THE NEXT GENERATION OF PROGRAMMING

Rehab Redefined
with LiNX® Technology
About LiNX

LiNX, our insight inspired platform, has advanced technology to provide a superb driving experience for users. It also allows professionals to configure and tailor the power wheelchair quickly and more intuitively thanks to its innovative live wireless programming.
What makes the LiNX platform so special?

- Access to configure, diagnose and update the control system.
- Quick & easy to program its intuitive graphical interface.
- Live wireless programming, no cables needed.
- Control features can be set specifically to each individual user.
Think all power wheelchairs are programmed the same?

Think again

- Professionals now have options when it comes to programming an Invacare Power Wheelchair with LiNX Technology:
  
  - **iOS Device**
    - easy to carry
    - plus a dedicated handheld programmer is no longer needed!
  
  - **Windows® Tablet/PC**
    - for those preferring a larger screen

All these devices connect wirelessly, via Bluetooth®, to the power wheelchair system through a LAK (LiNX Access Key) and allow real time adjustments to be made without the need to reboot the system for each change, speeding up the programming process.

So what are the programming capabilities available with LiNX?

Adjust the drive speeds, acceleration and deceleration

Live adjustments can be made to the forward, reverse and turn speeds in order to increase evaluation efficiency and overall experience for the user. The system boasts unique programming parameters such as Turn Boost for proportional drivers and Veer at Low Speed for non-proportional drivers, which enable the system to be further customized.
The standard Drive and Seating profiles are no longer fixed thanks to LiNX. Our new remotes (REM400 and REM500) allow professionals to mix and match the drive and seating controls, customizing the display to suit an individual’s lifestyle. Please see the following examples of what is possible:

### Adjust a seating function speed

Seating function speeds can be adjusted live to suit user preference. If they feel the actuator is moving too fast or too slow, the actuator speed can be increased/decreased as required.

### Profile set-up

Profiles can also be set-up for remote options i.e. head control, chin control, attendant control; plus, the names of the profiles can be changed to something more memorable.

For scanning, this means that each profile can be set up to each user’s preference. Profiles can be called ‘my house’, for example, and functions can be set to the user’s preference. Functions not required can be made invisible.

**An example:** As you approach your house, you lower your speed. To access the door, you have to go down a ramp where you always tilt your chair back. Once you entered the house, you return your chair to its standard seated position and go check your e-mail on your computer.

The setup of the ‘house’ profile can be:

- Driving at lower speed – indoor slow
- Tilting to take the ramp – tilt
- Driving up the ramp – indoor slow
- Tilting back after the ramp – tilt
- Driving to the computer – indoor slow
- Accessing the computer – connectivity

You can add and repeat functions in the same profile. That means, using scanning, the order of the function sequence can be personalized and you don’t need to go through all the seating or driving functions.

### Example 1

<table>
<thead>
<tr>
<th>Profiles: Drive 1</th>
<th>Drive 2</th>
<th>Drive 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functions:</td>
<td>Tilt</td>
<td>Recline</td>
</tr>
<tr>
<td></td>
<td>Elevate</td>
<td>LNX</td>
</tr>
</tbody>
</table>

### Example 2

**Profiles**

- **Indoor:** Low speed drive
- Maximum tilt
- Maximum recline
- Maximum legrest

- **Outdoor:** Maximum speed drive
  - Elevate
  - Tilt

- **Work:** Medium speed drive
  - Tilt
  - Connectivity

If they feel the actuator is moving too fast or too slow, the actuator speed can be increased/decreased as required.
4. **Adjust the joystick sensitivity**

The responsiveness of the joystick can be adjusted, for example, for users with a tremor. The tremor dampening parameter takes into consideration a percentage of tremor, depending on the user’s needs, and can be adjusted to how far the joystick needs to be deflected before the wheelchair reacts.

5. **Adjust the joystick neutral window**

For users who are not able to move the joystick in a direct and straight forward, reverse, left or right motion, the neutral window can be altered, so if the user pushes the joystick up with a slight right angle, the power wheelchair can be programmed to accept this as forward.

6. **Adjust the joystick throw**

The joystick throw can be shortened to get full speed or activation without having to move the joystick completely up, down, left or right.

7. **Adjust the speed parameter for each drive function**

The maximum speed the power wheelchair can reach can be tailored in each drive function. For example, one of the drive functions can be set-up for outdoor use and so will utilize the full speed available, while another drive function can be set-up for indoor use and so setting a lower maximum speed will enable the user to better control their power wheelchair around the house.
Adjust the joystick commands

The basic commands on a power wheelchair are forward, reverse, left and right but there are also other commands such as tilt, recline, lights, horns etc. to consider. The REM400 and REM500 allow the commands to be changed the way the user wants them, based on frequency or even by accessibility as directions can be eliminated if required.

Proportional or non-proportional actuator control

This feature gives the user flexibility of controlling their power positioning functions proportionally through their joystick. This capability allows a user to control the speed of their power positioning function based on the needs of their environment as well as physiological considerations.

Latched driving

Latched driving modes allow the user to maintain a forward or reverse speed so that they can drive without having to continuously provide a drive demand. There are six latched driving modes: three step up modes, two step up/down modes and cruise control.

- In the step up/down modes, choose between 3 and 5 fixed speeds to accelerate, but the opposite command will also step down a speed.
- In the step up mode, choose between 1, 3 and 5 fixed speeds to accelerate.
- Cruise control will maintain speed when joystick is released.

Expanding the system with other components

If over time the controls on the power wheelchair need to be added to or changed, the system will allow this, including using alternative controls.

Bulk mode changes

Bulk mode changes allow for pre-set programming, ideal if the professional knows exactly what parameters to change before the user arrives for an even quicker set-up. Drive and seating speeds, which can also be done live, can also be pre-set.
Enabling/disabling G-Trac® technology in each drive function

This is ideal when setting up a chair as the G-Trac technology can be enabled in one function but disabled in another to demonstrate the difference between the power wheelchair having and not having G-Trac technology. As standard, G-Trac technology is enabled in all three drive functions, so to disable it, a bulk mode change will have to be performed.

Invert power positioning function

This great feature gives the user the choice of how they operate a power positioning function. For example, with tilt, some users prefer to pull the joystick back toward them for the power wheelchair to start going into tilt, and when they push forward on the joystick, the chair returns to its normal position. Other users might prefer to push the joystick forward for the chair to start tilting back, and so on.

Adaptive Load Compensation (ALC) calibration

Calibrating the Adaptive Load Compensation following a motor replacement maximizes the drive performance of the power wheelchair.

Reset the motor performance

This is useful for a new user or when new motors or power module have been put on the power wheelchair.
Useful statistics

LiNX gives valuable information about how the power wheelchair is being used, which can be read live from the power wheelchair or as part of a saved file. It includes:

- A battery usage section - holds information on total charge time and number of charge cycles
- Information on the cumulative time the power wheelchair has spent within each battery gauge
- Logged battery events, including high, low and deep discharge states with dates and times, thanks to the real-time clock built into the system
- A drive usage section showing maximum motor currents which provides information on the demand of each motor

All this information can be reset to allow new data to be captured in order to continually monitor the power wheelchair’s usage. It can also be reset when the batteries are exchanged.

Read chair diagnostics live

The Invacare LiNX system can display real-time data from the control system (iOS device only). This diagnostic information can assist to quickly identify areas affecting the power wheelchair’s performance such as:

- Joystick calibration
- Worn or damaged motors
- Motor resistance levels
- Battery statistics
- Speed dial calibration

System summary

The system summary section within LiNX allows quick access to key information with the ability to easily share it.

- Serial numbers
- Firmware versions
- Module information
- Product codes
- Hardware versions

MyLiNX App

This game changing app eliminates the worry of battery life and anxiety of things going wrong with the power wheelchair, helping the user to feel more confident and enjoy life.

By connecting wirelessly to the Invacare power wheelchair, MyLiNX provides vital information and data regarding the chair’s drive time, battery life and overall usage.

Also, when the user is out and about, and the power wheelchair has a fault, the app allows the user to alert their provider quickly and easily, giving them complete peace of mind.

Search and download the MyLiNX app at no charge at the Google Play™ Store or Apple® App Store®. It is compatible with all LiNX enabled Invacare power wheelchairs.
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We didn’t think so.

To find out more about LiNX, visit invacare.com/RehabRedefined