



Mx4000 - Multi Treatment Chair

User's Manual

Index



- 1. Introduction
- 2. About this Product
- 3. Definitions
- 4. Safety
- 5. Electrical Specifications
- 6. Installation
- 7. Operation
- 8. Optional Accessories
- 9. Maintenance & Cleaning
- 10. Warranty & Service



INTRODUCTION

About this User Manual

This user manual contains instructions for the proper and safe use of the Multi Treatment Chair, and for patient & user safety and comfort, which has to be strictly followed. This User manual has to be read and observed by every person using or handling this Multi Treatment Chair. In case of any query, kindly contact Midmark India Pvt. Ltd

ABOUT THIS PRODUCT

- This treatment chair is non-invasive medical device used for patients to facilitate their sitting or lying down which allows examination, diagnosis, treatment, or transportation of the patient by doctor / medical / paramedical / hospital personnel.
- This treatment chair is for patient support and patient rest facility which helps medical experts in carrying out their medical procedures comfortably.
- The treatment chair is manufactured and supplied in non-sterile condition for use in normal hospital environment.
- The Multi treatment chair is a platform which provides comfortable position for the patients who
 are going through the following treatment: Dialysis, Chemotherapy, Oncology and Blood
 transfusion.

Multi Treatment Chair Features



Technical Data

Please refer Mx4000 catalogue for Technical Data of this product.

Optional Accessories

Please refer Mx4000 catalogue for various accessories available and compatible with this product.



Operator

Operator is the person appointed by the owner (i.e. clinic, hospital management, etc.) who will be responsible for the safe operation of this Multi Treatment Chair.

User

User is a person who is capable of assessing clinical condition of patient e.g. specialist medical personnel, doctors, nursing staff, attendants etc. On the basis of their training experience or through the instructions, they are entitled to operate the Multi Treatment Chair on their own responsibility or to carry out work on it and are able to recognize and control possible risks to the patient as well as the Multi Treatment Chair.

Patient

The patient is a person who is ill, infirm, disabled or in need of care & occupying this Multi Treatment Chair. Each time the Multi Treatment Chair is allotted to a new patient it is recommended that the patient is instructed by the operator or the user about the functions important for his/her comfort and safety.

SAFETY

In this user manual the following safety symbols are used



Danger: This symbol will appear wherever safety instructions are designed to protect people from physical harm. The symbol stands from imminent danger of death or serious injury.



Caution: This symbol will appear where situations are described, which might be angerous, and which might inflict slight injuries.



Electrical Hazard: This symbol will appear when a life threatening hazard or hazardous condition is likely to occur.



Advice: This symbol will appear in front of additional helpful pieces of advice.

A dot in front of the text implies the action that is required to be taken.



Safety Instructions

- Always use Midmark accessories that have been designed and approved for use with the Multi Treatment Chair.
- Ensure that the Multi Treatment Chair is assembled and installed in accordance with the instructions given in this user manual.
- Restrict child visitors without proper attendants. Supervision is necessary to avoid any mishap due to unintended movement of the Multi Treatment Chair.
- Persons with reduced physical or mental abilities & children must not use & handle the Multi Treatment Chair without proper supervision.
- Accessories or any devices used along with the Multi Treatment Chair should be as per its intended use specified and approved by Janak.
- The Multi Treatment Chair should always be kept and used in normal indoor hospital environment.
- The Multi Treatment Chair is not suitable for use in the presence of a flammable anesthetic
 mixture with air or with oxygen or nitrous oxide. It may damage the Electro-mechanical Control
 System.
- Keep the user manual handy with the operator/user for ready reference.



Electrical Safety Points

When the Multi Treatment Chair is connected to 230V / 15A (or as per country specific) main supply



Do not overload the product by connecting more than one plug to the three pin mains ocket.

- AC power supply exceeding 230V or sudden spikes or lack of proper earthing can be hazardous to user / patient, as well as can cause damage to the Multi Treatment Chair and property.
- Ensure stabilized and properly earthed input power supply for the equipment.
- Inspect all the wires and cables for any cuts, cracks, damages at regular intervals.

ELECTRICAL SPECIFICATIONS

Mains power supply
90V AC to 300V AC with battery
Frequency
Protection Voltage
Mode of operation
Power consumption ideal mode without battery
Power consumption ideal mode with battery
Power consumption at maximum load
Mains Fuse
DC Bus Fuse
Protection Class

50Hz +/- 5Hz 300V to 450V 10% (2min. In Use /18 min. Not in use) 5W 10W 300W max. 2A fast blow for Mains (external) 10A fast blow fuse (internal)

150V AC to 300V AC without battery



Inbuilt Battery Charger

Battery Charger (Inbuilt)

- Suitable to charge 1.3Ah X2 batteries
- Reverse polarity protection
- Spark free connection
- Short circuit protected output.
- Zero idle battery consumption, to enhance standby time.
- · Maximum battery charging cut-off.
- · Battery low protection.

Environmental

Altitude

Operating
Temperature
Relative Humidity
Atmospheric Pressure

00C to 500C 0% to 95% non condensing 800 to 1060 hPa < 2000m

Storage /Transport

Storage /Transport Temperature Relative Humidity Atmospheric Pressure Altitude Protection degree

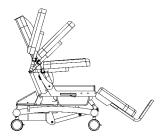
-10°C to 50°C 0% to 95% non condensing 800 to 1060 hPa < 2000m Ip54



INSTALLATION

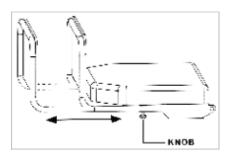
- 1. Unpack all the components carefully.
- 2. If the packing is drenched by rain, water or other liquids, inform this matter to the operator.
- 3. Each Multi Treatment Chair is supplied with the following components as per packing list.

Arm Rest - 02 Nos.



.Arm rest can be easily attached and detached by tightening and loosening the knob respectively.

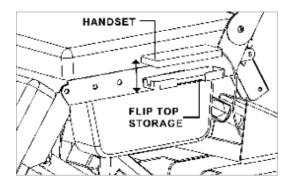
Foot Rest - 01 No.



.Foot rest can be fixed by tightening the knob provided on both sides. The Foot Rest can be adjusted as per the height of the patient.



Handset - 01 No.



The Handset is used to obtain different positions available on the Multi Treatment Chair. The Handset when not operational can be placed in the flip top storage provided at both the sides of the Multi Treatment Chair.



While interchanging the position of handset, precaution should be taken to ensure that andset cable is not squeezed.

Food table & IV Pole Provision (Optional) – 01 No. each



Food Table can be fixed by tightening the knob provided on both sides. The Food Table can be adjusted by loosening the knob according to the height of the patient.



The clamp provision should be fixed on the curved base frame at the rear end of the Multi Treatment Chair. The IV Pole should then be inserted into the slot provided in the clamp provision.

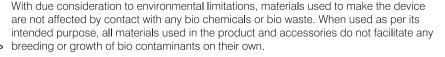
- 4. Get the input voltage & earthing tested through a qualified electrician.
- 5. Prior to connecting to the mains, it is necessary to ensure that all electrical connections are proper and tightened.
- 6. It is advisable to charge the battery for 24 hours to get the best performance when plugged in for first time.
- 7. Using the handset check all the functions by pressing the respective buttons.
- 8. Demonstrate the functions of the Multi Treatment Chair to the user / operator.
- 9. Fix the optional accessories on the Multi Treatment Chair as shown above.

Get the input voltage & earthing tested through a qualified electrician.



Prior to connecting to the mains, it is necessary to ensure that all electrical connectionsre proper and tightened.







OPERATION

- Before putting the Multi Treatment Chair into use for the first time ensure that all the transport securing devices and packing film are removed.
- Clean and disinfect the Multi Treatment Chair prior to the first time use.
- The Multi Treatment Chair should be used on a flat floor.
- · Check if all the operations are functioning properly.
- This Multi Treatment Chair should be operated only by an authorized and trained person who
 has knowledge of its operation.



Do not stretch / extend the power supply cord from its plug.



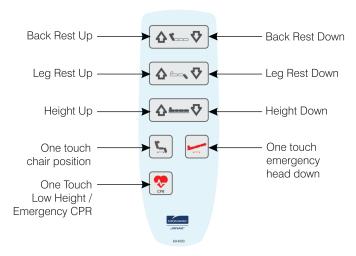
Do not load the chair more than 150 kgs. which is the safe working load of this Multi Treatment Chair.



Lcontrol Elements (handset)

- The motorized adjustment functions can be controlled using the handset
- · Cleaning of the handset with water or other liquid is prohibited

Using the control elements



The handset is having the above controls as mentioned. Press the desired function button up control/down control key to get the required position.



Handset, if dropped can cause malfunctioning of the handset.



Battery

The Multi Treatment Chair is equipped with battery to allow emergency operation of the electric drive system. This ensures that all the power adjustment can still be carried out even in the event of power failure. The battery also has inbuilt fuse protection for the safety of electrical control system.



- It is necessary to fully charge the battery atleast once a month, especially when the Multi Treatment Chair has not been in use for a long time. Otherwise the battery could get permanently discharged and/or damaged.
- Always keep the Multi Treatment Chair in charging condition for any emergency use.
- Always keep the Multi Treatment Chair connected to the main supply to get a fully charged battery.
- Operations of the Multi Treatment Chair on Battery should be only as per its Duty cycle (refer Electrical Specifications given above)



Batteries in the Multi Treatment Chair may emit hydrogen gas. So do not bring fire or a heated object close to the Product



Welcome Position



To attain the welcome position

- 1. Press the 'Power On' button (10) on the handset.
- 2. Bring the chair to its lowest position by pressing the height adjustment button (6) and then press the chair position button (7).

Alternatively, the welcome position can also be attained by -

- 1. Bring the chair to its lowest position by pressing the height adjustment button (6)
- 2. Press the back rest button (1) to get the convenient angle.
- 3. Now lower the foot rest by pressing (4) to get the convenient angle.



There is a possibility of injury to the feet when foot rest is in the lowest position.



There is a possibility of fingers or hand entrapment when the back rest is operated and the arm rest handle is in an inward position. Always move the S.S. armrest handle away or in the outward direction before adjusting or operating the back rest.



Flat Position



To attain the flat position

Press button (9) to attain the flat position with one touch of a button.

Trendelenburg Position



To attain the trendelenburg position

Press button (8) to attain the trendelenburg position with one touch of a button.



Castors



The Multi Treatment Chair is provided with 125 mm high grade synthetic, twin wheel castors, two with brake & two without brake. The brakes can be activated by pushing the lever in downward direction. To release the brake, the lever has to be pushed up.

OPTIONAL ACCESSORIES IV Pole:





IV Poles is used to hang IV bags for infusion of liquid substances directly into the vein. The IV pole is a removable, telescopic pole which is clamped on the rear side of the Multi Treatment Chair either on the left side or right side. The IV pole has a safe working load of 10 kgs equally distributed on both hooks.



Do not exceed the load capacity of the IV pole. If IV pole is over loaded, personal injury or equipment damage may occur.



There is a possibility of injury to the feet when the IV Pole assembly is fixed to the Multi Treatment Chair.



Food Table

The Food Table can be used to have food and also as a reading table. The ratchet mechanism on the Food Table helps in getting a better reading angle.



There is a possibility of fingers or hand entrapment between arm rest & S.S. rod of the food table. Move the arm rest away from the food table rod while operating the back rest, to avoid the fingers getting entrapped between the armrest and food table rod.



There is a possibility of food table falling on the patient's leg if the knob is not tightly fixed. Ensure that this knob is always tightened when the chair is being used.



Use Multi Treatment Chair accessories in accordance with the manufacturer's instructions for patient safety and comfort. Use recommended spares and accessories like saline rod & food table of suitable design manufactured by "Midmark" to eliminate hazards.



MAINTENANCE & CLEANING

Maintenance

Each time before putting the Multi Treatment Chair into service the user must check that -

- All the functions are in satisfactory working condition before the chair is occupied by the next patient.
- Unplug the mains supply before carrying out any maintenance activity
- Lubrication of all the mechanical joints / pins / moving parts / tightening of the bolts should be carried out at least once in three months, to avoid unnecessary sound and wear & tear of the Multi Treatment Chair.
- At regular intervals carry out a visual inspection and check for any mechanical damage (e.g. loose /missing rivets, screws, etc.)
- If any damage or malfunction is observed, immediately report this matter to the operator.
- If the Multi Treatment Chair is not in use, it should be stored in a dry and flat indoor environment which is rodent free with gradient not more than 5 degrees.
- If the Multi Treatment Chair is not in use for long term, it is necessary to conduct a test to check for functioning and any mechanical damage that might have been caused.
- Depending on the usage certain moving parts may require replacement due to wear & tear. We
 recommend timely replacement with genuine 'Janak' spares for safety and trouble free
 operation.
- Lubricating the moving parts and tightening of the bolts should be carried out periodically.

Cleaning & Disinfecting

- The Multi Treatment Chair is not suitable for machine wash or Steam Cleaning.
- Do not spray water jet.
- Wipe the Electrical components with dry cloth only. No traces of water or disinfectant should be present on any electrical component.
- The Multi Treatment Chair cannot tolerate the influence of strong solvent, basic or alkaline liquids & caustic agents. Also, do not use concentrated insecticides on electrical parts.
- The cleaning agents must not contain any substance which bring about any changes in the structure or adhesive property of the plastic.
- The Multi Treatment Chair should be properly cleaned and disinfected to avoid infection and stains before allotment to a new patient.
- Immobilize the Multi Treatment Chair & remove all the detachable accessories and components before cleaning. Any prolonged contact of urine or acid on mild steel can corrode the surface. Keep the surface dry at all times.
- Wearing suitable protective clothing, clean the surface with a disposable cloth soaked in a
 neutral detergent and hot water. We recommend use of Bacillocid to clean the Multi Treatment
 Chair
- Start by cleaning the upper sections of the Multi Treatment Chair & work along all horizontal surfaces. Work methodically towards the lower sections of the Multi Treatment Chair. Take extra care to clean areas that may trap dust or dirt. All detachable accessories and its component can be cleaned separately.





Do not expose the Multi Treatment Chair to excessive moisture as corrosion may cause personal injury or equipment damage.

Disposal:



Caution: Product and its defective parts especially elements made of plastic, steel, rubber and electrical / electronics (including battery) material should be disposed off in accordance with the statutory rules and regulations prevailing for such disposal. The user is advised to contact 'Midmark' for further assistance.



ROUTINE INSPECTION CHECK LIST: INSPECTION BY THE USER

(Recommended Frequency: Every new allotment but not later than one month)

Checks	Observations	ОК	Not OK	Description of faults
Visual check of the electrical compon	ents			
Handset	Damage			
Handset cable	Damage, routing			
Mains cable	Damage, routing			
Control elements	Damage, routing			
Visual check of the mechanical components				
Main frame	Damage, deformation			
IV Rod with clamp (Optional)	Damage, bent			
Mattress	Damage			
Screws and rivets	Loosened, missing			
Performance check of the electrical components				
Handset	Function test			
Control unit	Function test			
Motors	Function test			
Performance check of all mechanical components				
Adjustable footboard	Secure fastening			
Castors	Locking, release (mobilization)			
Detachable armrest	Secure fastening			
Food table (Optional)	Secure fastening			
Accessories	Fastening, damage, missing			
Sign	Result of inspection		Date	



Troubleshooting Guide

Problem Possible Causes		Remedy		
The Chair is not working	No main voltage at mains socket The mains cable is not plugged in	Check in the supply current Plug in the mains cable		
Certain functions are not working	Actuator not functioning Control unit not functioning Handset not functioning Cables of the actuators are loosened	Check the actuator connector for any loose connection Replace the actuator Repair or repaice the control unit Repair or repaice the handset Fix the cables firmly		
Chair is not functioning during mains power failure	Battery discharged Battery fuse blown off Battery wire loosened	Recharge the battery as recommended Replace the fuse Fix the battery wire firmly		
Beeping sound from the Control Unit	Overloading on the Multi Treatment Chair Internal or external fuse blown off Battery discharged	Reduce the load on the battery Replace the fuse Recharge the battery		
Castors not working	Castors are damaged Castors are not locking	Replace the castors Check the locking lever for any damage & replace the castor		
Abnormal sound/vibrations during any operation	Linkages are tight Nut/Bolts are loosen	Lubricate the linkages from its joints Tighten the bolts		
Unusual burning smell	Check for any short circuit in the Mains wire Short circuit in the Control Unit	Switch off the mains supply & unplug the Chair from its mains socket & contact 'Janak' for further assistance		



WARRANTY & SERVICE

Midmark India Pvt. Ltd. warrants, solely to the end users of this Multi Treatment Chair that for a period specified in the warranty certificate, such Multi Treatment Chair shall perform as per its intended use. The foregoing warranties shall not apply if the Product has been subjected to: (a) physical abuse, misuse, abnormal use, or use not consistent with Midmark India Pvt. Ltd.'s published directions, (b) any modification by anyone other than Midmark India Pvt. Ltd. or third parties designated by Midmark India Pvt. Ltd.; or (c) fraud, tampering, negligence or accidents, depending upon the nature of the products.

Limitation Of Liability: In no event shall Midmark India Pvt. Ltd. be liable or obligated to the end user in any manner for any special, non-compensatory, consequential, indirect, incidental, statutory or punitive damages of any kind, including, without limitation, for injury or loss of life, lost profits, lost sales, lost revenue, loss of any software or data, or loss of use of any hardware, software or data, regardless of the form of action, whether in contract, tort, negligence, strict product liability, or otherwise, even if Midmark India Pvt. Ltd. has been informed of or is aware of the possibility of any such damages in advance. Midmark India Pvt. Ltd. 's total aggregate liability under this agreement and in relation to anything whichMidmark India Pvt. Ltd. has done or not done in connection with this agreement shall be limited to the price of the products purchased and paid for by the end user during the period in which such liability arises. The limitations set forth above shall be deemed to apply to the maximum extent permitted by applicable law and notwithstanding the failure of the essential purpose of any limited remedies.

In order to maintain functional safety and right to claim under the warranty only original 'Midmark' replacements parts may be used for ordering replacement parts, customer service request and further question, please contact our technical support department.

MANUFACTURER'S ADDRESS

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