

Power Wheelchair Guide Glossary

Power Mobility Device (PMD)	Mobility device “that relies on power for control for its operation” (<i>Waugh & Crane, 2013, p. 20</i>) including power wheelchairs and power operated vehicles (POVs) also known as scooters.
Power Operated Vehicle (POV)	Also known as scooter. Includes a platform, basic Captain's Seating, a tiller control for operation, and available in 3 or 4-wheeled models.
Power Wheelchair (PWC)	“Wheelchair in which the motor power is derived from an integral source of electric power.” (<i>Waugh & Crane, 2013, p. 23</i>)
Power Base Wheelchair (Power Base)	Part of the power wheelchair “containing the drive controls system, batteries, and wheels which can be separated from the seating system.” (<i>Waugh & Crane, 2013, p. 24</i>)
Captain's Chair / Captain's Seating	Basic automotive style seating most often includes a back and seat support made of upholstered foam and typically used on POVs, Group 1, and Group 2 PMDs.
Adjustable Rehab Seat Frame (Rehab Seating)	Includes a seat frame, may or may not include a contoured upholstered back and seat. Allows for addition of alternative back and seat supports when needed, as well as other necessary postural supports to meet the end users unique seating and positioning needs.
Chassis	Basic structure of the power base to which everything else (e.g., batteries within chassis, drive wheels, motors, actuators) is attached.
Actuators	Component responsible for moving a portion of the seating system, electronically powered. For example, the “recline” actuator is responsible for changing the seat-to-back support angle.
Motor	Electrical device that creates motion. In a PWC, the motor receives a signal from the controller based on end user input. It is coupled to the drive wheel via a gear box. The motor turns the gear box resulting in required torque and movement of the drive wheel.
Suspension	“Mechanism of a device that is intended to reduce vibration” (<i>Waugh & Crane, 2013, p. 32</i>), in power wheelchairs; most often a compression spring.
Torque	Twisting/turning force that causes rotation around an axis. In power wheelchairs this is a function of appropriate gearing within the gear box to assure the power base can navigate obstacles effectively.
Tracking Technology	“Motor technology that helps a power wheelchair to travel in a true forward direction on various terrains. Commonly used with alternative drive controls” (<i>Waugh & Crane, 2013, p. 43</i>) and for front-wheel drive power bases.
Footprint	Overall Wheelchair Depth (Base Length): Rear caster to front most part of wheelchair. Keep in mind that casters swivel, therefore footprint can change depending on position of the casters. Measure the footprint in “worst case scenario” when back and/or front casters are swiveled outwards, creating the largest footprint. Overall Wheelchair Width (Base Width): Outside of drive tire to outside of drive tire on opposite side.
Rear-Wheel Drive (RWD)	Power base with drive wheel located at the rear of the base and casters are located at the front of the base.
Mid-Wheel Drive (MWD)	Power base with drive wheel located at the center of the base, and casters are located at the rear and front of the base.
Front-Wheel Drive (FWD)	Power base with drive wheel located at the front of the base, and casters are located at the rear of the base.
Power Tilt	Power seat function that changes the orientation of the seat, either posteriorly or anteriorly, while maintaining seat-to-back support angle and seat-to-lower leg support angle. (<i>Waugh & Crane, 2013</i>) Posterior Tilt: Front portion of seat moves superiorly. Anterior Tilt: Rear portion of seat moves superiorly.

Power Recline	Power seat function that changes the seat-to-back support angle.
Power Elevating Legrests	Power seat function that changes the seat-to-lower leg support angle, some legrests articulate/lengthen while elevating (<i>Dicianno et al., 2009</i>)
Power Seat Elevation	"Allows raising and lowering of the whole seating system, changing the seat-to-floor height without altering the angular orientation of the seating supports." (<i>Waugh & Crane, 2014, p. 48</i>)
Power Standing	Power seat function that allows the end user to achieve a standing position within the wheelchair.
Caster	Small wheels in contact with the ground during power wheelchair operation. Depending on the type of power base, there are 2 (FWD & RWD) or 4 (MWD) casters on the ground.
Drive Wheel	"Wheel that transmits drive power and guides the wheelchair." (<i>Waugh & Crane, 2013, p. 34</i>)
Standard Drive Control	Standard proportional joystick used to operate the power wheelchair.
Proportional Drive Control	Infinite control of speed (zero to max speed) based on amount of user input and 360° of directional movement. Continuous and fluid response of wheelchair as user moves the drive control away from neutral.
Non-Proportional Drive Control	Also known as switched or digital. Either "on" or "off", typically either 4 to 8 discreet directions of movement, and can be programmed for single or multiple speeds.
Lower Leg Support Assembly (Front Rigging)	"Combination of the lower leg frame, lower leg support and foot support, and their mounting and/or attachment hardware, as a unit" (<i>Waugh & Crane, 2013, p. 30</i>)
Arm Support Assembly (Arm Rests)	"Combination of the arm support and its attachment and/or mounting hardware, as a unit" (<i>Waugh & Crane, 2013, p. 30</i>)
Power Base Assembly	Includes everything that makes up the PWC base such as the chassis, batteries, motor, gear box, drive wheels, suspension, casters, and power wheelchair electronics.
Seat Assembly	Includes everything that attaches to the PWC base and is what the user occupies when in the PWC.
Controller	"An electronic system or device including microprocessor and other related electronics that retrieves and converts input signals from the occupant into output signals that activate powered components of the wheelchair". Non-Expandable Controller: "Controller in which only a standard proportional joystick can be used as the input device. It may have the ability to control up to 2 power seating actuators through the drive control and incorporate an attendant control" (<i>Waugh & Crane, 2013, p. 44</i>) Expandable Controller: Capable of accommodating standard or alternative drive controls, and/or can operate "3 or more powered seating functions through the input device. It may also be able to operate other electronic devices, a separate display for alternative drive control devices, and an attendant control" (<i>Waugh & Crane, 2013, p. 44</i>)
Attendant Drive Control	Typically a standard drive control mounted behind the back support for use by a caregiver/ attendant.
Alternative Drive Control	"A type of drive control or input device other than a standard proportional joystick used to operate a power wheelchair" (<i>Waugh & Crane, 2013, p. 45</i>)
Memory Seating	Capability of some power wheelchair electronics that allows for saving of orientations in space incorporating multiple power seat functions to meet unique end user needs (e.g., entering vehicle position, bladder management position, ideal pressure relief position).
Mobility Related Activities of Daily Living (MRADLs)	ADLs impacted by mobility status such as toileting, feeding, dressing, grooming, and bathing most often considered in the home environment.
Center of Gravity (CoG)	How the weight of the wheelchair is balanced, can change based on how the end user occupies the wheelchair and where the end user's center of mass is located. Important when considering performance of the PWC base.