

Invacare® Ultra Low Maxx by Motion Concepts

Supplement to power wheelchair user manual

en Powered Positioning Seating System
User Manual

This manual MUST be given to the user of the product. BEFORE using this product, this manual MUST be read and saved for future reference.



Contents

1	Ge	eneral	
	1.1	About This Manual	
	1.2	Symbols in This Manual	
	1.3	Warranty Information	
	1.4	Safety Information on Using the Seating System	
2	Co		
_	2.1	Imponents Power Positioning Functions	
	2.2	Driving and Seating Limitations (LiNX System)	. :
	2	2.2.1 Driving Limitations	. :
	2	2.2.2 Seating Limitations	1
3	Se	tup	1
	3.1	General Setup Information	1
	3.2	Adjusting Swing Away Remote Holder	1
	3.3	Adjusting Quad Link Remote Holder	1
	3.4	Adjusting Maxx Resolve Swing-Away Remote Holder	1.
	3.5	Adjusting Nucleus Midline Holder	1
	3	3.5.1 Adjusting Depth of Nucleus Midline Holder	1
	3	3.5.2 Adjusting Height of Nucleus Midline Holder	1
	3	3.5.3 Adjusting Remote / Display Position	1
	3.6	Adjusting Swing-Away Mechanism	2
	3.7	Adjusting Swing-Away Display Holder	
	5.7	Adjusting Swing Away Display Holder	_

3.8	Adju	sting Manual Chin Control	21
3	3.8.1	Adjusting Extremity Control Joystick	. 21
3	3.8.2	Adjusting Egg Switch	. 22
3.9	Adju	sting Head Array	. 22
3.10	Adj	usting Sip and Puff Head Array	23
3.11	Adj	usting Angle of Preset Backrest	. 23
3.12	Adj	usting Cantilever Flip-up Armrest	23
3.13	Ultı	a Rail Mounted Flip Back Cantilever Maxx Armrest	24
3.14	Adj	usting Two Post Recline Armrest	25
3.15	Adj	ust Armpad with Multi Axis Upper Extremity Support	
	(MAC	ES)	25
3.16	Adj	usting Elbow Block	26
3.17	Adj	usting Hip Support with Quick Release	27
3.18	Adj	usting Lateral Trunk Support	. 29
3.19	Adj	usting the Headrest	30
3	3.19.1	Installing Headrest Adapter for Elite and High Backs	. 30
3	3.19.2	Auto-style Headrest Set-up and Installation	32
3	3.19.3	Adjusting Elan Headrest Hardware	32
3	3.19.4	Adjusting Multi-axis Headrest Hardware	33
3.20	Pivo	ot Plus Legrests	34
3	3.20.1	Swing Away Legrests	34
3	3.20.2	Removing Legrests	35
3	3.20.3	Adjusting Angle of Legrest	. 35
3	3.20.4	Adjusting Width- and Angle-Adjustable Footplate	36
3.21	Cen	tral Legrests — Manually Adjustable	36
3	3.21.1	Removing Legrest	36

© 2024 Invacare Corporation

All rights reserved. Republication, duplication or modification in whole or in part is prohibited without prior written permission from Invacare. Trademarks are identified by $^{\text{TM}}$ and $^{\text{@}}$. All trademarks are owned by or licensed to Invacare Corporation or its subsidiaries unless otherwise noted.

2 24 2	Catting Angle of Lagrant	7 2	25.0	Adirotica Acada and Banth adirotable Factors	
	Setting Angle of Legrest			Adjusting Angle— and Depth—adjustable Footrest	
3.21.3				ered Elevating Legrests (ADE Legrests)	
	Setting Angle of Footplate			Swivelling Legrest Outward and / or Removing	
	Setting Angle and Height of Calf Pad			5 5	
	Legrest			Adjusting Length of Legrest	
	Setting Length of Legrest3			Adjusting Height of Calf Pad	
3.22.2	8 8			Adjusting Depth of Calf Pad	
3.22.3	Adjusting Footplate Width			Unlocking and Swivelling Calf Pad Backward	
3.22.4	Setting Angle of Foot Platform	9 3	.26.7	Adjusting Angle–adjustable Footrest	54
3.22.5	Setting Height and Width of Calf Pad	9 3	.26.8	Adjusting Angle– and Depth–adjustable Footrest	54
3.23 Vari-	-F Legrest4	0 4 Usa	ge		50
3.23.1	Swivelling Legrest Outward and / or Removing 4	Λ	•	ng / Removing Recline Armrest	
3.23.2	Setting Angle4			ng Cantilever Armrest	
3.23.3	Setting End Stop of Legrest 4	1		ving / Inserting Hip Support with Quick Release	
3.23.4	Adjusting Length of Legrest4	7		LNX Powered Central Legrest with Telescoping	50
3.24 Vari-	-A Legrests 4	3	_	pard	56
3.24.1	Swivelling Legrest Outward and / or Removing 4	2		cing Backrest Cushion	
3.24.2	Setting Angle4	3 4.5	періа	Ling Backrest Cushion	57
3.24.3	Setting End Stop of Legrest 4	4 5 M a	intena	nce Schedule	58
3.24.4	Adjusting Length of Legrest4	6 6 Aft	er Use		50
3.24.5	Adjusting Height of Calf Pad 4	_		ditioning	
3.24.6	Adjusting Depth of Calf Pad4			sal	
3.24.7	Unlocking and Swivelling Calf Pad Backward 4	7			
3.24.8	Adjusting Angle–adjustable Footrest 4	0		nooting	
3.24.9	Adjusting Angle— and Depth—adjustable Footrest4		Perfor	mance Troubleshooting	60
3.25 ADN	1 Legrests4		hnical	Data	63
3.25.1				ical Specifications	
3.25.2	Setting Angle4				
3.25.3	Adjusting Length of Legrest5				
3.25.4	Adjusting Height of Calf Pad				
3.25.5	Adjusting Depth of Calf Pad5				
3.25.6	Unlocking and Swivelling Calf Pad Backward				

1 General

1.1 About This Manual

This document is a supplement to the product's user documentation.

This component itself does not bear a CE and a UKCA mark but is part of a product that complies with the Medical Device Regulation 2017/745, Class I and Part II UK MDR 2002 (as amended) Class I concerning medical devices. It is therefore covered by the product's CE and UKCA marking. See the product's user documentation for more information.

Only use this component if you have read and understood this manual. Seek additional advise from a healthcare professional who is familiar with your medical condition and clarify any questions regarding the correct use and necessary adjustment with the healthcare professional.

Note that there may be sections in this document, which are not relevant to your component, since this document applies to all available models (on the date of printing). If not otherwise stated, each section in this document refers to all models of the component.

Invacare reserves the right to alter component specifications without further notice.

Before reading this document, make sure you have the latest version. You find the latest version as a PDF on the Invacare website. Previous product versions may not be described in this Manual's current revision. If you require assistance, please contact Invacare.

If you find that the font size in the printed document is difficult to read, you can download the PDF version from the website. The PDF can then be scaled on screen to a font size that is more comfortable for you.

For more information about the component, for example safety notices and recalls, contact your Invacare representative. See addresses at the end of this document.

In case of a serious incident with the component, you should inform the manufacturer and the competent authority in your country.

1.2 Symbols in This Manual

Symbols and signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words.



DANGER!

Indicates a hazardous situation that will result in serious injury or death if it is not avoided.



WARNING!

Indicates a hazardous situation that could result in serious injury or death if it is not avoided.



CAUTION

Indicates a hazardous situation that could result in minor or slight injury if it is not avoided.



NOTICE!

Indicates a hazardous situation that could result in damage to property if it is not avoided.



Tips and Recommendations

Gives useful tips, recommendations, and information for efficient, trouble-free use.



Tools

Identifies required tools, components and items which are needed to carry out certain work.

Other Symbols

(Not applicable for all manuals)



UK Responsible Person

Indicates if a product is not manufactured in the UK.



Triman

Indicates recycling and sorting rules (only relevant for France).

1.3 Warranty Information

We provide a manufacturer's warranty for the product in accordance with our General Terms and Conditions of Business in the respective countries.

Warranty claims can only be made through the provider from whom the product was obtained.

1.4 Safety Information on Using the Seating System

Your seating system has been specially configured and assembled to the power wheelchair base prior to delivery. Note that the final configuration and purchasing decision regarding the complete wheelchair system is the responsibility of the power wheelchair user, who is capable of making such a decision, and his / her healthcare professional. The contents of this manual are based on the expectation that a power wheelchair expert has fitted the power wheelchair to the user and has assisted the prescribing healthcare professional in the instruction and use of this device.

The user manual of the power wheelchair contains all relevant safety information about the use of the power wheelchair including the seating system. Be certain to read and follow these safety information.



WARNING! Risk of Tipping

The power wheelchair may tip over when you change its stability characteristics by changing your seating position.

- Determine and establish your personal safety limits by practicing bending, reaching and transferring activities in the presence of a qualified healthcare professional before attempting active use of the wheelchair.
- Your seating system can be mounted onto the power wheelchair base in various forward and aft positions.
 Make certain that the position selected provides you with maximum stability over the full range of seating positions.
- Consider all personal gear and accessories (backpacks, vent systems, extra batteries, etc.) that will be carried on the wheelchair. For example, a loaded backpack, attached to the back of the seating system, can significantly reduce the rearward stability of your wheelchair.
- Consider the backrest being used. For example, a
 recessed back can shift your centre of gravity backward
 and significantly reduce the rearward stability of the
 wheelchair. Conversely, a thick back cushion will shift
 you forward and reduce the wheelchairs forward
 stability.



- Always shift your weight in the direction you are turning.
 Shifting weight in the opposite direction of the turn may compromise stability of the power wheelchair base, causing it to tip over.
- Consider the seat cushion being used. A thick seat cushion will raise your centre of gravity and reduce the wheelchairs stability in all directions.
- All seating systems are equipped with drive lockouts.
 Make certain this is set so as not to compromise your stability while driving (refer to 2.2 Driving and Seating Limitations (LiNX System), page 8).
- The wheelchair has a programmable controller which allows adjustment of the maximum acceleration and deceleration of the wheelchair. Make sure that these are set to an appropriate level for the system and for you, the user.
- When operating in reduced speed drive or anti-tipper lockout, always travel on a smooth level surface to ensure the wheelchair's stability is not compromised.
- Ensure all medical conditions are considered when setting up your wheelchair. Involuntary muscle movement such as spasms may affect the stability of the wheelchair, especially when the seating system is in a tilted or reclined position.
- When a system is fully tilted or reclined, the front wheels of the wheelchair should never come off the ground. If this occurs, please contact your authorised Invacare dealer immediately to resolve the issue.



WARNING!

Risk of Death, Serious Injury or Damage

Risk of entrapment and strangulation when loose personal belongings (e.g. jewellery, scarfs) get caught by moving or protruding parts.

- Make sure that any loose items are clear of moving parts of the power wheelchair, e.g. wheels or powered seating components.
- Keep your hands, clothing and all other objects away from wheels or powered seating components when they are in operation.
- Power off power wheelchair immediately to stop any movement.

2 Components

2.1 Power Positioning Functions

The seating system offers the following functions:

CG-TILT

The CG (centre of gravity) tilt function compensates for weight shift by sliding the pivot axis and entire seat assembly forward as the seat tilts back. Typical tilt range is 0° - 45° (with lifter) or 0° - 50° (without lifter).

RECLINE

The recline function enables users to infinitely change the seat to back angle of their system within a set range. Typical recline angle range is 90°-168°.

ESR

ESR (extended shear reduction) is synchronised with recline to reduce the amount of shear between the client and the backrest. This is accomplished using a linkage that slides the backrest on the backposts as the back reclines.

PRECLINE

Available as an option with recline systems, precline adjusts the back angle of the seating system into a forward position, closing the seat to back angle to less than 90°. (Note: the maximum recline angle is decreased approximately by the number of degrees of precline).

SCISSOR LIFTER/LIFTER MODULE

The scissor lifter module allows users to raise their power positioning system up to 300 mm above the lowest seat-to-floor height of their system. The scissor lifter is combined with a tilt function.

LEGRESTS

Our wide range of power and manual legrests are available in an array of sizes and styles including individual legrests and central foot platforms to help secure and position clients' legs. In addition, we offer a multitude of legrest hangers to accommodate your legrest choice. Power legrests may be programmed to operate in one of the two following configurations:

- · Individual (legrests operate independently),
- · Combined (legrests operate in unison)

2.2 Driving and Seating Limitations (LiNX System)



DANGER!

Risk of Severe Injury or Death

The angle at which the limit switches/locko

The angle at which the limit switches/lockouts are set is critical to the safe operation of the system.

- Invacare will not be liable for any injuries or damage sustained when adjustments are made beyond the factory recommended settings.
- To ensure proper set-up, adjustments to lockouts and limits should only be performed by a qualified technician.
- Never exceed the maximum recommended limits.
 Lockouts and limit switches should be set up to best meet the needs of the user without compromising the overall stability of the wheelchair.
- Following any limit or lockout adjustments, always test the seating system over the full range of motion (i.e. tilt, recline, lifter) to verify the revised set-up is functioning properly and ensure that there are no resulting stability or interference issues.



Additional limits and lockout switches may be required for more complicated/specialised seating systems. For information on limits/lockouts that are not identified in this manual, contact your provider.

For TDX SP2, drive and seating restrictions are only updated while stationary.

For AVIVA RX and AVIVA FX, drive and seating restrictions are updated both while driving and while stationary.

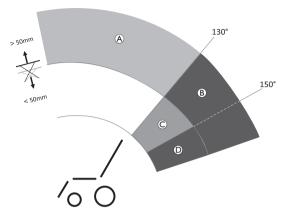
2.2.1 Driving Limitations

Driving Limitations

Seating systems are configured / programmed with a drive slowdown. The drive slowdown utilises microswitches to trigger the system into reduced drive speed.

All tilt and recline seating systems are equipped with a drive lockout (DLO) limit to prevent the wheelchair from being driven when the seating system is tilted or reclined beyond a pre-determined safe total angle and / or a pre-determined height. The total angle can be any combination of seat angle, backrest angle and/ or surface angle.

AVIVA RX with Lifter

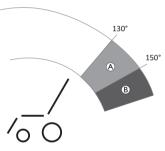


	Limitation	Cause for Limitation
A	Drive Slowdown	If lifter is raised • >50 mm
(B)	Drive Lockout	If lifter is raised • >50 mm and if backrest angle is • >130°
©	Drive Slowdown / Lockout adjustable by provider	If lifter is raised • <50 mm and if backrest angle is • >130° - <150°1

	Limitation	Cause for Limitation
	Drive Lockout	If lifter is raised
		• <50 mm
D		and if backrest angle is
		• >150°

1 The provider can determine the angle when the drive slowdown should turn into a drive lockout.

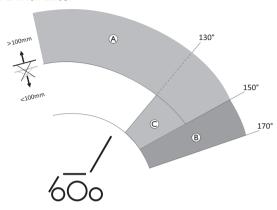
AVIVA RX without Lifter



	Limitation	Cause for Limitation
A	Drive Slowdown / Lockout adjustable by provider	If backrest angle is • >130° - <150°1
(B)	Drive Lockout	If backrest angle is • >150°

1 The provider can determine the angle when the drive slowdown should turn into a drive lockout.

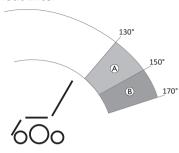
TDX SP2 with Lifter



	Limitation	Cause for Limitation
A	Drive Slowdown	If lifter is raised • >100 mm
(B)	Drive Slowdown / Lockout adjustable by provider	If backrest angle is • >150° - <170°1
©	Drive Slowdown	If lifter is raised • <100 mm and if backrest angle is • >130° - <150°

¹ The provider can determine the angle when the drive slowdown should turn into a drive lockout.

TDX SP2 without Lifter

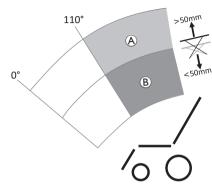


	Limitation	Cause for Limitation
A	Drive Slowdown	If backrest angle is • >130° - <150°
B	Drive Slowdown / Lockout adjustable by provider	If backrest angle is • >150° - <170°1

1 The provider can determine the angle when the drive slowdown should turn into a drive lockout.

2.2.2 Seating Limitations

AVIVA RX with Lifter

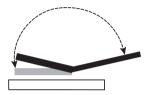


	Limitation	Cause for Limitation
A	Tilting >110° inhibited	If lifter is raised • >50 mm
B	Lifting inhibited	If backrest angle is • >110°

There are no other seating limitations for AVIVA RX without lifter and TDX SP2 (with / without lifter) despite of the Max. Back Angle Limit

Max. Back Angle Limit

The maximum back angle limits how far the backrest can be reclined using either the tilt or recline actuators. The seating systems are typically preset at the factory to the maximum allowable angle and do not require any further adjustment unless the maximum angle needs to be decreased (see hazard statement below).



Max. Back Angle Limit =

168° (TDX SP2) 170° (AVIVA RX)

I NOTICE!

— When establishing the maximum back limit, always consider the size and location of any personal gear that may be carried on the wheelchair, as it could cause interference between the backrest and the power wheelchair base when fully tilted / reclined, and damage the actuator and / or wheelchair.

3 Setup

3.1 General Setup Information



WARNING! Risk of Death. Serious Injury or Damage

Continued use of the power wheelchair that is not set to the correct specifications may cause erratic behaviour of the power wheelchair resulting in death, serious injury, or damage.

- Performance adjustments should only be made by healthcare professionals or persons fully conversant with this process and the driver's capabilities.
- After the power wheelchair has been set-up / adjusted, check to make sure that the power wheelchair performs to the specifications entered during the set-up procedure. If the power wheelchair does not perform to specifications, IMMEDIATELY turn the power wheelchair Off and re-enter set-up specifications. Contact Invacare, if power wheelchair still does not perform to correct specifications.



WARNING!

Risk of Death, Serious Injury or Damage

Attaching hardware that is loosely secured or missing could cause instability resulting in death, serious personal injury, or property damage.

— After ANY adjustments, repair or service and before use,



make sure that all attaching hardware is present and tightened securely.



WARNING! Risk of Injury or Damage

Incorrect set up of this power wheelchair performed by users / caregivers or unqualified technicians can result in injury or damage.

- DO NOT attempt to set up this power wheelchair. Initial set up of this power wheelchair MUST be performed by a qualified technician.
- Adjustment by the user is only recommended after they have been given appropriate guidance by the healthcare professional.
- DO NOT attempt to carry out the work if you do not have the listed tools available.



CAUTION!

Risk of Injury or Damage

The power wheelchair is fitted with an individual, multiply adjustable seating system including adjustable legrests, armrests, a headrest or other options which are used to adapt the seat to the physical requirements and the condition of the user. It is possible that collisions or pinch points can occur between power wheelchair components due to various combinations of adjustment options and their individual settings.



When adapting the seating system and the seat functions to the user:

- Beware of pinch points when adjusting the power wheelchair components and
- ensure that no power wheelchair components collide.

| NOTICE!

The power wheelchair is manufactured and configured individually to the specifications of the order. The assessment must be performed by a healthcare professional according to the user's requirements and health conditions.

- Consult a healthcare professional if you intend to adapt the power wheelchair configuration.
- Any adaption should be performed by a qualified technican.

Initial setup should always be done by a healthcare professional. Adjustment by the user is only recommended after they have been given appropriate guidance by the healthcare professional.

Electrical Adjustment Options

Refer to the user manual for your remote for more information on operating electrical adjustment options.

Footplates

All footplates offered by Invacare can be folded upwards.

3.2 Adjusting Swing Away Remote Holder

The following information is valid for all seating systems.



CAUTION!

Risk of the remote being pushed backwards during an accidental collision with an obstacle, such as a doorframe or table, and the joystick being jammed against the armpad if the position of the remote is adjusted and all screws are not completely tightened This will cause the power wheelchair to drive forward

uncontrollably and potentially injure the power wheelchair user and any person standing in the way.

- When adjusting the position of the remote, always make sure to tighten all screws securely.
- If this should accidentally happen, immediately switch the power wheelchair electronics OFF at the remote.



CAUTION! Risk of Injury

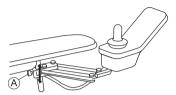
When leaning on the remote, for example, when transferring into or out of the wheelchair, the remote holder may break and the user may fall out of the chair.

 Never lean on the remote as a support for, for example, transfer.

14

Adjusting Remote Height

• 6 mm Allen key



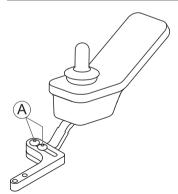
- 1. Loosen screw (A).
- 2. Adjust component to desired position.
- 3. Tighten screw.

Adjusting Remote Offset

The remote can be adjusted by 20 mm sidewise.



• 3 mm Allen key



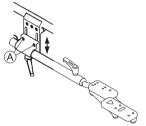
- Loosen screws A.
- 2. Adjust component to desired position.
- 3. Tighten screws.

3.3 Adjusting Quad Link Remote Holder

Adjusting Remote Height



• 6 mm Allen key



- 1. Loosen the two set screws (A) on the remote mount.
- Push or pull the remote mounting tube up or down to the desired height.
- 3. Tighten the two set screws on the remote mount.

Adjusting Remote Position



• 6 mm Allen key



- 1. Loosen screw (A) securing adjustable remote tray (B) to Quad Link.
- 2. Rotate remote to desired position.
- Tighten screw to secure adjustable remote tray to Quad Link.

Adjusting Lock Tension

By default, the Quad Link is fitted with two magnets locking the Quad Link in extended position. Removing a magnet reduces the tension and makes it easier to release the Quad Link.



CAUTION!

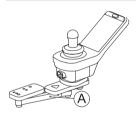
Risk of Injury or Damage to Wheelchair

Removing both magnets leaves Quad Link without lock. Quad Link could retract unintentionally.

— Always leave at least one magnet.



• Small pointed tool such as paper clip



- Swivel Quad Link to side to access magnets.
- 2. Insert tool in hole (A) and push out magnet on other side.

3.4 Adjusting Maxx Resolve Swing-Away Remote Holder

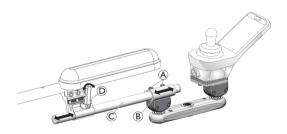
Adjusting Remote Depth



The depth adjustment on an offset remote tube is the same as for a straight remote tube.



• 5 mm Allen key



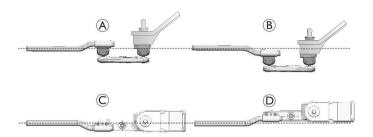
1. Loosen screws A to adjust clamp B on tube C to desired depth of remote.

Tighten screws when desired position is reached.

and / or

Offset Remote Tube Configurations

By rotating the offset remote tube, the direction of the offset can be adjusted to several configurations:



- A raised
- B lowered
- outward (if mounted on right armrest) / inward (if mounted on left armrest)
- inward (if mounted on right armrest) / outward (if mounted on left armrest)

Height and Angle Adjustment

The height / angle of the Maxx Resolve Remote Holder is adjusted via two ball clamp assemblies on the swing away mechanism. The rear ball clamp assembly is attached to the remote tube, on the front ball clamp assembly the remote is mounted. Both ball clamp assemblies can be independently adjusted to position the remote at the height and / or angle that fits the user's needs.



Ball clamp assemblies mounted upwards



Ball clamp assemblies mounted downwards



When adjusting the angle of the ball clamp assemblies upwards, the body of the swing away mechanism becomes angled upward. This upward angle means that when the remote swings outward (when mounted on the right armrest) or inward (when mounted on the left armrest), it will swingaway to a lower position. The opposite effect applies when the angle of the ball clamp assemblies is adjusted downwards.



• 5mm Allen key



Angle Adjustment



Height Adjustment



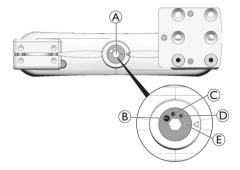
- 1. Loosen screws (A) in each ball clamp assembly.
- 2. Pivot / Rotate the ball clamp assemblies to desired angle / height.
- 3. Tighten screws, when desired position is reached.

Break-Away Tension Setting Adjustment

The Maxx Resolve Swing-Away Remote Holder uses a tension adjustable belt-drive to control the "break-away" force required to reposition the remote. The tension can be adjusted via the cam wheel at the centre of the swing-away mechanism. There are four tension setting options available to accommodate the user's strength and mobility. The break-away tension should be set to fit the user's needs.



· 6 mm Allen key



- Use the cam wheel (A) to adjust the break-away tension to one of the four setting options:
 - ® hard
 - © medium
 - D easy
 - © very easy

3.5 Adjusting Nucleus Midline Holder



WARNING!

Risk of Injury or Damage

Loose small parts can lead to choking hazard that may result in injury or death.

- Do not remove any small parts except to replace the joystick knob.
- Do not leave removed joystick knob unattended.
- Closely supervise children, pets or people with physical / mental disabilities.



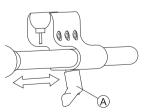
CAUTION!

Risk of Injury or Damage

Remaining burrs and missing end caps after modifications on rods, such as shortened rod, can lead to injury or damage.

- Deburr cut after cutting excessive length.
- Re-install end cap after deburring.
- Check end cap for tight fitting.

3.5.1 Adjusting Depth of Nucleus Midline Holder



- 1. Loosen lever A.
- 2. Shift nucleus midline holder to desired position.
- 3. Tighten lever.

3.5.2 Adjusting Height of Nucleus Midline Holder

You can adjust the height of the nucleus midline holder in two ways:

- Adjust it together with the armrest height, refer to corresponding armrest chapters 3.12 Adjusting Cantilever Flip-up Armrest, page 23, 3.13 Ultra Rail Mounted Flip Back Cantilever Maxx Armrest, page 24 or 3.14 Adjusting Two Post Recline Armrest, page 25.
- Adjust the height of the nucleus midline holder only, refer to section below.



• 3/16 inch Allen key



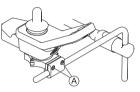
- 1. Loosen screw (A).
- Adjust nucleus to desired height.
- 3. Tighten screw.

3.5.3 Adjusting Remote / Display Position



- 4 mm Allen key
- 8 mm wrench

Tilting Remote (DLX-REM110, DLX-REM2XX, DLX-REM400)



- 1. Loosen screws (A).
- 2. Position remote on holder.
- 3. Tighten screws.

Fig. 3-1 Example of DLX-REM400 adjustment. DLX-REM110, DLX-REM211 and DLX-REM216 are adjusted the same way.

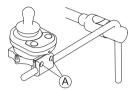
Rotating Remote (DLX-REM110, DLX-REM2XX, DLX-REM400)



- Loosen screw A.
 - Rotate remote in clamp to desired position.
- 3. Tighten screw.

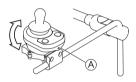
Fig. 3-2 Example of DLX-REM400 adjustment. DLX-REM110, DLX-REM211 and DLX-REM216 are adjusted the same way.

Tilting Remote (DLX-CR400 and DLX-CR400LF)



- 1. Loosen screws (A).
- 2. Position remote on holder.
- 3. Tighten screws.

Rotating Remote (DLX-CR400 and DLX-CR400LF)

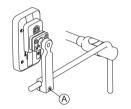


- 1. Loosen screw (A) (not shown in picture).
- 2. Rotate remote in clamp to desired position.
- 3. Tighten screw.

DLX-REM500



• 3/16 inch (5 mm) Allen key



- 1. Loosen screw (A).
- 2. Position display on holder.
- 3. Tighten screw.

ASL Components on Nucleus Tray



• 3/16 inch (5 mm) Allen key



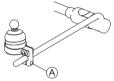
- Loosen screw A.
- 2. Position tray on holder.
- 3. Tighten screw.

Fig. 3-3 Graphic serves as an example.

ASL Components on Nucleus Midline Holder Only



• 5/32 inch (4 mm) Allen key



- 1. Loosen screw A.
- 2. Position ASL component on holder.
- 3. Tighten screw.

Fig. 3-4 Graphic serves as an example.

3.6 Adjusting Swing-Away Mechanism



WARNING! Risk of Injury or Damage

Loose small parts can lead to choking hazard that may result in injury or death.

- Do not remove any small parts except to replace the joystick knob.
- Do not leave removed joystick knob unattended.
- Closely supervise children, pets or people with physical / mental disabilities.



CAUTION! Risk of Injury or Damage

Remaining burrs and missing end caps after modifications on rods, such as shortened rod, can lead to injury or damage.

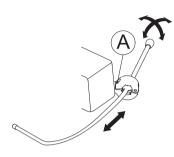
- Deburr cut after cutting excessive length.
- Re-install end cap after deburring.
- Check end cap for tight fitting.

The swing-away mechanism can be used for different options such as:

- · PROTON wings of head array
- · Extremity control joystick for chin control
- Egg switch



• 5/32 inch (4 mm) Allen key



Adjusting Depth

- 1. Loosen screw (A).
- 2. Adjust rod to desired depth.
- 3. Tighten screw.

Adjusting Position

The swing-away mechanism can be turned through 360 degrees.

- 4. Loosen screw (A).
- 5. Adjust to desired position.
- 6. Tighten screw.

3.7 Adjusting Swing-Away Display Holder



• 3 mm Allen key



Adjusting Holder Height

- 1. Loosen screws A.
- 2. Position holder to desired height.
- 3. Tighten screws.

Adjusting Holder Orientation

The holder can be turned through 360 degrees.

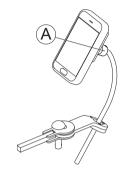
- 1. Loosen screws A.
- 2. Adjust holder orientation.
- 3. Tighten screws.

Adjusting Display Orientation

The display can be turned through 360 degrees.



• 18 mm wrench



- L. Loosen clamping bush (A).
- 2. Adjust display orientation.
- 3. Tighten clamping bush.

3.8 Adjusting Manual Chin Control



WARNING!

Risk of Injury or Damage

Loose small parts can lead to choking hazard that may result in injury or death.

- Do not remove any small parts except to replace the joystick knob.
- Do not leave removed joystick knob unattended.
- Closely supervise children, pets or people with physical / mental disabilities.



CAUTION!

Risk of Injury or Damage

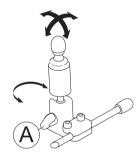
Remaining burrs and missing end caps after modifications on rods, such as shortened rod, can lead to injury or damage.

- Deburr cut after cutting excessive length.
- Re-install end cap after deburring.
- Check end cap for tight fitting.

3.8.1 Adjusting Extremity Control Joystick

Adjusting Joystick Orientation

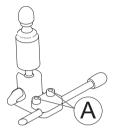
The joystick can be turned through 360 degrees. A slot on the side allows you to angle the joystick at 90 degrees.



- 1. Loosen hand screw (A).
- Turn underpart of joystick to position slot.
- Adjust joystick orientation. If desired, lock joystick in 90 degree angle in slot.
- 4. Tighten hand screw.

Adjusting Position on Holder

• 5/32 inch (4 mm) Allen key



- 1. Loosen screws (A).
- 2. Position joystick on holder.
- 3. Tighten screws.

Adjusting Depth and Height

Refer to 3.6 Adjusting Swing-Away Mechanism, page 20.

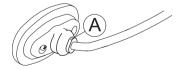
3.8.2 Adjusting Egg Switch

Adjusting Switch Orientation

The egg switch can be turned through 360 degrees.



• 7/16 inch(11 mm) wrench



- 1. Loosen nut A.
- 2. Adjust egg switch orientation.
- 3. Tighten nut.

Adjusting Depth and Height

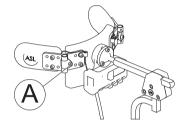
Refer to 3.6 Adjusting Swing-Away Mechanism, page 20.

3.9 Adjusting Head Array

Adjusting Pad Position



• 5/32 inch (4 mm) Allen key



- Loosen screw A.
- 2. Adjust pad position.
- 3. Tighten screw.

Adjusting PROTON Wings

Refer to 3.6 Adjusting Swing-Away Mechanism, page 20.

Adjusting Headrest Position

Refer to 3.19.4 Adjusting Multi-axis Headrest Hardware, page 33.

3.10 Adjusting Sip and Puff Head Array

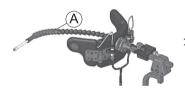
Adjusting Pad Position

• 5/32 inch (4 mm) Allen key



- 1. Loosen screw A.
- 2. Adjust pad position.
 - 3. Tighten screw.

Adjusting Position of Sip and Puff Tube



.. Bend flexible sip and puff tube (A) to desired position.

Adjusting Depth of Sip and Puff Tube



- 1. Loosen clamping lever (A).
- 2. Adjust sip and puff tube to desired depth.
- 3. Tighten clamping lever.

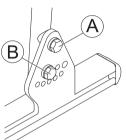
Adjusting Headrest Position

Refer to 3.19.4 Adjusting Multi-axis Headrest Hardware, page 33.

3.11 Adjusting Angle of Preset Backrest

li

- 10 mm wrench
- 13 mm wrench



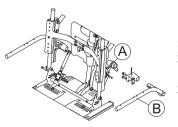
- On both sides, loosen screw A.
 Do not remove it.
- 2. On both sides, loosen and remove screw and washer **(B)**.
- 3. Adjust backrest to desired angle.
- 4. Insert screw and washer and tighten.

3.12 Adjusting Cantilever Flip-up Armrest

Adjust Armrest Width



• 6 mm Allen key

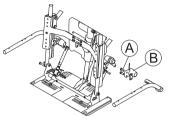


- 1. Remove screw (A).
- Adjust armrest ® to desired width.
- . Insert and tighten screw.

Adjust Armrest Height



• 13 mm open-ended wrench

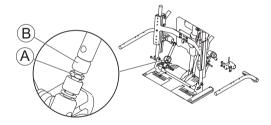


- 1. Loosen screws (A).
- 2. Adjust armrest ® to desired height.
- . Tighten screws.

Adjust Armrest Angle



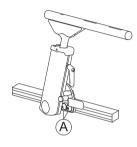
• 13 mm open-ended wrench



- 1. Loosen lock nut (A).
- 2. Adjust armrest angle by adjusting thread rod with thumb nut ®:
 - To lift armrest, screw in thread rod.
 - To lower armrest, screw out thread rod.
- 3. Tighten lock nut.

3.13 Ultra Rail Mounted Flip Back Cantilever Maxx Armrest

Adjusting Position



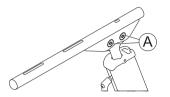
- Loosen screws A.
 Do not remove them.
- 2. Adjust armrest to desired position.
- 3. Tighten screws.

Adjusting Height



- 1. Loosen clamping lever A.
- 2. Adjust armrest to desired height.
- 3. Tighten clamping lever.

Adjusting Angle



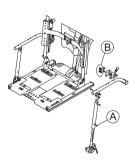
- Loosen screws A.
 Do not remove them.
- 2. Adjust armrest to desired angle.
- 3. Tighten screws.

3.14 Adjusting Two Post Recline Armrest

The two post recline armrest has an adjustable pivot arm to allow height adjustments in 13 mm increments.



- 5 mm Allen key
- 13 mm wrench



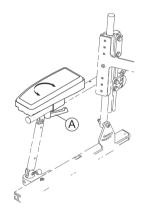
- Remove screw

 and slide the inner pivot arm up / down to the desired height.
- 2. Reinstall screw.
- 3. To adjust the armrest receiver assembly to match the height adjustment of the pivot arm assembly, loosen the two screws ® on the inside of the armrest receiver and slide the armrest receiver up / down the backrest tube to the desired height.
- 4. Re-tighten screws.

Recline Armrest and Hip Support

When using a two post recline armrest in combination with a hip support, note that the hip support must be installed in front of the receiver of the two post recline armrest. When installed behind the receiver, the hip support can get damaged when reclining the backrest.

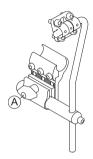
3.15 Adjust Armpad with Multi Axis Upper Extremity Support (MACES)



- 1. Loosen clamp lever (A).
- 2. Adjust armpad position.
- 3. Tighten clamp lever.

3.16 Adjusting Elbow Block

Adjusting Depth of Elbow Block

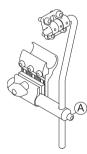


- Loosen screw (A).
 Do not remove it.
- 2. Adjust elbow block to desired depth.
- 3. Tighten screw.

Adjusting Height of Elbow Block



• 5 mm Allen key



- Loosen screw A.
 Do not remove it.
- 2. Adjust elbow block to the desired height.
- 3. Tighten screw.

Adjusting Width of Elbow Block



- 3 mm Allen key
- 4 mm Allen key



- Loosen screws (A) and (B).
 Do not remove them.
- 2. Adjust elbow block to desired width.
- 3. Tighten screws.

Adjusting Angle of Elbow Block



• 4 mm Allen key



- Loosen screws (A).
 Do not remove them.
- 2. Adjust elbow block to desired angle.
- 3. Tighten screws.

3.17 Adjusting Hip Support with Quick Release

Adjusting Position



• 5 mm Allen key

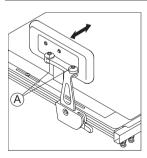


- Loosen screw (A).
 Do not remove it.
- 2. Adjust hip support to desired position.
- 3. Tighten screw.

Adjusting Width



• 2 x 5 mm Allen key

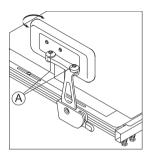


- 1. Loosen screws (A).
- 2. Adjust hip support to desired width.
 - You can adjust the width only smaller than the seat width but not wider.
- 3. Tighten screws.

Adjusting Angle



• 5 mm Allen key

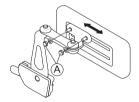


- 1. Loosen screws A.
- 2. Adjust hip support to desired angle.
- 3. Tighten screws.

Adjusting Hip Pad Depth



• 10 mm wrench



- 1. Loosen the two screws (A).
- 2. Adjust hip pad to desired depth.
- 3. Tighten screws.

Adjusting Hip Pad Height

You can adjust the hip pad height in two ways:

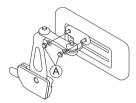
- · Via its mounting slots.
- Via its bracket.

Via mounting slots



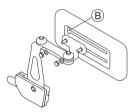
• 10 mm wrench

1.



Loosen the two screws (A).

2.



Remove hip pad bracket from mounting slot via cut-out ®.

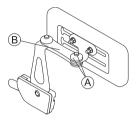
- 3. Insert hip pad bracket in other mounting slot.
- 4. Tighten screws.

Via bracket



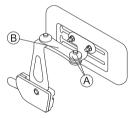
• 5 mm Allen key

1.



Remove upper screw and friction cap (A).

- 2. Remove small friction link B.
- 3.



Remove hip pad with bracket, turn upside down and reinstall.

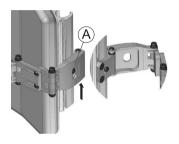
4. Insert friction link, friction cap, screw and tighten.

3.18 Adjusting Lateral Trunk Support



- 4 mm Allen key
- 10 mm wrench

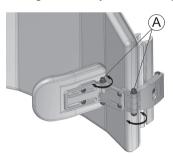
Swing-away Feature



- 1. Lift bracket (A) up to release.
- 2. Swing lateral rearward.

Adjusting Angle

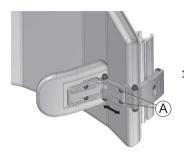
The angle can be adjusted infinitely.



 Loosen nuts / screws (x2) (A) to adjust pad angle.

Adjusting Width

When adjusting both laterals, the width can be adjusted to total of 89 mm (3.5").



.. Loosen screws (x2) (A) to adjust bracket width.

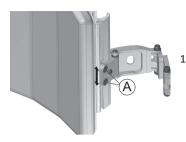
AdjustingPad Depth

The pad depth can be adjusted in a range of 63.5 mm (2.5") in total.



 Loosen screws (x2) A to adjust pad depth.

Adjusting Height



3.19 Adjusting the Headrest



CAUTION!

Risk of injury during use of the power wheelchair as a vehicle seat if a headrest is wrongly adjusted or not installed

This can cause the neck to be hyperextended during collisions.

- A headrest must be installed. The headrest optionally supplied for this power wheelchair by Invacare is perfectly suitable for use during transport.
- The headrest must be adjusted to the user's ear height.



Risk of damage to the wheelchair

 For systems equipped with power recline and ESR, always inspect / test the headrest (down tube) for possible interference over the full range of recline. If interference occurs, the length of the down tube must be modified as necessary.



- It may be necessary to remove and modify the back cushion cover in order to access the headrest mounting holes on the back pan.
- An optional shim plate is available. It may be installed between the clamp assembly and the back pan to provide additional spacing / clearance on Posture Back and Deep Back.

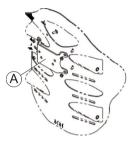
The headrest clamp hardware is designed to install into existing mounting holes in the backrest pan.

3.19.1 Installing Headrest Adapter for Elite and High Backs

When installing a headrest on a High Back or Elite Back, you need to use an adapter.



- Phillips screwdriver
- 8 mm wrench

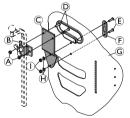


 Using the hardware provided, align and install the headrest adapter (A) into the existing mounting holes in the back pan.

Installing Headrest Adapter for Elite 2 Back (Recline)



- 4 mm Allen key
- 10 mm wrench



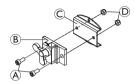
- 1. Install headrest clamp ® to headrest adapter © with screws ® and nuts A.
 - Install headrest adapter © to backrest plate © with screws E, headrest washer plate E, washers H and nuts I.

Installing Headrest Adapter for Elite 2 Back (Tilt)



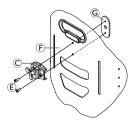
- 5 mm Allen key
- 10 mm wrench

1.



Install headrest clamp B to headrest adapter C with screws A and nuts D.

2.

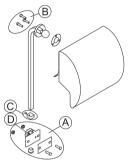


Install headrest adapter $\mathbb C$ to backrest plate $\mathbb E$ with screws $\mathbb E$ and headrest nut plate $\mathbb G$.

3.19.2 Auto-style Headrest Set-up and Installation



- 2.5 mm Allen key
- 4 mm Allen key
- 5 mm Allen key
- 10 mm wrench



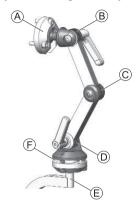
- Using the hardware provided, align and install the headrest clamp assembly into the existing mounting holes in the back pan (A).
- 2. Secure the headrest pad to the headrest rod via the mounting hardware provided (8).

hardware.

- The headrest pad can be adjusted to any desired angle via the pivot ball at the end of the headrest rod by loosening and tightening the mounting
- 3. Adjust the overall height of the headrest pad / mounting post via the knoh ①.
 - For proper set-up the headrest should be adjusted to the user's ear height.
- 4. Once the final height position is set, adjust the D-Ring (with setscrew) so that it rests flush with the top of the clamp assembly (to prevent slipping) ©.

3.19.3 Adjusting Elan Headrest Hardware

Elan headrest hardware is highly adjustable. The illustration below shows the possible adjustment ranges of the joints.

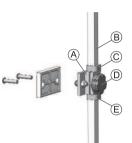


A	Upper multi-angle rotational pivot	360° rotation 80° tilt
B	Upper linkage	180° rotation
©	Middle linkage	100° rotation
D	Lower linkage	180° rotation
E	Mounting post	360° rotation in 90° increments
F	Lower multi-angle rotational pivot	360° rotation 50° tilt

Installing



- 2.5 mm Allen key
- 4 mm Allen key
- 5 mm Allen key



- Using hardware provided, align and install headrest clamp assembly into existing mounting holes in backrest pan A.
- Install headrest pad (not shown) to headrest rod using mounting hardware provided.

hardware.

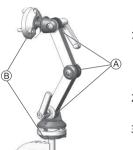
- The headrest pad can be adjusted to any desired angle via the pivot ball at the end of the headrest rod by loosening and tightening the mounting
- 3. Loosen and remove lower D-Ring (E) from hardware.
- Slide vertical mounting post ® into clamp assembly and adjust overall height of headrest pad to desired position. Tighten knob
 For proper set-up headrest should be adjusted to user's ear height.
- 5. Adjust upper D-Ring © as required.
- 6. Once final height position is set, adjust lower D-Ring © so that it rests flush with bottom of clamp assembly (to prevent slipping).

Adjusting Depth and Angle

The headrest can be further adjusted for depth and angle via the articulating hardware.



- 4 mm Allen key
- 5 mm Allen key



- Loosen screws and clamping levers of dual link adjustment assembly (A) and screws of upper and lower rotational pivots (B).
- 2. Adjust component to desired position.
- 3. Tighten screws and clamping levers.

3.19.4 Adjusting Multi-axis Headrest Hardware

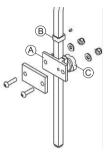
Installing



The headrest pad can be adjusted to any desired angle via the pivot ball at the end of the headrest rod by loosening and tightening the mounting hardware.



- 2.5 mm Allen key
- 4 mm Allen key
- 10 mm wrench



- Using hardware provided, align and install headrest clamp assembly into existing mounting holes in backrest pan

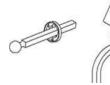
 .
- Install headrest pad (not shown) to headrest rod using mounting hardware provided.
- Adjust overall height of headrest pad to desired position. Tighten knob ©. For proper set-up headrest should be adjusted to user's ear height.
- 3. Once final height position is set, adjust D-Ring ® so that it rests flush with top of clamp assembly (to prevent slipping).

Adjusting Depth and Angle

The headrest and horizontal rod can be further adjusted for depth and angle via the triangular multi-offset bracket.



• 5/32 inch (4 mm) Allen key



- Loosen hardware in multioffset bracket

 .
- Adjust headrest to desired position.
- 3. Re-tighten hardware.

3.20 Pivot Plus Legrests

3.20.1 Swing Away Legrests

The Pivot Plus legrests use a user friendly lever handle that locks and unlocks the legrest, allowing the legrest pin to pivot / rotate about the legrest receiver.

1.



Place the lever handle (A) in the unlocked position.

2.



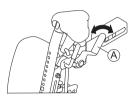
Swivel the legrest outward.

3.20.2 Removing Legrests

Removing

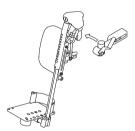
1. Powered Pivot Plus only: Disconnect actuator.

2.



Place lever handle (A) in unlocked position.

3.



Lift entire legrest assembly upward.

Reinstalling

- 1. Insert legrest pin inside legrest receiver.
- 2. Return lever handle to locked position.
- 3. Powered Pivot Plus only: Connect actuator. Make sure plug engages with audible click.

3.20.3 Adjusting Angle of Legrest

The angle of the Pivot Plus legrest is adjusted by manually elevating or lowering it.

Elevating Pivot Plus legrest



1. Pull legrest upward to desired angle.

Lowering Pivot Plus legrest



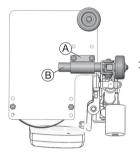
- 1. Unlock manual legrest lever A.
- 2. Lower legrest to desired angle.
- Lock manual legrest lever.

3.20.4 Adjusting Width- and Angle-Adjustable Footplate



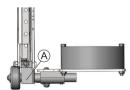
- 6 mm Allen key
- 10 mm wrench

Adjusting the Width



Adjusting the Angle

The footplate angle can also be adjusted via the setscrew on the inside of the footplate bracket.



 Tighten or loosen the set screw (A) to increase or decrease the footplate angle accordingly.

3.21 Central Legrests — Manually Adjustable

3.21.1 Removing Legrest

You can remove central, manually adjustable legrest completely.

1.



Remove removable axle (A).

2.



Hold legrest securely and pull lever B.

3. Remove legrest from holder ©.

3.21.2 Setting Angle of Legrest



CAUTION! Risk of injury

If the legrest is not secured and the lever (A) is pulled, the legrest will drop suddenly, which could cause an injury.

— Secure the legrest before pulling the lever.



- 1. Hold the legrest securely.
- 2. Pull the lever (A).
- 3. Push the legrest into the required position.

3.21.3 Setting Length of Legrest



• 3/16 inch(5 mm) Allen key

You can adjust the length of the legrests independently of one another.



- .. Release the bolts (A) on the rear of the legrest.
- 2. Set the desired length.
- 3. Re-tighten the bolts.

3.21.4 Setting Angle of Footplate



• 5/32 inch (4 mm) Allen key



- 1. Fold the footplates up in order to access the adjusting screws (A).
- 2. Set the adjusting screws.
- 3. Fold the footplates down again.

3.21.5 Setting Angle and Height of Calf Pad



• 3/16 inch (5 mm) Allen key



- 1. Fold the calf pad forward in order to access the bolt (A).
- 2. Loosen the bolt and adjust the calf pad to the required angle and height.
- 3. Re-tighten the bolt.
- 4. Fold the calf pad back.

3.22 LNX Legrest

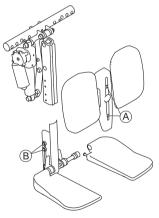
3.22.1 Setting Length of Legrest

If needed, the legrest can be pre-set to 83° or 97° instead of 90°. Contact your Invacare provider.



- 4 mm Allen key
- 10 mm open-ended wrench

You can adjust the length of the legrests independently of one another.



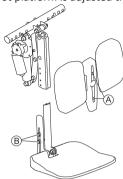
- 1. Remove screws (A) at the front of legrest.
- 2. Remove cover together with calf pads.
- Loosen nuts ® at the side of legrest.
 It may be necessary to remove

the nuts and move them from one slot to the other.

- 4. Set desired length.
- 5. Re-tighten nuts.
- Refit the calf pads and cover and re-tighten screws.



The legrest with foot platform is adjusted the same way.



3.22.2 Setting Angle of Footplate



• 5/32 inch (4 mm) Allen key



- 1. Fold the footplates up in order to access the adjusting screws (A).
- 2. Set the adjusting screws.
- 3. Fold the footplates down again.

3.22.3 Adjusting Footplate Width

The footplate width is adjusted via spacers:

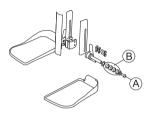
Ultra Low Maxx

- · Set spacers on the inside to increase width.
- Set spacers on the outside to decrease width.

Each spacer increases or decreases the width by 1/4" (6.35 mm).



• 6 mm Allen key



- Remove screw A.
- 2. Remove spacers (B) and footplate.
- Set spacers on the inside as needed.
- 4. Add footplate.
- 5. Set spacers on the outside as needed.
- 6. Re-tighten screw.

3.22.4 Setting Angle of Foot Platform



• 5/32 inch (4 mm) Allen key



- 1. Fold the foot platform up in order to access the adjusting screw (A).
- 2. Set the adjusting screw.
 - . Fold the foot platform down again.

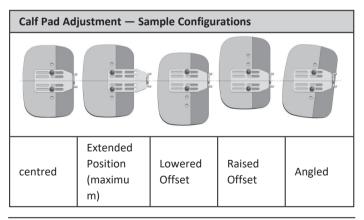
3.22.5 Setting Height and Width of Calf Pad

ļ

Risk of damage to the power wheelchair

 After changing the configuration of the calf pads make sure that the calf pads contact neither the castors nor the seat plate when adjusting the legrest angle.

Calf pads may be adjusted independently on their respective mounting bracket using the mounting screws at the rear of the calf pads. Calf pads may be adjusted (for depth, height & angle) to achieve a variety of different configurations. The independent pad adjustments provide optimal positioning and comfort for end users - sample configurations are illustrated below.





• 4 mm Allen key

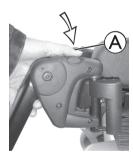
1. Fold the calf pad forward in order to access the bolts.

- 2. Loosen the bolts and remove them if necessary.
- 3. Adjust the calf pad to the required height and width.
- 4. Re-tighten the bolts.
- 5. Fold the calf pad back.

3.23 Vari-F Legrest

3.23.1 Swivelling Legrest Outward and / or Removing

The small unlocking button is located on the upper section of the legrest. When the legrest is unlocked, it can be swivelled inward or outward when getting into the wheelchair as well as being removed completely.



- Press the unlocking button (A) and swivel the legrest outward.
- 2. Remove the legrest in an upward direction.

3.23.2 Setting Angle



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



• 6 mm Allen key

1.



Loosen the screw (A) using the Allen key.

 If the legrest cannot be moved after loosening the screw, position a metal pin in the designated borehole ® and use a hammer to knock on this lightly. The clamping mechanism in the interior of the legrest will be released by this. Repeat the procedure from the other side of the egrest if necessary.



Loosen the screw ©.

- 4. Set the desired angle.
- 5. Re-tighten the screw.

3.23.3 Setting End Stop of Legrest

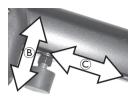
- 6 mm Allen key
- 10 mm wrench

1.



The end position of the legrest is determined by means of a rubber stop ${}^{\circledR}$.

2.



The rubber stop can be screwed in or out ® or pushed up or down ©.

3.



Loosen the screw $\ensuremath{\textcircled{\texttt{D}}}$ and swivel the legrest upward in order to access the rubber stop.





Loosen the counternut $extbf{E}$.

5.



Move the rubber stop to the desired position.

6. Re-tighten the counternut.



Move the legrest to the desired position.

8. Re-tighten the screw.

3.23.4 Adjusting Length of Legrest



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



• 5 mm Allen key



- 1. Loosen the screw (A).
- 2. Adjust to the desired length.
- 3. Re-tighten the screw.

3.24 Vari-A Legrests

3.24.1 Swivelling Legrest Outward and / or Removing

The small unlocking button is located on the upper section of the legrest. When the legrest is unlocked, it can be swivelled inward or outward when getting into the wheelchair as well as being removed completely.



- Remove the legrest in an upward direction.

3.24.2 Setting Angle

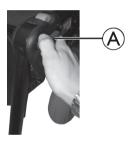


CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.

1.



Loosen the locking knob (1) counter-clockwise at least one turn.



Hit the knob to release the locking mechanism.

3.



Set the desired angle.

4.



Turn the knob clockwise to tighten it.

3.24.3 Setting End Stop of Legrest

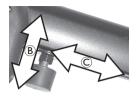


• 10 mm wrench

1.

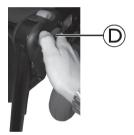


The end position of the legrest is determined by means of a rubber stop ${}^{ ext{\textcircled{-}}}$.



The rubber stop can be screwed in or out \circledR or pushed up or down \copyright .

3.



Loosen the locking knob $\ensuremath{\mathbb{O}}$ counter-clockwise at least one turn.

4.



Hit the knob to release the locking mechanism.

5.



Swivel the legrest upward in order to access the rubber stop.



Use the wrench to loosen the counternut (E).

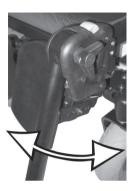
7.



Move the rubber stop to the desired position.

8. Re-tighten the counternut.

9.



Move the legrest to the desired position.

10. Re-tighten the locking knob.

3.24.4 Adjusting Length of Legrest



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



• 5 mm Allen key



- 1. Loosen the screw (A).
- 2. Adjust to the desired length.
- 3. Re-tighten the screw.

3.24.5 Adjusting Height of Calf Pad



• 4 mm Allen key



- 1. Loosen the screws (A).
- 2. Adjust to the desired position.
- 3. Re-tighten the screws.

3.24.6 Adjusting Depth of Calf Pad

The depth of the calf pad can be adjusted via the holding plate. The holding plate hole combinations allow 5 different depth settings.



• 10 mm wrench



- 1. Remove nut A.
- Adjust to the desired depth. Observe that the round holes are intended for the calf pad retaining screw and the oblong holes for the aglet without thread.
- 3. Screw the nut back on and tighten.

3.24.7 Unlocking and Swivelling Calf Pad Backward

1.



Press the calf pad straight down.



Unlock the legrest and swivel outward. The calf pad swivels backward on its own.

3.



Lift leg over the heel strap and place on the ground.

3.24.8 Adjusting Angle-adjustable Footrest



• 5 mm Allen key



- 1. Loosen both set screws on the footrest.
- 2. Adjust to the desired angle.
- 3. Re-tighten the screws.

3.24.9 Adjusting Angle- and Depth-adjustable Footrest



• 5 mm Allen key

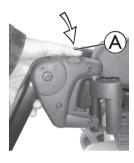


- 1. Loosen the set screw on the footrest $ilde{\mathbb{A}}$.
- 2. Adjust the footrest to the desired angle or depth.
- 3. Re-tighten the screw.

3.25 ADM Legrests

3.25.1 Swivelling Legrest Outward and / or Removing

The small unlocking button is located on the upper section of the legrest. When the legrest is unlocked, it can be swivelled inward or outward when getting into the wheelchair as well as being removed completely.



- Remove the legrest in an upward direction.

3.25.2 Setting Angle



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



CAUTION!

Risk of crushing

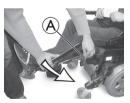
— Do not reach inside the swivelling range of the legrest.

Raising



 Pull the legrest upward until the desired angle has been achieved.

Lowering



3.25.3 Adjusting Length of Legrest



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



· 5 mm Allen key



- 1. Loosen the screw (A).
- 2. Adjust to the desired length.
- 3. Re-tighten the screw.

3.25.4 Adjusting Height of Calf Pad



• 4 mm Allen key



- 1. Loosen the screws (A).
- 2. Adjust to the desired position.
- 3. Re-tighten the screws.

3.25.5 Adjusting Depth of Calf Pad

The depth of the calf pad can be adjusted via the holding plate. The holding plate hole combinations allow 5 different depth settings.



• 10 mm wrench



- 1. Remove nut (A).
- Adjust to the desired depth. Observe that the round holes are intended for the calf pad retaining screw and the oblong holes for the aglet without thread.
- 3. Screw the nut back on and tighten.

3.25.6 Unlocking and Swivelling Calf Pad Backward

1.



Press the calf pad straight down.

2.



Unlock the legrest and swivel outward. The calf pad swivels backward on its own. 3.



Lift leg over the heel strap and place on the ground.

3.25.7 Adjusting Angle-adjustable Footrest



• 5 mm Allen key



- 1. Loosen both set screws on the footrest.
- 2. Adjust to the desired angle.
- 3. Re-tighten the screws.

3.25.8 Adjusting Angle- and Depth-adjustable Footrest



• 5 mm Allen key



- Loosen the set screw on the footrest
 A.
- 2. Adjust the footrest to the desired angle or depth.
- 3. Re-tighten the screw.

3.26 Powered Elevating Legrests (ADE Legrests)

3.26.1 Swivelling Legrest Outward and / or Removing

The small unlocking button is located on the upper section of the legrest. When the legrest is unlocked, it can be swivelled inward or outward when getting into wheelchair as well as being removed completely.



- 2. Remove the legrest in an upward direction.

3.26.2 Setting Angle



CAUTION! Risk of crushing

— Do not reach inside the swivelling range of the legrest.



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.

The electrically height-adjustable legrests are operated using the remote. Refer to the separate user manual for your remote for more information.

3.26.3 Adjusting Length of Legrest



CAUTION!

Risk of injury due to incorrect adjustment of the footrests and legrests

 Before and during every journey it is imperative to ensure that the footrests contact neither the castor wheels nor the ground.



• 10 mm wrench



- 1. Loosen the screw (A).
- 2. Adjust to the desired length.
- 3. Re-tighten the screw.

3.26.4 Adjusting Height of Calf Pad



• 4 mm Allen key



- 1. Loosen the screws (A).
- 2. Adjust to the desired position.
- 3. Re-tighten the screws.

3.26.5 Adjusting Depth of Calf Pad

The depth of the calf pad can be adjusted via the holding plate. The holding plate hole combinations allow 5 different depth settings.



• 10 mm wrench



- 1. Remove nut A.
- Adjust to the desired depth. Observe that the round holes are intended for the calf pad retaining screw and the oblong holes for the aglet without thread.
- 3. Screw the nut back on and tighten.

3.26.6 Unlocking and Swivelling Calf Pad Backward

1.



Press the calf pad straight down.



Unlock the legrest and swivel outward. The calf pad swivels backward on its own.

3.



Lift leg over the heel strap and place on the ground.

3.26.7 Adjusting Angle-adjustable Footrest



• 5 mm Allen key



- 1. Loosen both set screws on the footrest.
- 2. Adjust to the desired angle.
- 3. Re-tighten the screws.

3.26.8 Adjusting Angle- and Depth-adjustable Footrest



• 5 mm Allen key



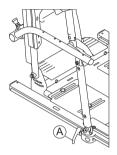
- 1. Loosen the set screw on the footrest $ilde{\mathbb{A}}$.
- 2. Adjust the footrest to the desired angle or depth.
- 3. Re-tighten the screw.

4 Usage

4.1 Rotating / Removing Recline Armrest

Rotating Armrest

For side transfers, the recline armrest can be rotated backwards around the pivot pin in the armrest receiver.



- 2. Lift up on the armrest so that it pivots back around the armrest receiver / pin.

Removing Armrest



- 1. Unlock the lever lock (A) at the front of the armrest and disengage the pivot arm.
- 2. Pull outward on the plunger ® at the rear pivot of the armrest.
- 3. Remove the armrest assembly.

4.2 Rotating Cantilever Armrest

For side transfers, cantilever armrests can be rotated backwards around the pivot pin in the armrest receiver.

Backpost Mounted Flip Back Cantilever Armrest



1. Lift up on armrest so that it pivots back around armrest receiver / pin.

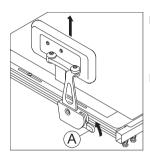
Ultra Rail Mounted Flip Back Cantilever Maxx Armrest



1. Pull release lever (a) and lift up on armrest so that it pivots back.

When lowering armrest, make sure it engages with an audible click.

4.3 Removing / Inserting Hip Support with Quick Release



Removing Hip Support

- 1. Pull lever (A) upwards.
- 2. Remove hip support from holder.

Inserting Hip Support

- 1. Insert hip support in holder.

4.4 Using LNX Powered Central Legrest with Telescoping Footboard

Adjusting Angle



WARNING! Pinch point

Risk of pinching when adjusting legrest angle.

Keep top of legrest clear when adjusting legrest angle.

Lowering Footboard



NOTICE!

Lowering footboard until preset point could damage floor.

— Stop lowering footboard when it touches the floor.

You can lower the telescoping footboard until a preset point.

Depending on the wheelchair configuration, this point might not exactly fit the seat-to-floor height but end a few millimeters above or push a few millimeters into the floor.

Drive Lockout



NOTICE!

Driving the wheelchair with lowered footboard could damage the legrest.

- As soon as you move the footboard, a drive lockout engages.
- 1. To disengage drive lockout, retract footboard to top position.

4.5 Replacing Backrest Cushion

only for Matrx Elite backrests

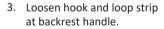
Removing Backrest Cushion



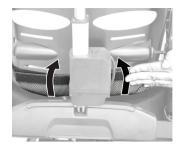
1. Loosen hook and loop strip at the lower backrest.



2. Lift cushion upwards.



Installing Backrest Cushion



1. Attach hook and loop strip at the lower backrest.



2. Fold cushion upwards.



3. Attach hook and loop strip at backrest handle.

5 Maintenance Schedule

To ensure the optimal safety and reliability of your power positioning system, adhere to the maintenance schedule / table below. In addition to the maintenance schedule, note the following maintenance tasks and safety warnings that should be incorporated into your daily routine.



WARNING!

Any sudden or gradual deterioration in the function / performance of your power positioning system (i.e. increased actuator motor / gearbox noise, rattling, sloppiness, etc.) must be reported to your dealer immediately

- A complete wheelchair inspection by a qualified technician is recommended to ensure there is no unusual wear and tear, or physical damage that requires servicing and / or repair.
- To ensure your power positioning system is operating properly and safely, Invacare recommends a complete dealer inspection be performed on your power positioning system every six (6) months by a qualified technician.
- Be certain to read and follow all maintenance and safety information specific to your power wheelchair base. Refer to your wheelchair's user manual (provided separately).

Daily Maintenance:

 Check that all switches (push buttons / toggles) that operate your power positioning system are functioning properly. Charge batteries (refer to your wheelchair's user manual for important information on battery charging and proper battery care).

Monthly Inspection Checklist:

- Electrical / Wiring harnesses:
 - Check for pinches or pulls in wiring (over full range of seating system)
 - Inspect for wear & tear damage to wires
 - Ensure connections are secure
- · Upholstery:
 - Check all upholstered parts for damage and wear
 - Check all covers especially near metal parts for damage and wear
- Hardware and components:
 - Inspect mounting hardware (seating system to base)
- Limit switches:
 - Check limit switch settings
 - Ensure DLO functions correctly

6 After Use

6.1 Reconditioning

This product is suitable for reuse. To recondition the product for a new user, carry out the following actions:

- Inspection according to service plan, refer to the service manual, which is available through Invacare.
- Cleaning and disinfection, refer to respective chapters in the user manual of the power wheelchair base.
- Adaptation to the new user, refer to 3 Setup, page 12.

Make sure that the user manual is handed over with the product.

If any damage or malfunction is detected, do not reuse the product.

6.2 Disposal

Be environmentally responsible and recycle this product through your recycling facility at its end of life.

Disassemble the product and its components, so the different materials can be separated and recycled individually.

The disposal and recycling of used products and packaging must comply with the laws and regulations for waste handling in each country. Contact your local waste management company for information.

7 Troubleshooting

7.1 Performance Troubleshooting

For additional troubleshooting information regarding the power wheelchair & electronics, refer to the Troubleshooting section of the power wheelchair and remote user manuals (provided separately).

Symptom	Probable Cause	Solutions	
Wheelchair power is ON, but system does not drive	System tilted and / or elevated beyond the drive lockout (DLO) angle	Return seating system to neutral (home) position.	
	Drive motors not engaged	Engage drive motors.	
	LNX powered central legrest with telescoping footboard lowered	Retract footboard to top position.	
Seating system not functioning	Low batteries	Check / charge / replace batteries. Contact your provider.	
	Loose / faulty electrical connection	Check cable connections / check cable ties (too tight / too loose). Contact your provider.	
	Blown fuse	Inspect / replace fuse. Contact your provider.	
	Interference / obstructions, pinched wires	Check for sources of interference or obstructions / inspect cables for pinch points. Contact your provider.	

Symptom	Probable Cause	Solutions	
Intermittent seating system functions (day to day, during tilt, during recline)	Loose / faulty electrical connection	Check cable connections / check cable ties (too tight / too loose).	
	Faulty power harness	Check / replace power harness. Contact your provider.	
	Faulty limit switch	Check / replace limit switch. Contact your provider.	
	Nearly exhausted battery (fluctuating charge)	Check / replace battery. Contact your provider.	
	Loose / faulty electrical connection	Check connections.	
Drive lockout (DLO) is not functioning		Contact your provider.	
	DLO limit switch / mechanical switch is not set properly	Contact your provider.	
	Faulty DLO limit switch	Contact your provider.	
Limit switch not functioning properly	Loose / faulty electrical connection	Check connections. Contact your provider.	
	Faulty limit switch	Check / replace limit switch. Contact your provider.	
	Limit switch is not set—up properly	Contact your provider.	
System only operates in one direction	Limit is exceeded (DLO, RDS, back angle, elevating seat lockout)	Come within limit ranges.	
	Faulty limit switch	Check / replace limit switch. Contact your provider.	
	Limit switch is not set—up properly	Contact your provider.	
	Low voltage	Contact your provider.	
	Battery not charged	Charge batteries.	

Symptom	Probable Cause Solutions		
Remote will not function	Remote not plugged in	Inspect cable connection.	
	Remote not turned on	Turn on power to the remote via the keypad.	
	Blown base fuse	Inspect / replace fuse. Contact your provider.	
Actuator keeps running	Pinched switch harness	Inspect / adjust harness position to prevent pinching. Contact your provider.	

Technical Data

8.1 Technical Specifications

The technical information provided hereafter applies to a standard configuration or represents maximum achievable values. These can change if accessories /options are added. The precise changes to these values are detailed in the sections for the respective accessories / options.

- Note that in some cases the measured values may vary up to \pm 10 mm.
- \int_{0}^{∞} For more technical data of the power wheelchair refer to the user manual of your wheelchair.

Dimensions According to ISO 7176-5	Power Wheelchair		
Differsions According to 150 7176-5	AVIVA RX	TDX SP2	
Backrest Height ¹	355 mm - 505 mm (depending on backrest option)		
Finished Backrest Height ¹	455 mm - 635 mm (tilt–only systems)	• 505 mm - 685 mm (recline systems)	
Back Cane Heights (fixed angle setting only)	• 18° - 24° (straight back canes)	• 20° - 24° (angled back canes)	
Back Cane Angle (fixed angle setting only)	• 75° - 116° (straight back canes)	81° - 121° (angled back canes)	
Seat Cushion Thickness	• 75/90/100 mm		
Seat Width	 405 mm 430 mm 455 mm 480 mm 505 mm 	 530 mm 555 mm 580 mm (TDX SP2 only) 610 mm (TDX SP2 only 	

Dimensions According to ISO 7176-5	Power Wheelchair		
	AVIVA RX	TDX SP2	
Seat Depth	405 mm430 mm455 mm480 mm	505 mm530 mm555 mm580 mm	
Backrest Angle	 90° 170° 82° 162° (8° precline mount) 60° 140° (30° precline mount) 	 90° 168° 82° 162° (8° precline mount) 60° 140° (30° precline mount) 	
Recline Armrest Height ²	 230 mm - 330 mm/330 mm - 405 mm (two-post flip back recline armrest) 240 mm - 330 mm/320 mm - 405 mm (backpost mounted flip back cantilever armrest) 		
Tilt Armrest Height ³	230 mm - 320 mm (Ultra Rail mounted flip back cantilever Maxx armrest)		
Armrest Depth ⁴	• 230 mm - 470 mm	• 250 mm - 590 mm	
Armrest Length	• 255 - 355 mm		
Max. Armrest Weight	• 1.7 kg		
Max. Headrest Weight	• 1.4 kg		
Powered Tilt	 0° 50° (standard mount) -5° 45° (with 5° fixed anterior mount) -10° 40° (with 10° fixed anterior mount) 5° 55° (with 5° fixed posterior mount) 		
Powered Tilt With Lifter	 0° 45° (standard mount) -5° 40° (with 5° fixed anterior mount) -10° 35° (with 10° fixed anterior mount) 5° 50° (with 5° fixed posterior mount) 		
Seat Angle, Manual Adjustment	• 0° 8°		

Footrests and Legrests					
Vari F	Length	• 290 mm – 460 mm	Pivot Plus	Length	• 365 mm – 465 mm
	Angle	• +70° - 0°		Angle	• +80° - +20°
	Max. Weight	• 1.6 kg		Max. Weight	• 4.4 kg
Vari A	Length	• 290 mm – 460 mm	Central (manual)	Length	• 310 mm – 410 mm
	Angle	• +70° - 0°		Angle	• +90° - 0°
	Max. Weight	• 2.7 kg		Max. Weight	• 5.4 kg
ADM (manual)	Length	• 290 mm – 460 mm	Central Powered LNX ⁵	Length	• 340 mm – 410 mm
	Angle	• +80° - 0°		Angle	• +97° – + 7°
	Max. Weight	• 3.1 kg			• +90° - 0°
ADE (powered)	Length	• 290 mm – 460 mm			• +83°7°
	Angle	• +80° - 0°			
	Max. Weight	• 4.2 kg			

¹ Measured without seat cushion

5 Legrest not removable, so no component weight measurable

² Armrests only available on reclining systems

³ Armrests only available on tilt-only systems

⁴ Distance between backrest reference plane and most forward part of armrest assembly

Notes

Notes



Australia:

Invacare Australia Pty. Ltd. Unit 18/12 Stanton Road, Seven Hills, NSW 2147,

Australia

Phone: 1800 460 460 Fax: 1800 814 367 orders@invacare.com.au www.invacare.com.au

EU Export:

Invacare Poirier SAS Route de St Roch F-37230 Fondettes Phone: (33) (0) 2 47 62 69 80 serviceclient export@invacare.com

serviceciient_export@invacare.

www.invacare.eu.com

Canada:

Invacare Canada LP c/o Motion Concepts Canada 84 Citation Drive Unit 11 Concord. Ontario L4K 3C1

New Zealand:

Invacare New Zealand Ltd 4 Westfield Place, Mt Wellington 1060

New Zealand

Phone: 0800 468 222 Fax: 0800 807 788 sales@invacare.co.nz www.invacare.co.nz

United Kingdom & Ireland:

Invacare Limited Pencoed Technology Park, Pencoed Bridgend CF35 5AQ Phone: (44) (0) 1656 776 200

uk@invacare.com www.invacare.co.uk

UKRP Invacare UK Operations Limited
Unit 4, Pencoed Technology Park, Pencoed
Bridgend CF35 5AQ
UK



Yes, you can: