

# USER MANUAL

Revision: R1

## ECHO-FLEX 4400 4400-G



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## 1. CONTACT US

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

- **7-digit serial number (example: 1234567);**
- **Model number or name (example: 4400-D).**

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





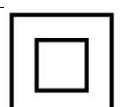




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## 2. INTENDED USE




























ECHO-FLEX table is AC powered table that can be adjusted to different position. It is used to support a patient during medical examination or short procedure. It is intended to be operated by healthcare professional in a medical environment including hospitals, clinics and doctor's office.











## 3. SYMBOL IDENTIFICATION

The following symbols and their definitions are used throughout this manual.

Symbol	Definition
	<b>WARNING.</b> Alerts the reader about a situation, which if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.
	Warning, electrical shock hazard.
	Operator must read manual before using this equipment.
	Protective earth (ground).
	Class II or double insulated electrical equipment.
	Electrical safety, type B applied part.
	No sitting.
	No stepping.
	This device contains materials that are potentially hazardous to the environment. In accordance with directive on waste electrical and electronic equipment (WEEE), Product's electrical system and accessories should not be disposed as unsorted municipal waste. Consult your instructional policies and local regulations regarding disposal.

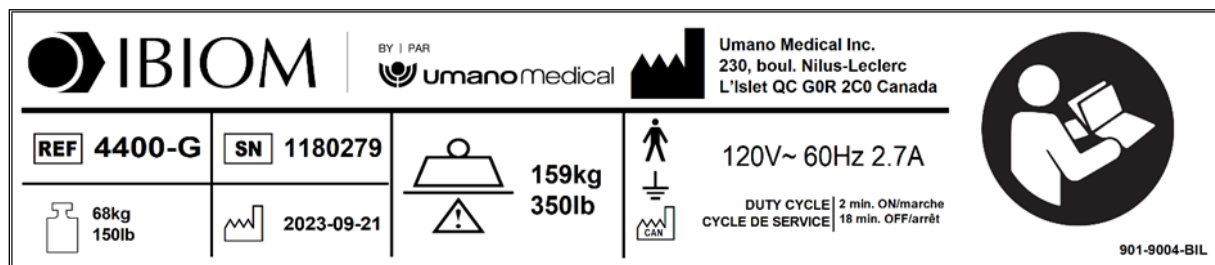
## 4. WARNINGS

	<b>MANDATORY.</b> Read, understand and keep this manual before starting to use Umano Medical's products. This manual must be available for everyone using Umano Medical's products.
	<b>WARNING.</b> ECHO-FLEX™ table is designed for indoor use on flat surfaces.
	<b>WARNING.</b> Always lock wheels before the patient is placed on table.
	<b>WARNING.</b> Never use braking system to stop a moving table.
	<b>WARNING.</b> Do not use ECHO-FLEX™ table for any purpose other than the intended use.
	<b>WARNING.</b> Do not modify this equipment without Umano Medical's authorization.
	<b>WARNING.</b> Do not use in oxygen-rich environment.
	<b>WARNING.</b> Do not use in MRI environment.
	<b>WARNING.</b> Do not use in wet environment.
	<b>WARNING.</b> Do not use for CPR or X-ray procedures or with defibrillator.
	<b>WARNING.</b> Never exceed safe working load of 350lb or 159kg on table. Safe working load includes patient's weight and accessories.
	<b>WARNING.</b> Never exceed safe working load of 25lb or 11kg on IV pole.
	<b>WARNING.</b> Do not sit on backrest.
	<b>WARNING.</b> Do not sit on leg section.
	<b>WARNING.</b> Always lower table to minimum height for patient access.
	<b>WARNING.</b> Do not leave patient unattended.
	<b>WARNING.</b> Do not use ECHO-FLEX™ table as a transport stretcher to move the patient from one room or floor to another.
	<b>WARNING.</b> To ensure proper operation of the table, maintenance must be done as described in this manual.
	<b>WARNING.</b> Read the warnings in the various sections of this manual.
	<b>WARNING.</b> Do not roll on power cable or hand control cable.
	<b>WARNING.</b> Keep all cables out of reach of children.
	<b>WARNING.</b> Keep all cables away from moving parts.
	<b>WARNING.</b> Do not move table by pulling hand control, power cable or any other cable.
	<b>WARNING.</b> Never use the table if the power cable or any other cables are damaged.
	<b>WARNING.</b> Keep the power cable out of heat sources.
	<b>WARNING.</b> Always ensure there is sufficient clearance around the table before activating the various movements to avoid collisions with the environment, equipment and people.
	<b>WARNING.</b> Always have patient enter and exit table from the side.

	<b>WARNING.</b> Avoid placing hands and other body parts near moving parts or locking mechanism.
	<b>WARNING.</b> Once security rail is closed, make sure it is securely locked.
	<b>WARNING.</b> Always raise security rail once the patient is in place.
	<b>WARNING.</b> Do not let fall mobile parts.
	<b>WARNING.</b> Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	<b>WARNING.</b> Medical staff should inform the patient on how to adjust table.
	<b>WARNING.</b> Do not place hands and other body parts near the various moving parts when the table is adjusted to position.
	<b>WARNING.</b> If patient is not able to adjust table, the hand control should be placed out of the patient's reach.
	<b>WARNING.</b> Defective or damaged batteries may leak acid and adequate precautions must be taken during handling and transportation.
	<b>WARNING.</b> Do not open the battery case as damage to the cell or circuitry may develop excessive heat.

## 5. LABEL

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



















### Symbol identification

	Manufacturer's name and address
	Product code or name
	7-digit serial number
	Product's weight
	Date of manufacture (YYYY-MM-DD)
	Maximum safe working load (maximum patient weight)
	Made in Canada
	Type B applied part
	Protective earth (ground)
	Obligation to read the operation manual
120V ~	Required voltage (120V), alternating current
60Hz 2.7A	Fréquence du courant (60Hz), ampérage maximale (2.7A)
DUTY CYCLE / CYCLE DE SERVICE	Maximum activation time followed by minimum deactivation time

## 6. OPERATION INSTRUCTIONS

### 6.1 Installation

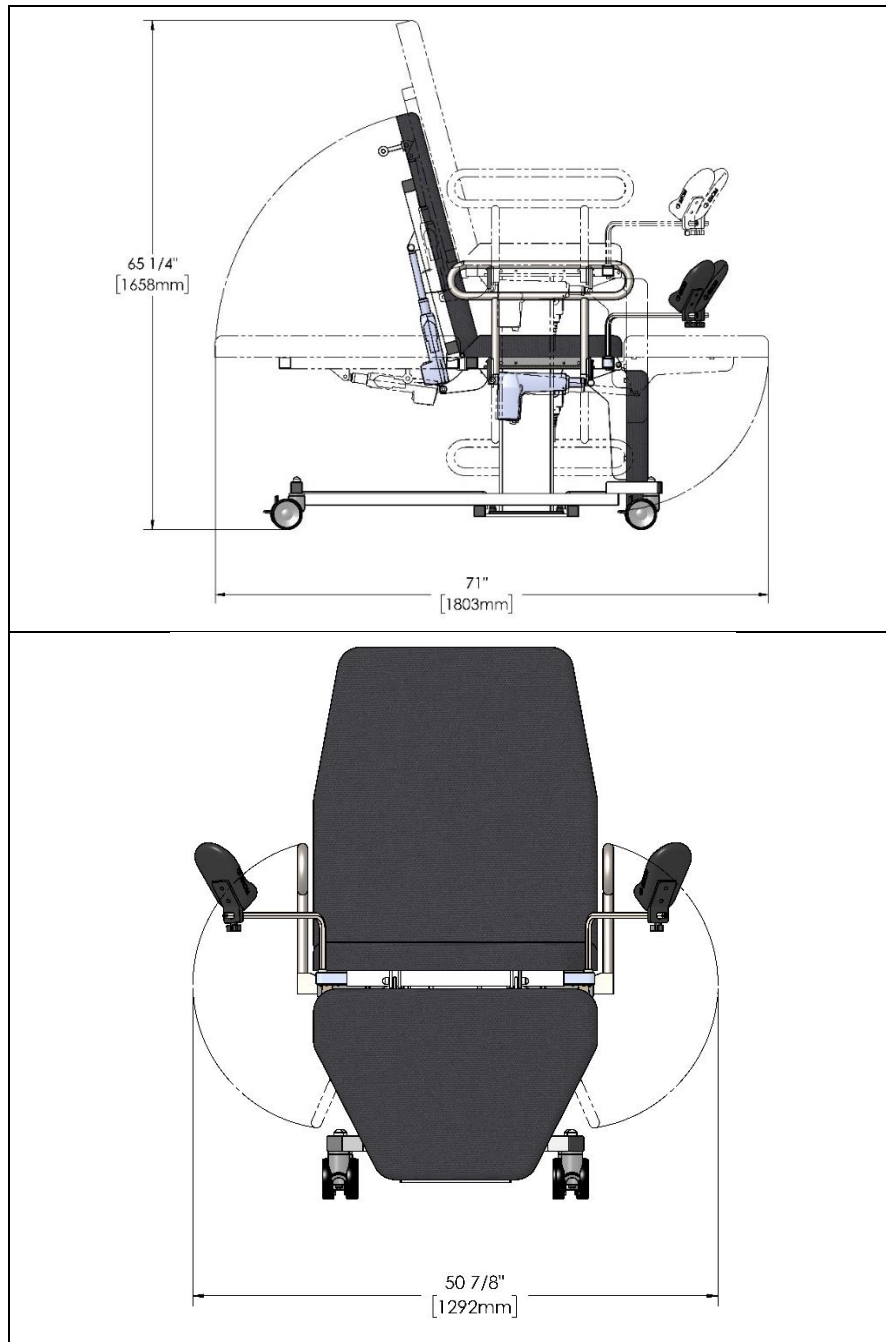
	<b>WARNING.</b> Always ensure there is sufficient clearance around the table before activating the various movements to avoid collisions with the environment, equipment and people.
	<b>WARNING.</b> ECHO-FLEX™ table is designed for indoor use on flat surfaces.
	<b>WARNING.</b> Always lock wheels before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

ECHO-FLEX™ table is delivered fully assembled and ready for use. The table must be unpacked and inspected upon receipt to ensure that there has been no damage during transport.

1. Position table to desired location. Once in place, install all accessories (IV pole, arm board, if applicable).







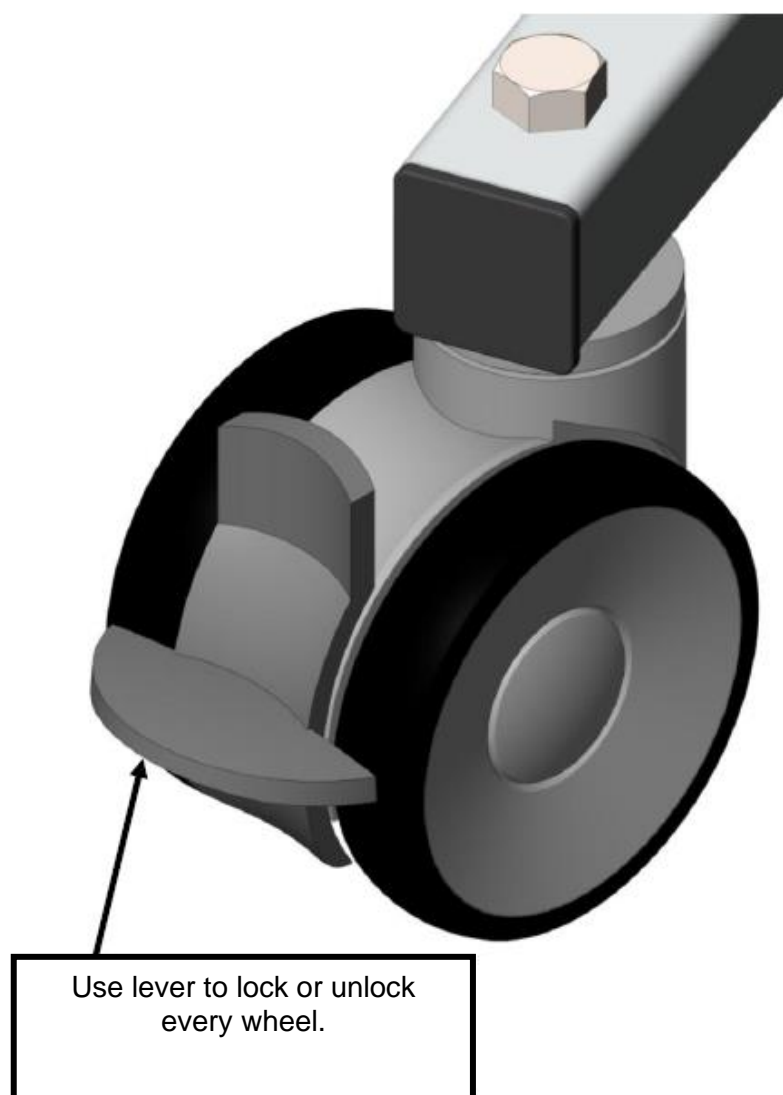
2. Position table to desired location. **IMPORTANT:** Make sure you have enough space around table to avoid collisions between its surroundings in ALL POSITIONS. Dimensions show maximum space needed. Dimensions may be less than the one indicated below depending on options.













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 an operation test to ensure that everything is working properly.

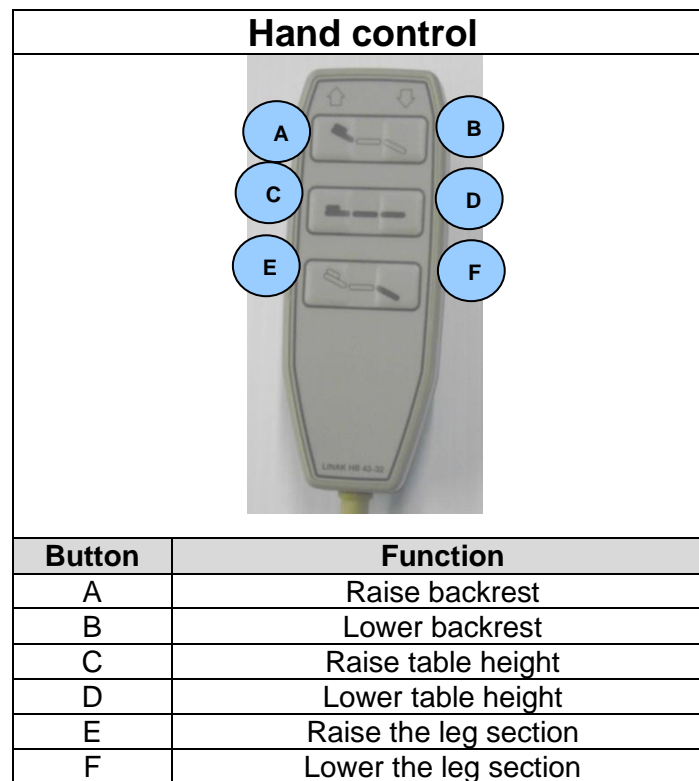
## 6.2 Wheel with individual brake

	<b>WARNING.</b> Always lock wheels before the patient is placed on table.
	<b>WARNING.</b> Never use braking system to stop a moving table.
	<b>WARNING.</b> Do not move table by pulling hand control, power cable or any other cable.
	<b>WARNING.</b> Always ensure there is sufficient clearance around the table before activating the various movements to avoid collisions with the environment, equipment and people.



### 6.3 Table functions

	<b>WARNING.</b> Always ensure there is sufficient clearance around the table before activating the various movements to avoid collisions with the environment, equipment and people.
	<b>WARNING.</b> Always lock wheels before the patient is placed on table.
	<b>WARNING.</b> Always lower table to minimum height for patient access.
	<b>WARNING.</b> Always have patient enter and exit table from the side.
	<b>WARNING.</b> Do not leave patient unattended.
	<b>WARNING.</b> Medical staff should inform the patient on how to adjust table.
	<b>WARNING.</b> If patient is not able to adjust table, the hand control should be placed out of the patient's reach.
	<b>WARNING.</b> Avoid placing hands and other body parts near moving parts or locking mechanism.
	<b>WARNING.</b> Never use the table if the power cable or any other cables are damaged.
	<b>WARNING.</b> Keep all cables away from moving parts.

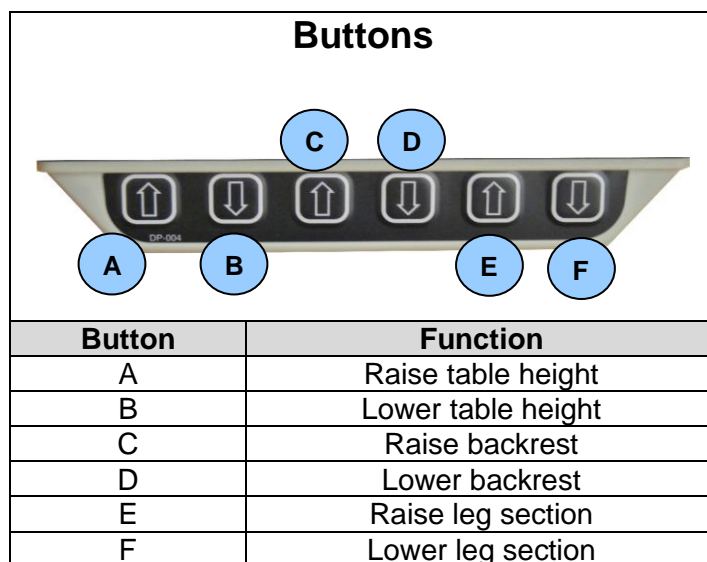










To avoid any damage to the hand controller cable, please use the tie located under the backrest mattress.

**Foot control**

Button	Function
A	Raise table height
B	Lower table height
C	Raise backrest
D	Lower backrest



## 6.4 Security rail

	<b>WARNING.</b> Do not leave patient unattended.
	<b>WARNING.</b> Always have patient enter and exit table from the side.
	<b>WARNING.</b> Do not place your hand in or near security rail locking mechanism during operation.
	<b>WARNING.</b> Always raise security rail once the patient is in place.
	<b>WARNING.</b> Once security rail is closed, make sure it is securely locked.
	<b>WARNING.</b> Do not let fall mobile parts.






- To lower security rail, pull handle with one hand and hold security rail with other hand.
- To move up security rail, lift up rail and it will engage automatically. Always make sure it is securely locked.



Security rail lowered down.

## 6.5 *Rechargeable battery*

	<b>WARNING.</b> Never exceed duty cycle of 2/18 (2 minutes ON and 18 minutes OFF).
	<b>WARNING.</b> Defective or damaged batteries may leak acid and adequate precautions must be taken during handling and transportation.
	<b>WARNING.</b> Do not open the battery case as damage to the cell or circuitry may develop excessive heat.

- **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 outlet to the wall 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.
- When battery level is low and needs to be charged, it will emit audible signal.












## 6.6 Stirrups



- 1- To remove stirrups, pull out from hanger.
- 2- Stirrups can be moved forward or backward. Unscrew knob underneath stirrup and move it to desired position then tighten knob.
- 3- Stirrups can be oriented at different angle. Pull out stirrup, turn to desired angle and move it back in hanger.



## 7. CLEANING INSTRUCTIONS

	<b>WARNING.</b> Always clean table between patient to avoid contamination.
	<b>WARNING.</b> Clean table immediately after spillage of bodily or other fluids.
	<b>WARNING.</b> Protect mattress cover from sharp and rough objects to avoid damaging it.
	<b>WARNING.</b> 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.
	<b>WARNING.</b> Do not wash with pressure or steam.
	<b>WARNING.</b> It is the user's responsibility to wear adequate protective equipment to avoid contamination from bodily fluids or other dirt on table.
	<b>WARNING.</b> 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.
	<b>WARNING.</b> Do not use cleaning products containing other products or in concentration other than those specified in this section.
	<b>WARNING.</b> Do not use abrasive cleaning products.
	<b>WARNING.</b> Avoid placing hands and other body parts near moving parts or locking mechanism.
	<b>WARNING.</b> It is the user's responsibility to ensure that these instructions are in accordance with the institution's internal infection control procedures.

### 7.1 Recommended cleaning products

- Disinfectant containing sodium hypochlorite (bleaching product) in a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing hydrogen peroxide diluted in a maximum concentration of 0.5%. Always rinse with clean water and dry with a clean cloth.
- Disinfectant containing alcohol diluted in 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.

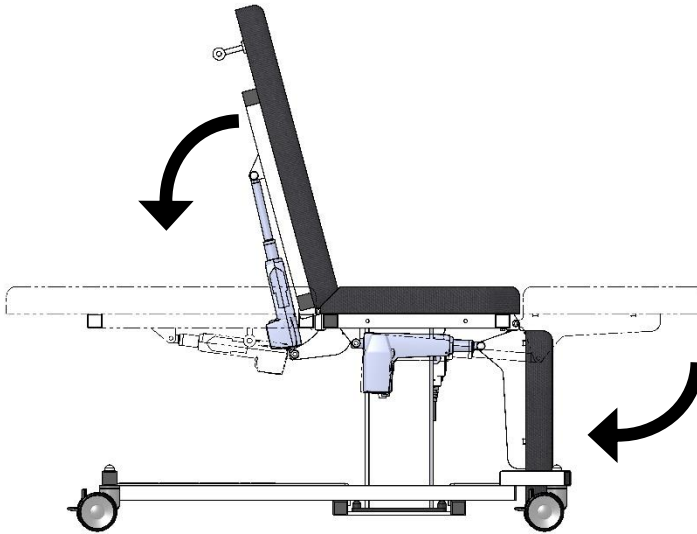
#### Notes:

- Always test the cleaning product in an inconspicuous place to check the effect of this product on the cleaned surface.
- Always follow manufacturer's cleaning products instructions.
- Clean spill as soon as possible to prevent penetration and becoming a permanent stain.

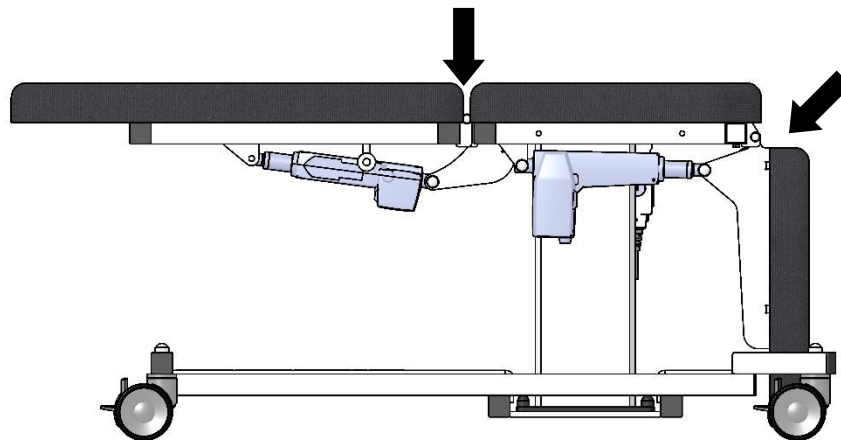
## 7.2 Cleaning procedure

Procedure for effective cleaning of surfaces and openings.

1. Lower the backrest completely.



2. Clean all mattress surfaces, including surfaces in openings between the backrest and seat and the seat and leg section. **IMPORTANT:** Allow the surfaces to dry before raising the backrest.



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

3. Clean all parts that may be contaminated and/or that are in contact with the patient, such as security rails, IV pole, handles, table base, etc.

## 8. SPECIFICATIONS

### 8.1 Product specifications



<b>Width</b>	27 in / 69 cm
<b>Length</b>	71 in / 180 cm
<b>Backrest</b>	31 in / 79 cm
<b>Seat</b>	20.5 in / 52 cm
<b>Leg section</b>	18 in / 46 cm
<b>Operation</b>	<ul style="list-style-type: none"> <li>• 3 functions hand control device (backrest, height, leg).</li> <li>• Foot switch (option).</li> <li>• Button controller (option).</li> </ul>
<b>Adjustable backrest</b>	0° to 80°
<b>Adjustable height</b>	24.5 to 36.5 in / 62 to 93 cm
<b>Maximum safe working load</b>	350 lb / 159 kg
<b>Wheel diameter</b>	4 in / 10 cm
<b>Weight*</b>	150 lb / 68 kg
<b>Mattress cover</b>	Vinyl <ul style="list-style-type: none"> <li>• Waterproof</li> <li>• Anti-microbial</li> <li>• Stain resistant**</li> <li>• Fire retardant               <ul style="list-style-type: none"> <li>• FMVSS-302</li> <li>• CA TB 117-2013 (Section 1-Cover Fabric)</li> <li>• BIFMA Class A</li> <li>• NFPA 260</li> <li>• UFAC Class 1</li> </ul> </li> </ul>

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

\* May vary depending on options.

\*\* If cleaning instructions are followed.

## 8.2 Electrical specifications

<b>Volt</b>	120 VAC, alternating current
<b>Amperage</b>	2.7A
<b>Actuators</b>	24 VDC, direct current
<b>Frequency</b>	60 Hz
<b>Hospital grade plug</b>	Yes
<b>Electrical protection</b>	 Class I
<b>Applied part</b>	 Type B
<b>Battery type (option)</b>	Rechargeable sealed lead acid
<b>Battery capacity (option)</b>	1.3 Ah
<b>Protection class (IP)</b>	Control box : IPX4 Actuator : IPX4 Lifting column: IPX0 Hand control: IPX1 Double foot switch: IPX6 Button controller: IPX0 Battery: IPX1
<b>Duty cycle</b>	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

Umano Medical's product are certified according to CSA SPE 3000 standard for electrical medical device except contrary indication. Label is located on the base of the product.



## 9. WARRANTY

The Umano Medical tables 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](mailto:servicing@umanomedical.com)

## 10. WASTE DISPOSAL

	<b>WARNING.</b> Before disposal, clean equipment properly to avoid contamination.
	<b>WARNING.</b> Disposal of this equipment should only be done by qualified personnel.
	<b>WARNING.</b> 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.
- Equipment can be disposed of by separating the different 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 and textiles

## 11. MAINTENANCE

See service manual.



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## 12. TROUBLESHOOTING

See service manual.

## **13. SPARE PARTS**

See service manual.



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