Tiger G2

End user instructions








Transmitters

TG-T12-20, TG-T12-21
TG-T12-22, TG-T12-23
TG-T12-24, TG-T12-25
TG-T12-30, TG-T12-31
TG-T12-32, TG-T12-33
TG-T12-34, TG-T12-35

ED-TG2-TX103-B01-EN
Language: English (original)

TELE RADIO® REMOTE CONTROL

CONTENTS

CHAPTER 1: CUSTOMER INFORMATION

THANK YOU FOR PURCHASING A TELE RADIO AB PRODUCT

Read all instructions and warnings carefully before mounting, installing and configuring the products.

These instructions have been published by Tele Radio AB and are not subject to any guarantee. The instructions may be withdrawn or revised by Tele Radio AB at any time and without further notice. Corrections and additions will be added to the latest version of the instructions. Always download the installation instructions from our website, www.tele-radio.com, for the latest available version. Keep the safety instructions for future reference.

IMPORTANT! These instructions are intended for end users. They can be printed and handed to end users. The installation instructions containing information about the installation and configuration of the radio remote control unit on the machine are not intended to be passed on to the end user. Only such information that is needed to operate the machine correctly by radio remote control may be passed on to the end user.

Tele Radio AB remote controls are often built into wider applications. Always refer to the applicable local regulations for installation and safety requirements relating to cranes, hoists or other material handling and/or lifting equipments using Tele Radio AB products, e.g.:

- applicable local and industrial standards and requirements,
- applicable occupational health and safety regulations,
- applicable safety rules and procedures for the factory where the equipment is being used,
- user and safety manuals or instructions of the manufacturer of the equipment where Tele Radio AB remote control systems are installed.

Tele Radio AB instructions do not include or address the specific instructions and safety warnings of the end product manufacturer.

For battery precautions, see "Battery precautions" on page 16.

Tele Radio AB products are covered by a guarantee/warranty against material, construction or manufacturing faults, see § "GUARANTEE, SERVICE, REPAIRS AND MAINTENANCE" on page 19

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ABOUT TIGER TG2 SYSTEMS

The Tiger TG2 product range is composed of transmitters and receivers intended for use together as a system in complex lifting applications such as cranes, OHT cranes and electric hoists or advanced mobile applications.

Tiger TG2 systems put safety first, the stop function achieved product certifications CAT3, PLe and SIL3 in accordance with EN 13849-1 and IEC 61508 respectively. The ergonomic sizes and shapes of the transmitters, the clear and fully customizable panel foils & face-plates as well as the accessories ensure that the Tiger G2 radio remote controls are easy to operate.

ABOUT THIS DOCUMENT

Every care has been taken in the preparation of this manual. Please inform Tele Radio AB of any inaccuracies or omissions. These End user instructions cover general safety issues, main technical specifications, standard installation, operating instructions, general troubleshooting, battery information and regulatory information. Images shown in this document are for illustrative purposes only.

Term and symbol definitions

The capitalized terms and symbol used herein shall have the following meaning:

- WARNING! indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION! indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.
- IMPORTANT! is used for information that requires special consideration.
- NOTE! is used to address practices not related to physical injury.

This symbol is used to call attention to safety messages that would be assigned the signal words "WARNING" or "CAUTION".

WARNINGS & RESTRICTIONS

Carefully read through the following safety instructions before proceeding with the installation, configuration, operation or maintenance of the product. Failure to follow these warnings could result in serious injury and property damage.

Tiger TG2 products must not be operated without having read and understood the End User instructions, the specific technical documentation (when provided), and having received the appropriate training. The purchaser of this Tiger TG2 product has been instructed how to handle the system safely.

Operation

- This radio system should not be used in areas where there is a risk of explosion.
- Only qualified personnel should be permitted to access the transmitter and operate the equipment.
- Always follow operating and maintenance instructions as well as all applicable safety procedures and requirements.
- Do not open the receiver encapsulation unless you are qualified.
- You must satisfy the age requirements in your country for operating the equipment.
- It is strictly prohibited to operate the equipment under the influence of drugs, alcohol and/or medications.
- Always test the transmitter stop button before operating it. Press the stop button then twist and pull it out. This test should be done on each shift, without a load.
- Never use a transmitter if the stop button is mechanically damaged. Contact your supervisor/representative for service immediately.
- Never let the transmitter unattended.
- Always switch the transmitter off when not in use. Store in a safe place.
- Keep a clear view of the work area at all times.
- Avoid registering transmitters in receivers where they are not being used.

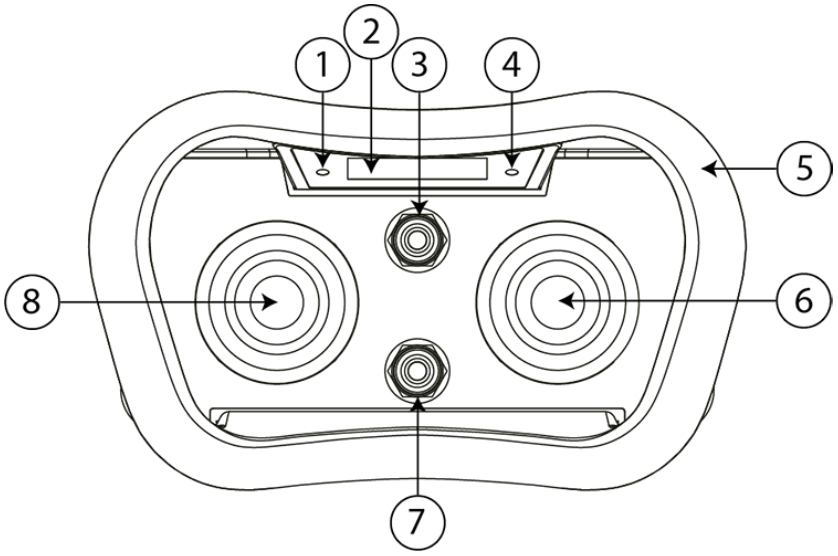
Maintenance

- Keep the safety instructions for future reference. Always download the End user instructions from our website for the latest available version.
- Always contact your representative for service and maintenance work on the product.
- If error messages are shown, it is very important to find out what caused them. Contact your representative for help.
- The functionality of the stop button should be tested at least after every 200 hours' use. Test the stop button by pressing it and pulling it out.
- If the stop button is mechanically damaged, do not use the transmitter. Contact your representative for service immediately.
- Keep the product in a clean, dry place.
- Keep contacts and antennas clean.
- Wipe off dust using a clean, slightly dam cloth.
- Never use cleaning solutions or high-pressure water.
- Check the transmitter encapsulation and foil for damages every day. If you use the transmitter although the encapsulation or foil is damaged, moisture can cause serious damage to the electronics.
- **Before maintenance intervention on any remote controlled equipments:**

- always remove all electrical power from the equipment.
- always follow lockout procedures.

CHAPTER 2: PRODUCT DESCRIPTION

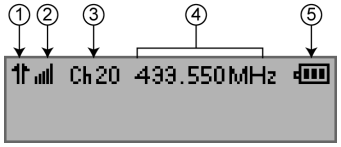
TRANSMITTER FRONT



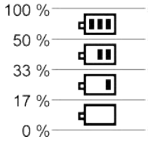
1. LED 1
2. Display
3. Upper function switch
4. LED 2
5. Handle bar
6. Right joystick
7. Lower function switch
8. Left joystick

TRANSMITTER DISPLAY

The transmitter display is intended for receiving and visualizing feedback information from the system as well as for basic configuration. The first row shows factory default information.

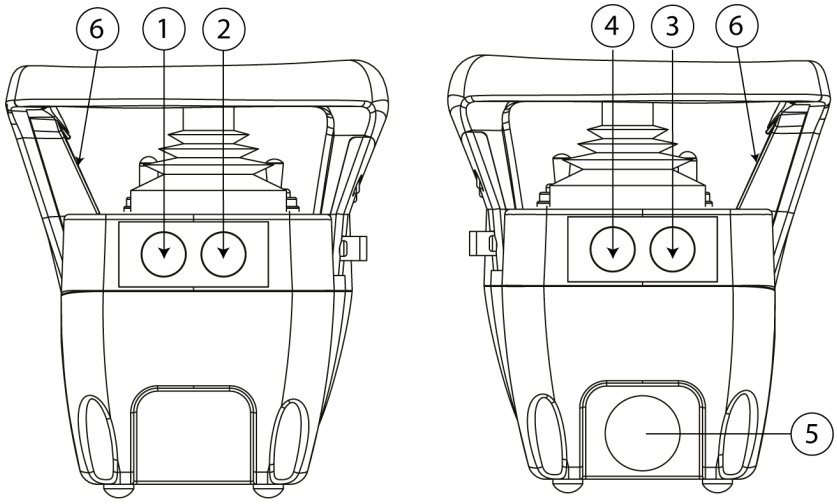


1. Radio communication
   - Simplex
   - Duplex
2. Signal strength
3. Channel number
4. Operating frequency
5. Battery level indication*



*approximate values with a new, fully charged battery.

TRANSMITTER SIDE

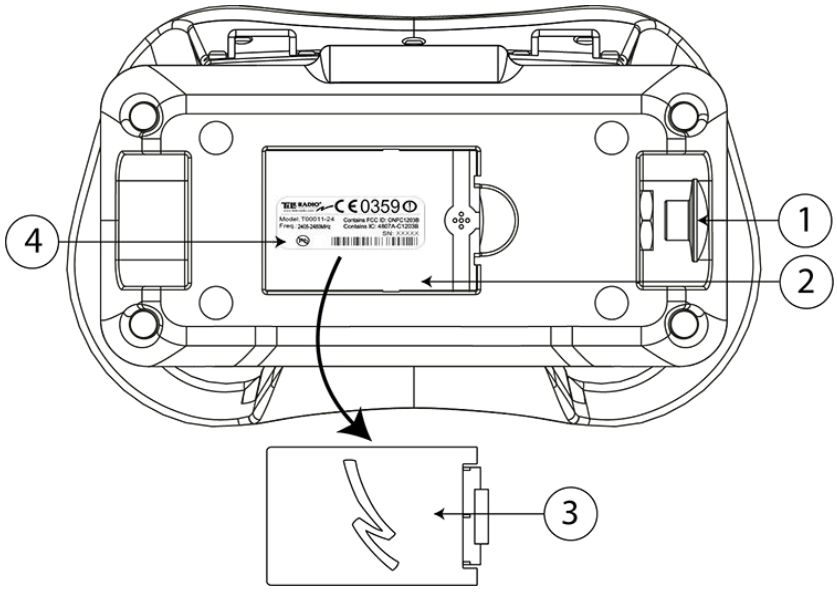


Left side

Right side

1. Side button 1
2. Side button 2 (safe button)
3. Side button 3 / start button / back
4. Side button 4 (safe button) / start button / select/confirm
5. Stop button
6. Display

TRANSMITTER BOTTOM



1. Stop button
2. Battery compartment
3. Replaceable battery
4. Product label (placed in the battery compartment)

TECHNICAL DATA

	TG-T12-20, TG-T12-21, TG-T12-22 TG-T12-23, TG-T12-24, TG-T12-25	TG-T12-30, TG-T12-31, TG-T12-32 TG-T12-33, TG-T12-34, TG-T12-35
Number of front switches	2 toggle switches, SPDT,(On)-None-(On)	
upper switch	momentary function (spring return)	
lower switch	stay-put function	
Number of joysticks	2, 2-axis with spring return for step or analogue control (see § Joystick directions below).	
Number of side buttons	4	
Battery	Replaceable, rechargeable lithium-ion	
I/O switch	No	
Radio communication	Simplex (default), support for duplex	
Max. number of registered receivers	15	
Max. number of PIN codes	10	
Dimensions	210 x 140 x 130 mm / 8.3 x 5.5 x 5.1 in	
Weight	1200 g / 2.6 lbs	
Frequency band	433.075–434.775 MHz	903.0125–926.9875 MHz
Number of channels	69 (channel 1–69)	–
Number of frequency banks	–	15 (bank 1–15)
Radio frequency output power	<10 mW	<1 mW
Operating time (with continuous usage)	Approximately 16 h	
IP code	65	
Operating temperature	-20…+55 °C / -4…+130 °F	

Joystick directions

TG-T12 transmitters have two 2-axis with spring-to-centre joysticks . Depending on the model, the joysticks allow for a 2 or 4 graduated steps or stepless control.

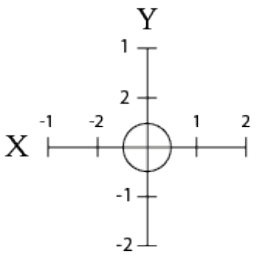
	TG-T12-20 TG-T12-30	TG-T12-21 TG-T12-31	TG-T12-22 TG-T12-32	TG-T12-23 TG-T12-33	TG-T12-24 TG-T12-34	TG-T12-25 TG-T12-35
Joystick 1 (XY)	2x2	2x2	4x4	4x4	Analog XY	Analog XY
Joystick 2 (XY)	0x2	2x2	0x4	4x4	Analog Y	Analog XY

Code (XY)	Movement control on X	Movement control on Y
0x2	–	2-step
2x2	2-step	2-step
2x0	2-step	–
4x4	4-step	4-step
4x0	4-step	–
Analog XY	stepless	stepless
Analog Y	–	stepless

Example:

XY = 2x2

The joystick operates on both X and Y axes, with 2 steps right and left, up and down from the center.

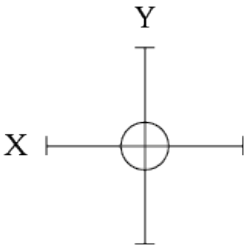


XY= 0x2

The joystick operates on the Y axe only, with 2 steps up and down from the center.

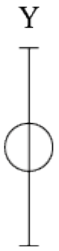
Analog XY

The joystick operates on both X and Y axes with stepless movement.



Analog Y

The joystick operates on the Y axe only with stepless movement from center and back.



FREQUENCY BAND 433 MHZ

For radio systems operating on frequency band 433 MHz, the frequency band is divided into 69 channels (channel 1-69). Once the channel has been selected on the transmitter, the receiver will automatically detect and switch to the same channel.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	433.075	26	433.700	51	434.325
02	433.100	27	433.725	52	434.350
03	433.125	28	433.750	53	434.375
04	433.150	29	433.775	54	434.400
05	433.175	30	433.800	55	434.425
06	433.200	31	433.825	56	434.450
07	433.225	32	433.850	57	434.475
08	433.250	33	433.875	58	434.500
09	433.275	34	433.900	59	434.525
10	433.300	35	433.925	60	434.550
11	433.325	36	433.950	61	434.575
12	433.350	37	433.975	62	434.600
13	433.375	38	434.000	63	434.625
14	433.400	39	434.025	64	434.650
15	433.425	40	434.050	65	434.675
16	433.450	41	434.075	66	434.700
17	433.475	42	434.100	67	434.725
18	433.500	43	434.125	68	434.750
19	433.525	44	434.150	69	434.775
20	433.550	45	434.175		
21	433.575	46	434.200		
22	433.600	47	434.225		
23	433.625	48	434.250		
24	433.650	49	434.275		
25	433.675	50	434.300		

FREQUENCY BAND 915 MHZ

Radio systems operating on frequency band 915 MHz use frequency-hopping spread spectrum (FHSS) to communicate. The frequency band is divided into 15 frequency banks (1-15). Frequency bank 1 is selected by default.
To establish a radio link between the receiver and the transmitter, both units must be configured to use the same frequency bank. Contact you representative for assistance.

CHAPTER 3: OPERATION

To control a receiver, the transmitter must be registered and logged in to the receiver. If another transmitter is already logged in to the receiver, it must be logged out before a different transmitter can be logged in. If no transmitter is logged in to a receiver, any registered transmitter will automatically log in when sending radio signals to the receiver. The transmitter will remain logged in until it is manually logged out.

NOTES! More than one transmitter can be registered in the receiver, but only one transmitter can be logged in at a time.

START THE TRANSMITTER

IMPORTANT! To be able to control a receiver with the transmitter, the transmitter must be registered in the receiver. If no receiver is registered, the display will show [No receivers] [Press Menu + Stop] after the stop button has been pulled out.

NOTE! By default, the receivers used in the last session are automatically selected at next start up.

1. Make sure that the stop button is pressed.

2. Pull out the stop button.
   LEDs 1 + 2 light.
   The receiver(s) selected in the last session are indicated by the corresponding highlighted number. The display shows [Push start buttons].
   Go to step 4 to log in to the previously selected receiver, go to step 3 to select another receiver.
   If no receiver is selected, LEDs 1 + 2 will go out and the display will show [Select receiver(s)].

3. Select a receiver. Move the left joystick right/left to step between the registered receivers. Move down to select the receiver(s) to operate (move up to deselect).
   Once a receiver has been selected, LEDs 1 + 2 light and the display shows [Push start buttons].

4. Press both side buttons 3 and 4 at the same time.
   The buzzer beeps. LEDs 1 + 2 flash.

5. Release the start buttons.
   The buzzer stops beeping. LEDs 1 + 2 go out. The display briefly shows [Logging in].
   Once the radio link has been established, the stop relays activate.

If not successfully completed, the display will show [LOGIN FAILED][ANOTHER TX IS LOGGED IN].

If no radio link is established within 25 seconds, the transmitter switches off.

Start the transmitter with PIN code

1. Make sure that the stop button is pressed.

2. Pull out the stop button.
   LEDs 1 + 2 light.

3. Enter the PIN code. Move the left joystick right/ left to select a digit and up/ down to select the desired number (0-9).

4. Move the left joystick to the left or press side button 4 to confirm.
   The receiver(s) selected in the last session are indicated by the corresponding highlighted number. The display shows [Push start buttons]. Go to step 6 to log in to the previously selected receiver, go to step 5 if you want to select another receiver.
   If no receiver is selected, LEDs 1 + 2 go out and the display shows [Select receiver(s)]

5. Select the receiver(s) to operate. Move the left joystick right/left to step between the registered receivers. Move down to select the receiver(s) to operate (move up to deselect).
   Once a receiver has been selected, LEDs 1 + 2 light and the display shows [Push start buttons].

6. Press both start buttons (side button 3 + 4) at the same time.
   The buzzer beeps. LEDs 1 + 2 flash (green when the battery capacity is good, red when the battery capacity is poor).

7. Release the start buttons.
   The buzzer stops beeping. LEDs 1 + 2 go out. The display briefly shows [Logging in].
   Once the radio link has been established, the stop relays activate.

If no radio link is established within 25 seconds, the transmitter will switch off.

SWITCH THE TRANSMITTER OFF

NOTE! When the transmitter is switched off, it remains logged in to the receiver(s). To logout, see § "Logout" on page 12

1. Press the stop button.
   The display shows [Stopping]. The transmitter switches off. All relays deactivate.

LOGOUT

A transmitter already logged in to the receiver has to be logged out before any other transmitter can be logged in.

NOTE! If a transmitter has been lost or seriously damaged, use the replace procedure whenever possible. It is possible to log out a transmitter directly from the receiver, however this is not recommended. Contact your representative for assistance.

NOTE! Logout can only be performed when the transmitter is on and a radio link with one or more receivers has been established. The receiver must be powered-up for the logout procedure to be successful.

Quick logout

Once the transmitter has established a radio link with one or more receivers, 'Quick logout' can be used to log out from those receivers.

This procedure will log the transmitter out from all receivers that are part of the radio session

NOTE! 'Quick logout' can only be performed when the transmitter is on and the radio link is up.

1. Press side button 4. Keep pressed.

2. Press the stop button.

3. Release side button 4.
   LEDs 1 + 2 flash.
   The display shows [Logging out]. The transmitter takes approximately 3 seconds to logout.
   When successfully completed, the display shows [Logout OK]. The transmitter switches off.

SWITCH CHANNEL

For radio systems operating on frequency band 433 MHz, it is possible to switch channels.

To switch frequency bank on radio systems operating on frequency band 915 MHz, contact your representative for assistance.

1. Make sure that the stop button is pressed.

2. Pull out the stop button.
   LEDs 1 + 2 light.

3. Press side button 3. Keep pressed.

4. Press the stop button.

5. Release side button 3.
   Use the left joystick to move up and down the menu options.

6. Navigate to [Channel] or [Bank]. Press side button 4 to enter the menu.

7. Select a channel in the list.

8. Press side button 4 to confirm.
   The display shows [Channel][No].

9. Use the left joystick to select [Yes]. Press side button 4 to confirm.
   When successfully completed, the transmitter returns to the menu list.

REPLACE

It is possible to replace a registered transmitter with another transmitter of the same model. The procedure does not require to open the receiver housing but the receiver needs to be powered up and within transmission range. Use the transmitter that will replace the old transmitter to perform the following instructions.

Do not perform this action when the receiver is in a session with another transmitter. The radio communication may be interrupted or broken.

IMPORTANT! If the transmitter already has receivers registered, we recommend erasing all receivers from the transmitter before starting the replacement. The receiver will automatically be stored in the same location as in the old transmitter. If this location is no longer available, the replacement will fail.

If the transmitter being replaced is registered in more than one receiver, it will only be replaced in one receiver at a time. To replace a transmitter in more than one receiver, the replacement procedure must be completed for each receiver.

1. Make sure that the stop button is pressed.
2. Pull out the stop button.
   LEDs 1 + 2 light.
3. Press side button 3. Keep pressed.
4. Press the stop button.
5. Release side button 3.
   Use the left joystick to move up and down the menu options.
6. Navigate to [Replace]. Press side button 4 to enter the menu.
7. Enter the serial number (SN)[1] of the transmitter to be replaced (i.e. the old, lost or broken transmitter). Move the left joystick right/ left to select a digit and up/ down to select the desired number (0-9).
8. Press side button 4 to confirm.
   The display shows [Replace][No].
9. Use the left joystick to select [Yes]. Press side button 4 to confirm.
   The display shows [Replacing] while the process is ongoing. LED 1+ 2 flash.
   When successfully completed, the display shows [Replace OK]. The transmitter switches off.

If not successfully completed, the display shows [FAILED] and the buzzer emits a beep. The transmitter switches off.

[1] The serial number is printed on the product label located in the battery compartment.

AUTOMATIC SHUTDOWN

Automatic shutdown helps prolong battery capacity by automatically switching the transmitter off after a preset period of inactivity.

1. Make sure that the stop button is pressed.

2. Pull out the stop button.
   LEDs 1 + 2 light.

3. Press side button 3. Keep pressed.

4. Press the stop button.

5. Release side button 3.
   Use the left joystick to move up and down the menu options.

6. Navigate to [Auto Shutdown]. Press side button 4 to enter the menu.

7. Select the automatic shutdown time, 0–255 minutes.Move the left joystick right/ left to select a digit and up/ down to select the desired number (0-9).
   To deactivate the automatic shutdown, select 0.

8. Press side button 4 to confirm.

9. Use the left joystick to select [Yes]. Press side button 4 to confirm.
   When successfully completed, the transmitter returns to menu mode.

CHAPTER 4: BATTERY GUIDE

BATTERY PRECAUTIONS

Carefully read through the following safety instructions and warnings before using, charging or disposing of the batteries.

Batteries contain flammable substances such as lithium or other organic solvents, which may result in overheating, rupture or combustion. Failure to read and follow the below instructions may result in fire, personal injury and damage to property if charged or used improperly.

Handling and storage

- Risk of explosion if battery is replaced with a battery of an incorrect type.
- Do not short circuit, disassemble, deform or heat batteries.
- Never attempt to charge a visibly damaged or frozen battery.
- Do not use or charge the battery if it appears to be leaking, deformed or damaged in any way.
- Do not solder directly onto batteries.
- Do not leave the battery in the charger once it is fully charged.
- Store in a cool location. Keep batteries away from direct sunlight, high temperature, and high humidity.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way.
- Keep batteries out of reach of small children. Should a child swallow a battery, consult a physician immediately.

Disposal

When discarding batteries, insulate the + and - terminals of batteries with insulating/ masking tape.

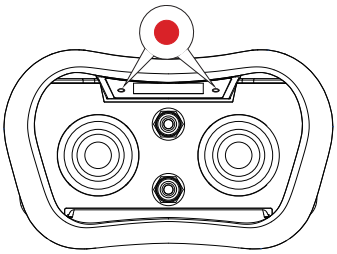
- Do not place multiple batteries in the same plastic bag.
- Do not incinerate or dispose of batteries in fire.
- Do not place used batteries in the household waste. Dispose of used batteries in accordance with the applicable regulations and legal requirements.
- Batteries that have been disposed of incorrectly may short circuit, causing them to become hot, burst or ignite.

BATTERY INFORMATION

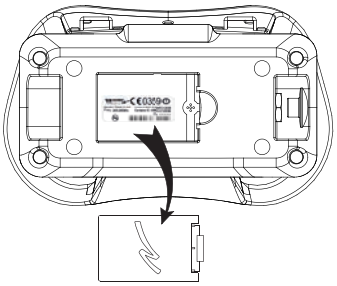
	TG-T12-20, TG-T12-21, TG-T12-22, TG-T12-23, TG-T12-24, TG-T12-25 TG-T12-30, TG-T12-31, TG-T12-32, TG-T12-33, TG-T12-34, TG-T12-35
Type of battery	Replaceable, rechargeable lithium-ion battery
Art. nr	M245060
Operating time	Approximately 16 h with continuous usage*
Charger**	Tele Radio charger unit, 5 V DC, 10 % (1A)
Art. nr	M769755 + M769780
Charging time	Approximately 4 hours with an empty battery
Charging temperature	0…+45 °C / +32…+113 °F

* When the battery capacity reaches approximately 10 %, LEDs 1+2 light red.
**Must be purchased separately.

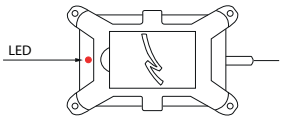
CHARGE THE BATTERY



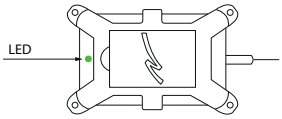
1. When the battery capacity reaches approximately 10 %, LEDs 1 + 2 light red and the internal buzzer beeps 3 times.



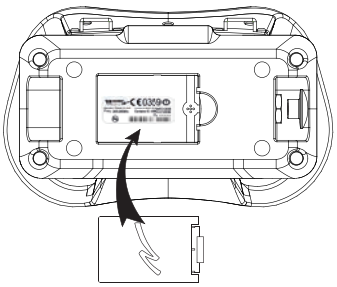
2. Remove the battery from the transmitter.



3. Charge the external battery using a Tele Radio AB charger unit.
   While charging, the charger unit LED lights red.



4. When the battery is fully charged, the LED turns green.



5. Put the battery back into the transmitter.

CHAPTER 5: GUARANTEE, SERVICE, REPAIRS AND MAINTENANCE

Tele Radio AB products are covered by a guarantee/warranty against material, construction and manufacturing faults. During the guarantee/warranty period, Tele Radio AB may replace the product or faulty parts. Work under guarantee/warranty must be carried out by Tele Radio AB or by an authorized service centre specified by Tele Radio AB.

The following are **not** covered by the guarantee/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 and use.
- Damp and water damage.

Maintenance:

- Repairs and maintenance must be carried out by qualified personnel.
- Only use spare parts from Tele Radio AB.
- Contact your representative for service or any other assistance.
- Keep the product in a clean, dry place.
- Keep contacts and antennas clean.
- Wipe off dust using a slightly damp, clean cloth.

NOTE! Never use cleaning solutions or high-pressure washer.

CHAPTER 6: REGULATORY INFORMATION

EUROPE

Applies to:

- **TG-T12-20…25 models**

CE marking

Hereby, Tele Radio AB, declares that the radio equipment type(s) listed above is/ are in compliance with Directive 2014/53/EU.

The latest version of the complete EU Declaration of Conformity is available on the Tele Radio AB website, www.tele-radio.com.

WEEE directive

This symbol means that inoperative electrical and electronic products must not be mixed with household waste. The European Union has implemented a collection and recycling system for which producers are responsible. For proper treatment, recovery and recycling, please take this product to a designated collection point.

Tele Radio AB strives to minimize the use of hazardous materials, promotes reuse and recycling, and reduces emissions to air, soil and water. When a commercially viable alternative is available, Tele Radio AB strives to restrict or eliminate substances and materials that pose an environmental, health or safety risk.

NORTH AMERICA

Applies to:

- **TG-T12-30…35 models**

FCC statement

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, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

The radio module in this product is labelled with its own FCC ID and IC number. The FCC ID and IC is not visible when the radio module is installed inside another device. Therefore, the outside of the device into which the module is installed must also display a label referring to the radio module. The final end device must be labelled in a visible area with the following:

“Contains FCC ID: ONFC1104A”

“Contains IC: 4807A-C1104A”

IC Statement

This product complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of device.

Le présent appareil est conforme aux CNR d’Industrie Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :

1. l’appareil ne doit pas produire de brouillage;
2. l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

To satisfy IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.

Afin d'assurer la conformité aux exigences de la IC en matière d'exposition aux RF, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil et toute personne à proximité pendant le fonctionnement de l'appareil. Pour assurer le respect de ces exigences, il n'est pas recommandé d'utiliser l'appareil à une distance inférieure à celle-ci.

The radio module in this product is labelled with its own FCC ID and IC number. The FCC ID and IC is not visible when the radio module is installed inside another device. Therefore, the outside of the device into which the module is installed must also display a label referring to the radio module. The final end device must be labeled in a visible area with the following:

Le module radio est étiqueté avec sa propre identification FCC et son propre numéro de certification IC. L'identification FCC et le numéro de certification IC ne sont pas visibles lorsque le module est installé à l’intérieur d’un autre dispositif, c'est la raison pour laquelle la partie externe du dispositif dans lequel le module est installé doit également présenter une étiquette faisant référence au module inclus. Le produit final doit être étiqueté sur une zone visible avec les informations suivantes :

“Contains FCC ID: ONFC1104A”

“Contains IC: 4807A-C1104A”

FCC/IC label placement

The FCC/IC label is placed on the radio module. The radio module is mounted inside the transmitter.

RADIO MODULE

The following products described in these instructions contain radio modules:

PRODUCT	RADIO MODULE
TG-T12-30, TG-T12-31, TG-T12-32, TG-T12-33, TG-T12-34, TG-T12-35	D00005-04

ANNEX A: FREQUENT TERMS

Function relay	Standard relay, controlled by the buttons on the transmitter unit.
Interlocking	Prevents a component from functioning when another component is functioning or operating in a particular way.
Latching relay functionality	The relay becomes active every time you press a button and remains active until the button is pressed again.
Load select mode	One or more Load select modes are stored in the transmitter unit. Activating a specific Load select mode results in a group of preselected relays on the receiver unit, which may be controlled from the transmitter unit.
Momentary relay functionality	The relay will only be active while a button is pressed on the transmitter. When the button is released, the relay will no longer be active.
Operating mode	One or more Operating modes are stored in the receiver unit. Each Operating mode describes which relays on the receiver unit are controlled when specific buttons on the transmitter unit are pressed.
Stop relay	Safety related relay controlled by the stop button on the receiver. Intended to interrupt the power supply to a safety application controlled by the receiver unit.
Zero position check	Security function ensuring that potentially active buttons/joysticks upon start up or lost/found radio links must be in the zero position before the system can be used to avoid unplanned movements of the controlled object.

INSTRUCTIONS
INSTRUCCIONES
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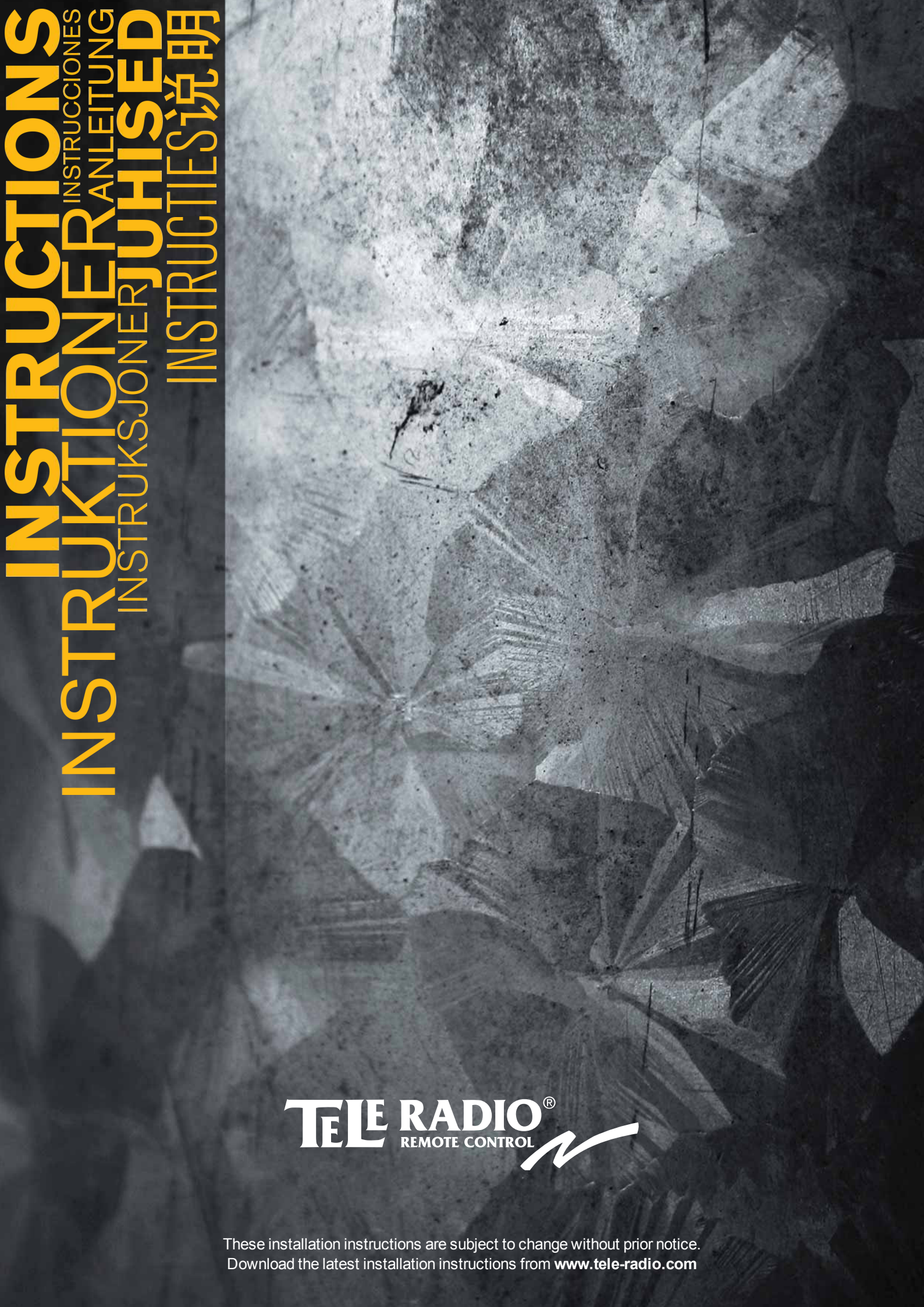

TELE RADIO®
REMOTE CONTROL

These installation instructions are subject to change without prior notice.
Download the latest installation instructions from **www.tele-radio.com**