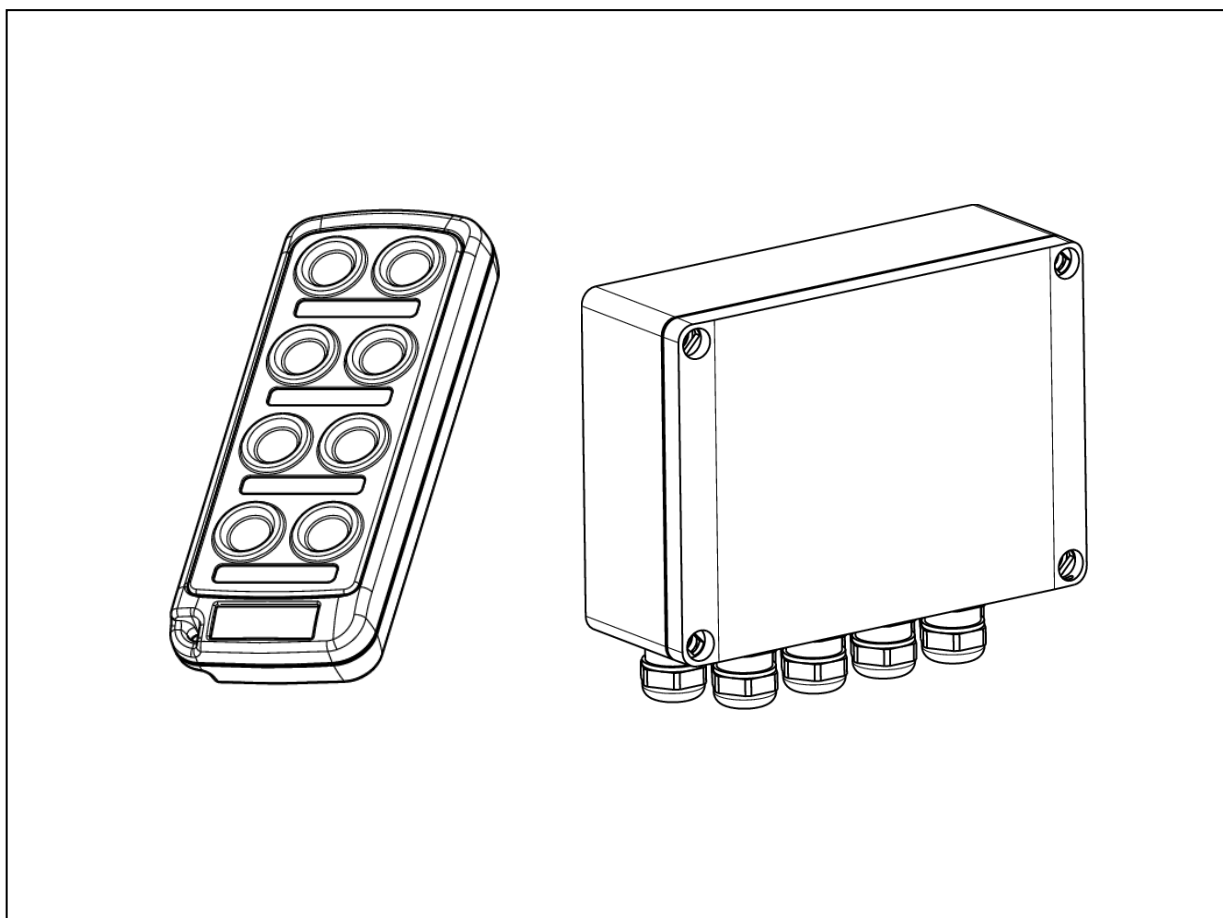


Manual

Seldén Four Function Remote Control System



1. Four Function Remote Control System

1.1 The manual

To derive the maximum benefit and enjoyment from your Seldén Remote Control Unit, we recommend that you study this manual carefully.

The manual covers the four function transmitter and receiver, and related compatible parts.

Seldén Mast AB guarantees the Remote Control System 2 years. The guarantee covers faults arising from defective design, materials or workmanship.

The guarantee is only valid if the Remote Control System is installed and operated in accordance with this manual.

If the Remote Control System is repaired by anyone other than Seldén Mast AB or one of our authorized dealers, the guarantee ceases to be valid.

Seldén Mast AB reserves the right to alter the content of the manual and design of the product without prior warning.

For latest update check www.seldenmast.com or contact Seldén for your own issue.

1.2 Product information

Four functions can be remotely controlled, each in two directions.

Two functions can be used at the same time.

Up to eight hand units can be used with one receiver

The remote control system can operate on two radio frequencies, 434,33 or 433,92 MHz.

The transmitter and receiver are linked together using the transmitter's serial number.

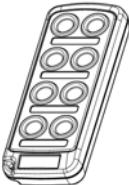


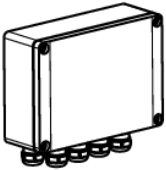
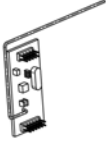
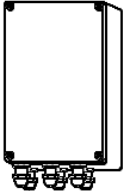
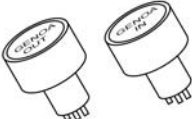
The transmitter is water proof (IP67)

Temperature range when in use: -10 - +50 degrees celsius

Receiver power consumption: 40 mA (at rest), 60 mA (one function activated)

Transmitter power consumption: XX mA (at rest), YY mA (one function activated)

1.3 Related Components / Spare Parts

	<p>Transmitter / hand unit: 532-460-11 REMOTE CONTROL HAND UNIT, MK2</p> <p>Spare battery: 4LR44</p>
	<p>Holder for transmitter / hand unit : 532-467 REMOTE CTRL, HOLDER 60X55 COMP</p>
	<p>Neck Strap: 539-669 REMOTE CONTROL NECK BAND</p>
	<p>Receiver box 4 functions 532-466-10 REM.CTRL REC.BOX, MK2</p> <p>Spare fuse: type glass tube, 4 A (T4L250V)</p>
	<p>Receiver card plug-in for Furlex Electric control box, compatible with MK2</p> <p>532-465-01 REM.CTRL REC.CARD(MK1,MK2)FLXE</p>
	<p>Control box for Furlex Electric, compatible with MK2 if it has software update 349-1043-2.0.0 or higher.</p> <p>532-448 CONTROL BOX FLX 200/300E 12V 532-459 CONTROL BOX FLX 300/400E 24V 532-469 CONTROL BOX FLX 400E 24V</p>
	<p>Pushbutton Selden</p>

1.3 Installation, Four Function Remote Control System

It is important to have circuit breakers that permit cutting power to powered functions such as winches, furling gear, etc. when the boat is not under supervision by the crew.

The remote control system is intended as an optional way of operating functions aboard. We recommend that the remote control system is installed in parallel with conventional control buttons so that all functions can be operated in a conventional manner.

The voltage supplied to the receiver box can be 12 or 24V, the receiver automatically adapts. Use an appropriate fuse for the size of cable needed.

The receiver box is to be mounted in a protected location aboard, and oriented with the cable entries as the lowest point.

The receiver antenna is located inside the receiver box. The range when installed in a GRP boat is about 15m. For installations in metal boats a connector for an external antenna can be soldered in place of the built-in antenna.

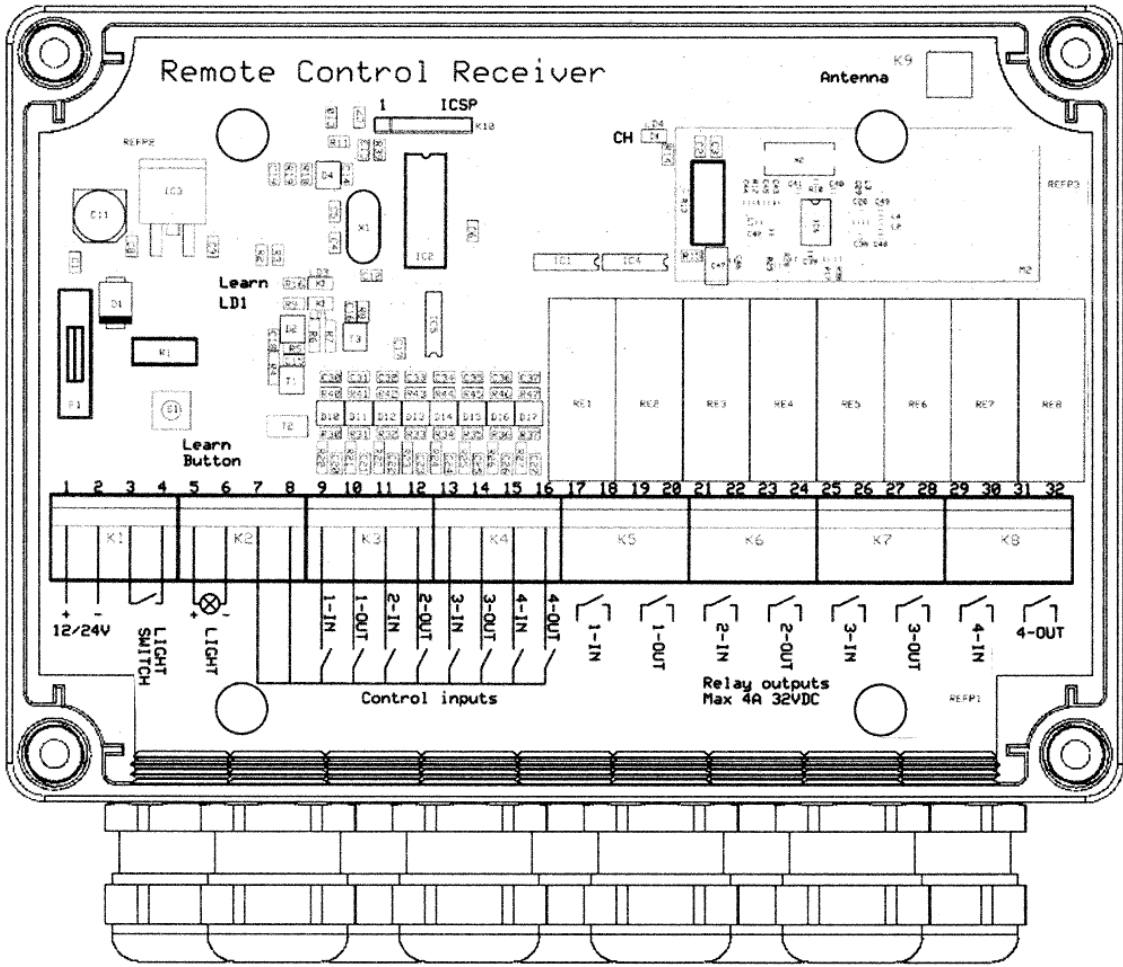
The receiver box has eight normally open relays that close a circuit when they are activated.

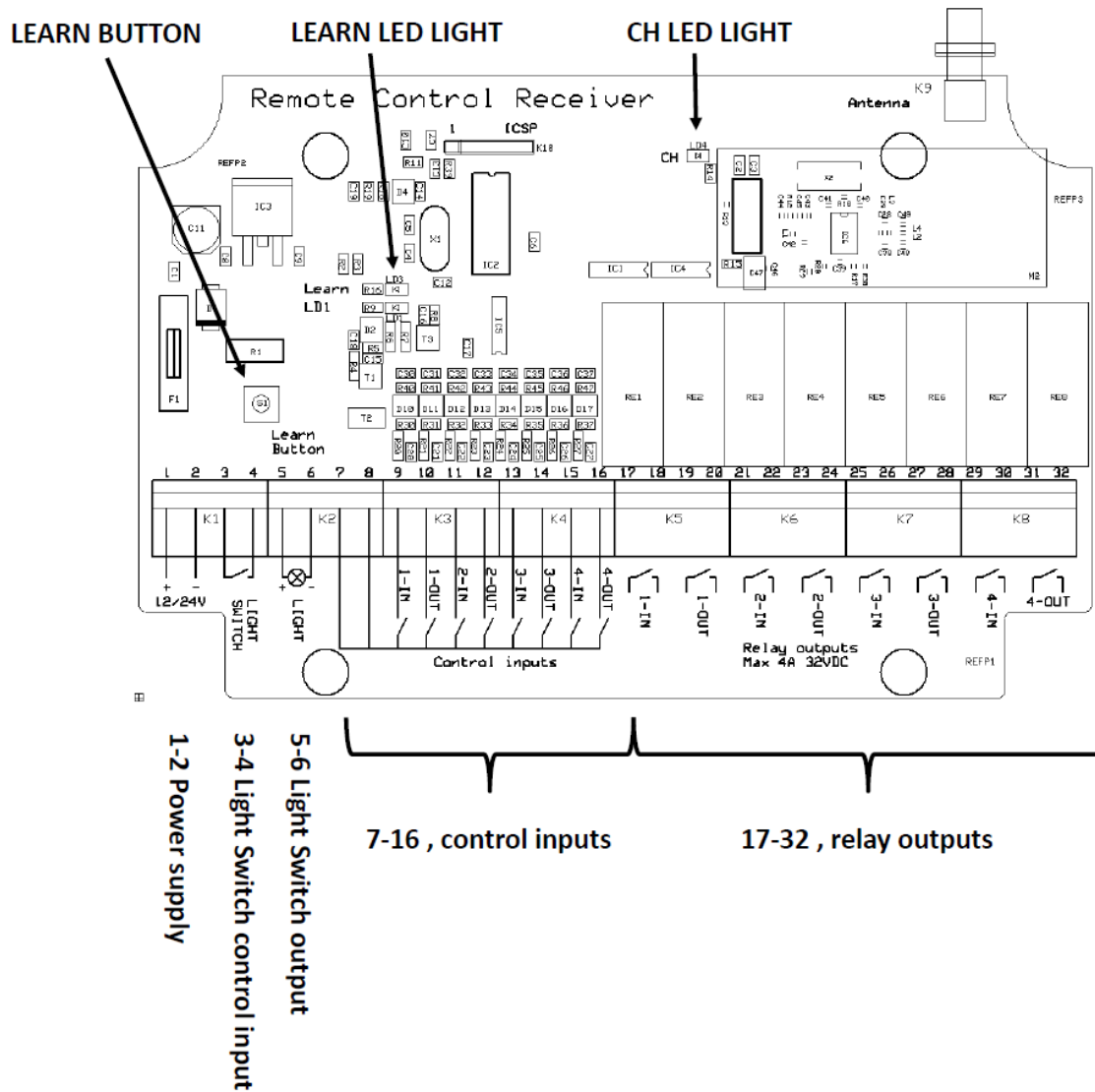
The maximum rated current for the relays is 4A. The intended use is for control current. Loads such as for example DC motors and solenoid coils for hydraulic valves are not intended to be passed through this controlbox, separate control boxes are to be used.

The receiver box has control inputs that work in parallel with the control signal sent by radio. The control cables inputs are meant for incoming control cables from the control buttons normally installed.

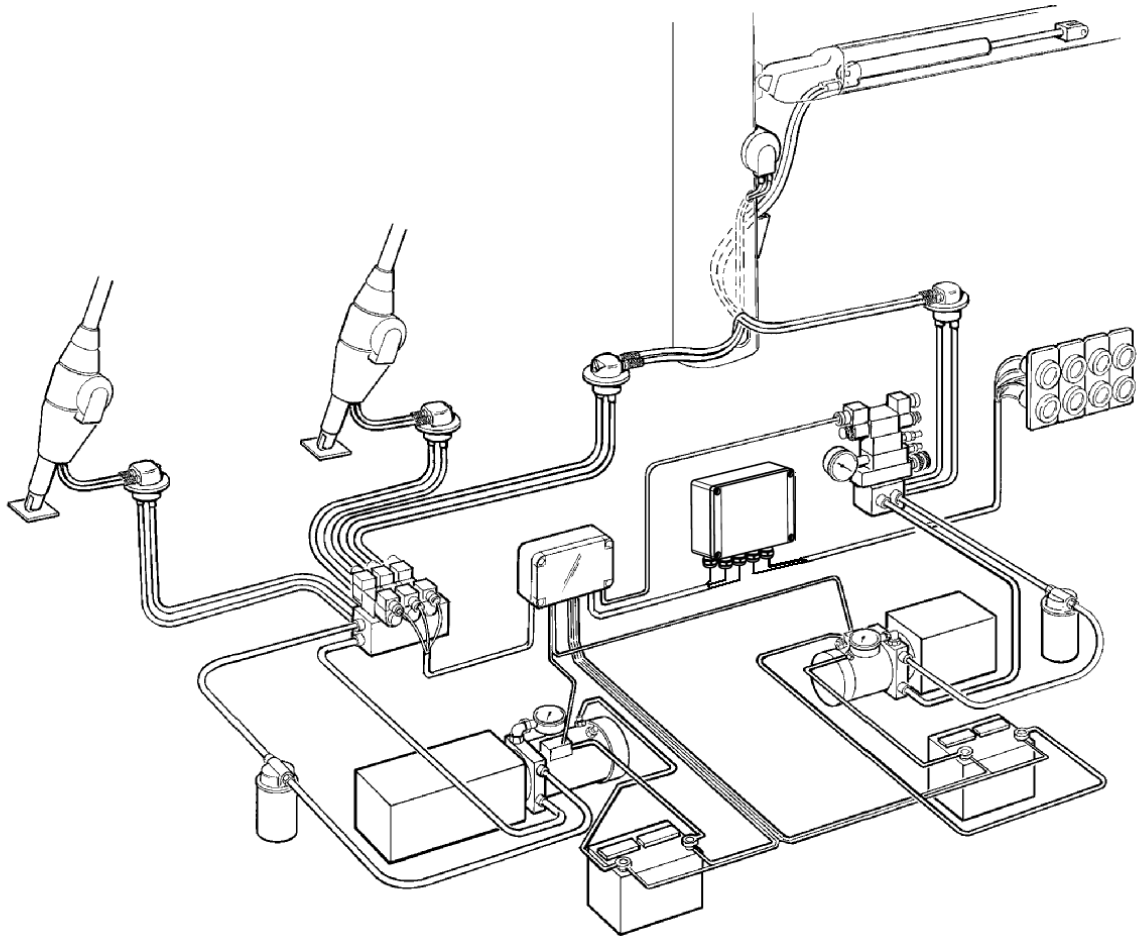
Compatibility with Selden Furlex Electric controlboxes:

The Furlex electric controlboxes (with the software update 349-1043-2.0.0 or higher) and the receiver plug-in card are compatible with the 4-channel receiver box. The compatibility means that a transmitter can be connected to both the 4-function receiver as well as the single-function plugin receiver card. Which row of buttons that is to be connected to the single function is determined by what button on the transmitter is pushed when connecting. Please see 595-926 for a description of the Furlex Electric controlbox and the Receiver plug-in card.





- 1-2 Power supply: to be connected to 12 – 24V
- 3-4: Switch for activating lit buttons, if the buttons are always to be lit, 3-4 can be connected with a jumper cable.
- 5-6: Button lighting
- 7-8: Cables to pushbuttons (power supply, 7 is the same as 8)
- 9-16: Cables from pushbuttons
- 17-32: connected to control cox for the units to be controlled.



The picture above shows an installation example where the four function receiver box is used together with pushbuttons.

1.4 Operation

The active channel on the receiver is shown by the “CH” LED light on the receiver printed circuit board:

“CH” LED light is lit: 434,33 MHz

“CH” LED light is not lit: 433,92 MHz

Switching receiver frequencies:

-Press the LEARN button four times with maximum 1 s. between

Switching the transmitter to channel 434,33 MHz:

-Press all four top buttons (row one and two) simultaneously for at least four seconds

Switching the transmitter to channel 433,92 MHz:

-Press all four lower buttons (row three and four) simultaneously for at least four seconds

Connecting a transmitter to the 4-function receiver:

- 1) Press and hold the Learn button on the printed circuit board of the controlbox, until the LEARN LED next to it is lit, then let go of the button.
- 2) Push any button on the remote control, the LEARN LED confirms by flashing repeatedly. All of the functions are now connected to the receiver so that row 1 on the hand unit will now activate control outputs 1-in and 1-out, and so on.

Connecting an additional transmitter to the 4-function receiver:

-Follow the same procedure as above.

The maximum number of connected transmitters to one receiver is eight.

Disconnecting transmitters from the receiver:

-Press the Learn button on the receiver's printed circuitboard for approximately 10 seconds, until the LED light next to it flashes.

After the reset procedure no transmitters are connected to the receiver.

1.5 Diagnostics / Fault finding

Problem:

-Remote control system not operating for any of the buttons being pushed on the transmitter

Recommended action:

- 1) Make sure the receiver box has power.
- 2) Make sure the transmitter battery is OK
- 3) Check that the receiver and the transmitter are operating on the same channel
- 4) Try switching frequencies
- 5) Try un-programming the receiver and re-connecting the transmitter

Problem:

-Poor range:

Recommended action:

- 1) Try switching frequencies
- 2) Make sure the transmitter battery is OK

Problem:

-Remote control system not operating for some of the buttons being pushed on the receiver

Recommended action:

- 1) Check if the failing remote function can be operated by pushbutton.
- 2) Listen when operating to see if the relays are making a clicking sound.
- 3) Check for faulty wiring

Diagnostics:

Faulty power supply to the receiver is indicated by a blinking LED light "Learn" on the printed circuit board.