

LiNX[®] Control System



**Smart Technology:
Redefining Mobility**

LiNX[®]



Invacare **LINX** is our **insight inspired** control system with **advanced technology** that provides a **superb driving experience** for users and allows professionals to **configure and tailor** powerchairs quickly and more **intuitively**. Key features include:

- Touch screen remote
- Remote selection
- Choice of specialist controls
- Simple wireless programming
- Enhanced drive experience
- Range of power modules

Touch Screen Remote

Invacare **LINX** introduces **next generation technology** to powerchairs with the REM400 remote that requires **minimal force** to operate. This innovative remote allows it to be **configured to a users' physical and cognitive ability**, making it **suitable for a range of users**.

- **Swipe or tap-only operation including interaction settings to define the threshold between the swipe movements**
- **Direct access or step by step menu operation**
- **Adjustable brightness**
- **Configurable for left or right handed use**
- **Glove mode setting**
- **Mix and match function in the menu**
- **Profiles and functions accessible via the touch screen, buttons, toggle switches or joystick**
- **Mouse mover with on touch screen mouse clicks**
- **Switch control accessibility feature to navigate and select items on smart phone or tablet**

The development of the REM400 has involved extensive research, trials and tests. The joystick knob has been specifically designed to make it easier to access the screen. External toggle switches can be configured for improved accessibility for users that have difficulties reaching the on/off or operating functions on the touch screen.



REM500 – Touch Screen Display

The REM500 is a **display only** version of the REM400, retaining the **3.5” interactive touch screen** with ON/OFF and multi-purpose buttons located at the bottom. It also features a charging port, two stereo jack inputs and has been specifically designed for those who **cannot use a standard joystick**.



Built-in Bluetooth

The REM400 and REM500 controls have **built in Bluetooth** which allows users to be connected to their computers, laptops and Macs. **LINX** allows the user to connect to multiple devices simultaneously and has built in mouse mover and switch control functionality to be able to control PC, Laptop, smart phone etc.

Remote selection

LiNX offers a range of remotes to suit many needs, all of which are easy to understand and simple to use.



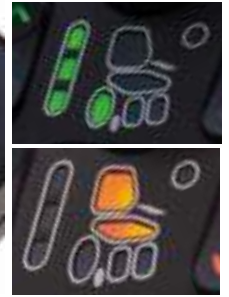
REM110 - Drive Only Remote

The **LiNX** range of controls start with a **simple set-up** that features the drive function, horn and a speed dial.



REM211 - Drive and Seating Remote

The additional seating functions on this control are displayed with **easy to understand** icons.



REM216 - Drive, Seating and Lights Remote

The REM216 has added light buttons to operate hazard lights, lights and indicators.

- The button for the active function is bright and will also be dim for inactive functions
- The primary and secondary functions on the light buttons are for lights and hazards.

These three remotes have the same familiar design and share the same key features:

- Large on/off button allowing **easy targeting**
- Ergonomic joystick requiring a **low force** to operate
- **Accurate** system status and battery gauge display
- **Easy to use** physical speed dial
- Icon based menu structure (REM211 and REM216 only)
- Simple **keyless** lock function

MyLiNX App

The innovative app provides **clear battery life** and fault code information related to the powerchair, as well as an insight into its **diagnostics** and overall **health**. It also gives users a simple way to **communicate** chair issues to their provider.



Choice of specialist controls

To **maximise control and independence**, the REM400 and REM500 allow a selection of specialist controls and joysticks to be used on Invacare's remarkable powerchairs.

Joystick options



Extremity control joystick (ASL138)

Very small profile joystick ideal for **chin control** due to the outer shell being resistant to saliva and other foreign objects. Comes with a headrest and an egg switch for function and profile changes. Its built in **Bluetooth** allows simple access to computers or communication devices.



MEC joystick (ASL130)

Designed for users with **muscle weakness or fine motor control** that require a very low force joystick, operated with a limited range of motion. Has a built in mode change function and Bluetooth for simple access to computers or communication devices, along with a choice of joystick tops.



Compact joystick single switch (ASL133)

Has a single function switch in the top of the joystick cap and a textured end for a tactile feel. The cap of the joystick is moulded to the base, ideal for users with high muscle tone / **uncontrolled movements**.



Paediatric compact joystick (ASL132)*

A joystick in a compact package designed for paediatric users. Its shallow base makes it ideal for **midline mount**.

Remote options



Compact remotes (DLX -CR400/DLX-CR400LF)

Compact joystick with access to multiple profiles and functions, ideal for users with a **limited range of motion**; also available in a low force joystick version.

Head Controls



Head array (ASL104/ASL104P)

Three proximity sensors mounted in the headrest which comes with an egg switch that can be configured for menu navigation and mounted in a location accessible for the user. It has built in **Bluetooth**, allowing simple access to computers or communication devices, and is available with straight pads (ASL104) or adjustable wings (ASL104P).

A great feature of the **LINX** system is the intelligent system has the ability to interface with a range of third party remotes.



Sip 'n' Puff head array (ASL109)*

Combines simple sip and puff (forward / reverse) controls with head movements (left / right). Allows **more flexibility** and is easier to control than a Sip 'n' Puff on its own. The **lip switch** resets or changes the function or profile.

Proximity Switch Control



Four Switch Proximity array (ASL106)

Four proximity sensors mounted inside an eclipse tray suitable for those with a **defined range of motion requiring no force**. It also has built in Bluetooth, allowing simple access to computers or communication devices.

Dual Controls



Attendant Control Unit (DLX-ACU200)

Allows access for up to **3 drive functions** and all **seating functions** with graphic display, attendant in charge indicator and status LED's.

IDC Dual control (IDC)



Allows access to the drive function, speed dial, forward and reverse option and speed handle with **emergency stop feature**. It also indicates who is in control, the on/off status and the forward and reverse status.

* Offered on chair on the TDX SP2 Ultra Low Maxx powerchair only.

Simple wireless programming



Professionals can now configure powerchairs quickly and more intuitively to each individual user thanks to the **revolutionary programming interface** built into **LiNX**.

- The **clean and simple LiNX** interface makes it **easy to configure** individual settings for users via a PC, laptop or iOS device
- The next generation technology built in to **LiNX** allows **wireless access** to diagnose and update the control system
- The enhanced diagnostic feature **records statistics** on how the chair has been used while performance data can also be viewed in **real time**
- Inputs can be assigned per function so users can select a different input **based on their energy level/fatigue**

Enhanced drive experience



Total control

Maintaining a consistent speed when driving over uneven terrain, camber or incline can be tricky and often tiring. Intelligence within the **LiNX** system, load compensation, is **constantly analysing and reacting** to any differences between what should be happening with what is actually happening. The results are **greater control, improved hold on slopes** and greatly **improved drive** over soft surfaces at low speeds. The innovative inbuilt technology:

- **Compensates for in-balances** that may exist or develop within the powerchair, enabling a consistent drive
- Allows for **more accurate and predictable control** over different surfaces
- Accurate driving in tight spaces is straight forward with its **low speed and creep control**



Consistent over time

There are a number of variables that may lead to imbalances within a power chair - weight distribution, wear and tear etc. These factors can sometimes lead to variances in how the powerchair drives. The Invacare **LiNX** control system has **adaptive load compensation** which **interprets, learns and adapts the motors** to these changes, ensuring the drive of the powerchair is **optimised and well balanced** over time.



LiNX G-Trac® technology

LiNX G-Trac ensures the directions indicated by the control are followed by the chair. The **digital gyroscopic technology** detects and corrects the smallest deviations from the intended path caused by a surface change and **reduces** the number of corrective actions needed. It increases **point to point driving accuracy**, reducing the number of physical and cognitive demands required, especially for specialist control users.

Switches, auxiliary and power modules



Remote Stop Switch (ASL504)

Allows the TDX SP2 with Ultra Low Maxx to be stopped within a range of **6 meters** via one switch and will allow it to move again. Useful when **intervention** is needed during training/ chair set up's/ assessments.



10-way switch

Access to 5 main powered positioning functions that can be re-programmed and re-labelled; ideal for those who have difficulty reaching or positioning their hand to the buttons on the control.



USB Charger (DLX-USB02)

2 x USB 2.0 ports supply up to 1A each to keep **devices charged**. Rail mounting feature enables easy access.



Switches

A selection of different sized and coloured switches are available that can be plugged into the jack sockets of the LiNX system. They are pre-configured but can be changed to different functions and access methods: momentary, latched, single or double click, short press or long press.

Wireless accessories

Gives users of ASL inputs with built in Bluetooth wireless access to communication devices or PC, Mac and laptop mouse mover when a separate switch is inserted in the user port of the interface.



ACT - Actuator control module

Module to expand the system for further powered positioning functionality with 2 or 4 channels.

- On-board angle sensor
- Status LED
- Refined seating control
- Connectors:
 - 2 x bus ports
 - 2 or 4 x actuator ports



Power modules

LINX power modules allow for a seamless transition from a simple driving configuration up to configurations featuring multiple actuators and lights.

- 60, 75 and 120 A rating
- 2 x actuator outputs (optional)
- Lighting outputs (24V / 12V) (optional)
- 2 x bus ports
- Real-time clock
- Statistics recorder



Input module

Required for a selection of specialist controls, including Sip 'n' Puff, as well as third party alternative inputs.

- Configurable V out for sensor support
- Accepts proportional & switched inputs
- Layout:
 - DB9 serial port
 - Stereo jack port for contrc inputs
 - Sip 'n' Puff input nozzle
 - 2 x bus ports
 - White status LED (active demand input)



Output module

Users that need to control third party equipment (external outputs, e.g. a communication device) with their LiNX remote.

- Up to eight independent configurable relay switch contacts
- Each quadrant has a long and a short press and can be assigned to output activated, activation mode (momentary, toggle, latched set or latched clear), and the icon displayed
- Layout:
 - Female DB9 connector
 - Stereo jack port
 - 2 x bus port

