

CARGO FLOOR®

TX/RX REMOTE CONTROL

The measurements given in this instruction start with the metric system after which between brackets [0] the imperial measurement is mentioned.

Cargo Floor B.V. World's leading manufacturer and supplier of horizontal loading- and unloading transport conveyor systems.



We would like to introduce to you the right operation of the Cargo Floor TX/RX remote control with the help of the following data and we also want to point out to you the steps that you can take to solve malfunctions.

Please read - and follow - our instructions carefully so that the Cargo Floor TX/RX remote control will give you reliable and trouble free service for many years.

If the Cargo Floor TX/RX remote control does not operate at all (or properly) after following the instructions, please do not hesitate to contact your nearest agent, who will with no doubt assist you in solving the problem.

Please pay particular attention to the contents of the "Important recommendations and guidelines" and "important instructions".

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IMPORTANT RECOMMENDATIONS AND GUIDELINES FOR THE COMMISSIONING

Before putting the Cargo Floor loading and unloading system into operation, follow the recommendations provided below and check the specified checkpoints to avoid damage to the Cargo Floor system and the vehicle. Please review the important instructions before operating the Cargo Floor moving floor system and loading cargo into the vehicle. Likewise, before loading cargo, check the operation of the various control switches/valves to familiarise yourself with how the system works. We strongly recommend that you perform these checks when picking up the vehicle from the dealer so that your skilled supplier can answer your questions and provide you with any necessary advice or guidance you may require.

Important:

- Always check that the selected loading or unloading direction is actually activated and occurring!!
- If the system fails to start, turn off the Cargo Floor conveyor transport system and the hydraulic pump and follow the recommendations and guidelines provided below. Do not repeatedly try to start the system as this may result in damage to your Cargo Floor system and/or vehicle.
- After use, turn off the Cargo Floor system and hydraulic pump. Set switches to the "0" position and the lever in neutral.

In case of doubt or uncertainty about these recommendations and guidelines, always contact your dealer or an official workshop.

The Cargo Floor system comes standard with an user manual, but is this has not been supplied, please contact your dealer or download it from the official Cargo Floor website: www.cargofloor.com

- A) Always open the vehicle's doors <u>before</u> turning on the hydraulic pump. Note! Build-up of pressure against the doors can open them with force. Also some of the cargo can fall out of the vehicle by itself after opening the doors, therefore KEEP CLEAR AT ALL TIMES, product could fall on top of you! Both could result in damages and/or injuries! It is always advisable to use the pneumatic door lock, if provided.
- **B)** 1. Check that the vehicle's (quick-detachable) couplings are properly connected to the P (Pressure line) and the T (tank/return line). Also check that the couplings are fully tightened or slid completely into each other.

IMPORTANT: the pressure and return line connectors may not be reversed or exchanged to prevent dirt or water from entering the lines when connecting them!

2. Before connecting, check that the non-return valves can open easily (check: the non-return valves should open easily when pressed with the finger, if not, potential pressure build-up in the hydraulic lines may be preventing the system from starting).

NOTE: Incorrectly connected or unopened hydraulic couplings will cause serious damage to the Cargo Floor system and the vehicle.

- C) The vehicle (pump) must be fitted with a pressure relief valve that is set at the maximum pressure according to the system, see the technical specs. If fitted, check that the dual-function lever (function: tipper/Cargo Floor) is in the Cargo Floor position. Pressure may not exceed the maximum adjusted and allowable operating pressure of the Cargo Floor moving floor system. An incorrectly adjusted pressure relief valve can cause damage to the Cargo Floor system and the vehicle.
- D) During operation, the (hand)brake of the vehicle must always be applied. You must, however, move the vehicle forward on time to unload it quickly in order to prevent unnecessary strain and wear to the floor and the vehicle.
- E) Use of a wireless remote control is permitted only if it is fully tested before the start of each loading or unloading operation. Always check if the function you have selected is actually activated and taking place. If, for example, you have accidentally pressed the load function when you actually meant to press the unload function, irreversible damage may occur to the Cargo Floor system and the vehicle.
- F) During operation of the Cargo Floor conveyor system, all existing STOP and control knobs/levers must be freely accessible.
- G) The pressure filter element needs to be replaced at least once a year. If the couplings between the vehicle and the Cargo Floor system are regularly removed, it is advisable to check the pressure filter for dirt build-up and replace the pressure filter element more often, if necessary. If provided,



also check the return filter (not supplied with the Cargo Floor). Failure to replace a filter element on time may cause damage to or malfunctions in the Cargo Floor system and the vehicle.

- H) Moving parts must be shielded. Always maintain at least 10 meter [30'] distance from the Cargo Floor system when it is in operation.
- I) In the event of malfunctions/maintenance work, you may approach the Cargo Floor conveyor system only if all equipment, including the hydraulic pump, have been shut off, and the Cargo Floor system and the electro-hydraulic aggregate have been disconnected from the power supply and pump.
- J) Regularly check and, if necessary, tighten any loose bolts that secure the aluminium floor profiles to the Cargo Floor system. All such checks can simply be performed inside the vehicle itself by qualified personnel. The Cargo Floor conveyor transport system must, however, be turned on in unloaded condition and the person performing the check must place his finger half on the floor profile and half on the bolt. There should be no appreciable movement/space between the floor profile and bolt. Failure to check these bolts may lead to damage to the Cargo Floor system. During this check, a second person must also be present to switch off the Cargo Floor system.
- K) Check that the minimum required amount of oil is present 150 liter [40 US gallon]. Too little oil in the hydraulic tank will cause damage to both the pump and the Cargo Floor system.
- L) Do not allow the number of strokes to exceed the maximum allowable 16 power strokes per minute. Only a CF500 SLC Power Speed Cargo Floor system may deliver up to 23 beats per minute. A higher number of power strokes can cause damage to the Cargo Floor moving floor system and the vehicle.
- M) Hydraulic lines, couplings and hoses with very small diameters will cause damage.
- N) If the Cargo Floor moving floor system fails to start or operates incorrectly, the Cargo Floor system and the hydraulic pump must be shut down immediately. Subsequently, check all the checkpoints before switching the pump and the Cargo Floor system back on. To prevent the oil from overheating, regularly check the oil temperature by CAREFULLY and CAUTIOUSLY touching the line and or oil tank. If either is too hot to the touch, stop touching them right away. WARNING: TOUCHING OVERHEATED OIL AND COMPONENTS CAN CAUSE BURNS!
- O) The cause of failure or malfunctioning of the Cargo Floor system may also be due to other hydraulic components that may or may not be connected to the same hydraulic circuit of the Cargo Floor system.
- P) Jamming of the floor profiles caused by the transport of abnormal loads and or the freezing of the floor or of the product to the floor may result in damage to the Cargo Floor system and the vehicle. Recommendation: in the event of freezing, stop the system and try to find a hall (heated area) to allow the product to thaw.
- Q) Because the electrical power supply of the Cargo Floor system is often connected to the lighting circuit of the vehicle, it is advisable to turn on the lighting throughout the operation of the system.
- R) Maintenance and repairs to the Cargo Floor system may be only performed by qualified personnel. Use only original Cargo Floor components to ensure maximum reliability and long service life.
- S) Maximum cargo weight is subject to the limits set by law and applicable regulations. Even if the system can transport heavier loads, the law determines the maximum limit. Excessively heavy cargo can cause damage to the Cargo Floor transport system and the vehicle.
- T) Check that the correct type and quality of hydraulic oil is used. The use of incorrect oil type may cause damage to the Cargo Floor system and the pump.
- U) Check the vehicle for correct voltage. Make sure there are no open electrical connections. A faulty electrical system can cause damage to the Cargo Floor conveyor system and the vehicle.
- V) Check that the bulkhead, if present, is functioning smoothly and properly. A properly functioning bulkhead ensures that the product is unloaded in a clean and quick fashion. A malfunctioning bulkhead may extend the unloading time and cause damage to the vehicle.
- W) Use of the Cargo Floor system by unqualified personnel can cause damage to the Cargo Floor system and the vehicle.
- X) Excessively high oil temperatures will cause damage to the Cargo Floor system and other hydraulic components, such as the pump.
- Y) It is at all times advisable to stop the Cargo Floor system when all the piston rods are retracted. This is usually the case when the floor profiles are positioned towards the unloading end (vehicle doors). Unretracted piston rods may cause damage to the Cargo Floor system.

TX/RX remote control



- Z) To prevent damage to the floor profiles, exercise caution and limit the dump height as much as possible. The transport of unauthorised goods, such as aggressive, corrosive, hot, hard, sharp and viscous materials may cause damage to the Cargo Floor system and the vehicle. Avoid loading and unloading sharp objects. Loads that are softer than the hardness of the floor profiles will extend the service life of your system; if in doubt, use a protective cloth or consult your dealer.
- AA) Forklift trafficable. In principle, the floors are completely trafficable and can be driven over by forklifts, but always consult your dealer for advice on the maximum loads allowed on your vehicle. Overloading will cause damage to the Cargo Floor moving floor system and the vehicle.
- BB) Always return emergency control(s) to their original non-activated position after use.
- CC) During the operation of the system, test the temperature of the oil by touching the side of the tank. If the oil is so hot that you cannot continue to touch the tank, switch off the pump to allow the oil to cool off and determine what is causing the overheating. Stop loading or unloading if the oil is too hot, as this will irreversibly cause damage to the Cargo Floor system and the other hydraulic components.

WARNING: TOUCHING OVERHEATED OIL AND COMPONENTS CAN CAUSE BURNS AND INJURIES!

- DD) During loading and unloading operations, the load should be spread to give an even weight distribution over the floor area, otherwise the load may stall. Tip: when transporting pallets, place softwood boards of 300 x 18 x 2350 mm. [12" x 0.75" x 92.5"] to distribute the pressure more evenly.
- EE) The constant pressing of the load against the head board or the doors can lead to extra wear of the complete system. Also the construction can be damaged. Please consult your supplier about the optimizing possibilities or in order to prevent problems occurring.
- FF) The user/operator/driver that is operating the Cargo Floor system is compelled to remain a safe distance from the Cargo Floor system at all times, from the time of switching on the hydraulic pump until turning it off. He should ensure that no dangerous situations can occur. When the process malfunctions or if other people are present he should shut down the Cargo Floor system, or hydraulic pump, immediately.
- GG) No unauthorized alterations/modifications/changes/adjustments may be made to any part of the Cargo Floor drive unit and system.

WARRANTY

Warranty is subject to <u>prior</u> approval by Cargo Floor B.V.! To request warranty coverage, visit <u>www.cargofloor.com</u> to fill out and submit the warranty application form provided there; do not forget to include your Cargo Floor system number on the form.

Emergency stop

In the event of an <u>EMERGENCY</u>, operation of the Cargo Floor moving floor system can be halted as follows:

- By pressing the red stop button on one of the control switches;
- By turning all switches to position "0";
- By putting the handle of the control valve in the middle "0" position (only B and A control);
- Turning off the PTO pump/engine;
- Turning off the main switch of the power supply;
- Turning off the motor of the electro-hydraulic aggregate;

This WARNING STICKER/DECALL is attached near the control cabinet.



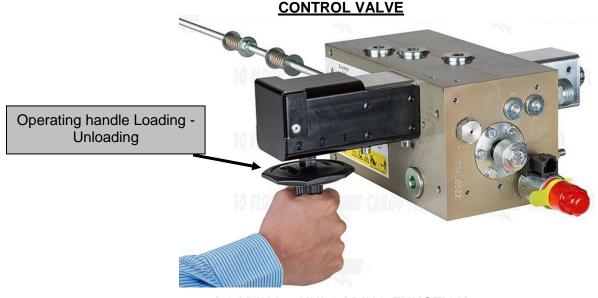
www.cargofloor.com Version 01 / January 4th, 2016



B-CONTROL

With a B-controlled Cargo Floor, the activation of the floor to the loading / stop / unloading function is done manually by using the operating handle and switched on/off by use of an electrical switch.

You determine beforehand the position for unloading / loading by means of the manually controlled handle. The system can be switched on/off by operating an electrical switch. If the switch is activated the system will start moving directly.



LOADING - UNLOADING FUNCTION

PRECHECK!

BE CAREFUL: when starting the pump/pto the floor could start moving immediately!

In certain configurations the functions can be different from the standard situation as described below. It is therefore very important to always test your configuration first without a load. After use always return the controls to the non activated 0 position.

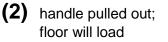
The position of the handle:

(1) handle pushed in; floor will unload

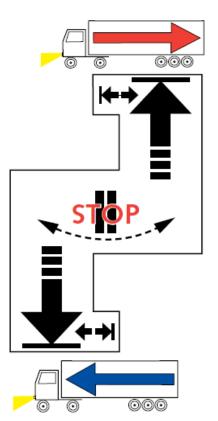


(0) handle in the middle position; floor stops











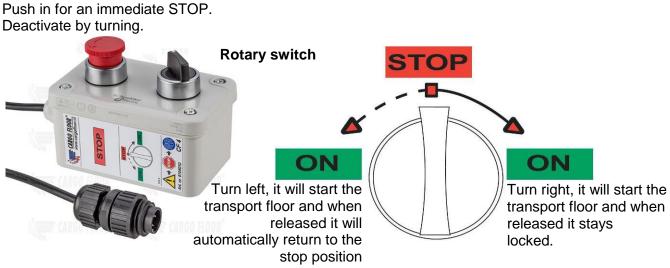
FUNCTION OF B-CONTROL SWITCHES

CF4 REMOTE CONTROL (MAIN CONTROL)

After you have manually put the handle in the loading / unloading function, the moving floor system can be turned on / off by using the electrical switch.

The CF4 remote control has the following functions:

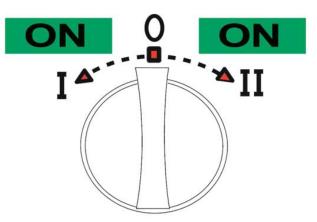
Red STOP button



CF3 CONTROL

The CF3 control is the permanent control which is mounted in the control box and has 3 switch positions with the following functions:

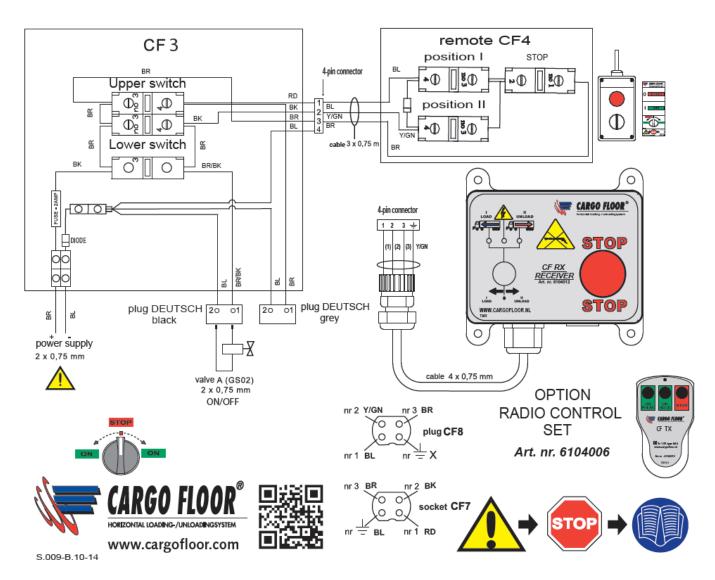




When turned left or right, it will start the floor and when released it will automatically return to the 0 position



ELECTRICAL CIRCUIT DIAGRAM B-CONTROL





E-CONTROL

With an E-controlled Cargo Floor, the activating of the floor to the loading / stop / unloading function is done only by use of an electrical switch.



FUNCTION OF E-CONTROL SWITCHES

PRECHECK!

BE CAREFUL: when starting the pump/pto the floor could start moving immediately!

In certain configurations the functions can be different from the standard situation as described below. It is therefore very important to always test your configuration first without a load. After use always return the controls to the non activated 0 position.

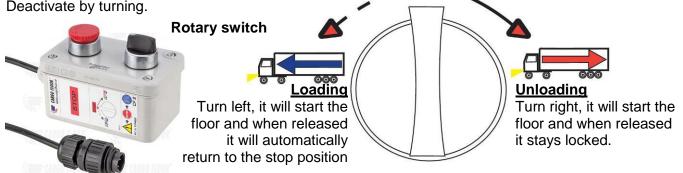
CF8 REMOTE CONTROL (MAIN CONTROL)

The standard wired remote control CF8 is used to put the floor in the loading/stop/unloading function.

The CF8 remote control has the following functions:

Red button

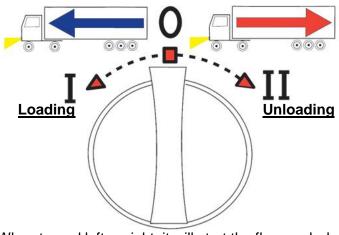
Push in for an immediate STOP. Deactivate by turning.



CF7 CONTROL

The CF7 control is the permanent control which is mounted in the control box and has 3 switch positions with the following functions:

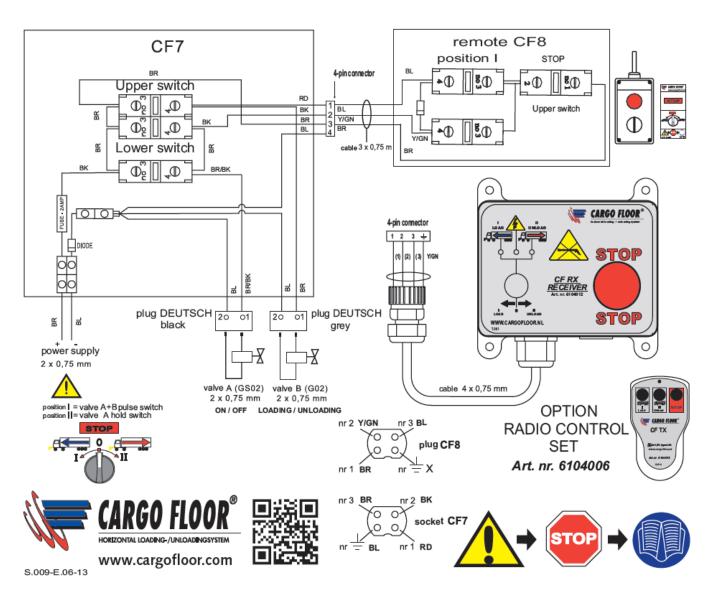




When turned left or right, it will start the floor and when released it will automatically return to the 0 position



ELECTRICAL CIRCUIT DIAGRAM E-CONTROL





WIRELESS REMOTE CONTROL

<u>Optional</u>

A wireless remote control set (TX/RX) is available as an option for the E- and B- operated system. This wireless remote control can be easily retrofitted in new and existing controls.

In the E-operated systems the wireless remote control replaces the CF8 wired remote control. In the B-operated systems the wireless remote control replaces the CF4 wired remote control.

PRECHECK!



BE CAREFUL: when starting the pump/pto the floor could start moving immediately! In certain configurations the functions can be different from the standard situation as described below. It is therefore very important to always test your configuration first without a load.

After use always return the controls to the non activated 0 position.

CF RX RECEIVER



Red stop button

On the receiver RX a red stop button is mounted, by pushing this button you can stop the system in case of emergency. By pulling it the system will be activated again. Do take care, with reference to the accessibility, that when using a remote control, the door of the control box is opened so the red stop button can be operated.

Tilting switch

This receiver is supplied with a tilting switch, with this switch can de system be activated when the CF TX is not working. (E-control loading / stop / unloading, B-control on/off).

<u>CF TX TRANSMITTER</u> <u>E-CONTROL</u>

Fitted with three buttons, with the following functions:



Button 1 (load). By pushing this button the system will load, by releasing it the system will stop.

Button 2 (unload). By pushing this button the system will unload, by pushing it again the system will stop (or you push the red marked stop button).

Button 3 (stop). With this button you stop the system.

B-CONTROL



Fitted with three control buttons with the following functions:

Button 1 (ON PULSE as pulse contact). By pushing this button the system will be activated, by releasing it the system will deactivate.

Button 2 (ON HOLD as hold contact). By pushing this button the system will be activated, by pushing it again the system will deactivate (or you push the stop button 3).

Button 3. (Stop) With this button you stop the system.

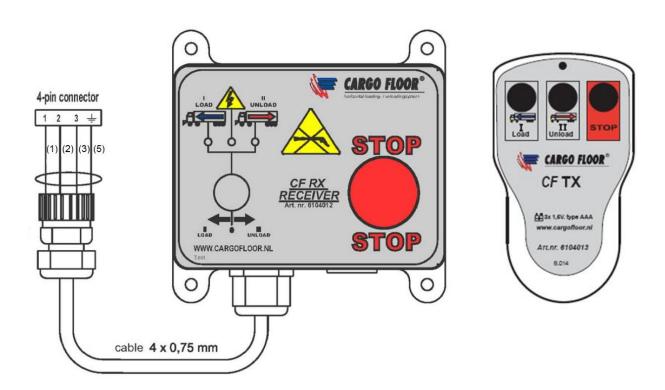


SCOPE OF SUPPLY

Parts no. 6104006: Set wireless remote control Cargo Floor CF RX TX (receiver + transmitter)



6104006





IMPORTANT INSTRUCTIONS

- Prevent water and dirt getting into the plug when (de)mounting the plug.
- Check on the spot, after mounting, if the range of the transmitter TX is large enough to reach the receiver RX.
- Do not drop the hand held transmitter.
- Never use a high pressure cleaner on the electric components. So also do not use it on the Cargo Floor RX/TX remote control.
- For the most optimal reception of the receiver RX mounting it as far as possible at the outside is recommended. We strongly advise against mounting the receiver RX in a steel case.
- If the range of the hand transmitter is diminishing we recommend changing the 3x AAA batteries.
- Prevent damages to the reciever RX. Therefore, do not use the plastic box, in which the receiver is mounted, as storage space.
- It is preferred that you carry the transmitter TX at its clip. If the transmitter is put in to the trouser pocket it is possible that the function buttons are pressed and the Cargo Floor system is unwittingly operated. This also will also shorten the life span of the 3 AAA batteries there signals are being send without this being needed.
- At all times remain in signal range of the receiver with your sender when you are loading or unloading.
- When a malfunction occurs in the electrical system the standard present emergency control can be used to activate the on / off functions. For further details regarding this see the user's manual you have received with you trailer. You can also download it at our website: www.cargofloor.com.
- Regularly perform careful checks on the following aspects:
 - Damages to the casing;
 - Moisture in the casing;
 - Damages to the wiring of the plugs.





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Attention: if you ordered a transmitter and receiver as a **set**, it will already be programmed. This set is plug and play.

In any other case it would be meaningful to read this instruction

Before putting the new hand transmitter TX into use the plastic strip needs to be removed, which is positioned between the battery connection. Then check if the screw of the battery lid is screwed in correctly. See the instructions on the plastic strip.



In order to have the hand transmitter communicate with the receiver you need to program the receiver. Open the lid of the reciever carefully. This is done by loosening the four screws of the reciever lid. **Attention:** these are bayonet screws, these need to be pressed in and then turned a quarter.

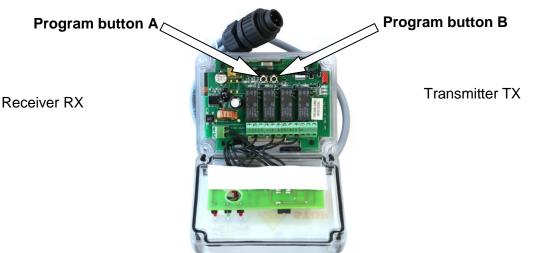
When the transmitter (TX) is operated it will send a unique signal together with a general one. This means that the transmitters (TX) will operate all receivers (RX) that are not programmed. The Cargo Floor receivers are all programmed and will only respond to a transmitter that is programmed.

If you want to program a transmitter and tune it to a receiver you do not need to program every function. The receiver has been specially made for the Cargo Floor function. This means that when the transmitter is programmed all the functions work at once. If programming fails the first time then use the emergency stop of the receiver. The power of the receiver will be cut off. Deactivate after a few moments the emergency stop and program the transmitter again.

The transmitter has two programmable buttons (A and B, see picture). Programming is done by pressing these buttons, keep them pressed for about a second

The programming of a new or extra transmitter to one receiver: A-B-A-A-A-A-B-B. After this press for at least two seconds a button of the transmitter. The receiver is now programmed.

Erasing a transmitter: A-B-A-A-A-A-B. Press the last B for four seconds.





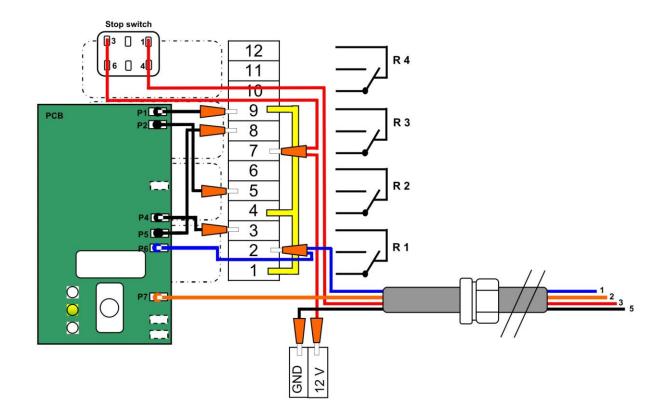
If you need any further instructions, please contact Cargo Floor B.V.

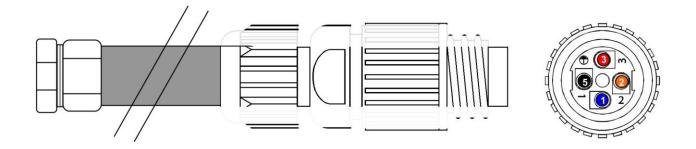


TECHNICAL DATA OF THE CARGO FLOOR TX/RX REMOTE CONTROL

NB the cables in the RX shall be numbered acc to the drawing. The colours are only shown as a guideline.

 Valve 1 IN Valve 2 OUT	= Cable no 1 = Cable No 2
 Power 12 V GND	= Cable No 3 = Cable No 5







TROUBLESHOOTING

If the Cargo Floor moving floor system fails to operate (in the correct manner) after meticulously having followed the operating instructions, then carry out the following checks:

Malfunction	Cause	Remedy
Transmitter LED is not on.	Batteries are empty	Replace batteries
The transmitter functions, but	1. There is no power on	1. Switch on the lights of the
the receiver does not.	the receiver	trailer.
	2. The stop button of the	2. Pull out the stop button.
	transmitter is pressed	3. Make sure that the receiver is
	3. The distance to the	in the range of the transmitter.
	receiver is to large	4. Connect the plug correctly.
	4. The plug is not	5. Turn of the other transmitter.
	connected correctly into	
	the fixed switch	
	5. Another transmitter is	
	active.	
Transmitter and receiver	1. Electric malfunction in	1. If this is the case the system
function, but the system does	the wiring from the	operates on the emergency
not turn on.	remote control to the	control. (See you standard users
	cartridge and solenoid.	manual.) Check if the wiring or
	2. A hydraulic	the function of the cartridge and
	malfunction	solenoid.
		2. The system does not respond
		to the emergency control. For
		solutions see your standard users
		manual.

CONTACT DATA

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Phone number:	+31 524 593 900
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Website:	www.cargofloor.com

Order spare parts:

E-mail address:	sales2@cargofloor.nl
DID number:	+31 524 593 922

After Sales (technical questions and malfunctions)

E-mail address: <u>as@cargofloor.com</u> DID number: +31 524 593 981 / +31 524 593 991

Coevorden, The Netherlands

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