Euroelectrika 240 x 270 mm. Tempered glass 3mm

Maximum exposure time  
12 minutes

Exhaust  
Two flexible tubes, diameter 12 inches (300 mm). Max 16 ft each

Features:  
8 digitally controlled power levels for the lamps
4 levels of body cooling
High Fidelity CD Player and twin speakers
2 stage voice prompt system
Easy access component trays
Individual safety switch for each UV filter
Temperature sensors
LCD graphic display
LCD Diagnostic message center
360° tanning experience
10.0 Troubleshooting & Adjustments

10.1 To adjust the Upper Limit Switch

This adjustment will allow you to control how far the canopy is raised between sessions. It is checked during installation and, normally, no subsequent adjustment is required. However, if the canopy is lifting too high, or not high enough, here is the step by step adjustment procedure:

i. Switch off all power to the machine and disconnect one lead of the battery inside of the right hand component drawer. Note that to access the battery, the drawer must be opened about two thirds of the way. Make sure the cables are disconnected from the main control board, otherwise the cables will be damaged as the drawer is opened this far.

ii. Remove the 2 screws and washers securing the rear metal flaps (2) to the iron bar hinge.

iii. On the left side, remove the two screws securing the upper limit micro switches. Remove the micro switch assembly for easy access.

iv. Adjust the 2 micro switches equally, back or forward to adjust the height to which the canopy is raised during sessions. Positioning the micro switches forward (away from the rear of the machine) will reduce the height to which the canopy is raised. The micro switches are secured by a nut and a lock nut.

v. Replace the micro switch assembly, connect up the battery and replace the cables on the main printed circuit board. Turn on power to the bed.

vi. Check the lift operation. Secure the rear metal flaps when working correctly. Close right hand drawer.

10.2 Lamp Intensity Adjustment Problems

If you are not getting a 25% or 30% decrease in Magic or Platinum lamp output when adjusting the lamp level (user control) from Level 8 to Level 1, here is the suggested approach:

First, it is very important that on the secondary output of the transformer, the voltage measurement between phases should be at least 380 VAC with the machine switched on (measure the voltage under load conditions). If this voltage is below 380 VAC, the lamp regulation will not work properly because the output of the lamps already will be at a minimum level, so it may be necessary to use the 400 VAC secondary taps or increase the voltage on the primary.

After this voltage check you may proceed with the electronic regulation of the lamps:

1. Program all of the lamps to maximum intensity and variability – level 8 and R, S, T at 255.

2. Switch on the Magic (or Platinum) and wait 2 minutes, to allow all of the lamps to reach full ignition.

3. Press the LAMP button and, with the minus button, reduce the lamps to the minimum user level, noting the brightness decrease.

4. In case you see no decrease in brightness level, it will be necessary to switch off the Magic or Platinum with the stop button, allow the cooling cycle to end, and (with all power removed from the transformer) switch the transformer secondary cables on U380 (U400) with W380 (W400).

5. Go back to step 1 and confirm you now have noticeable decrease in the brightness. If you measure with a UVA meter, expect a 25% to 30% variation from Level 8 to Level 1. Note that, on the Magic, 3 lamps are not adjustable.

6. Only after you have achieved this normal variation of the lamps, should you adjust the lamp intensity and RST levels to your liking, in the programming mode.

Before replacing any printed circuit boards, please follow the above instructions.

If board replacement is necessary eventually, the most probable cause is the TRIAC 12 board.
Note that in both the Magic and the Platinum, the design allows for 15 individual TRIACS, which are the devices that allow adjustability of the lamps.

With only 15 lamps in the Platinum, each lamp is assigned one TRIAC for individual control of each of the 15 lamps. In the Magic, 3 of the TRIACS are assigned to individually control the 3 face lamps, and 12 TRIACS are assigned to 24 of the other lamps which are regulated in pairs. That leaves 3 lamps which are not regulated – 2 at the foot of the bed and one under the pillow.

Below are the instructions for measuring the lamp variation voltages on the TRIAC Board

10.3 To Measure the Lamp Intensity adjustment voltages

Referring to the diagram (below) of the TRIAC and AUX boards:

Note that the TRIAC board has 4 TRIAC output connectors for each of the 3 phases, R, S and T. On the left side of the board you can see 4 U.S.G connectors (phase S), 4 U.T.G. connectors at the top of the board (phase T) and 4 U.R.G. connectors on the right side (phase R)

On the AUX board, there are 3 TRIAC output connectors, one for each of the phases R, S and T. One each U.R.G., U.S.G. and U.T.G which are the lamp controlling connectors to the facial lamps 1, 2, and 3.

There are a total of 4 measurements which indicate that the lamp control is working for all of the phases and for all of the lamps:

Initially set the RST programming to 0 and then, on the AUX board, measure between phase R (you can pick this up from K1 lamp contactor, and phase R is closest contact on K1 to the front of the bed) and the U pin of the U.R.G. connector. See diagram which shows the volt meter connections. This should read approximately 230 VAC at lamp intensity (user control) Level 8, and approximately 207 VAC (about a 10% drop) if you use the LAMP MINUS button to reduce the lamp intensity to Level 1. Now if you program the RST setting to 255, the maximum and minimum readings should now be 230 VAC and 186 VAC (about a 20% drop).

Similarly, on the TRIAC board, take the same voltage measurements at one of the 4 connectors for each of the 3 phases.
TRIAC Board Voltage Measurements for Lamp Intensity Adjustment
10.4  Lamps not Igniting - lamp contactors fail to energize

When the START button is pushed (or the T-Max external timer is switched on), the Lamp Contactors (K1, K2 and K3) and the Fan Contactor (K4) are energized. K1 allows the 240VAC to ignite lamps 1, 2 and 3, K2 ignites lamps 4, 4A, 6, 6A, 8, 8A, 10, 10A, 11, 11A, 12, 12A, 14, 14A and 17. K3 ignites lamps 5, 5A, 7, 7A, 9, 9A, 13, 13A, 15, 15A, 16 and 16A.

K4 provides 240 VAC to the Body Fans and the Lamp and Triac Cooling Fans.

 Relay R1 is energized by the 12 VDC from the AUX Printed Circuit Board as long as the 30 UV filter micro switches are closed (Blue filters all in place).

The contact of Relay R1 allows the Neutral wire to be connected to K1 - K3, the Hour Meter (C) and the Backup Timer Ta. Note that the K4 Neutral goes direct to K4. The fused Phase T routes 220VAC to K1 - K4, C and Te when the electronic switches S (on the TRIAC PCB) are switched on in the Start sequence, providing contact RE (Emergency button and Backup Timer) is not activated. This is a normally closed contact and will remove the 220VAC if the Emergency Button is pushed or the Backup Timer activates.

10.5  To adjust volume on the Magic, Platinum or King voice chips

- Start a session on the Platinum or Magic
- Immediately press the Audio button
- Increase volume with the + button to the required volume
- Press the Stop Button once to save the new volume level (this switches off the machine of course)
ELECTRICAL DIAGRAMS

MAGIC BOARD

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www.sunitalia.com
MAGIC 636 LAMP CONTROLLER K3 CIRCUIT
MAGIC UV FILTER MICRO SWITCHES

If any UV Filter Microswitch is open (filter broken) then relay R1 will not energise and the lamp contactors K1, K2 and K3 will not activate.

The contacts of relay R1 connect the neutral to the lamp contactors K1, K2 and K3.

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MAGIC 636 BALLAST CONNECTORS

NOTE THAT THE EVEN NUMBERED PINS (BALLAST OUTPUTS) HAVE THE FOLLOWING CABLE COLORS
PIN 2 IS BLACK, PIN 4 BROWN, PIN 6 GREY, PIN 8 RED AND PIN 10 ORANGE

THE ODD NUMBERED PINS (BALLAST INPUTS) ARE ALL BLUE

<table>
<thead>
<tr>
<th>Connector A</th>
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<tr>
<td>BALLAST 10 IN</td>
<td>BALLAST 12 OUT</td>
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<tr>
<td>1° 0 6</td>
<td>BALLAST 10A IN</td>
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<td>BALLAST 10 OUT</td>
<td>BALLAST 15 IN</td>
</tr>
<tr>
<td>2° 0 7</td>
<td>BALLAST 10A OUT</td>
</tr>
<tr>
<td>BALLAST 14 IN</td>
<td>BALLAST 15 OUT</td>
</tr>
<tr>
<td>3° 0 8</td>
<td>BALLAST 14A IN</td>
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<td>BALLAST 14 OUT</td>
<td>BALLAST 16 IN</td>
</tr>
<tr>
<td>4° 0 9</td>
<td>BALLAST 14A OUT</td>
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<tr>
<td>BALLAST 12 IN</td>
<td>BALLAST 16 OUT</td>
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<tr>
<td>5° 0 10</td>
<td>BALLAST 12A IN</td>
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<tr>
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<td>BALLAST 1 IN</td>
</tr>
<tr>
<td>BALLAST 3 OUT</td>
<td>BALLAST 7 IN</td>
</tr>
<tr>
<td>2° 0 7</td>
<td>BALLAST 1 OUT</td>
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<td>BALLAST 6 IN</td>
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<tr>
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<td>BALLAST 4 IN</td>
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<tr>
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<td>BALLAST 7A IN</td>
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<td>5° 0 10</td>
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<tr>
<td>BALLAST 17 OUT</td>
<td>BALLAST 13 IN</td>
</tr>
<tr>
<td>2° 0 7</td>
<td>BALLAST 2 OUT</td>
</tr>
<tr>
<td>BALLAST 11 IN</td>
<td>BALLAST 13 OUT</td>
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## MAGIC RIGHT FRONT EQUIPMENT TRAY

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<td>FUSE 2</td>
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<td>FUSE 1</td>
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<td>HOUR METER</td>
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Magic Equipment Tray
Lift Motor Components in Blue

- **Main Board**
- **Triac Board**
- **Transformer 300 VA**
- **50 VA Transformer**
- **Battery**
- **Battery Charger**
- **Triacs**
- **Triacs**
- **Triacs**
- **Triac Fan**
- **Transformer**
- **24 Volts 24 Volts**
- **Phase R Phase S**
- **Phase T Neutral**
- **Fan Relay Triacs & Lamps**
- **K4 Timer**
- **K3**
- **K2**
- **K1 Pot-Aux Card**
- **Lamp Fuses**
- **Lamp Contactors**
- **Hour Meter**

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TRIAC BOARD LIFT MOTOR CIRCUIT

When the lift motor is in normal mode, not in emergency, battery mode, relays 3 and 4 on the TRIAC PCB control the direction of the lift motor. The upper microswitch is normally closed and opens when the canopy is fully raised. The lower microswitch is normally closed and opens when the canopy is fully closed.

The second upper micro switch comes into use when the Emergency Push Button is activated or the override timer times out. This second upper micro switch opens when the canopy is fully open and prevents Relay R3 from energising, disconnecting the battery from the lift motor.

Refer to the Magic Equipment Tray Layout Showing the Lift Motor Circuit Components in Blue.
MAGIC 636 AND SUNSPORT PLATINUM CONNECTOR G

62 LIFT MOTOR  1  9  76 LAMPS AND TRIACS FANS
63 LIFT MOTOR  2  10  74 BODY FAN
43 MICROSWITCH COMMON  3  11 E EMERGENCY PUSHBUTTON
2 UPPER MICROSWITCH  4  12 E EMERGENCY PUSHBUTTON
3 LOWER MICROSWITCH  5  13 L PHASE T
E2 EMERGENCY MICROSWITCH  6  14 (-) MINUS SPEAKER COMMON
E2 EMERGENCY MICROSWITCH  7  15 (+) SPEAKER LEFT
N NEUTRAL  8  16 (+) SPEAKER RIGHT
TRIAC BOARD SIGNALS

TRIAC BOARD

MASSAGE MICROSWITCHES

LOWER LIFT MICROSWITCH

UPPER

COMMON

TO TRIAC & LAMP FANS (76)
TO BODY FAN (74)

TRIAC 4
TRIAC 5
TRIAC 10
TRIAC 11

TRIAC BOARD

JP18
JP19
JP20
JP21
JP22
JP23
JP24
JP25
JP26

LAMP CONT K3 COIL (39)
PHASE T INPUT
FAN CONT K4 COIL (76)
LAMP CONT K2 COIL (37)
LAMP CONT K1 COIL (79)

TRIAC 15
TRIAC 14
TRIAC 9
TRIAC 8
TRIAC 6
TRIAC 7
TRIAC 12
TRIAC 13
REAR CANOPY

ASSY. C

ASSY. F

ASSY. D

FRONT CANOPY

LAMP ADJUSTMENT FOR THE MAGIC 636

REAR BASE

ASSY. B

ASSY. E

ASSY. A

FRONT BASE

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Magic 636 – 360 HP

Magic 636 Right Side Equipment Tray - Component Layout
LAYOUT DIAGRAM FOR THE MAGIC 636 BASE UNIT AND LOWER 3 LAMP ASSEMBLIES

MAGIC 636 CENTER BASE AND LAMP ASSEMBLIES

LAMP ASSEMBLY B

LE15F/US Exhaust Fan

LAMP ASSEMBLY E

LAMP ASSEMBLY A

CENTER BASE UNIT
LAYOUT DIAGRAM FOR THE MAGIC 636 CANOPY UNIT AND UPPER 3 LAMP ASSEMBLIES

REAR

MAGIC 636 CANOPY AND LAMP ASSEMBLIES

CENTER CANOPY UNIT

FRONT
### SAMPLE CUSTOMER CARD

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<th>Tanning Equipment Used</th>
<th>Exposure time in minutes</th>
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Magic 636 – 360° HP

Rear Tray Layout – Version 2005

Magic 636 – 360° HP
Rear Tray Layout
Rear Tray Disconnect Box
Rear Tray Full View
Rear Tray Lamp Contactors
Rear Tray Lamp Fuses
Rear Tray Main Board
Rear Tray Right Side Detail