

Programming Compact Joystick (CJ) R-net



2.0 Programming

The control system can be programmed to meet your needs. Programming can be performed using the specialist R-net software and Dongle.

If you re-program your control system, make sure that you observe any restrictions given in your wheelchair user manual. Note any changes you make for future reference.

Remark! Programming should only be conducted by healthcare professionals with in-depth knowledge of PGDT electronic control systems and the CJ R-net . Incorrect programming could result in an unsafe set-up of a wheelchair for a user. Permobil Inc accepts no liability for losses of any kind if the programming of the control system is altered from factory pre-set values.

2.1 Program Settings

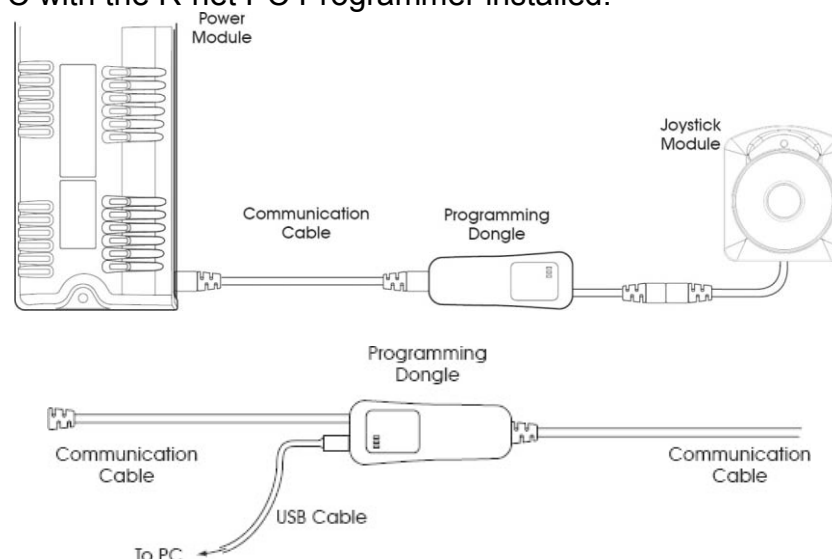
It is the wheelchair manufacturer's or dealer responsibility to program the control system to suit the vehicle model and ensure safe operation in compliance with relevant legal requirements over the whole of the operating range. Permobil Inc accepts no liability for losses of any kind due to failure to, or incorrect programming of the R-net Control System.

Programming should only be conducted by healthcare professionals with in-depth knowledge of PGDT electronic control systems and of the CJ-R-net of Permobil Inc. Incorrect programming could result in an unsafe setup of a wheelchair for the user.

2.2 Programming Connection

2.3 PC Programming

To utilize the R-net PC Programming Suite the R-net Dongle must first be connected in the communications system as shown. A USB cable can then be connected between the Dongle and a PC with the R-net PC Programmer installed.



3.0 Functionality Tests after reprogramming.

Perform the following tests, in order, on each wheelchair before dispatch.

These tests should be conducted in an open space and a restraining device such as a seat belt should always be used. Permobil Inc accepts no liability for losses of any kind arising from failure to comply with this condition.

3.1 Joystick and Gaiter

- Check that the joystick is not bent or damaged.
- Check the thin rubber gaiter or boot, around the base of the joystick shaft, for damage or splitting. Check visually only, do not handle the gaiter.
- Check that the joystick returns to the centre position when you push and release it.

3.2 Operational Test

This test should be carried out on a level floor with at least one meter clear space around the wheelchair.

- Switch on the control system.
- Check that the battery gauge remains on, or flashes, after one second.
- Push the joystick slowly forwards until you hear the parking brakes operate. The chair may start to move.
- Immediately release the joystick. You must be able to hear each parking brake operate within a few seconds.
- Repeat the test a further three times, pushing the joystick slowly backwards, left and right.

3.3 Test Drive

- Drive the wheelchair and make sure that it operates correctly for all positions of the user controls.

3.4 Soft-Stop Test

- Drive the wheelchair at full forward speed and switch the control system off.
- The wheelchair must not stop suddenly, but should decelerate to standstill.

4 Programming

4.1 Introduction

This chapter gives an overview of the programmable parameters within the R-net control system related to the CJ R-net. The R-net can be programmed using a PGDT R-net PC Programmer.

Programming should only be conducted by healthcare professionals with in-depth knowledge of PGDT control systems and in-depth knowledge of the CJ R-net .
Incorrect programming could result in an unsafe set-up of a wheelchair for a user.
Permobil Inc accepts no responsibility for losses of any kind if the programming of the control system is altered from the factory pre-set values.

4.2 PC Programmer

For a complete list of all programmable parameters we refer to the R-net Control System Technical Manual – SK77981 – of PGDT.

Here is the list with all parameters related to the CJ R-net .

Compact Joystick:

Grab Focus	<i>Sets how the focus can be grabbed</i>
Grab Focus Time	<i>Maximum time to grab focus by joystick movement</i>
Profile Switch	<i>Sets the functionality of the profile switch</i>
Jack Disconnected Alarm	<i>Enables alarm on jack disconnection</i>

4.2.1 Grab Focus: Default – Local On

Sets how focus can be grabbed.

- Standard:** Standard JSM behaviour (See R-net Control System Technical Manual – SK77981 – of PGDT)
- Local On:** If the local power button/switch is operated to start-up the system, the joystick module will be the active input device.
- Local On/JS Movement:** Additional to the Local On the focus can be grabbed by any movement of the joystick *.
- Local On/JS Double Reverse:** Additional to the Local On the focus can be grabbed by moving the joystick twice backwards *.

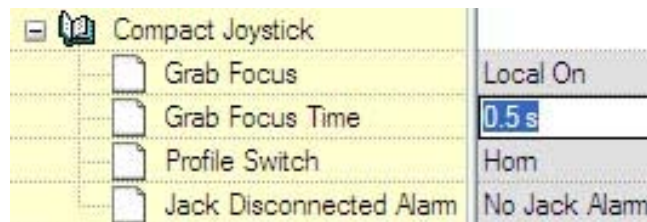


* See also Grab Focus Time

4.2.2 Grab Focus Time: Default – 0.5 s

Maximum time to grab focus by joystick movement

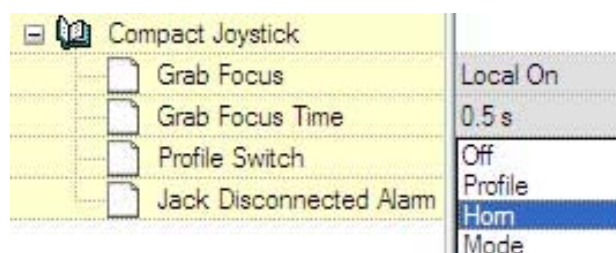
- 0.1 ... 2.0 s** Sets the period in which the movement to grab the focus must be finished.



4.2.3 Profile Switch: Default – Horn

Sets the functionality of the profile switch

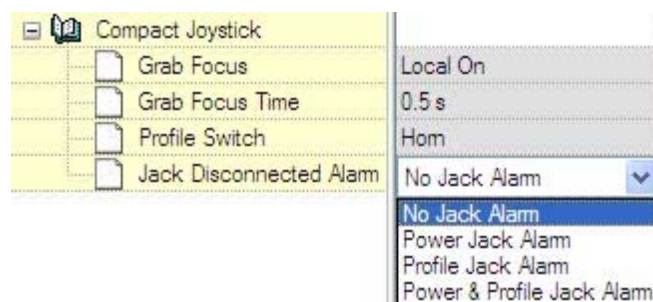
- Off:** The switch is disabled
- Profile:** Selects the next profile (and mode if Profile/Mode is set for Profile Button – see the R-net Control System Technical Manual – SK77981 – of PGDT)
- Horn:** Selects the horn. The horn will sound while this button/switch is depressed.
- Mode:** Selects the next available mode in the last profile in which that mode was used.



4.2.4 Jack Disconnected Alarm: Default – No Jack Alarm

Enables alarm on jack disconnection

No Jack Alarm:	No alarm will be generated when a disconnection of the External On/Off Switch or the External Profile Switch occurs.
Power Jack Alarm:	When a disconnection on the External On/Off Switch Jack occurs, the system enters an error state. Further driving is no longer possible.
Profile Jack Alarm:	When a disconnection on the External Profile Switch Jack occurs, the system enters an error state. Further driving is no longer possible.
Power & Profile Jack Alarm:	This is the combination of Power Jack Alarm and Profile Jack Alarm.



4.3 User Cases:

4.3.1 General

The contents of this chapter will explain you, from a user point of view, how to deal with all parameters that are related to the CJ R-net .

Depending on the use case more or less parameters must be changed. All these parameters will be grouped in a parameter subset file.

4.3.2 User can not operate buttons/switches:

Operation is all done by movement of the joystick. A standby function is needed to change profiles, axes, etc.

Subset file:

	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Profile Management				S1	S2	S3	S4	
Profile Name				Yes	Yes	Yes	Yes	
Profile Enable				[12345678]	[1]	[1]	[1]	
Mode Enable								
Input Device Type	Universal	Universal	Universal	Compact JS	Compact JS	Compact JS	Compact JS	Attendant
Input Device Subtype	All	All	All	All	All	All	All	All
Allow Grab	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Controls								
Global								
Change Profile while Driving	Yes							
Profile Button	Profiles							
Profiled	Profile 1	Profile 2	Profile 3	S1	S2	S3	S4	Attendant
Change Mode while Driving				No	No	No	No	
Standby Time				5 s	5 s	5 s	5 s	
Mode Selection in Standby				Yes	Yes	Yes	Yes	
Standby in Modes				[1234567]	[1234567]	[1234567]	[1234567]	
Standby Forward				Drive	Drive	Drive	Drive	
Standby Left				Seating	Seating	Seating	Seating	
Standby Right				Rem Sel	Rem Sel	Rem Sel	Rem Sel	
Remote Selection				No	No	No	No	
Compact Joystick								
Grab Focus	Local On							
Grab Focus Time	0.5 s							
Profile Switch	Hom							
Jack Disconnected Alarm	No Jack Alarm							

The standby function is the key to access all the possibilities of your wheelchair. From standby you can
 access drive mode: move joystick forward
 operate actuators: move joystick left
 change profile: move joystick right

4.3.3 User can operate 1 button/switch:

Operation is done by a combination of the joystick and the button or switch.

The assigned button is used to switch between profiles.

Subset file:

	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Profile Management				S1	S2	S3	S4	
Profile Name				Yes	Yes	Yes	Yes	
Profile Enable				[12345678]	[1]	[1]	[1]	
Mode Enable								
Input Device Type	Universal	Universal	Universal	Compact JS	Compact JS	Compact JS	Compact JS	Attendant
Input Device Subtype	All	All	All	All	All	All	All	All
Allow Grab	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Controls								
Global								
Change Profile while Driving	Yes							
Profile Button	Profiles							
Profiled	Profile 1	Profile 2	Profile 3	S1	S2	S3	S4	Attendant
Change Mode while Driving				No	No	No	No	
Compact Joystick								
Grab Focus	Local On							
Grab Focus Time	0.5 s							
Profile Switch	Profile							
Jack Disconnected Alarm	No Jack Alarm							

Table of Content:

2.0 Programming.....	2
2.1 Program Settings.....	2
2.2 Programming Connection	2
2.3 PC Programming	2
3.0 Functionality Tests after reprogramming.....	3
3.1 Joystick and Gaiter	3
3.2 Operational Test.....	3
3.3 Test Drive	3
3.4 Soft-Stop Test.....	3
4 Programming	4
4.1 Introduction	4
4.2 PC Programmer	4
4.2.1 Grab Focus: Default – Local On	5
4.2.2 Grab Focus Time: Default – 0.5 s	5
4.2.3 Profile Switch: Default – Horn	5
4.2.4 Jack Disconnected Alarm: Default – No Jack Alarm.....	6
4.3 User Cases:.....	6
4.3.1 General.....	6
4.3.2 User can not operate buttons/switches:.....	7
4.3.3 User can operate 1 button/switch:	7
Table of Content:	8

<p>HEADOFFICE Permobil AB BOX 120 Per Uddéns väg 20 SE-861 23 Timrå Tel +46 60 59 59 00 Fax +46 60 57 52 50 info@permobil.se</p> <p>PERMOBIL EUROPE BV De Doom 22 NL-6419 CX Heerlen Tel +31(0) 45 564 54 90 Fax +31(0) 45 564 5491 info@permobil.nl</p> <p>BELGIEN Permobil Benelux BV Beitel 11 NL-6466GZ Kerkrade Tel +31(0) 45 564 54 80 Fax +31(0) 45 564 54 81 info@permobil.nl</p> <p>AUSTRALIA Northcott Dynamic Living Designs No. 1 Fennell Street North Parramatta NSW, 2151 Australië Tel +61 2 9890 0100 Fax +61 2 9683 2827 Sales@northcott.com.au</p> <p>DENMARK Permobil AS Måløv Tel +45 44 68 14 06 Fax +45 44 68 24 06 mail@permobil.dk</p> <p>GERMANY Permobil GmbH Freie Vogel Strasse 393 DE- 44269 Dortmund Tel+ 49 231 945363 0 Fax +49 231 945363 70 info@permobil.de</p> <p>FINLAND Algol Pharma Ab Pharmaceutical Division 13 P.O. Box Karapellontie 6 FI-02611 Espoo Tel +358 9 509 91 Fax +358 9 509 92 58</p>	<p>FRANCE Permobil sarl 225, rue Tourmaline Pôle d'Activités Nord FR-13510 Eguilles Tel +33 4 42 52 80 30 Fax +33 4 42 52 80 31 info@permobil.fr</p> <p>GREECE Scan Ideal S.A. 28 Tzavela str GR-54249 Thessaloniki Tel +30 231 0320 150 Fax +30 231 0320 151 info@permobil.nl</p> <p>HONGKONG 3-Med Medical Instruments Co., Ltd. 26 D, Kin Ga Ind. Building no 9 San On St. Tuen Mun, N.T. Tel +852 2458 3648 Fax +852 2424 6541 Sales@threemed.com.hk</p> <p>ICELAND Stod Hf Trönuhrauni 8 IS-220 Hafnarfirdi Tel +354 565 28 85 Fax +354 565 14 23</p> <p>IRAN Iran Majin Co. Ltd No 114, W. Kayhan St. 15776 Tehran Tel +98 21 875 8583 Fax +98 21 875 8584</p> <p>ITALY Permobil Italy Via Tartini 5/D I-50144 Firenze Tel +39 055 36 05 62 Fax +39 055 324 60 59 carlo@disabiliabili.net</p>	<p>JAPAN Permobil K.K. Akasaka wing bld 1F Minato-Wad Akasaka 6-6-15 107-0052 Tokyo Japan Tel +81 3 5603678 Fax+81 3 5603679</p> <p>NORWAY Permobil AS Hvamsvingen 22 NO-2013 Skjetten Tel. +47 48 12 90 00 Fax +47 63 84 48 50 firmapost@permobil.no</p> <p>AUSTRIA Permobil GmbH Flüelstraße 10 CH-6064 Kerns Tel +41 41 662 06 00 Fax +41 41 662 06 02</p> <p>PORTUGAL Mobilitec, Lda Rua dos Verdes, 123 Pedras Rubras PT-4470-6578 Moreira- Maia Tel +351 22 943 61 30 Fax +351 22 943 61 39 info@mobilitec.net</p> <p>SPAIN Mobilitec, Lda Rua dos Verdes, 123 Pedras Rubras PT-4470-658 Moreira- Maia Tel +351 22 943 61 30 Fax +351 22 943 61 39 info@mobilitec.net</p>	<p>TURKEY Hakemannltd . Sti. Abdulah Cevdet Sk. 39/7-8 TR-06550Çankaya Ankara Tel +90 312 440 06 32 Fax +90 312 439 96 91</p> <p>UK Permobil Ltd. Unit 4, West Vale Building Wakefield Rd GB-Brighouse HD6 1PE Tel +44 1484 722 888 Fax+44 1484 723 013 sales@permobil.fsbusiness.co.uk</p> <p>USA Permobil Inc 6961 Eastgate Blvd US-37090 Lebanon TN Tel +1 800 736 0925 Fax +1 800 231 3256 info@permobilus.com</p> <p>SOUTH-KOREA ATN Corporation 1006, Yongsan Jun Ja B/D 16-58 Hankagro-3Ka Yongsan-Ku Seoel Tel +82 2 714 8030 Fax +82 2704 8030 Atnetcorpnetgo.com</p> <p>SWEDEN Permobil Försäljning & Service AB Box 120 Per Uddéns väg 20 SE-861 23 Timrå Tel +46 60 59 59 00 Fax +46 60 57 52 50</p> <p>SWITZERLAND Permobil AG Flüelstraße 10 CH-6064 kerns Tel +41 41 662 06 00 Fax +41 41 662 06 02 info@permobil.ch</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------