

# **USER MANUAL**

with CE Mark Statement

### **DECLARATION OF CONFORMITY**



The manufacturer

### Neatech.it

4/A A. De Curtis St. 80040 Cercola (NA), Italy

under its responsibility, states that

#### the wheelchair Speedstar Xtreme

satisfies the conditions laid down by European Directive 93/42; according to the criteria for classification of annex IX of this Directive, the Speedstar Xtreme is classified as

#### class I medical device

It also complies with the requirements of the harmonized standards:

UNI EN 12182 Ausili tecnici per persone disabili

UNI EN 12184 Sedie a rotelle a propulsione elettrica, motorette e loro sistemi di carica

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#### **TIPPING HAZARD**

Any transport on a slope greater than the maximum security slope can be dangerous.



#### **ELECTROMAGNETIC RADIATION DANGER**

The behavior of the wheelchair while driving may be affected by electromagnetic fields such as mobile phones and other devices.

It is recommended to avoid the use of the wheelchair in the presence of such devices.



#### **TEMPERATURE**

The temperature of some surfaces may increase when the chair is exposed to external heat sources as sunlight.



#### **DISPOSING**

This product and all its components can not be treates as household waste. For more detailed information on how recycling and disposal this product contact your local waste disposal service.

# 1. WHEELCHAIR PRESENTATION

Thank you for purchasing the electronic wheelchair Speedstar Xtreme. Speedstar Xtreme is designed to be used mainly for competition use.

The aeronautical technology, used to manufacture all Neatech.IT products, made possible to create rigid and foldable frame highly customizable and reliable. Frame and canvas are available in different colors.

#### Characteristic

- Pair of engines of 350W
- Mechanical electromagnetic parking brake
- Custom colors
- Adjustable armrests
- Adjustable backrest
- Maximum speed 15 km/h

- Joystick
- 360 mm wheel drive with increased section
- Range of 45 km
- Fully charged in 7 ore
- Maximum slope 22%

**WARNING:** It is prohibited to use wheelchair or its parts for any purpose other than that indicated; for a correct use please follow the instructions given in this manual. **NEATECH.IT disclaims any responsibility for damages caused by improper use of aids** 

## 2. STARTING UP

## Checks to be made on delivery

- Check the integrity of the original packaging.
- Check for any anomalies on the shipping documents.
- Check the functionality and integrity of the device in all of its parts, at the time of or immediately thereafter, to ensure that no damage is caused by a careless transport.
- Make sure the surface of the device is not damaged, scratched, bended, etc.
- Any fault or damage found must be immediately reported on the shipping documents and promptly communicated to the carrier.
   For any other questions, please contact the manufacturer.
- If you don't want to use the Speedstar Xtreme for a long time, store it in a safe place fre from dust and moisture.

#### Inside the box there is:

**Speedstar Xtreme** wheelchair

N. 1 pair of armrests

N. 1 joystick

N. 1 Charger

Documentation and manuals



#### **PACKAGING DIASPOSAL**

To properly recycle the packaging materials follow the instructions provided by your local waste disposal service.

# 2. STARTING UP

# Connection of the Joystick

Connect the cable of the joystick as shown in Figure 1. Make sure it is fully engaged. If it appears difficult to insert the connector try to invert and reinsert



Figure 1

### Trasporto e immagazzinamento

If you don't use the Speedstar Xtreme for a long time make sure you set the switch (I) OFF You should keep the Speedstar in a place free from dust and moisture and away from heat sources.

If you must ship the Speedstar Xtreme, turn off the switch (I), unplug the joystick and remove the footrests and armrests.

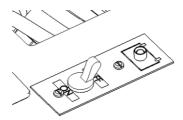


Figure 2

#### Checks before use



For a safe use and to avoid any situations of risk to the user before using the product perform the following checks .

### Checking tire pressure

Verify that the tire pressure is consistent with the values given in table

Front wheels	3,0 bar
Rear wheels	1,5 bar

### Checking battery charge level

Check the battery charge level on the indicator located on the joystick.

# • Check of electric cables

Check that the wires don't constitute a hindrance to the movements of the wheelchair.

### Consolle di comando

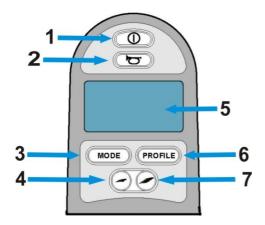


Figure 3



1. On-Off button

- 2. Beeper
- 3. MODE button
- 4. MIN speed selector
- 5. Display LCD a colori
- 6. PROFILES button
- 7. MAX speed selector
- 8. Controller

Figure 4

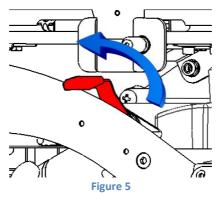
**NOTE**: it is possible that the control console of the Speedstar is different depending on the accessories chosen. Main controls remain unchanged .

#### Powered mode

Set the release engine lever as shown in Figure 5. In this conFiguretion, wheels are normally brake.

Use the switch (I), see Figure 2, to turn on and turn off the

Speedstar.



Seing Figure 3 and Figure 4 use the button 1 to turn on the command console. Use button 4 and 7 to select the travel speed.

Use the controller 8 to get in gear. Its proportional functionality allows you to adjust speed and direction according to the intensity with which you act on the controller.

By re leasing the lever of the controller automatically starts the electromagnetic brake that looks the wheels of the Speedstar Xtreme.

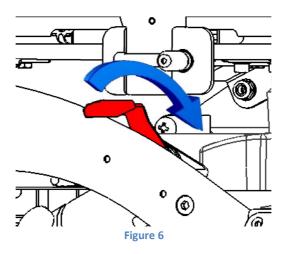
Use button 3 to navigate between the driving modes set during programming of the console. Use button 6 to navigate between profiles set during programming of the console.



Don't turn on or turn off the console while wheelchair is moving

### Push mode

If you need to use the push mode use switch (I), Figure 2, to turn off the Speedstar and set the release engine lever as shown in Figure 6.





In the push mode electromechanical brakes are off and therefore use of the Speedstar Xtreme in presence of slopes may be dangerous.

# **Charge of the batteries**

To recharge the batteries use only the provided charger. The manufacturer is not responsible for damage to person or property resulting from the use of non original product

0	
Connect the power cord to a power supply 230 V.  If the led A doesn't turn on check the voltage and the fuse inside the charger.	A B C
Connect the cable to the joystick as shown in figure. All led of the charger light up and after a second led C turns off and the charge starts. If not, check the connections made.	A B C 1"
Battery correctly loaded. Unplug the power cord and the battery cable.	A B C

It is recommend to charge the batteries when the il display indicates that they are almost discharged. Each battery is subject to a normal "self discharge", so batteries that are not used for long time will discharge by itself.

Charging time is influenced by multiple factors such as remaining battery power, battery state of aging and temperature. However the approximate charging time is about 7-9 hours. If the charge duration was reduced (about 1 hour), that is a sign of failure: contact the vendor for a possible replacement of batteries.

Don't use the wheelchair during the charge.



#### SHOCK HAZARD

Check if charger data sheet matches with the network power (voltage, frequency).



#### **RELEASE DANGER**

Any impact to the batteries could cause a loss of fluids. Pay attention



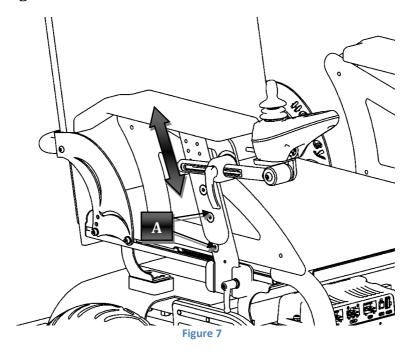
#### **ENVIRONMENTAL HAZARD**

It is recommended to properly recycle used batteries. Contact your local agency for waste disposal for more information.

#### Armrest

It is possible to make several adjustments on the armrests: height, width and depth of the aid and position of the joystick. Shown operations can be performed on both armrests.

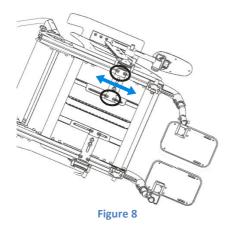
## Height



Seeing Figure 7 loosen the screws (A), and set armrests height to desired value and retighten the screws (A).

NOTE: for this operation use a 6 mm allen wrench.

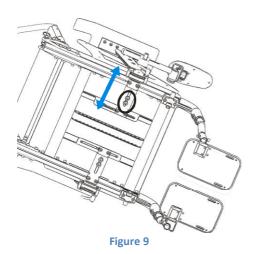
#### **Profondità**



To adjust armrests depth act under the seating floor. Loosen the 4 screws indicated in Errore. L'origine riferimento non è stata trovata, and move the armrest till the desired position; tighten the screws again. Be sure that the armrest can't move at all. NOTE: for this operation use a

10 mm open-end wrench.

#### Width

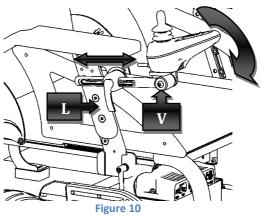


To adjust armrests width act under the seating floor. Loosen the 2 screws indicated in Figure 9 and move the armrest in accordance with the directions indicated to reach the desired position and tighten the screws again. NOTE: for this operation use a 6 mm allen wrench.

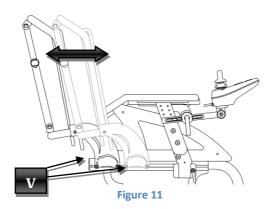
## **Joystick**

Loosen the lever (L), as shown in Figure 10, so it is possible to move the joystick in depth to reach the desired position. Retighten the lever. To adjust the angle of the joystick you must act on the screw

(V)



# **Backrest depth**



Seeing Figure 11 Loosen the screws (V), move back up to the desired position and retighten the screws

NOTE: for this operation use a 4 mm allen wrench.

# **Backrest inclination**

To adjust the backrest angle it is necessary to remove the insert (I) and replace it once you get the desired angle as shown in Figure 12 Figure 13.

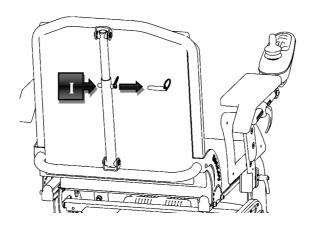


Figure 12

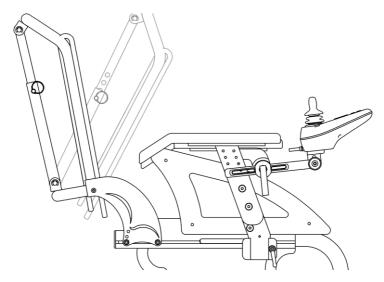
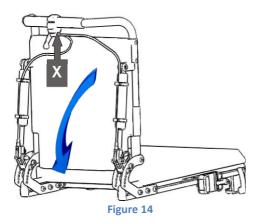


Figure 13

# 5. ACCESSORIES

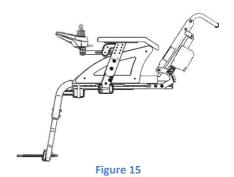
Speedstar Xtreme can be equipped with many accessories that NEATECH make available to meet different customer's needs. There is the possibility that the joystick changes depending on desired accessories.



### **Dynamic reclining backrest**

This equipment allows you to recline the backrest with the help of a lever installed on the back. Pull the lever (X) and recline the backrest to the desired inclination, so release the lever (X).

Powered reclining backrest With the aid of two electronic pistons user can recline the backrest with the joystick



# 5. ACCESSORIES



Figure 16

## Side pad right - left

It is an adjustable support thath acts laterally on the chest of the user to keep the desired position. It can be mounted either in pairs or individually.

### Adjustable headrest

It is a headrest mounted on the back; you can adjust either height and inclination. With a pin you can also rotate it.



Figure 17

# Seat belt

Speedstar Xtreme has the predisposition for the installation of a seat belt that can be mounted on request.

You can also request: heel straps, calf straps and foot straps.

# 6. CONTROL AND MAINENANCE

# **Specifications**

Maximum allowed mass	150 kg		
Intended use	Speedstar Xtreme is intended for all those groups of users that are confined to a sitting position who have the opportunity and the need not only to travel autonomously but even to carry out a true sport activity.  The wheelchair can't be used as a seat in La		
	sedia non deve essere utilizzata come sedile su motor vehicles.		
Temperatura di utilizzo	from -10 °C to 40 °C		
Class (UNI EN 12184)	Class C		
Dimensions [mm]	width 73cm length 90cm height 90cm		
Empty weights [kg]	81kg		
Maximum safe slope [°]	22%		
Maximum height of the platform from which the chair can descend safely [mm]	100mm		
Range [km]	45km		
Batteries	2 batteries ZGL 12054 12 V 80Ah		

# 6. CONTROL AND MAINENANCE

### Maintenance and cleaning

Regular maintenance help to preserve functionality and safety of the Speedstar. The lack or inadequacy of care and maintenance implies a limitation of the warranty from the manufacturer.

To clean the chair don't use any device to spray water at high pressure and in any case protect the control device from water and humidity. For plastic or metal parts use a soft cloth moistened with a non-aggressive detergent. For pads, linings and covers of the seat and backrest use warm water and mild detergent.

Do not use chemical cleaners, solvents, acids, etc Tires can be cleaned with water and detergent.

OPERATION	PERIODICITY
Checking tightness of chassis screws	Annual
For this operation contact your	
vendor	
Replacing the batteries	Biennial
For this operation contact your	
vendor	
Tire pressure monitoring	Weekly
Checking of tire usury	Monthly
Complete cleaning	Monthly

### Serial number

For any report or requests for assistance communicate the unique identification code on the frame of each Speedstar Xtreme.

# 7. FAULT, REPAIR AND ASSISTANCE

POSSIBLE FAULT	PROBABLE CAUSE	ACTION
	power button is set to OFF	set power button to ON (see Figure 2)
	joystick cable not properly inserted	insert properly joystick cable
Joystick does not turn on	electrical fault	contact assistance
	il cavo della joystick non è inserito correttamente	inserire il cavo joystick
	guasto all'impianto contattare il fornito	
	wheelchair in push mode	set the lever as shown in Figure 5
Joystick is turned on but the chair doesn't drive	mechanical failure	contact assistance
	wheelchair in push mode	set the lever as shown in Figure 5
Wheelchair makes noise	release lever not properly inserted	insert correctly the release lever
	mechanical failure	contact assistance
Wheelchair doesn't have a good grip	Tires are not set to the correct value of pressure	Set the tires pressure to the correct value
Low autonomy of batteries	end of the life cycle of the batteries	contact assistance for the replacement of the batteries

# 7. FAULT, REPAIR AND ASSISTANCE

# Spare parts list

DESCRIPTION	NOTES
Tire wheel	Specify seat size, front wheel or rear wheel, right or left wheel
Inner tube wheel	Specify seat size, front wheel or rear wheel
Cover	Specify seat size
Motor	Specify left or right
Backrest canvas	Specify seat width and backrest height
Seat canvas	Specify seat width and depth
Headrest	Specify left or right
Bearing pair for front forks	
Front forks	Specify Speedstar version (66 - 55)
Lights	Specify if position light, directions light or headlights

**NOTE:** For any other problem, contact the manufacturer.

# 7. FAULT, REPAIR AND ASSISTANCE

## Condizioni di garanzia

Speedstar is a product globally guaranteed for 24 months with the exception of batteries that are guaranteed for six months. The warranty covers defects in materials or workmanship. The warranty doesn't cover parts subject to usury or damaged parts by: overload, misuse, alterations and repairs made by unauthorized third parties.

The warranty expires in case of tampering, improper storage, unauthorized or incorrect maintenance.

MODEL:	Speedstar Xtreme
SERIAL NUMBER:	
DATE OF CONSTRUCTION:	

### **USER MANUAL**

### SPEEDSTAR XTREME

### **NEATECH.IT**

Our Mission is transfer technology and solution from the aerospace industry to disability sector. We are proud to offer the highest quality products and solution on the market.



www.neatech.it