

OPERATION MANUAL

Revision: R1
Serial # 1000089 and +

ELECTRIC TREATMENT CHAIR DIALYSIS/ONCOLOGY TRIAD



TRIAD

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1. TO CONTACT US

Before contacting us, make sure to have the following information ready:

- **7-digit serial number (example: 1234567).**
- **Model number or name (example: TRIAD).**

This information is available on the label located on the base of the chair.











Phone	1-877-247-7494 418-247-3986
Email	information@umanomedical.com
Web	www.umanomedical.com
Address	Umano Medical Inc. 230, boul. Nilus-Leclerc L'Islet, QC G0R 2C0 Canada

2. INTENDED USE


























The TRIAD chair is an electric chair that can be adjusted to different positions. It is designed to support a patient during a medical examination or procedure. It is intended to be used by qualified medical personnel in a medical environment, such as hospitals, clinics, and doctor's offices.


















3. SYMBOLS

List of symbols used in this document. These symbols are used only where applicable.

Symbol	Definition
	WARNING. Alerts the user to a situation that, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.
	Warning, risk of electrical shock.
	It is mandatory to consult this manual before use.
	Electrical protection, class II device, double insulation.
	Electrical protection, type B applied part.
	No sitting.
	No stepping.
	This device contains electrical and electronic components that may pose a risk to the environment. According to the WEEE (Waste from Electrical and Electronic Equipment), the TRIAD electrical system and accessories should not be disposed of as unsorted municipal waste. Check with your local authorities for disposal of these components.

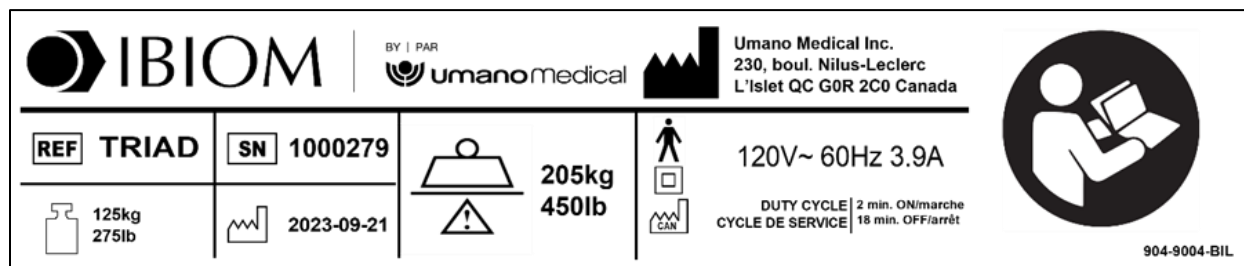
4. WARNINGS

 	<p>MANDATORY. Read, understand, and retain this manual before using Umano Medical's products. This manual must be available to anyone who will use Umano Medical's products.</p>
	<p>WARNING. TRIAD chair is designed for indoor use on flat surfaces.</p>
	<p>WARNING. Always lock wheels before the patient sits in the chair.</p>
	<p>WARNING. Never use the central locking system to stop the chair while it is in motion.</p>
	<p>WARNING. Do not use the TRIAD chair for any purpose other than the intended use.</p>
	<p>WARNING. Do not modify this equipment without Umano Medical's authorization.</p>
	<p>WARNING. Do not use in oxygen-rich environment.</p>
	<p>WARNING. Do not use in MRI environment.</p>
	<p>WARNING. Do not use in wet environment.</p>
	<p>WARNING. Do not use for CPR or X-ray procedures or with a defibrillator.</p>
	<p>WARNING. Never exceed the safe working load of 450lb or 205kg on the TRIAD treatment chair. This load includes the weight of the patient and the accessories.</p>
	<p>WARNING. Never exceed the safe working load of 100lb or 45kg on TRIAD's armrests. This load includes the weight of the patient and the accessories (example: retractable shelf in option).</p>
	<p>WARNING. Never exceed the safe working load of 25lb or 11kg on TRIAD's shelf.</p>
	<p>WARNING. Never exceed the safe working load of 10lb or 4.5kg on TRIAD's retractable shelf.</p>
	<p>WARNING. Never exceed the safe working load of 100lb or 45kg on TRIAD's footrest. This load includes the weight of the patient and the accessories (for example: optional mini exercise bike).</p>
	<p>WARNING. Do not sit on the backrest of the chair.</p>
	<p>WARNING. Do not sit on the leg section of the chair.</p>
	<p>WARNING. Do not sit on the armrests of the chair.</p>
	<p>WARNING. Do not leave patient unattended.</p>
	<p>WARNING. Do not use the TRIAD chair as a transport stretcher to move the patient from one room to another or one floor to another.</p>
	<p>WARNING. To ensure proper operation of the chair, maintenance must be done as described in this manual.</p>
	<p>WARNING. Read the warnings in the various sections of this manual.</p>
	<p>WARNING. Do not roll the chair on the power cable or the hand control cable.</p>
	<p>WARNING. Keep all cables out of the reach of children.</p>














	WARNING. Keep all cables away from moving parts of the chair.
	WARNING. Do not move the chair by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Never use the chair if the power supply cable or any other cable is damaged.
	WARNING. Keep all cables away from heat sources.
	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Never exceed duty the cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	WARNING. Medical staff must instruct the patient on how to adjust the chair.
	WARNING. If the patient is not able to adjust the chair by himself, the hand control must be placed out of the patient's reach.
	WARNING. Never place hands or other body parts near moving parts when the chair is adjusted.
	WARNING. Always lower and close the armrests once the patient is in the chair.
	WARNING. Always ensure that the armrest rotation is locked in the closed position once the patient is in the chair.
	WARNING. Always lower the chair to its lowest position before the patient sits in the chair.
	WARNING. The patient should only sit on the chair from the side.
	WARNING. Always ensure that the shelf mechanism is tight before the patient sits in the chair.
	WARNING. Always take appropriate measures to avoid injuries when handling accessories (shelf, armrest, mini exercise bike, etc.).
	WARNING. Defective or damaged batteries may leak acid and proper precautions must be taken during handling and transportation.
	WARNING. Never open the battery case, as the cell or circuit may be damaged and excessive heat may develop.

5. LABEL

The product identification label is located on the product base. This image and the information contained herein are for reference purposes only.



















Symbol identification

	Name and address of the manufacturer
	Product name or number
	7-digit serial number
	Product weight
	Date of manufacture (YYYY-MM-DD) format
	Maximum safe working load
	Made in Canada
	Type B applied part
	Class II equipment (double electrical insulation)
	Mandatory to read the operation manual
	Required voltage (120V), alternating current
	Current frequency (60Hz), maximum amperage (3.9A)
	Maximum activation time followed by minimum deactivation time

6. OPERATING INSTRUCTIONS

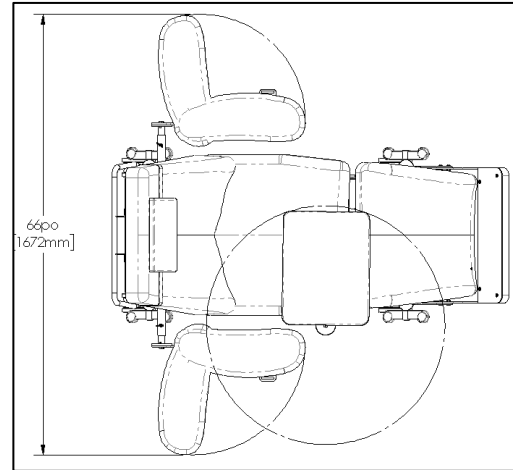
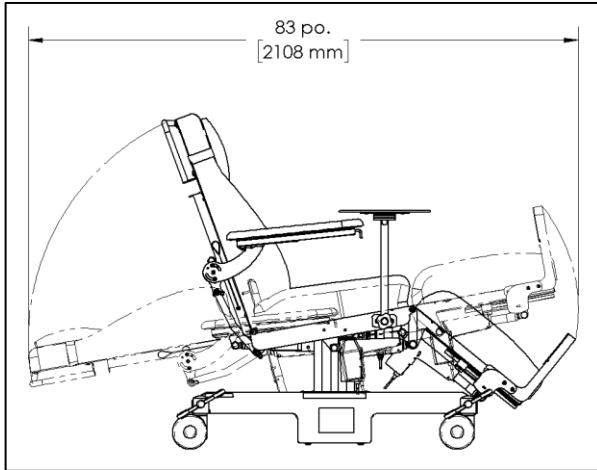
6.1 Setting up the chair

	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. The TRIAD chair is designed for indoor use on flat surfaces.
	WARNING. Always lock wheels before the patient sits in the chair.
	WARNING. Never use the braking system to stop the chair while it is in motion.
	WARNING. Do not leave the patient unattended.
	WARNING. Do not use in an oxygen-rich environment.
	WARNING. Do not use in MRI environment.
	WARNING. Do not use in wet environment.
	WARNING. Do not use for CPR or X-ray procedures or with a defibrillator.
	WARNING. Do not roll the chair on the power cable or the hand control cable.
	WARNING. Keep all cables out of the reach of children.
	WARNING. Keep all cables away from moving parts.
	WARNING. Do not move the chair by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Never use the chair if the power supply cable or any other cable is damaged.
	WARNING. Keep all cables away from heat sources.
	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).

The TRIAD chair is delivered assembled and ready for use. The chair must be unpacked and inspected upon receipt to ensure that there has been no damage during transport.





1. Once the chair is unpacked and positioned in the desired location, install all accessories (armrests, shelf if applicable).

2. Position the TRIAD chair in the desired location. **IMPORTANT:** Make sure you have enough space around the chair to avoid collisions between its surroundings in ALL POSITIONS.



3. Once in place, lock all wheels.
4. Remove any remaining packaging from the product. Example: Protective plastic on the hand control cable.
5. Connect the power cord.
6. Perform a test run to make sure that everything is working properly.

6.2 Central lock and directional caster









	WARNING. Always lock casters before the patient sits in the chair.
	WARNING. Never use the central lock while the chair is in motion.
	WARNING. Do not move the chair by pulling on the hand control, the power supply cable, or any other cable.
	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.



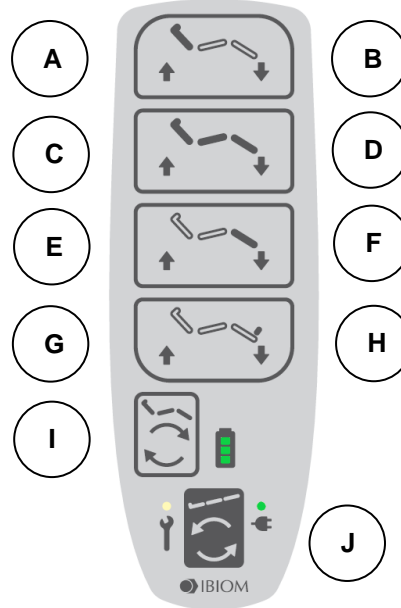
The central lock mechanism can be operated by one of the pedals located on each side of the chair. The foot pedal is simply pressed into one of the 3 positions:

- Red: all 4 casters are locked;
- Neutral: all casters unlocked;
- Green: 1 caster is aligned to the axis of the chair and 3 are unlocked.

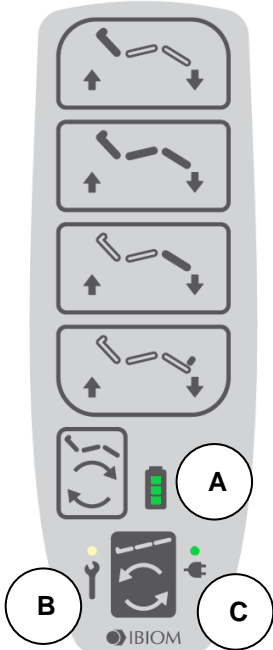
6.3 Chair adjustments

	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the surroundings and people.
	WARNING. Always lock casters before the patient sits in the chair.
	WARNING. Always lower the chair to its lowest position before the patient sits in the chair.
	WARNING. Do not leave patient unattended.
	WARNING. Medical personnel must instruct the patient on how to adjust the chair.
	WARNING. If the patient is not able to adjust the chair by himself, the hand control must be placed out of the patient's reach.
	WARNING. Never place hands and other body parts near moving parts when the chair is adjusted.
	WARNING. Never use the chair if the power supply cable or any other cable is damaged.










Hand control buttons



Button	Function
A	Raise the backrest (tilt)
B	Lower the backrest (tilt)
C	Raise the chair
D	Lower the chair
E	Raise leg section
F	Lower leg section
G	Raise footrest
H	Lower footrest
I	Simultaneous movements: raise the backrest and lower the leg section. (Sitting position)
J	Simultaneous movements: lower the backrest and raise leg section. (Emergency position)

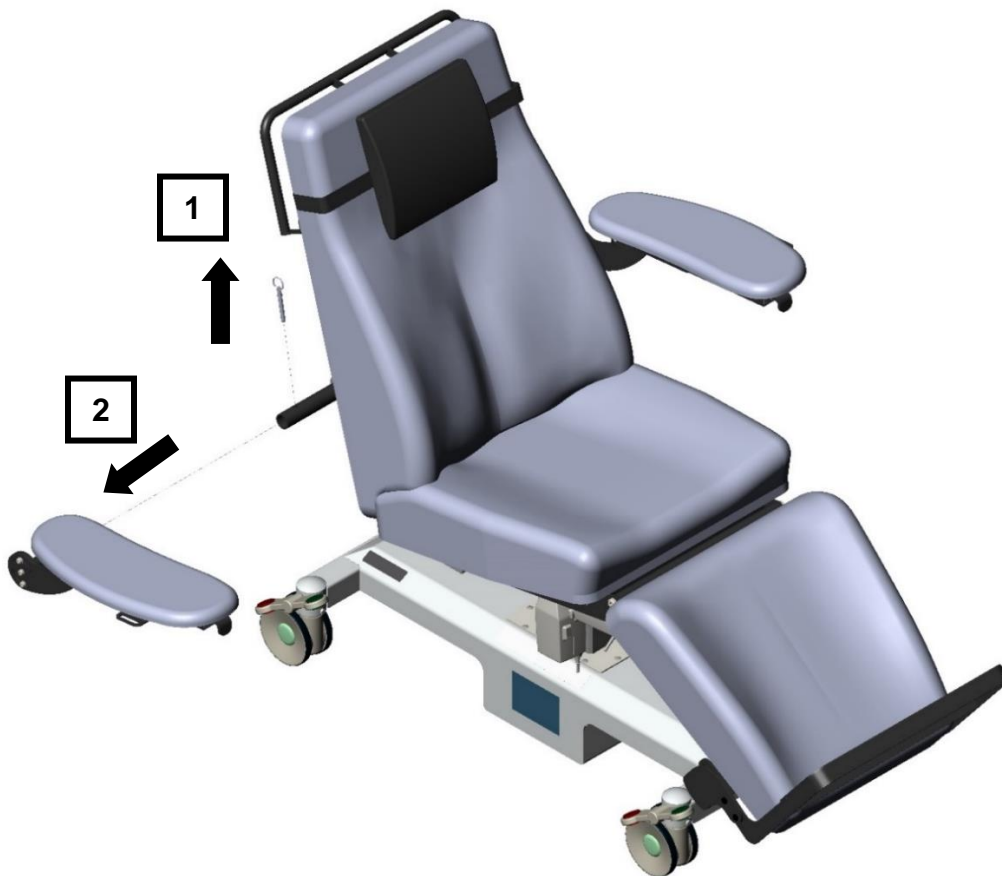
Hand control lights	
	
Light	Function
A	Battery level light (BA16 battery in option)
	3 full lights: 70% to 100% of capacity
	2 full lights: 20% to 70% of capacity
	1 flashing light: 0% to 20% of capacity
	1 flashing light + beep sound: 10% or less of capacity
	0 light: battery discharged or without battery
B	Service light (see troubleshooting section)
C	Light to indicate that the chair is powered by a wall outlet.

6.4 Armrest

	WARNING. Never exceed safe working load of 100lb or 45kg on TRIAD's armrests. This load includes the weight of the patient and the accessories (example: retractable side shelf).
	WARNING. Never exceed safe working load of 10lb or 4.5kg on TRIAD's retractable side table.
	WARNING. Do not sit on armrests.
	WARNING. Always lower and close the armrests once the patient is in place on the chair.
	WARNING. Always ensure that armrest rotation is locked in the closed position once the patient is in the chair.
	WARNING. Do not leave patient unattended.
	WARNING. The patient should only sit on the chair from the side.
	WARNING. Medical staff must instruct the patient on how to adjust the chair.
	WARNING. Always take appropriate measures to avoid injuries when handling accessories (shelf, armrest, mini exercise bike, etc.).

Removable armrest

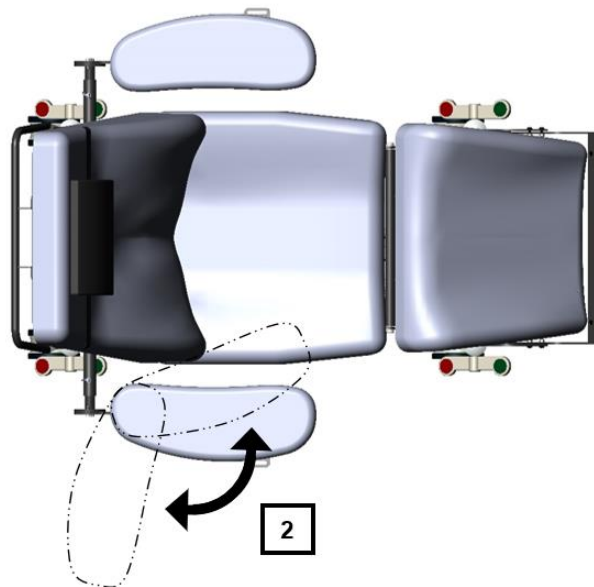
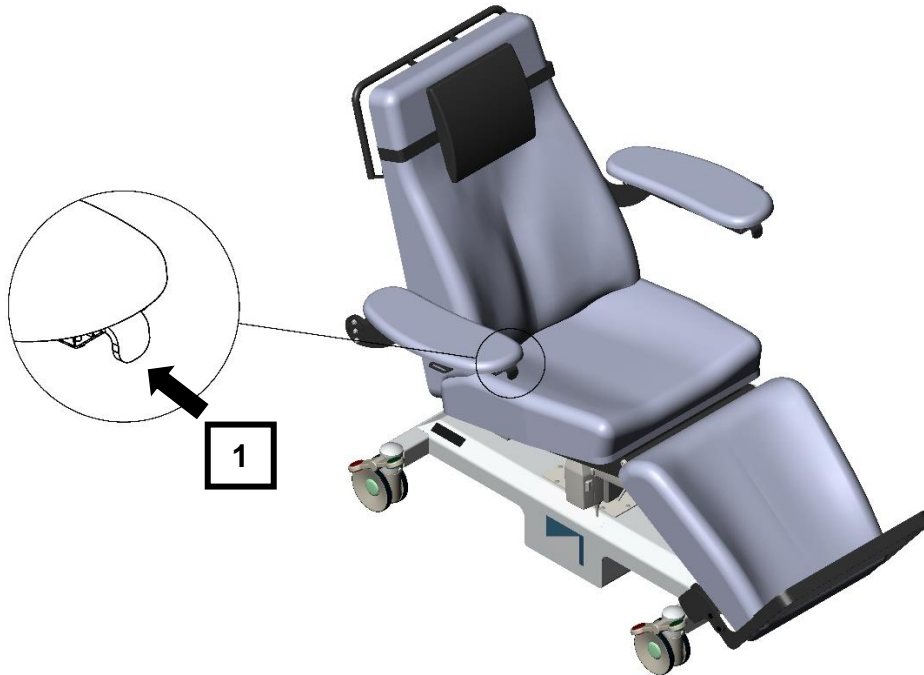
1. Remove the pin with the metal ring. **IMPORTANT:** DO NOT pull on the cord connecting the pin to the structure.
2. Remove the armrest.



Swivel armrest

WARNING. Always ensure that the armrest rotation is locked in the closed position once the patient is in the chair.

1. Push and hold the lever.
2. Rotate the armrest to the desired position and release the lever.



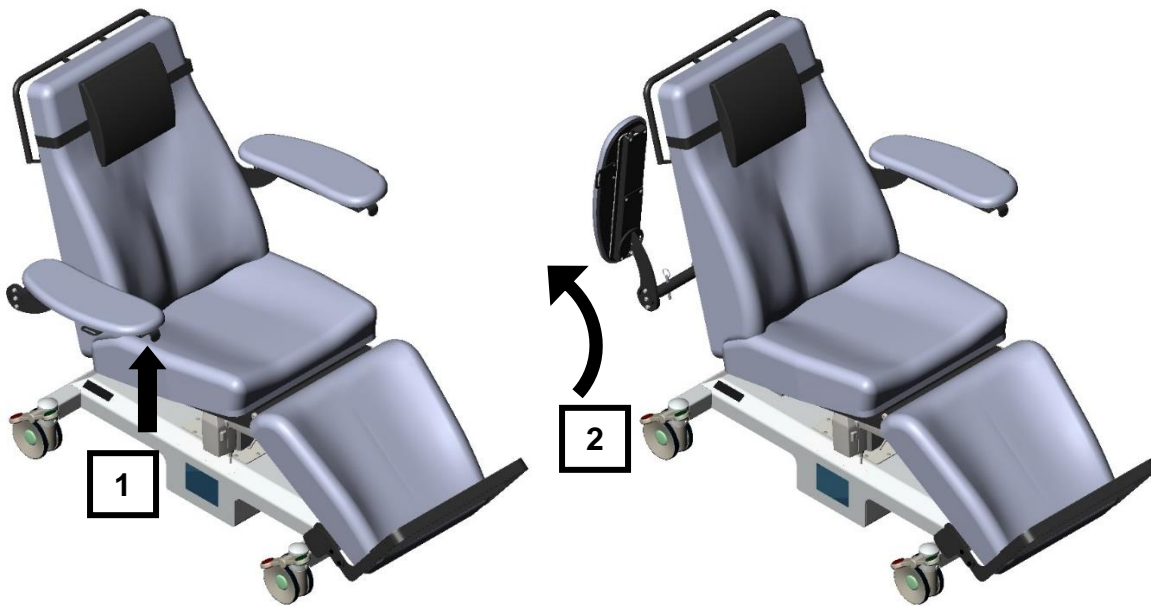
Raising armrest





WARNING. Always ensure that the armrest rotation is locked in the closed position once the patient is in the chair.

Each armrest can be lifted except with certain options. (Closing plate or retractable shelf on the armrest) In these cases, the armrest is locked for safety reasons.

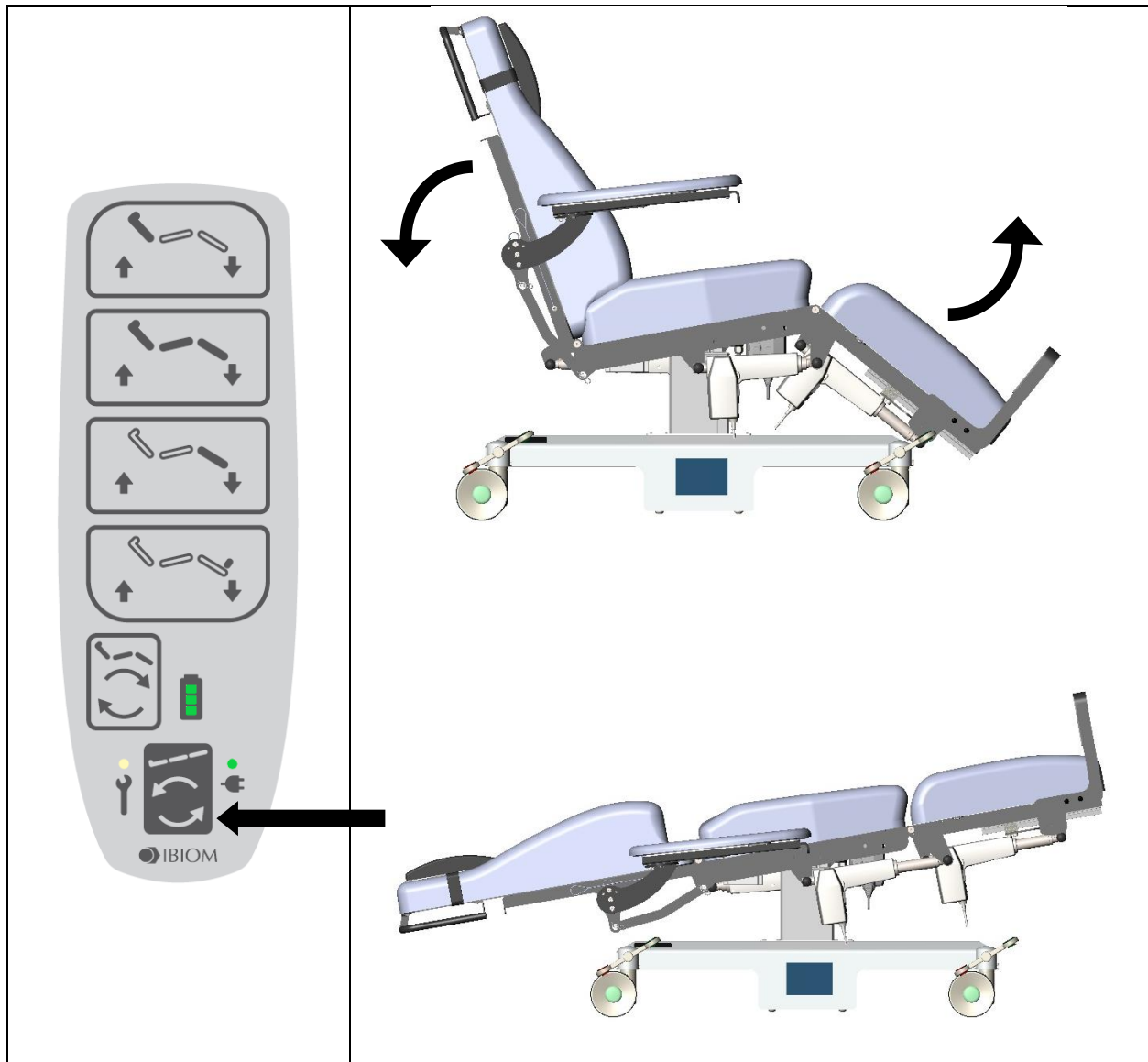
1. Hold armrest underneath.
2. Raise armrest until it stops to its raised position. No locking system is required.






6.5 Emergency position - electrical

	WARNING. Do not use TRIAD chair as a transport stretcher to move the patient from one room to another or one floor to another.
	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the environment, equipment and people.

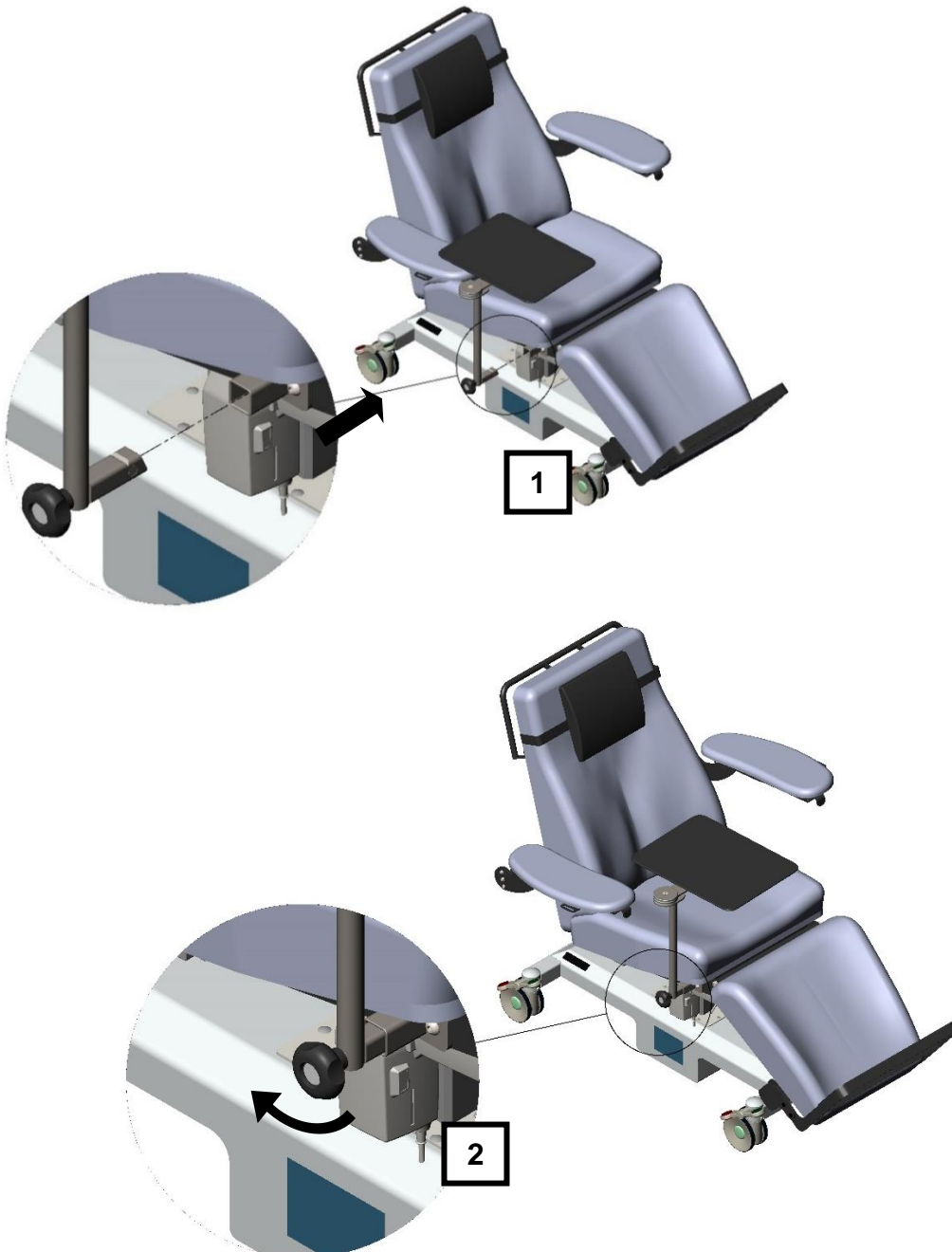
To activate the emergency position, use corresponding buttons on hand control device. This function moves simultaneously backrest and leg section.



6.6 Shelf

	WARNING. Never exceed safe working load of 25lb or 11kg on TRIAD's side table.
	WARNING. Always ensure that side shelf mechanism is solidly tighten before the patient is placed in the chair.
	WARNING. Always take appropriate measures to avoid injuries when handling accessories (shelf, armrest, mini exercise bike, ect.).

1. Insert the tube into the support on the right or left side of the chair located under the cushion. Insert it all the way to the end of the support.
2. Tighten the handle to lock the shelf in place. Turn it until you feel a good resistance.
3. To remove the shelf, loosen the handle and remove the shelf.

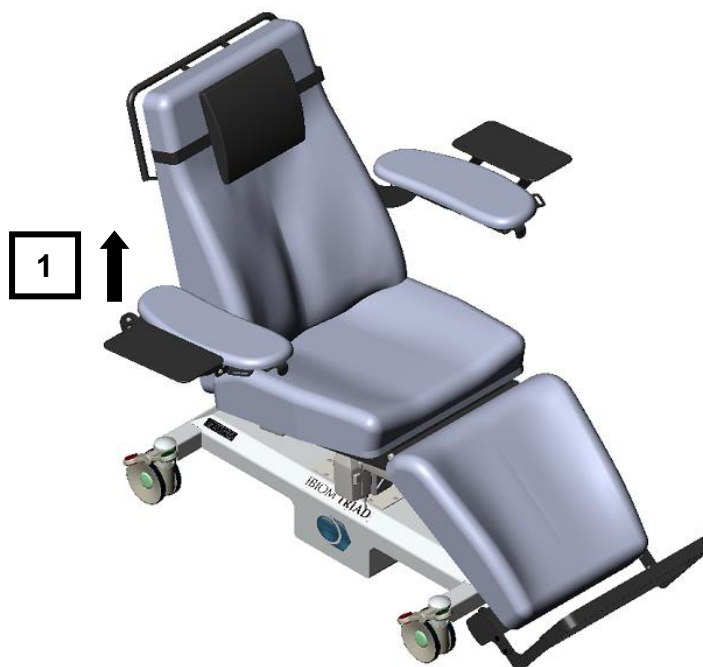


6.7 Retractable shelf






WARNING. Never exceed the safe working load of 10lb or 4.5kg on TRIAD retractable shelf.

1. Lift the shelf slightly.
2. Gently fold the shelf.





6.8 Rechargeable battery

	WARNING. Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	WARNING. Defective or damaged batteries may leak acid and proper precautions must be taken during handling and transportation.
	WARNING. Never open the battery case, as the cell or circuit may be damaged and excessive heat may develop.

- **CAUTION.** NEVER discharge completely battery or it may be damaged and reduce its lifetime.
- Always allow battery to settle to room temperature before use.
- Do not exceed duty cycle 2/18 as it will shorten the life and reduce performance of the battery.
- After every day of use, make sure to charge battery for 8 hours. Plug power cable to the wall outlet to charge.
- If battery is not used every day, charge as needed.
- It is possible to use battery while it is plugged to wall outlet without any risk of damage.
- Battery light functions: see section 6.3.

6.9 Emergency foot switch












	WARNING. Always ensure there is sufficient clearance around the chair before activating the various movements to avoid collisions with the environment, equipment and people.
	WARNING. Avoid placing hands and other body parts near moving parts when the chair is adjusted.

Emergency footswitches are located on both sides of the chair.

1. To activate the emergency position, press the negative symbol on the footswitch. This function allows the backrest to be lowered and the leg section to be raised simultaneously to place the patient in the supine position (Trendelenburg).
2. To raise the backrest and lower the leg section simultaneously, press the positive symbol on the footswitch.



7. CLEANING INSTRUCTIONS

	WARNING. Always clean chair between patient to avoid contamination.
	WARNING. Clean chair immediately after spillage of bodily or other fluids.
	WARNING. Protect mattress cover from sharp and rough objects to avoid damaging it.
	WARNING. Always inspect mattress to ensure its integrity. A damaged mattress can absorb contaminated liquids. In case of tear or wear, contact Umano Medical to immediately replace the damaged mattress.
	WARNING. Do not pressure wash or steam clean.
	WARNING. It is the user's responsibility to wear adequate protective equipment to avoid contamination from bodily fluids or other dirt on the chair.
	WARNING. Any damage to the mattresses caused by the use of a product other than those mentioned in this section or at a different concentration is not covered by the warranty.
	WARNING. Do not use cleaning products containing other ingredients or at concentrations other than those specified in this section.
	WARNING. Do not use abrasive cleaning products.
	WARNING. Avoid placing hands and other body parts near moving parts when the chair is adjusted.
	WARNING. It is the user's responsibility to verify that these instructions are consistent with the facility's internal infection control procedures.

7.1 Recommended cleaning products

- Disinfectant containing sodium hypochlorite (bleach) diluted to a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing hydrogen peroxide diluted to a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing alcohol diluted to a maximum concentration of 22%. Always rinse with clean water and dry with a clean cloth.
- It is recommended to use “ready-to-use” cleaning products.

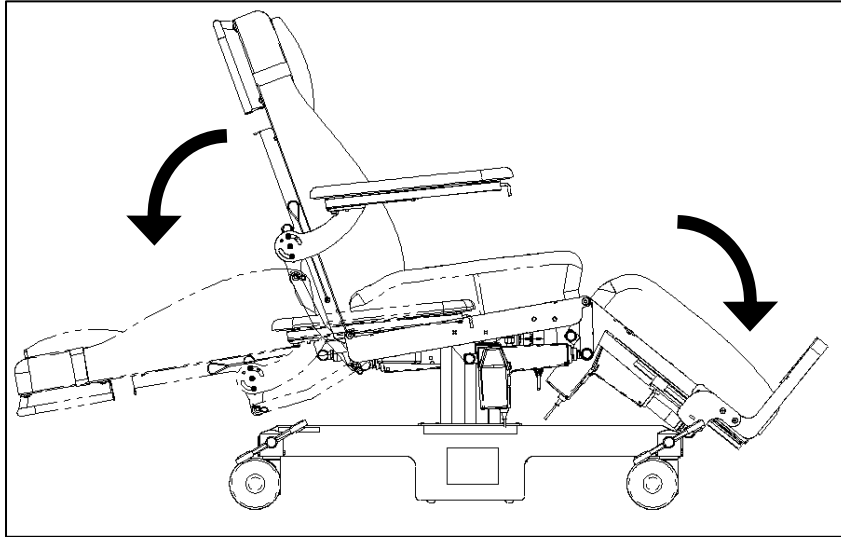
Notes:

- Always test the cleaning product in an inconspicuous area to verify its effect on the surface being cleaned.
- Always follow manufacturer's cleaning products instructions.
- It is important to clean immediately after a spill to prevent the cushion cover from becoming permanently stained.

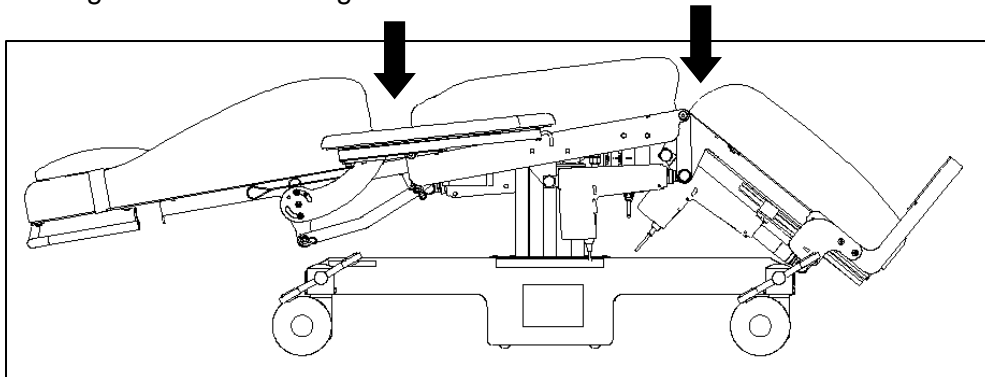
7.2 Cleaning procedure

Procedure for effective cleaning of surfaces and openings.

1. Lower the backrest completely.
2. Lower the leg section completely.



3. Clean all cushion surfaces, including surfaces in openings between the backrest and seat and those between the seat and leg section. **IMPORTANT:** Allow the surfaces to dry before raising the backrest or leg section.



- NOTE: In case of a major spill, it is possible to remove all cushions for complete cleaning. Please contact Umano Medical for further details.

4. Clean the armrests.
5. Clean the pillow all around and underneath.
6. Clean all parts that may be contaminated and/or that have been in contact with the patient, i.e., the shelf, handles, closure plates, base of the chair, etc.

8. SPECIFICATIONS

8.1 Technical data



Width without armrest	24 in / 61 cm
Width with armrest	38 in / 97 cm
Length in prone position	77 in / 196 cm
Length in sitting position	60 in / 152 cm
Armrest dimensions	7 x 19 in / 18 x 48 cm
Armrest adjustments	From 20° inside to 100° outside
	Vertical 0° or 90°
	Removable
Operation	<ul style="list-style-type: none"> • 6 functions hand control device (backrest, height, leg, footrest, emergency position and sitting position). • Footswitch for the emergency position (optional).
Backrest adjustment	0° to 80° (0° = Trendelenburg).
Leg section adjustment	0° to -50°.
Seat height	20 to 28 in / 51 to 71 cm
Footrest adjustment	6 in / 15 cm
Emergency position (Trendelenburg)	-10° with hand control -10° with emergency footswitch (optional)
Maximum safe working load	450 lb / 205 kg
Wheel diameter	5 in / 12.7 cm
Weight¹	250 lb / 114 kg
Cushion cover	Vinyl <ul style="list-style-type: none"> • Waterproof • Anti-microbial • Stain resistant² • Fire retardant <ul style="list-style-type: none"> • FMVSS-302 • CA TB 117-2013 (Section 1-Cover Fabric) • BIFMA Class A • NFPA 260 • UFAC Class 1

Umano Medical Inc. reserves the right to change specifications without notice.

1 May vary depending on options.

2 If cleaning instructions are followed.

8.2 Electrical specifications

Volt	120 VAC, alternating current
Amperage	3.9A
Actuators	24 VDC, direct current
Frequency	60 Hz
Hospital-grade plug	Yes
Electrical protection	 Class II
Applied part	 Type B
Battery type (option)	Rechargeable sealed lead acid
Battery capacity (option)	1.3 Ah
Protection class (IP)	Control box: IPX6 Actuator: IPX4 Lifting column: IPX0 Hand control: IPX6 Footswitch: IPX6 Battery: IPX4
Duty cycle	Intermittent 2/18 Max 2 minutes on 18 minutes off

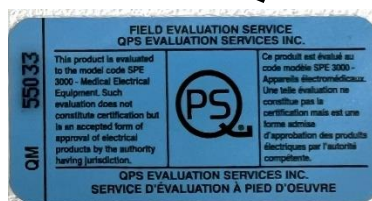
Umano Medical Inc. reserves the right to change specifications without notice.

8.3 Environmental conditions

Conditions	Temperature	Relative humidity	Pressure
Normal condition	5 °C to 40 °C	20% - 80%	70-106 kPa
Storage	-10 °C to 50 °C	20% - 80%	70-106 kPa
Transport	-10 °C to 50 °C	20% - 80%	70-106 kPa

8.4 Certification

This product is certified according to CSA SPE 3000 standards for electrical medical equipment unless otherwise specified. Label is located on the base of the product.



9. WARRANTY

The Umano Medical treatment chairs are designed for a 10-year service life under normal use, conditions, and with periodic maintenance as recommended in Maintenance Manual.

Shipment receipt

The purchaser should examine the shipment upon receipt. Umano Medical must be notified by the purchaser within 30 days of invoice of any short shipment, or any order-mistake. Apparent shipment damage must be noted on delivery receipt and notified immediately to Umano Medical. A claim in the amount of replacement cost will be initiated with the carrier for the damages incurred. If any damage is found, the purchaser must notify Umano Medical within 15 days of shipment receipt.

Product return

Merchandise cannot be returned without approval from Umano Medical. An authorization number will be provided which must be printed on the packaging of the returned merchandise. Modified or discontinued products are not subject to return.

Limited warranty

Umano Medical warrants to the original purchaser that the products shall be free of structural defects in material and workmanship for a determined period after date of delivery; refer to the purchase documentation for information about the available warranty time periods. Umano Medical's obligation under this warranty is expressly limited to supplying replacement parts and/or service for, or replacing, at its option, any product that is, in the sole discretion of Umano Medical, found to be defective. In addition, Umano Medical warrants for life to the original purchaser that the welds on its products will be free from structural defects. Any repair using non-authorized or non-original parts and any product alteration or modification will void this warranty.

Parts and service

Original service parts are available for the lifetime of the product. Contact Umano Medical at:

Umano Medical Inc.




230 boulevard Nilus-Leclerc, L'Islet QC G0R 2C0 CANADA

T: (418) 247-3986

T: (844) 409-4030

servicing@umanomedical.com

10. WASTE DISPOSAL

	WARNING. Before disposal, clean equipment properly to avoid contamination.
	WARNING. Disposal of this equipment should only be done by qualified personnel.
	WARNING. This equipment contains electronic components that may cause environmental damage. Please dispose of it properly in accordance with the regulations in force in your region.







- Before disposal, equipment must be clean properly to avoid contamination.
- The equipment can be disposed of by separating the various components for recycling and/or disposal.
- Always follow local regulations for proper disposal of the various components of the equipment.

COMPONENT GROUP	MATERIAL GROUP
Actuators, lifting column, control box, controls, cables and other electronic components	Electronic
Metal structure	Metal
Battery pack	Batteries
Plastic parts	Plastic
Mattress	Foam, textiles, wood

11. MAINTENANCE

See the service manual.

12. TROUBLESHOOTING

	Verification	Cause	Corrective action
No movement is working	No green lights on the hand control 	The battery is low or completely drained.	Connect the equipment to a wall socket. Once plugged in, try the movements. If the problem persists, go to the next cause. If the problem is resolved, let the battery charge for 8 hours. (CAUTION: Never allow the battery to drain completely, it could damage it).
	No audible alarm and green power light on the hand control is off. 	Equipment not connected to the wall outlet.	Connect equipment to wall outlet. If the problem persists, continue to the next cause.
		Wall outlet is defective.	Make sure there is power in the electrical outlet. If the problem persists, the control box or the power cable are defective.
 Service light	Yellow light flashing quickly + audible alarm when hand control buttons are pressed.	Control box error.	Press the two buttons at the same time of the second row of the hand control for 10 seconds. If the problem persists, contact Umano Medical. 
 Service light	Yellow light on continuously when hand control buttons are pressed and no movement.	The actuator is over the safe working load.	Actuator capacity exceeded. Decrease the load and the error will be cleared. If the problem persists, contact Umano Medical.
 Service light	Yellow light flashing slowly + audible alarm.	Duty cycle 2min on. / 18 min. off exceeded.	Wait 18 minutes before using the equipment.

13. SPARE PARTS

See the service manual.



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