# 2016/2017 | HANDBIKES, TRACTION AND STEERING DEVICES FOR DAILY USE AND SPORT – FOR CHILDREN, YOUNG PEOPLE AND ADULTS

















## **MOBILITY MADE SIMPLE!**

#### Dear readers,

With our »mobility made simple« brand slogan, as an innovative manufacturer of wheelchairs, hand-bikes, traction and steering attachments we promise you the greatest flexibility and quality of life. We are constantly working to provide maximum customisation and mobility for our customers from modifications via development to manufacturing.

For this purpose, we have improved the range of drives and shift equipment in the area of the handbikes and traction devices. For the electric compact bike and the NJ1 e-assistant, we have added the new drive system BionX IGH2 with integrated 2-speed automatic shifting to our range of products. For the manual handbikes, we are now offering the electric shift Alfine Di2 that can be operated using your hand or chin via electric buttons. Moreover, we have developed convenient switching solutions between two rechargeable batteries for the BionX and neodrives drive systems.

But we don't want to give away too much in advance. We are delighted to be able to present our new handbike catalogue and wish you lots of pleasure when browsing through it.

Warmest greetings,

Jörg Sättele

**Managing Director** 

**Andreas Sättele** 

h. 561

**Managing Director** 

## **TABLE OF CONTENTS**

#### Some key information:

- All of our products are »Made in Germany«
- Each year we process over 100 tons of aluminium
- The handbike that had to travel the furthest distance to its owner was on its way for 9,530 km (Chiba, Japan)
- In 2014, rehab division revenue increased by 11 %
- In 2014 five new jobs were created at the Dotternhausen location

ABOUT US	
ADAPTIVE BIKES	
OVERVIEW	
SPIKE ADAPTIVE BIKE	
NJ1 ADAPTIVE BIKE	
<b>COMPACT BIKES &amp; RACING BIKES</b> 1	
OVERVIEW	
FREAK BIKE FOR	
CHILDREN & YOUNG PEOPLE 1	ļ
NJ1 COMPACT BIKE 1	
NJ1 EL. COMPACT BIKE	
RAPTOR 4ALL & 4YOU RACING BIKE 2	

STEERING & TRACTION DEVICES	22
OVERVIEW	23
FREEWAY STEERING ATTACHMENT	24
NJ1 E-ASSISTANT TRACTION DEVICE	26
OPTIONS	28
OPTIONS & ACCESSORIES	29
GEAR SHIFTS	32
DRIVE SYSTEMS	36
ADAPTERS	38
COLOURS	39

#### YOUR CONTACT AT PRO ACTIV



#### www.proactiv-gmbh.com

You can find out everything about us, our products, news and much more on the internet.



#### Telephone +49 (0) 7427 9480-0

Your direct line to us. We are happy to answer all of your questions. Normal working hours 08:00 am to 05:30 pm (Fridays 08:00 am to 04:00 pm).



#### In person locally

You can obtain information about our innovations and products and of course test them at trade fairs and events throughout Europe! You will find our trade fair and event calendar at <a href="https://www.proactiv-gmbh.com/">www.proactiv-gmbh.com/</a> trade\_fair\_event\_calendar



The recipe for the success of our products: enthusiastic employees and personal consultation,...

# WE STAND FOR »MOBILITY MADE SIMPLE« AND OFFER YOU:

- high-quality & long-lasting products
- customer focus and creation of individuality
- innovations
- good service & individual advice





Our aim is to develop and produce top-quality products to guarantee maximum mobility in your everyday life.

Achieving this aim is the daily challenge of each of our employees at PRO ACTIV.

## **ABOUT US**







...to CNC bending technology,...



...a clear drive for perfection...



...with specialist personnel in assembly and trained eyes in quality control.

# High manufacturing depth for your individuality

PRO ACTIV has a manufacturing depth of over 70% at the Dotternhausen location (Germany). Almost all parts of our products are manufactured in our own facility. This produces the competence to be able to implement your special requirements in detail.

# Our handbikes and traction devices are innovative and top quality

From the design via production to assembly, even when processing purchased parts, we ensure the highest quality and precision. In order to offer you the best solutions, our designers work closely with wheelchair users, therapists and specialist dealers. Each individual product is subject to strict

quality controls. Regular checks according to quality standards DIN 9001 and DIN 13485 are a matter of course.



# ADAPTIVE BIKES OVERVIEW





	SPIKE adaptive bike   from p. 8	NJ1 adaptive bike   from p. 10
Drive type	Manual with gear shift	Manual with gear shift
Application area	Bike for children & young people with 75 kg	Bike for young people and adults
	trailer load. For adults with greater body weight	up to 120 kg trailer load and 10 kg load capacity
	on request	Individual approval up to 200 kg
Total weight	from 7.3 kg	from 8.3 kg
Wheel sizes	20"	20", 24", 26"
Brakes	Rim brake & back-pedalling brake	Rim brake, back-pedalling brake, disc brake
		(depending on the equipment)
Derailleurs		
Shimano Deore 27-speed 3x9	No	Yes
Shimano Deore XT 27-speed 3x9	No	Yes
Shimano Deore XT Dyna-Sys 30-speed 3x10	No	Yes
Hub gears		
3-speed Shimano Nexus	Yes	No
7-speed Shimano Nexus	Yes	Yes
8-speed Shimano Nexus	Yes	Yes
11-speed Shimano Alfine	No	Yes
11-speed Shimano Alfine Di2	No	Yes
14-speed Rohloff	No	Yes
Pedal bearing gearshift		
Mountaindrive 2.5:1 gear reduction for hills	Yes	Yes

More details from Www.proactiv-gmbh.com

Custom-made options upon request.





The SPIKE can be perfectly combined with the BUDDY child's wheelchair. In particular for children, riding handbikes promotes social integration.



There are different hub drive systems to choose from. The operation is carried out via the grip shift or operating machine (see page 32).



The adjustment options for bottom bracket support and frame adapter allow for customisation at all times.

The SPIKE adaptive bike is mainly used by children and teenagers but also by adults who like a simple and compact handbike.

Its weight of 7.3 kg makes it a particularly light adaptive bike. Due to the range of hub gears, optimum adaptation is possible for any user.

Braking of the SPIKE is simply carried out using the back-pedalling brake and/or the V-brake rim brake.

Since the SPIKE is very compact and simple, it has a very small turning radius and does not require a lot of space, which makes it ideal for narrow alleys or public transport, for example. The SPIKE is therefore perfect for your journey to work or school and for city tours.



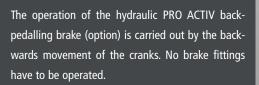
- ✓ 3-speed Shimano Nexus hub gears
- ✓ 7-speed Shimano Nexus hub gears
- ✓ 8-speed Shimano Nexus hub gears



»I get to work quicker on the NJ1 than I would by car because the routes are ideal. Anyway I prefer travelling by bike. This gives me physical balance every day, I love the fresh air and enjoy a little training too.«

(Daniela Keller)







The crank release function (option) is activated via the pressure plates on the side of the pedal bearing housing. It permits (also with back-pedalling brake) riding backwards and manoeuvring using the handrims.



Whether it is a trip into the city or a longer tour, the NJ1 adaptive bike allows for easy and comfortable travelling at all times with your own wheelchair.

The NJ1 adaptive bike is light and stable and has excellent handling characteristics. Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking. The handbike equipment is variable, from touring

bike to sports bike. Moreover, a wide range of options and tetraplegic accessories is also available (from page 28).

Additional information on the NJ1 adaptive bike with electric support (NJ1 e-assistant) on pages 26 and 27.

## WIDE RANGE OF GEAR SHIFTS

- 27-speed Shimano Deore or Deore XT derailleur
- ✓ 30-speed Shimano Deore XT Dyna-Sys derailleur

- ✓ 7 or 8-speed Shimano Nexus hub gears
- ✓ 11-speed Shimano Alfine hub gears
- ✓ 11-speed Shimano Alfine Di2 electric hub drive
- ✓ 14-speed Rohloff Speedhub 500/14 hub drive



# COMPACT BIKES & RACING BIKES OVERVIEW













FREAK compact bike   from p. 14	NJ1 compact bike   from p. 16	NJ1 el. compact bike   from p. 18	RAPTOR 4all & 4you racing bike   from p. 20
Manual with gear shift	Manual with gear shift	Manual with gear shift	Manual with gear shift
		and electric support	
Up to 100 kg load capacity, child and youth bike	Up to 100 kg load capacity, leisure, sports and	Up to 100 kg load capacity, leisure, sports and	Up to 100 kg load capacity, sports and competition
	touring. Individual approval up to 120 kg	touring. Individual approval up to 120 kg	
from 14.8 kg	from 15.8 kg	from 24.8 kg	from 14.9 kg
20", 26"	26"	26"	26"
Rim brake, back-pedalling brake, disc brake	Rim brake, back-pedalling brake, disc brake	Rim brake, back-pedalling brake, disc brake	Rim brake, disc brake
(depending on the equipment)	(depending on the equipment)	(depending on the equipment)	(depending on the equipment)
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	No	No
Yes	Yes	No	No
Yes	Yes	No	No
Yes	Yes	No	No
Yes	Yes	No	Yes
No	No	Yes	No
No	No	Yes	No
Yes	Yes	Yes	No





»Backrest with Body Contour back upholstery«: Highly breathable backrest with high comfort thanks to suspension. The back angle can be infinitely adjusted without any tools.



In collaboration with young athletes of several (german) wheelchair sports clubs, we have developed an outstanding teenage handbike.

The FREAK compact bike consists of a drive unit and a stable girder chassis, which can be separated for transportation within seconds. The easy handling, dimensions and optimised weight are specially designed for the success and fun of our young customers.

With its adjusted steering geometry, long wheelbase and even weight distribution the FREAK bike has excellent handling characteristics. Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking. The handbike equipment is variable, from touring bike to sports bike.

# WIDE RANGE OF GEAR SHIFTS

- 27-speed Shimano Deore or Deore XT derailleur
- ✓ 30-speed Shimano Deore XT Dyna-Sys derailleur
- ✓ 7 or 8-speed Shimano Nexus hub gears
- ✓ 11-speed Shimano Alfine hub gears

- ✓ 11-speed Shimano Alfine Di2 electric hub drive
- ✓ 14-speed Rohloff Speedhub 500/14 hub drive



»An elegant frame that does what it says on the tin and fantastic manoeuvrability! Problem-free adjustment of the seating position and 100% suitable for off-road use. And a packaged size that fits into any car. My dream of climbing mountains again was made possible with the NJ1 compact bike.« (Michael Schmid)



The back angle can be infinitely adjusted without any tools. The back position is also adjustable lengthways. This allows a flexible adaptation to the requirements.



The all-rounder for ambitious leisure cyclists and hobby sports people. Its modular design, its aerodynamic characteristics and its outstanding workmanship guarantee 100% riding pleasure. The NJ1 compact bike consists of a drive unit and a stable girder chassis, which can be separated for transportation within seconds.

Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking. The handbike equipment is variable, from touring bike to sports bike.

The NJ1 compact bike lives up to its name also with respect to its pack size of 104 cm x 39 cm x 48 cm.

## WIDE RANGE OF GEAR SHIFTS

- ✓ 27-speed Shimano Deore or Deore XT derailleur
- ✓ 30-speed Shimano Deore XT Dyna-Sys derailleur

- ✓ 7 or 8-speed Shimano Nexus hub gears
- ✓ 11-speed Shimano Alfine hub gears
- ✓ 11-speed Shimano Alfine Di2 electric hub drive
- ✓ 14-speed Rohloff Speedhub 500/14 hub drive





The NJ1 el. compact bike consists of a drive unit and a stable girder chassis, which can be separated for transportation within seconds. This allows a packing size of 104 cm x 39 cm x 48 cm to be achieved.

There is a choice of BionX and neodrives drive systems for electric support. There is an overview of the drive systems on pages 36 and 37. A speed of up to 6 km/h can be reached using the starting assistant or pushing aid. When pedalling, the drive system assists with the set support level at a speed of up to 24.9 km/h.

Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking.

Depending on the purpose, you can choose between offroad and touring equipment.

#### **RANGE OF GEAR SHIFTS**

Depending on the drive system, different gear shifts can be selected or gear shifts are already integrated:

- 27-speed Shimano Deore or Deore XT derailleur (BionX P 250, BionX D series, neodrives Z10-DT)
- 2-speed automatic gear shift IGH2 (BionX IGH2)
- 3-speed hub gear IGH3 (BionX IGH3)



# RAPTOR 4ALL

**RACING BIKE** 

The adjustable bottom bracket support allows to adjust the angle and height of the bottom bracket position. This allows changes to be carried out flexibly when the requirements change.

The RAPTOR racing bike is a high-end sport device for racing sport. Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking.

For transportation, the complete drive unit can be removed using a quick lock so you can achieve a small packing size with a few hand movements.

# **& 4YOU**



**Drive unit welded permanently:** Torsion-resistant tube yokes with individual bottom bracket position ensure optimal power transmission.



You can select between an adjustable bottom bracket support and a fixed welded drive unit.

- With the adjustable bottom bracket support, the bottom bracket position can be adjusted lengthwise and in its angle, which offers a high flexibility.
- With the fixed welded drive unit, the bottom bracket position is fixed and cannot be adjusted. This ensures for further weight

optimisation and optimum power transmission.

The adjustable backrest angle is continuously adjustable without tools for flexible adaptation. As an option, the backrest can also be integrated into the frame guide which leads to an additional weight optimisation.

The difference between the products RAPTOR 4all & 4you lies in the possibilities when designing the frame.

- The RAPTOR 4all can be selected in two frame sizes.
- The RAPTOR 4you is individually adapted to its user with regard to all dimensions. Each frame is unique, entirely tailored to the user's requirements and needs.

#### **RANGE OF GEAR SHIFTS**

- ✓ 27-speed Shimano Deore or Deore XT derailleur
- ✓ 30-speed Shimano Deore XT Dyna-Sys
- ✓ 14-speed Rohloff Speedhub 500/14 hub drive



# STEERING & TRACTION DEVICES OVERVIEW





FREEWAY	steering	attachment	from p. 24

NJ1	e-	as	sistant	tı	actio	n (	device	1	trom	p.	26

Drive type	Via handrims	Manual with gear shift and
		electric support
Application area	Up to 120 kg trailer load	Up to 120 kg trailer load and 10 kg load capacity
		Individual approval up to 200 kg
Total weight	from 2.7 kg	from 14.2 kg
Wheel sizes	20"	20", 24", 26"
Brakes	Rim brake	Rim brake, back-pedalling brake, disc brake
		(depending on the equipment)
Derailleurs		
Shimano Deore 27-speed 3x9	-	Yes
Shimano Deore XT 27-speed 3x9	-	Yes
Shimano Deore XT Dyna-Sys 30-speed 3x10	-	Yes
Hub gears		
3-speed BionX IGH3	-	Yes
2-speed BionX IGH2	-	Yes
Pedal bearing gearshift		
Mountaindrive 2.5:1 gear reduction for hills	-	Yes

More details from Www.proactiv-gmbh.com

**Custom-made options upon request.** 



**STEERING ATTACHMENT** 





The »rollikids« have tested the FREEWAY in combination with a SPEEDY 4all with Twion equipment for the magazine DRS. The result: »Seeing that the wheelchair now runs on three large wheels, the riding feels completely different. On smooth surfaces, the vehicle moves quickly and easily, on uneven ground, e.g., forest grounds, the roots of trees and potholes are simply rolled-over. Without the FREEWAY steering attachment, I would have to keep on riding in a tilted wheelchair position...« (Magazine »DRS« 09/2014)



The steering damper keeps the device on a straight track almost all the time, even when there is no hand on the handle bar.



Those who already have a PRO ACTIV adaptive bike or NJ1 e-assistant can couple the FREEWAY to the wheelchair via the adapter already in place.



The FREEWAY makes your wheelchair an all-terrain vehicle. It just takes a few movements to attach the amazingly light FREEWAY (from 2.7 kg) to the wheelchair and you are off: on tracks, cobbles, snow or sand – the FREEWAY makes movement easy!

The wheelchair is still pushed forward as usual via the handrims, the caster wheels are slightly above the ground. And everyone who has tried it

before can confirm: A 20" wheel handles obstacles significantly more easily than a 4", 5" or 6" wheel. The FREEWAY thus provides an entirely new freedom of movement!

Even on hilly routes the FREEWAY has tremendous benefits. Uphill it is an enormous relief for the accompanying person pushing the wheelchair for support, downhill the vehicle moves by itself.

The user steers and brakes using the FREEWAY. Curves can easily be managed via the steering system, and not as normally through braking and pushing motions on the handrims, which always lead to a loss of momentum.



# NJ1 E-ASSISTANT

TRACTION DEVICE





The »PRO ACTIV, Elektrisches Zuggerät NJ1 e-assistant – Adaption« video on youtube.com shows how to quickly connect and disconnect the NJ1 e-assistant with the central adapter. A front adapter with connections to the front frame tubes is also available. For more information on our adapters, refer to page 38.



With the exchange plug connection for BionX drive systems, you are able to switch between the two rechargeable batteries with a few hand movements.



BionX IGH2 with integrated 2-speed automatic gear shift: Operating of shift controls is not necessary. In combination with the back-pedalling brake, there are no lines or cables on the handles.



The NJ1 e-assistant always permits easy and independent forward motion with your own wheelchair. When pedalling, the drive system assists with the set support level up to 24.9 km/h. A speed of up to 6 km/h can be reached without pedalling using the starting assistant or pushing aid.

This traction device is available with a back-pedalling brake which makes operation by tetraplegics particularly easy. There is also the option of a crank freewheel at the back. The cranks can be disconnected to manoeuvre back and forth, and you can comfortably reverse using the handrims.

In the shifting range, the 2-speed automatic gear shift IGH2 is optimum for tetraplegics as shift controls do not have to be operated. As an alternative, you can select the 3-speed hub gear IGH3 with operating machine for chin control.

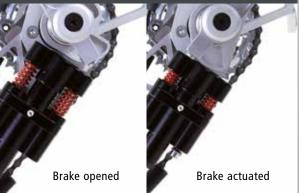
Depending on the drive system, different gear shifts can be selected or gear shifts are already integrated:

- 27-speed Shimano Deore or Deore XT derailleur (BionX P 250, BionX D series, neodrives Z10-DT)
- 2-speed automatic gear shift IGH2 (BionX IGH2)
- ✓ 3-speed hub gear IGH3 (BionX IGH3)



## **OPTIONS & ACCESSORIES**

## Back-pedalling brake



The operation of the hydraulic PRO ACTIV back-pedalling brake is carried out by moving the cranks backwards.

#### Crank release function



The crank release function permits riding backwards and manoeuvring using the handrims on handbikes equipped with a back-pedalling brake. The crank release function is operated by pressing the side pressure plates on the pedal bearing housing.

## Tetra hand support

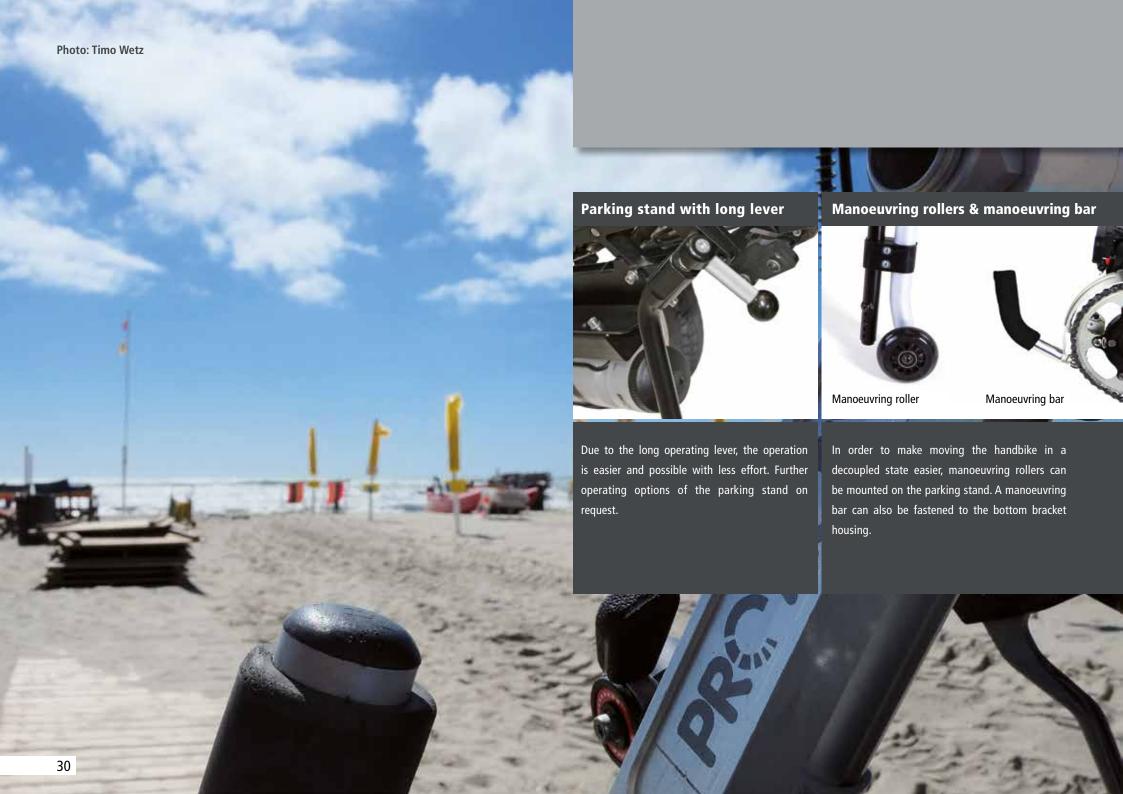


You can place your hands in the Tetra hand supports to permit a safe crank movement, even if the gripping function of your hands is restricted.

#### Tetra shell handles



Tetra shell handles provide for comfortable wrist support.



### **OPTIONS & ACCESSORIES**

#### Operating lever for the parking brake



### Re-plugging unit



#### **Exchange plug connection**



#### Chin operating, starting assistant



The »parking brake operated via the operating lever« is implemented via the mounted rim brake. The parking brake is operated via an operating lever on the bottom bracket support.

With the re-plugging unit for neodrives drive systems, you are able to conveniently plug between the two rechargeable batteries using magnetic connectors on the bottom bracket support. This is also possible without complete finger function. The controls such as the wake-up switch can be reached comfortably thanks to the new rechargeable batteries.

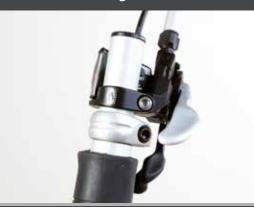
With the exchange plug connection for BionX drive systems, you are able to switch between the two rechargeable batteries with a few hand movements without having to re-plug a rechargeable battery or cable.

By pressing the operating lever upwards with your chin, the starting assistant can be activated.

### **Grip shift**

On the grip shift, the shifting is carried out by turning the handle to the right and left. The gear selected is shown on the grip shift for hub drives. With derailleurs, you can read-off which chain wheel/sprocket is currently being used on the grip shift.

### Thumb/index finger shift controls



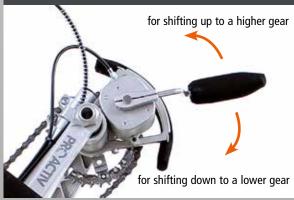
Shifting with the thumb/index finger shift controls is carried out by pressing the gear lever with your fingers. With the hub gear Shimano Alfine, the gear selected is shown in the display above the handle. With derailleurs, this display is an orientation as to which chain wheel/sprocket is currently being used.

### **Electric buttons**



Shifting with the electric shifting Alfine Di2 is carried out by pressing the buttons with your hand or chin. The gear selected is shown on the display.

### **Operating machine**



With the operating machine (with 8-speed Shimano Nexus and BionX IGH3), shifting is carried out using your chin. To change up to a higher gear, move the gear lever 45° up and to change down to a lower gear, move it 45° down. After the gear change, the gear lever moves back to its starting position. There is no display for the gear selected available.

# GEAR SHIFTS OVERVIEW

#### Advantages of the hub drive systems:

- they can also be shifted when at standstill
- almost no effort for maintenance and care
- operation via **one** shift control

#### Advantages of the derailleurs:

- less weight
- higher degree of efficiency
- more gears

			NEW
	Hub gears		NEW
	7 and 8-speed Shimano Nexus hub gear	11-speed Shimano Alfine hub gear	11-speed Shimano Alfine Di2 electric hub gear
Brief description	Reliable shifting hub with 7 or 8 gears and integrated back-pedalling brake.  Suitable for daily use and hobby sport.	Highly efficient 11-speed hub gear. Suitable for daily use and hobby sport.	Electric 11-speed hub gear with LED display and independent power supply.  In combination with the hydraulic PRO ACTIV back-pedalling disc brake, there are no lines or cables on the handles.  Suitable for daily use and hobby sport.
Freewheel/back-pedalling brake	Integrated back-pedalling brake	Freewheel shifting hub; back-pedalling brake can be implemented via the hydraulic PRO ACTIV back-pedalling brake (optional)	Freewheel shifting hub; back-pedalling brake can be implemented via the hydraulic PRO ACTIV back-pedalling brake (optional)
Gear range	244% (7-speed), 307% (8-speed)	409%	409%
Handling options	Grip shift or operating machine (8-speed)	Thumb / index finger shift controls	Electric buttons



You will find our wheelchairs in our "Wheelchairs for daily use and sports" product catalogue. – just request one on +49 (0) 7427 9480-0 or info@proactiv-gmbh.de or download one at www.proactiv-gmbh.com

#### **Hub** gears



#### **Brief description**

14-speed Rohloff Speedhub 500/14 hub gear

High-precision shifting with 14 gears.
Suitable for hobby sport and professionals.

#### Freewheel / back-pedalling brake

Gear range
Handling options

Rohloff Speedhub 500/14

Freewheel shifting hub; back-pedalling brake can be implemented via the hydraulic PRO ACTIV back-pedalling brake (optional) 526%

Grip shift

#### 2-speed automatic hub gear BionX IGH2

Automatic 2-speed hub drive system for the NJ1 e-assistant. From 12 to 16 km/h (depending on the wheel size), you shift to second gear automatically. In combination with the hydraulic PRO ACTIV back-pedalling disc brake, there are no lines or cables on the handles. Suitable for daily use and hobby sport.

Freewheel shifting hub; back-pedalling brake can be implemented via the hydraulic PRO ACTIV back-pedalling brake (optional)

136%

No shift controls,

shifting is carried out automatically



	Derailleurs		
3-speed hub gear BionX IGH3	27-speed Shimano Deore derailleur	27-speed Shimano Deore XT derailleur	30-speed Shimano Deore XT Dyna-Sys derailleur
The 3-speed hub drive system for the	Precision derailleur with 27 gears.	High-precision derailleur with 27 gears.	High-precision derailleur with 30 gears.
NJ1 e-assistant.	Suitable for hobby sport.	Suitable for professionals and intensive use	Suitable for professionals and intensive use
Suitable for daily use and hobby sport.		(> 1,000 km/year).	(> 1,000 km/year).
Freewheel shifting hub; back-pedalling brake	Back freewheel; back-pedalling brake can	Back freewheel; back-pedalling brake can	Back freewheel; back-pedalling brake can
can be implemented via the hydraulic PRO ACTIV	be implemented via the hydraulic PRO ACTIV	be implemented via the hydraulic PRO ACTIV	be implemented via the hydraulic PRO ACTIV
back-pedalling brake (optional)	back-pedalling brake (optional)	back-pedalling brake (optional)	back-pedalling brake (optional)
186%	582%	618%	569%
Grip shift or operating machine	Thumb/index finger shift controls	Thumb/index finger shift controls	Thumb/index finger shift controls
	on both sides or grip shift on both sides	on both sides or grip shift on both sides	on both sides

## **Bion**X



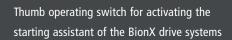




LCD display with BionX drive systems and TFT display with neodrives drive systems

Grip shift for hand operation of the 3-speed hub drive system IGH3 (BionX IGH3)







Control satellite for activating the pushing aid forwards with neodrives drive systems

#### **Brief description**

Rechargeable batteries to choose from, with ranges (with full battery charge and one rechargeable battery) Note: The range can be doubled by using a second rechargeable battery.

#### Output Torque

Sunnort 4

Support

Recuperation (battery refill)

Gear shift

#### **BionX IGH2**

»High-performance drive for permanent assistance with integrated 2-speed automatic gear shift«

- LiMn / 48 V / 8.8 Ah / 423 Wh / 52 cells Range approx. 60 to 80 km\*
- LiMn / 48 V / 11.6 Ah / 556 Wh / 52 cells Range approx. 80 to 100 km\*

250 W 9/40 Nm

4 levels of support: 35%, 75%, 150%, 300%

4 recuperation levels

Integrated 2-speed automatic gear shift

No shift controls, automatic shifting

#### Display

Starting assistant/pushing aid

#### LCD display

**Starting assistant up to 6 km/h forwards**Operation via the thumb operating switch (below

the display or on the handle) or using the chin

operating lever

**Switching between 2 rechargeable batteries** 

**Production location** 

via exchange plug connection

Canada

\*depending on profile covered

## **DRIVE SYSTEMS OVERVIEW**

»High-performance drive for permanent assistance

with integrated 3-speed hub drive system« ■ LiMn / 48 V / 8.8 Ah / 423 Wh / 52 cells

■ LiMn / 48 V / 11.6 Ah / 556 Wh / 52 cells

Integrated 3-speed hub drive system

Shifting via the grip shift for hand operation

or via operating machine for chin operation

Starting assistant up to 6 km/h forwards

Operation via the thumb operating switch (below

the display or on the handle) or using the chin

Range approx. 60 to 80 km\*

Range approx. 80 to 100 km\*

Canada

**BionX IGH3** 

250 W 9/40 Nm

4 levels of support:

4 recuperation levels

LCD display

operating lever

Canada

via exchange plug connection

35%, 75%, 150%, 300%



Canada

	NEW	neodrives
BionX P 250	BionX D-Series	Neodrives Z10-DT
»High-performance drive for permanent	»Powerful drive for permanent	»Powerful drive for permanent support,
support«	support with high torque«	Made in Germany«
■ LiMn / 48 V / 8.8 Ah / 423 Wh / 52 cells	■ LiMn / 48 V / 8.8 Ah / 423 Wh / 52 cells	■ LiMn / 36 V / 10.75 Ah / 387 Wh / 50 cells
Range approx. 60 to 80 km*	Range approx. 60 to 80 km*	Range approx. 50 to 70 km*
■ LiMn / 48 V / 11.6 Ah / 556 Wh / 52 cells	■ LiMn / 48 V / 11.6 Ah / 556 Wh / 52 cells	■ LiMn / 36 V / 14.25 Ah / 513 Wh / 50 cells
Range approx. 80 to 100 km*	Range approx. 80 to 100 km*	Range approx. 70 to 90 km*
250 W	250 W	250 W
9/40 Nm	25/50 Nm	12/40 Nm
4 levels of support:	4 levels of support:	5 levels of support:
35%, 75%, 150%, 300%	35%, 75%, 150%, 300%	60%, 120%, 180%, 240%, 300%
4 recuperation levels	4 recuperation levels	2 recuperation levels, downhill assistant for
		automatic adjustment of the recuperation level
No integrated shifting	No integrated shifting	No integrated shifting
Selection of supplementing derailleurs,	Selection of supplementing derailleurs,	Selection of supplementing derailleurs,
Shifting via thumb / index finger shift controls or	Shifting via thumb / index finger shift controls or	Shifting via thumb / index finger
grip shift	grip shift	shift controls or grip shift
LCD display	LCD display	TFT screen
Starting assistant up to 6 km/h forwards	Starting assistant up to 6 km/h forwards	Pushing aid up to 6 km/h forwards and
Operation via the thumb operating switch (below	Operation via the thumb operating switch (below	up to 1.5 km/h backwards
the display or on the handle) or using the chin	the display or on the handle) or using the chin	Operation with your fingers via the control satellite
operating lever	operating lever	next to or under the display (forwards) and via the
		display menu (backwards)
via exchange plug connection	via exchange plug connection	via the re-plugging unit on the bottom bracket support

Germany



#### Adapter equipment for tetraplegics and users with reduced function:

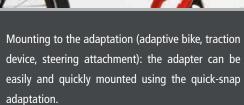
The central adapter can be equipped with a lever extension of the quick-release clip and a centring column adaptation assistance. Moreover, a lever extension of the eccentric lever on the quick-snap can be selected for the adapter. These options make the adaptation easier.

### **ADAPTERS**

#### **Central adapter**



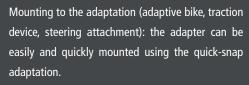
Attachment to wheelchair: the central adapter



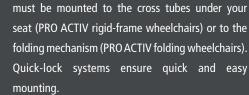
#### Front adapter



Attachment to wheelchair: the front adapter must be mounted to the front frame tubes. That way it is in the user's direct field of view. The clamping mechanism is easy to operate, also for tetraplegics. The front adapter can be used for various tube diameters and thus also for wheelchairs of other manufacturers.



After decoupling from the wheelchair, the front adapter can remain on the adaptation, which facilitates coupling for tetraplegics.



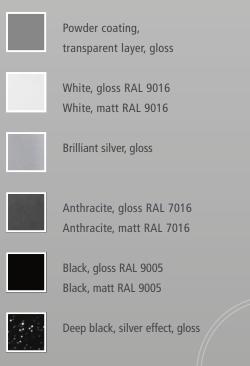




Since we always want to offer current and fashionable colours this may also result in short-term changes to the colour selection.

Please refer to www.proactiv-gmbh.com/colours for the current range of offers.

- The SPIKE adaptive bike, the FREAK, NJ1 and RAPTOR compact bikes as well as the FREEWAY can be designed in the following colours.
- For the NJ1 adaptive bike and the NJ1 e-assistant there is a choice between silver or black.







#### www.proactiv-gmbh.com



Scan QR code directly with your mobile to learn more about our products.

# PRO ACTIV Reha-Technik GmbH

Im Hofstätt 11 D-72359 Dotternhausen Tel +49 (0) 7427 9480-0 Fax +49 (0) 7427 9480-7025 info@proactiv-gmbh.de



Your nearest PRO ACTIV specialist retailer:



Printed in Germany 08/2015. Subject to technical modifications and printing errors. Colour variances to the actual product colours are possible due to the printing technology used