



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



PROACTIV®
R E H A - T E C H N I K



www.proactiv-gmbh.com

MOBILITY MADE SIMPLE!

MOBILITY MADE SIMPLE!



Dear readers,

With our »mobility made simple« brand slogan, as an innovative manufacturer of wheelchairs, handbikes, 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 neodrive 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
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	4
ADAPTIVE BIKES	6
OVERVIEW	7
SPIKE ADAPTIVE BIKE	8
NJ1 ADAPTIVE BIKE	10
COMPACT BIKES & RACING BIKES	12
OVERVIEW	12
FREAK BIKE FOR	
CHILDREN & YOUNG PEOPLE	14
NJ1 COMPACT BIKE	16
NJ1 EL. COMPACT BIKE	18
RAPTOR 4ALL & 4YOU RACING BIKE	20

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 **www.proactiv-gmbh.com/trade_fair_event_calendar**



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

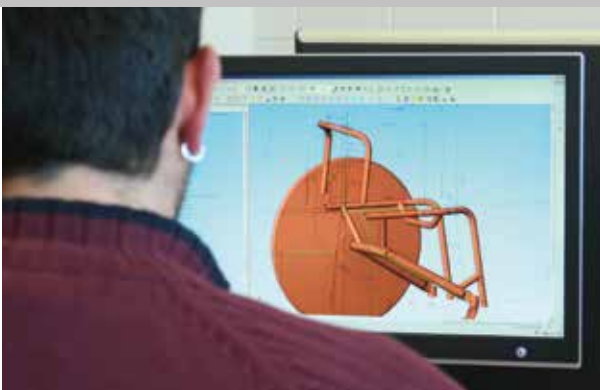
**WE STAND FOR »MOBILITY MADE SIMPLE«
AND OFFER YOU:**

- 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.



...continuous 3D CAD processes...



...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.



Timo Wetz travelling
through the Tuscany
(Photo: Hanna Wetz)

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 trailer load. For adults with greater body weight on request	Bike for young people and adults up to 120 kg trailer load and 10 kg load capacity 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-peddalling brake	Rim brake, back-peddalling 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

Custom-made options upon request.



More details from
www.proactiv-gmbh.com

SPIKE

ADAPTIVE BIKE



The stand simplifies connection and disconnection and enables the adaptive bike to be parked securely. When moving, it can be folded to save space.

Photo: Timo Wetz



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-peddalling 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.



RANGE OF GEAR SHIFTS

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

NJ1

ADAPTIVE BIKE



Electric 11-speed Shimano Alfine Di2 hub gear system (option): The shifting is carried out using an electric button that is operated using your fingers, the heel of your hand or your chin. Switching is possible when standing still.



With the adjustable bottom bracket support (option), the angle and height of the bottom bracket position can be adjusted.

Daniela Keller in her leisure time out and about with the NJ1 adaptive bike
(Photo: Timo Wetz)

»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 operation of the hydraulic PRO ACTIV back-peddalling brake (option) is carried out by the backwards movement of the cranks. No brake fittings have to be operated.



The crank release function (option) is activated via the pressure plates on the side of the pedal bearing housing. It permits (also with back-peddalling 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

Evelyn and Michael Schmid in Bavaria
(Photo: Evelyn Schmid)



Drive type

Application area

Total weight

Wheel sizes

Brakes

Derailleurs

Shimano Deore 27-speed 3x9

Shimano Deore XT 27-speed 3x9

Shimano Deore XT Dyna-Sys 30-speed 3x10

Hub gears

7-speed Shimano Nexus

8-speed Shimano Nexus

11-speed Shimano Alfine

11-speed Shimano Alfine Di2

14-speed Rohloff

3-speed BionX IGH3

2-speed BionX IGH2

Pedal bearing gearshift

Mountaindrive 2.5:1 gear reduction for hills

Custom-made options upon request.

COMPACT BIKES & RACING BIKES OVERVIEW

More details from
www.proactiv-gmbh.com



FREAK compact bike | from p. 14

Manual with gear shift

Up to 100 kg load capacity, child and youth bike

from 14.8 kg

20", 26"

Rim brake, back-peddalling brake, disc brake
(depending on the equipment)

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

No

No

Yes



NJ1 compact bike | from p. 16

Manual with gear shift

Up to 100 kg load capacity, leisure, sports and
touring. Individual approval up to 120 kg

from 15.8 kg

26"

Rim brake, back-peddalling brake, disc brake
(depending on the equipment)

Yes

Yes

Yes

Yes

Yes

Yes

Yes

No

No

Yes



NJ1 el. compact bike | from p. 18

Manual with gear shift
and electric support

Up to 100 kg load capacity, leisure, sports and
touring. Individual approval up to 120 kg

from 24.8 kg

26"

Rim brake, back-peddalling brake, disc brake
(depending on the equipment)

Yes

Yes

Yes

No

No

No

No

No

Yes

Yes

Yes



RAPTOR 4all & 4you racing bike | from p. 20

Manual with gear shift

Up to 100 kg load capacity, sports and competition

from 14.9 kg

26"

Rim brake, disc brake
(depending on the equipment)

Yes

Yes

Yes

No

No

No

No

Yes

No

No

No

FREAK

BIKE FOR CHILDREN & YOUNG PEOPLE



Various leg supports are available for customisation.

The sports device turns into an easily stored package with a few movements.

Photo: Timo Wetz



»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

NJ1

COMPACT BIKE



The sports device turns into an easily stored package with a few movements.



You can upgrade your PRO ACTIV wheelchair to become a »trailer« with a hitch and bar. So you always have your wheelchair with you even when on longer tours.

Michael Schmid out and about
in the mountains in Upper Bavaria
(Photo: Evelyn Schmid)

»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

NJ1 EL.

COMPACT BIKE



The drive unit and chassis (loading weight from 13.0 and 7.9 kg) can be separated from one-another in a few steps and the running wheels and rechargeable batteries can be removed for transporting.



The motors of the BionX and neodrive drive-systems are maintenance-free. Please refer to pages 36 and 37 for an overview of the available drive systems.

Photo: Carmen Wetz



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



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 neodrive 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, neodrive Z10-DT)
- ✓ 2-speed automatic gear shift IGH2 (BionX IGH2)
- ✓ 3-speed hub gear IGH3 (BionX IGH3)



As the drive unit can be removed, it is possible to define the ideal position in a practical test over several days with a drive unit and adjustable bottom bracket support. The individual, fixed welded forks can then be produced using the ideal position set.

RAPTOR 4ALL

RACING BIKE



The exchangeable axle tube provides the user with a high degree of flexibility. In just a few steps the RAPTOR can be converted to a time trial bike with a minimal track width and wheels behind the body.



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.

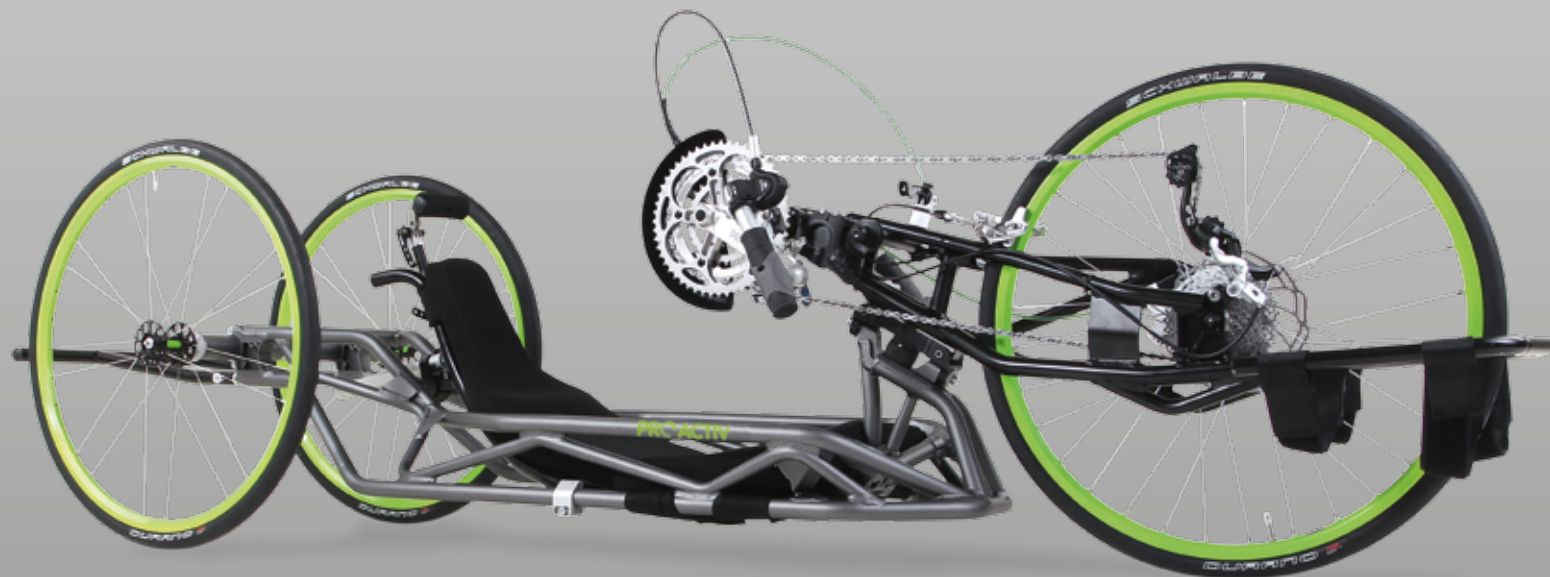
The RAPTOR racing bike is a high-end sport device for racing sport. Top-quality gear and brake components from the bicycle industry ensure precise switching of gears and braking.

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 derailleur
- ✓ 14-speed Rohloff Speedhub 500/14 hub drive



Thorsten Krämer in Hamburg
(Photo: Gunther Belitz)

STEERING & TRACTION DEVICES OVERVIEW



FREEWAY steering attachment | from p. 24



NJ1 e-assistant traction device | from 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-peddalling 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

Custom-made options upon request.



More details from
www.proactiv-gmbh.com

FREEWAY

STEERING ATTACHMENT



The top-quality Shimano V-Brake service brake allows for comfortable braking downhill without getting hot hands on the handrim.



Small packaging size as the wheel can be removed quickly and easily via a quick-lock system.

Photo: Melanie Wendt



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.

BionXTM



neodrives

NJ1 E-ASSISTANT

TRACTION DEVICE



Connection of the dual rechargeable batteries to double the range. The batteries can be removed for transportation thus reducing the loading weight to around 14 kg.



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.

Photo: Melanie Wendt



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.



NEW

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



NEW

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.



GEAR SHIFTS

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

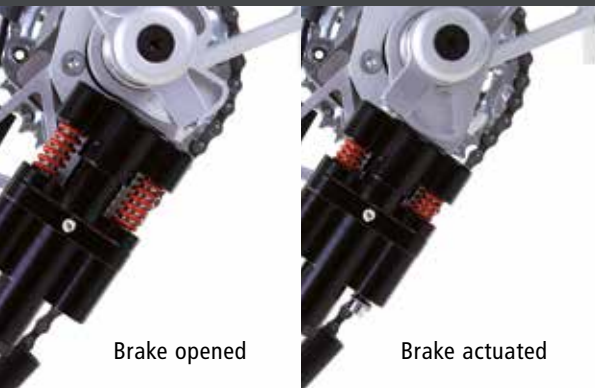
- ✓ 27-speed Shimano Deore or Deore XT derailleur (BionX P 250, BionX D series, neodrives Z10-DT)
- ✓ 2-speed automatic gear shift IGH2 (BionX IGH2)
- ✓ 3-speed hub gear IGH3 (BionX IGH3)

Timo Wetz in Tirol, Austria
(Photo: Carmen Wetz)



OPTIONS & ACCESSORIES

Back-peddalling brake



The operation of the hydraulic PRO ACTIV back-peddalling 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-peddalling 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.



Parking stand with long lever



Due to the long operating lever, the operation is easier and possible with less effort. Further operating options of the parking stand on request.

Manoeuvring rollers & manoeuvring bar



Manoeuvring roller

Manoeuvring bar

In order to make moving the handbike in a decoupled state easier, manoeuvring rollers can be mounted on the parking stand. A manoeuvring bar can also be fastened to the bottom bracket housing.

OPTIONS & ACCESSORIES

Operating lever for the parking brake



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.

Re-plugging unit



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.

Exchange plug connection



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.

Chin operating, starting assistant



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

Grip shift



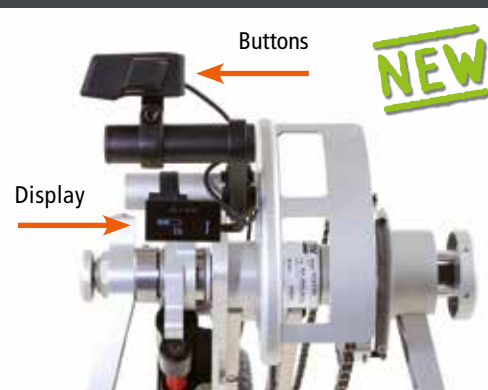
On the grip shift, the shifting is carried out by turning the handle to the right and left. The gear selected is shown on the grip shift for hub drives. With derailleurs, you can read-off which chain wheel/sprocket is currently being used on the grip shift.

Thumb/index finger shift controls



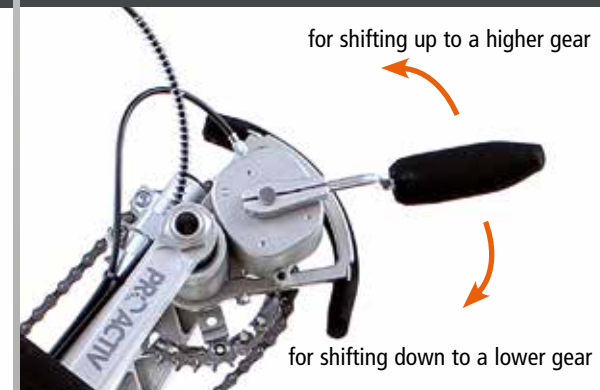
Shifting with the thumb/index finger shift controls is carried out by pressing the gear lever with your fingers. With the hub gear Shimano Alfine, the gear selected is shown in the display above the handle. With derailleurs, this display is an orientation as to which chain wheel/sprocket is currently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

	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

NEW

Hub gears

14-speed Rohloff Speedhub 500/14 hub gear

Brief description

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

Freewheel / back-pedalling brake

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

Gear range

526%

Handling options

Grip shift

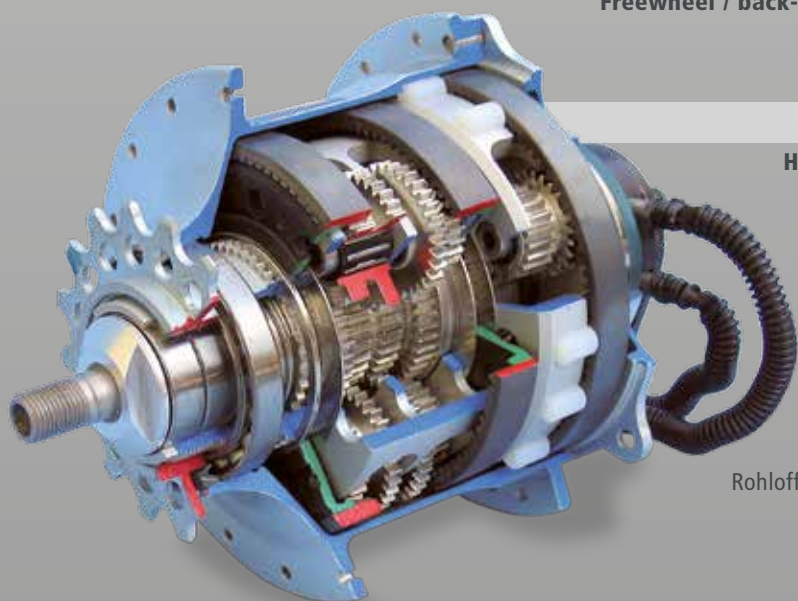
2-speed automatic hub gear BionX IGH2

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 automatical-
ly. 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



Rohloff Speedhub 500/14

GEAR SHIFTS OVERVIEW

More details from
www.proactiv-gmbh.com



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

BionX™

NEW



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)



Thumb operating switch for activating the starting assistant of the BionX drive systems



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

BionX IGH2	
Brief description	»High-performance drive for permanent assistance with integrated 2-speed automatic gear shift«
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.	<ul style="list-style-type: none"> ■ 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*
Output	250 W
Torque	9/40 Nm
Support	4 levels of support: 35%, 75%, 150%, 300%
Recuperation (battery refill)	4 recuperation levels
Gear shift	Integrated 2-speed automatic gear shift No shift controls, automatic shifting
Display	LCD display
Starting assistant/pushing aid	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	via exchange plug connection
Production location	Canada

*depending on profile covered

DRIVE SYSTEMS OVERVIEW

NEW

 **neodrives**

BionX IGH3	BionX P 250	BionX D-Series	Neodrives Z10-DT
»High-performance drive for permanent assistance with integrated 3-speed hub drive system«	»High-performance drive for permanent support«	»Powerful drive for permanent support with high torque«	»Powerful drive for permanent support, Made in Germany«
<ul style="list-style-type: none"> ■ 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* 	<ul style="list-style-type: none"> ■ 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* 	<ul style="list-style-type: none"> ■ 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* 	<ul style="list-style-type: none"> ■ LiMn / 36 V / 10.75 Ah / 387 Wh / 50 cells Range approx. 50 to 70 km* ■ LiMn / 36 V / 14.25 Ah / 513 Wh / 50 cells Range approx. 70 to 90 km*
250 W	250 W	250 W	250 W
9/40 Nm	9/40 Nm	25/50 Nm	12/40 Nm
4 levels of support: 35%, 75%, 150%, 300%	4 levels of support: 35%, 75%, 150%, 300%	4 levels of support: 35%, 75%, 150%, 300%	5 levels of support: 60%, 120%, 180%, 240%, 300%
4 recuperation levels	4 recuperation levels	4 recuperation levels	2 recuperation levels, downhill assistant for automatic adjustment of the recuperation level
Integrated 3-speed hub drive system Shifting via the grip shift for hand operation or via operating machine for chin operation	No integrated shifting Selection of supplementing derailleurs, Shifting via thumb / index finger shift controls or grip shift	No integrated shifting Selection of supplementing derailleurs, Shifting via thumb / index finger shift controls or grip shift	No integrated shifting Selection of supplementing derailleurs, Shifting via thumb / index finger shift controls or grip shift
LCD display	LCD display	LCD display	TFT screen
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	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	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	Pushing aid up to 6 km/h forwards and up to 1.5 km/h backwards Operation with your fingers via the control satellite next to or under the display (forwards) and via the display menu (backwards)
via exchange plug connection	via exchange plug connection	via exchange plug connection	via the re-plugging unit on the bottom bracket support
Canada	Canada	Canada	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 must be mounted to the cross tubes under your seat (PRO ACTIV rigid-frame wheelchairs) or to the folding mechanism (PRO ACTIV folding wheelchairs). Quick-lock systems ensure quick and easy mounting.

Mounting to the adaptation (adaptive bike, traction device, steering attachment): the adapter can be easily and quickly mounted using the quick-snap adaptation.

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.

Mounting to the adaptation (adaptive bike, traction device, steering attachment): the adapter can be easily and quickly mounted using the quick-snap adaptation.

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

COLOURS



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.



Powder coating,
transparent layer, gloss



White, gloss RAL 9016
White, matt RAL 9016



Brilliant silver, gloss



Anthracite, gloss RAL 7016
Anthracite, matt RAL 7016



Black, gloss RAL 9005
Black, matt RAL 9005



Deep black, silver effect, gloss



Pure orange, gloss RAL 2004
Pure orange, matt RAL 2004



Fire red, gloss
Fire red, matt



Pink magenta, gloss, RAL 4010
Pink magenta, matt, RAL 4010



Violet, gloss



Light cyan, gloss
Light cyan, matt



Pastel blue, gloss, RAL 5024
Pastel blue, matt, RAL 5024



Sky blue, gloss



Navy blue, gloss
Navy blue, matt



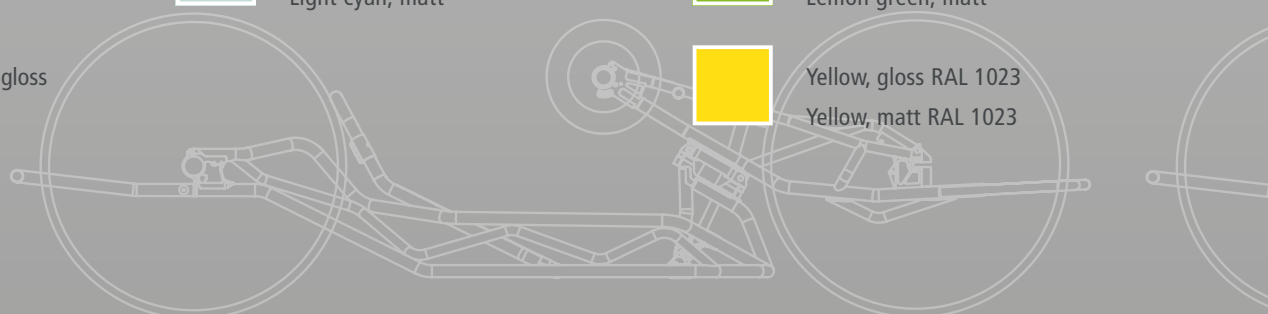
Apple green, gloss
Apple green, matt



Lemon green, gloss
Lemon green, matt



Yellow, gloss RAL 1023
Yellow, matt RAL 1023





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) 74 27 94 80-0
Fax +49 (0) 74 27 94 80-70 25
info@proactiv-gmbh.de



Your nearest PRO ACTIV specialist retailer: