ibot® by MOBIUS MOBILITY

occupied transport user manual

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Model Name: iBOT® PMD

Power Wheelchair

Occupied Transport User Manual Part Number: IBOT-09057-001-EN
Occupied Transport User Manual Revision: Rev. 2.4 2021-11-18
This version of the Occupied Transport User Manual relates to Rev. 2.4 of the IBOT-09032-001-EN Clinician and Training Manual.

Language: English

Contact Mobius Mobility to obtain this manual in a format for use by visually impaired people.

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Images of the device pictured throughout this manual may not be an exact representation of your specific configuration and are for instructional purposes only.

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Occupied Transport Use

The iBOT® Personal Mobility Device ("iBOT® PMD") Occupied Transport option is intended to provide persons, unable to transfer from their wheelchair into a standard factory motor vehicle seat, the option for transportation while seated in their iBOT® PMD wheelchair.

Read the iBOT® PMD User Manual, herein referred to as the "User Manual", and this Occupied Transport User Manual.

Do not use the iBOT® PMD Occupied Transport option without reading and understanding the User Manual and this Occupied Transport User Manual.

Do not attempt to install components or maintain the device without reading and understanding the User Manual and this Occupied Transport User Manual.

If you do not understand the warnings and caution instructions, contact *Technical Support* before using the device.

The iBOT® PMD Occupied Transport option has been tested in accordance with the requirements of ISO 7176 Part 19 Standards (wheeled mobility devices used as seats in motor vehicles). The Occupied Transport option, including either manufacturer installed front and rear securement brackets or docking securement, has been through *Frontal Impact Tests* in accordance with this standard using a 168 lb (76 kg) dummy. The user weight must be greater than 50 lb (22.5 kg) and less than 300 lb (136 kg).

Training is provided when your customized device is delivered. This training is essential in teaching you safe driving techniques, proper use, and device maintenance.

⚠ WARNING

Use Vehicle Seat:

When feasible, the iBOT® PMD user should transfer into the vehicle seat and use the manufacturer-installed restraint systems. The unoccupied device should be stored in a cargo area or secured in the vehicle during travel.

Occupied Transport should only be used by those unable to transfer into the vehicle seat.

Contraindications

Do not use the Occupied Transport option if you:

- Weigh less than 50 lb (22.5 kg) or more than 300 lb (136 kg).
- Are unable to sit upright in a seating system with back against backrest and head against head restraint.
- Need accessories not specifically approved for transportation by Mobius Mobility that mount to the device.

⚠ WARNING

Upright Seated Position:

The wheelchair backrest and head restraint are integral parts of the Occupied Transport option. If you are unable to sit upright in the seating system with your back against the backrest and your head against the head restraint, then use of Occupied Transport option is not recommended.

⚠ WARNING

Accessories:

In the event of a sudden stop or accident, accessories may become flying objects or increase forces on critical transport option components as they shift or move. It is recommended that unsecured accessories or those placed behind the iBOT® PMD backrest be removed from the device and secured elsewhere so they do not cause injury to vehicle occupants in the event of a collision. Examples include but are not limited to trays, cup holders, oxygen or other respiratory equipment devices, IV poles, backpacks and other personal items. If these accessories cannot be secured, occupied transportation is not recommended.

Symbols

The following table lists and defines any symbols or labels that are used with the Occupied Transport option. Refer to the iBOT® PMD User Manual for other symbols that may appear on the device or the device accessories.

Table 1: *Symbols*

Symbol	Definition
	This symbol indicates compliance with ISO 7176 Part 19.
	This symbol indicates the Freewheel Lever (brake release) is locked.
	This symbol indicates the Freewheel Lever (brake release) is unlocked.

Symbol	Definition
	This label indicates a securement point on the device.

Safety

Every iBOT® PMD must be operated with appropriate safety considerations. There are additional safety rules you must follow to obtain full mobility and value from your iBOT® PMD.

This Occupied Transport User Manual contains two types of safety messages:

⚠ WARNING

Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

Additional and reinforcement of warnings and cautions appear throughout this Occupied Transport User Manual where appropriate.

Instructions for You

You play the central role in the safe operation of the iBOT® PMD for Occupied Transport and the safety of others around you. Safe operation of the iBOT® PMD for Occupied Transport depends upon your good judgment. There are important safety duties that must be performed by you and the people who may assist you.

1. Drive safely and follow the operating procedures, safety rules, and driving guidelines provided in the User Manual and this Occupied Transport User Manual.
2. Heed all caution and warning messages printed in the User Manual and this Occupied Transport User Manual. Use the procedures and guidelines provided in the User Manual to respond quickly and correctly to caution and warning signals you see or hear when driving the device.
3. Always select the driving mode best suited to your current driving needs, the terrain, and any other driving conditions.
4. Keep your device in good working condition. Maintain and service it according to the procedures in this Occupied Transport User Manual and the User Manual warranty recommendations. If the device appears damaged or unsafe to operate, do not drive and contact *Technical Support*.
5. Do not attempt to modify the hardware, software, components, or programming of your device.

Instructions for Assistants

Assistants must read and follow the instructions in this Occupied Transport User Manual before assisting with the operation of the iBOT® PMD for Occupied Transport.

Warnings and Cautions

The Warnings and Cautions throughout this Occupied Transport User Manual apply to the iBOT® PMD Occupied Transport option only. All other iBOT® PMD Warnings and Cautions can be found in the User Manual.

⚠ WARNING

Occupied Transport User Manual:

This Occupied Transport User Manual details options and operation of components required for Occupied Transport and those warnings associated with the iBOT® PMD. Read the full iBOT® PMD User Manual for additional instructions on operating and caring for your iBOT® PMD.

Driving

WARNING

Environments of Use:

Do not operate the iBOT® PMD outside of its rated environment for slopes and obstacles. Be careful when driving near unprotected ledges, drop-offs, or elevated surfaces. The device may tip over.

WARNING

Weight Restrictions:

Never enter or exit the vehicle on a ramp or lift that can not support 550 lb (250 kg) which includes the iBOT® PMD, the user, the user's accessories, and the user's personal items.

WARNING

Hazardous Obstacles:

Never climb obstacles that are unstable, irregular, slippery, or that cannot support the weight of the iBOT® PMD, you, and your personal items.

WARNING

Climbing Obstacles:

To avoid getting stuck against an obstacle in Standard Mode, approach obstacles at a steady, moderate speed or transition to 4-Wheel Mode. Only climb in the forward direction perpendicular to obstacles.

⚠ WARNING

Driving on Slopes:

Drive straight up or straight down slopes. Driving across or turning on slopes may cause the iBOT® PMD to tip.

Transitioning

⚠ WARNING

Head Clearance:

Total height of iBOT® PMD plus occupant must be shorter than clearance in the vehicle to prevent impact while entering vehicle. Ensure adequate clearance is present and the iBOT® PMD is in Standard Mode before entering the vehicle.

⚠ WARNING

Transition between Modes:

Make sure you have adequate surrounding space as you transition on level, slip-resistant surfaces.

WARNING

4-Wheel Mode Entry:

Never enter a vehicle in 4-Wheel Mode. In 4-Wheel Mode, all four drive wheels are on the ground and the seat is in an elevated position. 4-Wheel Mode raises your overall head height and automatically adjusts seat angle as you drive. This could cause injury or death.

If 4-Wheel Mode is needed when entering a vehicle using a ramp, it is recommended that once the iBOT® PMD has its front wheels on the ramp, you transition to Standard Mode.

If 4-Wheel Mode is needed when entering a vehicle using a vehicle lift, it is recommended that once the iBOT® PMD has its front wheels on the lift platform, you transition to Standard Mode.

WARNING

Entering Freewheel:

Do not put your iBOT® PMD in Freewheel while on an incline. This could cause the device to roll on its own, causing injury.

Do not enter Freewheel while seated in the device without an attendant present.

CAUTION

Moving parts can pinch and crush:

Do not adjust the seat position or any iBOT® PMD component if the immediate area of movement is not clear. This may cause you or a bystander to be pinched or crushed causing injury.

Securement

WARNING

Transporting:

When transporting, the iBOT® PMD must be facing forward and secured by the securement points in accordance with this Occupied Transport User Manual.

Do not use the vehicle's seat belt system to anchor the device. The device does not come with tie-down straps for motor vehicle use. You must anchor the device using ISO 10542-1 compliant tie-down strap assemblies.

Failure to follow these instructions could result in personal injury or death.

WARNING

Unsecured Device:

An iBOT® PMD that is not properly secured during transport can slide, roll, or tip over in the event of a sudden stop, swerve, or crash resulting in injury to occupant or other passengers in the vehicle. Proper securement of the device through a 4-point strap type tie-down or docking system is required at all times while the vehicle is in motion.

⚠ WARNING

Unsecured Occupant:

Occupants that are not properly secured during transport can slide, fall, or fly out of the seat in the event of a sudden stop, swerve or crash resulting in injury to the occupant or other passengers in the vehicle. Proper securement of the occupant through a dynamically crash tested and approved pelvic and upper chest belt restraint is required at all times while vehicle is in motion.

⚠ WARNING

Worn or Broken Securement Systems:

Worn or broken vehicle tie-down or occupant restraint systems can be a hazard to the occupant or other passengers in the vehicle. Inspect all equipment regularly according to manufacturer's instructions and replace anything with noted wear immediately. Ensure track mount, docking system, and occupant securement system are clean and free of dirt and debris at all times.

Component

WARNING

Wheelchair Trays:

Trays can break loose and become a projectile in the event of a vehicle crash. In order to reduce the potential of injury to vehicle occupants, wheelchair-mounted trays not specifically designed for crash safety should be removed and secured separately in the vehicle, or be secured to the iBOT® PMD but positioned away from the occupant with energy-absorbing padding placed between the tray and the occupant.

WARNING

Head Restraint:

The provided head restraint is part of the occupant protection system and should always be in place and used to reduce the likelihood of head or neck injuries in transport. Only headrests approved as head restraints for occupied transportation should be used while the vehicle is in motion.

WARNING

Head and Neck Support:

Hard head or neck supports increase the likelihood of a neck injury during a crash. If head or neck support is required during occupied travel, it is recommended to use a soft neck collar. Do not attach neck support to the iBOT® PMD, seating system, or headrest.

⚠ WARNING

Positioning Belt Use:

Always wear your positioning belt and fasten it snugly when operating the iBOT® PMD. You could fall from the device if you do not wear your positioning belt. Personal injury or death could result.

A positioning belt is not rated for use as a pelvic and chest restraint belt for occupied transportation.

⚠ WARNING

Modifications:

No unauthorized modifications, alterations, or substitutions should be made to the iBOT® PMD, securement points, or to structural and frame parts or components without consulting Mobius Mobility. Altering the seating may increase the risk of personal injury.

All modifications to the device must be performed by a Mobius Mobility authorized service provider.

WARNING

Filling Tires:

Check at regular intervals that the iBOT® PMD tires have the prescribed tire pressure. Incorrect tire pressure can cause deteriorating stability and maneuverability.

The recommended tire pressure is 55 psi (380 kPa).

Note that overfilling causes a risk of explosion.

WARNING

Retrofit and Changes:

It is not recommended to install securement point brackets, docking securement adapters, and/or pelvic belt restraint *anchorages* on the iBOT® PMD after sale (i.e. retrofit) unless authorized by Mobius Mobility. All Occupied Transport option components must be added according to the manufacturer's instructions by a trained professional.

WARNING

Footplate Use:

When operating the device, your feet should always be placed on the footplates. Feet can get trapped or pinched between the footplates and the device or the ground leading to personal injury or death.

Care should be taken to avoid obstacles that could impact the footplate, which could cause personal injury.

CAUTION

Arms and Hands:

Arms and hands can get trapped or pinched between the iBOT® PMD and vehicle. When operating the device, your arms should always be placed on the armrests and caution used to avoid impact. Care should be taken to avoid narrow spaces that could trap arms or hands, which could cause personal injury.

CAUTION

Vehicle Belt Restraint:

Do not route the vehicle belt restraint near sharp edges of the seating system. Routing the seat belt near these sharp edges could fray the seat belt over time, leading to potential for personal injury.

Battery Packs and Charging

WARNING

Off-board Battery Charger:

Do not carry the charger on the iBOT® PMD. If traveling with the charger, ensure it is secured in the vehicle to ensure it does not become a projectile in the event of an accident.

WARNING

Battery Charging Environment:

Charging must be done in a well-ventilated room.

Charging must only be done in dry indoor areas.

⚠ WARNING

Approved Battery Charger and Batteries:

Use only manufacturer supplied battery chargers and batteries with the device. Using a different battery charger, batteries, or battery mounting with the device or modifying any battery packs may result in overheating and fire or become a projectile in the event of a crash.

⚠ WARNING

Damage to Battery:

If any of the battery packs are cracked or damaged, do not charge. If the iBOT® PMD is in a motor vehicle accident, do not operate device until batteries have been checked for damage. Contact *Technical Support*.

Conventions

This table describes typographic conventions that may be used in this document.

Table 2: *Conventions*

Convention	Description
	This symbol is used to instruct you to refer to the User Manual and Occupied Transport User Manual prior to using the system.
Boldface type	• Names of options and elements that appear on the user controller screen. • Keys on the keyboard. • User input for procedures.

Convention	Description
Italic type	Accentuates words or phrases that appear on the user controller display and/or within the *"Glossary" on page 87*.
Hyperlink to website	Hyperlinks to websites are highlighted in blue and underlined.
See "Conventions" on the previous page.	Cross references to locations within the document are highlighted in blue and italicized.
	Indicates a *Note* or supporting information.

Terminology

Table 3: *Terminology*

Convention	Description
Move	The action word used when referring to movement of the joystick or the shortcut controls.
Press	Used to instruct the user to press down on a physical button.
Push	Used to instruct the user to push forward on the joystick or the device.
Scroll	Used to instruct the user to move the joystick through a series of choices to highlight icons.
Select	Used to instruct the user to choose the highlighted option.

Convention	Description
The product is referred to as the iBOT® PMD or the *device* throughout this Occupied Transport User Manual.	

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Occupied Transport Components

This chapter describes the standard components that are included with your iBOT® PMD with Occupied Transport.

iBOT® PMD with Occupied Transport

The iBOT® PMD with Occupied Transport can be divided into three essential parts:

- A *Transport Approved Seating System*, which includes all the components designed to support you in a seated position and allow for transportation in a motor vehicle such as seat frame, seat cushion, backrest and head restraint. Always refer to your specific seating manual for instructions and care.
- A *Transport Approved Power Base*, which includes all the components that provide mobility such as the wheels, batteries, motors, and user controller as well as an interface option to allow for transportation in a motor vehicle such as securement points or docking pin.

- A *Wheelchair Tie-down and Occupant Restraint System*, which includes either a 4-point strap-type tie-down system or a docking system that can interface with the transport approved power base to secure the device to the vehicle floor along with a vehicle mounted pelvic belt and shoulder harness approved for occupied wheelchair transportation.

WARNING

The iBOT® PMD when ordered with the Occupied Transport option includes a transport approved seating system and a transport approved power base along with securement brackets and/or a docking pin. To complete the securement system and obtain an occupant restraint system, it is required that you visit a company that specializes in the equipment required to secure both the wheelchair and the occupant into the vehicle.

WARNING

Ground clearance is reduced in Standard Mode with the addition of the optional Docking components.

Transport Approved Seating System

⚠ WARNING

ISO 7176 Part 19:2008 standards test that a complete device that includes a power base, seating system, securement brackets, and related literature can be used for occupied transportation. Your device has been tested to this standard. For your safety, only seats approved by Mobius Mobility for transportation and those tested to ISO 16840-4 for wheelchair seating should be used in conjunction with the power base. Use of alternate seating systems could result in injury or death.

Table 4: *Transport Approved Seating System Components*

Component	Description	
Seat Frame	The *Seat Frame* is the support system for the seat cushion and backrest. It includes the seat interface to the power base.	

Table 4: *Transport Approved Seating System Components*

Component	Description	
Backrest	The *Backrest* is the support system for your back while seated in the device. The backrest is attached to the seat frame.	
Seat Cushion	The *Seat Cushion* is a separate, removable postural pad used to support the lower surface of the buttocks and thighs.	

Table 4: *Transport Approved Seating System Components*

Component	Description	
Head Restraint	The *Head Restraint* is attached to the backrest and includes the padded part that your head rests against while seated in the device and its adjustment and attachment hardware.	

CAUTION

A head restraint that is part of the device is recommended to reduce the risk of neck injuries in rear impacts.

Transport Approved Power Base

Table 5: *Transport Approved Power Base Components*

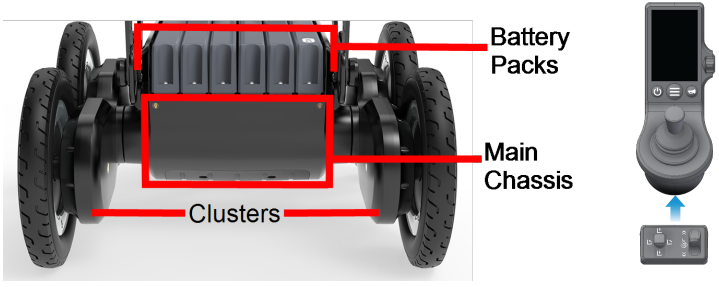
Component	Description	Component Image
Power Base and User Controller	Refer to the iBOT® PMD User Manual for more information and descriptions.	

Table 5: *Transport Approved Power Base Components*

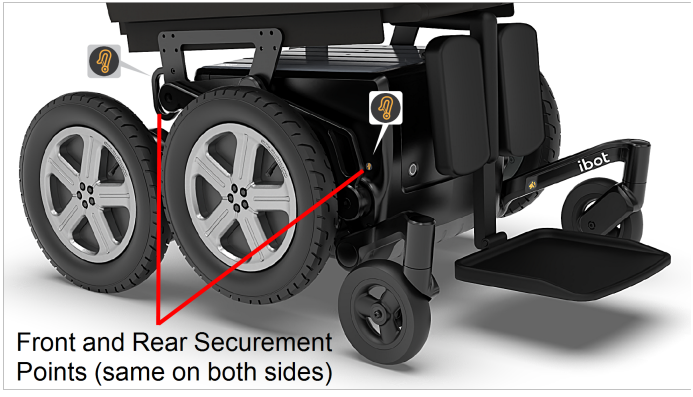
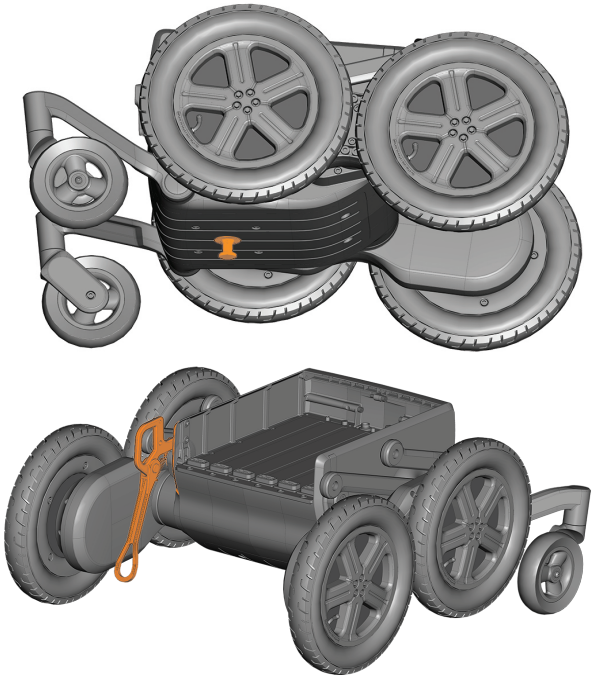
Component	Description	Component Image
Securement Points	There are four securement points on the power base (two in front and two in rear).	 Front and Rear Securement Points (same on both sides)

Table 5: *Transport Approved Power Base Components*

Component	Description	Component Image
Docking Pin and Loop Interface	An optional docking pin and securement loop is available for the device. The pin and loop connects to an EZ Lock system to secure the device to a vehicle floor.	

Securement Systems

There are two types of securement systems available to secure the power base to a vehicle floor:

- 4-Point Strap Type Tie-down System
- Docking Type Securement System

Either system provides appropriate securement of the device to a vehicle floor for Occupied Transport.

⚠ WARNING

The iBOT® PMD must be secured to a vehicle floor for transportation using one of the two methods:

- 4-Point Strap Type Tie-down System
- Docking Type Securement System

Read and follow manufacturer instructions. Failure to secure the device properly can result in it slipping or tipping over in the event of a sudden stop, swerve, or accident resulting in injury or death to occupant and other vehicle passengers.

⚠ WARNING

In order to reduce the potential of injury to vehicle occupants, wheelchair-mounted trays not specifically designed for crash safety should:

1. Be removed and secured separately in the vehicle.

   OR

2. Be secured to the device so they do not break free in a crash but positioned with a gap of at least 3 in (75 mm) between the wheelchair tray and the wheelchair occupant's abdomen and/or chest so as not to interfere with proper belt-restraint use, and should have energy-absorbing padding placed in the gap between the tray edge and the wheelchair occupant.

⚠ WARNING

ISO 7176 Part 19:2008 standards test that a complete device that includes a power base, seating system, securement brackets, and related literature can be used for occupied transportation. Your device has been tested to this standard. For your safety, only 4-point strap type tie-down systems tested and approved to ISO 10542-1 for wheelchair tie-down and occupant restraint systems should be used in conjunction with the power base mounted securement brackets. For your safety, only vehicle mounted occupant restraint systems (pelvic restraint seat belt and shoulder harness) that are tested to ISO 10542-1 should be used. Use of alternate systems could result in injury or death.

⚠ WARNING

ISO 7176 Part 19:2008 standards test that a complete device that includes a power base, seating system, securement brackets, and related literature can be used for occupied transportation. Your device has been tested to this standard. For your safety, only the EZ Lock docking system specifically for use with the iBOT® PMD and tested and approved to ISO 10542-1 should be used with the docking pin. For your safety, only vehicle mounted occupant restraint systems (pelvic restraint seat belt and shoulder harness) that are tested to ISO 10542-1 should be used. Use of alternate systems could result in injury or death.

⚠ WARNING

Mobius Mobility does not provide 4-point strap type tie-down systems, docking devices, or occupant restraint systems nor installs them within a vehicle. This set-up requires the assistance of a dealer that specializes in automobile mobility solutions. These parts are required and can be purchased through a certified mobility equipment dealer. In the USA and Canada, please visit https://nmeda.org/ for assistance in locating an NMEDA certified dealer near you to purchase the appropriate equipment for your vehicle and personalization of the set-up within the vehicle. It is not recommended that you use already existing tie downs, docking devices or occupant restraints until the set-up with the iBOT® PMD has been reviewed by the dealer. Failure to follow these instructions can result in injury or death.

Table 6: *Approved Tie-down and Occupant Restraint Systems*

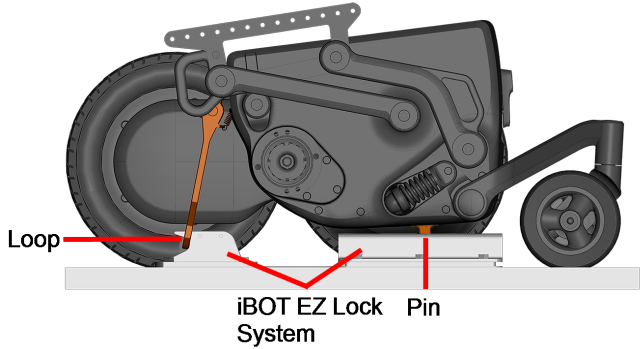
Component	Description	
Docking Device	The *Docking Device* is a vehicle mounted EZ Lock system that interfaces with the docking pin and loop on the power base.	

Table 6: *Approved Tie-down and Occupant Restraint Systems*

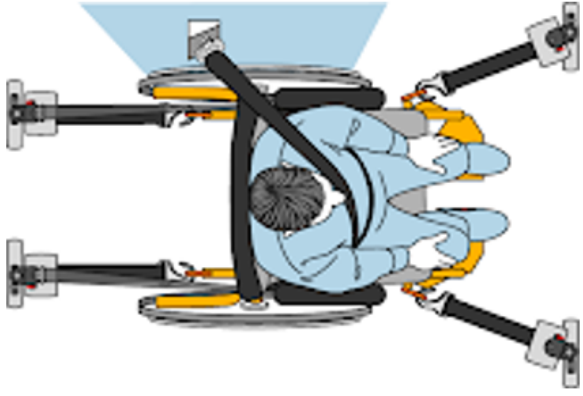
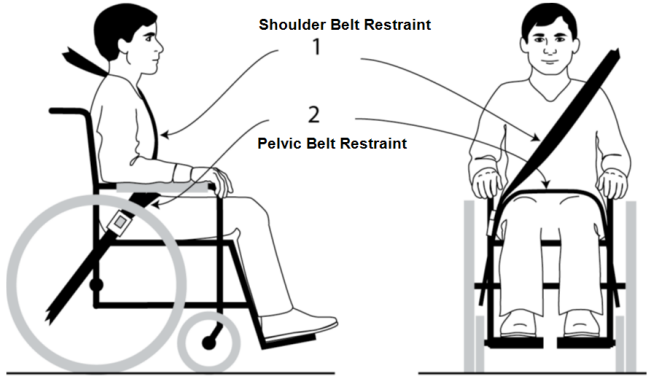
Component	Description	
4-Point Tie-downs	The 4-point tie-downs are four adjustable straps with hooks on both ends. One end of the strap attaches to one of the four securement brackets and the other end attaches to a vehicle floor.	

Table 6: *Approved Tie-down and Occupant Restraint Systems*

Component	Description	
Shoulder Belt Restraint	This is a belt that goes from the vehicle frame across the shoulder and attaches to the pelvic seat belt to secure the torso in the wheelchair in the event of a sudden stop or accident.	
Pelvic Belt Restraint	This is a vehicle mounted belt that goes across the pelvis of the occupant to secure them into the wheelchair in the event of a sudden stop or accident.	

The use of only a pelvic-belt restraint is not recommended.

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User Controller Functions

Driving Mode

The *Driving Mode* menu allows you to scroll through and select your available *Driving Modes*. Only three of these modes are needed for entering and exiting the vehicle and securing the chair and occupant for transportation.

Table 7: *Driving Modes*

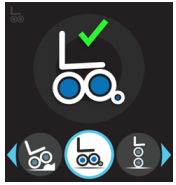
Icon	Description
	*Standard Mode*
	*4-Wheel Mode*
	*Docking Mode*

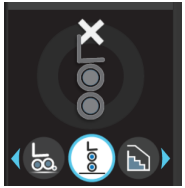
Do not change modes after the iBOT® PMD is tied down or docked. Changing modes after the iBOT® PMD is tied down or docked may lead to vehicle or device damage.

1. Push the **Menu** button.
2. Move the joystick **LEFT** or **RIGHT** to select the driving mode.

Icons with a check mark indicate the current driving mode selected.

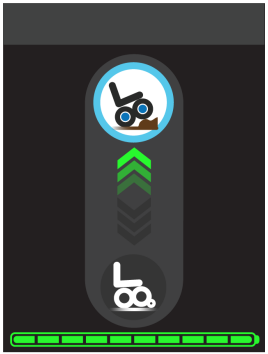
If you select the mode you are currently in, it will return you to the *Home Screen*.



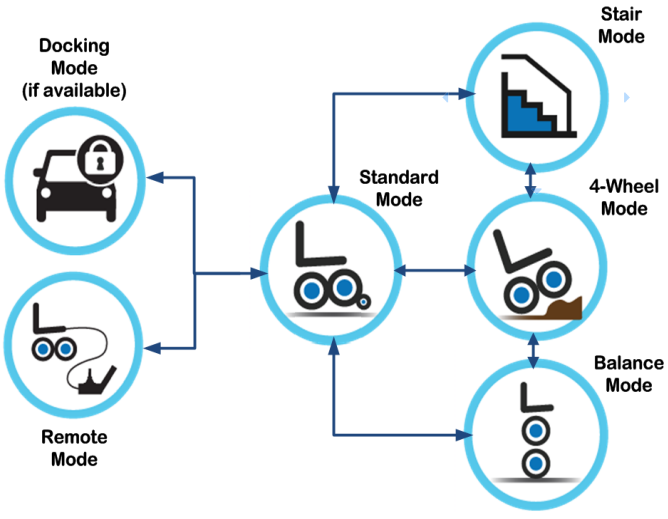
Icons with an up arrow indicate the driving mode can be selected.	
Icons displayed with an X indicate the driving mode cannot be selected.	

3. Move the joystick **FORWARD** and **HOLD** to transition to the selected mode.

   In the event that you need to cancel the transition you can move the joystick **BACK**.



Mode Transitioning Flow Chart



⚠ WARNING

Docking Mode is required in order to use an EZ Lock docking system. If Docking Mode is not available, contact Mobius Mobility.

⚠ CAUTION

Make sure the area between the seat bottom and the power base is clear. Crushing items or body parts could result in personal injury. Lower the seat only when you are sure there are no obstructions between the seat bottom and the power base.

Driving Modes and Techniques

Driving Modes Overview

Driving Modes are selected dependent upon your need as you go about your day. The iBOT® PMD provides multiple driving modes to accommodate various terrains.

Your clinician will recommend and enable only those driving modes that you have been trained to operate.

For normal driving, the technique is simple. Move the joystick in the direction you want to go and the device then moves in the direction in which the joystick is pointing.

Drive as gently as possible and try to avoid sudden braking and evasive maneuvers.

If you are not driving, it is recommended that you use the *Drive Setting 0* to deactivate the joystick to prevent any unintentional movement.

⚠ WARNING

Ensure proper head clearance before entering or exiting a vehicle. Prior to entering a vehicle for the first time, measure the distance from the bottom of the iBOT® PMD to the top of your head and compare it to the vehicle opening to ensure there is adequate clearance. Changing of drive modes and seat angle can reduce head clearance. Ensure the initial chosen drive position is used every time you enter or exit a vehicle. Failure to do so could result in serious injury or death.

⚠ WARNING

Prior to raising or lowering a vehicle lift, check that the Freewheel Lever (brake release) is in the locked position and the drive setting is at 0 to deactivate the joystick and prevent any unintentional movement. Failure to do so could result in injury or death.

CAUTION

Do not take the first test drive into your vehicle on your own. The test drive is intended to establish how you and the entire system work together and you may need assistance.

Environments For Use

The iBOT® PMD provides mobility in different environments. It is your responsibility to select the appropriate driving mode based on the occupied transport terrain condition.

Table 8: *Driving Mode for the Occupied Transport Terrain*

Terrain Condition	Standard	4-Wheel	Docking
Secured Carpeted Vehicle Floors	✓		
Vehicle Ramps*	✓	✓	
Vehicle Lifts*	✓	✓	
When Entering Docking Device			✓
While in Docking Device			✓
While Tied Down	✓		

* Use 4-Wheel Mode to enter vehicle only until the front wheels are on the ramp or lift then transition to Standard Mode.

⚠ WARNING

Except where expressly written in instructions, do not change modes while the device is in any of the following positions:

- on a vehicle lift
- on vehicle ramp
- inside the vehicle

Changing modes while in any of these positions can result in personal injury or death.

Surfaces to Avoid

Driving on certain surfaces may cause the device to tip over. To avoid this from happening, be aware of the surfaces to avoid while using the *Occupied Transport* option. The surfaces listed below are specific to occupied transportation. Refer to the iBOT® PMD User Manual for a list of all surfaces to avoid when operating the device.

All modes avoid:

- Loose items on vehicle floor such as vehicle mats, rugs, tie-down tracks and hardware. They can become tangled in the wheels and cause the device to tip or flatten a tire.
- Surfaces with cracks or gaps where the drive wheels or casters can become stuck or fall through.
    - Pay particular attention to ramps, lifts, and the transitions into and out of a vehicle.
- Unstable or slippery obstacles that may shift as you go over them. Shifting may cause the device to slip or tip over.
    - Pay particular attention to wet or icy surfaces when entering the vehicle.
    - Pay particular attention to ramps that are not secured to the vehicle as they may shift during use and cause the device to tip over.

Docking Mode avoid:

- Slopes, ramps and obstacles.
    - Ground clearance is reduced with the docking pin.

Standard Mode

Standard Mode fulfills your routine driving needs for indoor and outdoor conditions with reasonably level surfaces, ADA compliant ramps, and driving over very low obstacles such as door thresholds.

The seat is at its lowest level to access a table or desk. The lower seat height also increases head clearance space when entering or exiting a vehicle.

In *Standard Mode* the device drives on the rear drive wheels and front caster wheels.

⚠ WARNING

Only use Standard Mode when securing the device to the floor of a motor vehicle using the 4-point strap type tie-downs.

⚠ CAUTION

In Standard Mode, the front drive wheels are raised off of the driving surface; however, they are still driven by the motors.

Be aware of this condition when driving in tight spaces, as it is possible for the front drive wheels to contact and potentially climb an obstacle, causing the device to fall over.

Standard Mode Driving Technique

Space inside a vehicle can be rather tight. When turning be aware of the available space for the following:

- legs
- feet
- footrests
- head restraint
- assist handle
- arms
- armrests
- caster wheels

4-Wheel Mode

In 4-Wheel Mode, all four drive wheels are on the ground and active. The seat is in an elevated position. If using a ramp to enter a vehicle, it is recommended that, once the device has its front wheels on the ramp, you transition to Standard Mode.

Docking Mode

Docking Mode lowers the iBOT® PMD to allow the pin on the bottom of the device to lock into place with the *EZ Lock* docking station mounted in your vehicle.

This mode is intended only for use while using *EZ Lock* system for docking.

Only use Docking Mode when attempting to dock the device in a motor vehicle.

CAUTION

Driving in Docking Mode in other circumstances will place the pin on the bottom of the chair closer to the ground reducing ground clearance of the iBOT® PMD. This is not recommended as it can result in getting stuck going over obstacles or damaging the pin.

Balance Mode

Balance Mode should never be used while entering a vehicle, exiting a vehicle, or riding in a vehicle.

WARNING

The use of Balance Mode while in a vehicle or entering or exiting a vehicle is unsafe. Such use may cause you to fall or hit your head on the roof of the vehicle. This may cause injury or death.

CAUTION

Before using Balance Mode, return adjustable seating components such as backrests and elevating legrests to the same position they were in when you were CG Fit to the iBOT® PMD. Failure to do so may lead to personal injury.

Stair Mode

Stair Mode should never be used while entering a vehicle, exiting a vehicle, or riding in a vehicle.

WARNING

The use of Stair Mode while in a vehicle or entering or exiting a vehicle is unsafe. Such use may cause you to fall or hit your head on the roof of the vehicle. This may cause injury or death.

CAUTION

Before using Stair Mode, return adjustable seating components such as backrests and elevating legrests to the same position they were in when you were CG Fit to the iBOT® PMD. Failure to do so may lead to personal injury.

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Securing to a Vehicle

This chapter explains how to enter, exit, and secure your iBOT® PMD to a vehicle.

Entering a Vehicle Overview

WARNING

If your iBOT® PMD is not approved for Occupied Transport, do not use the iBOT® PMD as a seat in a motor vehicle. You should move to an approved motor vehicle seat and secure the device according to the directions in the *Transport* section of the User Manual. Only use the iBOT® PMD as a seat in a motor vehicle as indicated in this Occupied Transport User Manual. Contact *Technical Support* if you have questions regarding transport of the device in a motor vehicle

WARNING

When transporting, the iBOT® PMD must be facing forward and secured by the securement points in accordance with this Occupied Transport User Manual.

You must anchor the device using ISO 10542-1-compliant tie-down strap assemblies. Do not use the vehicle's seat belt system to anchor the device. Personal injury or death could result.

WARNING

Entering or exiting a vehicle must be done on level ground. A slope or cross slope on a road or driveway can introduce instability resulting in the iBOT® PMD tipping over or falling off the ramp. Failure to follow these instructions could result in personal injury or death.

⚠ WARNING

Prior to entering a vehicle for the first time, measure the distance from the bottom of iBOT® PMD to the top of your head and compare it to the vehicle opening to ensure there is adequate clearance at the vehicle opening. Changing of drive modes and seat angle can reduce head clearance. Ensure the initial chosen drive position from test drive is used every time you enter or exit the vehicle. Failure to do so could result in serious injury or death.

⚠ WARNING

Do not put your iBOT® PMD in Freewheel while on an incline. This could cause the device to roll on its own, causing injury.

Do not enter Freewheel while seated in the device without an attendant present.

Entering a Vehicle

You can drive the device into a vehicle by sitting in the device using Standard or 4-Wheel Mode (depending on the degree of incline).

Using Vehicle Ramp

1. Ensure vehicle is parked on level ground.
2. Measure height of chair plus occupant in seated position in Standard Mode. Ensure that opening of vehicle is high enough to accommodate occupant's seated height.
3. Ensure Freewheel Lever is in the locked position when driving the device.
   a. If an attendant will be pushing the device into the vehicle, ensure the following prior to getting on the ramp:
      - The device is powered off.
      - Freewheel Lever is in the unlocked position.

- The assistant has adequate strength to push the occupied device into the vehicle.

4. Drive onto ramp in either 4-Wheel or Standard Mode. Standard Mode is recommended unless 4-Wheel Mode is needed to initiate movement of the front wheels onto the ramp.
5. If in 4-Wheel Mode, as soon as the front wheels are on the ramp, transition to Standard Mode before entering the vehicle.
6. Drive into the vehicle and position the device facing forward in the designated area for transport.

If an assistant is pushing the device into the vehicle and positioning it, ensure the Freewheel Lever is in the locked position once complete.

WARNING

Use care when entering or exiting a vehicle on a ramp. Ensure ramp is on solid, level ground and free of obstacles before proceeding down the center of the ramp. Proceed slowly to ensure control throughout the process. Failure to do so could result in a tip-over or fall resulting in injury or death.

Using Vehicle Lift

1. Ensure vehicle is parked on level ground.
2. Measure height of chair plus occupant in seated position in Standard Mode. Ensure that opening of vehicle is high enough to accommodate occupant's seated height.
3. Ensure Freewheel Lever is in the locked position.
   a. If an attendant will be pushing the device onto the lift, ensure the following prior to pushing onto the lift platform:
      - The device is powered off.

- Freewheel Lever is in unlocked position.

4. Drive onto lift in either 4-Wheel or Standard Mode. Standard Mode is recommended unless 4-Wheel Mode is needed to initiate movement of the front wheels onto the lift.
5. If in 4-Wheel Mode, as soon as the front wheels are on the lift, transition to Standard Mode before operating lift.
   a. If an attendant pushed the device onto the lift, ensure the Freewheel Lever is in the locked position prior to operating the lift.
6. Follow lift manufacturer's instructions for placement of the device on the lift, securing device in place on the lift, operating the lift, and moving the device into a vehicle.
7. Drive into the vehicle and position the device facing forward in the designated area for transport.

If an assistant is pushing the device into the vehicle and positioning it, ensure the Freewheel Lever is in the locked position once complete.

WARNING

Use care when entering or exiting a vehicle on a lift. Ensure lift is on solid, level ground and free of obstacles before proceeding onto or off of lift. Proceed slowly onto center of platform to ensure control throughout the transition. Use lift and all safety devices for it as detailed by the automobile mobility provider and user manuals for the lift equipment. Failure to do so could result in a tip-over or fall resulting in injury or death.

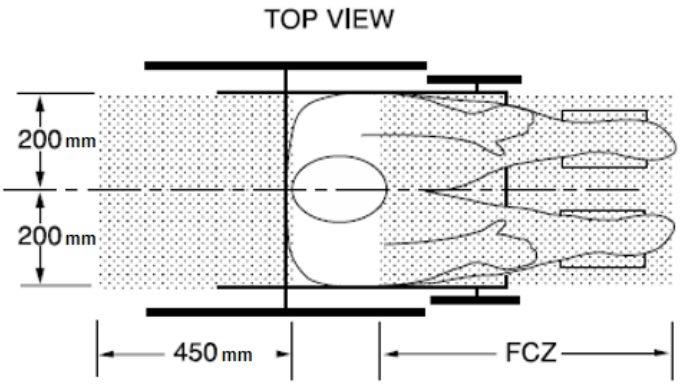
Securing with 4-point Strap Type Tie-downs

Always secure the iBOT® PMD and occupant in a forward-facing position. The device should be located as recommended by a certified automobile mobility provider. When positioning the device, always ensure there are appropriate clear zones around the occupant. *See "Clear Zones" below.*

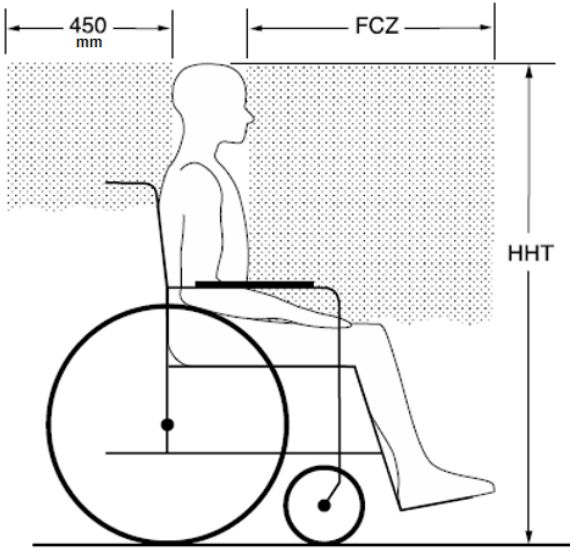
Clear Zones

⚠ WARNING

Always allow for proper clear zones when securing the device and occupant into the vehicle. To reduce possibility of contact with vehicle components or other passengers in the event of a crash allow as much room as possible around the device and occupant. Ensure all vehicle components that are in close proximity to the iBOT® PMD occupant are removed or covered with dense padding.



The rear clear zone (RCZ) is measured from the rearmost point on an occupant's head. The front clear zone (FCZ) is measured from the front most point on an occupant's head.



SIDE VIEW

FCZ = 650 mm (25.5 in) with upper torso restraint
FCZ = 950 mm (37.4 in) with only pelvic restraint

Seated head height (HHT) ranges from about 1200 mm (47 in) for a small adult female to about 1550 mm (61 in) for a tall adult male.

It is strongly recommended that both pelvic and upper-torso belts be used.

The frontal clear zone may not be achievable for wheelchair-seated drivers.

Tie-down Securing Procedure

1. Ensure that all components are secured to or removed from the device.
2. Ensure device is in Standard Mode and the device is powered off.

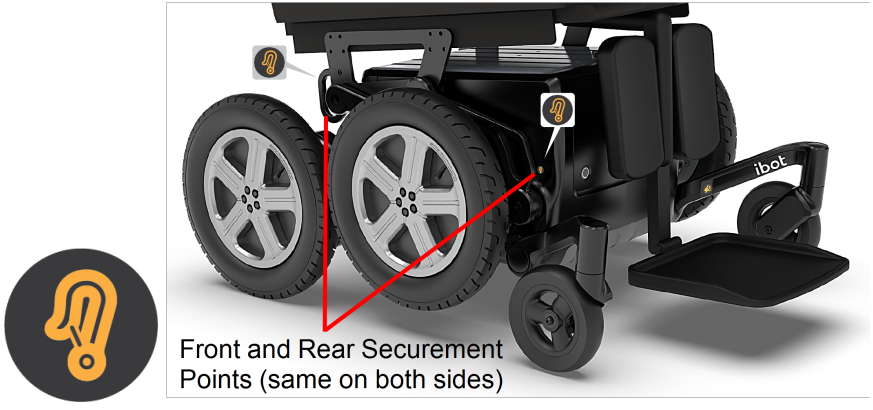
⚠ WARNING

Only use Standard Mode when securing the device in a motor vehicle using the securement points.

3. Ensure that the Freewheel Lever (brake release) is in the locked position.
4. The iBOT® PMD must be locked into position by attaching tie-down straps to the securement points at the front and rear.

⚠ WARNING

Only use the designated securement points to secure device to vehicle floor. Attaching to other components of the device or its accessories is prohibited. Doing so may damage the device or its accessories. In the event of a sudden stop, swerve, or accident the device could slide, turn, or tip over resulting in injury or death of wheelchair occupant or another passenger in the vehicle.



Front and Rear Securement Points (same on both sides)

5. Check 4-point tie-down system for any wear or damage.

CAUTION

If wear or damage to tie-down system is found, do not transport wheelchair at this time. Contact a certified automobile mobility provider to obtain replacement.

6. Secure the device according to the manufacturer of the vehicle restraint system instructions and those given to you by the certified automobile mobility provider. Always make sure the belts are secured with at least 1 in (25 mm) of clearance to foot riggings or other sharp edges.

CAUTION

Failure to ensure at least 1 in (25 mm) of clearance to foot riggings or other sharp edges can result in premature wear of the strap system and potential failure in the event of an accident. Some configurations of seat width, depth, and foot rigging style may reduce clearance and result in a Poor rating for wheelchair accommodation of vehicle anchored belt restraints. It is recommended that these configurations use a docking style system.

WARNING

Do not put the device in Freewheel after the device is tied down or docked in a vehicle.

7. Check that there is no pressure placed on the legs or feet by the vehicle or objects in the vehicle, and adjust the iBOT® PMD or the occupant's feet as needed.
8. If needed, contact *Technical Support* with any questions about securing the device in a motor vehicle.

Securing with EZ Lock Docking System

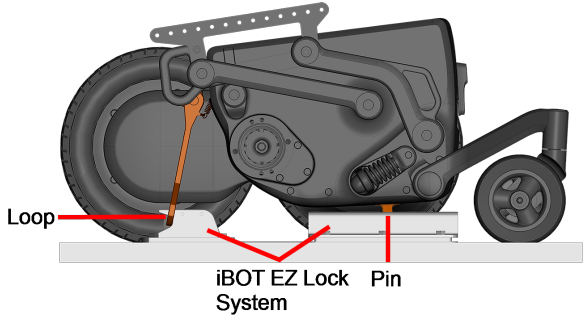
Always secure the iBOT® PMD and occupant in a forward-facing position. The device should be located as recommended by a certified automobile mobility provider. When positioning the device, always ensure there are appropriate clear zones around the occupant. *See "Clear Zones" on page 60.*

1. Line up the iBOT® PMD with the EZ Lock Docking System before driving into it.
2. On the user controller, transition into *Docking Mode*.

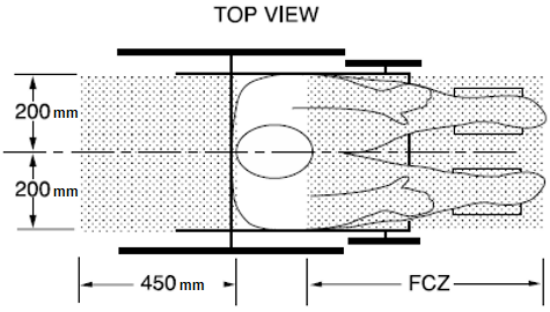
⚠ WARNING

Only use Docking Mode when attempting to dock the device in a motor vehicle.

3. Drive into the docking station until the pin and loop lock into place.
4. Confirm the green *READY* light on the EZ Lock alert system is on.



5. When positioning the device, always ensure there are appropriate clear zones around the occupant.
6. Ensure that all components are secured to or removed from the device.
7. Ensure the device is powered off.
8. Ensure that the Freewheel Lever (brake release) is in the locked position.
9. Check that there is no pressure placed on the legs or feet by the vehicle or objects in the vehicle, and adjust the iBOT® PMD or the occupant's feet as needed.
10. If needed, contact *Technical Support* with any questions about securing the device in a motor vehicle.



The frontal clear zone (FCZ) may not be achievable for iBOT® PMD-seated drivers.

⚠ WARNING

Do not put the device in Freewheel after the device is tied down or docked in a vehicle.

Occupant Securement

WARNING

In the event of a sudden stop or accident, accessories may become flying objects or increase forces on critical transport option components as they shift or move. It is recommended that unsecured accessories or those placed behind the iBOT® PMD backrest be removed from the device and secured elsewhere so they do not cause injury to vehicle occupants in the event of a collision. Examples include but are not limited to trays, cup holders, oxygen or other respiratory equipment devices, IV poles, backpacks and other personal items. If these accessories cannot be secured, occupied transportation is not recommended.

WARNING

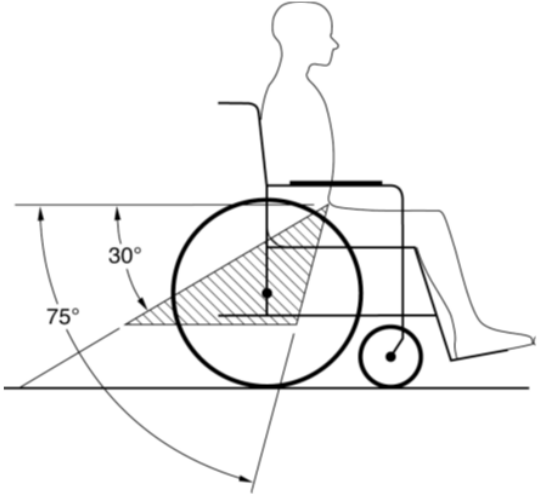
To ensure optimal performance of the device and occupant restraint system during a crash, the device seat back angle should not be placed greater than 30 degrees from vertical. If a greater angle is required, the upper torso belt anchor point or device should be positioned to ensure that it maintains contact with your shoulder and chest.

⚠ WARNING

To ensure optimal performance of the device and the occupant restraint system during a crash, the seat should not be tilted back more than 10 degrees or tilted forward from level. This will help ensure proper placement of the occupant restraint pelvic and shoulder belts and prevent sliding forward in seat in the event of an accident. Failure to do so could result in injury or death.

Once the device is properly secured to the vehicle floor, it is essential that the occupant is also secured prior to transport. A vehicle mounted pelvic and shoulder restraint meeting the requirements of ISO 10542 installed on vehicle by a certified automobile mobility provider is required.

Place pelvic-belt restraint low and across the front of the pelvis near the thighs such that the pelvic-belt restraint is 30° to 75° to the horizontal. A steeper angle within the preferred zone of 45° to 75° is desirable.

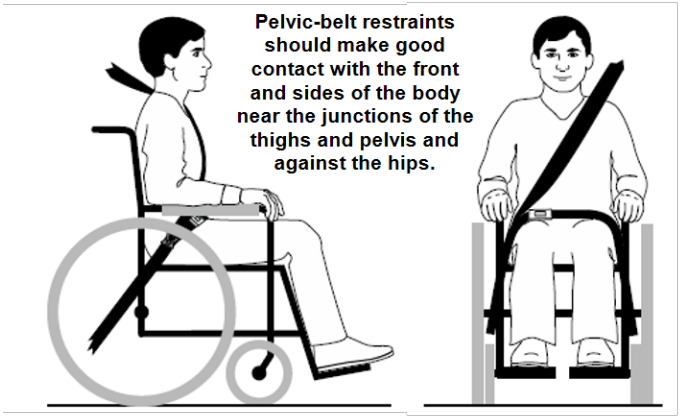


Belt restraints should not be held away from the body by wheelchair components or parts, such as the wheelchair armrests or wheels.

Some device components like armrests and wheels can interfere with belt fit. It may be necessary to insert the belt between the armrest and the seat-back or through openings between the backrest and seat in order to avoid placing the pelvic belt over the armrest.

Place shoulder-belt restraints over the middle of the shoulder and across the center of the chest.

- Always check webbing for signs of wear prior to placement.
- Belt restraints should be adjusted as tightly as possible.
- Belt webbing should not be twisted when in use.
- Belt webbing should be kept at least 1 in (25 mm) away from sharp edges. This includes back cane and armrest hardware. If it is not possible as assembled, please see Mobius Mobility or an authorized service provider for adjustments or alternate options that allow for proper clearance.



CAUTION

If wear or damage to restraint system is found, do not use device for occupied transport at this time. Contact a certified automobile mobility provider to obtain replacement.

CAUTION

Failure to ensure at least 1 in (25 mm) of clearance to armrests, back cane hardware or other sharp edges can result in premature wear of the strap system and potential failure in the event of an accident. Some configurations of armrests and backs may reduce clearance and result in a Poor rating for wheelchair accommodation of vehicle anchored belt restraints. It is recommended that these configurations be adjusted to increase belt clearance.

WARNING

Care should be taken when applying the occupant restraint to position the seat belt buckle so that the release button will not be contacted by wheelchair components during a crash. Failure to do so could result in belt becoming unbuckled resulting in a fall from the iBOT® PMD causing injury or death to occupant or passengers.

WARNING

Postural supports and positioning belts should not be relied on for occupant restraint in a moving vehicle unless they are labeled as being in accordance with the requirements specified in ISO 7176-19:2008. These devices are intended solely for maintaining an upright seated posture in the wheelchair and not as an occupant restraint in the event of a crash. Proper securement of the occupant through a dynamically crash tested and approved pelvic and upper torso occupant restraint belt is required at all times while vehicle is in motion.

To obtain a copy of ISO 7176-19 or ISO 10542 visit http://www.iso.org.

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Warnings, Cautions, and Alerts

The iBOT® PMD User Controller is programmed to display *Warnings*, *Cautions*, and *Alerts* for your safety.

Service Required

When a fault condition occurs, causing an error that needs to be reviewed by technical support, the *Service Required* icon displays on the notification bar. This icon is displayed along with a warning, caution or alert icon.

⚠ WARNING

The iBOT® PMD should be inspected by Mobius Mobility or an authorized representative before reuse following involvement in any type of vehicle collision.

Maintenance

Maintenance Frequency

You should visually inspect the device every time you use it to assess the need for service and ensure safe operation. Always refer to your iBOT® PMD User Manual, specific seating manual, and instructions from a certified automobile mobility provider for care on components you purchased for the Occupied Transport option. In addition, refer to the Occupied Transport User Manual. The information below is specific to the iBOT® PMD Occupied Transport option.

For repairs not described in this section, you will need to contact a Mobius Mobility authorized service provider. *See "Technical Support Contacts" on page 82.*

Table 9: *Maintenance Frequency*

Action	Daily	Weekly	Monthly	Yearly
Check securement points for damage or wear		X		
Check pin and loop on power base for damage or wear		X		
Check hook and loop attaching seat cushion to seat pan for wear		X		
Check 4-point tie-down system for any damage or wear	X			

WARNING

Never transport device if hardware is loose or you detect wear or damage on the securement hooks, 4-point strap type tie downs, pin or docking station, occupant restraint pelvic or shoulder harnesses, backrest or head restraint hardware. Doing so may result in injury or death.

WARNING

Visually inspect all tie-down and occupant restraint system and EZ Lock hardware according to the manufacturer's instructions. You should receive these at installation of the equipment through your certified automobile mobility provider. Ensure that any frayed, worn or broken components are replaced immediately and anchorage tracks and hardware are free of dirt and debris.

Battery Charging

Follow battery charging instructions listed in your iBOT® PMD User Manual.

WARNING

Never charge the iBOT® PMD in the vehicle. See User Manual for complete charging instructions.

Drive Wheel Care

Check drive wheel tire condition, wear, and pressure daily and any time they appear soft, worn, or damaged.

Inspect the caster wheels for wear and cracks. Check all tires for cuts, bulges, cracks, and other signs of damage or weakness.

Contact *Technical Support* if tires are damaged or weakened.

WARNING

For use in docking devices, it is critical that the tires are properly maintained and inflated at all times. Failure to do so could result in unintended movement of the device resulting in injury or death or inability to properly lock into the docking device.

Technical Support

Technical Support Contacts

Contact your device provider or Mobius Mobility for technical support on your iBOT® PMD.

Your device provider or Mobius Mobility technical support team can address many issues by phone, identify customer replaceable parts, schedule a service technician visit, or address warranty issues.

For service on the iBOT® PMD, including parts or service for the *Occupied Transport* options, or for information on customer replaceable parts, including part numbers, please contact your device provider or Mobius Mobility technical support at:

833-3GO-IBOT (833-346-4268)

For technical support, dial extension 5 (for emergencies dial extension 9) or email service@mobiusmobility.com

If you are experiencing a medical emergency please dial 911 in the USA or the appropriate emergency number in your country.

Mailing Address:

Mobius Mobility LLC

540 N. Commercial St.

Suite 310

Manchester, NH 03101

USA

or go to our website:

www.mobiusmobility.com

Service to components that do not fall under customer replacement parts must be completed by a Mobius Mobility authorized service provider.

Only use Mobius Mobility specified parts.

Contact Mobius Mobility to find out about product safety notices and product recalls.

WARNING

Discontinue use of any system component and contact technical support in the event a component stops working as expected.

Customer Replacement Parts

Customer Replacement Parts are components or accessories that you can replace and technical support is not typically needed. Replacement parts are shipped with illustrated instructions that describe how to remove the old part, and how to install and test the replacement part. You will also receive packing and shipping instructions for part returns, where applicable. A separate service manual is not available.

WARNING

Incorrect or poorly performed repair work may make it dangerous to use the device. The manufacturer accepts no liability for any personal injury or damage to the device and its surroundings that occurs on account of incorrect or poorly performed repair work.

Technical Specifications

WARNING

This device complies with ISO 7176-19:2008 testing standards for wheeled mobility devices for use as seats in motor vehicles. It has been designed and dynamically tested in a forward-facing seat in a motor vehicle orientation with an ATD (test dummy) restrained by both pelvic and shoulder belt (e.g. a shoulder belt as part of a three-point restraint). Always travel forward facing while in a vehicle. Both pelvic and shoulder belt restraints should be used to reduce the possibility of head and chest impacts with vehicle components.

WARNING

Only vehicle mounted pelvic and shoulder belt restraints should be used with this system. The device does not provide, has not been tested with, and cannot be used with any wheelchair-anchored pelvic and shoulder belt restraints or 5-point harnesses.

WARNING

Ground clearance is reduced in Standard Mode with the addition of the optional Docking pin and loop components.

Ease of access to and maneuverability in motor vehicles can be significantly affected by device size and turning radius. Smaller devices and/or devices with a shorter turning radius will generally provide greater ease of vehicle access and maneuverability to a forward-facing position.

Table 10: *Technical Specifications*

Description	Specification
Overall Length with Leg Support[1]	1153 mm (45 in)
Overall Width[1]	697 mm (27 in)
Stowage Length x Width x Height[1]	835 x 643 x 955 mm (33 x 27 x 37.5 in)
Total Mass[1]	122 kg (269 lb)
Total Maximum Permissible User Weight	136 kg (300 lb)
Ground Clearance without Docking Installed (Standard Mode)	63 mm (2.5 in)
Ground Clearance with Docking Installed (Standard Mode)	43 mm (1.7 in)
Ground Clearance with Docking Installed (Remote Mode)	61 mm (2.4 in)
Ground Clearance with Docking Installed (Docking Mode)	24 mm (0.9 in)
Turning Diameter	Standard: 1800 mm (71 in) 4-Wheel: 1400 mm (55 in) Balance: 1400 mm (55 in)

[1]This information was measured with an iBOT® PMD with a Motion Concepts Ultra Low Maxx Rehab Seat, configured as below, unless required for disclosure range:

- 20 in (510 mm) W x 18 in (460 mm) D
- Single Post Angle Adjustable Fold Down Back set at 10° with Contour Back, H:17 in (430 mm), finished height 21 in (530 mm)

- Adult Dual Post Adj. Ht. Arms w/ Quick Ht. Adj. with Standard Arm pad: Full Length
- Fixed Center Mount Platform with Rubber Coated 11.5 in (290 mm) W x 10 in (250 mm) D Footplate, set at 70°
- Matrx PS Cushion Fits W:19-20 in (480-510 mm), D:18-19 in (460-480 mm)
- Height Adj Swing Away Quad link
- Matrx Elan Headrest with Elan Multi-axis Hardware and Horizontal Headrest Rod
- Single Post Assist Handle

Glossary

A

Accessories

Items attached to or used with the wheelchair and wheelchair seated occupant such as trays, cup holders, oxygen or other respiratory equipment, IV poles, backpacks or other personal items.

ADA - Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.

Anchorage

Assembly of components and fittings by which loads are transferred directly from the wheelchair tie-down to the vehicle, or from the occupant restraint to the vehicle, wheelchair, wheelchair tie-down, or vehicle interior component.

Assist Handle

A handle located on the back of the seat used by an assistant to perform assisted stair climbing of the device.

Assistant

A person who is trained to assist the user with the operation of the device.

Automobile Mobility Provider

Equipment that is offered by a company that specializes in accessible vehicles, lifts, docking systems, tie-downs and other devices to allow for interfacing wheelchairs to a vehicle for occupied transport.

B

Backrest

This component is the padded part that your back rests against while seated in the device inclusive of its frame and hardware to attach it to the seat frame.

Balance Mode

Balance Mode is where the device uses only one set of drive wheels with the cluster in a vertical position. This mode is used to reach objects at elevated height and enjoy conversations with people at eye level.

Battery Charger

A hardware device used to charge the rechargeable batteries.

Battery Pack

Packs containing Lithium-ion battery cells. The battery packs are located on the back of the Power Base and power the device.

Belt

Length of webbing material used as part of an occupant restraint or postural support device.

C

Cautions

The caution symbol is a yellow exclamation point inside a yellow triangle. It is displayed to inform the user that a medium risk issue is occuring with the device. Resolution of the caution needs to be addressed in a timely manner to avoid the caution from escalating to a warning.

Clear Zone

Area around wheelchair seated occupant that is free from vehicle components, objects, or other passengers needed to ensure that wheelchair occupant will not impact items in the event of a crash.

D

Display

The graphical user interface portion of the user controller.

Docking Device

Portion of the docking system that is secured to the vehicle floor and engages with the wheelchair docking pin.

Docking Mode

Docking Mode is used to independently lock the device into a vehicle for transportation. Docking Mode puts the drive wheels on the ground and lowers the device closer to the ground for securement in a docking system.

Docking Pin

Add-on components fastened to the wheelchair that engage the wheelchair with the vehicle mounted docking device.

Docking Securement Adaptors

Portions of the wheelchair structure or add-on components fastened to the wheelchair that attach the docking pin to the wheelchair.

Docking System

Method of wheelchair tie-down by which portions of the wheelchair structure, or add-on components fastened to the wheelchair, align, mate and engage with a docking tie-down device fastened to the vehicle, upon maneuvering the wheelchair into position in the vehicle.

Drive Setting

A menu selection to control the driving speed of the device.

Driving Mode

Driving Modes are the different ways the device drives in various terrain conditions. Standard Mode, 4-Wheel Mode, Balance Mode, Remote Mode, and Stair Mode are referred to as Driving Modes.

E

EZ Lock

Brand of docking system.

F

Forward Facing

Orientation in which the wheelchair-seated occupant and wheelchair face the front of the vehicle.

Four-Point (4-point) Strap Type Tie-downs

Wheelchair tie-downs that attach to the wheelchair frame at four separate securement points and also attach to the vehicle at four separate anchor points.

Four-Wheel (4-Wheel) Mode

4-Wheel Mode is where the device uses both sets of drive wheels. This mode is used for driving outdoors across soft or loose terrain such as dirt, grass, and gravel as well as over obstacles and curbs.

Freewheel

A state that allows the device to be pushed manually.

Freewheel Lever (brake release)

The Freewheel Lever (brake release) is located on the front of the power base. This lever allows the device to freewheel for manual pushing by physically engaging and releasing the braking system.

H

Head Clearance

Distance between top of head and vehicle structure.

Head Restraint

Headrest tested in conjunction with seating system that is intended to limit rearward movement of the wheelchair occupant's head in a vehicle impact.

Home Screen

The primary screen shown on the user controller display consisting of: Driving Mode, Battery Charging Status, Speed Gauge, any Action Required Prompts, Power and Fault Conditions.

Horn/Mute

A button on the User Controller which has a dual purpose to sound the Horn or temporarily Mute a warning, caution, or alert.

I

iBOT® PMD

Commercial name for the device.

J

Joystick

The joystick is used to drive and maneuver the device as well as navigate and make selections on the menu screens.

M

Menu Button

A button on the user controller that opens the Menu Screen or returns you to the Home Screen.

N

NMEDA

National Mobility Equipment Dealers Association.

Notification Bar

A bar shown across the top of the user controller screen that displays warning, caution, and alert icons, service wrench icon, temperature too high icon, and the Freewheel Lever (brake release) icon. These icons are not presented under normal conditions.

O

Occupant Restraint

System or device intended to restrain a motor-vehicle occupant during an impact in order to prevent ejection and prevent or minimize contact with the vehicle interior components and other occupants. Three-point restraint system includes three anchorages comprised of both a pelvic-belt restraint and a diagonal shoulder-belt restraint that connect together near the hip of the occupant.

Occupied Transport

Method of riding in a motor vehicle while seated in a wheelchair.

P

Pelvic Belt Restraint

This is a vehicle mounted belt that goes across the pelvis of the occupant to secure them into the wheelchair in the event of a sudden stop or accident.

Pinch Points

Moving parts of the device that could pinch if not cautious.

Positioning Belt

Webbing and its associated attachment hardware used to support a person’s pelvis in a desired seated position during normal wheelchair use.

Postural Support

Structure attached to a wheelchair that has a surface that contacts the occupant's body and is used to either modify or accommodate the occupant's sitting posture.

Power Base

Includes all the components that provide mobility such as the wheels, batteries, motors, and user controller.

Product Interface (PI)

The Product Interface application is for use only by a Mobius Mobility authorized service provider to program and service the device.

R

Remote Mode

Remote Mode is where the device raises the casters to enable the unoccupied movement of the device using the user controller.

S

Seat Cushion

The Seat Cushion is a separate, removable postural pad used to support the lower surface of the buttocks and thighs.

Seat Frame

This frame is the support system for the seat cushion and backrest. It also includes an interface to the power base.

Seat Height

Distance from ground to top of wheelchair seat pan.

Seat Interface

The component that joins the Power Base Main Chassis to the Seating System.

Seated Head Height

Distance from ground to top of person’s head while seated in the wheelchair.

Seating System

The component designed to support you while in a seated position. Always refer to your specific seating manual for instructions and care.

Securement Points

Brackets on the device's frame to which wheelchair tie-downs are connected.

Securement System

Combination of 4-point strap type tie downs or docking system and an occupant restraint with their related hardware.

Service Required

An icon in the notification bar that indicates Technical Support is required.

Settings Menu

A user controller menu selection that provides access to modifying device performance and troubleshooting.

Shoulder Belt-Restraint

This is a belt that goes from the vehicle frame across the shoulder and attaches to the pelvic seat belt to secure the torso in the wheelchair in the event of a sudden stop or accident.

Stair Mode

Stair Mode is where the wheel clusters rotate to enable the device to ascend and descend stairs with user control.

Standard Mode

Standard Mode drives the device using rear-wheel drive with front casters. This mode is used for your routine driving needs for indoor and outdoor conditions with reasonably level surfaces.

T

Transition

Transition means to change between the available driving modes.

Transport Approved Power Base

Portion of wheelchair system that is in accordance with the requirements of ISO 7176-19:2008 testing standards that includes base frame, wheels, motors, and batteries.

Transport Approved Seating System

Portion of wheelchair system that is in accordance with the requirements of ISO 7176-19:2008 testing standards that includes seat cushion, backrest, head restraint, and seat frame.

U

Unsecured

Loose, not tied down or contained.

User Controller

The hardware interface that controls the driving and menu functions.

V

Vehicle Lift

Device that is mounted to floor of an automobile that is designed to lower to the ground for wheelchair user to drive on then lift to the vehicle floor height for wheelchair user to enter vehicle.

Vehicle Mounted Occupant Restraint System

Three-point restraint system includes three anchorages comprised of both a pelvic-belt restraint and a diagonal shoulder-belt restraint that connect together near the hip of the occupant and attach to the vehicle floor.

Vehicle Ramp

A ramp that extends or is placed from the vehicle floor to the ground to provide a slope for the device to enter a vehicle.

Vehicle Seat

Seat commonly sold with an automobile for use with non-wheelchair seated passengers.

Vehicle Seat Belt

Seat belt commonly sold with an automobile for use with non-wheelchair seated passengers.

W

Warnings

The warning symbol is a red exclamation point inside a red triangle. It is to inform the user that a high risk issue is occuring with the device. Resolution of the warning is needed immediately to avoid injury.

Wheelchair Tray

A tray that mounts to or is placed on the device's armrests or frame. The wheelchair tray creates a table like space for the user to place their arms for support or to place objects for easy reach.

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U

W