

Invacare®
Storm Series®
TDX™

Invacare® Storm Series® TDX™



Yes, you can.™

TDX™ – The Total Driving eXperience. Merger of mind, body & machine.

It's just like you told us it should be – five of the most advanced technologies brought together to create a Total Driving eXperience.

MK5™ ELECTRONICS



In addition to new features and driver controls, the **MK5** places everything you love about the patented MKIV™ into a more intuitive format. Now the best electronics package in the industry is also the easiest to use.

CENTER WHEEL DRIVE



Center wheel drive offers the tightest turning radius possible, as well as improved tracking and ease of driving over all other configurations.

SURESTEP™



This patent-pending automatic system ensures that everyday obstacles and thresholds are handled elegantly, for a smooth ride.

STABILITY LOCK



The most pervasive issue with more maneuverable chairs is stability, but this patent-pending technology ensures that the chair remains stable, with the consumer in control.

TRUETRACK (TT)



The benefits of TT to switch drivers and those with marginal control have been proven, making these consumers more successful and efficient drivers.

You wanted one chair that does it all for your clients. Will three be okay?

THE STORM SERIES® TDX™



STORM TDX3™

Comes standard with three of the TDX technologies: **MK5™**, center wheel drive and SureStep.™

Pending Medicare K0011.



STORM TDX4™

Comes standard with four of the TDX technologies: **MK5**, center wheel drive, SureStep and Stability Lock.

Pending Medicare K0014.



STORM TDX5™

Comes standard with all five of the TDX technologies.

Pending Medicare K0014.

As with the 3G Storm Series, the Storm Series TDX allows you to customize a package for your client's needs and wants by moving options from model to model, as well as adding Tarsys® powered seating systems.

Everything active consumers need, besides a destination.



As the flagship of the Storm Series TDX™ line of power wheelchairs, the **Storm TDX5** comes standard with all five of the **Total Driving eXperience** technologies. TrueTrack technology, SureStep™ suspension, **MK5™** electronics, center wheel drive and Stability Lock result in unmatched rehab function, performance and flexibility and are the hallmarks of the Storm TDX5. This product was designed to meet the needs of the most challenging and demanding clients today and will continue to meet their needs as they change over time.

Features

- New Heavy-Duty TrueTrack motor package with a 400-lb. weight capacity and a top speed of 7.5 mph
- **MK5** electronics with the **MK5 TT-EX™** controller and **MK5 MPJ™** driver control
- SureStep suspension, configured for obstacles up to 3", and rear suspension for an overall smooth ride
- Can be configured for two Group 24 batteries or up to three 22NF batteries if a ventilator back-up battery is needed
- Designed to accommodate the full line of 2G Tarsys® powered seating systems (2GT™, 2GR™ and 2GTR™), including ventilator tray and power elevating legrests
- Bold styling and hot new colors create a rehab-friendly, yet clean overall style



See Invacare.com for case studies on TT.



SureStep elegantly allows incline transitions without high centering.



MPJ designed for flexibility and functionality.



MK5 TT-EX: All the MKIV features, plus many new innovations.



TrueTrack Technology (TT)

Over the past several years, TT driving technology has been continuously improved to bring a much-needed clinical benefit to those highly involved power chair drivers. This driving technology accurately translates the driver's commands and helps keep the power chair on a true forward path—even on slopes, thresholds and uneven terrain.

Features

- TT significantly minimizes the need for veer correction, so maintaining fine control requires less effort for joystick and switch drivers alike
- For non-proportional and marginal drivers, the true tracking capability greatly minimizes the fatigue of constant correction while driving
- Due to the technology of this motor design, we offer a 5-year limited motor warranty

Smooth Ride

For most custom rehab consumers, a smooth ride is critical to maintaining positioning, managing pain, controlling spasms and increasing endurance. To optimize shock absorption during the ride, the frame of the TDX can articulate independently. As the six wheels encounter variations in terrain, the SureStep system and rear suspension conform to the landscape, leaving the consumer more stable and comfortable.

MK5 Electronics

Once again, Invacare's MK5 electronics take a giant leap forward in function and features, bringing together new driver controls, programming and provider features, for the most intuitive configuration and use.

MK5 MPJ Driver Control

Thanks to the design of the multi-purpose joystick (MPJ), consumers with limited hand function have easy access to critical switches.

Features

- Inductive joystick mounted toward the rear of the housing allows full arm support while driving
- Light-touch, top-mounted toggle switch provides on/off and drive select
- Light-touch "thumb wheel" speed dial for on-the-fly overall speed changes
- Four completely separate drives allow customization of driving or alternative activities (e.g., powered seating and attendant) in specific drives
- Standard port for a remote on/off switch for those unable to access the toggle
- Optional port for drive select switch
- All programming and charging are accessed through a port in the joystick
- Unique mounting allows maximum flexibility for both lateral and rotational angle positions
- LCD displays parameters such as odometer, speedometer and battery voltage

MK5 TT-EX Controller

- Can accommodate multiple driver inputs, including all existing MKIV™ (5-pin) options. Must use the new MK5 display with switches
- Maximum current output of 100 amps ensures the TT package is powerful enough for any consumer need

Where performance, function and fun meet.



The **Storm TDX4** is the mid-range model of the Storm Series TDX™ line of power wheelchairs. It comes standard with four of the **Total Driving eXperience** technologies—**SureStep™** suspension, **MK5™** electronics, center wheel drive and **Stability Lock**. Stylish, powerful and flexible, the Storm TDX4 brings much to the table and can be equipped with **TrueTrack** if needed. This model is designed to meet the needs of many rehab consumers today and allows additional technologies to be added over time.

Features

- Two reliable 4-pole motor packages available: a 300-lb. weight capacity with a top speed of 6 mph, or a 400-lb. weight capacity with a top speed of 4.5 mph
- **MK5** electronics with the **MK5 EX™** controller and **MK5 DPJ™** driver control
- **SureStep** suspension, configured for obstacles up to 3", and rear suspension for an overall smooth ride
- Can be configured for two 22NF or Group 24 batteries. Up to three 22NF batteries can be used if a ventilator back-up battery is needed
- Designed to accommodate the full line of **2G Tarsys®** powered seating systems (**2GT™**, **2GR™** and **2GTR™**), including ventilator tray and power elevating legrests
- Bold styling and hot new colors create a rehab-friendly, yet clean overall style



4-pole motors with easy-access clutch release.



See Invacare.com for case studies on TT.



SureStep elegantly allows incline transitions without high centering.



DPJ: Two drives, plus mode switch for flexible use.



MPJ designed for flexibility and functionality.

Drive Systems

4-Pole Motor Package (Standard)

Providing reliable performance and great power, the 4-pole traditional motors are well suited for the needs of the Storm TDX4 consumer.

Available in two standard motor packages:

- Up to 300 lb. and 6 mph
- Up to 400 lb. and 4.5 mph



TrueTrack Technology (TT) (Optional)

- TT significantly minimizes the need for veer correction, so maintaining fine control requires less effort for joystick and switch drivers alike
- For non-proportional and marginal drivers, the true tracking capability greatly minimizes the fatigue of constant correction while driving
- Due to the technology of this motor design, we offer a 5-year limited motor warranty
- Up to 400 lb. and 7.5 mph

Smooth Ride

For most custom rehab consumers, a smooth ride is critical to maintaining positioning, managing pain, controlling spasms and increasing endurance. To optimize shock absorption during the ride, the frame of the TDX can articulate independently. As the six wheels encounter variations in terrain, the SureStep system and rear suspension conform to the landscape, leaving the consumer more stable and comfortable.

MK5 Electronics

Once again, Invacare's **MK5** electronics take a giant leap forward in function and features, bringing together new driver controls, programming and provider features in a package that's intuitive to configure and use.

MK5 DPJ Driver Control

The dual-purpose joystick (DPJ) was designed for comfortable hand function and easy operation of powered seating actuators.

Features

- Inductive joystick mounted toward the rear of the housing allows full arm support while driving
- Button mode switch with built-in LED permits instantaneous access to the powered seating control—SAC, TAC or TRCM; when this button is pressed, the inductive changes from driving to tilting, with no need for standby mode or additional switches
- Two completely separate drives allow customization of driving, while the mode switch remains available for powered seating functions
- All programming and charging are accessed through a port in the joystick

MK5 EX Controller

- Can accommodate multiple driver inputs, including all existing MKIV™ (5-pin) options. Must use the new **MK5** display with switches
- Maximum current output of 80 amps ensures that the 4-pole motors have all the power they need

MK5 MPJ™ Driver Control (Optional)

MK5 MPJ driver control can be added at any time to the **MK5** EX controller to accommodate changing needs.

The only option not available is compromise.



The **Storm TDX3** is the uncommonly well-appointed economy model of the Storm Series TDX™ line of power wheelchairs, coming standard with three of the **Total Driving eXperience** technologies—**SureStep™** suspension, **MK5™** electronics and center wheel drive. Through an a la carte system, the remaining TDX technologies (TrueTrack and Stability Lock) and any number of options can easily be added. With the same style and flexibility that distinguish the rest of the Storm Series, the Storm TDX3 starts from a standard configuration, with the comfort of knowing that any rehab technology can be added if needed.

Features

- New 2-pole motor package with a 250-lb. weight capacity and a top speed of 4.75 mph
- **MK5** electronics with the **MK5 EX™** controller and **MK5 DPJ™** driver control
- SureStep suspension, configured for obstacles up to 2", and rear suspension for an overall smooth ride
- Can be configured for two 22NF or two Group 24 batteries. Up to three 22NF batteries can be used if a ventilator back-up battery is needed
- Designed to accommodate the full line of 2G Tarsys® powered seating systems (2GT™, 2GR™ and 2GTR™), including ventilator tray and power elevating legrests
- While Stability Lock is optional with the standard TDX3 configuration, it is a standard inclusion with powered seating, base only, motor upgrades and med/tall seat-to-floor
- Bold styling and hot new colors create a rehab-friendly, yet clean overall style



2-pole motors offer true free-wheeling with a clutch release.



4-pole motors with easy-access clutch release.



See Invacare.com for case studies on TT.



SureStep elegantly allows incline transitions without high centering.



DPJ: Two drives, plus mode switch for flexible use.

Drive Systems

2-Pole Motor Package (Standard)

Providing appropriate power and speed, these new 2-pole motors perfectly meet the needs of the Storm TDX3 consumer.

4-Pole Motor Packages (Optional)

Available in two packages:

- Up to 300 lb. and 6 mph
- Up to 400 lb. and 4.5 mph



TrueTrack Technology (TT) (Optional)

- TT significantly minimizes the need for veer correction, so maintaining fine control requires less effort for joystick and switch drivers alike
- For non-proportional and marginal drivers, the true tracking capability greatly minimizes the fatigue of constant correction while driving
- Due to the technology of this motor design, we offer a 5-year limited motor warranty
- Up to 400 lb. and 7.5 mph

Smooth Ride

For most custom rehab consumers, a smooth ride is critical to maintaining positioning, managing pain, controlling spasms and increasing endurance. To optimize shock absorption during the ride, the frame of the TDX can articulate independently. As the six wheels encounter variations in terrain, the SureStep system and rear suspension conform to the landscape, leaving the consumer more stable and comfortable.

MK5 Electronics

Once again, Invacare's **MK5** electronics take a giant leap forward in function and features, bringing together new driver controls, programming and provider features in a package that's intuitive to configure and use.

MK5 DPJ Driver Control

The dual-purpose joystick (DPJ) was designed for comfortable hand function and easy operation of powered seating actuators.

Features

- Inductive joystick mounted toward the rear of the housing allows full arm support while driving
- Button mode switch with built-in LED permits instantaneous access to the powered seating control—SAC, TAC or TRCM; when this button is pressed, the inductive changes from driving to tilting, with no need for standby mode or additional switches
- Two completely separate drives allow customization of driving, while the mode switch remains available for powered seating functions
- All programming and charging are accessed through a port in the joystick

MK5 EX Controller

- Can accommodate multiple driver inputs, including all existing MKIV™ (5-pin) options. Must use the new **MK5** display with switches
- Maximum current output of 80 amps with special current limiting ensures that the 2-pole motors are well matched for the application

MK5 MPJ™ Driver Control (Optional)

MK5 MPJ driver control can be added at any time to the **MK5** EX controller to accommodate changing needs.

Bring out the adventurous spirit in every kid.



Intuitive, Successful Driving

There are two technologies that make the Storm Series TDX ideal for pediatric driving: center wheel drive and **MK5™** electronics. Center wheel driving is a more natural and intuitive way of moving, one that's ideal for new drivers. With "on a dime" turning, consumers know that if they clear their feet, they've cleared the rear of the chair.



The Storm Series has always provided a solid foundation for the mobility needs of early adolescents. The Storm TDX power chair models are no different. With seat sizes starting at 12" wide x 12" deep, and fun, recreational frame styling, the Storm TDX offers the technology, durability and flexibility that a pediatric consumer needs.

Features

- Junior-size ASBA seat frame can grow from 12" x 12" to 16" x 16" and then can be easily replaced by adult-sized ASBA seat frames
- Standard round back canes and seat rails allow simple interfacing with seating hardware and assistive technology mounts



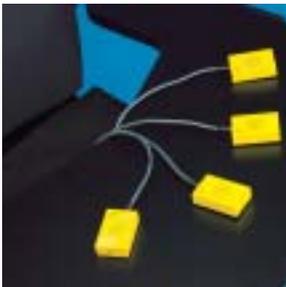
ASL proportional mini joystick is ideal for consumers with limited hand strength or range.



ASL proximity head array is the perfect choice for many pediatric consumers with spasticity, such as those with cerebral palsy.



ASL fiber optic tray array allows full driving and activity control through 2, 3 or 4 fiber optic switches—ideal for those needing fine-control, light or no-touch driving.



ASL proximity tray array allows full driving and activity control with 3 or 4 proximity switches—ideal for those who want driving with gross movements.

2G Tarsys® Powered Seating Systems

- 2GT™, 2GR™ and 2GTR™ systems can interface with any of the Storm TDX bases
- Powered seating as small as 16" x 16"; available with ventilator tray
- Round canes allow for the mounting of any aftermarket seating system, and many custom-contoured backs can be made to fit the shape of the curved ABS back pan
- Mobile arm support can mount to either the extruded channel canes or the round canes of the Tarsys systems

MK₅ Electronics

Driver Control Options

In addition to the MK₅ joysticks, the entire line of ASL driver controls works seamlessly with the MK₅ system.

MK₅ Pediatric Programming

MK₅ electronics offers the most customizable power chair controls available. Features specific to pediatric applications include:

- **No driving:** When activated, the no-driving mode allows full dedication to an alternative activity (e.g., communication, computer access) with no fear of moving the chair
- **Power level:** For indoor drive programs, power level can be reduced for beginning or marginal drivers. This ensures that if the chair hits an obstruction, it will simply stop
- **Attendant options:** There are four attendant options for the MK₅ electronics: 1812 dual proportional joystick, 1552 digital attendant control, ASL504 emergency remote stop and the ASL510 wireless digital attendant control
- **Joystick throw:** Allows proportional joysticks to customize the displacement for full speed range—ideal for those with limited strength or range
- **Axes selection by drive:** Directions of the driver's control can be changed, while leaving the attendant's in the standard configuration
- **Standby:** Allows access to all activities using the same switch system as driving, with no need for a reset switch
- **2-switch mode:** When using a 3-switch system like the ASL head array, the Tarsys powered seating systems can be easily interfaced to work through the driver control. With 2-switch mode, actuator functions can be stored in both the left and right switch locations, reducing the number of switch hits by half in order to operate the powered seating system
- **Drive lockout by drive:** To balance the need for consumer safeguards with the need for flexible programming, the MK₅ allows the degree of lockout to be set per drive. If a greater angle of tilt or recline is needed for certain driving maneuvers (e.g., entering a van), it can be stored in a matched driving program
- **Torque:** To ensure that the chair moves when a switch or joystick is activated, the torque parameter can be adjusted upwards. High torque with a slow-speed driving program permits immediate access to maximum motor power—a critical element in switch driving



The wiring harness of the TDX will work with MK batteries or those with this configuration.



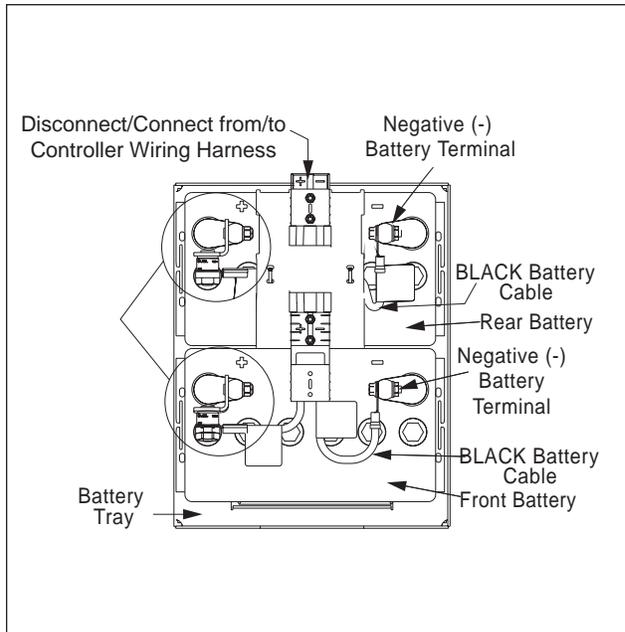
14" x 3"



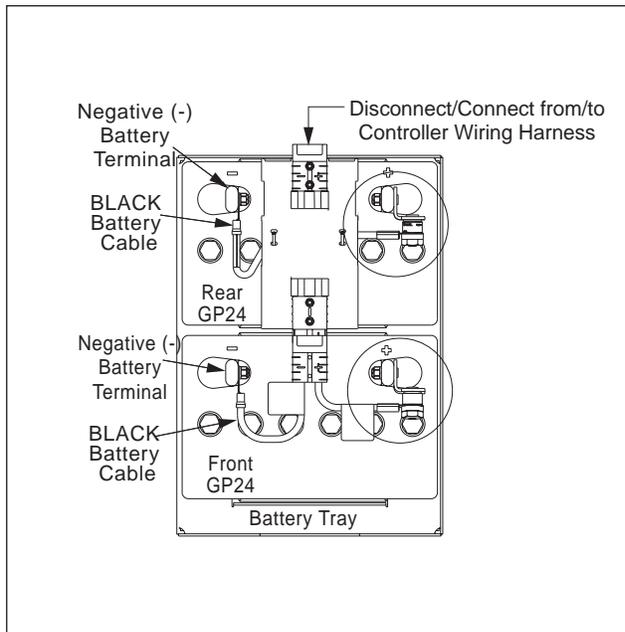
12" x 2.25"



6" x 2" castor



22NF Battery



Group 24 Battery

Battery Access

The removable front door provides easy access to the chair's batteries, which mount onto a sliding tray for easier loading and diagnostic access. Separate harnesses allow for clear, easy wiring and securing of the batteries. Only batteries with the terminal configuration shown above will interface with the Storm TDX. Sealed gel-cell batteries are highly recommended.

Wheels

- 14" x 3" (pneumatic or foam-filled—standard with 4-pole and TT motor packages)
- 12" x 2.25" (pneumatic or flat-free inserts—standard with the TDX3™ 2-pole motor package)
- Because the SureStep™ suspension can lift the castor to clear the terrain more effectively than a larger castor, the new 6" x 2" solid castor is the only castor needed
- Manual wheel locks available



In addition to seat-to-floor, these brackets allow for up to 10° of static seat dump, leaving the front STF virtually unchanged.



Rear suspension completes the smooth ride.



Center mount rigging provides excellent 90° foot positioning for tight hamstrings.



Allows for in-the-field knee angle adjustment from 90° to 60°.

Seat-to-Floor (STF) Options

ASBA seat frame

- Low STF bracket provides 16.5" at 0°
- Med STF bracket provides 18.5" at 0°*
- Tall STF bracket provides 20.5" at 0°*

* Med and tall STF options on the TDX3 require the addition of Stability Lock.

2G Tarsys® Powered Seating Systems

Low STF interface provides 18.5" at 0°

Rear Suspension

Spring suspension of the rear caster is standard with all models.

The user weight will determine the appropriate spring choice.

New Center Mount Rigging

- Extremely durable design allows for the possibility of opening a door as well as accommodating a high degree of spasticity
- Incorporating the gear mechanism from the Invacare® Solara™, the new center mount rigging features an in-the-field knee angle adjustable from 90° to 60° in 2° increments
- Lever release allows rigging to swing back for transfers
- Individual knee-to-heel length adjusts from 13" to 19" and 19" to 24", with anti-rotational footplate design
- Planar and dorsi flexion adjustment is built into the standard footplate
- Footplate has a slight side ridge to maximize foot area while assisting with foot placement
- Hole pattern permits mounting of aftermarket calf pads and shoe holders
- Clean design prevents pressure along the outside of the user's legs
- Suitable for 16" to 24" widths; not available with Junior seat sizes

Footplate Options



- 1 Standard composite – 1651
- 2 Angle-adjustable – AT5543
- 3 Extra large – 1350

Rigging Accessories



- 1 Calf strap – 1337
- 2 Heel loop with ankle strap – 1600BK
- 3 3" extensions – ALPT3

Swingaway Options Center-Pivot Style



90SWING with AT5543*
*Available with Junior seat only.



70STAPER



70NTAPER

Pin-and-Saddle Style



- 1 Tapered – P93ST
- 2 Non-tapered – P93

Elevating Pin-and-Saddle Style



Elevating/extending – P904A

Center-Pivot Style



Elevating – AT5544
(with extra-large footplate – 1350)

Power Elevating Legrests



Power elevating legrests feature anti-rotational footplate design, actuator built into the legrests, low-profile mounting, easy swing-away and disconnect.

MK5
electronics:
Quite
possibly
the most
significant
advancement
in electronics
ever.



MPJ designed for flexibility and functionality.

Proportional Driver Control Options

All proportional controls, such as joysticks and RIM head control, are characterized by the ability to grade speed from 0 to full velocity and allow for 360° of direction.

MK5™ MPJ™ Features

- Inductive joystick mounted toward the rear of the housing allows full arm support while driving
- Light-touch, top-mounted toggle switch provides on/off and drive select
- Light-touch “thumb wheel” speed dial for on-the-fly overall speed changes
- Four completely separate drives allow customization of driving or alternative activities (e.g., powered seating and attendant) in specific drives
- Standard port for a remote on/off switch for those unable to access the toggle
- Optional port for drive select switch
- All programming and charging are accessible through the joystick port
- Unique mounting allows maximum flexibility for both lateral and rotational angle positions
- LCD displays parameters such as odometer, speedometer and battery voltage



MK5 DPJ (Dual-Purpose Joystick)

DPJ™

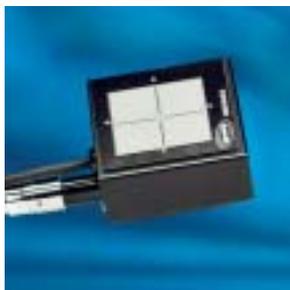
- Inductive joystick mounted toward the rear of the housing allows full arm support while driving
- Button mode switch with built-in LED permits instantaneous access to the powered seating control – SAC, TAC or TRCM; when this button is pressed, the inductive changes from driving to tilting with no need for standby mode or additional switches
- Two completely separate drives allow customization of driving, while the mode switch remains available for powered seating functions
- All programming and charging are accessed through a port in the joystick



MK5 Compact Joystick

Compact Joystick (1558/1812)

- Ideal for midline or alternative mounting when a standard-force joystick is needed
- Good option for proportional attendant control (cannot be used with the Touchpad light-touch joystick, ASL proportional mini joystick, ASL Stealth Mushroom joystick or Peachtree driving controls)
- Must use 1552 or ASL510 for attendant control



MK5 Touchpad Light-Touch Joystick

Touchpad Light-Touch Joystick (TCHDM)

- Good option for fine motor control, light-strength driving
- Provides tactile feedback of true direction and neutral
- Must use 1552 or ASL510 for attendant control



ASL Proportional Mini Joystick

ASL Proportional Mini Joystick (ASLPMJI)

- Ideal option for very light-force applications
- Comes standard with finger cup or chin ball
- Must use 1552 or ASL510 for attendant control



ASL Stealth Mushroom Joystick

ASL Stealth Mushroom Joystick (ASLPSMJI)

- Modeled after a track ball design, this is a good option for those driving with shoulder and arm function rather than hand/finger
- Must use 1552 or ASL510 for attendant control



MK5 RIM Head Control

RIM Head Control (1500)

- Permits proportional head driving requiring standard joystick force

Non-Proportional Driver Control Options

Non-proportional or switch driver controls are characterized by three or four distinct switch closures that relay one speed and one direction. One of these options can be used with any of the proportional driver controls indicated on pages 15-16.



Sip n' Puff System

Sip n' Puff System (1554/SNPM4)

- Standard setting (hard puff = forward, soft puff = right, hard sip = reverse, and soft sip = left) can be calibrated to the user's respiratory ability or changed through axes selection



ASL Fiber Optic Tray Array

ASL Fiber Optic Tray Array (ASL108)

- Can be mounted into any orientation for a minimal-movement, no-force switch system



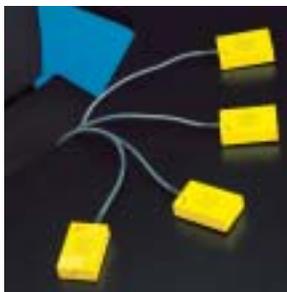
ASL Proximity Head Array

ASL Proximity Head Array (ASL105I)

- Can be configured with a variety of pad sizes and incorporated into a Stealth Ultra headrest
- Choose from four reset switches: proximity, beam, egg and wobble

ASL SNP Proximity Head Array (ASL109I)

- Combines the ASL proximity head array for left and right directions with Sip n' Puff for forward and reverse



ASL Proximity Switch Array

ASL Proximity Switch Array (ASL106I)

- Can be mounted into any orientation for a gross-movement, no-force switch system



Heavy-Duty Joystick

Heavy-Duty Joystick (1556M4)

- Switch joystick designed to withstand gross and spastic movements



Mini Tash Joystick

Mini Tash Joystick (5020)

- Light-force joystick for chin or hand use



Electronic Accessories

Electronic Accessories

- 1 "T-handle" flexible joystick extension – 1560
- 2 Straight-handle flexible joystick extension – 1561
- 3 Reset switch – 1817



Easy remote programmer – MKIV/MK5

New Simplified Programming Features

Speed and Response

To aid in the programming of driving parameters, the **MK5** features an overall programming screen. After the opening screen is displayed, the SPEED and RESPONSE parameters will appear. Adjusting SPEED will simultaneously change the values of forward speed, turning speed and reverse speed. Adjusting RESPONSE will simultaneously change the values of acceleration, braking, torque, turn acceleration, turn deceleration and turning speed.

Now adjusting the driving performance of a chair is as easy as using one screen.

Turn Acceleration

Same as MKIV™ “Sensitivity” – the time it takes to ramp up to turning speed.

Turn Deceleration

The time it takes to decelerate from a turn when the joystick is returned to neutral.

Axes Selection by Drive

Can be set globally or individually in each drive to allow for customization of the directional control.

Fault Log Descriptions

Detailed messages permit easier trouble shooting.

Global/By Drive

Enables all values listed in performance adjustments below torque to become global parameters; useful when calibrating the joystick or using standby functions. Global is the default setting for the **MK5**.

Valuable Diagnostic Tools

Current Status has been added to the **MK5** with a quick summary of the following items:

- Joystick Type
- % Joystick Throw Achieved
- Other Options found on the Daisy Chain Network
- Software Version
- Battery Voltage
- Load Test Results
- Drive Lockout Function as necessary
- Emergency Stop (Reset) Function
- Left & Right Percentage Current Rollback as read by Temperature Sensor
- Ready to Drive (Yes / Error Code)
- Odometer

Now summarizing the status and setup of a chair is simplified—just start with Current Status.

New Programming Features

Standby with Mode Selection

The user can program the controller to respond to the operating mode selections without using the emergency stop (reset) switch while the standby mode is active. In this mode, the controller will select a new mode (drive, drive selection or ECU selection) when the joystick is moved. The mode will be active when the joystick is returned to neutral.

Forward Command – Return to driving

Right Command – Selects {Drive Select}

(If remote select is not turned on, the right command will have no function)

Left Command – Selects powered seating control or ECU mode

Second level of left command will sequence through seat control or through ECU modes if more than one is turned on

(Special Case: The user will have to sequence through programmed activities only. For example, if TRCM is the only thing on, it is the only option with the left command. Also, if only one ECU is active, selecting ECU will enable the ECU and bypass the ECU selection mode.)



The slim and flexible single-function toggle provides easy control of the tilt and drive lockout indicator.



Single-actuator control



Two-actuator control

Tarsys® Powered Seating Electronics

Single-Function Toggle

Standard with the 2G Tilt only, this feature provides easy access to the power tilt system. LED will indicate when drive lockout – 20° of tilt – is reached. Drive lockout is not programmable.

SAC – Single-Actuator Control

This simple, economical option permits driver control operation of a single actuator. This feature enables the mode switch on the DPJ™ or can be activated in one of the four MPJ™ drives for quick access to the tilt through the driver control. Additional access to the single actuator is provided by a mono jack that can interface with any ability switch.

TAC – Two-Actuator Control

Repackaged to mount on back canes, the TAC permits driver control operation of up to two actuators, as well as access to speed programming, acceleration, angle range and drive lockout of the powered seating system. Additional ports on the TAC allow for ability switch control or attendant control of the system.

Drive Lockout by Drive

The drive lockout function can be turned off in select drives when needed, ensuring the safest decisions. Program set in the TRCM/TAC menu.



TRCM: Tilt Recline Control Module

Tarsys® Powered Seating Electronics

TRCM – Tilt Recline Control Module

The TRCM allows driver control operation of up to five actuators, along with access to speed programming, acceleration, angle range and drive lockout of the powered seating system.

Features (apply to both TAC and TRCM)

- Simplified programming features
- 2-switch mode: Allows head-control drivers to dedicate left and right commands while turning off the forward command
- Both the TAC and TRCM will work with the DPJ™ to enable the mode switch. When using any of the other MK5 proportional driver control options, including the MPJ™ one of the four drives should be programmed for no-driving mode. This will enable the consumer to toggle over to that drive and instantaneously access the powered seating functions through driver control without the use of standby. Simply turn on the no-driving mode, with TRCM, TAC or SAC "on" in that drive only.



MK5™ EX™ Controller

The MK5 EX controller features plug and play current limiting, which enables the controller to be safely used with both 2-pole and 4-pole motors. When plugged in, the controller senses the motor on the chair and loads the correct power and current rollback settings, with no calibration needed.



MK5 TTE-EX™ Controller

The MK5 TT-EX is the only power chair controller in the industry with TrueTrack. When used with the new Heavy-Duty GB™ motors, this controller can sense wheel position, varying the power to each motor to help ensure straightforward tracking, even over slopes and obstacles.

Options everyone can be comfortable with.



The Storm TDX power chair was engineered to avoid the compromising that can occur when powered seating systems are combined with traditional power bases. Thanks to the design of the TDX base, the addition of powered seating is virtually invisible to the base. Turning radius, stability and performance all remain virtually the same as with a standard ASBA seat frame. The combination of weight-shifting technology with center wheel drive and Stability Lock allows all seat depths and vent options to interface with one base length—which means no more short and long bases, no more compromising.

2G Tarsys Powered Seating System Common Features

- All 2G Tarsys powered seating systems have a weight capacity of 350 lb. (or 300 lb. with a ventilator). Base weight limit must be considered
- Each system features weight-shifting technology that helps limit the change to the center of gravity throughout tilt and recline ranges to help ensure proper balance and stability
- Seat sizes range from 16" x 16" to 22" x 22," with additional sizes available through specials, including 14", 15", 23" and 24" widths
- Power elevating legrests and ventilator tray can be added at any time
- Standard armpad features an elbow stop while allowing arm to fully flip back; Otto BockSM arm troughs are optional

Ventilator Tray Option

The Tarsys ventilator tray was designed to accommodate a wide variety of ventilators, including the Puritan Bennett® LP10 and LP8. Securely held with four links, the Tarsys tray articulates to clear the base while tilting or reclining, all while keeping the ventilator level.

Features

- Compact design translates into minimal increase of turning radius
- Can be retrofitted at any time to the 2G Tarsys powered seating systems, with no need to change base length or seat location



Retrofittable ventilator tray

Battery Arrangement

- The positioning of the ventilator back-up battery is easily solved on the TDX base: when a ventilator is added to the TDX, the battery arrangement allows three 22NF batteries. This places the ventilator battery in front of the battery compartment for easy recharging
- A fused harness is provided from the battery to the rear of the chair, terminated with standard Anderson connectors, for simple interfacing with the ventilator harness
- Please consult ventilator manufacturer for proper charging of the back-up battery, as the power chair charger will not charge a third battery
- Deep-dish door, longer tray and harness are all that is needed to add this option to the TDX base



New door, tray and harness are all that is needed to house the ventilator battery.

2GT™ Power Tilt System

- Tilt range of 0° - 45° or 5° - 50° allows proper pressure relief
- Standard round canes or extruded Tarsys canes allow for simple interfacing with any backrests
- When recessing a backrest, the SAC, TAC or TRCM options can be mounted onto the backrest itself or spaced rearward on the cane
- Single-function toggle is the standard electronics, with SAC, TAC and TRCM available as options
- System can easily be reset from 0° to 5° of starting tilt in the field as needed



2GT Power Tilt System



2GR Power Recline System



2GTR Power Tilt & Recline System

2GR™ Power Recline System

- Recline range of 90° - 175° allows proper pressure relief
- Extruded Tarsys canes are standard and required for the VSR (3" shear reduction system). In this configuration, the curved ABS back is standard. Aftermarket custom backs (e.g., ContourU® and Freedom Designs Incorporated®) can be ordered contoured to the shape of the ABS shell
- An extra 4" on curved ABS backs reduces the gap between the cushion and backrest to a minimum of 2" above the cushion for greater back support
- The 2GR can be ordered with standard round canes; this will eliminate the VSR actuator. With only the recline actuator, the standard electronics will be the single-function toggle
- When recessing a backrest, the TAC or TRCM options can be mounted onto the backrest itself or spaced rearward on the cane
- Mechanical push rods elevate either the AT5544 or Genius legrests with the recline motion
- Power elevating legrests and ventilator tray can be added at any time
- Legrest options include mechanical elevating, center mount rigging, non-elevating swingaways and power elevating legs
- System can easily be reset from 0° to 15° of tilt, in 5° increments, in the field as needed
- Specials for the curved ABS back include visco elastic foam, scapular relief and spinal relief; contact Invacare Specials or Rehab ASAP for full details

2GTR™ Power Tilt & Recline System

- Tilt range of 0° - 45° or 5° - 50° allows proper pressure relief
- Recline range of 90° - 175° allows proper pressure relief
- Extruded Tarsys canes are standard and required for the VSR (3" shear reduction system). In this configuration, the curved ABS back is standard. Aftermarket custom backs (e.g., ContourU and Freedom Designs) can be ordered contoured to the shape of the ABS shell
- An extra 4" on curved ABS backs reduces the gap between the cushion and backrest to a minimum of 2" above the cushion for greater back support
- When recessing a backrest, the TAC or TRCM options can be mounted onto the backrest itself or spaced rearward on the cane
- Mechanical push rods elevate either the AT5544 or Genius legrests with the recline motion
- Power elevating legrests and ventilator tray can be added at any time
- Legrest options include mechanical elevating, center mount rigging, non-elevating swingaways and power elevating legs
- System can easily be reset from 0° to 5° of starting tilt in the field as needed
- Specials for the curved ABS back include visco elastic foam, scapular relief and spinal relief; contact Invacare Specials or Rehab ASAP for full details



Yes, you can.™

Specifications**

	TDX5	TDX4	TDX3
Standard motor package	TTHD (Heavy-Duty TrueTrack) 400 lb. (ASBA seat) 350 lb. (2G Tarsys) 300 lb. (Tarsys & vent) Max. speed: 7.5 mph 3" obstacle climbing	4-pole motors 300 lb. (ASBA seat) 250 lb. (2G Tarsys) 200 lb. (Tarsys & vent) Max. speed: 6 mph 3" obstacle climbing Heavy-Duty 4-pole motors 400 lb. (ASBA seat) 350 lb. (2G Tarsys) 300 lb. (Tarsys & vent) Max. speed: 4.5 mph 3" obstacle climbing	2-pole motors 250 lb. (ASBA seat) 200 lb. (2G Tarsys) 150 lb. (Tarsys & vent) Max. speed: 4.75 mph 2" obstacle climbing
Optional upgrade motor packages	n/a	TTHD (Heavy-Duty TrueTrack) 400 lb. (ASBA seat) 350 lb. (2G Tarsys) 300 lb. (Tarsys & vent) Max. speed: 7.5 mph 3" obstacle climbing	4-pole motors 300 lb. (ASBA seat) 250 lb. (2G Tarsys) 200 lb. (Tarsys & vent) Max. speed: 6 mph 3" obstacle climbing Heavy-Duty 4-pole motors 400 lb. (ASBA seat) 350 lb. (2G Tarsys) 300 lb. (Tarsys & vent) Max. speed: 4.5 mph 3" obstacle climbing TTHD (Heavy-Duty TrueTrack) 400 lb. (ASBA seat) 350 lb. (2G Tarsys) 300 lb. (Tarsys & vent) Max. speed: 7.5 mph 3" obstacle climbing
Standard battery tray*	two Group 24 batteries <small>*Sealed gel cell highly recommended. See battery termination for compatibility with TDX battery tray.</small>	two 22NF batteries	two 22NF batteries
Battery options	three 22NF batteries ventilator tray option	two Group 24 batteries three 22NF batteries ventilator tray option	two Group 24 batteries three 22NF batteries ventilator tray option
Standard electronics controller	MK5 TT-EX	MK5 EX	MK5 EX
Standard joystick	MK5 MPJ	MK5 DPJ	MK5 DPJ
Options	all MKIV 5-pin switch options	MK5 MPJ all MKIV 5-pin switch options	MK5 MPJ all MKIV 5-pin switch options
Standard TDX technologies	MK5 electronics SureStep suspension center wheel drive Stability Lock TrueTrack technology	MK5 electronics SureStep suspension center wheel drive Stability Lock	MK5 electronics SureStep suspension center wheel drive
Options		TrueTrack technology	TrueTrack technology Stability Lock standard with base only, Tarsys, all motor upgrades & med/tall seat-to-floor picks

Common Features

ASBA seat sizes*	width: 12" to 24" depth: 12" to 22" *Sizes up to 16" are adjustable in width & depth.	Overall height (@ low STF) Back height 16" 34" 2G Tarsys @ 22" 37"
Back angle adjustment	80° to 100°	Overall width Base 25"
Seat-to-floor Low	16.5" @ 0° 17" @ 5°	Seat width to outside of joystick (16" width) 24.5"
Med	18.5" @ 0° 19" @ 5°	Seat width to outside of joystick (20" width) 28.5"
Tall	20.5" @ 0° 21" @ 5°	2G Tarsys options 2GT 0° to 45° or 5° to 50° tilt 2GR 90° to 175° recline 2GTR 0° to 45° or 5° to 50° tilt 90° to 175° recline
2G Tarsys	18.5" @ 0° 19" @ 5° w/ 16" deep*	Arm height adjustment ASBA 9" to 13" 2GT 9" to 13" 2GR & 2GTR 10" to 16"
*STF increases .5" per 1" of seat depth.		Overall length Base (caster to caster trailing) w/ 18" deep ASBA seat 35" & 90° center mount riggings 43" w/ 18" deep 2G Tarsys & 90° center mount riggings 42"
Incline capability	9°	
Curb climbing	3" obstacles (2" for TDX3)	
Turning radius (18" deep seat)	22" with 90° center mount rigging 24" with 70° NHD riggings	
**Due to manufacturing variances, all dimensions may ± .5" and all specs ± 10%.		



"Invacare says
'Yes, you can,'
and I couldn't
have said it
better myself."

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