

# IMPRINT

## PRODUCT

Item Number:

9237 91xx TX Mini

9237 92tx RX Heavy

9237 93xx TX Heavy

9237 94xx RX Mini

9237 95xx Holders etc.

Reference Number:

V01

## VERSION

Datum:

20th September 2010

# DIRECTIONS

## CAUTION!

Please read the manual carefully before use!  
The user must have read the manual and fully understood it.  
In case of questions or if anything is unclear, contact the supplier  
or the manufacturer before use.

The manufacturer cannot monitor observance of these instructions or the conditions of operation and use of the products of the ICARUS family. Incorrect installation and incorrect operation can lead to damage to property and injury. For this reason we do not accept any responsibility or liability for losses, damage to property or personal injury, or any further costs resulting from or in any way associated with incorrect installation, incorrect operation, incorrect use or lacking or incorrect maintenance.

## SAFETY REGULATIONS

- I. Products in the ICARUS family must only be installed, maintained, repaired and put into operation by trained and qualified technicians.
- II. To prevent misuse or danger, never leave the manual devices of the ICARUS family unsupervised.
- III. When using the manual devices, the work area must be within visual range of the user.

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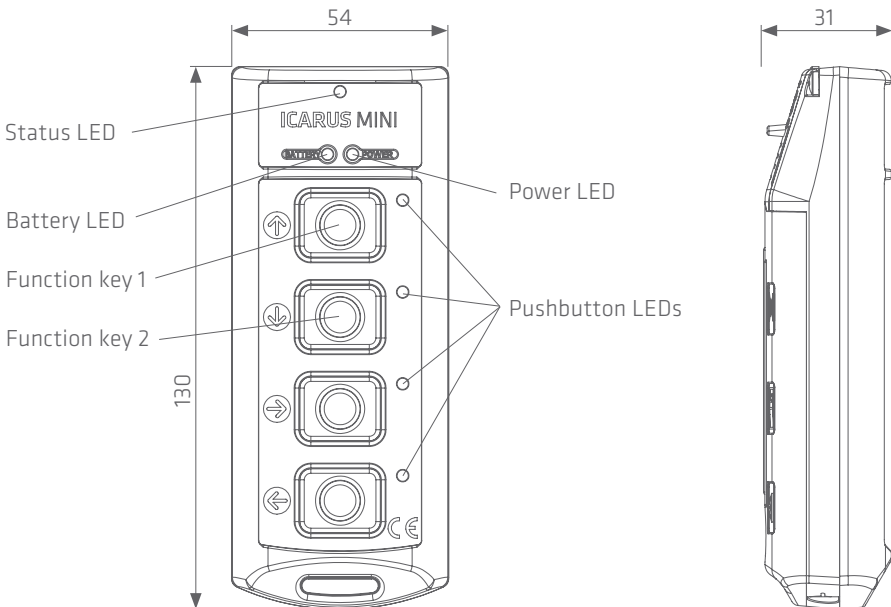
# TX MINI

## 1.1 TECHNICAL DATA

Frequency	433MHz
Number of channels	6
Number of buttons	max. 6
Transmitter output	≤ 10mW
Reaction time	< 40ms
Antenna	Internal
Batteries	3× Typ AA (normal or rechargeable)
IP protection rating	IP 67
Dimensions	130 × 54 × 31mm
Weight	185g (including batteries)

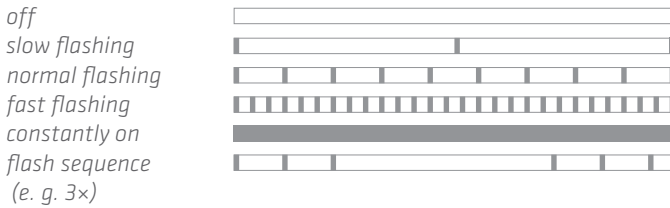
### Work area:

Range	Approx. 100m (depending on surroundings)
Temperature	-20°C to +50°C (depending on the battery)
Air humidity	10% - 95%
Working altitude	< 2000 m.a.s.l.
Housing material	PC - ABS



## 1.2 LED STATUS DISPLAY

General: ■ 50ms on



POWER LED (green)

<i>off</i>	System not active (power switch OFF)
<i>constantly on</i>	System active (power switch ON)
<i>fast flashing</i>	Radio signal is being transmitted (key pressed on the transmitter)
<i>slow flashing</i>	Learning mode active

BATTERY LED (red)

The speed of flashing depends on the battery status.  
As the battery voltage decreases the flashing frequency is increased.

<i>off</i>	Battery OK
<i>constantly on</i>	Battery is being charged
<i>slow flashing</i>	Battery voltage below 3V
<i>normal flashing</i>	Battery voltage below 2.7V
<i>fast flashing</i>	Battery voltage below 2.4V

If the battery voltage falls below 2.1V the remote control switches off automatically.

STATUS LED (red)

<i>flash sequence</i>	Error code (for description see 1.9)
-----------------------	--------------------------------------

PUSHBUTTON LEDs (red)

<i>off</i>	A function key is not being pressed
<i>on</i>	The relevant function key is being pressed

### 1.3 OPERATION

- I. Ensure the power supply to the receiver (24V DC)
- II. Push the red „power switch“ on the back of the transmitter up.  
POWER LED flashes green.
- III. Press any button on the transmitter
- IV. Transmitter ready for use (POWER LED CONSTANTLY ON)

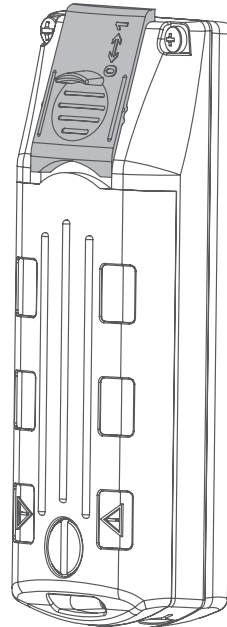
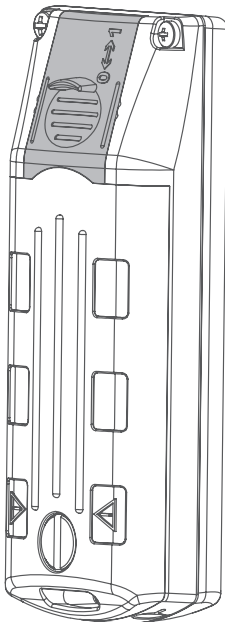
If the transmitter is not activated for longer than 15 minutes (standard setting) it turns itself off automatically to save energy. To use again, please push the power switch on the back down and start again at point two (see above). Please note: If the transmitter has turned itself off automatically it uses less energy, but still more than when the power switch has been pushed down!



**If the transmitter is not used for a prolonged period, please remove the batteries to avoid corrosion and resulting damage, and to avoid the batteries losing charge!**

Power switch down:  
Transmitter off

Power switch up:  
Transmitter on



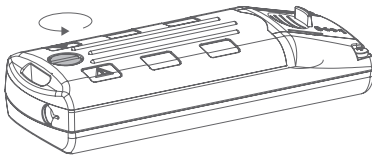
## 1.4 CHANGING BATTERIES

The manual devices in the ICARUS family can be equipped with conventional batteries or rechargeable batteries as desired. A transmitter equipped with rechargeable batteries can be charged at any time with the charger that is available as an accessory. During the charging procedure the BATTERY LED is constantly lit. As soon as it is no longer lit, the rechargeable battery has been charged and is ready for use.

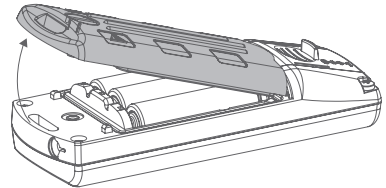
To change conventional batteries or rechargeable batteries, proceed as follows:

- I. Turn the locking screw on the battery compartment anti-clockwise
- II. Remove the battery compartment cover
- III. Remove the old batteries
- IV. Insert 3 AA batteries in the specified direction
- V. Put on the battery compartment cover and close it
- VI. Turn the locking screw on the battery compartment clockwise (max. 0.1Nm torque to prevent damage to the housing)

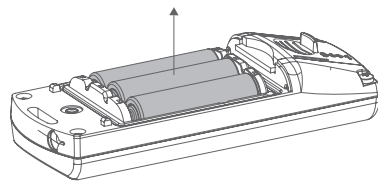
I.



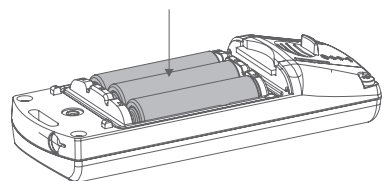
II.



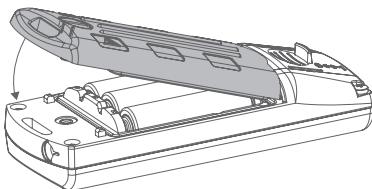
III.



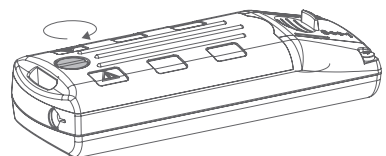
IV.



V.



VI.





## 1.5 CLEANING INSTRUCTIONS

The remote control should only be cleaned with a damp cloth and without chemicals.

## 1.6 CARE AND MAINTENANCE

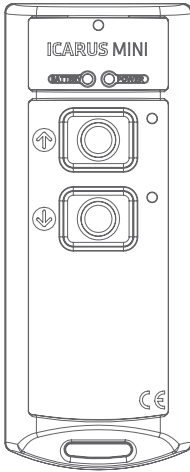
We recommend that you clean the remote control weekly as described in the previous section (damp cloth, no chemicals). If the remote control is used in a very dirty, e.g. dusty, environment, we recommend that you clean it every day to avoid possible resulting damage.

When changing the batteries, please check the contacts for corrosion and clean with a small brush if necessary. You should ensure that the surface of the contacts is not damaged.

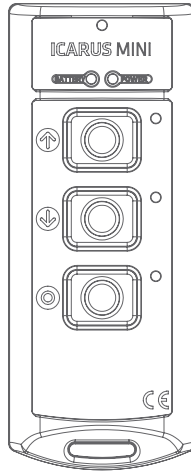
## 1.7 TRANSMITTER CONFIGURATIONS

The following transmitter configurations are possible:

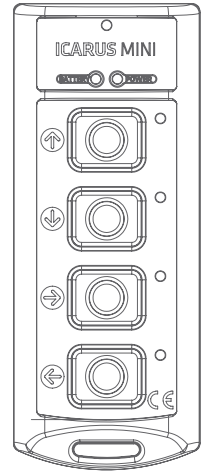
2 Control buttons



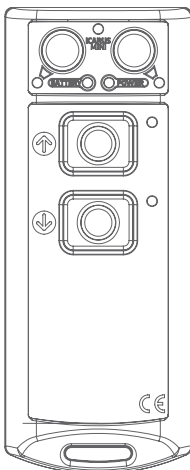
3 Control buttons



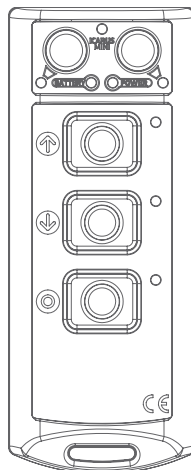
4 Control buttons



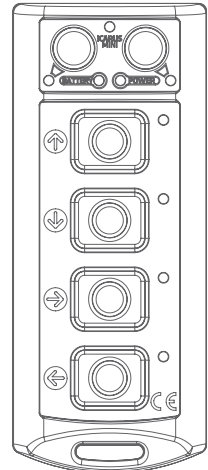
2+2 Control buttons



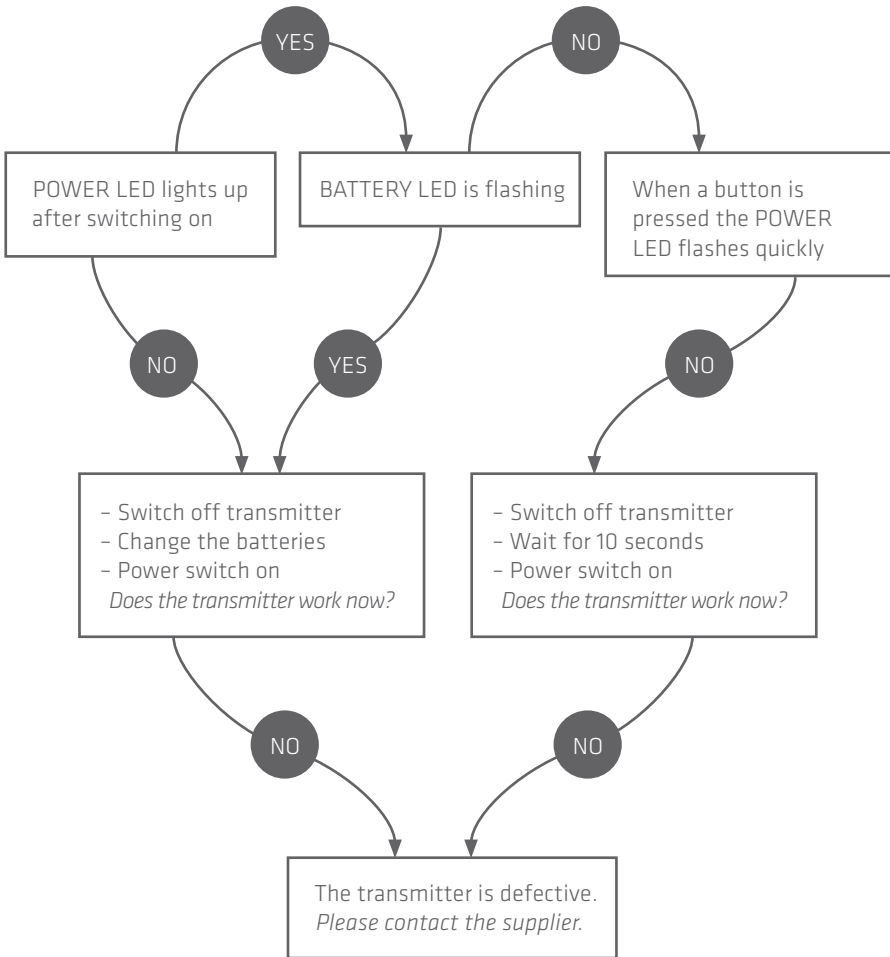
2+3 Control buttons



2+4 Control buttons



## 1.8 TRANSMITTER FAULT FINDING



If the status LED flashes, see description in 1.9!

If the transmitter only works over short distances, please proceed as follows:

- I. Ensure that the distance between the transmitter and receiver is not greater than 50 metres.
- II. Ensure that there are as few objects as possible, particularly metallic objects, between the transmitter and the receiver.
- III. If you are surrounded by a metallic grating or another heavy metallic structure, please leave these surroundings.
- IV. Check if there are transmission masts in the immediate vicinity, which could lead to faults, and if necessary leave this area.
- V. Check if there are cables in the immediate vicinity carrying high voltage or current and leave these surroundings if necessary.

If the transmitter still does not work correctly after carrying out these steps, please contact your supplier.

## 1.9 ERROR CODES AND REPAIR

In case of system malfunctions, the STATUS LED shows which error has occurred using an error code. The STATUS LED flashes x times followed by a short pause, then the STATUS LED flashes x times again etc..

If you count how many times the STATUS LED flashes in each interval, you can diagnose the error using the following listing.

The error is specified in this case only for diagnostic purposes. Internal errors cannot be influenced by the operator without authorisation. To clear the error display, switch off the remote control using the POWER switch, wait 5 seconds and switch it on again.

LED is flashing: Meaning:

<i>3 times</i>	<i>No connection between the controller and the radio module</i>
<i>4 times</i>	<i>Incorrect synchronisation of the PLL</i>
<i>5 times</i>	<i>Serial number error (internal)</i>
<i>6 times</i>	<i>Connection between the controller and the radio module deactivated</i>

flash sequence (e.g. 3 times)

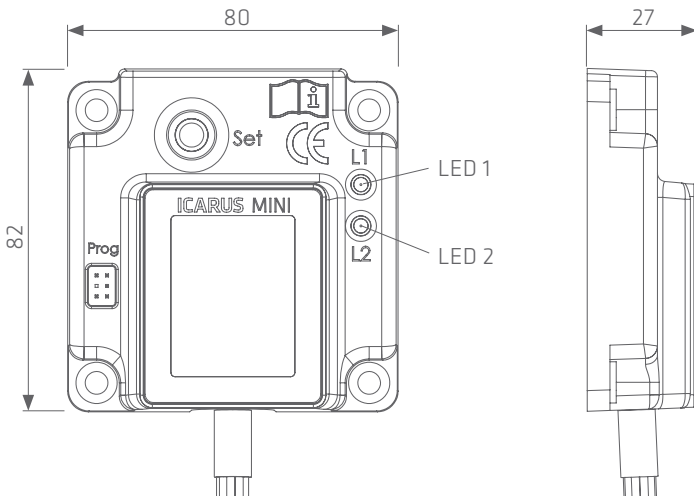


# RX MINI

## 2.1 TECHNICAL DATA

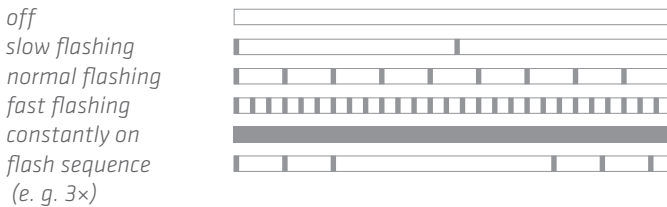
Frequency	433MHz
Sensitivity	-110dBm
Number of channels	6
Number of transmitters	max. 24
Number of outputs	6+2 (digital)
Number of inputs	2 (digital)
Max. switching capacity	2,5 A(per output)
Reaction time	< 40ms
Antenna	internal or external
IP protection rating	IP 67
Voltage	9-30Vdc
Energy consumption	< 1W (no output active)
Max. current	10 A
Dimensions	82 × 80 × 27mm
Weight	ca. 280g

Work area:	
Range	Approx. 100m (depending on surroundings)
Temperature	-30°C to +70°C
Air humidity	10% - 95%
Housing material	ABS
Working altitude	< 2000 m.a.s.l.



## 2.2 LED STATUS DISPLAY

General: ■ 50ms on



### LED 1

<i>off</i>	No power supply
<i>constantly on (green)</i>	System activated (emergency stop switch of the transmitter not pressed (TX HEAVY) or the power switch is ON (TX MINI))
<i>slow flashing (green)</i>	System deactivated (emergency stop switch of the transmitter pressed (TX HEAVY) or the power switch is OFF (TX MINI))
<i>flash sequence (red)</i>	Error (for description see 2.9)
<i>fast flashing (green)</i>	Learning mode active (description see 2.11)

### LED 2

<i>on (green)</i>	Radio signal received (key pressed on the transmitter)
<i>on (red)</i>	Radio signal not received (incorrect transmitter ID)
<i>on (green)</i>	Transmitter successfully logged in (in learning mode when key is pressed)
<i>on (red)</i>	Transmitter successfully logged of (in learning mode when key is pressed)
<i>off</i>	No radio signal

## 2.3 COMMISSIONING OF THE RECEIVER

Supply operating voltage to the receiver (9-30V DC) and log on the transmitter as per the description (2.11).

## 2.4 OPERATION

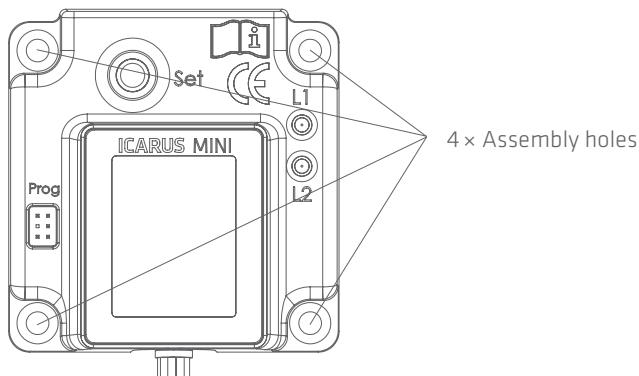
- I. Ensure the power supply of the receiver (9-30V DC). LED 1 flashes green.
- II. Push up the red „power switch“ on the back of the transmitter (TX MINI) or pull out the emergency stop switch (TX HEAVY).
- III. Press any button on the transmitter
- IV. System ready for use (LED 1 CONSTANTLY ON)



**If the transmitter is not activated for longer than 15 minutes (standard setting) it turns itself off automatically to save energy. The receiver is deactivated at the same time (LED 1 flashes green). To reactivate the receiver, proceed as described above.**

## 2.5 ASSEMBLY REGULATIONS

- I. Before installation and assembly of the receiver, check that it is working correctly.
- II. Before installation and assembly, separate the receiver from the mains.
- III. If possible, secure the receiver within visual range of the end user.
- IV. Do not fit near motors, relays or power cables.
- V. Fit receivers with internal antennae outside the metal housing.
- VI. You must observe the circuit diagram and ensure that it is followed.
- VII. After assembly check each function of the receiver before it is used in the normal working environment.

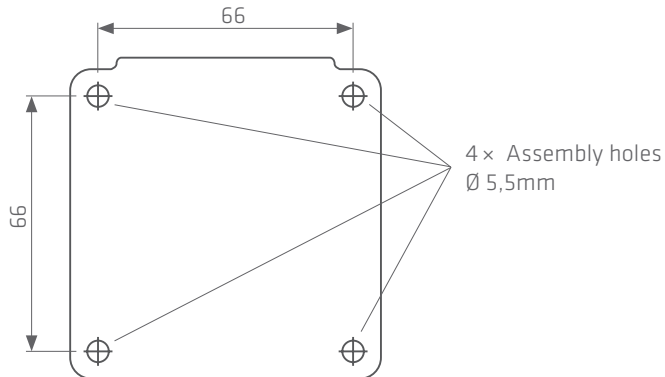


## 2.6 ASSEMBLY GUIDELINES

Fix the receiver with four fixing screws (M5, length as required).



**The maximum torque for the fixing screws must not be exceed 3.5 Nm during assembly.**



## 2.7 CLEANING INSTRUCTIONS

The receiver should only be cleaned with a damp cloth and without chemicals.

## 2.8 CARE AND MAINTENANCE

We recommend that you clean the receiver weekly as described in the previous section (damp cloth, no chemicals). If the receiver is used in a very dirty, e.g. dusty, environment, we recommend that you clean it every day to avoid possible resulting damage.



## 2.9 ERROR CODES AND REPAIR

In case of system malfunctions, LED 1 shows which error has occurred using an error code. LED 1 flashes x times then there is a short pause, then LED 1 flashes x times again etc... If you count how often LED 1 flashes per interval, you can use the following list to diagnose the error precisely.

flash sequence (e.g. 3 times) 

### First category errors (warning):

A first category error is just a warning, however the system is still ready for use. Nevertheless these errors should be repaired immediately, as otherwise smooth working is not guaranteed.

To reset the error display, press the SET button on the receiver once. If the error has been dealt with, LED 1 lights up again in green and operation can be continued.

LED 1 is flashing:	Meaning:
5 times	Input voltage below 9V

### Second category error:

Second category errors lead to an immediate system shutdown in order to prevent possible operational faults. If the cause of the error has been found and repaired, the error display can also be reset.

To do this, please disconnect the receiver from the power supply and connect it again. If the error has been successfully dealt with, LED 1 lights up again in green and operation can be continued. If the error is still present, the receiver switches itself off again immediately and displays the error code once more.

LED 1 is flashing:	Meaning:
6 times	Input voltage below 8V
8 times	Input voltage above 38V
9 times	Overcurrent (main controller)
10 times	High or low voltage (main controller)
11 times	An output has an error

If your receiver does not function although no error is displayed, it may be because the radio signal sent by the transmitter is not reaching the receiver. (When a button is pressed on the transmitter, LED 2 lights up in red)

In this case please try the following solutions:

- I. Ensure that the distance between the transmitter and receiver is not greater than 50 metres.
- II. Ensure that there are as few objects as possible, particularly metallic objects, between the transmitter and the receiver.
- III. If you are surrounded by a metallic grating or another heavy metallic structure, please leave these surroundings.
- IV. Check if there are transmission masts in the immediate vicinity, which could lead to faults, and if necessary leave this area.
- V. Check if there are cables in the immediate vicinity carrying high voltage or current and leave these surroundings if necessary.

If the receiver still does not work correctly after carrying out these steps, please contact your supplier.

## 2.10 CABLE ASSIGNMENT

<b>Function:</b>	<b>Number/Colour:</b>
0Vdc	yellow/green
12-24Vdc	1
In 1	2
In 2	3
System active	4
Out 0 (Pump)	5
Out 1	6
Out 2	7
Out 3	8
Out 4	9
Out 5	10
Out 6	11

## 2.11 TRANSMITTER LOGON AND LOGOFF

To log on a new or additional transmitter, learning mode must be activated. Proceed as follows:

- I. Ensure that the receiver is connected to a voltage source (9-30V DC).
- II. Wait for at least 5 seconds and then press the SET button on the receiver three times and holding it down the third time.
- III. Learning mode is now active as long as the SET button is held down. (LED 1 flashes quickly (green))

If learning mode is activated, transmitters can be logged on and off.

### Logging on a transmitter:

- I. Activate learning mode and hold down the SET button. (see above)
- II. Pull out the emergency stop switch (TX HEAVY) or push up the power switch of the transmitter (TX MINI) (ON).
- III. Press Function key 1 on the transmitter until LED 2 lights up in green. The transmitter is now logged on.

To log on a further remote control, please repeat the procedure from step two with the other transmitter. (Hold down the SET button!)

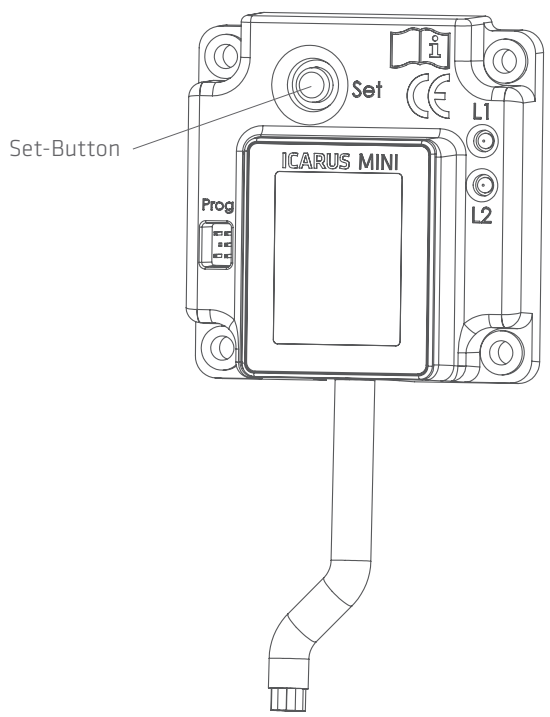
To deactivate learning mode, release the SET button of the receiver after logging on a transmitter.

### Logging off a transmitter:

- I. Activate learning mode (see above)
- II. Pull out the emergency stop switch (TX HEAVY) or push up the power switch of the transmitter (TX MINI) (ON).
- III. Press Function key 2. LED 2 lights up in red when the key is pressed. The transmitter is now logged off.

To log off a further remote control, please repeat the procedure from step two with the other transmitter. (Hold down the SET button!)

To deactivate learning mode, release the SET button of the receiver after logging off a transmitter.



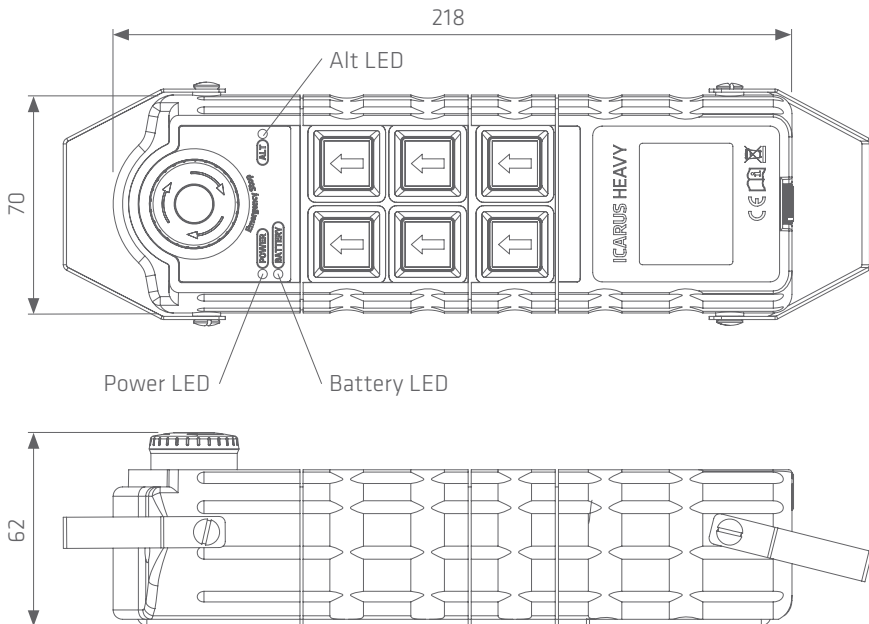
# TX HEAVY

## 3.1 TECHNICAL DATA

Frequency	433MHz
Number of channels	6
Number of buttons	max. 16
Transmitter output	< 10mW
Reaction time	< 40ms
Antenna	Internal
Batteries	6x Typ AA (normal or rechargeable)
IP protection rating	IP 54
Dimensions	218 × 70 × 62mm (6 buttons)
	257 × 78 × 62mm (6 buttons with clips)
Weight	500g (including batteries)

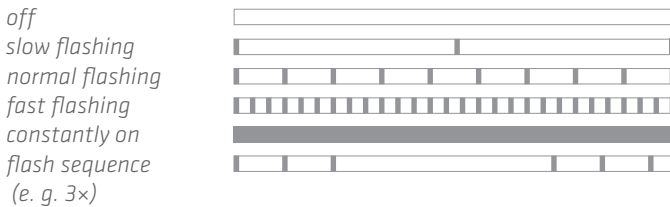
### Work area:

Range	Approx. 100m (depending on surroundings)
Temperature	-20°C to +50°C (depending on the battery)
Air humidity	10% - 95%
Housing material	ABS
Working altitude	< 2000 m.a.s.l.



### 3.2 LED STATUS DISPLAY

General: ■ 50ms on



#### POWER LED

<i>off</i>	System not active (emergency stop switch pressed)
<i>constantly on (green)</i>	System active (emergency stop switch pulled out)
<i>fast flashing (green)</i>	Radio signal is being transmitted (key pressed on the transmitter)
<i>slow flashing (green)</i>	Learning mode active
<i>flash sequence (red)</i>	Error

#### BATTERY LED

The speed of flashing depends on the battery status.  
As the battery voltage decreases the flashing frequency is increased.

<i>off</i>	Battery OK
<i>constantly on (green)</i>	Battery is being charged
<i>slow flashing (red)</i>	Battery voltage below 6V
<i>normal flashing (red)</i>	Battery voltage below 5.4V
<i>fast flashing (red)</i>	Battery voltage below 4.8V

If the battery voltage falls below 4.2V the remote control switches off automatically.

#### ALT LED

optionally programmable

### 3.3 OPERATION

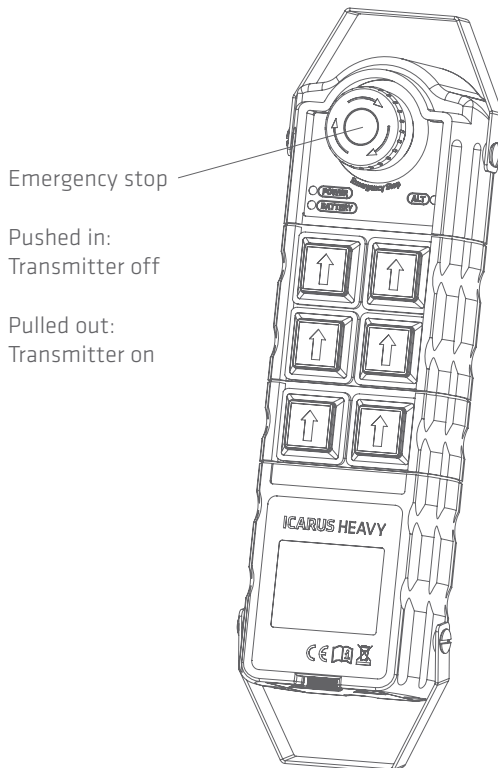
- I. Ensure the power supply of the receiver.
- II. Pull out the emergency stop switch of the transmitter.
- III. Press any button on the transmitter
- IV. Transmitter ready for use

If the transmitter is not activated for longer than 15 minutes (standard setting) it turns itself off automatically to save energy. To use again, please press the emergency stop switch and start again at point two (see above).

Please note: If the transmitter has turned itself off automatically it uses less energy, but still more than when the emergency stop switch has been pressed!



**If the transmitter is not used for a prolonged period, please remove the batteries to avoid corrosion and resulting damage, and to avoid the batteries losing charge!**

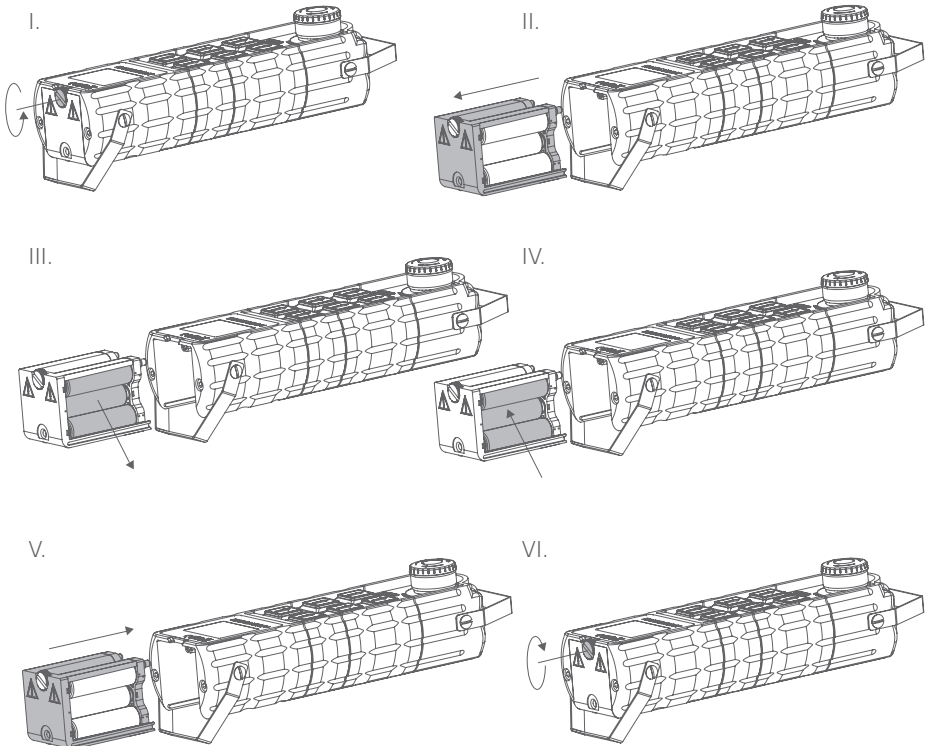


### 3.4 CHANGING BATTERIES

The manual devices in the ICARUS family can be equipped with conventional batteries or rechargeable batteries as desired. A transmitter equipped with rechargeable batteries can be charged at any time with the charger that is available as an accessory. During the charging procedure the BATTERY LED is constantly lit. As soon as it is no longer lit, the rechargeable battery has been charged and is ready for use.

To change conventional batteries or rechargeable batteries, proceed as follows:

- I. Turn the locking screw of the battery compartment anti-clockwise (on the bottom of the transmitter)
- II. Take the battery holder out of the transmitter
- III. Remove the old batteries
- IV. Insert 6 AA batteries in the specified direction
- V. Push the battery holder back into the transmitter
- VI. Turn the locking screw on the battery compartment clockwise (max. 0.1Nm torque to prevent damage to the housing)





### 3.5 CLEANING INSTRUCTIONS

The remote control should only be cleaned with a damp cloth and without chemicals.

### 3.6 CARE AND MAINTENANCE

We recommend that you clean the remote control weekly as described in the previous section (damp cloth, no chemicals). If the remote control is used in a very dirty, e.g. dusty, environment, we recommend that you clean it every day to avoid possible resulting damage.

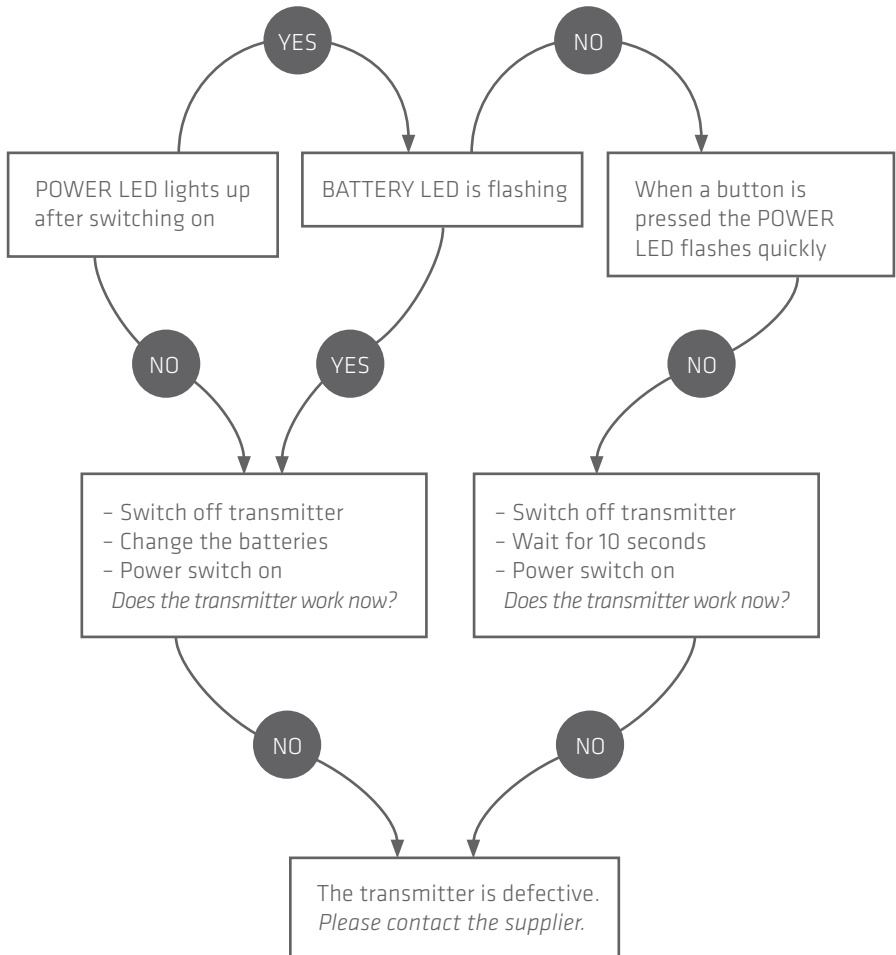
When changing the batteries, please check the contacts for corrosion and clean with a small brush if necessary. You should ensure that the surface of the contacts is not damaged.

### 3.7 TRANSMITTER FAULT FINDING

If the transmitter only works over short distances, please proceed as follows:

- I. Ensure that the distance between the transmitter and receiver is not greater than 50 metres.
- II. Ensure that there are as few objects as possible, particularly metallic objects, between the transmitter and the receiver.
- III. If you are surrounded by a metallic grating or another heavy metallic structure, please leave these surroundings.
- IV. Check if there are transmission masts in the immediate vicinity, which could lead to faults, and if necessary leave this area.
- V. Check if there are cables in the immediate vicinity carrying high voltage or current and leave these surroundings if necessary.

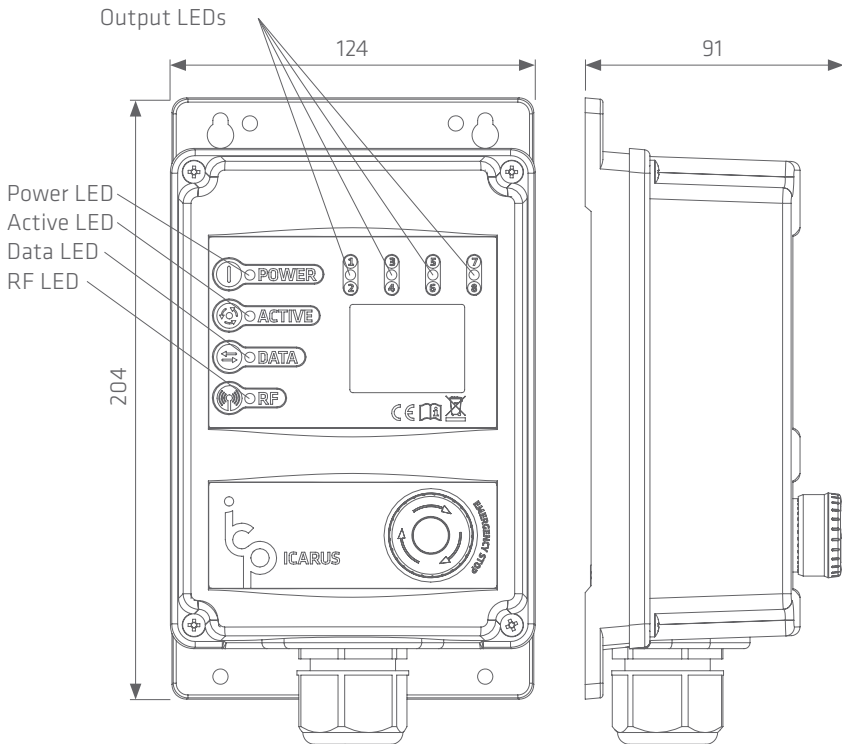
If the transmitter still does not work correctly after carrying out these steps, please contact your supplier.



# RX HEAVY

## 4.1 TECHNICAL DATA

Frequency	433MHz
Sensitivity	-110dBm
Number of channels	6
Number of transmitters	max. 24
Number of outputs	12+2 (digital)
Number of inputs	2 (digital)
Max. switching capacity	2.5 A (per output)
Reaction time	< 40ms
Antenna	Internal
IP protection rating	IP 67
Voltage	9-30Vdc
Energy consumption	< 1W (no output active)
Max. current	10 A
Dimensions	204 × 124 × 91mm
Weight	450g (without connection cable)
Work area:	
Range	Approx. 100m (depending on surroundings)
Temperature	-30°C to +70°C
Air humidity	10% - 95%
Housing material	ABS
Working altitude	< 2000 m.a.s.l.



## 4.2 LED STATUS DISPLAY

General:                   ■ 50ms on



### POWER LED

<i>off</i>	No power supply
<i>constantly on (green)</i>	Emergency stop switch on receiver not pressed
<i>slow flashing (green)</i>	Emergency stop switch on receiver pressed
<i>fast flashing (grün)</i>	Learning mode active (description see 4.11)
<i>flash sequence (red)</i>	Error (for description see 4.9)

### ACTIVE LED

<i>constantly on (green)</i>	System activated (emergency stop switch of the transmitter not pressed (TX HEAVY) or the power switch is ON (TX MINI))
<i>slow flashing (green)</i>	System deactivated (emergency stop switch of the transmitter pressed (TX HEAVY) or the power switch is OFF (TX MINI))

### DATA LED

<i>on (green)</i>	Data transfer is taking place (key pressed on transmitter (ID of the transmitter recognised))
<i>on (red)</i>	Data transfer is taking place (key pressed on transmitter (ID of the transmitter not recognised))
<i>off</i>	No data transfer (no key pressed on the transmitter)
<i>on (green)</i>	Transmitter successfully logged on (in learning mode when key is pressed)
<i>on (red)</i>	Transmitter successfully logged off (in learning mode when key is pressed)

## RF LED

<i>on (green)</i>	Any radio signal detected
<i>off</i>	No radio signal detected

## Output LEDs

<i>LED 1 (red) on</i>	Output 1 active
<i>LED 2 (green) on</i>	Output 2 active
<i>LED 3 (green) on</i>	Output 3 active
<i>LED 4 (grün) on</i>	Output 4 active
<i>LED 5 (green) on</i>	Output 5 active
<i>LED 6 (green ) on</i>	Output 6 active
<i>LED 7 (red) on</i>	Output 7 active
<i>LED 8 (green) on</i>	Output 8 active

Only 8 outputs are displayed.

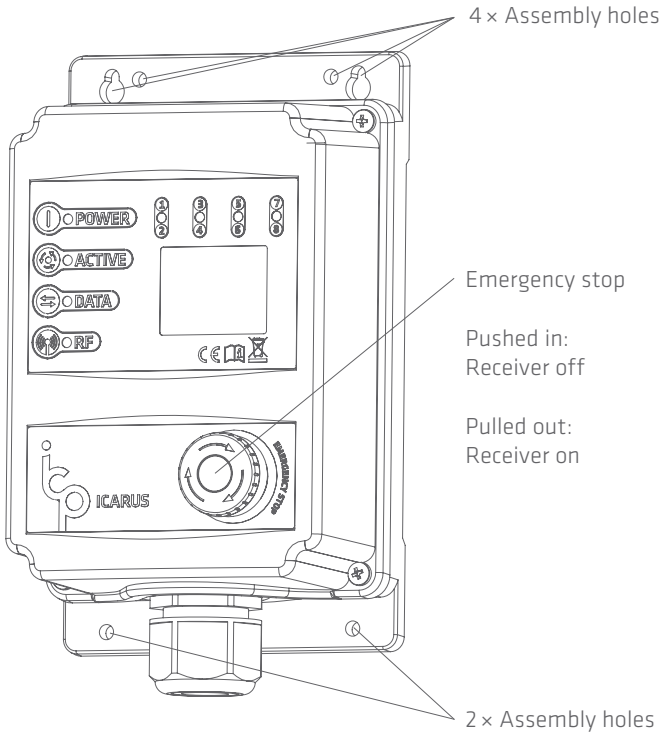
<i>flashing</i>	Shortcut of the relevant output
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### 4.3 COMMISSIONING OF THE RECEIVER

Supply operating voltage to the receiver (9-30V DC) and log on the transmitter as described (4.11).

#### 4.4 OPERATING THE RECEIVER

- I. Press the emergency stop switch on the receiver.
- II. Supply the operating voltage to the receiver (9-30V DC).  
The POWER LED now starts to flash green. The ACTIVE LED flashes red.
- III. Pull out the emergency stop switch on the receiver.  
The POWER LED now shines a constant green light.
- IV. Pull out the emergency stop switch on the transmitter (that is logged in (see 4.11)) (TX HEAVY) or push the red power switch on the transmitter (that is logged in (see 4.11)) (ON) (TX MINI).
- IV. Press any key on the transmitter. The ACTIVE LED on the receiver now shines a constant green light and the transmitter is ready for use.



## 4.5 ASSEMBLY REGULATIONS

- I. Before assembly of the receiver, check that it is working correctly.
- II. Before assembly, separate the receiver from the mains.
- III. If possible, secure the receiver within visual range of the end user.
- IV. Do not fit near motors, relays or power cables.
- V. Fit receivers with internal antennae outside the metal housing.
- VI. You must observe the circuit diagram and ensure that it is followed.
- VII. After assembly check each function of the receiver before it is used in the normal working environment.



**Check that the emergency stop switch is working at least once a week!**

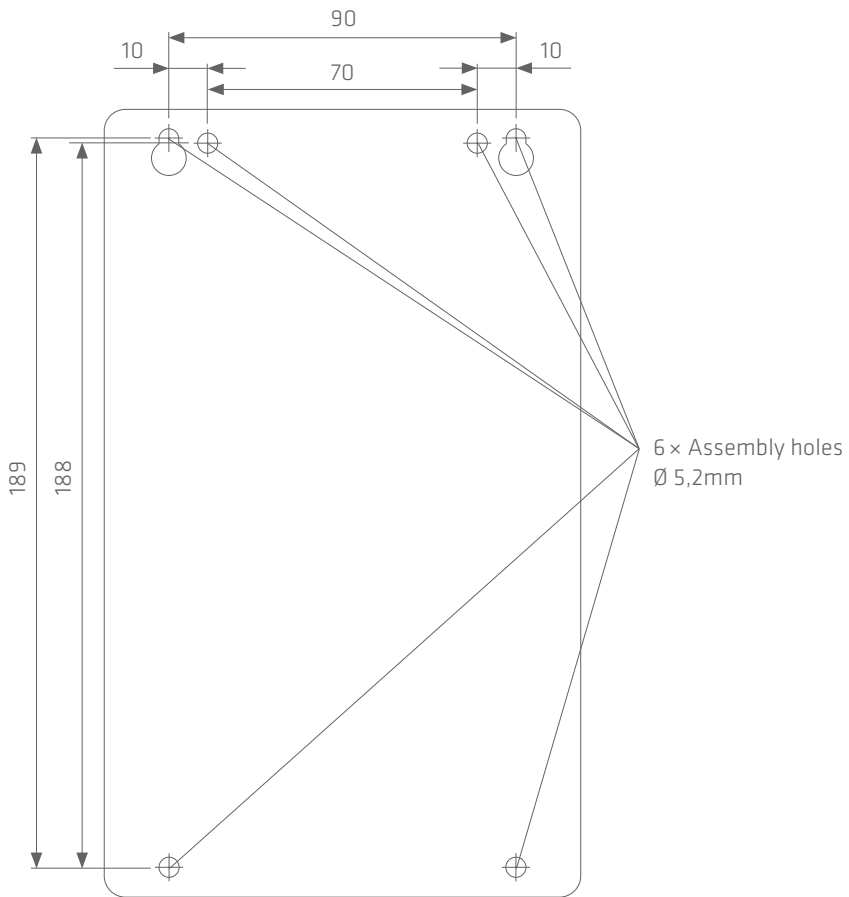


## 4.6 ASSEMBLY GUIDELINES

Fix the receiver with four fixing screws (M5, length as required).



**The maximum torque for the fixing screws must not be exceed 3.5 Nm during assembly.**



## 4.7 CLEANING INSTRUCTIONS

The receiver should only be cleaned with a damp cloth and without chemicals.

## 4.8 CARE AND MAINTENANCE

We recommend that you clean the receiver weekly as described in the previous section (damp cloth, no chemicals). If the receiver is used in a very dirty, e.g. dusty, environment, we recommend that you clean it every day to avoid possible resulting damage.

## 4.9 ERROR CODES AND REPAIR

In case of system malfunctions, the POWER LED shows which error has occurred using an error code. The POWER LED flashes x times then there is a short pause, then the POWER LED flashes x times again etc... If you count how often the POWER LED flashes per interval, you can use the following list to diagnose the error precisely.

*flash sequence (e. g. 3 times)* 

### First category errors (warning):

A first category error is just a warning, however the system is still ready for use. Nevertheless these errors should also be repaired immediately, as otherwise smooth working is not guaranteed.

To reset the error display, press the emergency stop switch on the receiver once and then pull it back out. If the error has been dealt with, the POWER LED lights up again in green and operation can be continued.

POWER LED is flashing: Meaning:  
5 times                      Input voltage below 9V

## Second category errors:

Second category errors lead to an immediate system shutdown in order to prevent possible operational faults. If the cause of the error has been found and repaired, the error display can also be reset.

To do this, please disconnect the receiver from the power supply and connect it again. If the error has been successfully dealt with, the POWER LED lights up again in green and operation can be continued. If the error is still present, the receiver switches itself off again immediately and displays the error code once more.

POWER LED is flashing: Meaning:

<i>6 times</i>	Input voltage below 8V
<i>8 times</i>	Input voltage above 38V
<i>9 times</i>	Overcurrent (main controller)
<i>10 times</i>	High or low voltage (main controller)
<i>11 times</i>	Error in an output (see output LEDs)

If your receiver does not function although no error is displayed, it may be because the radio signal sent by the transmitter is not reaching the receiver. (When a key is pressed on the transmitter, the RF LED DOES NOT light up)

- I. Ensure that the distance between the transmitter and receiver is not greater than 50 metres.
- II. Ensure that there are as few objects as possible, particularly metallic objects, between the transmitter and the receiver.
- III. If you are surrounded by a metallic grating or another heavy metallic structure, please leave these surroundings.
- IV. Check if there are transmission masts in the immediate vicinity, which could lead to faults, and if necessary leave this area.
- V. Check if there are cables in the immediate vicinity carrying high voltage or current and leave these surroundings if necessary.

If the receiver still does not work correctly after carrying out these steps, please contact your supplier.

## 4.10 CABLE ASSIGNMENT

<b>Function:</b>	<b>Number/Colour:</b>
0Vdc	yellow/green
12-24Vdc	1
In 1	2
In 2	3
System active	4
Out 0 (Pump)	5
Out 1	6
Out 2	7
Out 3	8
Out 4	9
Out 5	10
Out 6	11
Out 7	12
Out 8	13
Out 9	14
Out 10	15
Out 11	16
Out 12	17

## 4.11 TRANSMITTER LOGON AND LOGOFF

To log on a new or additional transmitter, learning mode must be activated. Proceed as follows:

- I. Ensure that the receiver is connected to a voltage source (9-30V DC) and the green POWER LED is constantly lit. For this the emergency stop switch on the receiver must be pulled out.
- II. Press the emergency stop switch on the receiver in.
- III. After a minimum of 4 seconds pull the emergency stop switch out. Then press the switch in twice and pull it out again each time. Learning mode is now activated. The POWER LED now flashes fast with a green light.

The procedure described in point three must be carried out within a time window of 4 seconds for learning mode to be activated.

If learning mode is activated, transmitters can be logged on and off.

Press the emergency stop switch to quit the learning mode.

### Logging on a transmitter:

- I. Activate learning mode (see above)
- II. Pull out the emergency stop switch (TX HEAVY) or push up the power switch of the transmitter (TX MINI) (ON).
- III. Press Function key 1 on the transmitter. The ACTIVE LED comes on with a green light when a key is pressed. The transmitter is now logged on.

To log on a further remote control, please repeat the procedure from step two with the other transmitter.

### Logging off a transmitter:

- I. Activate learning mode (see above)
- II. Pull out the emergency stop switch (TX HEAVY) or push up the power switch of the transmitter (TX MINI) (ON).
- III. Press Function key 2 on the transmitter. The ACTIVE LED comes on with a red light when a key is pressed. The transmitter is now logged off.

To log off a further remote control, please repeat the procedure from step two with the other transmitter.

# EXPLANATION OF SYMBOLS



**Caution / Danger**



**Separate household rubbish for disposal after the end of the service life**



**The product is in accordance with and fulfilment of EU guidelines**



**Read the operating instructions before use**

# DECLARATION OF CONFORMITY

We

Intelligent Creative Products bv  
Ondernemersweg 13  
7451 PK Holten  
The Netherlands

declare under our sole responsibility that the products

Icarus Family: *Project 10012*  
Icarus modules: *300030xx - Icarus Mini Handheld*  
*300020xx - Icarus Mini RxBox\_int\_ant*  
*300050xx - Icarus Heavy Handheld*  
*300040xx - Icarus Heavy Rx Box*

to which this declaration relates are in conformity with the technical requirements of the following standard(s)

The Manufacturer, hereby declare that the equipment as tested is representative within manufacturing tolerance to units.

Date: 20-07-2010

Verified:



Anton Bronsvort  
Product Development Manager



Erik van Asselt  
Quality Management Manager

EU-directive:	Based on harmonized EU-standards:	
EMC-directive: 2004/108/EC	EN 61000-3-2:2006 EN 61000-3-3:1995 EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007 EN 61000-6-4:2007	
Automotive	wE4	
Emission:	2004/104/EC (2004) + 2005/49/EC + 2005/83/EC + 2006/28/EC	
Immunity:	2004/104/EC (2004) + 2005/49/EC + 2005/83/EC + 2006/28/EC	
Broadband electromagnetic interference, par. 6.5 of 2004/104/EC (2004), Annex I	CISPR 25 (2002), par. 6.4 2004/104/EC (2004), Annex VII	30 - 75 MHz 62 - 52 dBuV/m 75 - 400 MHz 52 - 63 dBuV/m 400 - 1.000 MHz 63 dBuV/m
Narrowband electromagnetic interference, par. 6.6 of 2004/104/EC (2004), Annex I <sup>1</sup>	CISPR 25 (2002), par. 6.4 2004/104/EC (2004), Annex VIII	30 - 75 MHz 52 - 42 dBuV/m 75 - 400 MHz 42 - 53 dBuV/m 400 - 1.000 MHz 53 dBuV/m
Electromagnetic Radiation, Radiated immunity, par. 6.7 of 2004/104/EC (2004), Annex I <sup>2</sup>	SO 11452-2 (2004) 2004/104/EC (2004), Annex IX	200 - 2.000 MHz 30 V/m
Electromagnetic Radiation, Bulk Current Injection, par. 6.7 of 2004/104/EC (2004), Annex I <sup>2</sup>	ISO 11452-4 (2005) 2004/104/EC (2004), Annex IX	20 - 200 MHz 60 mA
Immunity to transient disturbances along supply lines, par. 6.8 of 2004/104/EC (2004), Annex I	ISO 7637-2 (2004) 2004/104/EC (2004), Annex X Pulse 1, 2a, 2b, 3a, 3b and 4	Immunity test level III
Emission of conducted disturbances, par. 6.9 of 2004/104/EC (2004), Annex I <sup>3</sup>	ISO 7637-2 (2004) 2004/104/EC (2004), Annex X Pulse 1, 2a, 2b, 3a, 3b and 4	12 V system: + 75 V / - 100 V 24 V system: + 150 V / - 450 V
R & TTE directive	<ul style="list-style-type: none"> <li>• EMC 2004/108/EC (article 3.1b of the 1999/5/EEC)</li> <li>• Low Voltage 2006/95/EC(article 3.1a of the 1999/5/EEC)</li> <li>• Automotive 2004/104/EC(article 1.3 of the 1999/5/EEC)</li> </ul>	