

# Tele Radio Jaguar

## MANUAL



Rev. IM-T70-003-A1



## CONTENTS



## FREQUENCY BANK

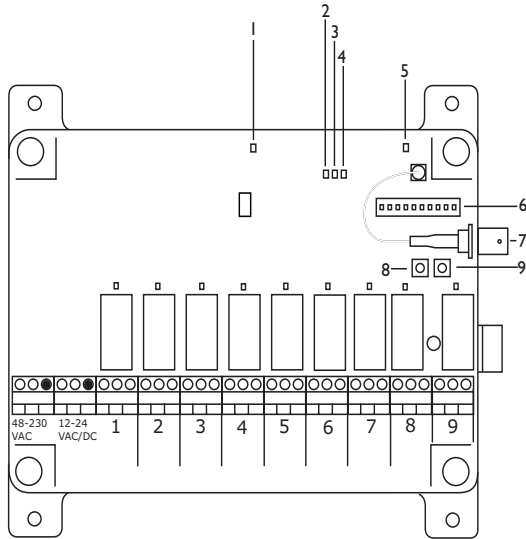
CHANNEL	FREQ.BANK 1	OPTION
1	433.075	111
2	433.175	112
3	433.275	113
4	433.375	114
5	433.475	115
6	433.575	116
7	433.675	117
8	433.775	118
9	433.875	121
10	433.975	122
11	434.075	123
12	434.175	124
13	434.275	125
14	434.375	126
15	434.075	127
16	434.075	128

CHANNEL	FREQ.BANK 2	OPTION
1	433.100	211
2	433.200	212
3	433.300	213
4	433.400	214
5	433.500	215
6	433.600	216
7	433.700	217
8	433.800	218
9	433.900	221
10	434.000	222
11	434.100	223
12	434.200	224
13	434.300	225
14	434.400	226
15	434.500	227
16	434.600	228

CHANNEL	FREQ.BANK 3	OPTION
1	433.125	311
2	433.225	312
3	433.325	313
4	433.425	314
5	433.525	315
6	433.625	316
7	433.725	317
8	433.825	318
9	433.925	321
10	434.025	322
11	434.125	323
12	434.225	324
13	434.325	325
14	434.425	326
15	434.525	327
16	434.625	328

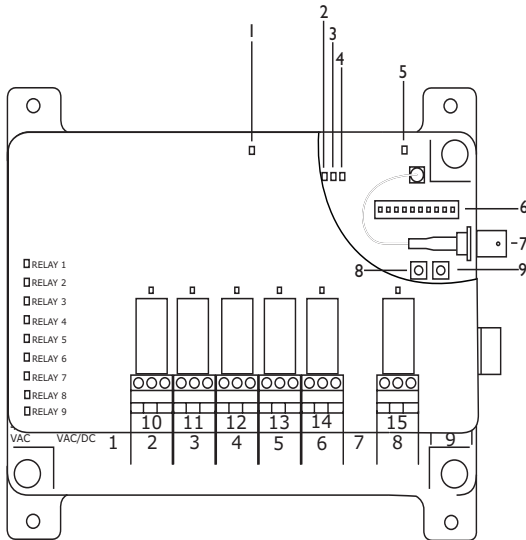
CHANNEL	FREQ.BANK 4	OPTION
1	433.150	411
2	433.250	412
3	433.350	413
4	433.450	414
5	433.550	415
6	433.650	416
7	433.750	417
8	433.850	418
9	433.950	421
10	434.050	422
11	434.150	423
12	434.250	424
13	434.350	425
14	434.450	426
15	434.550	427
16	434.650	428

# RECEIVER



T70RX-09SB

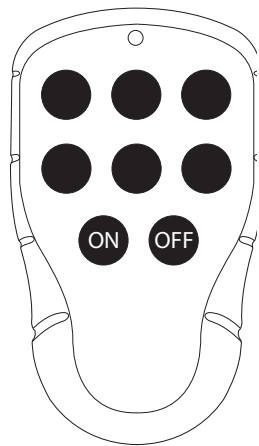
1. the yellow power supply LED
2. the red CODE STORING LED
3. the yellow LATCH LED
4. the green INTERLOCKING LED
5. LOGOUT LED
6. Receiver switch
7. Antenna connector
8. FUNCTION button
9. SELECT button



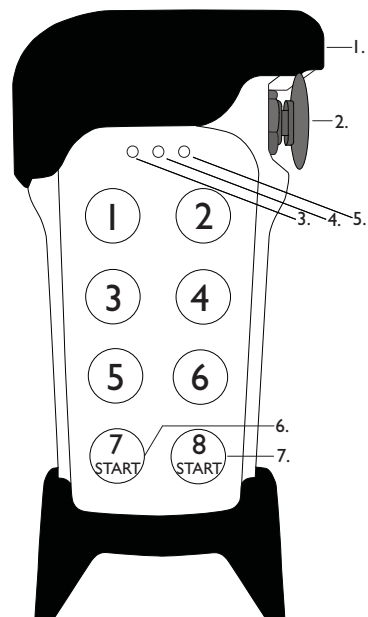
T70RX-15SB

1. the yellow power supply LED
2. the red CODE STORING LED
3. the yellow LATCH LED
4. the green INTERLOCKING LED
5. LOGOUT LED
6. Receiver switch
7. Antenna connector
8. FUNCTION button
9. SELECT button

## TRANSMITTER



T70TX-06TTB  
1. red LED  
2. ON button  
3. OFF button



T70TX-08ERB  
1. rubber cover  
2. STOP button  
3. yellow LED 1  
4. red/ green LED  
5. yellow LED 2  
6. button 7- START button  
7. button 8- START button

## I. GET STARTED

### **READ THE INSTRUCTIONS CAREFULLY BEFORE ASSEMBLING, INSTALLING, PROGRAMMING AND USING TELE RADIO PRODUCTS.**

Tele Radio cannot be held responsible for any damage or other fault caused by a failure to follow the instructions. Doing so may invalidate the warranty.

**IT IS YOUR RESPONSIBILITY TO FIND OUT ABOUT  
THE LAWS AND REGULATIONS  
THAT APPLY IN YOUR COUNTRY/REGION!**

### I.2 SAFETY INSTRUCTIONS

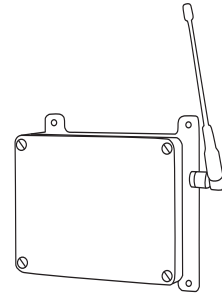
- This product should only be installed by qualified personnel.
- Switch off the power supply to the receiver before connecting the equipment.
- Turn off the transmitter when not in use.
- Keep a good overview of the work area.
- Use undamaged cables. Make sure that cables do not hang loose.
- Avoid installing the product in areas affected by strong vibrations.
- Only qualified personnel should have access to the transmitter.
- Do not leave the transmitter unsupervised.
- Contact your dealer for repair and maintenance work on the product.
- Retain the instructions for future reference and re-programming of the system.

*If the manual does not cover all your needs, visit our website for FAQ & the latest information:  
[www.tele-radio.com](http://www.tele-radio.com)*

### I.3 TECHNICAL DATA

#### THE SYSTEM

OPERATING FREQUENCY: 433.075-434.650 MHz.  
 CHANNEL: 64 (divided into 4 banks)  
 CHANNEL SEPARATION: 25 kHz.



#### RECEIVER

T70RX-09SB 9 relays  
 T70RX-15SB 15 relays (with expansion board)  
 WEIGHT: 700 grams (15 relays)

#### TRANSMITTER T70TX-08ERB

SIZE: 95 x 185 mm. (incl. rubber cover)  
 WEIGHT: 300 grams (incl. batteries)



#### TRANSMITTER T70TX-06TTB

SIZE: 113 x 66 x 35 mm.  
 WEIGHT: 120 grams (incl. batteries)



### I.4 RECEIVER POWER SUPPLY

POWER SUPPLY	CURRENT CONSUMPTION	
	(MIN.)	(MAX.)
12 V DC	30mA	300 mA
24 V DC	15 mA	200 mA
24 V AC	12 mA	150 mA
48 V AC	7 mA	100 mA
115 V AC	7 mA	50 mA
230 V AC	7 mA	30 mA



## 1.5 CHECK THE CONTENTS

Check that you have got the product that you ordered. If anything is missing, please contact your dealer immediately. The delivery also contains:

- 3 alkaline batteries for the transmitter
- 1 connection comb
- 1 installation and programming instruction manual

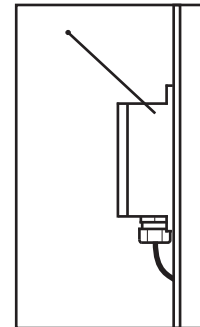
## 1.6 CONNECT THE RECEIVER

- Check that you have connected the power supply to the correct connection terminal.
- Note that all relays are potential-free, which means that you need to supply voltage if you want power out of a relay (e.g. via a connection comb).

## 1.7 INSTALL RECEIVER AND ANTENNA

### 1.7.1 Place the receiver

- Well protected from wind, damp and water.
- With cable holders and vent plugs face down to prevent water from seeping in (see picture).
- If the receiver is to be placed in a hard-to-reach place, it is advisable to complete the settings in the receiver before mounting it.



### 1.7.2 Place the antenna

- As high above the ground as possible.
- In as free position as possible.
- Well away from metal objects, such as metal girders, high-voltage cables and other antennas.
- Check that there is a good connection between the antenna and the material on which it has been installed, e.g. after repainting of the chassis.
- Check that the antenna aerial and any coaxial cables are undamaged.
- Check that the antenna is directed upwards at a 45° angle.

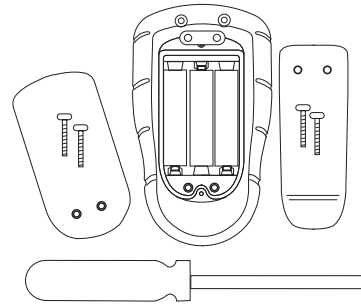
## I.8 INSTALL BATTERIES IN THE TRANSMITTER

### I.8.1 On the T70TX-06TTB transmitter

1. Remove the clip.
2. Remove the battery cover.
3. Put the batteries in.
4. Put back the battery cover (2 screws).
5. Put back the clip (2 screws).

*For optimum performance, use alkaline batteries.*

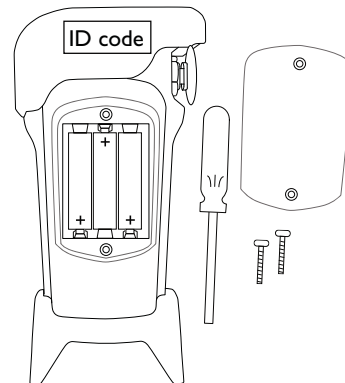
**NOTE!** If you need to change the frequency bank, we recommend doing this before putting back the battery cover and clip.



### I.8.2 On the T70TX-08ERB transmitter

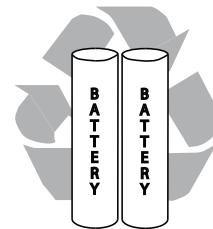
1. Remove the battery cover.
2. Put the batteries in.
3. Put back the battery cover (2 screws).

*For optimum performance use alkaline batteries.*



## I.9 RECYCLING OF BATTERIES

Used batteries should always be recycled. Contact your local authority or dealer for more information on proper recycling of batteries in your area.



## I.10 TRANSMITTER ID CODE

### On the T70TX-08ERB transmitter

Write down the transmitter ID code in the Settings document. See picture above for label position. Label is placed under the rubber cover.

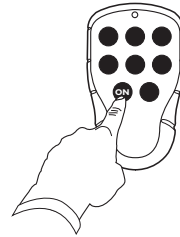
## 2 TRANSMITTER SETTINGS

### 2.1 Starting/ turning the transmitter off

#### 2.1.1 Starting T70TX-06TTB

1. Press the ON button for at least 1 second.

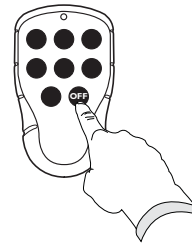
*When the transmitter is active, the transmitter LED flashes red. When transmitting, the transmitter LED lights red continuously.*



#### 2.1.2 Turning off T70TX-06TTB

1. Press the OFF button.

*The transmitter LED goes out.*



#### 2.1.3 Starting T70TX-08ERB

1. Pull out the STOP button.

2. Press the START buttons 7 and 8 for at least 1 second.

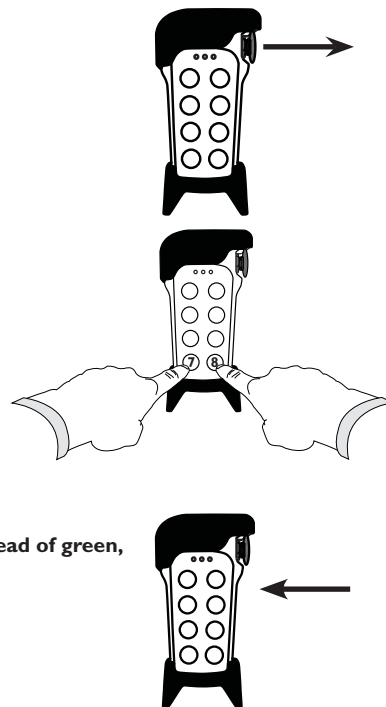
*If the transmitter LED is flashing red, the STOP button has not been pulled out.*

*When the transmitter is active, the transmitter LED is flashing green. When the transmitter is transmitting, the transmitter LED lights green continuously.*

**NOTE!** If the transmitter LED is lighting or flashing red instead of green, the battery power may be low. Check the batteries.

#### 2.1.4 Turning off T70TX-08ERB

1. Press the STOP button. The transmitter is now turned off.



## 2.2 AUTOMATIC SHUTDOWN SETTINGS

### 2.2.1 T70TX-06TTB transmitter

The transmitter will turn off after 1 minute idle. This cannot be adjusted.

### 2.2.2 T70TX-08ERB transmitter

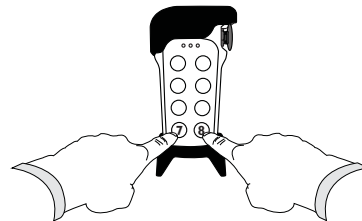
Automatic shutdown means that the transmitter will switch itself off, if you do not press a button for 1 minute (you can adjust this time according to the table below).

The transmitter does not log off from the receiver when it is automatically shut down.

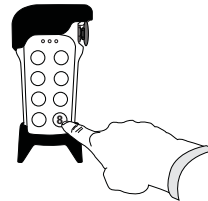
### 2.2.3 Change Automatic Shutdown time

OPTION	TIME
1	No automatic shutdown
2	1 minute
3	3 minutes
4	6 minutes
5	12 minutes

1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



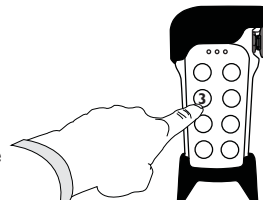
2. Keep button 8 pressed. Release button 7.



3. Release button 8.

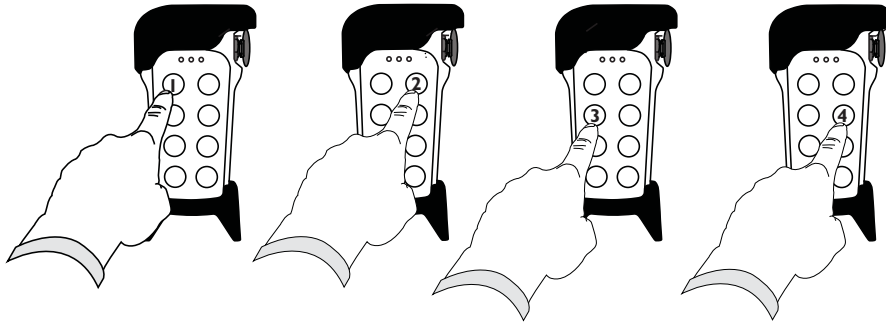
**Within 0.3 seconds:** Press button 3.

*Yellow transmitter LED 2 lights up and the green transmitter LED begins to flash.*



If you exceed the 0.3 second interval, the transmitter will exit the programming mode and will start up instead.

4. Enter the security code 1, 2, 3, 4 (up to 4 seconds between each number).

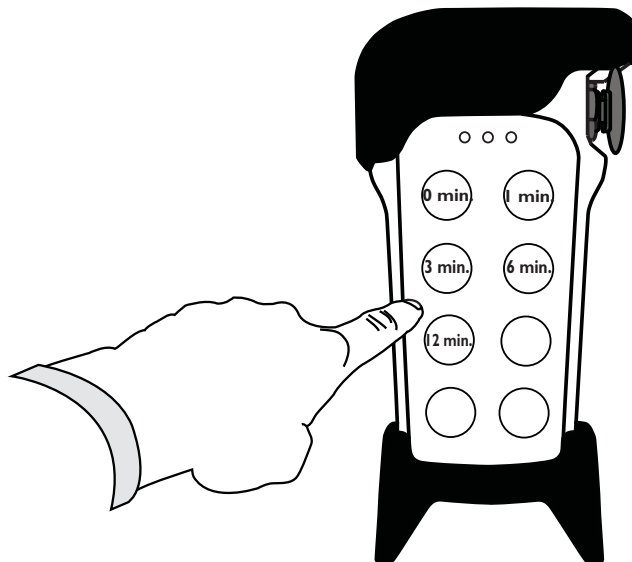


The transmitter LED starts to flash green and yellow transmitter LED 2 goes out.

5. Enter your choice 1-5:

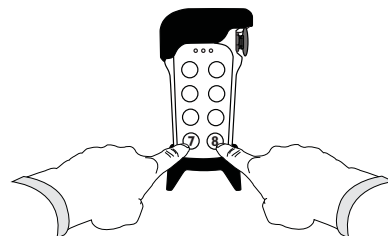
- 1= no automatic shutdown
- 2= 1 minute
- 3= 3 minutes
- 4= 6 minutes
- 5= 12 minutes

Yellow transmitter LED 1 flashes 3 times when the time setting has been changed.



6. Make sure to write down the new time for automatic shutdown in the Settings document.

6. Re-start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



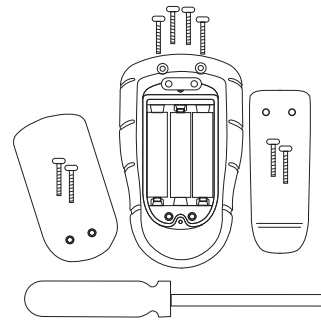
## 2.3 FREQUENCY SETTINGS

If your product will be used in an area with very little risk of interference from other radio-controlled equipment, skip this section. If necessary, you can switch the frequency at a later date. (See the first pages of the manual for frequency table).

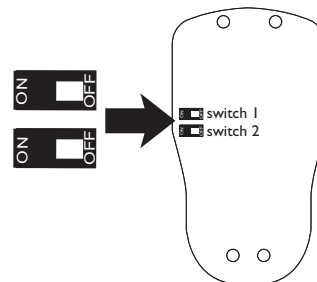
### 2.3.1 Switch frequency bank on T70TX-06TTB

**NOTE! IF YOU NEED TO SWITCH FREQUENCY BANK, WE RECOMMEND DOING THIS BEFORE REPLACING THE BATTERY COVER AND CLIP. MAKE FREQUENCY BANK SETTINGS BEFORE STORING THE TRANSMITTER IN THE RECEIVER. IF YOU WANT TO SWITCH FREQUENCY BANK AFTER STORING THE TRANSMITTER IN THE RECEIVER, YOU WILL HAVE TO ERASE THE TRANSMITTER FROM THE RECEIVER, SWITCH FREQUENCY BANK AND THEN RE-STORE THE TRANSMITTER IN RECEIVER.**

1. Remove the clip and battery cover on the back of the transmitter using a screw-driver. Remove any batteries that have been installed. Take off the transmitter's black casing.



2. Select frequency bank (see table below) on the two switches on the circuit board behind the batteries. The default setting is channel 1 in frequency bank 1.



3. Make sure to write down the new frequency bank in the Settings document.

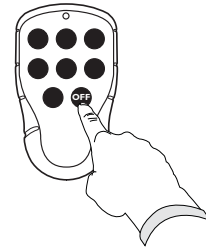
SWITCH 1	SWITCH 2	FREQUENCY BANK
OFF	OFF	1
ON	OFF	2
OFF	ON	3
ON	ON	4

## 2.3.2 Moving up and down within a frequency bank on T70TX-06TTB

The user can move up and down within a frequency bank while using the transmitter. This can be useful if there is a major risk of interference within the work area. The default setting is channel 1 in frequency bank 1.

The transmitter must be on.

1. Press the OFF button and keep it pressed.

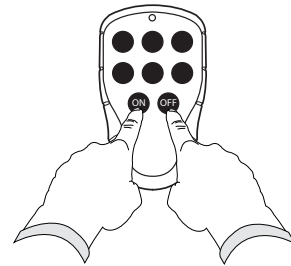


2. **Within 3 seconds:**

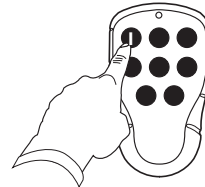
Press ON without releasing OFF.

*Transmitter LED flashes for 5 seconds.*

3. Release ON and OFF.



4. To move DOWN in frequency, press button 1.  
(1 press = 1 step in the table).



To move UP in frequency, press button 2.  
(1 press = 1 step in the table).



*The transmitter LED flashes 3 times.*

The transmitter turns off. The next time you start the transmitter, it will start in the new frequency.

**NOTE!** The next time that you activate the receiver by pressing a button on the transmitter, it can take up to 3 seconds for the receiver to connect to the transmitter.

### 2.3.3 Move more than one step on the T70TX-06TTB

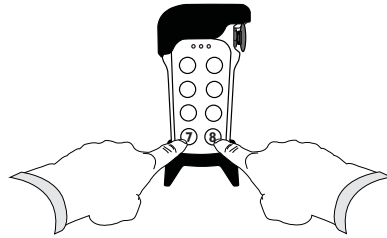
If you want to move several steps in frequency, you will need to restart the transmitter after every step. In this case you don't have to wait until the receiver connects to the transmitter.

If you move all the way to the bottom of the frequency table, the next step will be back to the top. If you move all the way to the top of the frequency table, the next step will be right at the bottom.

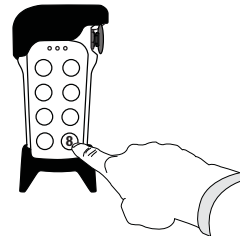
### 2.4 Switch frequency bank on the T70TX-08ERB

**NOTE! MAKE FREQUENCY BANK SETTINGS BEFORE STORING THE TRANSMITTER IN THE RECEIVER. IF YOU WANT TO SWITCH FREQUENCY BANK AFTER STORING THE TRANSMITTER IN THE RECEIVER, YOU WILL HAVE TO ERASE THE TRANSMITTER FROM THE RECEIVER, SWITCH FREQUENCY BANK AND THEN RE-STORE THE TRANSMITTER IN THE RECEIVER.**

1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.

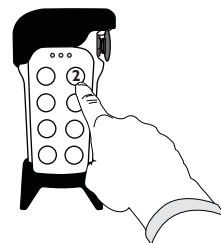


2. Keep button 8 pressed. Release button 7.



3. Release button 8.  
**Within 0.3 seconds:** Press button 2.

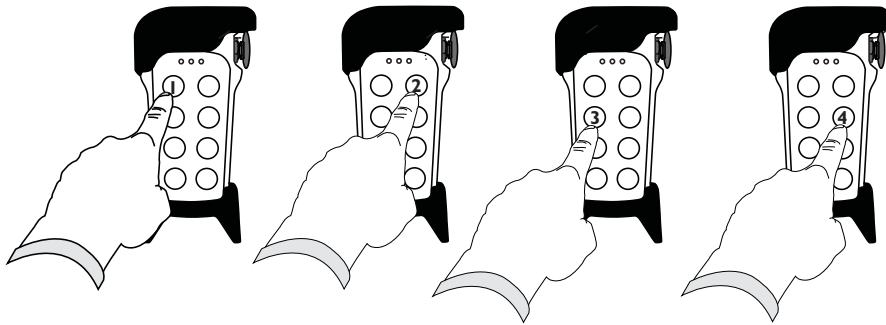
*Yellow LED 2 lights up and the green LED flashes.*



*If you exceed the 0.3 second interval, the transmitter exits programming mode and starts up.*



4. Enter the security code 1, 2, 3, 4 (up to 4 seconds between each number).



The green LED flashes and yellow LED 2 goes out.

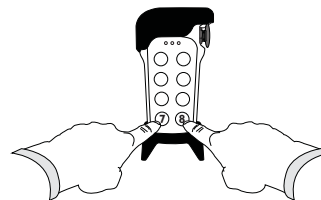
5. Press the 3-digit number for **OPTION**  
(See the first pages of the manual for frequency table).

Yellow transmitter LED 1 flashes 3 times when the setting has been made.

CHANNEL	FREQ.BANK I	OPTION
1	433.075	111
2	433.175	112
3	433.275	113
4	433.375	114
5	433.475	115

6. Make sure to write down the new frequency bank in the Settings document.

7. Re-start the transmitter by pressing the **START** buttons 7 and 8 for at least 1 second.



## 2.4.1 Settings to move up and down within a frequency bank on T70TX-08ERB

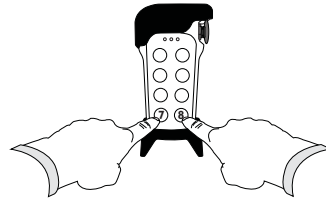
Decide how to move up and down within a frequency bank. Skip this section if you do not want to change the default settings.

**1. SAVE NEW FREQUENCY** (default setting). When a user moves up or down within a frequency bank, the transmitter saves the new frequency and uses it the next time it is started up.

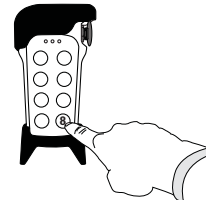
**2. TEMPORARY MOVE** When a user moves up or down within a frequency bank, the transmitter will not save the new frequency. The new frequency is only used until the transmitter is restarted.

**3. OFF** Users are not able to move up or down within a frequency bank.

1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



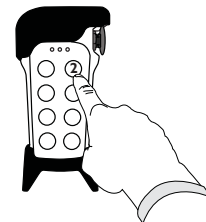
2. Release button 7.  
Keep button 8 pressed.



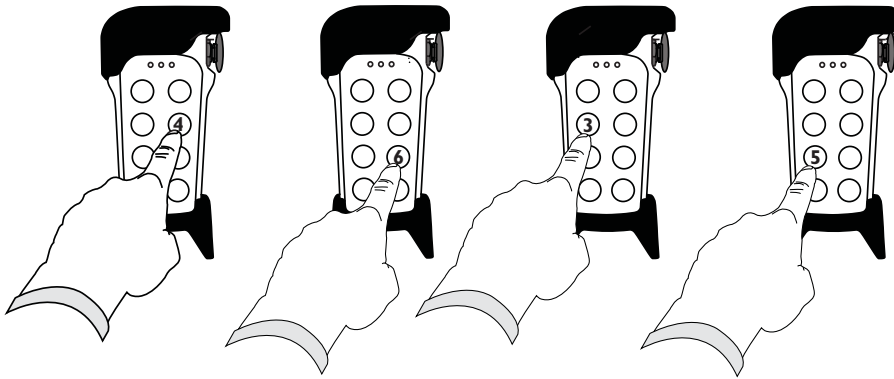
3. Release button 8.  
**Within 0.3 seconds:** Press button 2.

*Yellow transmitter LED 2 lights and the transmitter LED begins to flash green.*

If you exceed the 0.3 second interval, the transmitter will exit the programming mode and starts up.



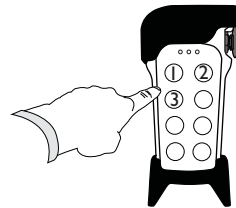
4. Enter the security code 4, 6, 3, 5 (up to 4 seconds between each number).



The transmitter LED flashes green. Yellow transmitter LED 2 lights up.

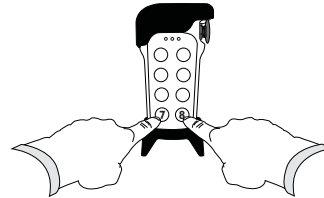
5. Enter your choice:

- 1. SAVE NEW FREQUENCY
- 2. TEMPORARY MOVE
- 3. OFF



The transmitter turns off.  
Yellow transmitter LED 2 goes out.

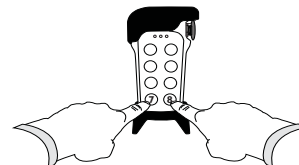
6. Re-start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



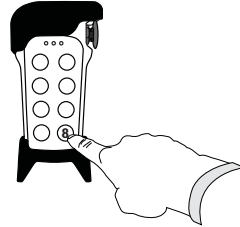
## 2.4.2 Move up and down within a frequency bank on T70TX-08ERB

Allowing users to move up and down within a frequency bank when using the transmitter can be useful, if there is a major risk of interference within the work area (see previous section).

1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.

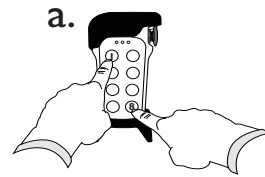


2. Release button 7. Keep button 8 pressed.



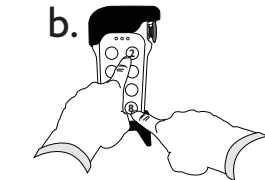
1a. Keep button 8 pressed. Press 1 to move DOWN within the frequency.

*Yellow transmitter LED 1 lights up.*



1b. Keep button 8 pressed. Press 2 to move UP within the frequency.

*Yellow transmitter LED 2 lights up.*



NOTE! If you move all the way to the bottom of the frequency table, the next step will be back to the top. If you move all the way to the top of the frequency table, the next step will be right at the bottom.

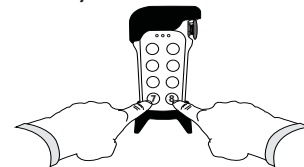
2. Release all buttons.

The frequency setting is now changed. Depending on the settings, this may apply until you turn off the transmitter or until the frequency is being switched again.

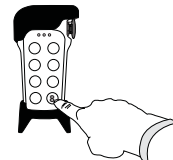
### 2.4.3 Check the current frequency of the transmitter on T70TX-08ERB

You can use the transmitter to find out what frequency it is currently set to send within.

1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



2. Release button 7.  
Keep button 8 pressed.

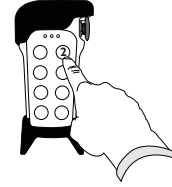


3. Release button 8.

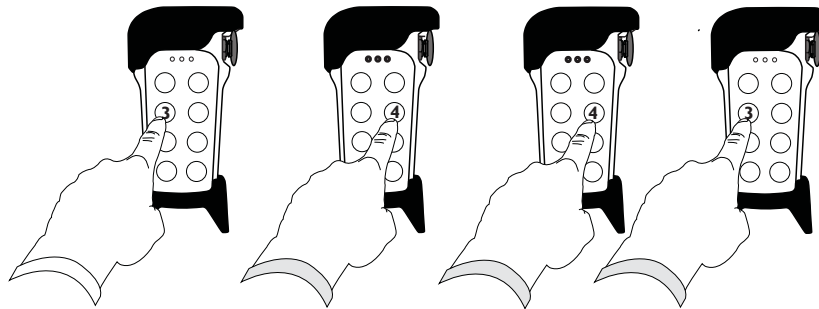
**Within 0.3 seconds:** Press button 2.

*Yellow transmitter LED 2 lights up and the transmitter LED flashes green.*

If you exceed the 0.3 second interval, the transmitter will exit the programming mode and starts up.



4. Enter the security code 3, 4, 4, 3 (up to 4 seconds between each number).



*The green transmitter LED starts to flash. Yellow transmitter LED 2 lights up.*

#### **1. FREQUENCY BANK 1-4:**

The transmitter LED lights green + yellow transmitter LED 2 flashes 1-4 times depending on what frequency BANK the transmitter is sending on.

#### **2. FREQUENCY CHANNEL 1-16:**

The transmitter LED lights red + yellow transmitter LED 2 flashes 1-16 times depending on what frequency CHANNEL the transmitter is sending on.

*The flashing sequence will be repeated until the transmitter is turned off.*

## 3 RECEIVER SETTINGS

### 3.1 FUNCTION SELECTION

You can make several selections to decide how to use your system. Some of the settings are made on the transmitter, others are made on the receiver. You can see the Function Selections available for your transmitter in this section. This is followed by the selections that you can do on the receiver. Read through the following sections carefully before making the Function Selection choice.

#### 3.1.1 T70TX-06TTB transmitter

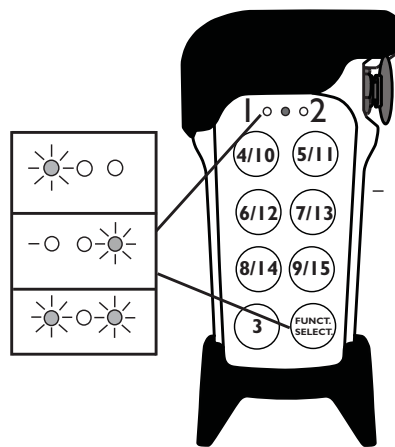
This transmitter is designed to control one receiver. The standard setting therefore is Function Selection 1, which can not be modified. Find out how the system works in the section called *Operating Mode 1*.

#### 3.1.2 T70TX-08ERB transmitter

If you want to use your transmitter to control a single receiver, you don't have to do anything. The default setting is Function Selection 1, which is for controlling only one receiver. If you want to control 2 receivers at the same time or one after another, choose Function Selection 2.

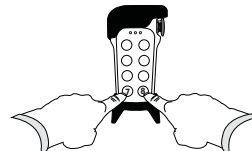
#### 3.1.3 The yellow LEDs on T70TX-08ERB

When the transmitter button 8 is set on Function Selection 2, you can control the transmitter's 2 yellow LEDs by scrolling (according to the yellow LEDs preset startup mode. How to change the preset startup mode, see the Set yellow LEDs on the transmitter at start up section).

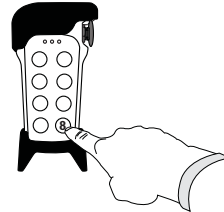


#### 3.1.4 Choosing Function Selection 1 or 2 on T70TX-08ERB

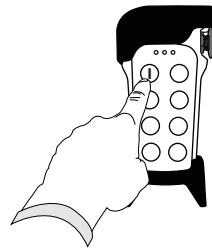
1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



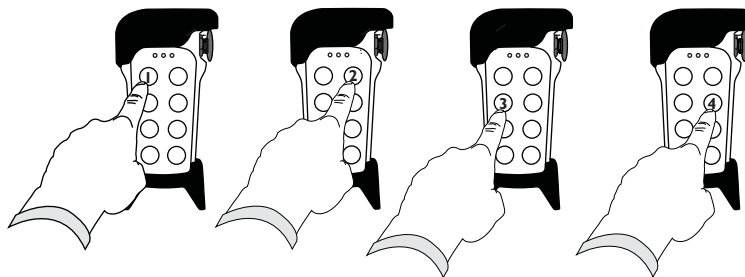
2. Release button 7.  
Keep button 8 pressed.



3. Release button 8.  
**Within 0.3 seconds:** Press 1.  
*Yellow transmitter LED 2 lights up. The transmitter LED flashes green.*

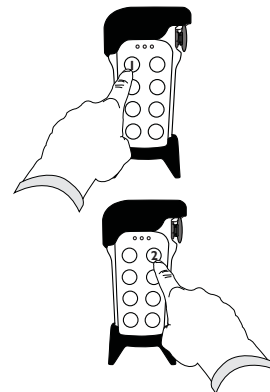


4. Enter the security code 1,2,3,4 (up to 4 seconds between the numbers).  
*The transmitter LED starts flashing green and yellow transmitter LED 2 goes out.*

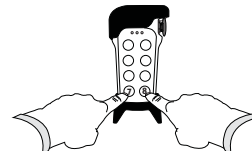


5. Enter your Function Selection choice: 1 or 2.

*Yellow transmitter LED 1 flashes 3 times.*



6. Re-start the transmitter by pressing the START buttons  
7 and 8 for at least 1 second.



## 3.2 OPERATING MODE

There are two receiver models available (see pictures in the first pages of the manual):

- T70RX-09SB- 9 relays
- T70RX-15SB- 15 relays (with expansion card)

With the T70TX-08ERB transmitter you can choose functionality for the system by choosing one of the preset Operating Modes (see overview on next page). You can change the settings using the receiver switch.

### **STOP button**

When the transmitter is active and the STOP-button is pressed, all relays go off.

### 3.2.1 How the relays function

Relays 4-9 or 4-15 (with expansion card) are function relays. Relay 1-3 work as described in the next section:

#### **RELAY 1**

- Activates when the transmitter is turned on.
- Turns off when transmitter buttons 1-7 have not been pressed in the last 6 minutes.
- Does not turn off until the relays that have a latching function have been restored to the OFF position.

#### **RELAY 2**

- Always activates when buttons 1-6 are pressed on the transmitter.  
The relay does not turn off until the relays that have a latching function have been restored to the OFF position (does not apply to relay 3). NOTE! Not in Operating Mode 7.

#### **RELAY 3**

- Activates when button 7 is pressed on the transmitter. NOTE! Not in Operating Mode 7.

### 3.2.2 LOGOUT function

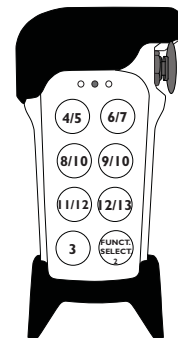
Not available on the T70TX-06TTB transmitter. LOGOUT is activated in all Operating Modes for the T70TX-08ERB transmitter. (See LOGOUT transmitters section).

### 3.2.3 Two-step buttons

When two numbers are shown on the same button (see picture), the first indicates the relay controlled when the button is pressed in halfway and the other indicates the relay controlled when the same button is fully pressed in.



### 3.2.4 Time delay between button steps

In some Operating Modes you can program a transmitter button time delay of 0.5 seconds. The delay is between the upper and lower steps of a button. Set switch 6 to ON position. Applies to Operating Modes 3, 4, 5, 6 and 8.





## OPERATING MODE

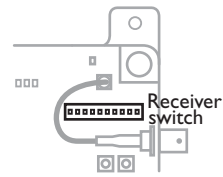
			RELAYS	RECEIVERS	TWO-BUTTONS	LATCHING	INTER-LOCKING
OP. MODE 1	1-2	–	9 or 15	1-2	No	programmable	programmable
OP. MODE 2	–	1-3	9 or 15	1-2	Yes	programmable	programmable
OP. MODE 3	–	1-3	15	2	Yes	automatic	automatic
OP. MODE 4	–	1-3	15	2	Yes	automatic	automatic
OP. MODE 5	–	1-3	15	1-2	Yes	automatic	automatic
OP. MODE 6	–	1-3	15	1-2	Yes	automatic	automatic
OP. MODE 7	–	1-3	9	1-2	Yes	not possible	not possible
OP. MODE 8	–	1-3	15	2	No	not possible	automatic

### 3.3 SELECT OPERATING MODE

#### SELECT OPERATING MODE BEFORE STORING THE TRANSMITTER!

1. Open the receiver (4 screws).

2. Enter the settings on the receiver switch in accordance with the picture shown for each Operating Mode. In some Operating Modes you can decide whether to put the switch in ON or OFF position, depending on what functionality you want for the receiver. A receiver switch that is possible to change is shown in both ON and OFF positions on the picture. The functions available by switching it are shown next to the receiver switch picture.



### 3.3.1 Switch Operating Mode after storing a transmitter

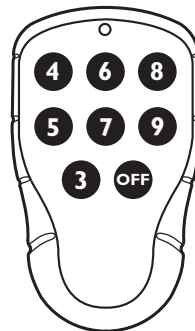
If you want to switch Operating Mode after storing one or more transmitters, you must erase all previous settings as described below:

1. Open the receiver (4 screws).

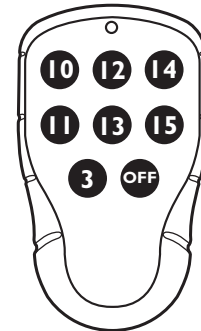
2. Make a Master Reset (see Master Reset section), which deletes all settings (interlocking and latching that are not automatic, as well as storing a transmitter) that you have made on the receiver. Choose Function Selection 1 or 2, choose Operating Mode and store the transmitter(s) again.

### 3.3.2 OPERATING MODE I

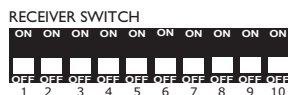
TRANSMITTER: T70TX-06TTB  
 RECEIVERS: 1 receiver with 9/15 relays  
 NUMBER OF TRANSMITTERS: 1-2  
 LATCHING: Available on relays 4-15.  
 INTERLOCKING: Available on relays 4/5, 6/7, 8/9, 10/11, 12/13 and 14/15.



TRANSMITTER 1  
activates relays 4-9

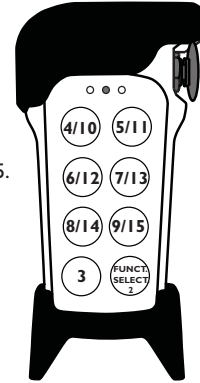


TRANSMITTER 2  
activates relays 10-15



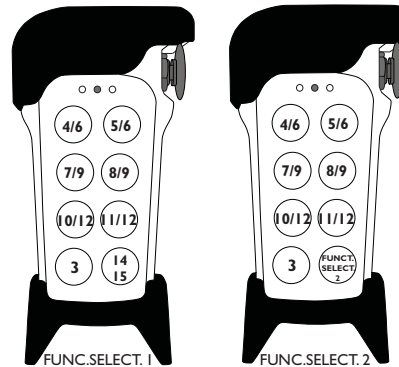
### 3.3.3 Operating Mode 2

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1-2 receiver(s) with 9/ 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Available on relays 4-15  
**INTERLOCKING:** Available on relays 4/5, 6/7, 8/9, 10/11, 12/13 och 14/15.  
**FUNCT. SELECT 1:** Yes. Transmitter button 8 no function.  
**FUNCT. SELECT 2:** Yes. Yes. Select Func. Select. 2 on the transmitter.  
 Transmitter button 8 controls 2 receivers via the yellow transmitter LEDs. How the LEDs function depend on how the transmitters are stored (see *Storing transmitters* section).



### 3.3.4 Operating Mode 3

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1-2 receiver(s) with 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Available on relay 14  
**INTERLOCKING:** Automatic on relays 4/5/6, 7/8/9 and 10/11/12  
**MODE-SPECIFIKT:** Relay 13 is not used  
**FUNCT. SELECT 1:** Yes. Switch 5 in OFF position: Transmitter button 8 activates relays 14 and 15 (see picture).  
**FUNCT. SELECT 2:** Yes. Select Func. Select. 2 on the transmitter.  
 Transmitter button 8 controls 2 receivers via the yellow transmitter LEDs. How the LEDs function, depend on how the transmitters are stored (see *Storing transmitters* section).

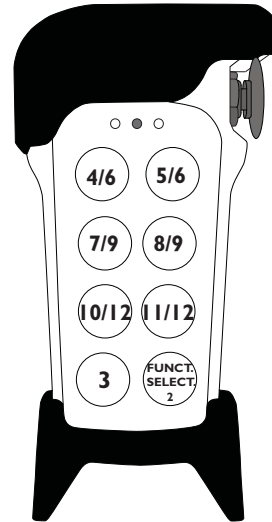


#### RECEIVER SWITCH 5

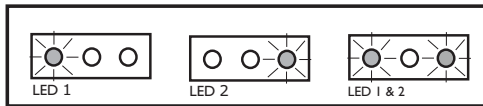


### 3.3.5 Operating Mode 4

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1 receiver with 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Available on relays 14 and 15  
**INTERLOCKING:** Automatic on relays 4/5/6, 7/8/9 and 10/11/12  
**MODE-SPECIFIC:** Relay 13 is not used  
**FUNCT. SELECT 1:** Not possible  
**FUNCT. SELECT 2:** Yes. Func. Select. 2 must be selected on the transmitter.

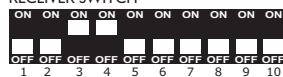


#### TRANSMITTER'S YELLOW LEDS



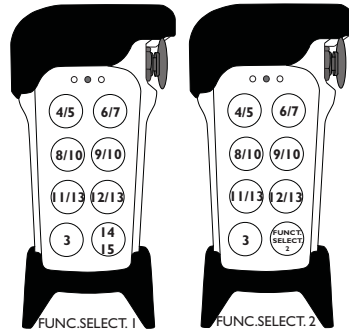
activates relay 14    relay 15    relays 14+15

#### RECEIVER SWITCH



### 3.3.6 Operating Mode 5

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1-2 receiver(s) with 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Available on relay 14  
**INTERLOCKING:** Automatic on relays 4/5/6/7, 8/9/10 and 11/12/13  
**FUNCT. SELECT 1:** Yes. Switch 5= OFF: Transmitter button 8 activates relays 14 and 15 (see picture).  
**FUNCT. SELECT 2:** Yes. Select Func. Select. 2 on the transmitter. Transmitter button 8 controls 2 receivers via the yellow transmitter LEDs. How the LEDs function, depend on how the transmitters are stored (see Storing transmitters section).



#### RECEIVER SWITCH



#### RECEIVER SWITCH 5

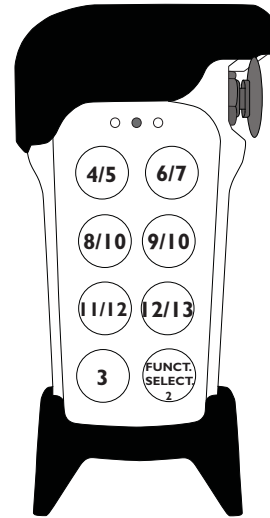
No function on relay 14 och 15.  
 Relay 14: latching on transmitter button 8.  
 Relay 15: momentary on transmitter button 8.

#### RECEIVER SWITCH 6

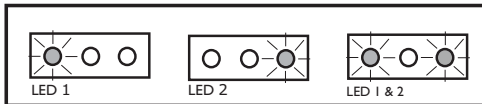
No delay between high- and lowspeed functions.  
 A delay of 0.5 seconds between high and lowspeed functions.

### 3.3.7 Operating Mode 6

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1 receiver with 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Available on relays 14 and 15  
**INTERLOCKING:** Automatic on relays 4/5/6/7, 8/9/10 and 11/12/13  
**FUNCT. SELECT 1:** Not possible  
**FUNCT. SELECT 2:** Yes. Func. Select. 2 must be selected on the transmitter. Transmitter button 8 controls the receiver via the yellow transmitter LEDs. How the LEDs function depend on how the transmitters are stored (see *Storing transmitters* section).

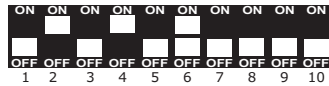


#### TRANSMITTER'S YELLOW LEDS

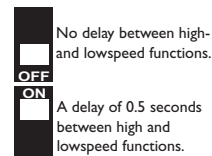


activates relay 14    relay 15    relays 14+15

#### RECEIVER SWITCH

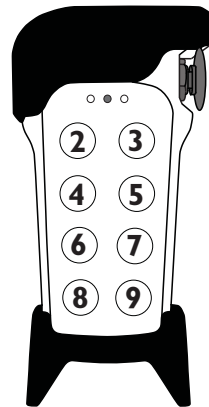


#### RECEIVER SWITCH 6

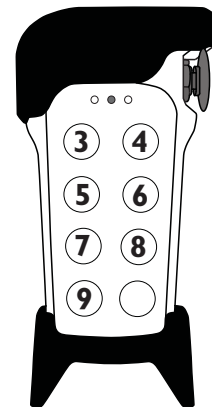


### 3.3.8 Operating Mode 7

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1 receiver with 9 relays.  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Not possible  
**INTERLOCKING:** Not possible  
**FUNCT. SELECT 1:** Yes. Func. Select. 1 must be selected on the transmitter.  
**FUNCT. SELECT 2:** Not possible

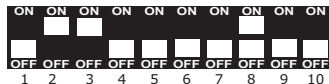


Receiver switch 8=OFF

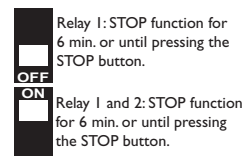


Receiver switch 8=ON

#### RECEIVER SWITCH

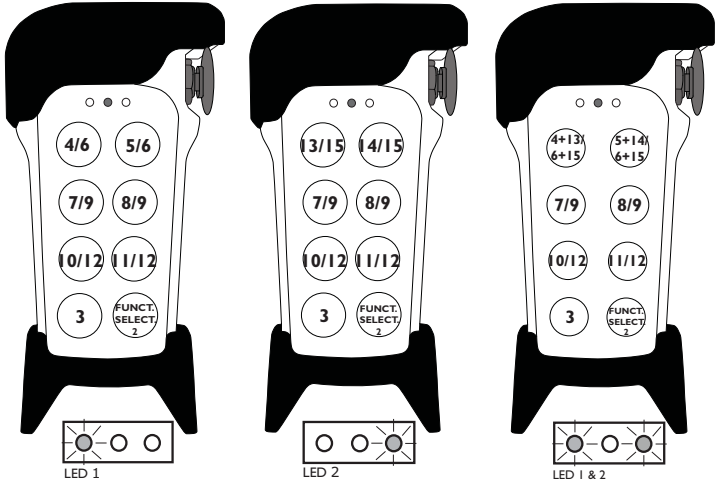


#### RECEIVER SWITCH 8



### 3.3.9 Operating Mode 8

**TRANSMITTER:** T70TX-08ERB  
**RECEIVERS:** 1 receiver with 15 relays  
**NUMBER OF TRANSMITTERS:** 1-3  
**LATCHING:** Not possible  
**INTERLOCKING:** Available on relays 4/5/6, 7/8/9, 10/11/12 and 13/14/15  
**FUNCT. SELECT 1:** Not possible  
**FUNCT. SELECT 2:** Yes. Func. Select. 2. must be selected on the transmitter. Transmitter button 8 controls the receiver via the yellow transmitter LEDs.



### RECEIVER SWITCH 6

No delay between high- and lowspeed functions.  
**OFF**  
 A delay of 0.5 seconds between high and lowspeed functions.  
**ON**

## 3.4 CHANGE OF LED THAT LIGHTS UP DURING STARTUP

### 3.4.1 On the T70TX-06TTB transmitter

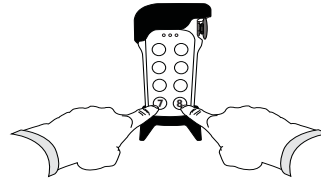
The transmitter does not have this option.

### 3.4.2 On the T70TX-08ERB transmitter

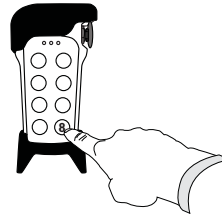
Applies to T70TX-08ERB with Function Selection 2. You can select how the yellow LEDs on the transmitter will light up when you start the transmitter. The default setting is for yellow LED 1 to light up when you start the transmitter. If you want to keep the default setting, skip this section.

1. No yellow LED lights up at start
2. Yellow LED 1 lights up at start
3. Yellow LED 2 lights up at start
4. Yellow LEDs 1 + 2 light up at start

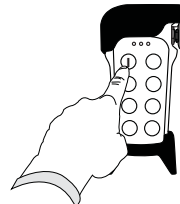
1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



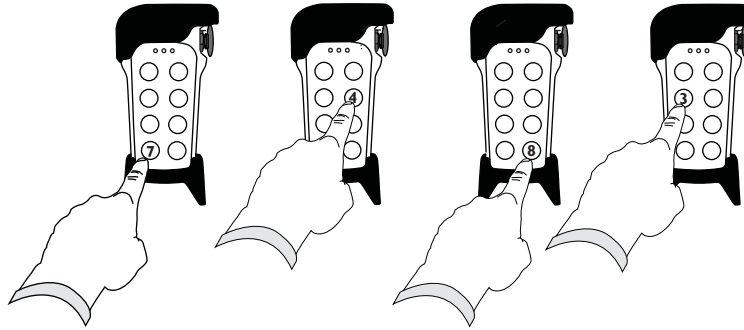
2. Release button 7.  
Keep button 8 pressed.



3. Release button 8.  
**Within 0.3 seconds:** Press 1.  
*Yellow LED 2 lights up. The LED starts to flash green.*



4. Enter the security code 7, 4, 8, 3 (up to 4 seconds between the numbers).

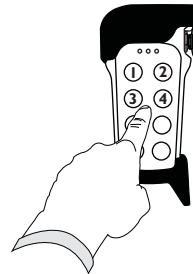


The green LED starts to flash and yellow LED 2 goes out.

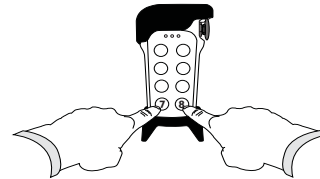
5. Enter your choice:

1. No yellow LED lights up
2. Yellow LED 1 lights up
3. Yellow LED 2 lights up
4. Yellow LEDs 1 + 2 light up

Yellow LED 1 flashes 3 times.



6. Re-start the transmitter by pressing the START buttons 7 and 8.



### 3.5 POWER SAVING FOR YELLOW TRANSMITTER LEDS

#### 3.5.1 On the T70TX-06TTB transmitter

The transmitter does not have this option.

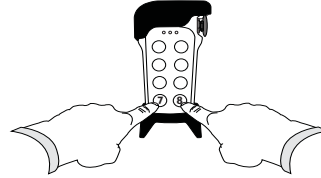
#### 3.5.2 On the T70TX-08ERB transmitter

Applies to T70TX-08ERB with Function Selection 2. When the transmitter is in Standby mode (i.e. not transmitting) default setting is that the selected yellow LEDs are continuously lit. You can make the LEDs flash to increase the battery life by changing the settings. If you want to keep the default setting, skip this section.

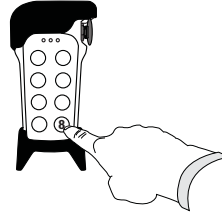
1. The selected Yellow LEDs are continuously lit
2. Selected LEDs flash



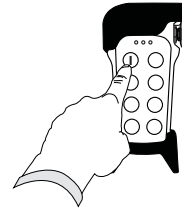
1. Start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



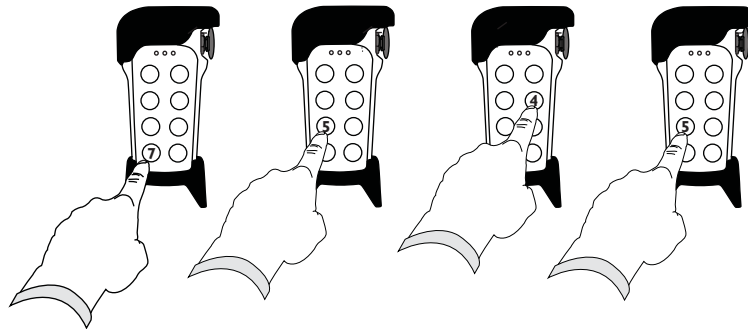
2. Release button 7.  
Keep button 8 pressed.



3. Release button 8.  
**Within 0.3 seconds:** Press 1.  
*Yellow LED 2 lights up. The LED starts to flash green.*



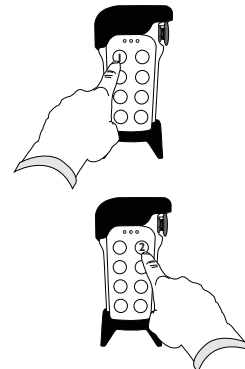
4. Enter the security code 7, 5, 4, 5 (up to 4 seconds between the numbers).



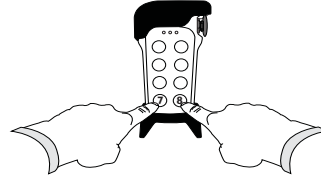
*The green LED starts to flash and yellow LED 2 goes out.*

5. Enter your choice (1 or 2).

*Yellow LED 1 flashes 3 times.*

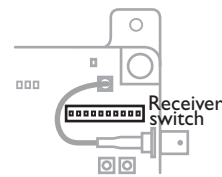


6. Re-start the transmitter by pressing the START buttons 7 and 8 for at least 1 second.



### 3.6 LATCHING RELAY FUNCTION

In some Operating Modes you can assign a latching function to certain relays (see description of *Operating Modes*). Latching means that the relay is activated every time a button is pressed, but remains active until the button is pressed again. You can set this on the receiver using the FUNCTION button and the SELECT button.

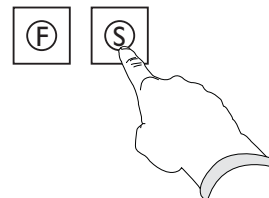


1. Use the FUNCTION button to switch between the 3 function LEDs:

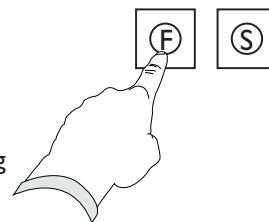
1. the red CODE STORING LED
2. the yellow LATCH LED
3. the green INTERLOCKING LED



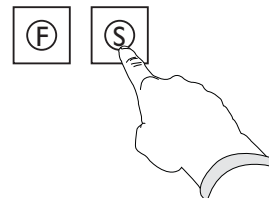
2. Stop at the yellow LATCH LED and select it by using the SELECT button. The yellow LATCH LED will go out. The red LED above relay 4 will light up.



3. Use the SELECT button to select the relay that you want to assign a latching function. Press the FUNCTION button to light up the yellow LATCH LED. If the yellow LATCH LED is already lit and the red LED above a relay lights up, this relay has already been assigned a latching function. To remove the latching function from a relay, press the FUNCTION button once, so that the yellow LATCH LED goes out.

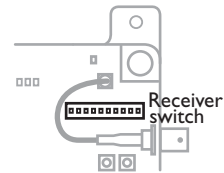


4. To assign latching to more relays, use the SELECT button to select the next relay that you want to assign a latching function to. The receiver will exit the code storing mode after 10 seconds idling.

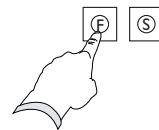


### 3.7 INTERLOCKING RELAY FUNCTION

In some Operating Modes you can assign an interlocking function to certain relays (see description of Operating Modes). Interlocking means that you can prevent selected relays from activating at the same time, even if the buttons are pressed at the same time, e.g. moving up and down. If two relays are interlocked, nothing will happen if the user presses both buttons at the same time. You can set this on the receiver using the FUNCTION button and the SELECT button.



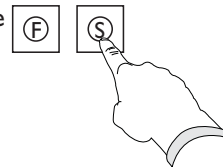
1. Use the FUNCTION button to switch between the 3 function LEDs:



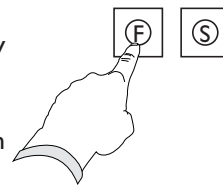
1. the red CODE STORING LED
2. the yellow LATCH LED
3. the green INTERLOCKING LED



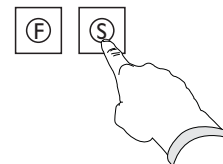
2. Stop at the green INTERLOCKING LED and select it by using the SELECT button. The green INTERLOCKING LED goes out. The red LEDs above relays 4 and 5 will light up.



3. Press the FUNCTION button to light up the green INTERLOCKING LED. If the green INTERLOCKING LED is already lit and the red LEDs above a relay pair light up, this relay pair has already been assigned an interlocking function. To remove the interlocking function from a relay pair, press the FUNCTION button once, so that the green INTERLOCKING LED goes out.



4. To assign interlocking to more relay pairs, use the SELECT button to select the next relay pair that you want to assign an interlocking function. The receiver will exit code storing mode after 10 seconds idling.

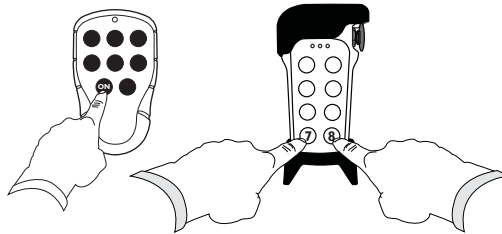


### 3.8 STORE THE TRANSMITTER IN THE RECEIVER

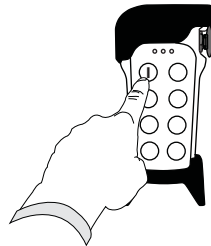
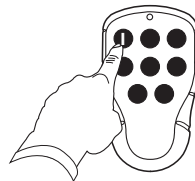
**NOTE! Do not store the transmitter in the receiver until you have selected Operating Mode.**

Depending on receiver model, you can store 1-3 transmitters. If the maximum number of transmitters has already been stored, all transmitters must be erased before you can store the transmitters that you want. NOTE! If several transmitters are used with one receiver, they must all use the same frequency bank.

1. Start the transmitter that you want to store.

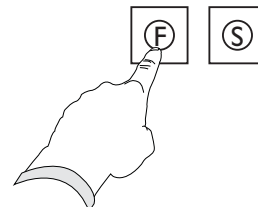


2. Press any transmitter button, e.g. button 1, and keep it pressed.



2. Press the receiver's FUNCTION button for more than 0.3 seconds.

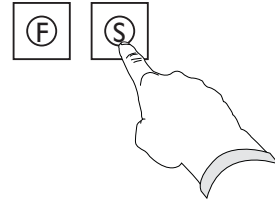
*The red CODE STORING LED on the receiver will light up.*



**3. Press the receiver's SELECT button.**

*All red relay LEDs will light up.*

The receiver will now start to search for and connect to the transmitter.



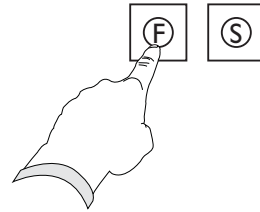
4. When the transmitter has been stored, the red relay LEDs on the receiver will flash 3 times.

5. Release button 1.

### 3.9 Erase transmitters

1. Press the receiver's FUNCTION button for more than 0.3 seconds.

*The red CODE STORING LED on the receiver lights up.*

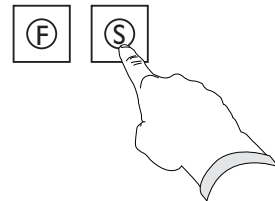


3. Press the SELECT button.

*All the red relay LEDs lights up.*

Hold down the SELECT button for more than 4 seconds.

4. All the red relay LEDs on the receiver will go out when all transmitters have been deleted.

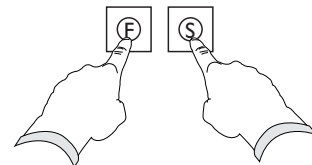


### 3.10 MASTER RESET OF THE RECEIVER SETTINGS

If you need to delete the settings you have made on the receiver (storing of transmitters as well as interlocking and latching relay functions), you can perform a Master Reset. The Operating Mode will not be deleted. To switch Operating Mode, change the position of receiver switch 1-4.

1. Press both the FUNCTION button and the SELECT button.

*All three function LEDs (the red CODE STORING LED, the yellow LATCH LED and the green INTERLOCKING LED) light up.*

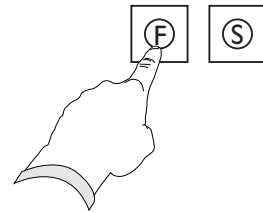


2. Hold down the FUNCTION button and the SELECT button for more than 10 seconds. After 10 seconds, the receiver's memory has been erased.

### 3.11 LOGOUT TRANSMITTERS

#### 3.11.1 On the T70TX-06TTB transmitter

There is no LOGOUT function on this transmitter.



#### 3.11.2 On the T70TX-08ERB transmitter

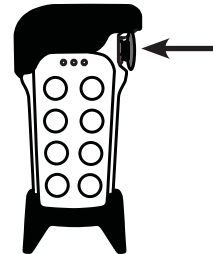
If you want to use more than one stored transmitter with your receiver, you must LOGOUT the transmitter that you used last.

### LOGOUT I

There are 3 ways to LOGOUT a transmitter:

1. Start the transmitter that you want to LOGOUT.

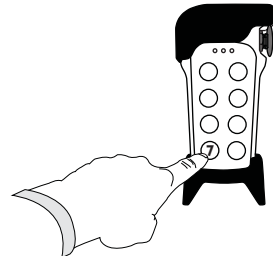
2. Press the transmitter's STOP button.



3. When the transmitter's red LED begins to flash, press button 7 within 2 seconds.

*Yellow transmitter LED 1 starts to flash.*

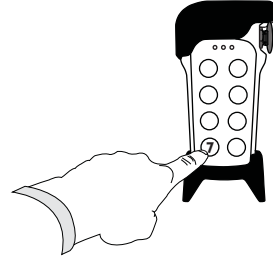
4. The transmitter is now logged out. It will turn off when the yellow transmitter LED stops flashing. You can now log on to the receiver using another already stored transmitter.



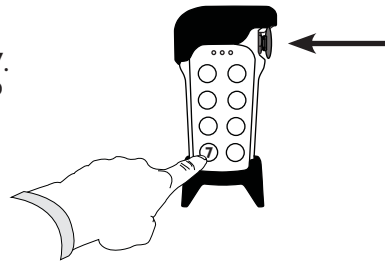
## LOGOUT 2- only if button 7 is not used for a high-risk function

1. Start the transmitter you want to log out.

2. Press button 7.



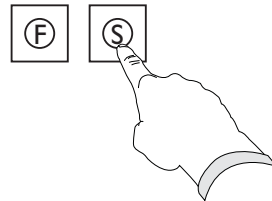
3. Press the STOP button without releasing button 7.  
*The red transmitter LED lights up for 1 second. Yellow transmitter LED 1 flashes.*



4. The transmitter is now logged out and turns itself off. You can now log on to the receiver using another already stored transmitter.

## LOGOUT 3- if transmitter can't be used

1. Press the SELECT button for at least 4 seconds. The green LOG ON/OFF LED on the receiver will go out.



2. You can now log on to the receiver using another stored transmitter.

### 3.12 REPLACE TRANSMITTERS

#### 3.12.1 On the T70TX-06TTB transmitter

There is no replacing function on this transmitter.

## EN REPLACE TRANSMITTERS

### ES On the TXI-C transmitter

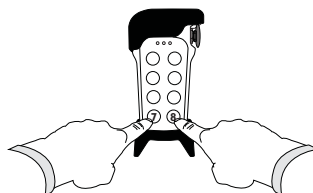
FR There is no replacing function on this transmitter.

### On the TX2 transmitter

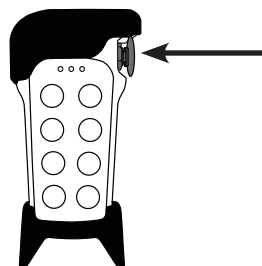
To replace a lost or broken transmitter with a new, without having to use the receiver. Simply use the new transmitter for all button operations.

**NOTE!** The new transmitter must use the same frequency bank as the transmitter that is being replaced.

1. Start the new transmitter.



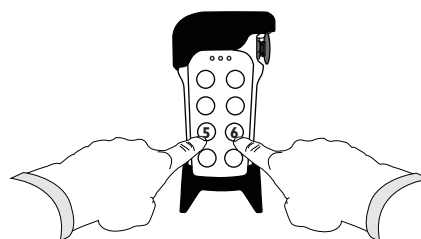
2. Press the new transmitter's STOP button.



3. The transmitter LED lights red.

**Within 2 seconds:** Press button 5 and 6.

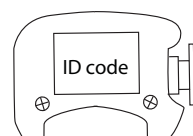
Yellow transmitter LED 1 lights.



4. Enter the product ID code for the transmitter that you want to erase (found under the rubber cover).

The transmitter LED lights red. Yellow transmitter LED 2 flashes.

The new transmitter can now be used with the receiver.





## THE REMOVABLE RUBBER COVER

EN  
ES  
FR

### On the TX2 transmitter

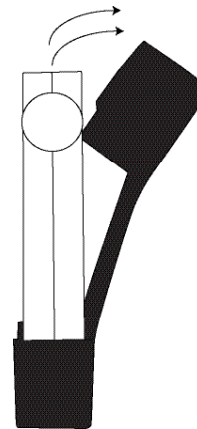
The TX2 transmitter comes with a removable rubber cover that helps prevent the transmitter from bumps, dirt and dust. The rubber cover can be easily removed and wiped off.

THE RUBBER COVER MUST BE REMOVED TO:

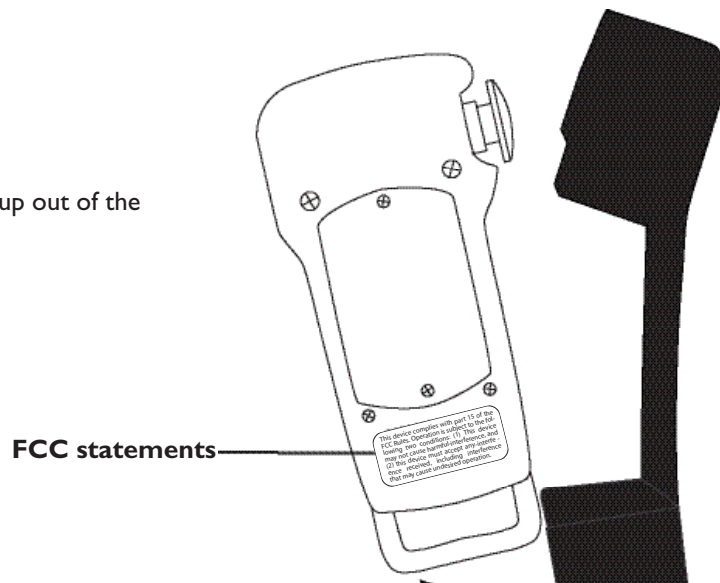
1. Reveal the FCC statements label (see picture below).
2. Reveal the ID code for the product (not the FCC ID code).

### How to remove the rubber cover

1. Loosen the rubber cover, starting at the top.



2. Lift the transmitter up out of the rubber cover.



### How to replace the rubber cover

1. Place the transmitter in the rubber cover, starting at the bottom.
2. Put the rubber cover back on the transmitter.

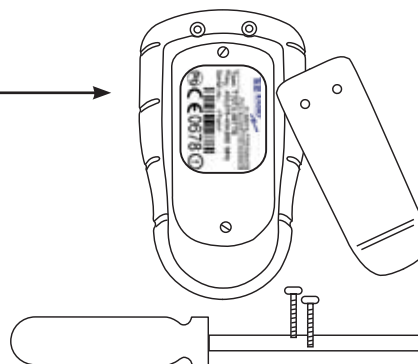
**EN** LOCATE THE IC AND FCC LABELS

**ES**

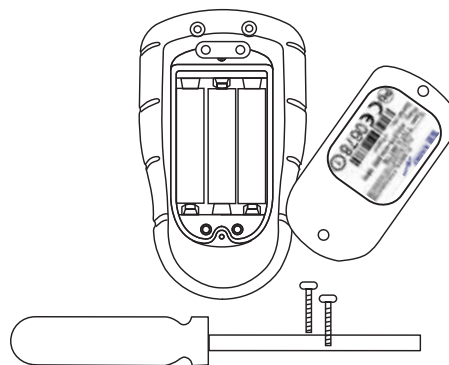
- FR** 1. Reveal the product information label (see picture).  
2. Reveal the FCC and IC label (see picture below).

**On the TXI-C transmitter**

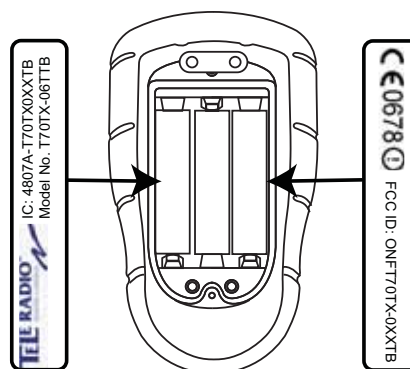
1. Remove the clip (2 screws).



2. Remove the battery lid (2 screws) and the batteries.



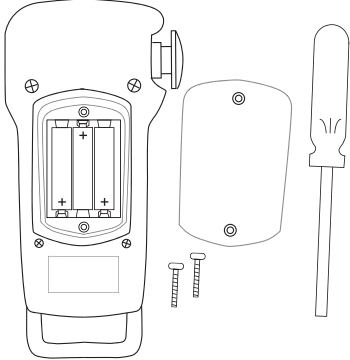
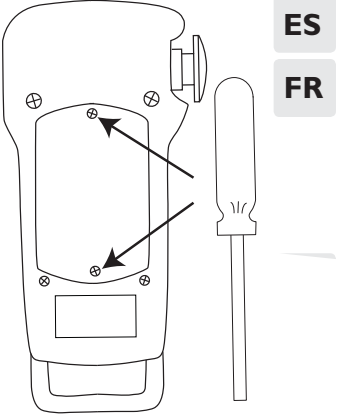
3. The FCC and IC labels are placed on the inside of the battery compartment. The FCC label is placed on the right side. The IC label is placed on the left side.



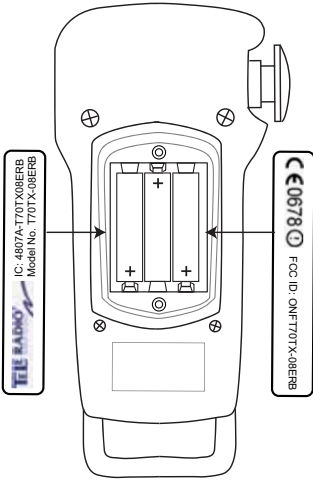
On the TX2 transmitter

EN  
ES  
FR

1. Remove the battery lid (2 screws) and the batteries.

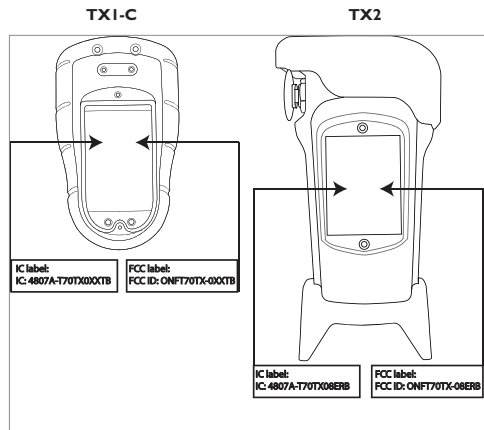


3. The FCC and IC labels are placed on the inside of the battery compartment. The FCC label is placed on the right side. The IC label is placed on the left side.



**EN**  
**ES**  
**FR**

## IC AND FCC LABELLING GUARANTEE



Tele Radio's products are covered by a guarantee against material, construction or manufacturing faults.

During the guarantee period Tele Radio may replace the product or faulty parts with new ones. Work under warranty must be carried out by Tele Radio or by an authorized service centre specified by Tele Radio.

The following faults are not covered by the warranty:

- Faults resulting from normal wear and tear.
- Parts of a consumable nature.
- Products that have been subject to unauthorized modifications.
- Faults resulting from incorrect installation or use.
- Damp or water damage.

## FCC STATEMENTS

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

1. THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE
2. THIS DEVICE MUST ACCEPT ANY INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

## DIRECTIVES AND STANDARDS

This product complies with current European directives and standards. "Declaration of Conformity" can be downloaded from: [www.tele-radio.com](http://www.tele-radio.com).

**CE0678** Ⓢ

## SERVICING & REPAIRS

Make sure that repairs and maintenance are only carried out by qualified personnel. Only use spare parts from Tele Radio.

Contact your dealer if you want to make a complaint about a product or require other service. Always have the following details to hand when you contact a dealer about a complaint or service issue: Name of the system, model and a description of the problem. If you need to return a product, the invoice number and delivery date should be included.

## OPERATING GUIDELINES

- Keep the product in a dry, clean place.
- Make sure that contacts and antennas are kept clean.
- Wipe off dust using a slightly damp, clean cloth.
- Never use cleaning solutions or high-pressure water.
-

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