



#### Introduction

This user manual covers the functions of your R-net LCD color control panel and is intended as an extension to your power wheelchair's user manual.

Please read and follow all instructions and warnings in all manuals supplied with your power wheelchair and its accessories. Incorrect use may both injure the user and damage the wheelchair. In order to reduce these risks, read all documentation supplied carefully, in particular the safety instructions and their warning texts.

It is also of the utmost importance that you devote sufficient time to getting acquainted with the various buttons, functions and steering controls and the different seat adjustment possibilities etc. of your wheelchair and its accessories before you begin using them.

All information, pictures, illustrations and specifications are based upon the product information available at the time. Pictures and illustrations are representative examples and not intended to be exact depictions of the relevant parts.

We reserve the right to make changes to the product without prior notice.

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# 1 Safety

# 1.1 Types of warning signs

The following types of warning signs are used in this manual:



# WARNING!

Indicates a hazardous situation which, if not avoided, could result in serious injury or death as well as damage to the product or other property.



# CAUTION!

Indicates a hazardous situation which, if not avoided, could result in damage to the product or other property.



Indicates important information.

# 1.2 Warning signs



**WARNING!** Always replace damaged joystick covers

Protect the wheelchair from exposure to any type of moisture, including rain, snow, mud or spray.

If any of the shrouds or the joystick boot has cracks or tears, they must be replaced immediately. Failure to do so may allow moisture to enter the electronics and cause personal injury or property damage, including fire.



**IMPORTANT!** Releasing the joystick stops seat movement

Release the joystick at any time to stop seat movement.



**IMPORTANT!** Use only the supplied battery charger

The wheelchair's warranty will be voided if any device other than the battery charger supplied with the wheelchair or the lock key is connected via the control panel charger socket.

# 2 R-net control panel with LCD color display

# 2.1 General

The control panel consists of a joystick, function buttons and a display. The charger socket is located at the front of the panel. Two jack sockets are located on the bottom of the panel. The control panel may have toggle switches at the bottom of the panel and/or a heavy duty joystick that is larger than shown in the figure.

Your wheelchair may also be equipped with an extra seat control panel in addition to the control panel.



# 2.2 Charger socket

This socket should only be used for charging or locking the wheelchair. Do not connect any type of programming cable into this socket. This socket should not be used as a power supply for any other electrical device. Connecting other electrical devices may damage the control system or affect the wheelchair's EMC (electromagnetic compatibility) performance.



**IMPORTANT!** Use only the supplied battery charger

# 2.3 Jack sockets

The external on/off switch jack (1) allows the user to turn on or off the control system using an external device such as a buddy button.

The external profile switch jack (2) allows the user to select profiles using an external device, such as a buddy button. To change the profile while driving, simply press the button.





# 2.4 Function buttons

### 2.4.1 On/off button

The on/off button turns on or off the wheelchair.

#### 2.4.2 Horn button

The horn will sound while this button is pressed.

### 2.4.3 Maximum speed buttons

These buttons decrease/increase the maximum speed of the wheelchair. Depending on the way the control system has been programmed, a screen can be displayed briefly when these buttons are pressed.

#### 2.4.4 Mode button

The mode button allows the user to navigate through the available operating modes for the control system. The number of modes available varies.

### 2.4.5 Profile button

The profile button allows the user to navigate through the profiles available for the control system. The number of profiles available varies.











### 2.4.6 Hazard warning button and LED

Available if the wheelchair is provided with lights.

This button turns on or off the wheelchair hazard lights. The hazard lights are used when the wheelchair is positioned such that it constitutes an obstruction for others. Push the button to turn on the hazard lights and push it again to turn them off. When activated, the LED indicator will flash in sync with the wheelchair's hazard indicators.

## 2.4.7 Lights button and LED

Available if the wheelchair is provided with lights.

This button turns on or off the wheelchair lights. Push the button to turn on the lights and push it again to turn them off. When activated, the LED indicator will illuminate.





#### 2.4.8 Left turn signal button and LED

Available if the wheelchair is provided with lights.

This button turns on or off the wheelchair's left turn signal. Push the button to turn on the turn signal and push it again to turn it off. When activated, the LED indicator will flash in sync with the wheelchair's turn signal.

# 2.4.9 Right turn signal button and LED

Available if the wheelchair is provided with lights.

This button turn on or off the wheelchair's right turn signal. Push the button to turn on the turn signal and push it again to turn it off. When activated, the LED indicator will flash in sync with the wheelchair's turn signal.





# 2.5 Locking and unlocking the control system

The control system can be locked in one of two ways. Either using a button sequence on the keypad or with a physical key. How the control system is locked depends on how your system is programmed.

## 2.5.1 Key locking

To lock the wheelchair with a key lock:

- Insert and remove a PGDT supplied key into the charger socket on the joystick module.
- The wheelchair is now locked.

To unlock the wheelchair:

- Insert and remove a PGDT supplied key into the charger socket.
- The wheelchair is now unlocked.



### 2.5.2 Keypad locking

To lock the wheelchair using the keypad:

- While the control system is turned on, press and hold the on/off button.
- After 1 second the control system will beep. Now release the on/off button.
- Deflect the joystick forward until the control system beeps.
- Deflect the joystick rearward until the control system beeps.
- Release the joystick, there will be a long beep.
- The wheelchair is now locked.

To unlock the wheelchair:

- If the control system has turned off, press the on/off button.
- Deflect the joystick forward until the control system beeps.
- Deflect the joystick rearward until the control system beeps.
- Release the joystick, there will be a long beep.
- The wheelchair is now unlocked.



# 2.6 Seat functions

Not all seat functions are available on all seat models.

On some seats, the seat functions can be controlled using the control panel joystick. Some models can memorize three seat positions. The seat adjustment mechanism stores each memorized seat position. This makes it easy to retrieve a seat position saved earlier.

#### 2.6.1 Return to drive mode

Press the mode button one or more times until a standard display image with a speed indicator appears in the control panel display.



#### 2.6.2 Maneuvering the seat

- 1. Press the mode button one or more times until a seat function icon appears in the control panel display.
- **2.** Move the joystick to the left or right to select a seat function. The icon for the seat function selected appears in the display.

The icons shown vary depending on the seat model and available functions.

3. Move the joystick forward or rearward to activate the function.

If the symbol M appears together with the seat icon, it means the memory function has been activated. Move the joystick to the left or right to choose a seat function instead.



#### 2.6.3 Memory

#### 2.6.3.1 Saving a seat position to memory

Some seat control systems can memorize three seat positions. The seat adjustment mechanism stores each memorized seat position. This makes it easy to retrieve a seat position saved earlier.

This is how you save a seat position to memory:

- 1. Adjust the seat function to the preferred position.
- **2.** Activate the seat memory function by pressing the mode button one or more times until a seat icon appears in the control panel display.
- Move the joystick to the left or right to select a memorized position (M1, M2, or M3). A seat icon and memory symbol M for the selected memorized position are shown in the control panel display.
- **4.** Move the joystick rearward to activate the save function. An arrow will appear next to the memory symbol M.
- **5.** Save the current position by moving the joystick forward and holding it in that position until the arrow next to the memory symbol M disappears.



#### 2.6.3.2 Retrieving a seat position from memory

This is how you retrieve a seat position from memory:

- **1.** Press the mode button one or more times until a seat function icon appears in the control panel display.
- Move the joystick to the left or right to select a memorized position (M1, M2, or M3). A seat icon and memory symbol M for the memorized position selected are shown in the control panel display.
- **3.** Press the joystick in the forward direction. The seat adjusts to the position stored earlier. For safety reasons, the joystick must be held forward until the seat is fully adjusted to the memorized position. Once the seat has adjusted to the memorized position, it stops moving.

П	<b>IMPORTANT!</b>	Releasing the joystick stops seat
:	movement	

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# 2.7 Display

The status of the control system is shown on the display. The control system is on when the display is backlit.

### 2.7.1 Screen symbols

The R-net drive screen has common components that always appear, and components that only appear under certain conditions. Below is a view of a typical drive screen in Profile 1.

- A. Clock
- B. Speedometer
- C. Profile name
- D. Current profile
- E. Battery indicator
- F. Maximum speed indicator

### 2.7.2 Battery indicator

This displays the charge available in the battery and can be used to alert the user of the status of the battery.

- Steady light: everything is in order.
- Flashing slowly: the control system is functioning correctly, but charge the battery as soon as possible.
- Stepping up: the wheelchair batteries are being charged. The wheelchair cannot be driven until the charger is disconnected and the control system is turned off and on again.





#### 2.7.3 Maximum speed indicator

This displays the current maximum speed setting.

The maximum speed setting is adjusted using the speed buttons.

# 2.7.4 Current profile

The profile number describes which profile the control system is currently operating in. The profile text is the name or description of the profile the control system is currently operating in.

# 2.7.5 In focus

When the control system contains more than one method of direct control, such as a secondary joystick module or a dual attendant module, then the module that has control of the wheelchair will display this symbol.

# 2.7.6 Speed limited

If the speed of the wheelchair is being limited, for example by a raised seat, then this symbol will be displayed. If the wheelchair is being inhibited from driving, then the symbol will flash.

## 2.7.7 Restart

When the control system requires a restart, for example after a module reconfiguration, this symbol will flash.



### 2.7.8 Control system temperature

This symbol means that a safety feature has been triggered. This safety feature reduces the power to the motors, and automatically resets when the control system has cooled down. When this symbol appears, drive slowly or stop the wheelchair. If the control system temperature continues to increase it can reach a level where the control system must cool down, at which point it will not be possible to drive any further.

### 2.7.9 Motor temperature

This symbol means that a safety feature has been triggered. This safety feature decreases the power to the motors, and automatically resets after a certain period of time. When the system is reset, the symbol disappears. When this symbol appears, drive slowly or stop the wheelchair. Permobil recommends that you drive slowly for a short period after the symbol has disappeared, to prevent unnecessary strain on the wheelchair. If the symbol appears multiple times and the wheelchair is not driven in any of the conditions mentioned in the chapter *Driving restrictions* of your wheelchair's user manual, there might be something wrong with the wheelchair. Contact your service technician.

### 2.7.10 Hourglass

This symbol appears when the control system is changing between different states. An example would be entering into programming mode. The symbol is animated to show falling sand.

#### 2.7.11 Emergency stop

If the control system is programmed for latched drive or actuator operation, then an emergency stop switch is usually connected to the external profile switch jack. If the emergency stop switch is operated or disconnected, this symbol will flash.







# 2.8 Settings menu

The settings menu permits the user to change, for example the clock, display brightness, and background color.

Press and hold both speed buttons simultaneously to open the settings menu.

Move the joystick to scroll through the menu.

A right joystick deflection will enter a submenu with the related function options.

Select *Exit* at the bottom of the menu and then moving the joystick to the right to exit the settings menu.

The menu items are described in the following sections.

### 2.8.1 Time

The following section describes submenus related to time.

Set Time	allows the user to set the current time.
Display Time	this sets the format of the time display or turns it
	off. The options are 12hr, 24hr or off.

	E9
Set Time	>
Display Time	<24hr>
Distance	>
Backlight	<100%>
Background	<blue></blue>
Diagnostics	>

## 2.8.2 Distance

The following section describes submenus related to distance.

Total Distance	this value is stored in the power module. It is related to the total distance driven during the time that the current power module has been installed in the chassis.
Trip Distance	this value is stored in the joystick module. It relates to the total distance driven since the last reset.
Display Distance	sets whether total distance or trip distance appears as the odometer display on the joystick module.
Clear Trip Distance	a right joystick deflection will clear the trip distance value.
Exit	a right joystick deflection will exit the settings menu.

	Ē
Total Distance	0012345
Trip Distance	0000123
Display Distance	<trip></trip>
Clear Trip Distance	>
Exit	>

## 2.8.3 Backlight

The following section describes submenus related to backlight.

Backlight	this sets the backlight on the screen. It can be set between 0% and 100%.
Background	sets the color of the screen background. Blue is the standard, but in very bright sunlight then the white background will make the display more visible. The options are Blue, White, and Auto.





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