# **Installation Instructions**

# Radio control device with angle sensor

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Introduction Radio control device

#### 1 Introduction

#### 1.1 General

The radio system comprises a transmitter and a receiver. The transmitter and receiver are precoded at the factory. Precoded means that each transmitter and receiver pair have been supplied with a code from the factory that is specific to this particular pair. No settings need to be adjusted on the new equipment. Precoding prevents any unauthorised party from being able to control your lift by mistake.

PNT-T2162 and PNT-T2183 work on the 2.4 GHz frequency.

#### 1.2 WEEE directive

The EU has implemented a collection and recycling system for which the products' manufacturers are responsible. For correct handling, recycling and reuse, take this product to a recycling station. We are striving to minimise our use of materials that are harmful to health and the environment, to increase reuse and recycling, as well as to reduce emissions and discharges to the air, ground and water. When a commercially viable alternative is available, we endeavour to limit or eliminate substances and materials that constitute a risk to health, safety and the environment.

#### 1.3 Important

The following "warning markings" appear in the installation instructions and are intended to draw your attention to circumstances potentially causing unwanted situations, near misses, personal injury or damage to the product, etc.

#### NOTE. -

Take care. Risk of damage to the product.

# **∆WARNING!** -

Take extra care. Risk of personal injury or damage to the product and the surroundings.

#### NOTE.

In order for the receiver module to be able to work, the lift's control system must have software version 9.0 or later. This is indicated on the control card with a label indicating e.g. V9.0.

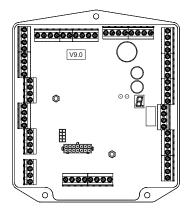


Fig.1. The software version is indicated with a label on the control card

Design and function Radio control device

# 2 Design and function

#### 2.1 Receiver

The receiver has a function button and two LEDs. The table below shows what the LEDs indicate.

LED	Off	On	Flashing	Indicates
1	Х			No transmitter is registered.
Red		Х		Radio link is up.
			Х	A transmitter is registered. Radio link is down.
2 Green	Х			The power to the receiver is disconnected.
		Х		The receiver is connected to power.
			Х	Incorrect radio packet received.



The battery LED lights when one of the buttons on the transmitter is pressed. The LED lights green when the battery capacity is high and red when the battery capacity is low.

The locking function LED lights (red) when the locking function on the transmitter is activated.

The switch on the rear of the transmitter disconnects the power from the battery. In position 0/OFF, it is not possible to start the transmitter. When the transmitter is being transported by air, the switch must be in the 0/OFF position.

#### NOTE.

The switch should not be used to turn the transmitter on and off in daily use

#### 2.3 Button functions

Pressing but- tons	PNT-2162	PNT-2183
Press 1	Up	Up
Press 2	Tilt	Tilt
Press 3	Down	Down
Press 1+2	Close	Close
Press 2+3	Open	Open
Press 4		Sled in
Press 5	Lock/Unlock	Lock/Unlock
Press 6		Sled out
Press 7		Function Y
Press 8		Function Z

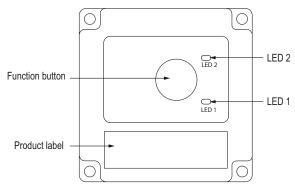


Fig.2. Receiver - Overview

#### PNT-T2162

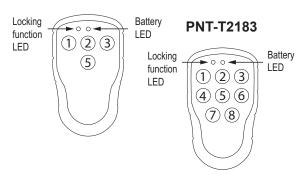


Fig.3. Transmitter - Overview, front

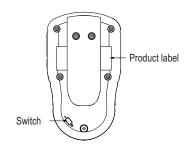


Fig.4. Transmitter - Overview, rear

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Operation Radio control device

# 3 Operation

#### 3.1 Programming a transmitter

To prevent registering or erasing of transmitters by mistake, it is only possible to register/erase transmitters up to 3 minutes after power-up of the receiver. After that nothing will happen if the receiver's function button is pressed.

#### 3.1.1 Delete a registered transmitter

Press and hold the receiver's function button, LED 1 (red) for approx. 4 seconds until LED 1 (red) goes out. The transmitter is now deleted from the receiver.

#### NOTE.

Only one transmitter can be registered in the receiver. If a transmitter is registered in a receiver in which another transmitter has already been registered, the new transmitter will replace the previous one.

#### 3.1.2 Register a transmitter

- 1. Press the receiver's function button; LED 1 (red) comes on.
- 2. Release the function button.
- 3. Press buttons 1+3 on the transmitter that is to be registered. LED 1 (red) flashes three times when the transmitter is registered. If no transmitter is found within 10 seconds, the receiver reverts to normal operating mode.

#### 3.2 Lock/Unlock

Press and hold button 5 to lock or unlock. The lock's status is indicated by the lock function LED, which comes on when the lock is activated. In the event of a fault in the remote control, unlocking can be performed by switching the control power (CS) Off/On.

#### NOTE.

If the remote control is in the locked position and the lift has been unlocked by switching the control power (CS) Off/On, the lift is locked again as soon as any button on the remote control is pressed.

Locking is retained if the lift loses power and then starts up again; the number 6 flashes on the control card's display. Unlocking is performed in accordance with the above description.

#### 3.3 Replacing the battery

- Remove the rear of the transmitter by unscrewing the 5 screws.
- Replace the batteries, 3 x 1.5V AAA. Use alkaline batteries for optimum performance.
- 3. Screw the rear of the transmitter on again.

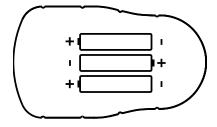


Fig.5. Replacing the battery

# **≜WARNING!**

Do not charge the batteries. Attempting to charge the batteries may result in an explosion or the leakage of hazardous fluids that will corrode the equipment.

#### NOTE.

Electronics and batteries must be separated before being put in the recycling. Make sure that electronics or batteries are not discarded with household waste.

# 4 Installing receiver module

#### NOTE. -

Make sure that the control card is disconnected from power before starting installation.

1. Identify the receiver module's terminal block on the control card. Fig.6.

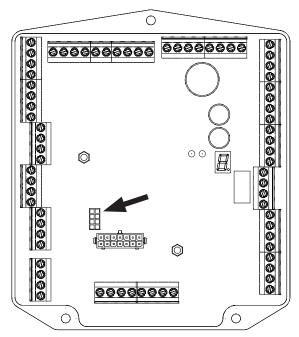


Fig.6. Receiver module terminal block on the control card

 Align the receiver module on the control card. Make sure that the receiver module's pins fit in the terminal block before pressing the receiver module straight down onto the control card. Fig.7.

#### NOTE. -

Make sure that the receiver module's pins fit in the terminal block on the control card.

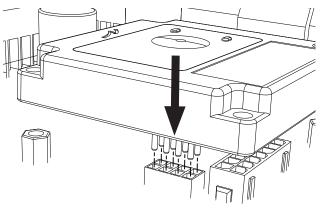


Fig.7. Make sure that the receiver module's pins fit in the terminal block before pressing the receiver module straight down onto the control card.

3. Screw the receiver module to the control card using two M3x10 screws. Fig.8.

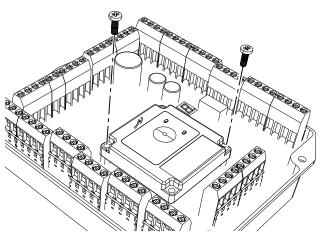


Fig.8. The receiver module is installed with two screws

# 5 Installing the angle sensor

## NOTE.

Angle sensors do not need to be installed on truck sliders.

The accompanying angle sensor does not need to be installed on certain lifts, as it is already installed as standard for the quick opening function. The existing angle sensor can also be used for the radio control.

Take care to place the sensor in the correct position, with the cable in the right direction and with the sensor at an angle of 45° to the platform in order to ensure correct function.

# **∆WARNING!**

The angle sensor constitutes a safety function for the radio control, which may not be modified or taken out of service, in order to prevent the lift being used intentionally or accidentally when the user has not checked the working area. Circumventing this function results in the CE marking from Zepro ceasing to apply.

#### 5.1 Installing on ZHD 2500

Screw the angle sensor on the existing weld screw with a nut, see illustration below.

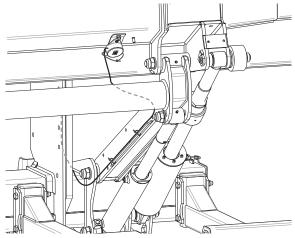


Fig.9. Installing on ZHD 2500

#### 5.2 Installing on ZHD 1500/2000

Drill 1 x 7.4 mm hole and screw the angle sensor into place.

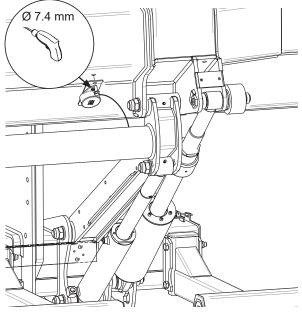


Fig.10. Installing on ZHD 1500/2000

## 5.3 Installation on other models

If the platform is not already equipped with an angle sensor, install according to a suitable example in one of the illustrations below.

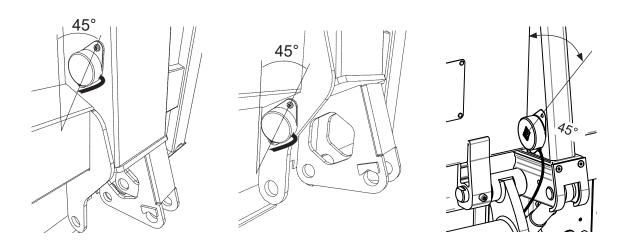


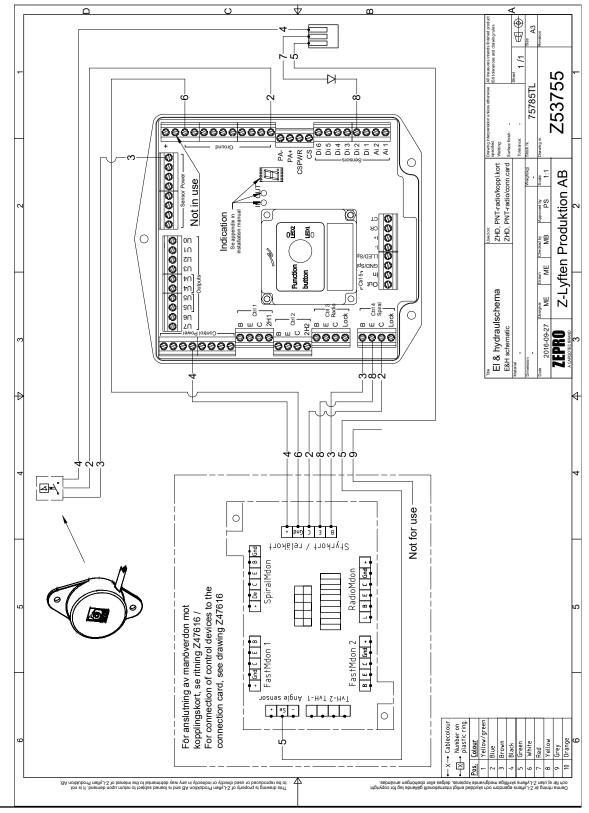
Fig.11. Installation on other models

# 6 Electrical and hydraulic drawings

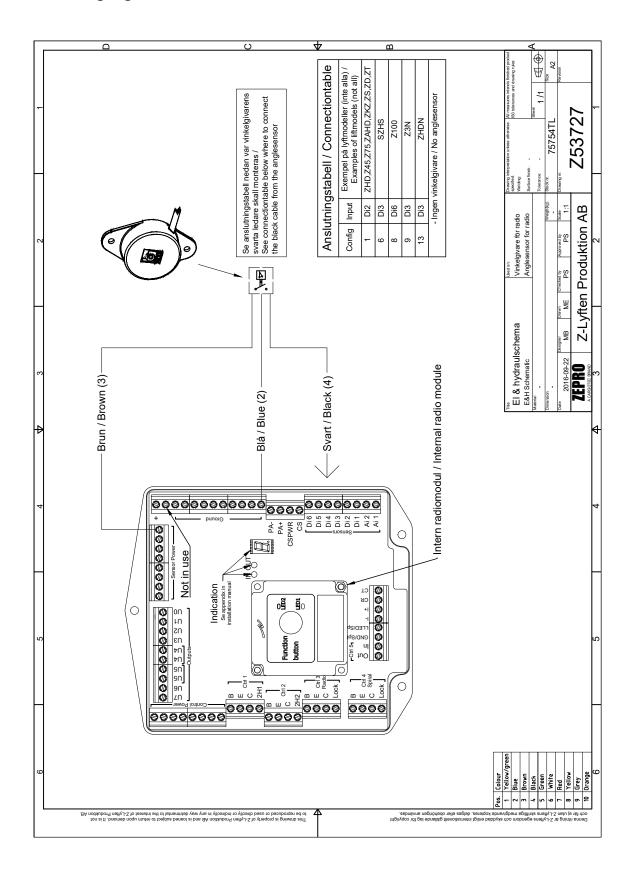
#### 6.1 Connecting receiver module PNT-T2162/PNT-T2183 together with connection card

#### NOTE.

Green cable is used for a 7-conductor. Black cable is used for a separate single conductor.



#### 6.2 Connecting angle sensor



Troubleshooting Radio control device

# 7 Troubleshooting

Problem	Possible cause	Action
No movement of the tail lift. LED 2 (green) on the receiver is not lit.	No power supply to the receiver or incorrect installation of the receiver.	Check the installation of the receiver. If this does not solve the problem, contact your support.
No movement of the tail lift. LED 1 (red) on the receiver is not lit.	No transmitter is registered in the receiver.	Register a transmitter in the receiver, see "3.1.2 Register a transmitter" on page 6.
No movement of the tail lift. LED 1 (red) on the receiver is flashing.	Incorrect transmitter unit is being used.	If the battery LED on the transmitter lights red when any button is pressed, the batteries should be replaced. Otherwise, check that the correct transmitter unit is being used. If this does not solve the problem, contact your support.
No movement of the tail lift. LEDs 1 (red) and 2 (green) on the receiver are lit.	The lock function is activated.	Unlock the transmitter, see "3.2 Lock/Unlock" on page 6.
No movement of the tail lift. The battery LED on the transmitter	The transmitter's switch is in position 0/Off.	Set the switch in position 1/On.
is not lit.	The battery in the transmitter is flat or damaged.	Replace batteries, see "3.3 Replacing the battery" on page 6.
No movement of the tail lift. The battery LED on the transmitter lights red when transmitting.	The battery capacity is low.	Replace batteries, see "3.3 Replacing the battery" on page 6.