



USER MANUAL

NETTI MOBILE

NETTI MOBILE INTUITIVE NETTI DYNAMIC MOBILE



Enable joy of life



CONTENTS

1. INTRODUCTION	6
2. QUICK REFERENCE	9
3. ELECTROMAGNETIC INTERFERENCE AND WARNINGS	10
4. DESCRIPTION	12
5. FEATURES OF NETTI MOBILE	13
6. ACCESSORIES	16
7. ASSEMBLING AND ADJUSTMENT. 7.1 Unpacking	18 19 19 19 19 19 19 19 19 19 19 19 19 19
8. NETTI MOBILE ELECTRONICS 8.1 Typical control system layout	28 30 30 32 35 36 36 38 38 38 38 38 38 38 39 38

	8.2.4 Driving	4
	8.2.4.1 The joystick	4
	8.2.4.2 The drive profile	4
	8.2.5 The horn	
	8.2.6 The seating functions	
	8.2.6.1 Available seating functions	
	8.2.7 The lights	
	8.2.8 The battery gauge	
	8.2.8.1 Battery charge indication	4/
	8.2.8.2 Other indications	4/
	8.2.9 The Fault indicator LED	-4-
	8.2.9.1 'Service due' indication	45
	8.2.9.2 Fault indication	45
	0.2.9.2 Fduit illuication	45
	8.2.10 Attendant mode	
	8.2.10 ACU Quick start	
	8.3 Troubleshooting	
	8.3.1 General fault finding check	
	8.3.2 Battery charging - fault finding	50
	8.3.3 Turning the system on - fault finding 8.3.4 Driving characteristics - fault finding.	50
	8.3.4 Driving characteristics - fault finding.	51
	8.3.5 Flash codes	51
	Shark System - keypads - fault finding	
	DX2 System - fault finding	55
9.	DRIVING TECHNIQUES	
	9.1 Driving your chair	58
	9.2 To begin	58
	9.3 Safe driving	58
	9.4 Indoor/outdoor driving	58
	9.5 Chair response	
	9.6 Steep slopes	
	9.7 Transfere	
10). BATTERIES & CHARGING	60
	10.1 How to charge	
	10.2 When to charge	
	10.3 Looking after your batteries	
	10.4 Replacing batteries	
	3	
11.	MAINTENANCE	63
	11.1 Electrical components	6.3
	11.2 Frame & seating system	64
	11.3 Maintenance schedule	
	The Plaintenance Schedule	00
12	. TESTS & WARRANTY	66
12	12.1 Tests	
	12.2 Guarantee	
	12.3 Claim	
	12.4 Spare part guarantee	
	12.5 Special adjustment/adaptation	
	12.6 Combination with other products	
	12.7 Service and repair	67
17	. MEASURES & WEIGHT	60
13	. ITEASURES & WEIGHT	08
	NETTI MOBILE INTUITIVE - WHEELCHAIR	млты
∟.	ATTENDANT CONTROL	vvii⊟ 7∩.7
G.	NETTI DYNAMIC MOBILE - WHEELCHAIR	
	DYNAMIC SEATING	.80-8



NETTI DYNAMIC MOBILE -WHEELCHAIR WITH DYNAMIC SEATING

1. INTRODUCTION4
2. QUICK REFERENCE9
3. ELECTROMAGNETIC INTERFERENCE AND WARNINGS10
4. DESCRIPTION12
5. FEATURES OF NETTI MOBILE13
6. ACCESSORIES14
7. ASSEMBLING AND ADJUSTMENT18
8. NETTI MOBILE ELECTRONICS28
9. DRIVING TECHNIQUES58
10. BATTERIES & CHARGING60
11. MAINTENANCE 63
12. TESTS & WARRANTY66
13. MEASURES & WEIGHT68
G. DYNAMIC SEATING80
G1 DYNAMIC SEATING ACCESSORY KIT - INTRODUCTION80
G2 AREAS OF USE80
G3 CONTRA-INDICATIONS SPECIFIC TO THIS
G4 DESCRIPTION 81

NETTI MOBILE INTUITIVE -WHEELCHAIR WITH INTUITIVE ATTENDANT CONTROL

2. QUICK REFERENCE	
	9
3. ELECTROMAGNETIC INTERFERENCE AND	
WARNINGS	10
4. DESCRIPTION	
5. FEATURES OF NETTI MOBILE	1.3
6. ACCESSORIES	
7. ASSEMBLING AND ADJUSTMENT	
8. ATTENDANT UNIT	
10. BATTERIES & CHARGING	
11. MAINTENANCE	
12. TESTS & WARRANTY	
13. MEASURES & WEIGHT	
10. 1 1E/10011E0 & WEIGHT	00
L1 NETTI MOBILE INTUITIVE WITH ATTENDAN	Г
CONTROL - INTRODUCTION	
L 1.2 Areas of use	
L 1.3 Contra indications	
L 1.4 Description	
2	
L2 ELECTRONICS	71
L 2.2 Turning on Netti Mobile Intuitive	72
L 2.2 Turning on Netti Mobile Intuitive	
L 2.3 Speed mode	72
L 2.3 Speed mode L 2.4 Driving	72 72
L 2.3 Speed modeL 2.4 DrivingL 2.5 Calibrating the Intuitive system	72 72 73
L 2.3 Speed modeL 2.4 DrivingL 2.5 Calibrating the Intuitive systemL 2.5 Battery gaugeL 2.5 Battery gauge	72 72 73 73
L 2.3 Speed mode	72 72 73 73
L 2.3 Speed mode L 2.4 Driving L 2.5 Calibrating the Intuitive system L 2.5 Battery gauge L 2.7 Electrical tilt/recline L 2.8 Lights	72 73 73 74 74
L 2.3 Speed mode	72 73 73 74 74
L 2.3 Speed mode	72 73 73 74 74
L 2.3 Speed mode	72 73 73 74 74 75
L 2.3 Speed mode	72 73 73 74 74 75
L 2.3 Speed mode	72 73 74 74 75 75
L 2.3 Speed mode	72 73 74 74 75 75 77
L 2.3 Speed mode	72 73 74 74 75 77 77
L 2.3 Speed mode	72 73 74 74 75 77 77

HOW TO READ THIS MANUAL

To enable you to find the information you need for your Netti Mobile, this manual is provided with an additional index page.

- Netti Dynamic Mobile wheelchair with the Dynamic seating.
- Netti Mobile Intuitive wheelchair with Intuitive attendant control.





Netti Mobile



Netti Dynamic Mobile equipped with the Dynamic seating accessory kit.



Netti Mobile Intuitive equipped with the Intuitive attendant control accessory kit.

1. INTRODUCTION

Netti Mobile is a class B powered wheelchair rated for indoor and outdoor use. It is tested to DIN EN 12184:2009. The tests were carried out by TÜV SÜD Product Service GmbH in Germany.

In Alu Rehab we believe that wheelchairs should be chosen based on a thorough assessment focusing on the needs of the user and demands from the environment. Therefore it is important to know about the possibilities and restrictions of the wheelchair. Netti Mobile is an electrical class B powerchair designed for users with the need for comfort and relief. The combination between the seating system and the ergonomical solutions in the frameconstruction, offers many possibilities foradaptation and adjustments.

The wheelchair is designed for indoor and outdoor use, and offers the possibility to vary the sitting position.

Max user weight: 140 kg.



 Specifications vary between countries



1.1 AREAS OF USE/INDICATIONS FOR NETTI MOBILE

Netti Mobile is an electrical comfort wheelchair for partially immobile persons with physical and/or mental disabilities. These disabilities may have multiple causes. Netti Mobile has an adjustable seat and back angle, thus facilitating for the user change of position, mobilisation or posture correction (stabilisation), wherever the following functional impediments with their multiple possible causes are present:

- limited or lacking mobility
- limited or lacking muscle power
- · limited movement range
- · lacking or limited trunk and body stability
- hemiplegia
- rheumatic-type disorders
- · craniocerebral injuries
- amputations
- other neurological or geriatric disorders.



An assessment is recommended to determine whether the user is able to control the wheelchair safely using the factory default configuration program.

It may be necessary to modify the default configuration program specific to the needs of the user. In some cases an attendant only wheelchair may be required.

1.2 CONTRAINDICATIONS

Netti Mobile must not be driven by persons who do not have sufficient cognitive ability to understand how to operate the electronic functions of this wheelchair.



Consult your healthcare professional or wheelchair provider if your condition changes

A Warning, people who suffer from muscle spasms might inadvertently cause their wheelchair to move or to change direction unexpectedly, endangering property, the user or 3rd parties.

A risk assessment should be undertaken to determine whether the benefit to the user exceeds the risks that have been identified.

1.3 QUALITY AND DURABILITY

The Netti Mobile wheelchair is tested at TÜV SÜD Product Service GmbH in Germany, following the European Standard DIN EN 12184:2009.

In normal use Alu Rehab A.S expects the service life to be 5-6 years. In practice the service life will depend strongly external factors including disability of the user, environment, and wether regular maintenance has been carried out

1.4 THE ENVIRONMENT AND WASTE DISPOSAL



Alu Rehab and its suppliers wish to protect the environment.
This means:

- That we avoid using environmentally harmful substances and processes to the greatest extent possible.
- That Alu Rehab's products are ensured a long service life and a high degree of flexibility - to benefit th environment and economy.
- That all packaging can be recycled.
- That the wheelchair was designed to be separated into its component materials - to make recycling easier.



Contact your local recycling agent to get correct information how to handle in you area.



1.5 INFORMATION FOR RE-USE

All products from Alu Rehab are designed to give years of maintenance-free service. All products can be adapted for reuse by an authorised dealer. In order to guarantee performance and safety, Alu Rehab recommends the following tests prior to any re-use.

Please examine the following components for function, integrity etc. and replace parts as necessary:

- controller, cables, actuator control, power module & battery
- Wheels (tyre tread)
- · Wheelchair frame
- Cushions
- Hubs
- Brake function
- Directional stability of wheels
- · Bearings and front castors

Please also note the contents of Section 11 Cleaning and care

1.6 ABOUT THIS MANUAL

In order to avoid damages while using the Netti Mobile wheelchair, please read this manual carefully before starting to use the chair.



Symbol of forbidden actions. No warranty can be claimed whenever these actions are implemented.

Symbol of warning. Whenever this symbol is used, caution has to be taken.

Symbol for important information.



Symbol for useful tips.



Symbol for tools.

Anti-tip

Correctly fitted, the anti-tip will secure the chair from tipping backwards. We strongly recommend use of the anti-tips.



1.7 NETTI MOBILE

Netti Mobile is available with a range of options to suit the vast majority of users.

Netti Mobile M Manually adjustable

- Manual seat tilt in steps (4°, 8°, 12° = backwards).
- Continuously manual adjustable backrest recline with gas spring.
- Dynamic Shark control system

Netti Mobile E1

- Electrical Seat Tilt
- Continuously manual adjustable back rest recline with gas spring.
- Dynamic Shark control system.

Netti Mobile E2

- Electrical seat tilt & backrest recline.
- Dynamic Shark control system.

Netti Mobile E4

- Electrical Seating Tilt, Backrest Recline & Legrests.
- Dynamic DX2 expandable control system.

Model	Control system	Arm rest remote control	Optional Attendant control
Netti Mobile M	Shark	DK-REM31	DK-ACU
Netti Mobile E1	Shark	DK-REMD21	DK-ACU
Netti Mobile E2	Shark	DK-REMD21	DK-ACU
Netti Mobile E4	DX2	DX2-REM420	DX2-ACU



1.8 TECHNICAL **CHARACTERISTICS**

Netti Mobile is a class B powered wheelchair designed for outdoor and indoor use.



Specification varies between countries.

Total weight: 94 Kg (400 mm width chair)

Seat width: 400, 450, 500 mm



(From back rest cushion to front of seat plate) 400, 425, 450, 475, 500 mm



Seat height: (From floor to top seat plate).

500 mm





¹ Using back rest extender gives 600mm

- * 40 cm model including battery
- ** Distance will vary depending on the driving style and the local conditions.
- *** Max speed for Netti Mobile with Intuitive Attendant contrl.5km/h **** Netti Mobile is CE marked for a maximum speed of up to 10km/h. However in some jurisdictions, powered wheelchairs with a maximum speed of more than 6km/h are subject to restrictions. Additional approvals or insurance may also be required. By specifying a maximum speed of 8 or 9,9km/h you accept the responsibility for ensuring the wheelchair will comply with any applicable local regulations and any necessary insurance will be obtained.
- Safe slope is 6°

Wheelchair class	В
Max load	up to140 kg
Crash tested to ISO7176-19 for users	up to136 kg
Overall length with foot support	1110 mm
Overall width	600 mm
Folded length	820 mm
Folded width	650 mm
Folded height	950 mm
Total mass*	94 kg
Mass heaviest part	29,1kg
Slope for static stability downhill z	max 18,4°
Slope for static stability uphill z	max 14,8°
Slope for static stability accross z	max 19°
Maximum safe slope	6°
Braking distance from max speed	1- 2,1m
Seat plane angle, fixed steps (backwards)	4°, 8°,12°
Seat plane angle cont. adjustable	-9° to 16°
Effective seat depth	400-500 mm
Effective seat width	400 mm
Seat surface height at front	500 mm
Backrest angle	88º-113º
Backrest height	480 mm
Foot support to seat distance Universal foot support Angle adjustale foot support	265 - 550 mm 280 - 770 mm
Leg to seat surface angle Universal foot support Angle adjustale foot support	62º - 158º 105º - 182º
Arm support to seat distance	185-325 mm
Front location of armrest structure	300-430 mm
Minimum turning radius	800 mm
Tyre dimensions castor wheels	2.8/2.54"(223x68)
Tyre dimensions driving wheels	3.0- 8"(350x78)
Reversing width	820 mm
Obstacle height	100 mm
Maximum range on full batteries according to ISO7176-4**	25 km
Standard maximum speed	6 km/h***
Optional maximum speed	8 or 9,9 km/h****
Battery	2x12 V;50 Ah



2. QUICK REFERENCE

The content of this page is a summary of the whole manual. It gives a brief introduction to the use and care of the Netti Mobile wheelchair.

The quick reference is not a replacement for the manual, only a reminder/check list.

- Put the back rest back, and secure the recline gas strut (Chapter 7.2)
- Install the cushions (Chapter 7.6 and 7.7)
- Mount the foot supports (Chapter 7.9)
- Mount the head support (Chapter 6.2)
- Set anti-tip in active position (Chapter 7.5)
- Mount accessory. (See chapter 6 for more information. Mounting descriptions will accompany the accessory.)
- For troubleshooting, see chapter 8. For mounting and adjustments see chapter 6 and 7.



A

Netti Mobile is approved to be used as a seat in a motor vehicle. Max. load 136 kg (Chapter 7.15).

When equipped with the Dynamic accessory kit: The maximum load becomes 136kg. The extension brackets shown in section G4 must be fitted when used as seat in a car.

- Drive carefully!
- ▲ Usage temperature: -10°C to 50°C Storage temperature: -20°C to 65°C
- ▲ Salt water will increase the risk of corrosion.
- When the chair is tilted rearwards, the anti tips and brakes should always be in use.
- A Be sure to lock all handles properly.
- ⚠ The anti-tips should always be used for the safety of the user.
- ▲ Metal components may become very hot when exposed to direct sunlight.
- ▲ Make sure to charge the battery regularly,
- **A** Make sure to do regularly maintenance.
- Never stand on the foot supports due to risk of tipping forwards.
- A Never lift the wheelchair by the foot supports or arm supports.
- Product configuration may vary between different countries.
- For visually impaired people, manuals and catalogues can be downloaded at:

www.Mv-Netti.com

If in doubt - contact your dealer!



3. ELECTRO-**MAGNETIC INTERFERENCE** AND WARNINGS

Powered wheelchairs may be susceptible to electromagnetic interference (EMI). which is interfering electromagnetic energy (EM) emitted from sources such as radio stations. TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones. The interference (from radio wave sources) can cause the power chair to release its brakes, move by itself. or move in unintended directions. It can also permanently damage the power chair control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each power chair can resist EMI up to a certain intensity. This is called its "immunity level." The higher the immunity level, the greater the protection will be.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimized.

Netti Mobile, degree of protection: IPX4. Netti Mobile is EMC approved.

A It is very important that you read this information regarding the possible effects of Electromagnetic Interference on your power chair.

The sources of radiated EMI can be broadly classified into three types:

 Hand-held portable transceivers (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie," security, fire, and police transceivers, cellular telephones, and other personal communication devices.



A Some cellular telephones and similar devices transmit signals while they are ON, even when not being used.

- Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle.
- Long-range transmitters and transceivers such as commercial broadcast transmitters. (radio and TV broadcast antenna towers) and amateur (HAM) radios.



⚠ Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios. TV sets. CD players. and media players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your power chair.

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources. (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the power chair control system while using these devices.



This can affect power chair movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the power chair.

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, twoway radios, and cellular phones can affect the power chair. Following the warnings listed below should reduce the chance of unintended brake release or power chair movement, which could result in serious injury.



A Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the power chair is turned ON



A Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.



▲ If unintended movement or brake release occurs, turn the power chair OFF as soon as it is safe.



⚠ Be aware that adding accessories or components, or modifying the power chair, may make it more susceptible to EMI.



A Report all incidents of unintended movement or brake release to the distributor of the product. Note whether there is a source of EMI nearby.

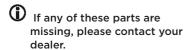


The wheelchair might disturb the operation of devices in its environment that emit electromagnetic fields (e.g. alarm systems of shops, automatic doors etc.)

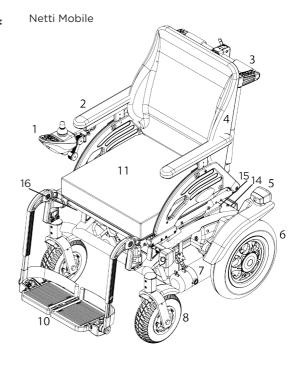


DESCRIPTION*

- 1. Control unit
- 2. Arm support pad
- 3. Push bar
- 4. Backrest cushion
- 5. Rear light
- 6. Main wheel
- 7. Motor
- 8. Front castor
- 9. Front light
- 10. Foot plate
- 11. Seat cushion
- 12. Intuitive attendant control
- 13. Actuator control
- 14. Battery box
- 15. Electronic box
- 16. Actuator box (if present)



* Product configuration may vary between countries.



Netti Mobile Intuitive equipped with Intuitive attendant control accessory kit





5. FEATURES OF NETTI MOBILE

STANDARD

SEAT'

- Seat tilt**
 - Either 3 step 4°, 8°, 12° (backwards) or continuously adjustable with gas spring or actuator: -9° to +16°
- Pressure distributive cushion
- · Adjustable depth of 10 cm

BACKREST

- Angle" 88°-113°
- Height: 50 cm
- The backrest cushion has integrated lumbar support and side support
- Push bar

FOOT SUPPORT*

- Foot support with fixed angle.
- Height- and angle adjustable foot plates
- Removable

ARM SUPPORT

- Height adjustable
- Revolvable

ARM PAD

Arm pad 385x58mm

WHEELS

- 14" driving wheels pneumatic
- 9" front castors pneumatic as standard,

or optionally with foam filled tyres.

Depends on model. See page 8.

"Netti Dynamic Mobile adjustable to user requirements.

ACCESSORIES

SEAT

- Hip belts (See chapter 6)
- Different seat cushions

BACKREST

- Electrical recline (See chapter 8.1.6)
- Backrest extender (See chapter 6)
- Lumbar support and wedge (See chapter 6)
- Different backrest cushions

ARM SUPPORT

• Hemi cushions (See chapter 6)

WHEELS

- 14" driving wheels, PU-puncture proof tyres
- 9" front castors, PU-puncture proof tyres

HEAD SUPPORT

- Height, depth and angle adjustable
- Removable
- Different head support models (See chapter 6)

Tables

• Trays (See chapter 6)

All Netti Mobiles are equipped with Lights and brakes.



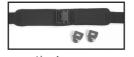
6. ACCESSORIES Backrest Cushions Many to choose from.

Please contact your dealer.





Hip belts /pelvic stabilizers with upholstery and car lock (20845). (See chapter 6.1 for mounting)



Foot box Upholstered



Trays

2 models: Universal and reinforced



Foot supports: Fixed angle foot support Footplates are height and angle adjustable



Upholstery for tray

Offers a soft base for the arm resting on the tray.



Foot support Angle adjustable mechanical



Wedge

Increases side support.



Electrical Foot support



Lumbar support Increases lumbar

curvature.



Amputation support



Vital Base Integral Pelvic stabilizer.





Seat Cushions

Many to choose from. Please contact your dealer.



Foot board with lock The foot support can

be swung to the side like standard foot supports.





Head support Support A Side support also with forhead band



Side support Correction Meant for correction of bad postures in the upper trunk.



Support B Small



Pad for side support Correction



Support C Large.



Side support Stable



Support D Comfort

support



Meant for users with decreased stability of the upper trunk. For otimal function use together with Stable cushion.



Support F with cheeck supports

Support E Adjustable side



Pad for side support Stable





Upholstery for calf support bracket Reduces pressure.



Hygiene cover Protects the core of the head support.

An accommodating



Calf pad hinged The user doesn't

have to lift the leg when mounting or dismounting the foot supports.



Head cushion

Hemi cushion

40x40 cm cushion with Kospoflex filling and rubber band.

support for hemiplegic users.



Abduction block

The block reduces abduction.

Small: 80 mm width Medium: 120 mm width Large: 140 mm width



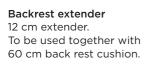
Head cushion Comfort Cushion with Kospoflex

filling to pull onto head rest.



Attendant control for: Shark System:

DK-ACU DX2 System: DX2-ACU





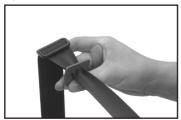




6.1 MOUNTING OF HIP BELT/ PELVIC STABILIZER

Illustration 6.1.1

· Pull the belt through the hole in the hip belt bracket.



III. 6.1.1

Illustration 6.1.2

• Thread the belt back through the belt clamp.



III. 6.1.2

Illustration 6.1.3

• Fix the hip belt bracket to the back rest hinge in the rearmost hole, using the enclosed screws and nuts.

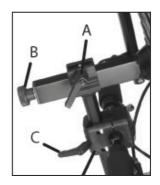


III. 6.1.3



2 pcs13 mm open-end spanner.

6.2 MOUNTING OF HEAD SUPPORT



- A Lever for depth adjustment
- B Wheel for angle adjustment
- C Lever for height adjustment
- D Head support bracket





- Place the squared nut in the trace of the head support bracket as shown above.
- Place the head support in the head support bracket.
- The height and the depth of the head support is set to the required positions and tightened.





 The head support bracket is fixed by tightening the four screws two by two diagonally so the bracket is fixed with the same strength divided on the four screws.

Adjusting the head support in depth:

- Release the locking lever on top of the vertical bar (A).
- Adjust the head support and fix it in required position.

Adjusting the head support in height:

- Release the locking lever on the head support adapter (C).
- Adjust the head support and fix it in required position.

Adjusting the head support in angle:

- Release the adjustment wheel at the rear of the horizontal bar (B).
- Adjust the head support and fix it in required position.

Adjusting the head support sideways:

- The head support adapter can be and left, moved both to the right giving the possibility to accomodate special needs for head support.
- Untighten the four screws holding the adapter together.
- Move the adapter to the required position and fix the adapter by tightening the screws diagonally.
- Remember to release the levers when adjusting the head support.
- If the head support stand does not fit the bracket perfectly the bracket is probably fixed too tight or unevenly.
- After fitting the head support fix it properly by tightening the little set screw in the centre on top of the head support bracket using an Allen key.
- If the head support seems too short in height, it can be turned 180° by releasing the adjustment wheel at the rear of the horizibtal bar (B)



7. ASSEMBLING AND **ADJUSTMENT**

7.1 UNPACKING

- 1. Unpack all the parts, and check that everything is there according to the packing list.
- 2. Check and adjust the seat depth (Chap. 7.3)
- 3. Mount the backrest (Chapter 7.2)
- 4. Mount the seat and back cushion (Chapter 7.6 and 7.7)
- 5. Mount the foot supports (Chapter 7.9)
- 6. Mount the head support (Chapter 7.10)
- 7. Mount any accessories (Chapter 6).

Weight of components (45 cm width chair):

Foot support Universal.: 1.2 kg each

Uno Back: 1,25 kg

VB Sit: 1 ka

Head support A: 1 kg Head support C: 0,9 kg

Battery: 14,5 kg

Tools needed are described under each chapter. Accessories described in chapter 5 is a presentation of options and will be delivered with separate mounting descriptions.

7.2 BACKREST

• To mount the gas spring, lift the push bow with one hand, and lead the gas spring locking head into the plastic bracket.



 Lock the back rest by pushing the locking bolt through the plastic bracket and gas spring locking head.



To check that the back rest is locked. grip the push bow and press the back rest forward. If the backrest falls forward - repeat the locking procedure or contact your dealer.



Under the seat plate, there is a position bracket for the gas strut. The bracket has five holes, covering seat depths 40. 42.5. 45. 47.5 & 50 cm.

The hole positions are in accordance with the holes in the backrest hinge. If the gas spring is mounted in the foremost hole of the position bracket under the seat, the backrest hinge should also be mounted in the foremost hole etc.





7.3 SEAT DEPTH ADJUSTMENT AT THE REAR.

- If the seat depth should be adjusted at the rear, release the locking bolt from the plastic bracket (III. 6.5.2).
- Find the required position for the locking head in the plastic bracket, and remove the plastic plug from this hole.
- Lock the back rest by pushing the locking bolt through the plastic bracket and the gas spring locking head.
- After changing the hole position in the plastic bracket, the hole position in the back rest hinge must be changed into the parallel position.

A Check that the hole in the back rest hinge and the plastic bracket are mounted in parallel position.

★ 6 mm Allen-key

7.4 SEAT DEPTH ADJUSTMENT IN FRONT

It is possible to adjust the seat depth with up to 10 cm in front. Do the following:

- Screw out the screws in the extension piece
- Place the extension piece in the wanted position
- Replace and tighten the screws



6 mm Allen-key

If the user has spastic tendencies the extension piece should not be pulled out more than 5 cm.

7.5 ANTI TIP

Use of the anti tip

- Pull the anti tip out
- Turn it up or down 180°.
- Lock it in position



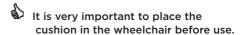


The anti tip should always be used for the safety of the user.

7.6 SEAT CUSHION

The seat cushion is attached to the seat plate with velcro.







7.7 BACKREST CUSHION

The backrest cushion is attached to the backrest with the velcro.





The seat and back rest cushion covers are washable and thereby reuseable. Follow the instruction on the cushions for correct maintanance and washing of the cushions.

7.8 ADJUSTING THE VELCRO **BACK**



- Loosen the straps and place the back rest cushion so that the user gets room for the bottom and the integrated lumbar support in correct position.
- Tighten the straps so that they follow the curvature of the spine and gives a little extra support at the top of the sacrum.

7.9 FOOT SUPPORTS

Netti Mobile has the following foot support alternatives:

1. Standard is Fixed angle foot support, swingable and removable with footboard

height and angle adjustable. The foot plates are foldable and can be analed in fixed positions.



2. Angle adjustable foot support (manual or electric)

3. Dynamic angle adjustable foot support (Netti Dynamic Mobile)

Mounting of the standard foot support

 Mount the foot support by holding onto the bar bending down towards the foot plate. Hold it in an angle of app. 20° to the side frame. Put it into the black



plastic lock attached to the extracable adjustment bar. Swing it in and push down.





▲ Squeeze hazard.

When mounting the foot supports, avoid to place fingers between frame and lock mechanism.









Adjusting the length of the foot support

- Untighten the screw to make the adjustment tube move
- Adjust the foot support in required position and fix the screw properly.





Adjusting the angle of the footplate

- The foot plates can be adjusted in angle.
- Untighten the screw and adjust the foot plate to the required angle. Fix the screw properly



Locking and releasing the foot plates

- The foot plates come with a locking bolt
 - which makes the plates stronger
- To lock the foot plates pull the plastic lock on the right foot plate and place the lock over the bolt on the left foot plate.
- To release the foot plate pull the plastic lock and lift the right foot plate up.



Mhile making the adjustment there must be no load on the foot plates.



For outdoor use, there should be a clearance of 4-5 cm between the foot plate and the ground.

Removing the foot support:

- Pull the plastic lock on the foot plate rearwards, so that the pin is released. and the foot plate can be folded up.
- Raise the foot support a few degrees.
- · Release the foot support by pulling it slightly straight up.
- Swing the foot support outwards.
- Lift and remove the foot support. (ill. next page).





A Never stand on the foot supports!



A Never lift the wheelchair by the foot supports.

Angle adjustable foot support with mechanical or electric function.

The angle adjustable foot supports are swingable and removable. They come with height- and depth adjustable calf support. The foot plates are hinged, and can be angled in fixed positions. As a standard the foot plates come with a locking bolt which makes the plates stronger. The bolt can be removed by using a pair of circlip pliers, it is normally not mounted on electrical foot supports.

Mounting of the foot support:

- Raise the support a few degrees.
- Fold the foot plates up.
- Hold the foot support in the angle on top, and place it in the extension piece in an angle as shown in picture below.
- Swing the foot support inwards and push slightly downwards until it goes into locked position.

Electrical foot supports

are mounted the same way and the cable is plugged into the socket underneath the seat









A Potential squeeze hazard when adjusting foot support in angle.





Height of foot plate:

The foot plates are stepless height adjustable.

- Unfix the adjustment screw so that the adjustment bar moves freely.
- Adjust the foot plate to required height, then tighten the screw.



Angle of foot plate:

- Unfix the screw as shown below using an Allen key.
- · Adjust the foot plate to the required angle and tighten the screw.



While making the adjustment there must be no load on the foot plates.



For outdoor use, there should be a clearance of 4-5 cm between the foot plate and the ground.



A Never stand on the foot plates due to the risk of tipping forward.



When adjusting foot support in angle, be aware of squeeze hazard between moving parts.

Removing the foot support:

- Pull the plastic lock on the foot plate rearwards, so that the pin is released. and the foot plate can be folded up.
- Raise the foot support a few degrees.
- Release the foot support by pulling it slightly straight up.
- Swing the foot support outwards.
- Lift and remove the foot support.



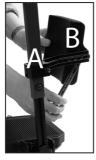
Adjusting the calf support

The calf support is height and depth adjustable. To adjust height unfix the nut on the outside of the calf support bracket, find the required height and fix the nut again (A). See next page.



10 mm open-end spanner





To adjust in depth, the calf pad is removed from the bracket by using an open-end spanner between the pad and the bracket. Find the required position and refix it (B).



* 13 mm open-end spanner



A Never stand on the foot supports!



Never lift the wheelchair by the foot supports.

If a Netti Mobile is to be fitted with either a footplate or a footbox: Please note that if the load on one side of the foot box or foot plate is significantly higher on one side than the other you might notice the foot box or foot plate starting to tilt with time. If this happens you should level the foot plate or foot box by raising or lowering the foot plate or foot box to either a fully raised or fully extended position.

If you find you are having to do this too often, please contact your Netti Mobile provider or Netti customer services for further advice".

7.10 Arm support

- The arm support is upholstered
- The arm support swings backwards.





• Press the red handle to release the arm support for to swing it backwards.



Swing the arm support down until it clicks into position.

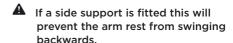


Adjusting the height of the arm support

- Untighten the screw on the arm support using a 4 mm Allen key.
- · Raise or lower stem
- · Tighten the screw



Be aware of the arm support lock (A) when locking arm support.



Be aware of potential squeeze hazard between arm support and top frame tube when locking arm support.



7.11 CONTROL UNIT POSITION

The control unit can easily be moved to required position. To adjust it, loosen the screws and slide it to an ergonomically correct controlling position. The control unit can also be moved to opposite side for left handed persons, but that needs to be done at your local dealer.







Swing away remote - never bend the bus cable tighter than 50mm radius.

Manual adjusted seat tilt with gas cylinder. The seat angle is regulated using the release

handle mounted on the push bar.



* For motorised tilt see chapter 8.1.6.

7.13 BACKREST ANGLE/RECLINE

The back rest angle is regulated using the release handle mounted under arm support (left or right).



For electrical recline see chapter 8.1.6.

 Make sure that ant tips are activated when using tilt and recline functions.

7.12 SEAT ANGLE/TILT

Fixed positions.

The seat angle is regulated using the manual spring mounted

below the seat at the rear.

The seat unit can be tilted in 3 steps -4°, -8°, -12°.

7.14 PARK BRAKE RELEASE **HANDLE**

Netti Mobile is equipped with a park brake release handle. This disengages the park brakes enabling you to push the chair manually. We recommend turning the control system off, before attempting to move the chair.



 For normal driving, pull the handle towards the back of the chair.



move the • To move the chair manually, handle towards the front of the chair.

A If the park brake is disengaged the chair may move without warning. As soon as you have finished moving the chair manually, you must move the handle back to the normal position.

7.15 STORAGE & TRANSPORT

- 1. Fold the backrest (Chapter 7.2)
- 2. Remove the foot supports (Chapter 7.9)
- 3. Remove the head support (Chapter 6.2)

A For long time storage, remove or disconnect the batteries.

TRANSPORT IN CAR:

Netti Mobile can be used as a seat in a motor vehicle.



Netti Mobile has been crash tested and certified to ISO 7176-19:2008. Max user weight 136kg

Netti Mobile should be secured using a Tie Down Restraint system, conforming to ISO 10542 or SAE J2249 with nonadjustable front straps and adjustable rear straps, which typically use Karabiner clips/S hooks and tongue and buckle fittings. These restraints generally comprise of 4 individual straps that are attached to each corner of the wheelchair marked by the following hook-sign:









Rear fixing point for transport

Front fixing point for transport

Remove and secure all components that may become detached in an accident.

A Secure the wheelchair occupant with the car safety restraints. Make sure the safety belt lies close to the occupants body and not accross armrests etc. Wheelchair harnesses are not safety belts.

Transportation on aircraft.

Specific regulations apply and will vary from airline to airline.

When Alu Rehab supplies batteries we fit AGM non spillable batteries from MK Battery International - part number M50-12SL DM.

The following page documents the tests that have been done as required by IATA.





July 2, 2010

Wheelchair Battery Transportation Policy

MK Battery International has all GEL and AGM VRLA products tested to the IATA/DOT transportation test procedures for non-spillable batteries. An independent laboratory certifies all testing.

When an MK Battery is labeled with the wording "ICAO, IMDG, IATA, and DOT Air Transport Approved", this means the product is classified as "non-dangerous" and is not restricted for air transport and is <u>exempt</u> from the hazardous materials regulations.

The three tests required for the above classification are:

- 1. Pressure Differential Test
- 2. Vibration Test
- 3. A67 Special Provision crack case test per IATA air transportation

Passing these tests along with the following additional packaging requirements exclude the batteries from any hazardous material regulations:

- 1. Battery must be protected against short circuits
- 2. Battery must be labeled as "Non-Spillable" or "Non-Spillable Battery"
- 3. Visual inspection shows no obvious defect or damage

If the battery is mounted to a wheelchair, it must be disconnected and the terminals must be insulated to prevent short circuits. The battery must also be securely attached to the wheelchair or mobility aid or must be removed and placed in a strong rigid packaging with the packaging marked with "Non-Spillable" or "Non-Spillable Battery".

<u>Note</u>: Every airline has their own policy/requirements – please visit the website of the airline you are traveling with for more information.

Unit 2, Henson Way, Telford Way Industrial Estate, Kettering, Northants, England, NN16 8PX +44 (0) 1536 484009

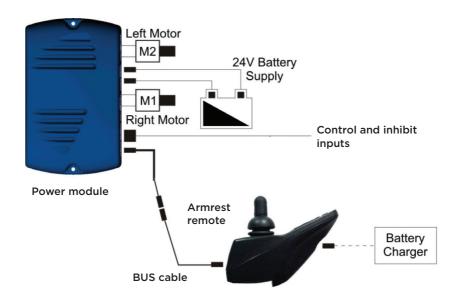


8. NETTI MOBILE CONTROL SYSTEMS

- Netti Mobile features provides unprecedented chair performance, control & safety.
- No heavy power cables running from the armrest to the motors and batteries.
- No hot surfaces for the user to touch.
- Superior EMC performance due to minimized power wiring.
- As standard the Netti Mobil™ M, E1 and E2 are equipped with Dynamic Shark control System.
- The DX2-system is standard when 4 or more electrical actuators are used.
- A Programming the controller of the wheelchair should only be done by authorised personnel trained by Alu Rehab. Incorrect controller settings could cause driving outside the safe limits and could result in damage or injury.

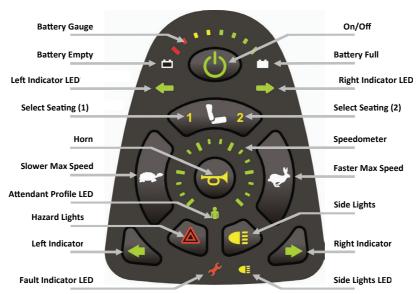
8.1 TYPICAL CONTROL SYSTEM LAYOUT

As standard Netti Mobile it is equipped with the following arm rest joystick remotes: Netti Mobile M:DK-REMD31, Netti Mobile E1 and E2:DK-REMD21, Netti Mobile E4: DX2-REM420

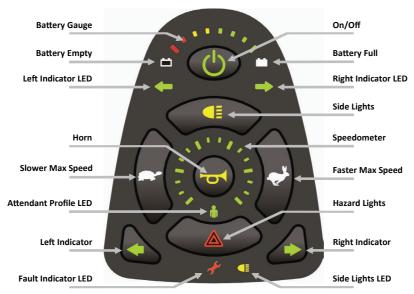




Shark DK-REMD21 for Netti Mobile E1 and E2



Shark DK-REMD31 for Netti Mobile M





8.1.1 TURNING THE SHARK SYSTEM ON AND OFF

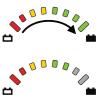
To turn on the Shark system



Press the on/off button.

All Battery Gauge LEDs turn on one by one.

After the Shark system has started up successfully, the Battery Gauge shows the charge of the battery.



To turn off the Shark system



Press the on/off button.

The Shark system turns off.

If the on/off button is pressed while the chair is driving, the chair will perform an emergency stop before it turns off.



The Shark system will start up in the Drive Program that has been set with the Active Drive Program parameter. The Shark system has up to 4 Drive Programs that can be selected only with the Wizard or the HHP. The user cannot select a different Drive Program. Use the different programs for different users, or for different types of chairs.

8.1.2 OUT OF NEUTRAL AT POWER UP (OONAPU)



If the Shark system is turned on while the joystick is not in the centre position, an "Out Of Neutral At Power Up" fault occurs.





During an OONAPU fault the speedometer LEDs flash continuously and the chair will not drive. As soon as the joystick is released back to the centre, the fault goes away and the chair will drive normally.



OONAPU is a feature that prevents sudden and unexpected powerchair movements if the joystick is out of the centre when the controller is turned on.

A If an OONAPU error does not go away after the joystick is released, the Shark system may be damaged. Do not use the power chair and consult a service agent.







To lock the Shark system

> 4 s

Press the on/off button for 4 seconds when the Shark system is turned on.



The Shark system turns off immediately when the on/off button is pushed.

After 4 seconds all LEDs of the battery gauge will flash twice and the horn will give two short beeps, to indicate that the Shark system is now locked.



To unlock the Shark system



Press the on/off button.

The Shark system will turn on, and the LEDs of the battery gauge will slowly flash from right to left to indicate that the Shark system is locked.





Press the horn button twice within 10 seconds.

The Shark system will turn on normally.



If the horn button is not pressed within 10 seconds, the Shark system will turn off again.

> 10 s





The Shark system will go to sleep after 10 minutes without joystick movement.

When the Shark system sleeps, it is partially turned off to reduce energy consumption and to make sure that the powerchair does not move when the user accidentally moves the joystick.

To wake up the Shark system



Press the on/off button on the Shark system.

The Shark system turns on.



When a programmer is connected to the Shark system, it will not go to sleep. If the Shark system goes to sleep during charging, the charging of the battery will continue.



8.1.4 DRIVING

THE JOYSTICK



Move the joystick.

Netti Mobile starts to drive in the direction of the joystick movement.

The amount of joystick movement determines the speed of the powerchair. If the joystick is moved further from the centre, the powerchair will drive faster.







ADJUST THE MAXIMUM DRIVE SPEED

Adjust the maximum speed of the chair to your preference or environment. The currently selected top speed is shown on the Speedometer.



SI OWFR



FASTER

Press and release the 'slower' button to decrease the maximum speed of the chair by 20 %. Press and hold the 'slower' button to decrease the

maximum speed of the chair in fine steps*.

Press and release the 'faster' button to increase the maximum speed of the chair by 20 %. Press and hold the 'faster' button to increase the maximum speed of the chair in fine steps*.



*If adjusting the speed in fine steps does not work, simultaneously hold down the 'slower' and 'faster' buttons for 2 seconds to activate fine speed control.

The Shark system will beep when the mode has been changed.

Using fine steps can be particularly useful for matching the chair speed to the walking speed of an accompanying pedestrian.



THE SPEEDOMETER



Max Speed Only The speedometer shows the maximum speed that has been set with the speed buttons.



When the joystick is deflected and the speed of the chair increases, the LEDs will turn on one by one until the maximum speed (that has been set with the speed buttons) is reached.

If the bottom-left GREEN LED is flashing, the Shark system is in speed limit mode. This happens when the chair is in an unstable position and driving too fast. It may be dangerous, for example when the seat is raised or tilted. Please contact your dealer for further details on how to limit the speed when the chair is not stable.

THE HORN



Press the horn button.



The horn will sound as long as the button is pressed.



8.1.5 THE BATTERY GAUGE

BATTERY CHARGE INDICATION

The Battery Gauge indicates how much battery charge remains.

Battery gauge	Meaning
	Flash Code 2 fault: battery too full. Slow down if you are driving down a slope. Turn on the lights, if fitted.
	Battery full.
n 0000	Battery half full. Start the return journey.
	Battery low. Recharge soon.
	Battery almost empty. Recharge now.
	Flash Code 2 fault: battery completely empty. Battery damage will occur if you keep on driving. Recharge immediately.

The remaining battery capacity does not translate directly to remaining physical range of the power chair. The remaining physical range depends on the ambient temperature, the capacity and age and state of the battery, the driving style of the user and the terrain that the power chair is being used in. Most of these factors can vary between, or within, one journey.



The batteries are maintenance free.



If you drive your Netti Mobile until the battery is completely empty or leave the battery with a low charge for a long time, you will damage the battery. This damage is permanent.

The battery will never return to its original capacity and your chair will have a shorter range.



OTHER INDICATIONS

Apart from the remaining battery charge, the Battery Gauge also indicates following conditions.

Battery gauge	Meaning
100米000	Drive Inhibit, the chair will not drive. For example, when a charger is connected to the MOBILE. The LEDs turn on one by one from left to right.
O O O O O O O O O O O O O O O O O O O	A fault has occurred. All LEDs turn on one by one from left to right to indicate that the chair will not drive. The Fault Indicator LED will show the corresponding Flash Code.

8.1.6 THE SEATING FUNCTIONS (E1 & E2 ONLY)



In the Seating Mode the joystick does not drive the chair, it selects and operates the seating functions instead.

Activate the Seating Mode



Press the Seat Function button to activate Seating Mode.

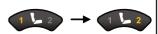


The Seating Mode starts with Seat Function 1 selected. The '1' on the Seat Function button becomes red.

Select the Seat Function



Press the Seat Function button or move the joystick right to select Seat Function 2.





Move the joystick left to select Seat Function 1.





Move the joystick forward to operate the Seat Function in one direction.

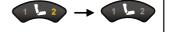


Move the joystick in reverse to operate the Seat Function in the opposite direction.

Return to the Driving Mode



Press the Seat Function button until both '1' and '2' are dark to return to Driving Mode.





8.1.7 THE LIGHTING SYSTEM

To operate the lights

	Press the side light button to switch the side/positioning lights on or off.
REMD21 REMD 31	The side light LED is on when the sidelights are switched on.
	Press the indicator buttons to switch the indicators on or off.
	The indicator LEDs flash at the same rate as the indicator lights. The indicators will switch off automatically.
	Press the hazard light button to switch the hazard lights on or off.
REMD21	Both indicator LEDs flash together at the same rate as the indicator lights.
REMD 31	



8.1.8 ATTENDANT MODE



Attendant Mode is selected when the User/Attendant switch on the DK-ACU Attendant Control module is set to 'Attendant'.

In Attendant Mode, the Attendant Control LED is on.

In Attendant Mode, the joystick of the REMD does not work. Only the joystick on the DK ACU is operational.



Attendant Control LED is on



8.2 DYNAMIC DX2 CONTROL SYSTEM WITH DX2 REM42 FOR NETTI MOBILE E4





8.2.0 TURNING THE DX2 CONTROL SYSTEM ON AND OFF

To turn on the DX System



Press the on/off button.

• The DX System starts up.



After the system has started up successfully, the Battery Gauge shows the charge of the battery and the Drive Profile LEDs show the currently selected Drive Profile.

To turn off the DX System



Press the on/off button.

• The DX System turns off.

If the on/off button is pressed while the chair is driving, the chair will perform an emergency stop before it turns off.



The System starts up in the drive profile that was used when it was turned off.

8.2.1 OUT OF NEUTRAL AT POWER UP (OONAPU)



If the REM42x is turned on while the joystick is not in the centre position, an "Out Of Neutral At Power Up" fault occurs.





During an OONAPU fault the five Drive Profile LEDs flash continuously and the chair will not drive.



As soon as the joystick is released back to the centre, the fault goes away and the chair will drive normally. If the joystick is not released back to the centre within 4 seconds, the OONAPU fault becomes a Module Fault (Flash Code 1)*. To clear this fault, turn the DX System off and then turn it back on.

OONAPU is a feature that prevents sudden and unexpected powerchair movements if the joystick is out of the centre when the controller is turned on.



Warning:

If an OONAPU error does not go away after the joystick is released, the REM42x may be damaged. Do not use the powerchair and contact a service agent.



8.2.2 SYSTEM ELECTRONIC LOCK



To lock the DX System



Press the on/off button for 4 seconds when the DX System is turned on.

- The DX System turns off immediately when the on/off button is pushed.
- After 4 seconds all Drive Profile LEDs and the Lock LED turn on for 1 second to indicate that the DX System is now locked.



To unlock the DX System



Press the on/off button.

 The Lock LED will flash for 10 seconds to indicate that the DX System is locked.





Press the horn button twice within 10 seconds.

< 10 s → on

If the horn button is not pressed within 10 seconds, the DX System will turn off again.

• The DX System will turn on normally.

> 10 s → off

8.2.3 SLEEP MODE



To save energy, the control system will go to sleep if it has not been used for 10 minutes. This also makes sure the power wheelchair does not move unexpectedly if the joystick is touched accedentally.

To wake up the DX System



Press any button.

The DX2 System turns on.



8.2.4 DRIVING 8.2.4.1 THE JOYSTICK

Move the joystick.



- The powerchair starts to drive in the direction of the joystick movement.
- The amount of joystick movement determines the speed of the powerchair. If the joystick is moved further from the centre, the powerchair will drive faster.



8.2.4.2 THE DRIVE PROFILE



specific drive setting (slow or fast, indoors or outdoors) that your therapist or dealer can adjust to suit your personal needs and preference. You can select the active Drive Profile with the Drive Profile Selection button.

To select the Drive Profile



Select a Drive Profile that matches your preference and environment. The currently selected Drive Profile is shown on the Drive Profile LEDs.

LEDs	Meaning	
	Drive Profile 0*. The powerchair does not drive	This profile should be used if the chair is not intended t be moved for a while. It is also required if the joystick i to be used to control an accessory, such as a PC.
00000	Drive Profile 1.	
	Drive Profile 2.	
	Drive Profile 3.	
0000	Drive Profile 4.	
00000	Drive Profile 5.	
a	Attendant Drive Profile (Drive P	rofile 6). See also <u>Attendant Mode</u> (8.2.10)

8.2.5 THE HORN



Press the horn button.



• The horn will sound as long as the button is pressed.



8.2.6 THE SEATING FUNCTIONS



In the Seating Mode the joystick does not drive the chair, it selects and operates the seating functions instead.

Activate the Seating Mode



Press the '+' or the '-' on the Actuator Selection button to activate Seating Mode.

• The Seating Mode starts with the seating function that was last selected.

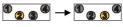
The Actuator LEDs indicate the currently selected seating function.



Select the seating function



Press '+' or move the joystick right to select the next seating function.





Press '-' or move the joystick left to select the previous seating function.



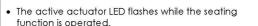
Operate the seating function



Move the joystick forward to operate the seating function in one direction.



Move the joystick in reverse to operate the seating function in the opposite direction.





If you move the joystick further forward, the seating function moves faster*.

Return to the Driving Mode



Press the '+' or the '-' on the Drive Profile Selection button to return to the Driving Mode.

• The Driving Mode returns to the Drive Profile that was selected before the Seating Mode was activated.

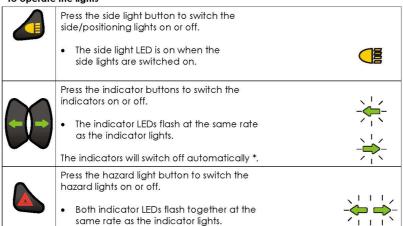


8.2.6.1 AVAILABLE SEATING FUNCTIONS

Actuator Function LEDs	Meaning
000	Seating Function 1 selected
0 8 8	Seating Function 2 selected
0 8 3 0	Seating Function 3 selected
0 2 3 0	Seating Function 3 and 4 selected*
0 0 0	Seating Function 4 selected

8.2.7 THE LIGHTS

To operate the lights





8.2.8 THE BATTERY GAUGE 8.2.8.1 BATTERY CHARGE INDICATION

The Battery Gauge indicates how much battery charge remains.

Battery Gauge	Meaning
日本を正正正正正正	Warning: battery too full. Slow down if you are driving down a slope.
	Battery full.
	Battery half full. Start the return journey.
	Battery low. Recharge soon.
□##sssssss	Battery almost empty. Recharge now.
	Warning: battery empty. Recharge immediately.

The remaining battery capacity does not translate directly to remaining physical range of the powerchair. The remaining physical range depends on the ambient temperature, the capacity and age and state of the battery, the driving style of the operator and the terrain that the powerchair is being used in. Most of these factors can vary between, or within, one journey.



Note:

If you drive your powerchair until the battery is completely empty or leave the battery with a low charge for a long time, you will damage the battery. This damage is permanent. The battery will never return to its original capacity and your chair will have a shorter range.

8.2.8.2 OTHER INDICATIONS

Apart from the remaining battery charge, the Battery Gauge also indicates the following conditions.

Battery Gauge	Meaning
	Drive Inhibit, the chair will not drive. The LEDs turn on one by one from left to right.
+	A charger is connected to the REM42x. The LEDs turn on one by one from left to right, followed by one second where the current battery capacity is displayed. This repeats while the charger is connected.
+	A fault has occurred. All LEDs turn on one by one from left to right to indicate that the chair will not drive. The Fault Indicator LED will show the corresponding Flash Code (see DSM section 9.6).



8.2.9 THE FAULT INDICATOR LED



The Fault Indicator LED turns on when the chair needs maintenance or when

8.2.9.1 'SERVICE DUE' INDICATION

If the powerchair has exceeded the drive time of the maintenance schedule, the Fault Indicator LED turns on continuously for 15 seconds every time the system is turned on.



Please take the chair to a qualified service technician for maintenance.

The service technician can reset the Service Due time with the Service Scheduler.

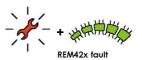
8.2.9.2 FAULT INDICATION

If a system fault condition exists, the Fault Indicator LED shows a Flash Code. A flash code is a specific number of short flashes, followed by a pause.



The Fault Indicator LED flashes the same number of times as the flash code number. For a description of the flash codes, see Flash Codes section 8.3.5

If the fault is located within the REM42x itself (and not in another DX Module), all five Drive Profile LEDs flash at the same time as the Fault Indicator LED.



If the fault is a serious fault that prevents the chair from driving, additionally the Battery Gauge shows a 'Drive inhibit' indication section 8.2.8





8.2.10 ATTENDANT MODE



Attendant Mode is selected when the User/Attendant switch on the DX-ACU Attendant Control module is set to 'Attendant'. In Attendant Mode, the Attendant Profile LED is on.

In Attendant Mode, the joystick of the REM42x does not work. Only the joystick on the DX-ACU is operational.

All the buttons of the REM42x still work the same as in normal mode. It is however not possible to select a different Drive Profile, because the Attendant Drive Profile (Drive Profile 6) will stay active until the attendant releases control back to the user.

If the Drive Profile selection button on the REM42x is pushed while a seating function is selected, the REM42x will return to Drive Mode, it will not change the Drive Profile.

See the DX2-ACU installation manual

QUICK START GUIDE

For detailed information, please consult the installation manual for the DX2-ACU, which can be downloaded from www.dynamiccontrols.com



DX2 versions of Netti Mobile can be ordered with the Dynamic DX2-ACU mounted at the back with an adjustable bracket and hand support.

When the attendant control is active the attendant can control the speed and direction of the Netti Mobile using the joystick. The lights and actuators can still be controlled from the arm rest remote.



To turn the control system on, press the power button.



When the Netti Mobile ready to be driven, the power button is lit green continuously: and the mode button is lit yellow continuously:





To toggle between driving by the user and driving by the attendant, press the mode button and hold it for at least 0.5s. The green attendant indicator lights up when in attendant mode.



To change the speed, press the mode button for **less that 0.5s**. The maximum speed with the joystick fully forward is shown by the speed indicator LEDs.



Emergency stop: press the power button, the Netti Mobile will come to a controlled and rapid halt.



The battery indicator provides the following information:

Indicator	Battery state of charge	Recommended actions
0	Flashing green - battery over- charged	Stop charging the battery
0	Green - battery full.	No action required.
0	Amber - battery half full.	Consider starting return journey.
0	Red - battery low.	Consider recharging battery soon.
*	Flashing red - battery empty.	Recharge the battery now.

Other information

FAULT	The on/off button flashes red	
Batteries being charged	The battery indicator flashes on and off every 0.4s It flashes green when the batteries are near full	
Driving inhibited or control system locked The mode button flashes on and off every 0.4s		
Joystick out of neutral when control system switched on	The speed indicator LEDs flash on and off every 0.5s. To clear the fault, let go of the joystick within 5s. Otherwise turn the control system off then turn it on again.	



8.3 TROUBLE-SHOOTING / WHEN THINGS GO WRONG

Netti Mobile M1, Netti Mobile E1, Netti Mobile E2, Netti Mobile E4

You are probably reading this page because there is something wrong with your Netti Mobile. There are many things that might cause a Netti Mobile not to behave as you would expect. Not all of them are to do with the control system. Sometimes a Netti Mobile might not behave as you would expect even if there is nothing wrong at all.

Drive Inhibit

Generally, if you experience a problem with your Netti Mobile, please make a note of the following information:

- What the problem is.
- How long you used your Netti Mobile before the problem appeared
- Under what circumstances it appeared, (while driving, after having been stored for a long time, after it had a collision etc)
 - This information will be helpful if you don't succeed in putting the problem right yourself and if you need to contact somebody for help.

Step by step procedure:

8.3.1 GENERAL CHECK

The majority of problems experienced with a power chair are due to faults that have nothing to do with the control system. That's why we start with the simpler and most common problems on a chair.

Have a look around the Netti Mobile and check as best you can that:

- All the cables and connectors are plugged in securely
- All the cables and connectors are undamaged with no signs of damage, cracking or scorching. (If you are able to do so, slide out the battery case - see page 60 and check inside and open the electronics box - see page 12).
- The electronic modules are undamaged, with no signs of cracking
- The motors are undamaged with no signs of scorching or leaking
- The frame of chair is undamaged with no signs of cracking
- If your Netti Mobile has pneumatic tyres, check they are correctly inflated with no significant damage
- The wheels have no significant damage and they are attached solidly to the chair



Warning: Connector terminals can be live even when the control system is switched off. Disconnect the batteries before attempting to clean any terminals or connectors. The parts listed above are safety critical. Even it turns out that the problem you noticed has nothing to do with these parts, if you notice any damage to them, you should contact us or your dealer. You should not drive the Netti Mobile until they have been repaired or replaced.

Sometimes a fault on a Netti Mobile can be caused by a connector having become unplugged or by corrosion in the connector. If that has happened, all you might need to do is to unplug a connector, clean the contacts with compressed air followed by a dry clean cloth if necessary and plug the connector in again.



8.3.2 BATTERY CHARGING

Connect the battery charger and leave it to charge the batteries until the charger's green LED has turned on. If the green LED does not turn on within 12 hours, there is a problem with either the charger, the batteries or the control system. Contact your dealer or My-Netti.com for assistance. See page 62 for guidance on charging the batteries.

8.3.3 TURNING THE SYSTEM ON

Try turning the control system on There are 4 fault possibilities listed below:

What happens	Try this	Further information
The control system turns on for a few seconds then turns itself off again	While the control system is on, try pressing the horn twice	The control system was probably locked. See page 31 for more information.
The control system turns on but the chair will not drive	Check the position of the park brake release lever. See page 25. If it is not in the vertical position move it to the vertical position, turn the control system off then turn it on again. If that doesn't work, and the control system displays a flash code, go to step 8.3.5	You might have accidentally released the park brakes. The control system will not allow you to drive when it's in this condition.
The control system will not turn on at all	Contact your Dealer or Netti Service for assistance	If you have already checked that the cables and connectors are in good condition and all the connectors are properly inserted, and you have charged the batteries correctly, there must be serious problem somewhere on your Netti Mobile
The control system turns on the chair drives, but the problem has not gone away. The control system does not display a flash code.	Go to step 8.3.5below to see what kinds of problems you might expect to see.	There are a couple of more things we can check but you probably need expert help.



8.3.4 DRIVING CHARACTERISTICS

What happens	Try this	Further information
Netti Mobile judders as it is driving along.	Get expert help	
Netti Mobile veers left or right	If the tyres are correctly inflated and the wheels are OK, you will require expert help	The motors might be damaged or there could be a problem with the control system. The wheelchair frame might have become dissorted.
One or both motors starts making loud scraping, clicking or scraping noises	Get expert help	
Netti Mobile does not drive as far as it used to on a fully charged battery	Get expert help	The motors might have been overloaded. The batteries might have been damaged.
The batteries seem to charge up very quickly), but they don't hold their charge.	Get expert help	The motors might have been overloaded. The batteries might have been damaged.
Netti MObile can no longer climb obstacles	Get expert help	The motors might have been overloaded, the batteries might have been damaged

8.3.5 FLASH CODES - THE CONTROL SYSTEM DISPLAYS A FLASH CODE

The control system on your Netti Mobile is designed to ensure safety first. That means it will prevent you from driving if it detects what appears to be a dangerous condition, it displays a flash code that can be used to find out what is wrong.

On standard M, E1, E2 or E4 Netti Mobiles you will see a flashing fault indicator LED, it's in the shape of a spanner.



The way a flash code is displayed is similar to Morse code. You will see a series of short flashes, there will be a long pause, then the series of short flashes will repeat. The flash code given by the number of short flashes.

If once you have tried the suggested action the flash code doesn't clear, contact your dealer.

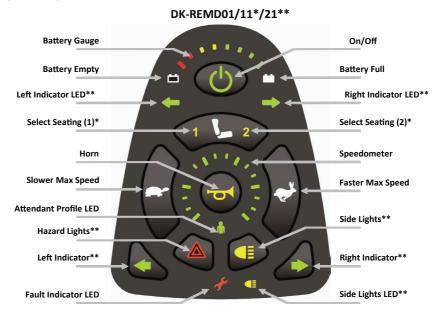
Sometimes a chair can have more than one fault. If this happens the control system will display the flash code that corresponds to the most dangerous condition. Once that fault has been cleared the system will then display the next flash code.

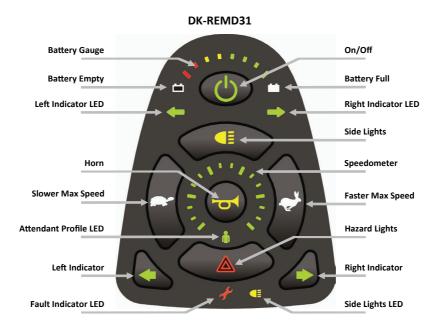


There are slight differences between the Shark and the DX2 flash codes.



YOU HAVE A SHARK CONTROL SYSTEM IF YOUR KEYPAD LOOKS LIKE ONE OF THESE:







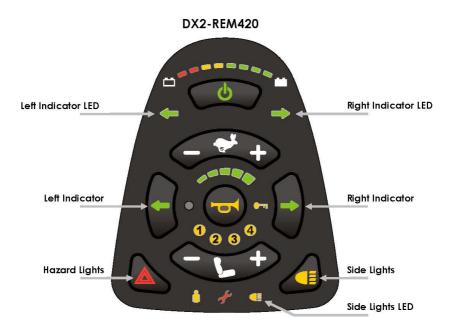
SHARK	CONTROL SYSTEM		
SHARK	CONTROL SYSTEM		
FLASH CODE	FAULT TYPE	TRY THIS	INFORMATION
1	Current limit time out or Joystick out of neutral at start-up	If you see this fault straight after you have turned the power on, let go of the joystick, turn the control system off then turn it on again. If you see this fault after you have been driving for some time, the motors might be in danger of overloading. Wait until the motors have cooled to ambient temperature before you attempt to drive again	For safety reasons the control system does not allow the chair to be driven if the joystick is not in the neutral position. Warning, if the system has stopped driving because of current limit time out, there is a grave danger of overloading the motors and damaging them permanently. Do not attempt to drive again until you are sure the motors have cooled down. This flash code might mean the motors have been damaged
2	Battery fault	Check the cables and connectors inside the battery box and between the battery box and the power module. See page 60 Charge the batteries. If this is not possible, you could try turning off the control system for a few minutes. This might allow the batteries to recover enough to allow to drive for a short distance. Replace the batteries	The control system has detected what appears to be a fault with the batteries. Bear in mind however that if there is a problem with cables and connectors between the batteries and the power module that could also appear to be a battery fault. This fault might also mean that the batteries have been discharged dangerously low. If you drive with the batteries in this condition you will risk damaging them permanently.
3	Fault with motor M2 (left side)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing.
4	Fault with motor M1 (right side)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing.



SHARK	CONTROL SYSTEM		
FLASH CODE	FAULT TYPE	TRY THIS	INFORMATION
5	Left park brake fault (M2)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing
6	Right park brake fault (M1)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing.
7	Shark Remote fault	Check the bus cable between the Shark remote and the power module. See page 58-59	This flash code might also indicate a problem with the bus connector or the cable. If there is a problem with remote, it will have to be replaced.
8	Shark power module fault	Check the bus cable between the Shark remote and the power module. See page 58-59	This flash code might also indicate a problem with the bus connector or the cable. If there is a problem with the power module, it will have to be replaced.
9	Communication fault between the Shark remote and the power module	Check the bus cable between the Shark remote and the power module. See page 58-59	This flash code might also indicate a problem with the bus connector or the cable. This fault sometimes means the Shark remote is faulty.
10	Other fault	Check all cables and connectors. Check the batteries are fully charged Turn the control system off, wait a few minutes then turn it on again.	This flash code is displayed when if the control system detects and abnormal condition on the system. It can also be caused by a low battery voltage.
11	Incompatible remote	A remote has been fitted that is incompatible with the power module.	This is unlikely to happen on a Netti Mobile

YOU HAVE A DX2 CONTROL SYSTEM IF YOUR KEYPAD LOOKS LIKE THIS:





*The light sensor dims the display when it is dark

DX2	CONTROL SYSTEM		
FLASH CODE	FAULT TYPE	TRY THIS	INFORMATION
1	Defective module	Make sure the batteries are fully charged then turn the controller off then on again.	
2	Accessory fault	Make sure the batteries are fully charged then turn the controller off then on again.	You would not expect to see this on Netti Mobile
3	Fault with motor M2 (left side)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing
4	Fault with motor M1 (right side)	Check the motor connector and the motor cable. Clean the motor. If this doesn't work contact your dealer.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing.



DX2	CONTROL SYSTEM		
FLASH CODE	FAULT TYPE	TRY THIS	INFORMATION
5	Left park brake fault (M2)	Check the motor connector and the motor cable. Clean the motor connector	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing
6	Right park brake fault (M1)	Check the motor connector and the motor cable. Clean the motor connector.	This flash code might also indicate a problem with the motor connector or the cable. If there is a problem with the motor it may need replacing.
7	Battery voltage too low	Turn the power off and charge the battery.	The control system has detected what appears to be a fault with the batteries. Bear in mind however that if there is a problem with cables and connectors between the batteries and the power module that could also appear to be a battery fault. This fault might also mean that the batteries have been discharged dangerously low. If you drive with the batteries in this condition you will risk damaging them permanently. The batteries may need to be replaced.
8	Battery voltage too high	Check whether the battery gauge is showing full. Turn the lights on to discharge the batteries then switch off the power and check whether the fault has cleared. If driving downhill, drive more slowly with the lights on.	This might mean the battery charger is defective You might see this flash code while driving down hill at high speed. If the battery gauge is not showing full, there is probably a fault with one of the cables or connectors between the power module and the batteries.



DX2	CONTROL SYSTEM		
FLASH CODE	FAULT TYPE	TRY THIS	INFORMATION
9	Communication fault between the modules that make up the control system	Check the bus cables. If this doesn't work contact your dealer	This flash code might also indicate a problem with the bus connector or the cable. This fault sometimes means the one of the modules is faulty.
10	Communication fault between the modules that make up the control system	Check whether the Hazard lights are on, if they are on, turn them off. Now turn the chair off then on again. Check the bus cables.	This flash code might also indicate a problem with the bus connector or the cable. This fault sometimes means the one of the modules is faulty
11	Current limit time out	If you see this fault after you have been driving for some time, the motors might be in danger of overloading. The motors will probably be hot to touch. If so, it's very important to wait until the motors have cooled to ambient temperature before you attempt to drive again	Warning, if the system has stopped driving because of current limit time out, there is a grave danger of overloading the motors and damaging them permanently. Do not attempt to drive again until you are sure the motors have cooled down. The motors might be faulty.
12	Module mismatch	Turn the power off then charge the batteries until they are full	This might mean there is a problem with the programming.

- Please contact your dealer for information about authorized service facilities that can give support if you are unable to solve the problem.
- ① If you need spare parts, please contact your dealer.
- Before making any changes that would change the specification of the Netti Mobile from the original, contact your dealer.
- If the DX2 remote or power supply is replaced, the new DX2 unit needs to be reporgrammed with the Netti driving program.



9. DRIVING **TECHNIQUES**

9.1 DRIVING YOUR CHAIR

Before sitting on your chair, verify:

- · The chair is switched off.
- · Swing away the armrests and foot supports if appropriate.
- The battery charger is disconnected from both the chair and the wall outlet.

Once on your chair, make sure that you are comfortably positioned and that the foot supports and armrests have been adjusted to suit your needs. The position of the joystick should be within reach to eliminate hand and arm exhaustion when driving.

9.2 TO BEGIN

- Set the speed control of the chair to SLOW.
- Press the "on / off" switch.
- Allow two seconds to elapse before engaging the joystick. This is a safety feature
 - to prevent sudden starts.
- Push the joystick gently forward applying a steady even pressure. The further you push the joystick, the faster the chair will go. The chair will stop when you return the joystick to the neutral or vertical position.
- Directional control is achieved by gently swiveling the joystick in the direction you wish to go. Pull back to reverse.
- The controller can be programmed to give you the best feel for all driving situations and only needs a light touch to respond.

Emergency stop

To stop the chair in an emergency press the on/off switch. The control system will turn off and the chair will come to a controlled stop.

9.3 SAFF DRIVING

- Never drive at a speed greater than your ability to safely control your chair. Remember that wet or loose surfaces need greater care and control.
- Always turn the chair OFF when transferring on or off or while the chair is stationary for long periods.
- Avoid jerky stop / start motions as this will result in excessive current draw from the batteries, increased tire wear and the rapid wearing of the gearbox and motors.
- Keep your chair clean from sand and salt water.

9.4 INDOOR/OUTDOOR DRIVING

When driving indoors keep the speed to a minimum to avoid the risk of collision. For outdoor driving be cautious of wet surfaces, loose sand, large curbs and potholes. A little practice will ensure you understand the capabilities of your chair and enable you to overcome the most common obstacles encountered when drivina.

9.5 CHAIR RESPONSE

Should the chairs response not be to your satisfaction, ask your dealer to adjust the program to a level at which you are comfortable. This program can be altered at anytime to either increase the response rates in line with your improved motor skills or to lower the rates to a level at which you feel comfortable and in control.



9.6 STEEP SLOPES

When the power wheelchair is to be operated up and down steep slopes, it is recommended that the user:

- Visually checks to see if the angle of the slope is less than 6 degrees.
- Checks that the slope surface is roughened to prevent slippage.

If the slope meets these conditions, it is recommended that the user approach the slope at a slow speed, keeping the chair under control at all times. Leaning the trunk forward by climbing up and leaning backward by descending helps to keep stability. It may be preferable to track across the slope so as to decrease the steepness of the descent providing that the surface of the slope is wide enough and suitable to prevent slippage. Do not turn on steep slopes.

A If the slope does not meet these conditions, it is recommended that the user does not climb or descend the slope.

9.7 TRANSFER

Techniques for transfering to/from the wheel-chair should be practiced well with the persons involved. Here, we give some important advices for preparation of the chair.

Please note: the following principles are illustrated with pictures with manual wheelchair.

With or without companion - sideways. Before transfer:

- The wheelchair should be placed as close as possible to the destination of the transfer.
- Drive the wheelchair backwards 5-10 cm in order to make the front castors turn forward.
- Remove foot support and revolve arm support on the side of the transfer.
- Turn the power off before transfering.

With or without companion - forwards. Before transfer:

- The wheelchair should be placed as close as possible to the destination of the transfer.
- Pull the wheelchair backwards 5-10cm in order to make the front castors turn forwards.
- Tilt the chair forward.
- Turn the power off before transfering.



Using a patient hoist lift:

Before transfer to chair:

- Tilt the chair back
- Remove the head support
- Remove the foot supports
- · Open the back rest angle slightly
- Turn the power off before transfering.
- Replace the components when the transfer is finished.



A Never stand on the foot plates without making sure that they are touching the ground due to the risk of tipping forwards.



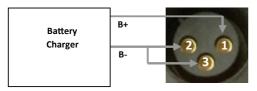
10. BATTERY CHARGING





10.1 HOW TO CHARGE

The 3-pin XLR battery charging socket is located on the master controller - see images.



Pin	Signal
1	Battery Positive (B+)
2	Battery Negative (B-)
3	Drive Inhibit

This charger has a mains plug to insert into a mains socket. It has a round 3 pin XLR plug to insert into the 3 pin XLR charging socket on the master controller. See images.

Alu Rehab supplies a charger together with the Netti Mobile power chair.

Batteries must be charged before using the power chair for the first time and are recommended to be charged up to 10 - 14 hours after each day's use. Battery performance improves after it has been discharged and re-charged 15-20 times. You may find therefore that at first, the range of your Netti Mobile may increase with the use.

A While the charger is connected, driving is inhibited. This is indicated by the battery gauge LEDs turning on one by one from red through amber to green.

During charging the charger LED is lit red. Only when it changes to green is charging completed. Don't rely on the batter gauge of the controller to decide when the batteries are fully charged.

A

- Batteries should be charged every night in a well ventilated room.
- DO NOT place the power wheelchair near radiators or open fireplaces while charging.
- DO NOT smoke or permit open flames in the immediate vicinity.
- Turn the chair controller power off before charging.

Do not attempt to disconnect the batteries or remove the fuse while the batteries are being charged.

See the manual of the battery charger for more information.

To remove the charger cable, pull on the plug. Do not pull on the cable. Remove the plug in the direction of the cable, do not try to turn the plug.

A load during charging (for example, the use of seating actuator) causes a temporary voltage drop in the battery. This can cause the battery charger to detect that the battery is still empty when in fact it has been fully charged. This can result in overcharging and possible battery damage.

If the wheelchair is turned off or goes into sleep mode while charging, charging will continue.



The AGM batteries we use do not suffer from the capacity robbing effect known as "memory".

Charging the batteries:

- Position Netti Mobile power chair next to a standard wall outlet.
- Connect the battery charger to a standard wall power outlet.
- Switch the power off.

At the end of the charging cycle:

- A green light will appear on the charger.
 This indicates that the batteries are fully charged and ready for use.
- If fitted, the battery charge level indicator on the controller should also show a full charge when switched on.

When your batteries are fully charged you should have sufficient power to give you all the mobility required in a day.

10.2 WHEN TO CHARGE

Charge every night

The intelligent charger we supply should fully charge your batteries over-night typically within 10-14 hours.

There is no danger of overcharging your batteries. The intelligent charger we supply detects when the batteries are fully charged and stops charging automatically.

10.3 LOOKING AFTER YOUR BATTERIES

- Always use the charger we supply with the Netti Mobile.
- Never use an automotive or wet type battery charger, it will damage your batteries.
- The deeper you discharge the batter ies the shorter the life.
- Avoid draining your batteries com pletely.
- Don't leave your batteries in a low state of charge for a long time.
- If a battery has been discharged, charge it again as soon as possible.
- Always charge your batteries fully af ter driving.

if you are not planning to use your Netti Mobile for a long period of time, the batteries should be disconnected before it is put into storage. Even when the control system is turned off it uses a small stand by current. Over a long period, even this current can be enough to discharge the batteries below their safe limit causing permanent damage.

We recommend you leave control system turned off while charging.



10.4 REPLACING BATTERIES

We recommend you have your batteries replaced by a qualified dealer or technician. They have the necessary tools and training to do the job safely and correctly.

A Batteries can be dangerous. Dropping a tool or touching a watch or bracelet across the terminals can result in an electric shock. sparks, smoke, fire or even an explosion. Always wear electrically insulating gloves when working with wheelchair batteries.

A Batteries and their terminals contain lead, and lead compounds that can be dangerous to health. Wash your hands after handling.

Batteries produce explosive gases, keep sparks, flames an cigarettes away from batteries at all times. Always wear safety glasses and a face shield when working on or near batteries

A Batteries contain sulphuric acid, it can cause blindness or severe burns.

If an emergency you might need to replace the batteries. In that case, follow these instructions carefully....

- Turn the power off.
- · Open the elctronic box on top of the battery and disconnect the battery connection plug box
- Release the lock of the battery box.



 Disconnect all battery connection cables located in the battery box.





- The System is secured by a 80A fuse. The red line shows where it sits. Disconnect this one too.
- Inspect the battery terminals and connectors. If they are dirty, clean with compressed air, then use a dry cloth or a soft brush to remove any contamination.
- Connect the terminal lugs on the wiring loom to the new batteries, observing the polarity of the lugs as noted before.
- Place the new batteries back into the battery box and plug the battery connectors back in and also the fuse
- · Replace the battery box lid.
- Reconnect the power cable to the plug in the elctronic box, and close the lid.
- Fix the battery box with its lock.
- A For maximum performance it is recommended that you replace both batteries at the same time.
- The batteries are maintenance free
- Only fit batteries that are rated for use in powered wheelchairs.



11 MAINTENANCE

11.1 ELECTRIC COMPONENTS

- Keep all electric controls components free of dust, dirt and liquids. To clean the product, use a cloth dampened with warm soapy water. Do not use chemicals, solvents or abrasive cleaners, as this may damage the product.
- Monthly check all vehicle components for loose, damaged or corroded components, such as connectors, terminals, or cables. Restrain all cables to protect them from damage. Replace damaged components. Monthly check the joystick-gaiter for cracks and holes where dirt may enter and influence on the joystick functions. Damaged gaiter to be replaced by service center.
- Once every 6 months, test all the buttons and switches to make sure the work well.
- There are no user-serviceable parts in any parts of the electronic control system. Do not attempt to open any case or undertake any repairs, else warranty will be voided and the safety of the system may be compromised.
- · Where any doubt exists, consult your nearest service centre or agent.



A It is the responsibility of the end user to maintain the product in a state of good repair at all times. Prolonged exposure to direct sunlight or certain solvents or household chemicals may cause damage to plastic components. resulting in loss of functionality or deterioration in performance.

If any component is damaged in any way, or if internal damage may have occurred (for example by being dropped), have it checked by qualified personnel before operating.

An electric wheelchair needs some basic attention to ensure it provides reliable service. We recommend that the user ensures that the power wheelchair is checked regularly for maintenance requirements and receives a thorough, annual maintenance check up.



We recommend that the chair has at least one full service from an authorised dealer once a vear.

A Make sure that the Service manual for Netti Mobile is used - to have documentation that all aspects have been serviced.



If you notice any irregular aspect of your chair, call your dealer for assistance.

The bus connectors are not suitable for frequent connection and disconnection. Do not disconnect the bus cables unless it is absolutely necessary.

The pins in a bus connector may be live even if the control system is switched off. If you have to disconnect a bus cable make sure you disconnect it at both ends.

REGULAR MAINTENANCE:

- Avoid knocking or bumping the any part of the control system especially the intuitive attendant control.
- Avoid prolonged exposure of your power chair to extreme conditions, such as heat. cold. or moisture.
- Keep the controller clean.
- Check that all controller connectors are tight and secured properly.
- Never hose off your power chair or place it in direct contact with water.
- Do not apply liquid cleaners or solvents directly to the control box, battery charger or any electrical connections.



- Use only recommended batteries and have batteries changed only by qualified dealers.
- Charge batteries regularly. Make sure the charger lead plugs are engaged properly in the sockets. Do not disconnect by pulling the cord.
- With the controller turned off, check the joystick. Make sure it is not bent or damaged and that it returns to the center when you release it. Check the rubber boot around the base of the joystick for damage. Visually inspect the boot. Do not handle or try to repair it. See your authorized dealer for any questions.
- Visually inspect the controller cables and connectors. Make sure that they are not frayed, cut or have any wires exposed.
 - See your authorized dealer if there is a problem with any of these components.
- Ensure that all parts of the control system are securely fastened to your Netti Mobile. Do not over tighten any screws.

11.2 FRAME & SEATING SYSTEM

All Netti wheelchairs have a modular design for easy maintenance. Alu Rehab carries stock of all parts and is ready to supply these on short notice. Necessary instructions for mounting will follow the parts.

Parts to be handled by user are defined in spare part catalogues that can be downloaded at www.My-Netti.com. Here you will find ordering information and drawings. These parts can, if needed, also be removed and sent to manufacutrer/distributor upon request.

Parts related to wheel frame construction must be handled by manufacturer or authorized sercvice facility.

A Parts to be ordered from spare parts catalogue can be exchanged by user.

Alu Rehab must be contacted for evaluation before any return of goods. Alu Rehab will then give instructions for shipping.

A Tyres must be changed at a repair shop.

A You can order original paint from Alu Rehab to repair scratches and minor damages to the paint:

Please contact your dealer to order.

A If defects or damages occur, please contact your dealer.

▲ Check/re-adjust screws and nuts at regular intervals.

▲ Sand and sea water (salt used for gritting in the winter) can damage the bearings of the front castors and main wheels. Clean the wheelchair thouroughly after use.

By the yearly full service make sure that the Service manual for Netti Mobile is followed to have documentation that all aspects have been serviced.



11.3 MAINTENANCE SCHEDULE:

Frequency	Weekly	Monthly
Check defects/ damages E.g. breakage/missing parts	Х	
Washing of wheelchair		X
Oiling of bearings*		X
Washing of cushions		X
Check anti tip function		X
Check brake adjustment		X
Check tyre wear		X

- As a rule of thumb, use oil on movable parts and all bearings. Alu Rehab recommends use of ordinary bicycle oil
- 1. Remove cushions before washing the wheelchair.
- 2. Clean frame using water and a rag.
- 3. We recommend using soft soap.
- 4. Wash the Frame well using clean water to remove all the soap.
- 5. Use methylated spirit on the frame parts only to remove any dirt left.

REGULAR CLEANING OF UPHOLSTERY

Clean cushions and covers according to instructions printed on cushions.

Cushion cleaning procedures:

- Cucinon Cicaning procedures			
CORE			
Washing	Hand wash 40°C		
Disinfection	Virkon S		
	Auto clave 105°C		
Drying	Squeeze		
	Air dry standing edgewise		
OUTER COVER			
Washing	Machine wash 60°C		
Drying	Tumble dry max 85°C		

DISINFECTION OF THE WHEELCHAIR

- Remove cushions (See separate washing instructions).
- Use a soft rag, added with Hydrogenperoxide or technical alcohol (Isopropanol).
- Hydrogenperoxide recommended : NU-CIDEX "Johnson% Johnson"

It is not recommended to use steam or jet stream cleaning of netti Mobile.



12. TESTS & WARRANTY

12.1 TESTS

Netti Mobile is tested and has been approved for usage both indoors and outdoors. The chair is CF marked.

Maximum user weight: 140 kg

It is tested by TÜV SÜD Product Service GmbH according to EN 12184: 2009.



Seating system is tested for fire resistance according to: ISO 7176-16:1997

12.2 GUARANTEE

Alu Rehab is providing you with a 5-year guarantee on all frame components and on the cross-tube assembly. There is a 2-year guarantee on all other components except batteries. For the batteries a 6 month quarantee is provided.

Alu Rehab is not responsible for any damage resulting from inappropriate or unprofessional installation and/or repairs, neglet, wear, from changes in wheelchair assemlies or instutions not approved by Alu Rehab or by use of spare parts delivered or produced by third parties. In such cases, this guarantee shall be considered null and void.

12.3 CLAIM

- Claim is to be addressed to the sales agent of the wheelchair. Please note that sales documentation has to be filled in and signed correctly in order to document time and and place of the purchase of the wheelchair.
- Generally, defects are accepted as reason for claims. The sales agent and Alu Rehab are to decide whether a defect has to be repaired, or the customer is entitled to a reduced prize due to the defect.
- This decision is based on an evaluation. of defect. 14 days after receiving a claim, the customer receives a report from the sales agent and/or Alu Rehab are going to handle the defect.
- Claim are to be forwarded as soon as a defect is discovered.



A Normal wear, incorrect use or incorrect handling is not a reason for claims.



The user is to use, maintain and handle the wheelchair as described in the user manual.



12.4 SPARE PART GUARANTEE

- Alu Rehab offers a 5-year guarantee (as a minimum) for spare parts. The periode of guarantee is defined as beginning at the date, Alu Rehab cancels the production of a specified type of chair.
- During the period of spare part guarantee,
 spare parts are delivered within 14 days.
- During the periode of spare part guarantee,
 Alu Rehab offers a 1 year guarantee for defect spare parts.

12.5 SPECIAL ADJUSTMENT/ ADAPTATIONS

Special adjustments/adaptations are defined as all adjustments that are not included in this manual. Wheelchairs that are especially adjusted/adapted by the customer can not keep the CE mark given by Alu Rehab A.S Norway. If this is the case, the warranty given by Alu Rehab A.S Norway will not be valid. If any uncertainty about special fitting and adaptations, please contact Alu Rehab A.S.

12.6 COMBINATIONS WITH OTHER PRODUCTS

Combinations of Netti and other products not manufactured by Alu Rehab A.S Generally in these cases, the CE mark of all the products involved will not be valid. However, Alu Rehab A.S has made agreements with some manufacturers about some combinations.

For further information, please contact your dealer or Alu Rehab A.S Norway directly.

12.7 SERVICE AND REPAIR

Information about service and repair services in you area, please contact your local dealer.

- A unique identification number / serial number is to be found on the bottom frame on left side of the chair.
- A spare part catalogue for the wheelchair can be obtained through your local dealer or downloaded at www.My-Netti.com
- A refurbishment manual for the wheelchair can be obtained through your local dealer or downloaded at www.My-Netti.com



13. MEASURES & WEIGHT

Seat width*	Seat depth**	Back rest heigh ***	Total width	Weight
40 cm	40-50 cm	48(60) cm	60 cm	94,0 kg
45 cm	40-50 cm	48(60) cm	65 cm	94.5 kg
50 cm	40-50 cm	48(60) cm	70 cm	95,0 kg

^{*} Measured between skirt guards.

W	Max	user	weight	is	140	kg.

Dealer:	
Serial no.:	
Date supplied:	
Dealer stamp:	

^{**} Measured from front of seat plate to back rest hinge without cushion. Using standard Uno back rest cushion subtract app. 3 cm.

^{***} Measured from from seat plate to top of back rest velcro.



Model: Netti Mobile

Language: English Version: 2015/10



L. NETTI MOBILE INTUITIVE - POWER WHEELCHAIR WITH ATTENDANT CONTROL

L1 NETTI MOBILE INTUITIVE INTRODUCTION

Netti Mobile Intuitive is a power wheelchair with integrated intuitive control unit for attendants



I 1.1 INTRODUCTION

The Intuitive attendant control kit is a set of components including brackets, motors. actuators and a control system to convert a Netti Mobile power chair to allow control by the Netti intuitive attendant control. The attendant intuitive control unit has power button, light control and easy speed control by pushing or pulling the push bow.



L1.2 AREAS OF USE/INDICATIONS SPECIFIC TO THIS ACCESSORY KIT

Netti Mobile Intuitive is developed for the use for occupants who are unable to use a controller to drive a power wheelchair by themselves. Carers and health-professionals can control the intuitive power wheelchair as easy as a manual wheelchair. When the Intuitive attendant control kit is mounted the blinkers are disconnected. and the chair is only meant for attendant control in public traffic.

L1.3 CONTRA-INDICATIONS SPECIFIC TO THIS ACCESSORY KIT

Carers and health professionals whose body shape and size prevents them from adjusting the control bar so that the driver's forearm cannot be aligned closely enough with the control bar for comfortable operation. See section L2.1.

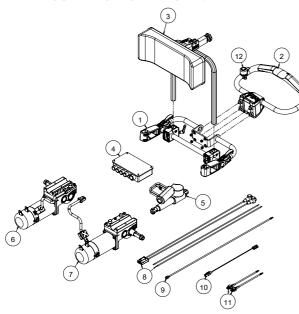
A driving assessment is recommended in case a special adaptation is required.

Do not attempt to lift or move the wheelchair using the control bar of the Intuitive attendant control. This will damage the flexible mountings. Instead. swing the attendant control downwards and grip the chair by the push bow. See L1.4 and L2.1

If a Netti Mobile Intuitive is to be used either as a seat in a motor vehicle or transported in a vehicle, the intuitive attendant control must be swung down to the lowest position and locked in place. See procedure in section L2.1.



L1.4 DESCRIPTION OF INTUITIVE ATTENDANT CONTROL KIT



12 Bell

- 11 Pair of lighting looms
- 10 Park brake sensor with inhibit connector
- 9 Power loom for actuator control box
- 8 Battery loom
- 7 Left drive motor
- 6 Right drive motor
- 5 Tilt actuator
- 4 Actuator control with seal and mounting screws
- 3 Head support D with height adjustable bracket
- 2 Intuitive attendant control with flexible mountings
- 1 Push bow with mounting plate for attendant control and mountings for head support

L2 INTUITIVE ATTENDANT CONTROL ACCESSORY KIT - ELECTRONICS

L2.1 ADJUSTMENT OF THE INTUITIVE ATTENDANT CONTROL

Before turning on the intuitive attendant control, make sure that the driver's forearm is aligned with as closely as possible with the control bar. Preferably within +/- 10%.

To change the angle of the attendant control, release the red locking levers on either side of the push bow. Turn the controller then tighten levers firmly.



Please note: depending on the height of the attendant it may first be necessary to adjust the seat tilt or the back rest recline to achieve a comfortable driving position.







L2.2 TURNING THE NETTI MOBILE INTUITIVE CHAIR ON AND OFF

L2.3 SPEED MODE



The intuitive attendant control has 2 speed modes: slow and normal.

The intuitive attendant control starts up in the speed mode in which it was switched off.

While the green LED is on and not flashing the chair is in slow mode.

While the green LED is off the chair is in normal mode.

To change from one mode to the other press the speed mode button once.

L2.4 DRIVING



Netti Mobile Intuitive is ready for driving when the green LED stops flashing

Grip the control bar and squeeze the yellow deadman's switch.



While holding the yellow deadman's switch, push or pull or turn the control bar in the direction you want to drive.

The chair will gently accelerate and drive in the direction and at the speed you require. The speed will change depending on how much force you apply to the control bar. To stop the chair, simply let go of the control bar.



L 2.5 CALIBRATING THE INTUITIVE ATTENDANT CONTROL

If the Netti Mobile Intuitive wheelchair has been exposed to temperature changes, it may become necessary to calibrate the Intuitive System:



The green light does not stop blinking. The chair is not ready to drive.

Turn the System off by pressing the On/Off button.

Hold the yellow bar pressed while you press the On/Off button once. Keep holding the yellow bar (ca 4-5 sec.) until the green light starts flashing quickly.



Let go of the yellow bar and wait until the green light stops flashing. The calibrating of the system is completed and the chair is now ready to drive again.

L 2.6 THE BATTERY GAUGE

BATTERY CHARGE INDICATION

The Battery Gauge indicates how much battery charge remains.

Battery gauge	Meaning	
	Battery full.	
	Battery half full. Start the return journey.	
	Battery low. Recharge soon.	
	Battery almost empty. Recharge now.	
	BATTERY GAUGE FLASHES SLOWLY The control system is functioning correctly, but you should charge the battery as soon as possible.	



L2.7 ELECTRICAL TILT/RECLINE

Netti Mobile Intuitive is available with electrical operation of tilt, recline and foot supports. Functions can be mounted one by one, or all together, and are operated with a hand control. The functions can be operated separately. As special adaptation both foot supports can be operated simultanously - as with footbox and footboard.



A Electrical components are to be mounted by Alu Rehab or certified personnel.

Actuator control functions:

- 1. Left foot support up
- 2. Left foot support down
- 3. Right foot support up
- 4. Right foot support down
- 5. Tilt back
- 6. Tilt forward
- 7. Recline forward
- 8. Recline back



L2.8 THE LIGHTS

Press the lights button once to turn the lights on or off.





L2.9 TROUBLESHOOTING THE INTUITIVE CONTROL SYSTEM

BATTERY GAUGE FLASHES RAPIDLY (EVEN WHEN THE CONTROL BAR IS NOT BEING

The control system safety circuits have operated and the control system has been prevented from moving the wheelchair.

This indicates a system trip, i.e. the Control has detected a problem somewhere in the wheelchair's electrical system. Please follow this procedure:

- Switch off the control system.
- Make sure that all connectors on the wheelchair and the control system are mated securely.
- · Check the condition of the battery.
- Try using the trouble shooting guide below
- Switch on the control system again and try to drive the wheelchair. If the safety circuits operate again, switch off and do not try to use the wheelchair.

Contact your service agent.

Flash code	Fault source	Meaning
1. Bottom LED flashes		The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery. or The left hand motor has a bad connection. Check the connections to the left hand motor.
2. Bottom 2 LEDs flash	or Right motor	The left hand motor has a short circuit to a battery connection. Contact your service agent. or The right hand motor has a bad connection. Check the connections to the right hand motor.
3. Bottom 3 LEDs flash	or	The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the control system connections are secure. or An excessive voltage has been applied to the control system. Thisis usually caused by a poor battery connection. Check the battery connections.



Flash code		Fault source	Meaning
4. Bottom 4 LEDs flash		Control signal at switch on	Control signal at switch on (this corrected by letting go of the control bar)
	ottom	or	or
	4	Control module	Fault with intuitive attendant control
	Ds	module	or
	ash		A possible control system fault is indicated. Make sure that all connections are secure.
* 7	5. All	Parking brakes	The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the control system connections are secure.
	LEDs	or	or
	flash	Battery connectors	An excessive voltage has been applied to the control system. This is usually caused by a poor battery connection. Check the battery connections.

These trip code descriptions are aimed at end users. For a more detailed flash code description please contact your dealer.

- Please contact your dealer for information about authorized service facilities that can give support if solution is not reached in this form.
- lack lack When in need of spare parts, please contact your dealer.
- f O When making changes affecting frame construction, contact dealer / manufacturer for confirmation.



L3. DRIVING TECHNIQUES

L3.1 Driving your chair Before sitting on your chair, verify:

- · The chair is switched off.
- Swing away the armrests and foot supports if appropriate.
- The battery charger is disconnected from both the chair and the wall outlet.

Once on your chair, make sure that the attendant and the user are comfortably positioned and that the foot supports and armrests have been adjusted appropriately. The height and angle of the intuitive attendant control should be adjusted to a comfortable position so the attendant's forearms are in-line with the control bar of the attendant control."

▲ Do not hang anything from or attach anything to the control bar. Before turning the chair on make sure that the control bar of the intuitive attendant control is not in contact with any objects or surfaces.

L3.2 TO BEGIN

Press the "on / off" switch.

Do not touch the control bar until the green LED has stopped flashing.

Set the speed to SLOW. The green LED should be on and not flashing. If the green LED is not on , press the Snail button once. Grip the control bar and squeeze the yellow deadman's switch.

While holding the yellow deadman's switch, push or pull the control bar in the direction you want to drive.

The chair will gently accelerate and drive in the direction and at the speed you require.

The speed will change depending on how much force you apply to the control bar. To stop the chair, simply let go of the control bar.

▲ L3.3 EMERGENCY STOP

To stop the chair in an emergency press the on/off switch. The control system will turn off and the chair will come to a controlled stop.

L3.4 SAFE DRIVING

- Never drive at a speed greater than your ability to safely control your chair.
 Remember that wet or loose surfaces need greater care and control.
- Always turn the chair OFF when transferring on or off or while the chair is stationary for long periods.
- Avoid jerky stop / start motions as this will result in excessive current draw from the batteries, increased tire wear and the rapid wearing of the gearbox and motors.
- Keep your chair clean from sand and salt water

L3.5 INDOOR/OUTDOOR DRIVING

When driving indoors keep the speed to a minimum to avoid the risk of collision. For outdoor driving be cautious of wet surfaces, loose sand, large curbs and potholes. A little practice will ensure you understand the capabilities of your chair and enable you to overcome the most common obstacles encountered when driving.



L3.6 CHAIR DRIVING PERFORMANCE

Should the chairs does not drive to your satisfaction, ask your dealer to adjust the program to a level you are comfortable with. This program can be altered at anytime to either increase the response rates in line with your improved motor skills or to lower performance to a level at which you feel comfortable and in control.

L3.7 STEEP SLOPES

When the power wheelchair is to be operated up and down steep slopes, it is recommended that the user:

- · Visually checks to see if the angle of the slope is less than 6°.
- Checks that the slope surface is not slippery

If the slope meets these conditions, it is recommended that the user approachs the slope at a slow speed, keeping the chair under control at all times. It may be preferable to track across the slope so as to decrease the steepness of the descent providing that the surface of the slope is wide enough and suitable to prevent slippage.



If the slope does not meet these conditions, it is recommended that the user does not climb or descend the slope.

ACCESSORY

An armrest mounted joystick for user control of the wheelchair can be delivered.



Model: Netti Mobile

Language: English Version: 2015/10



G. DYNAMIC **SFATING ACCESSORY KIT**

G1 INTRODUCTION

The Dynamic seating system accessory kit is a set of components to integrate the Netti Dynamic seating system into a Netti Mobile.

See the main Netti Dynamic System brochure UM0116UK and Netti Dynamic Foot supports UM0115UK for more information on functionality, mounting and adjustments.

It is suitable for use with all existing standard variants of Netti Mobile

Although Netti Mobile is crash tested to ISO 7176-19, a Netti **Dvnamic Mobile** equipped with the



Dynamic seating accessory kit may be used as a seat in a motor vehicle only if it is a lso equipped with the optional extension brackets shown section G1.4.

Maximum user weight when used as a seat in a motor vehicle: 136 kg.



On request the main components of the Dynamic seating system accessory kit can be mixed and matched with the accessories in section 6 of this manual.

G2 AREAS OF USE/INDICATIONS SPECIFIC TO THIS ACCESSORY KIT

users affected by dystonia with extension movements resulting in very strong spasms and contractions which affect the user's muscle-bone apparatus causing joint dislocations and challenging the strength of the wheelchair.

G3 CONTRA-INDICATIONS SPECIFIC TO THIS ACCESSORY KIT

Netti mobile must not be driven by persons whose dystonia is too severe for them to be able to control the wheelchair safely. In some cases an attendant only Netti Mobile may be appropriate.

A driving assessment is recommended in case a specially adapted drive program is required.

Marning: If the Dynamic accessory kit is to be used with an attendant control the extension movements and spasms of the user may be so severe and unpredictable that they prevent the attendant from driving the wheelchair safely.

In this case an assessment should be carried out. Depending on the severity of the spasms, alternative solutions may include using the Intuitive attendant control accessory kit, or a special adaptation to lock the seat back while driving.



G4 DESCRIPTION



Dynamic armrests with squeeze protection



Dynamic head rest



Dynamic leg rests with gas springs and foot plates



Pivoting seat base plate + Gas spring for recline



Reinforced extension brackets for leg rests, (required if Netti Mobile is to be used as a seat in a motor vehicle)



ANY TIME UPDATED AND RELATED User Manuals and Mounting descriptions please see the homepage

www.My-Netti.com - Downloads - Manuals



Model: Netti Mobile

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IN DIALOGUE WE CREATE SIMPLE SOLUTIONS AND ENABLE JOY OF LIFE



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