

# Meeting the needs of people living with **Cerebral Palsy**

QUANTUM<sup>®</sup>  
**iLevel**<sup>®</sup>  
power chairs



# Condition

Cerebral Palsy (CP) is a chronic condition affecting body movements and muscle coordination, usually originating before birth or during infancy and often resulting from trauma or a loss of oxygen to the brain. There are three types of cerebral palsy: spastic, ataxic, and athetoid or dyskinetic.

CP is characterized by an inability to fully control muscles and coordination. Some of the symptoms that can be associated with cerebral palsy are spasticity or muscle spasms, involuntary movements, disturbance in gait (walking) and mobility, sensory integration issues, impairment of sight, hearing, speech and seizures. CP can affect one side of the body (hemiplegia), both legs (diplegia) or all four extremities (tetra or quadriplegia).

# Mobility and Assistive Technology Needs

Depending on the severity of the condition, some clients may not require assistive technology and may only have an affected gait. Others may only require the use of a walker or braces to accomplish independent mobility.

If a power mobility device is required, it is suggested the individual be evaluated early in the development process to promote increased independence and social interaction, along with providing the client with the opportunity to fully explore his/her environment.

The individual should be fitted with a power base that can meet various seating, positioning and electronics needs. An individual may require a power positioning system to help with pressure relief or independent weight shifting. Power seating options available include power tilt, power recline, and power tilt and recline. Additional options include a 12" power adjustable seat lift with iLevel®, power articulating leg rests and a power articulating foot platform.

A customized seating system is an important part of helping a client compensate for asymmetries, managing tone, providing proper stability, support and pressure management. There are also many custom accessories that can be adapted to meet the individual's needs. Optional LED fender lights on the Edge® 3, Edge 3 Stretto™ and Q6 Edge® Z (optional on the Q6 Edge® 2.0 and Q6 Edge® HD) help clients see and be seen.

Often, an individual changes over time due to growth, weight gain or loss, therapeutic and/or medical intervention and the results of aging with a disability. To adapt to these changes, the seating system needs to be modular so the needs of the individual can continue to be met.



**TRU-Balance® 3 Power Positioning Systems**



**Stealth® i-Drive®**

The i-Drive® is the most advanced wheelchair drive control in the world. The drive control works at a frequency of 16kHz, which provides real time user interface and results in improved driving efficiency, better feedback, smoother control and a more intuitive "feel." Our superior positioning and head control products produce a mechanical framework for the i-Drive technology that offers limitless combinations of head, trunk and cervical positioning options.



**LED fender lights**

Standard on Edge® 3, Edge 3 Stretto™ and Q6 Edge® Z  
Optional on Q6 Edge® 2.0 and Q6 Edge® HD



Q-Logic 3 (comes standard with Bluetooth®)

## The Quantum® Solution

Some clients with cerebral palsy who have more advanced mobility needs may benefit from a power base that has the ability to accept full seating and positioning options. These include various specialty drive controls from Stealth Products® such as i-Drive® Alternative Drive Controls.

Available with an array of compatible seating and positioning options, the Edge 3 also offers optional iLevel® Power Adjustable Seat Height, with speeds up to 4.5 mph and 12" elevation, to increase client independence and enhance social interaction.

The Q6 Series also accepts a wide selection of seating and positioning options, and possesses a proven track record of quality, reliability and customer satisfaction. All chairs in the series have the capability to accept expandable electronics.

Many Quantum® Power Chairs have options for clients that are beginning power mobility use at an early age, including the Edge 3 Stretto™. Every other chair is at least 2.5" wider!

The TRU-Balance® 3 Power Tilt provides clients with the option of ordering angle-adjustable towers and adjusting the angle of the back canes to keep optimum comfort and positioning.

TRU-Comfort 2 Seating provides excellent comfort and pressure management in addition to having an aesthetically pleasing look.

Stealth Products® Cushions allow for added stability and support for a client's positioning and provide exceptional envelopment for assistance with pressure management.

In addition, other positioning components can be utilized along with the seat cushion and back rest for greater postural support and tone management.

Q-Logic 3 Advanced Drive Controls are user-friendly and highly customizable. The Q-Logic 3 EX Joystick comes standard with wireless Bluetooth programming through Windows devices and Bluetooth access to computer, tablet and phone functions. Clinic Mode allows for quick setup of multiple input devices during client evaluations and automatically assigns drive modes to input devices. The Q-Logic 3 iAccess features programmable push button and toggle options for customized seating access.

The Q-Logic 3 EX Enhanced Display is equipped with many client benefits including the ability to learn infrared commands so your client can control devices like televisions and X10 technology to further improve independence and Bluetooth wireless mouse emulation. Bluetooth capability enhances learning in the school environment by providing wireless computer access for more independent participation.



Edge 3 Stretto™ with iLevel® Power Adjustable Seat Height



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