GIMA
PROFESSIONAL MEDICAL PRODUCTS

ELECTRIC DIALYSIS CHAIR
POLTRONA ELETTRICA PER DIALISI
SILLÓN ELÉCTRICO PARA DIÁLISIS
FAUTEUIL ÉLECTRIQUE DE DIALYSE

Manuale d'uso - User manual -
Manual del usuario - Mode d'emploi

ATTENTION: *The operators must carefully read and completely understand the present manual before using the product.*
ATTENZIONE: *Gli operatori devono leggere e capire completamente questo manuale prima di utilizzare il prodotto.*
ATENCIÓN: *Los operadores deben leer atentamente y comprender completamente el presente manual antes de utilizar el producto.*
ATTENTION : *Les opérateurs doivent lire attentivement et comprendre complètement le présent manuel avant d'utiliser le produit.*

Gima 44320

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Made in China

REF SKE-180

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INTENDED USE

Dialysis chairs are specialized medical furniture designed for patients undergoing hemodialysis, a medical procedure used to filter waste products and excess fluids from the blood when the kidneys are unable to perform this function effectively.

WARNING

Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the Member State in which the user and/or the patient is established.

1. Product introduction

SKE-180 electric blood collection chair is designed and manufactured for blood donors of blood station and hospitals, which meets the demands of the market and absorbs and draws upon the advanced foreign technology. This product adopting the power of linear pushing-bar system can realize the movement of the whole table, the fold of the backboard and the leg-rest. it also can realize all kinds of posture of blood-taking like prostration, seating and semi-reclining, can boost and reduce the internal pressure while taking blood, make the process of blood-taking smoother and easier. The surface of backboard which is in accordance with the curve of body's back provides better comfort for the blood donor, the broad armrest can remain the degree unchanged when the backboard's angle has been changed. Combined with the horizontal outward swing function, it can make the arm positioning more convenient for donors. Meanwhile it can reduce the psychological pressure of the initial donor and make the whole procedure relax, pleasant and meet the humanized requirement.

2. Main application and applicable scope

SKE-180 electric blood collection chair is supplied to blood stations and hospitals.

Dear user, We are very thankful of you to purchase our SKE-180 electric blood collection chair. Please read the instruction manual carefully before operation. The warranty bill is enclosed in the instruction manual. you will need the instruction manual when you ask for repair, please keep it properly.

3. Main technical parameters

Model	SKE-180
Product name	Electric blood collection chair
Chair dimension (length X Width)	1800mm×580mm
Chair height	500mm
Leg Plate Dimension (length X Width)	500mm×400mm
The angle of turning off of the backboard	0°- 73°
Speed of motor movements	0.8m/min
Supply voltage	AC220V
Frequency	50Hz
Input Power	550 VA
Motor power	300VA
Electric Current	3A
Security category	Class I
Protection type	B
IP Protection	IPX0
Load	240kg
Net Weight	100kg

4. Precautions and safety warnings

Please keep the all part of this electric chair clean, do not charged scrub with a damp cloth.

The electric blood chair uses single-phase three-pole plug, please check the power outlet seriously and ensure a reliable ground.

Please shut down the power switch and pull away power plug when stop work.

The interference generated by using run-time may have a negative impact on the other medical electric devices.

When clean the chair, please use the cloth soaked in neutral detergent diluted with water and twist dry, then wipe dry with a dry cloth.

The cushion of the electric blood collection chair uses anti-flaming and antistatic professional PVC artificial leather , it has anti-fouling and anti-corrosion features.

When the chair is in use, do not use flammable liquids or gaseous anesthetic, if it really needs flammable reagents, you must make sure that the flammable reagents on the blood donor's body has volatilized completely. It is must be paid attention.

Do not make other flammable materials close to the electric blood collection chair. Do not to pour water on the hand-held manipulator neither to avoid negative consequences.

When the electric blood collection chair is in its late life, the equipments and accessories are aging, its sensitivity and reliability will decrease, thus the equipment will come into the high incidence of failure, and you will have obvious difficulties in maintaining. At this period, the equipment will have adverse effects on its usage, it even will cause a serious threat to the safety, then replacement in the same type of equipment accessories should be considered.

If you want to replace the accessories, you should first consider our company as your first choice, if the replacement of the same type of equipment accessories is not from ours, our company will not bear the consequences.

The cushion of the electric blood collection chair uses anti-flaming and antistatic professional PVC artificial leather, if it needs replacement, you must use the same type of cushion to replace, otherwise you shall take the consequences.

Should there is failure, the equipment would be repaired by the professionals, if you need any service or technical support, please contact the distributor, dealers or dial l the hotline of our company. Please do not let non-professional maintenance person to dismantle and repair.

5. Safety warning

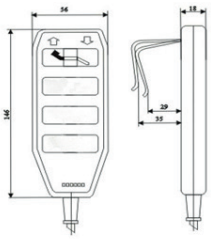
Please do not disassemble the electric blood collection chair, for security purposes please have qualified professionals serve.
Pleae do not place other items on the chair surface of the electric blood collection chair.
To avoid damage, please do not hit or fall any accessories of the electric blood collection chair.
If you don't intend to use the electric blood collection chair for a long time, please remove the plug from the outlet in order to avoid equipment damage caused by short-term voltage fluctuations in power.
To avoid equipment damage, please do not spill any liquid to the electric blood collection chair.
Make sure there is no any objects placed on the power cable, and the cable is not easy to stumbled or be trampled.
To avoid using this electric blood collection chair in such an environment: Below 5°C or above 40°C; humidity is greater than 80%. In vibration environment

6 Product icons and Instructions

Electric Blood Collection Chair

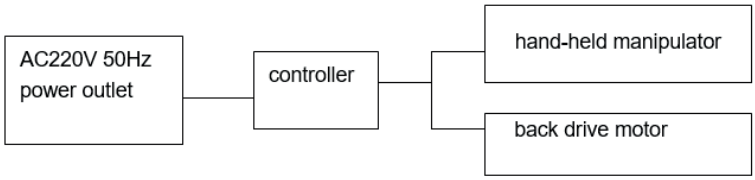
1. Main frame
2. Universal wheel
3. Backboard
4. Seat section
5. Leg plate
6. Pedal frame
7. The armrest
8. Small table
9. Small table base
10. Hand control operator

7. Instructions for hand-held manipulator



Hand-held Manipulator	
	
Backboard rise key / backboard go down key	Linkage with the backboard and leg plate

8. Electrical circuit diagram



9. Electrical parts icon

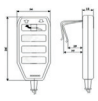

Controller


Hand-held manipulator


Linear Pushing Bar Motor

Box parts diagram

Box should be carried to the flat ground first, then open box board, remove the protection packaging of the electric blood collection chair, then lift the electric blood collection chair carefully and put it on the ground lightly. We have set up the location of working for the electric blood collection chair when it is out of the factory. Please check that the box should contain the following components

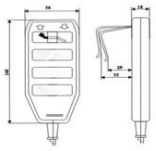
	Electric blood collection chair backboard leg plate armrest		Linear Pushing Bar Motor
	Controller		Hand-held manipulator

10. Accessories and packing List

Box Name	Parts name		Qty
Main body	chair frame parts	Chair frame unit	1 set
	Part of the seat	Cushion, leg plate	1 set
		antifouling seat cover	2 sets
	Electrical parts	linear pushing bar motor	1 set
		controller	1 set
		hand-held manipulator	1 set
Manual Bag	installation and operating instructions		1 pcs
	Product certificate		1 pcs
	after-sales service undertaking		1 pcs
	product acceptance		1 pcs
	repair bill of the product		1 pcs

11. Product installation diagram

The electric blood collection chair must be rested on horizontal ground



plug in the power, then it can work

12. Operating method

Make it power on while use it, then use the hand-held manipulator to control it, press the corresponding key to make it achieve the required position.

When the backboard rise or down, use a linear pushing bar motor to adjust the angle, you need only press the backboard rise key to control the angle of rise, and press the backboard go-down key to control the angle of descent, release the control button untill you adjust it to the required angle, it also leads to the linkage of the leg plate and backboard.

Armrest is fixed on the chair rack with holder, you may toggle armrest directly to adjust its horizontal angle.

If there is abnormal phenomena while use, you should turn off the power switch, unplug the power cord, and make contact to our after-sales service hotline, never use it again before being repaired.

13. Care and maintenance

The electric blood collection chair has been rigorously tested before leaving the factory, please do not pick, combine or disassemble.

If need to remove or replace the power line, you should hold the power plug to pull out, pleae don't directly use hand to pull the power line in order to avoid to damage the power line.

To avoid damage to electrical equipment, don't wash the electric blood collection chair with water, you may use soft and clean cloth to wipe, 75% isopropyl alcohol solution is also applied for better clean.

The electric blood collection chair should be stored in dry, no corrosive gas and ventilated environment, avoid direct sunlight.

14. Failure analysis and troubleshooting

Fault	Check	Solution
Hand-held manipulator is not responding	To check whether the plug is plugged in corresponding interfaces correctly	Make sure the plug being well put
Slow operation and noisy	Interface loose or motor controller failure	Make interface seated or replace the motor Controller
Action has no response	motor controller fault	Replace the motor controller

15. Normal operation, storage and transport conditions

1. Normal working conditions	
a) Ambient temperature	5 ~ 40°C
b) Relative humidity	no more than 80%
c) Atmospheric pressure	70kPa ~ 106kPa
d) Supply voltage	220V
e) Power frequency	50Hz

2. Storage and transport conditions	
a) Ambient temperature	-40°C ~ 55°C
b) Relative humidity	no more than 95%
c) Atmospheric pressure	50kPa ~ 106kPa

16. Environmental protection

When the electric blood collection chair is in its late life, the equipment and accessories are aging,its sensitivity and reliability will decrease, thus the equipment will come into the high incidence of failure, there will be obvious difficulties in maintaining. At this period, the equipment will have adverse effects on its usage, it even will cause serious threat to the security, then the replacement with the same type of accessories should be considered.

Scrapped parts must be placed in designated containers with clear mark and be kept closed, then report it to the equipment department for proper disposal.

17. Issues identified before use

Fault location	Check the reason	Corrective measure
chair frame is unstable	not placed in the flat ground	Please move to the flat ground
press the control button and the electric blood collection chair has no reaction	the power plug is not plugged into outlet	Please supply the power plug into the outlet
no reaction from time to time	interface loose or motor controller fault	make the interface seated or replace the motor controller

EMC

1) This product needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided, and this unit can be affected by portable and mobile RF communications equipment.

2) * Do not use a mobile phone or other devices that emit electromagnetic fields, near the unit. This may result in incorrect operation of the unit.

3) Caution: This unit has been thoroughly tested and inspected to assure proper performance and operation!

4) * Caution: This machine should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, this machine should be observed to verify normal operation in the configuration in which it will be used.

Guidance and Manufacturer's Declaration – Electromagnetic Immunity		
The SKE-180 is intended for use in the following electromagnetic environment. The customer or user of the SKE-180 should make sure it is used in such an environment		
Emission test	Compliance	Electromagnetic Environment - Guidance
RF Emission to CISPR 11	Group 1	The bed uses RF energy for its internal function
RF Emission to CISPR 11	Class B	The bed is intended for use in all types of establishment including residential and similar user that are directly connected to a public supply network that also serves buildings used for residential purposes
Harmonics according to IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker acc. to IEC 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity		
The SKE-180 is intended for use within healthcare facility environment. Users or customers must use bed in this environment		
Immunity test	IEC 60601-1-2/ EN 60601-1-2 Test level	Electromagnetic Environment - Guidance
Electrostatic discharge (ESD) IEC 61000-4-2 /EN 61000-4-2	Contact discharge: +8kV Air discharge: +2kV, +4kV, +8kV, +15kV	Contact discharge: +8kV Air discharge: +2kV, +4kV, +8kV, +15kV Floor should be made of wood and concrete or be tiled with ceramic tiles. If the floor is covered with synthetic flooring material, the relative air humidity must be at least 30% Can be used when higher ESD levels are present
Electrical fast transient/burst IEC 61000-4-4 /EN 61000-4-4	+2kV Power supply line +1kV Input/Output lines	+2kV Power supply line The quality of the supply voltage should be equivalent to that of a typical business or hospital environment.

Surge IEC 61000-4-5 /EN 61000-4-5	Line - line: +0.5kV, +1.0kV Line - ground: +0.5kV, +1.0kV, +2.0kV	Line - line: +0.5kV, +1.0kV Line - ground: +0.5kV, +1.0kV, +2.0kV The quality of the supply voltage should be equivalent to that of a typical business or hospital environment.
Power Frequency Magnetic Fields IEC 61000-4-8 /EN 61000-4-8	30 A/m 50Hz/60Hz	30 A/m 50Hz/60Hz Magnetic fields with a network frequency should be equivalent to those to be found in a typical business or hospital environment.
Voltage Dips IEC 61000-4-11 /EN 61000-4-11	0% UT: 0.5 cycles Phase: 00, 450, 900, 1350, 1800, 2250, 2700, 3150	0% UT: 0.5 cycles Phase: 00, 450, 900, 1350, 1800, 2250, 2700, 3150
	0% UT: 1 cycle 70% UT: 25/30 cycles Single phase: 00 0% UT ; 300 cycle	0% UT: 1 cycle 70% UT: 25/30 cycles Single phase: 00 0% UT ; 300 cycle The quality of the supply voltage should be equivalent to that of a typical business or hospital environment. If the person using the bed requires that the bed functions must continue despite any interruptions in the energy supply, it is recommended that the bed be connected to an uninterruptible electricity supply or a battery
Short interuptions IEC 61000-4-11 /EN 61000-4-11	0% UT: 250/300 cycles	0% UT: 250/300 cycles The quality of the supply voltage should be equivalent to that of a typical business or hospital environment. If the person using the bed requires that the bed functions must continue despite any interruptions in the energy supply, it is recommended that the bed be connected to an uninterruptible electricity supply or a battery
Note: UT is the AC Power voltage before applying in the test level		

Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The SKE-180 is intended for use in an electromagnetic environment that used wireless RF transceiver. Electromagnetic interference can be prevented by maintaining the minimum distance between RF transceiver and V8v8c depend on the maximum output and frequency of the communication device as recommended below.

Immunity test	IEC 60601-1-2 /EN 60601-1-2 Test level	Complianc elevel (V/m)	Ban d (MHz)	Service	Modulation	Maximum power (W)	Distance (m)
Enclosure port to RF wireless communication sequipment IEC 61000-4-3 /EN 61000-4-3	27V/m 385MHz	27	380-390	TETRA 400	Pulse modulatio n18Hz	1.8	0.3
	28V/m 450MHz	28	430-470	GMRS 460, FRS 460	FM+5 kHz deviation 1 kHz sine	2	0.3
	9V/m 710MHz	9	704-787	LTE Band 13, 17	Pulse modulatio n217Hz	0.2	0.3
	9V/m 745MHz						
	9V/m 780MHz						
	28V/m 810MHz	28	800-960	GSM 800/900, TETRA 800, iDen 820, CDMA 850 LTE Band 5	Pulse modulatio n18Hz	2	0.3
	28V/m 870MHz						
	28V/m 930MHz						

Enclosure port to RF wireless communication sequipment IEC 61000-4-3 /EN 61000-4-3	28V/m 1720MHz	28	1700-1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1,3, 4,25; UMT S	Pulse modula-tio n217Hz	2	0.3
	28V/m 1845MHz						
	28V/m 1970MHz						
	28V/m 2450MHz	28	2400-2570	Bluetooth, WLAN, 802.11 b/g/n RFID 2450, LTE band 7	Pulse modula-tio n18Hz	2	0.3
	9V/m 5240MHz	9V/m 5785MHz	5100-5800	WLAN 802.11 a/n	Pulse modula-tio n217Hz	0.2	0.3
	9V/m 5500MHz						
	9V/m 5785MHz						

Guidance and Manufacturer's Declaration - Electromagnetic Immunity			
The SKE-180 is intended for use in the following electromagnetic environment. The customer or user of the SKE-180 should make sure it is used in such an environment.			
Immunity test	IEC 60601-1-2 /EN 60601-1-2 Test level	Compliance level	Electromagnetic Environment - Guidance
RF Conductivity IEC 61000-4-6 /EN 61000-4-6	3V 0.15MHz-80MHz	3V 0.15MHz-80MHz	Field intensity from the fixed RF transmitter determined by a field investigation of the magnetic field must be lower than the compliance level of the respecti-ve frequency band. Near devices with the following symbol,interference could occur.
	6V in ISM bands between 0.15MHz- 80MHz 80%AM at 1kHz	6V in ISM bands between 0.15MHz- 80MHz 80%AM at 1kHz	
Radioactive RF electromagnetic field IEC 61000-4-3 /EN 61000-4-3	3V/M 80MHZ-2.7GHz 80%AM at 1kHz	3V/M 80MHZ-2.7GHz 80%AM at 1kHz	

a. The intensity of a magnetic field from fixed transmitters such as a radio (mobile/radio) telephone base station, land mobile radio, amateur radio, AM and FM radio broadcasting, and TV broadcasting cannot be theoretically predicted accurately. To determine the electromagnetic environment for a fixed RF transmitter, consider investigating the electromagnetic field in the location where the bed is used. If the intensity of the magnetic field in the location where the V8v8c is used exceeds the above RF compliance level, make sure to monitor if the V8v8c operates appropriately. If abnormal movement is found, take additional measures as needed, such as changing the direction or position of the V8v8c.
b. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

ENGLISH

Symbols	
Symbols	Meaning
	Manufacturer
	Authorized Representative in the European community
	Disposal of Electrical & Electronic Equipment (WEEE): Do not treat this product as household waste
	Medical Device compliant with Regulation (EU) 2017/745
	Observe the instructions for use
	Type B applied part
	Medical device
	Product code
	Unique device identifier
	Imported by
	Temperature limit
	Humidity limit
	Atmospheric pressure limit
	Keep away from sunlight
	Keep in a cool, dry place
	Caution: read instructions (warnings) carefully
	Consult instructions for use
	Date of manufacture
	Lot number