tele radio®
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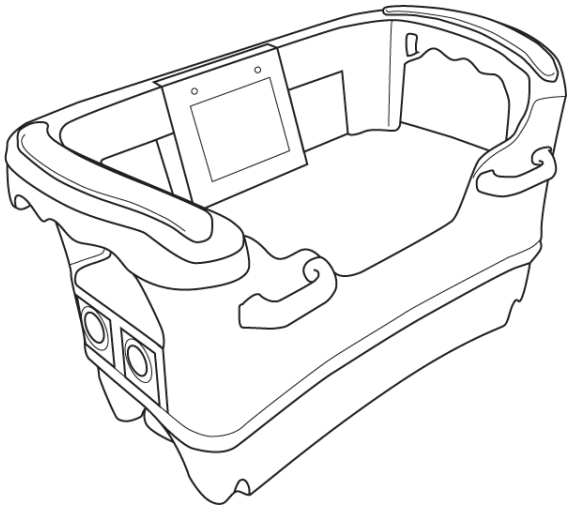
safe smart strong

END USER INSTRUCTIONS

Transmitters: T26-01, T26-06, T26-07, T26-81



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CHAPTER 1: INTRODUCTION **5**
1.1 About this document 7
1.2 Product label 8
CHAPTER 2: SAFETY **11**
2.1 Warnings & restrictions 11
2.2 Safety features 13
CHAPTER 3: TECHNICAL DATA **14**
3.1 System specifications 14
3.2 Transmitter specifications 14
CHAPTER 4: PRODUCT GENERAL DESCRIPTION **17**
4.1 Overview 17
4.2 Transmitter dimensions 17
4.3 Transmitter top views 18
4.4 Transmitter bottom views 20
4.5 Transmitter side views 22
4.6 Display and display LEDS 25
4.7 Side buttons 26
CHAPTER 5: STATUS AND ERROR INDICATIONS **27**
5.1 Display LEDs status and error codes 27
5.2 Error indications and messages 27
CHAPTER 6: OPERATION **28**
6.1 General information 28
6.2 General navigation 28
6.3 Start-up protection 29
6.4 Functionality test 30
6.5 Log the transmitter in to a receiver 31
6.6 Start a session 32
6.7 Log the transmitter out from a receiver 34
6.8 Switch the transmitter off 35
6.9 Advanced operation 35
CHAPTER 7: CONFIGURATION MENU **37**
7.1 Menu mode and standard settings 37
7.2 Enter Menu mode (no PIN code required) 38
7.3 Enter Menu mode (PIN code required) 39

7.4 Register a transmitter in a receiver 40
7.5 Clear blocked inputs 43
CHAPTER 8: BATTERY 45
8.1 Battery precautions 45
8.2 Battery information 47
CHAPTER 9: WARRANTY, SERVICE, REPAIRS, AND MAINTENANCE 49
CHAPTER 10: REGULATORY INFORMATION 50
10.1 Europe 50
10.2 North America 50
10.3 AEC 52
ANNEX A: INDEX 53

CHAPTER 1: INTRODUCTION

Thank you for using a Tele Radio AB product

READ ALL INSTRUCTIONS AND WARNINGS CAREFULLY BEFORE OPERATING THE PRODUCTS.

These End user instructions have been published by Tele Radio AB and are not subject to any guarantees. The End user instructions may be withdrawn or revised by Tele Radio AB at any time and without further notice. Corrections and updates will be added to the latest version of the manual. Always download the End user 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. The instructions can be printed and handed to end user.

Tele Radio AB remote controls are often built into wider applications. This documentation is not intended to replace the determination of suitability or reliability of the product for specific user applications and should not be used for this purpose. It is the responsibility of any such users or integrators to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use. Tele Radio AB shall not be responsible or liable for misuse of the information contained herein.

Always refer to the applicable local regulations for installation and safety requirements relating to cranes, hoists, material handling applications, lifting equipment, industrial machinery, and/or mobile hydraulic applications 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 End user instructions do not include or address the specific instructions and safety warnings of the end product manufacturer.

For battery precautions, see "8.1 Battery precautions".

Tele Radio AB products are covered by a warranty against material, construction, or manufacturing faults. See "Chapter 9: Warranty, service, repairs, and maintenance".

1.1 About this document

Before installing or operating the product, read the corresponding documentation carefully.

Tele Radio AB's product range is composed of transmitters, receivers, and accessories intended for use together as a system.

T26 systems are mainly intended for the hydraulic and mobile equipment markets. These systems are not standardized but customized and adapted to each customer's needs. How the outputs are connected to control the object depends on each specific installation and will not be covered in this document. For exact details, see the technical documentation provided for your specific system. Drawings, schematics and connection diagrams are unique and are also provided together with the system. Images shown in this document may therefore not show the exact position of buttons, paddles and are for illustrative purposes only.

These End user instructions cover main technical specifications and standard operating instructions.

Please report any error or omission in this document, as well as any improvement or amendment suggestion to td@tele-radio.com.

1.1.1 COPYRIGHT

1.1.2 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".

1.2 Product label

Each product has a unique Serial Number (SN). It is important to keep this number and to use it in all communication with Tele Radio AB.

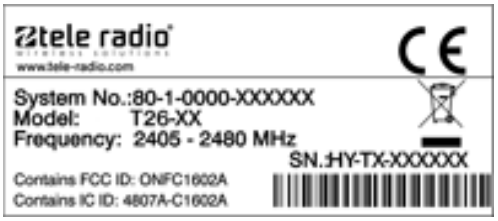
The serial number is written on the product label located in the battery compartment (see "4.4 Transmitter bottom views").

Record your serial number here:

1.2.1 GENERATED SYSTEM NUMBER FOR CUSTOMIZED SYSTEMS

Each customized system has its own generated system number. It is important to keep this number and to use it in all communication with Tele Radio AB.

The label with the system number (System No.) is affixed on the product's original label.[1]



Record your system number here:

[1]The original serial number (SN) is also indicated on the new label.

1.2.2 ABOUT T26 TRANSMITTERS

T26 transmitters have duplex communication and work in continuous mode.

NOTE: Base models are meant to be customized according to customer or application requirements.

There are four base models available.

Model	Main boards		Expansion boards				
	Base board	Bottom board	LEDs (handlebar)	RFID	Extra IOs	Paddle IOs	Hall effect
T26-01	●	●	●	●	○	○ (1)	○ (1)
T26-06	●	●	–	○	○	○ (1)	○ (1)
T26-07	●	●	●	○	○	○ (1)	○ (1)
T26-81	●	●	●	●	○ (2)	○ (1)	○ (1)

● Standard ○ Optional[1]

Model	Blank front	Stop button on the side	Key switch	LEDs in handlebar	RFID	Cable control	Vibration motor
T26-01	●	○	●	●	●	○	●
T26-06	●	○	○	○	○	○	●
T26-07	●	○	○	●	○	○	●
T26-81	2 joysticks, 3 toggle switches	●	●	●	●	○	●

● Standard ○ Optional[2]

[1]Must be purchased separately.

[2]Must be purchased separately.

1.2.3 COMPATIBILITY

This transmitter is compatible with all transmitters and receivers in the Puma range.

CHAPTER 2: SAFETY

2.1 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 death or serious injury.

This product must not be operated without having read and understood the End user instructions, the specific technical documentation (for customized systems), and having received the appropriate training. The purchaser of this product has been instructed how to handle the system safely. The following information is intended for use as a complement to applicable local regulations and standards.

IMPORTANT! Tele Radio AB remote controls are often built into wider applications. These systems should be equipped with:

- **a wired emergency stop where necessary**
- **a brake**
- **an audible or visual warning signal**

2.1.1 OPERATION

This radio system must 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 or representative for service immediately.**
- **Never leave 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.**

2.1.2 MAINTENANCE

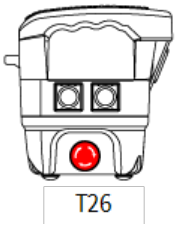
Before maintenance intervention on any remote controlled equipments:
- **always remove all electrical power from the equipment.**
- **always follow lockout procedures.**

- Keep the safety information for future reference. Always download the End user instructions from our website, www.tele-radio.com, for the latest available version.
- 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 (see "2.2.1 Stop button").
- If the stop button is mechanically damaged, do not use the transmitter. Contact your supervisor or representative for service immediately.
- Keep the product in a clean, dry place.
- Do not try to open the encapsulation.

- Always contact your representative for service and maintenance work on the product.
- Keep contacts and antennas clean.
- Wipe off dust using a clean, slightly damp cloth.
- Never use cleaning solutions.
- Check the encapsulation, foils and cable for damages every day. If you use the product although the encapsulation or foil is damaged, moisture can cause serious damage to the electronics.

2.2 Safety features

2.2.1 STOP BUTTON



When the **Stop** button is pressed, the safety relays on the receiver deactivate, unless otherwise stated in the corresponding technical documentation provided with each customized system.

IMPORTANT! Always use the Stop button in an emergency.

Fig. 1 Example of possible locations for the stop button. Here on the right side of a T26 transmitter.

IMPORTANT! The Stop button should always be tested before operating the transmitter. This test should be done on each shift, without a load.

To test the stop button:

1. Press the **Stop** button.
2. Twist and release the **Stop** button.

CHAPTER 3: TECHNICAL DATA

NOTE: The information below may differ in customized systems, please refer to the corresponding technical documentation provided with each system.

3.1 System specifications

Radio frequency band	2405 – 2480 MHz
Frequency management	Direct Sequence Spread Spectrum (DSSS) Field Strength Adaptation Feature
Number of Channels	16 (channel 11 – 26)
Range (typical)	100 m (328 ft), adjustable depending on configuration
System address	32 bit – 4 294 967 295 possibilities
Data format	250 kbit/s
Hamming distance	6
Pairing (registration)	Easy to pair without tools and without opening the receiver housing.
Configuration	Display menu

3.2 Transmitter specifications

3.2.1 COMMON SPECIFICATIONS

Power supply	One (1) replaceable, rechargeable lithium-ion battery
Battery pack	3.7 V / 1600 mAh Li-ion – 1 battery compartment
Current consumption	From 130 mA (depending on the configuration)
Operating time	Up to 10 h (depending on the configuration)
Radio frequency output power	EIRP[1] < 12.5 dBm (18 mW)
Antenna	Internal (external as an option)
Functions	Up to 40 analog functions Up to 96 digital functions
Display	LCD 45 x 35 mm (1.77 x 1.37 in) Resolution: 320 x 240 px Graphic / pixels with backlight sensor Standard and Custom configurations

[1]Equivalent isotropic radiated power

Safety levels	EN ISO 13849-1, PLd CAT3 (Stop function)
IP code	IP65
Operating temperature	-20...+55 °C / -4...+130 °F
Storage temperature	-30...+70 °C / -22...+158 °F (without battery)[1]
Charging temperature	+10...+35 °C / +50...+95 °F

3.2.2 OTHER SPECIFICATIONS

	T26-01	T26-06	T26-07	T26-81
Number of joysticks	○	○	○	2, 2-axis with spring return for analog control directions[2].
Number of paddles	○	○	○	–
Number of switches	○	○	○	3, toggle switch (On)–None–(On) (spring return)
Stop button	On the side	No predefined position		On the side
Key switch	●	–	–	●
LEDs in handlebar	●	–	●	●
RFID	●	–	–	●
Vibration motor for Haptic feedback	●			
Built-in drop and tilt protection	●			
Cable backup	○			
Weight (typical)	~0.95 kg (~2.1 lbs)			~2 kg (~4.4 lbs)

● Standard ○ Optional[3] – : Not available

Joystick directions

T26-81 transmitters have two joysticks (2-axis with spring-to-centre) allowing a stepless control.

[1]For storage temperature of battery pack M245060 (D4-02), see "8.2 Battery information".

[2]see "Joystick directions" on next page.

[3]Must be purchased separately.

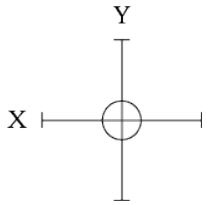
	T26-81
Joystick 1 (XY)	Analog XY
Joystick 2 (XY)	Analog XY

Code (XY)	**Movement control on X**	**Movement control on Y**	**Movement control on Z**
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	–
Analog XYZ	stepless	stepless	stepless

Example:

Analog XY

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



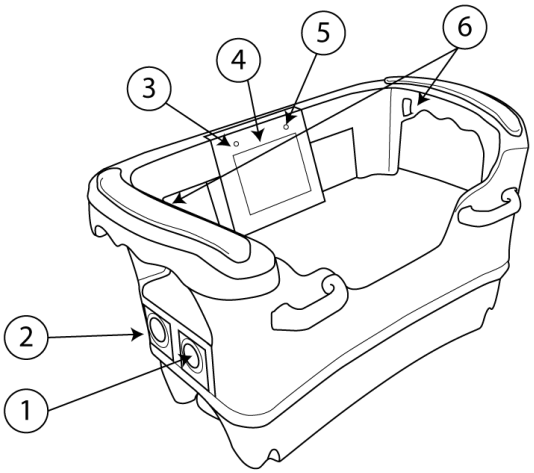
Analog Y

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

CHAPTER 4: PRODUCT GENERAL DESCRIPTION

NOTE: The pictures shown in this chapter are for illustrative purposes only. Depending on the configuration, the actual product appearance may differ from the basic model used for reference.

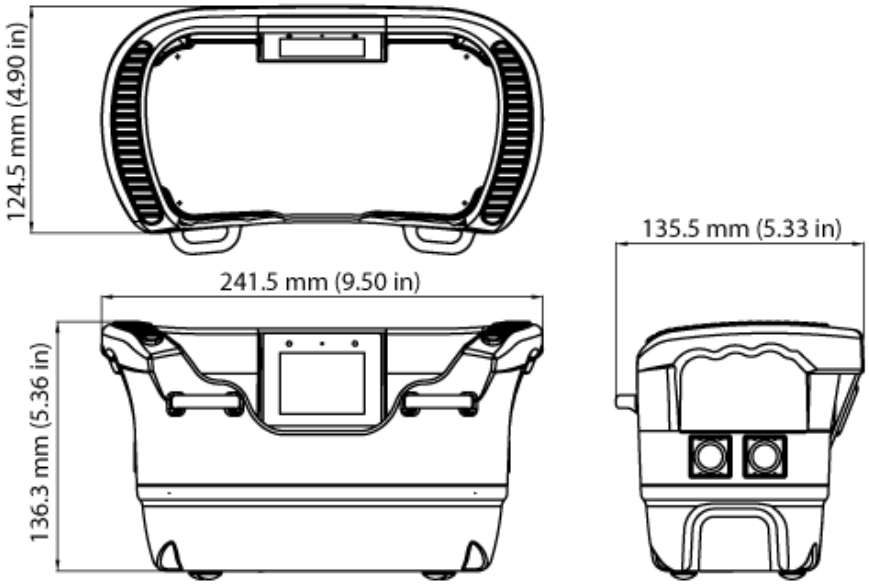
4.1 Overview



1. side button 2
2. side button 1
3. Status LED
4. LCD display
5. Battery LED
6. Handlebar LEDs*

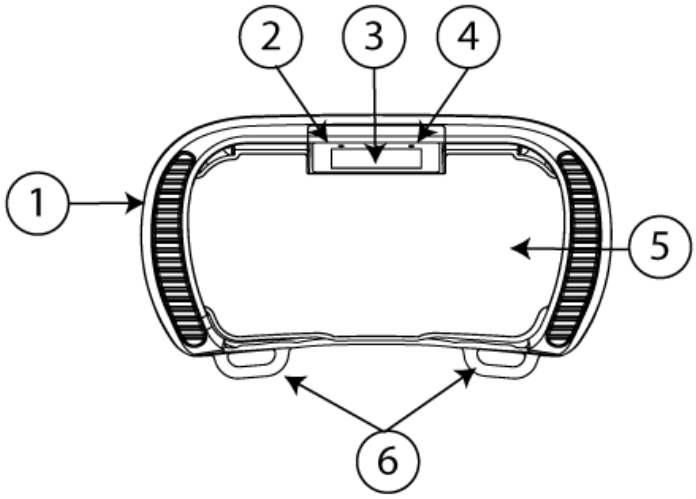
* Depending on models (see "1.2.2 About T26 transmitters").

4.2 Transmitter dimensions



4.3 Transmitter top views

4.3.1 T26-01, T26-06, T26-07

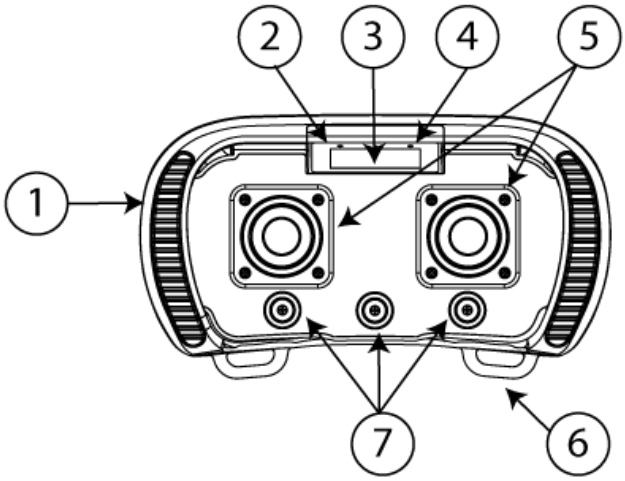


1. Handlebar[1]
2. Status LED
3. LCD display
4. Battery LED
5. Customizable area[2]
6. Belt loops

[1]T26-07: With integrated LEDs.; T26-06: no integrated LEDs.

[2]Paddles, joysticks, buttons, etcs. depending on the configuration.

4.3.2 T26-81

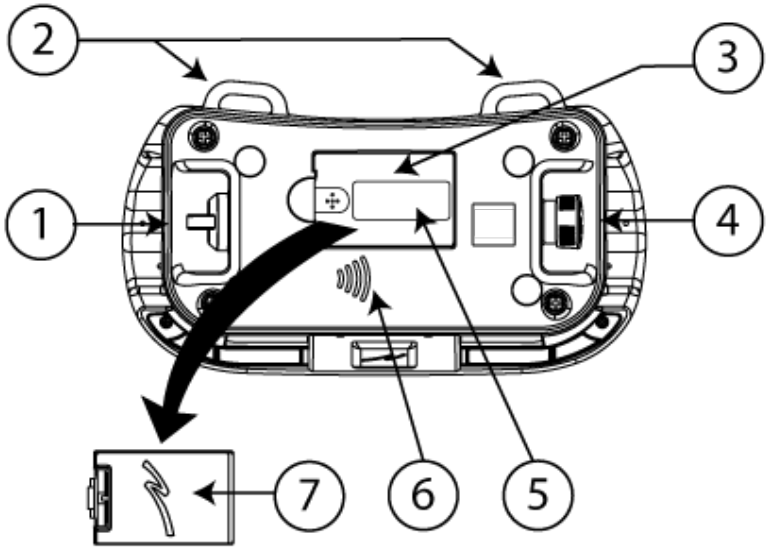


1. Handlebar[1]
2. Status LED
3. LCD display
4. Battery LED
5. Joysticks 1–2
6. Belt loops
7. Toggle switches 1–3

[1]With integrated LEDs.

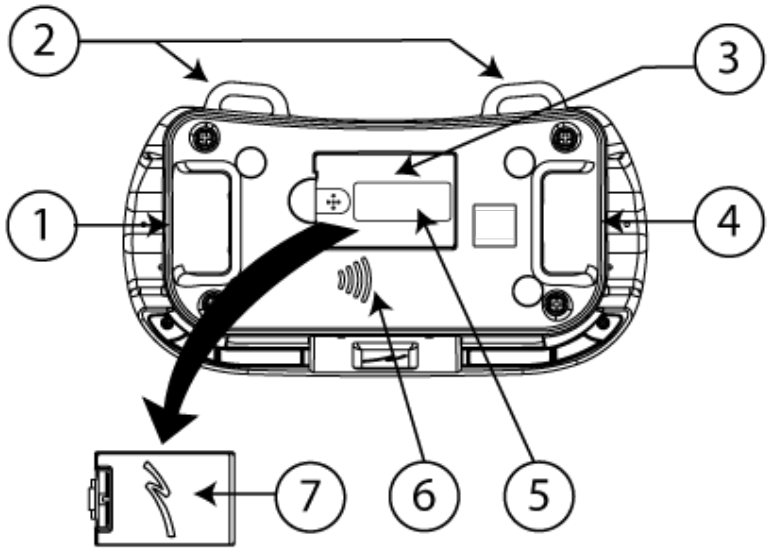
4.4 Transmitter bottom views

4.4.1 T26-01, T26-81



1. Key switch
2. Belt loops
3. Battery compartment
4. **Stop** button
5. Product label
6. RFID antenna (configurable option)
7. Replaceable battery

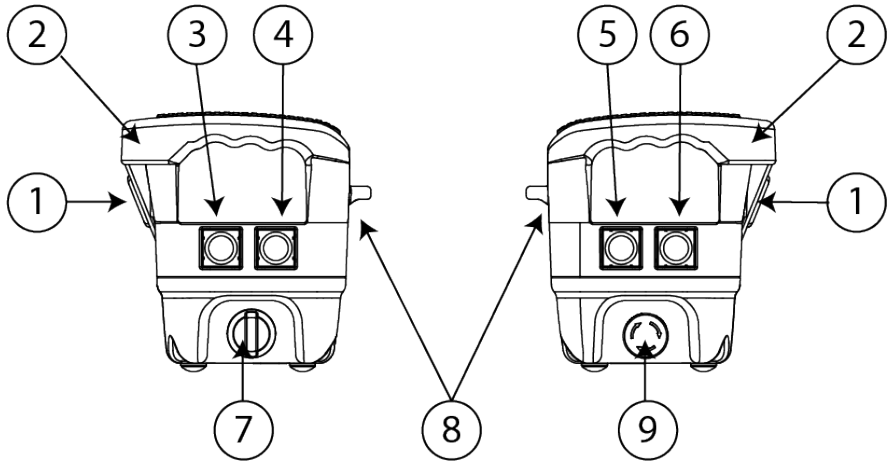
4.4.2 T26-06, T26-07



1. Customizable area (e.g. for a key switch)
2. Belt loops
3. Battery compartment
4. Customizable area (e.g. for the stop button)
5. Product label
6. RFID antenna (configurable option)
7. Replaceable battery

4.5 Transmitter side views

4.5.1 T26-01



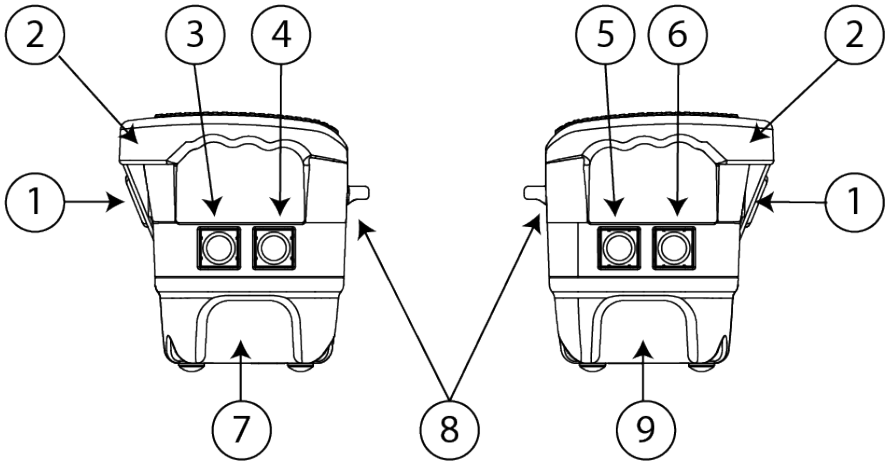
Left side

Right side

1. LCD display
2. Handlebar[1]
3. **SB1**
4. **SB2**
5. **SB4**
6. **SB3**
7. Key switch
8. Belt loops
9. **Stop** button

[1]With integrated LEDs.

4.5.2 T26-06, T26-07

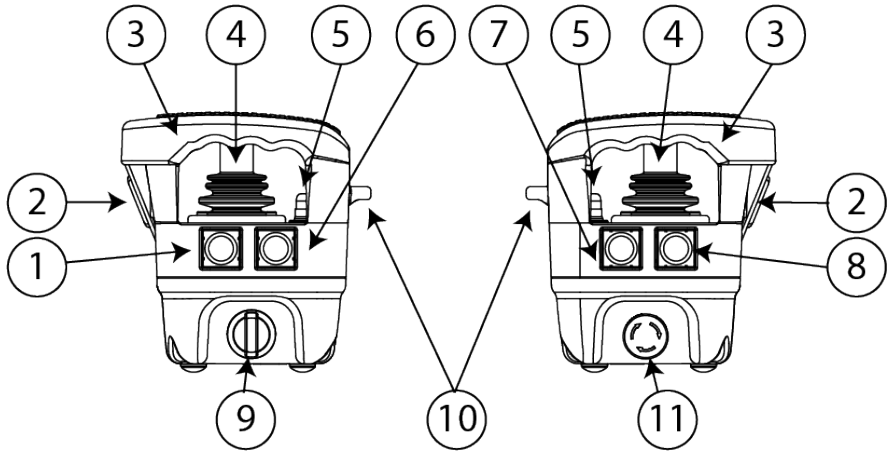


Left side Right side

1. LCD display
2. Handlebar[1]
3. **SB1**
4. **SB2**
5. **SB4**
6. **SB3**
7. Customizable area (e.g. for a key switch)
8. Belt loops
9. Customizable area (e.g. for the stop button)

[1]T26-07: With integrated LEDs.

4.5.3 T26-81



Left side Right side

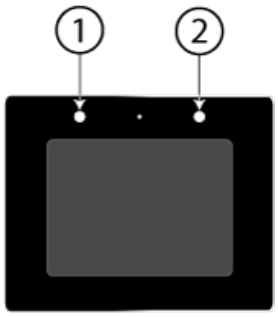
1. **SB1**
2. LCD display
3. Handlebar[1]
4. Joysticks 1–2
5. Toggle switches 1–3
6. **SB2**
7. **SB4**
8. **SB3**
9. Key switch
10. Belt loops
11. **Stop** button

[1]With integrated LEDs.

4.6 Display and display LEDS

The transmitter is equipped with two LEDs providing information about battery level, radio link status and other status.

The transmitter display is intended for receiving and visualizing feedback information from the system as well as for basic configuration. The T26 transmitter display is controlled by the transmitter's side buttons.



1. Status LED
2. Battery LED

4.6.1 DISPLAY LEDS

The transmitter display has two bi-color LEDs for status indication:

- Battery LED is for battery indication.
  Green means that the battery level is good while red indicates that the battery level is low. When the battery LED turns red, the battery should be changed / recharged at the next convenient opportunity.
- Status LED is for radio link and system information.

For more information about status and error indications, see "Chapter 5: Status and error indications"

4.6.2 MESSAGE TYPES ON THE DISPLAY

Error /Fail messages

”Error”/”Fail” messages are shown on a red background and indicate a fatal error. ”Error”/”Fail” messages are displayed until the transmitter is turned off (after expiration of the inactivity period or manual stop by the user).

Success messages

”Success” messages are shown on a green background and indicate that an operation has succeeded. ”Success” messages messages are displayed until the transmitter is turned off (after expiration of the inactivity period or manual stop by the user).

Warning messages

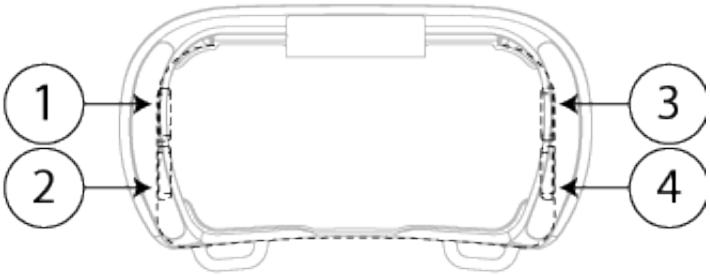
”Warning” messages are shown on a yellow background and indicate a warning message that will vanish after a short moment.

Information messages

”Information” messages are shown on a white background and give information about an ongoing operation, e.g. when you log in, etc.

4.7 Side buttons

The side buttons have different functions depending on the mode the transmitter is in.



1. **SB1**
2. **SB2**
3. **SB3**
4. **SB4**

4.7.1 TRANSMITTERS USING SOFTWARE NUMBER SW0033-31V06 OR HIGHER (FROM 05/14/2019)

Side button...	**Default function in...**			
	pre-session	**session**	**menu mode**	**calibration mode**
SB1	Enter calibration mode	–	**Select**	Swap directions
SB2	Handlebar light	Handlebar light	Handlebar light/ **Back**	Handlebar light
SB3	**Start** / **Menu mode**	–	**Up**	Calibration positive
SB4	**Start**	**Quick logout**	**Down**	Calibration negative

CHAPTER 5: STATUS AND ERROR INDICATIONS

5.1 Display LEDs status and error codes

LED	Colour	Off	On	Flash	Indicates
Battery LED	green		●		Battery level is good.
	red		●		Battery level is low, must be charged.
	red			●	Battery is charging and is not yet fully charged.
	–	○			No battery present in battery compartment.
Status LED	green		●		When started, radio link established.
	green			●	When started, no radio link.
	red		●		Fatal error. More information can be found on the display.
	red			●	Sending stop/ logout command. More information can be found on the display.

5.2 Error indications and messages

Please write down or take a picture of the error message shown on the display and contact your representative for assistance.

CHAPTER 6: OPERATION

6.1 General information

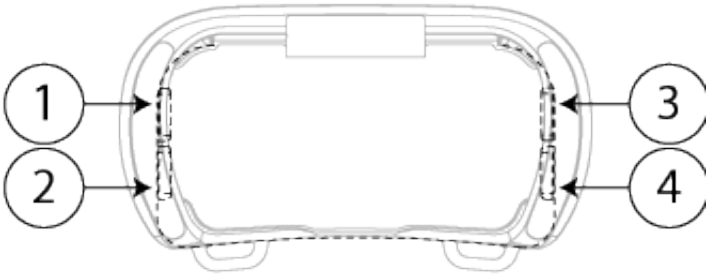
To control a receiver, the transmitter must be registered and logged in to the receiver. If another transmitter is already logged in to the receiver, it must be logged out before a different transmitter can be logged in.

If no transmitter is logged in to the receiver, proceed with the login procedure before using the system. Once a transmitter has been logged in, it will remain logged in until it is manually logged out.

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

6.2 General navigation

The Menu system is controlled by side buttons **SB1–4**.



1. **Select** button (**SB1**)
2. **Back** button (**SB2**)
3. **Up** button (**SB3**)
4. **Down** button (**SB4**)

6.2.1 MAIN MENU

Side button	Action
SB1 (Select)	Enter the selected menu
SB2 (Back)	Back / cancel
SB3 and **SB4** (Up/Down)	Move between the menu items

6.2.2 ENTER NUMBERS/ CHANGE VALUES

Side button	Action
SB1 (Select)	Accept the updated value
SB2 (Back)	Cancel and go back to the menu without confirmation
SB3 and **SB4** (Up/Down)	Increase/decrease the value displayed

6.2.3 SELECT A LOCATION

Side button	Action
SB1 (Select)	Select/deselect the current location. Selected elements are indicated by a + sign on the left of the selection.
SB2 (Back)	Accept currently selected slots
SB3 and **SB4** (Up/Down)	Move through the location list.

6.3 Start-up protection

RFID tags can be activated to prevent unauthorized personnel from operating the transmitter. To activate the RFID functions, contact your representative for assistance.

Once the RFID start-up protection functions have been activated, RFID tags need to be registered in the transmitter before they can be used.

If the RFID start-up protection functions have been activated but no RFID tag has been registered, this will be indicated on the display with the following warning message: `[There are no RFID stored in the settings. Register tags in the config menu.]`

Once RFID tags have been registered, the display will show: `[Waiting for a valid tag to be presented…]` each time the transmitter is started.

6.4 Functionality test

NOTE: This list is intended for use as a support for the manufacturer of the equipment where Tele Radio AB remote control systems are installed.

Before operating the radio system, follow the procedure below.

IMPORTANT! This test should be performed at each shift, without a load, and should include but not be limited to the following steps

- Make sure that the controlled object can not cause any harm in the event of unexpected movement.
- Always follow local safety rules and start the equipment according to the corresponding instructions.
- Make sure that the transmitter can control the receiver by testing all functions.
- Make sure that the functions respond as expected.
- Make sure that all movements are as planned.
- Make sure that the stop button works correctly.
- Make sure that the stop function works correctly.
- Make sure the system stops when the battery is removed from the transmitter.

6.5 Log the transmitter in to a receiver

1. Make sure that the **Stop** button is pressed.
2. Turn the key switch to the 'On' position (horizontal).
3. Twist and release the **Stop** button.
   (missing or bad snippet)(missing or bad snippet)
   The display shows: `[Session Selection]`

   NOTE: Should the display show a warning message on zero position for the control switch or joystick, release the affected controls in order to proceed. If the controls are not released, the transmitter will block the corresponding inputs and display the following warning message: `[Inputs have been blocked. IO board 0X: 0xXXXXXXXX]`.
   Enter the **Menu mode** and clear the locked inputs before proceeding with the login procedure (see "7.5 Clear blocked inputs").
3. Press the **Select** button to select one or more receiver(s) for the session.
   The display shows: `[Select one or more items]` and the list of the registered receivers. Selected receivers are marked with a + sign.

Select/change one or more receiver(s)

4. Choose a receiver in the list using the **Up/Down** buttons.
5. Press the **Select** button to select.
   A + sign is displayed in front of the selected receiver.
6. Repeat steps 4–5 if necessary.
7. Press the **Back** button to accept.
   The display returns to the start screen: `[PUSH START BUTTONS]`
8. Press both **Start** buttons to start the session.
   The buzzer emits a beep. The display shows: `[Logging in…]`.
9. Press the **Stop** button to exit the session.
   The display shows: `[Ending session…]`
   The login settings are now stored/ saved in the transmitter.

Keep selected receiver(s)

4. Press the **Back** button.
   The display returns to the start screen: `[PUSH START BUTTONS]`
5. Proceed to step 8

6.6 Start a session

To be able to control a receiver using the transmitter, the transmitter must be registered and logged in to a receiver.

When not in use, transmitters must be switched off and stored in a secure storage space.

Do not use the system if the stop button is damaged or if it does not stop the equipment. Doing so could result in serious injury or death.

NOTE: If the transmitter has never been logged in to the receiver before, the start-up procedure will fail and the transmitter will turn off.
Start the transmitter again and log in to a receiver before proceeding with the start-up procedure (see "6.5 Log the transmitter in to a receiver").

NOTE: The last accessed receiver(s) will automatically be selected the next time the transmitter is started.

1. Make sure that all safety measures have been followed.
2. Make sure the transmitter battery is charged.
3. Make sure that the **Stop** button is pressed.
4. Turn the key switch to the 'On' position (horizontal).
5. Twist and release the **Stop** button.
   The initial start-up logo is displayed. Battery indicator(s) light(s). The display shows: `[PUSH START BUTTONS]`

   NOTE: If the display shows a warning message on zero position for the control switch or joystick, release the affected controls in order to proceed. If the controls are not released, the transmitter will block the corresponding outputs and display the following warning message: `[Inputs have been blocked. IO board 0X: 0xXXXXXXXX]`.

   To clear the locked inputs before proceeding with the start-up procedure see "7.5 Clear blocked inputs".

6. Press the **Select** button to check if there are receiver(s) selected for the session.
   The display shows: `[Select one or more items]` and the list of registered receivers. Selected receivers are marked with a + sign.
   If the correct receiver is already selected

   - Press the **Back** button.
     The display returns to the start screen: `[Session Selection]`
   - Proceed to step 11.

   To select/change receiver(s):

   - Proceed to next step.
7. Choose the receiver(s) to operate using the **Up/Down** buttons.
8. Press the **Select** button to select.
   A + sign is displayed in front of the selected receiver.
9. Repeat step(s) 7–8 if necessary.
10. Press the **Back** button to accept.
    The display shows: `[Session Selection]`
11. Press and hold both **Start** buttons simultaneously for one second.
    The buzzer emits a beep.
12. Release both **Start** buttons.
    The Status LED flashes rapidly while waiting for the receiver confirmation.

    - **If the transmitter has already been logged in to the receiver:**
      The display shows: `[Logging in…]`
      The transmitter logs in to the receiver in which it has been registered in. The Status LED lights green.
    - **If the transmitter has not been logged in to the receiver:**
      The display shows: `[Login failed. No receivers selected for session.]` *The transmitter turns off.*
      Start the transmitter again and log in to a receiver before proceeding with the start-up procedure ("6.5 Log the transmitter in to a receiver").

NOTE: If the paired receiver is not detected within 30 s, the login process is canceled. *The display shows:* `[Login failed. Timout. Receiver HY-RX-xxxx]` and the transmitter turns off.

13. Proceed with the functional test (see "6.4 Functionality test").

6.7 Log the transmitter out from a receiver

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

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.

NOTE: The logout procedure will log the transmitter out from all receivers that are part of the radio session.

6.7.1 SOFTWARE VERSION SW0033-31V06 OR HIGHER

1. Press and hold side button **SB4**.
2. Press the **Stop** button.
   The display shows: `[Logging out…] and [Logout successful]`
3. Release side button **SB4**.
   The transmitter turns off.

6.8 Switch the transmitter off

When the transmitter is active and the stop button is pressed, all relays on the receiver deactivate.

NOTE: When the transmitter is switched off, it remains logged in to the receiver(s). To log out, see "6.7 Log the transmitter out from a receiver"

1. Press the **Stop** button.
   The display shows: `[Ending session]`
   The transmitter turns off. All relays on the receiver deactivate.

6.9 Advanced operation

6.9.1 PITCH & CATCH

NOTE: For this procedure to succeed, the Pitch & Catch function must have been configured in the receiver and in the transmitter(s) allowed to carry out Pitch and Catch. Contact your representative for assistance

NOTE: For this procedure to succeed, the transmitters must be set to the same radio channel.

The transmitter being in an ongoing session must allow (pitch) the other transmitter to take over (catch) the session.

On the transmitter in session	On the transmitter that will "catch" the session
1. Press and hold the **allowPitchAndCatchProcedureButton** button. *The transmitter enters Picht&Catch mode.*	
	2. Log the transmitter in the receiver. *The transmitter has taken over the session.*
3. Once the other transmitter has successfully logged in, release the **allowPitchAndCatchProcedureButton** button.	
4. Press the **Stop** button.	

6.9.2 MASTER TAKEOVER

NOTE: For this procedure to succeed, the Master takeover function must have been configured in the receiver and in the transmitter(s) allowed to carry out Master takeover . Contact your representative for assistance

NOTE: Once Master takeover has been configured, it is possible to log in with any master transmitter even if someone else has logged in before, or even when there is no session active.

1. Log in with the Master transmitter.
   Any other transmitter in session is automatically logged out.
   The transmitter is logged in to the receiver.

CHAPTER 7: CONFIGURATION MENU

7.1 Menu mode and standard settings

The **Menu mode** allows for certain settings to be set directly from the transmitter. Once in **Menu mode**, the following menus will be available.

Menu	Description
[Register	Select a location to register a new receiver in. Radio communication is immediately enabled when the registration is confirmed.
[Erase]	Select a registered receiver to be erased from the transmitter.
[Replace]	Select a registered receiver to be replaced.
[Clear blocked input]	Reset any blocked input.
[Radio Channel]	Select the channel/bank to use.
[Backlight Intensity]	Set the display luminosity (in %).
[Buzzer Volume]	Set the buzzer volume level (in %).
[Radio Inactivity Timeout]	Set the off delay (in s) before the transmitter automatically switches off.
[Time Zone]	Select the time zone (UTC +/- 14 h).
[Startup protection - RFID Learn]	Register one or more RFID tags in the transmitter for start up protection.
[Startup protection - RFID Erase]	Erase one or more registered RFID tag from the transmitter.
[Repeater Configuration]	Set the position number of a repeater (slot ID) when used in a chain of repeaters.
[Show device information]	Display the unit's serial number and a list of the software versions currently installed on the transmitter.
[Show BLOB info]	Display BLOB information.
[Start RFID Test]	For testing the registered RFID tags.

For more information about the menu navigation, see "6.2 General navigation".

7.1.1 MENU MODE PROTECTION

PIN codes can be activated to prevent unauthorized personnel from entering the **Menu mode**. To activate the PIN code functions, contact your representative for assistance. All PIN code settings require assistance.

The **Menu mode** can be protected by PIN codes with different access levels (ex: standard and admin). Once the protection functions have been activated, a PIN code will always be required for accessing the **Menu mode**.

7.2 Enter Menu mode (no PIN code required)

1. Make sure that the **Stop** button is pressed.
2. Turn the key switch to the 'On' position (horizontal).
3. Twist and release the **Stop** button.
   The initial start-up logo is displayed. Battery indicator(s) light(s). The display shows: `[Session Selection]`
4. Press and hold side button **SB3**.
5. Press the **Stop** button.
6. Release **SB3**.
   The display shows the menu list.
7. Select a menu by using side buttons **SB1–4** (see "6.2 General navigation").

7.3 Enter Menu mode (PIN code required)

1. Make sure that the **Stop** button is pressed.
2. Turn the key switch to the 'On' position (horizontal).
3. Twist and release the **Stop** button.
   The initial start-up logo is displayed. Battery indicator(s) light(s). The display shows: `[Session Selection]`
4. Press and hold side button **SB3**.
5. Press the **Stop** button.
6. Release **SB3**.
   The display shows: `[Config Menu PIN 0000]`
7. Enter the first digit using the **Up/Down** buttons.

   NOTE: Once the **Select** button has been pressed, it is not possible to move back to the previous digit. Pressing the **Back** button will abort the procedure.
8. Press the **Select** button to accept and move to the next digit.
9. Repeat steps 7–8 until all four digits have been entered.
10. Press the **Back** button to accept.

    - **If the entered PIN code is correct:**
      The display returns to the menu list.
    - **If the entered PIN code is incorrect:**
      The display shows: *`[Config Menu PIN Incorrect PIN entered, shutting down device]`*. *The transmitter turns off.*
      Go back to step 1 and try again.

7.4 Register a transmitter in a receiver

Registering means establishing communication between the transmitter and the receiver.

T26 transmitters can have up to 32 registered receivers (locations 1–32).

NOTE: The registration instructions require access to the receiver housing. For the registration procedure to be successful, the receiver must be powered up.

RISK OF UNINTENDED EQUIPMENT OPERATION
Only transmitters that are intended for use should be registered in the receiver.
Failure to follow these instructions could result in death, serious injury, or equipment damage.

RISK OF UNINTENDED EQUIPMENT OPERATION
Do not perform this action when the receiver is in a session with another transmitter. The radio communication may be interrupted or broken.
Failure to follow these instructions could result in death, serious injury, or equipment damage.

On the Receiver

1. Power the receiver up.
   LED 1 is flashing (red).
2. Press and hold the **Cap sensor** button until LED1 stops flashing.
   LEDs 2–5 flash (fast).
3. Release the **Cap sensor** button.
   LEDs 1–5 flash (slow).
   The receiver is now in registration mode.
   If no register command is received within 30 seconds, the receiver will exit registration mode.[1]

On the Transmitter

4. Make sure that the **Stop** button is pressed.
5. Turn the key switch to the 'On' position (horizontal).
6. Twist and release the **Stop** button.
   The initial start-up logo is displayed.Battery indicator(s) light (s).The display shows:`[Session Selection]`.
7. Enter **Menu mode** (see "7.2 Enter Menu mode (no PIN code required) ").
8. Navigate to the `[Register]` menu using the **Up/Down** buttons.
9. Press the **Select** button to enter.
10. Choose a location for the receiver to be registered in using the **Up/Down** buttons.
11. Press the **Select** button to select.
    A + sign is displayed in front of the selected location.
12. Press the **Back** button to accept.
    The display shows:`[Registration in progress…]`

When the transmitter's register command is received, …

On the Receiver	On the Transmitter
LEDs 1–5 flash (fast).	*The display shows:*`[Confirm registration on the receiver]`.
13. Press the **Cap sensor** button for at least 2 s. *LEDs 1–5 flash three times.*	*The display shows:*`[Registration successful. Transmitter was registered in HY-RX-xxxxx]`.

[1] It is also possible to exit registration mode by briefly touching the receiver's cap sensor button.

The transmitter is now registered.

On the Receiver	On the Transmitter
LED 1 is flashing (slow).	*The transmitter turns off.*

If not successfully completed:

On the Receiver	On the Transmitter
The receiver exits registration mode. *LED 1 is flashing (red).*	*The display shows:* `[Registration failed Timout]`. The transmitter turns off. Go back and proceed from step 2.

7.5 Clear blocked inputs

On start up, the T26 transmitters perform a zero position check for control switches, joysticks and/or paddles.

If the transmitter detects that some control commands are not in the zero position, the following warning message is displayed:

`[One or more inputs are not in the zero/startup position]`
`[Release all controls to proceed.]`

If the affected controls are not released, the transmitter will block the corresponding inputs and display the error message:

`[Zero position problem identification in progress.]`
`[Please wait for device to automatically restart]`

The next time the transmitter is started, the display will show the warning message:

`[Inputs have been blocked.]`
`[IO board 0X: 0xXXXXXXXX]`.

To clear the locked inputs:

1. Make sure that the **Stop** button is pressed.
2. Turn the key switch to the 'On' position (horizontal).
3. Twist and release the **Stop** button.
   The initial start-up logo is displayed. Battery indicator(s) light(s). The display shows: `[Session Selection]`
4. Press and hold side button **SB3**.
5. Press the **Stop** button.
6. Release **SB3**.
   The display shows the menu list.
7. Navigate to the `[Clear blocked input]` menu using the **Up/Down** buttons.
8. Press the **Select** button to enter.
   The display shows: `[Value: False]`
9. Press the **Up** or **Down** button to change `[False]` to `[True]`.
10. Press the **Select** button to confirm.
    The display returns to the menu list.
    - **If successfully completed, at next start-up:**
      The display shows: `[Session Selection]`

- **If not successfully completed, at next start up:**
  The display shows: `[Inputs have been blocked.]` `[IO board 0X: 0xXXXXXXXX]`.
  Go back to step 1 and try again.

CHAPTER 8: BATTERY

8.1 Battery precautions

Carefully read 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.

8.1.1 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.**

8.1.2 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.**

8.2 Battery information

NOTE: Only batteries approved by Tele Radio AB should be used in T26 transmitters.

T26 transmitters are equipped with one battery. Battery level is indicated by the LED indicator on the transmitter's display (see "4.6.1 Display LEDs").

If both batteries are very low and charging is in progress, the battery LED 1 and 2 will flash red at the beginning of charging. After a moment, the charging process will determine which battery that should be charged first. The LED corresponding to the battery being charged will continue to flash (red) while the other battery LED will remain lit (red). If there is any charging error during charging, the corresponding battery LED will flash red /green alternatively (appears orange) with an interval ON=100 ms and OFF=900 ms.

The battery can be recharged using a Tele Radio AB battery charger (e.g. table charger or car cigarette lighter adapter) or the AC main charger adapter.

BATTERY PACK	
Article number	M245060 (D4-02)
Battery type	Replaceable, rechargeable lithium-ion battery
Weight (typical)	47 g (1.66 oz)
Voltage	3.7 V / 1600 mAh
Operating time	~ 16 h with continuous usage
Charging time	~ 4 h with an empty battery
Charging cycle	600 cycles
Charging temperature	+10...+35 °C / +50...+95 °F
Storage temperature	-20...+55 °C / -4...+130 °F

CHARGER[1]	**M769755**	**M769780**	**M769746**
Description	Table/wall charger battery M245060	AC adapter to be used with M769755	DC adapter[2] to be used with M769755

[1] Purchased separately.

[2] Car cigarette-lighter adapter

CHARGER[1]	M769755	M769780	M769746
Input/output power	5 V DC, 10 % (1A)	110 – 240 V AC / 5 V DC	12 – 24 V DC / 5 V DC
Weight (typical)	0.12 kg (0.26 lbs)	–	0.11 kg (0.25 lbs)
Dimensions	90 x 25 x 135 mm (3.5 x 1 x 5.3 in)	–	–
Other	Can be wall-mounted	Supplied with multiple connector types	–

NOTE: M769755 must be purchased together with an adapter, either AC (M769780) or DC (M769746).

NOTE: Electronics and batteries must be physically separated before disposal. Make sure that electronics or batteries are not disposed of in household waste.

8.2.1 CHARGE THE BATTERY IN THE TABLE CHARGER

NOTE: When approximately 10 % of a battery capacity remains, the corresponding battery LED will light red.

1. Remove the battery from its compartment and place it in the Tele Radio AB battery charger.
2. The charger's LED lights red while the battery is charging.
3. The charger's LED turns green when the battery is fully charged.
4. Put the battery back into the transmitter's corresponding compartment.

[1] Purchased separately.

CHAPTER 9: WARRANTY, SERVICE, REPAIRS, AND MAINTENANCE

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

The following 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 and use
- Damp and water damage

Maintenance

Repairs and maintenance must be performed by qualified personnel

Only use spare parts from Tele Radio AB

Contact your representative for service or any other assistance

Keep contacts and antennas clean

Wipe off dust using a slightly damp, clean cloth

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

CHAPTER 10: REGULATORY INFORMATION

10.1 Europe

Applies to:

T26, T26-01, T26-06, T26-07, T26-81,

10.1.1 CE MARKING

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

10.1.2 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.

10.2 North America

Applies to:

T26, T26-01, T26-06, T26-07, T26-81

10.2.1 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.

10.2.2 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, operation 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.

10.2.3 FCC/IC LABELS

The radio module in this product is labeled with its own FCC ID and IC numbers. The FCC ID and IC numbers are 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 enclosed radio module. The final end device must be labeled in a visible area with the following:

“Contains FCC ID: ONFC1602A”

“Contains IC: 4807A-C1602A”

The FCC and IC numbers are found on the product label.

10.2.4 RADIO MODULE

The products described in these instructions contain the radio modules:

PRODUCT	RADIO MODULE
T26	D00005-15

10.3 AEC

Applies to:

T26-01, T26-06, T26-07, T26-81

10.3.1 AEC STATEMENT (ДЕКЛАРАЦИЯ EAC)

This product is declared as compliant within Eurasian Economic Union (EAC). EAC declaration is available on request.

ANNEX A: INDEX

A

AEC Statement 52

Antenna 14

B

Battery 47

Charge 48

BATTERY PACK 47

Battery precautions 45

Handling 45

Storage 45

C

CHARGERS 47

Charging temperature 15, 47

Clear blocked inputs 43

Compatibility 10

Configuration menu 37

Enter Menu mode, no PIN code 38

Enter Menu mode, PIN code 39

Current consumption 14

D

Data format 14

Dimensions 17

Display LEDs 25

Display specifications 14

Disposal 46

E

EIRP 14

F

FCC statement 50

FCC/IC labels 52

Frequency management 14

Functionality test 30

I

IC Statement 51

IP code 15

L

Log in 31

Log out 34

M

M245060 47

M769746 47

M769755 47

M769780 47

Maintenance 49

Menu mode 37

- Enter Menu mode, no PIN code 38
- Enter Menu mode, PIN code 39
- Menu protection 38

Menu navigation 28

Message types 25

N

Number of channels 14

O

Operating temperature 15

P

PIN code 38
Power supply 14
Product label 8

R

Radio frequency band 14
Radio frequency output power 14
Radio module 52
Range 14
Register 40

S

Safety Features 13
Safety standards 15
Serial Number 8
Side buttons 26
SN 8
Specifications
  System 14
  Transmitter 14
Start-up protection 29
Start session 32
Status and error code messages 27
Stop button 13
Storage temperature 15, 47
Switch off 35

System address 14

T

Transmitter display 25

W

Warnings & restrictions 11

Maintenance 12

Operation 11

WEEE directive 50

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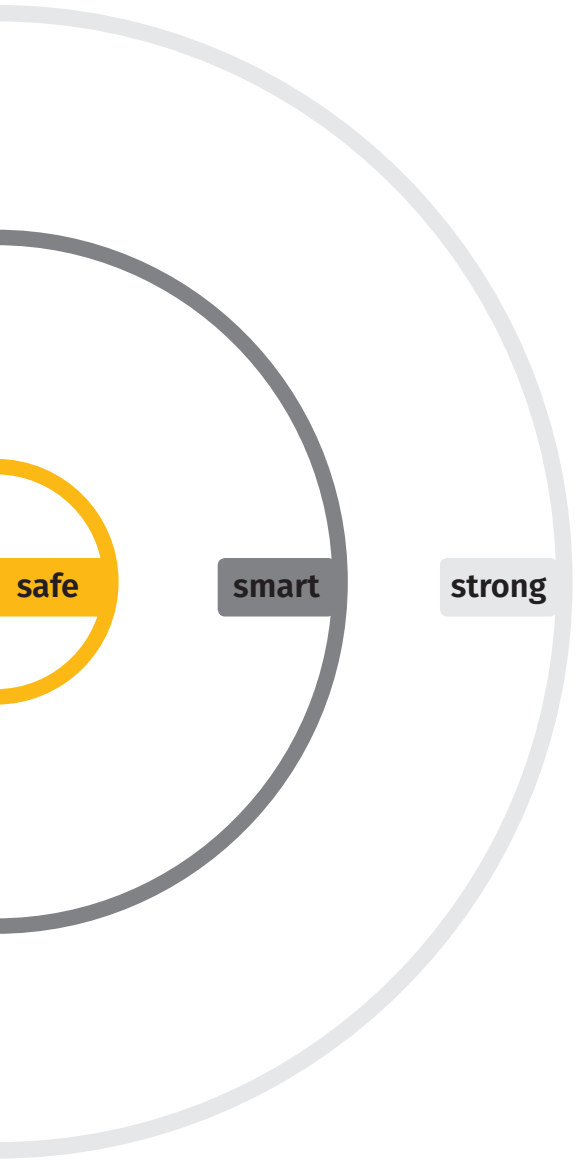

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wireless solutions

These End user instructions are subject to change without prior notice.

Download the latest End user instructions from *www.tele-radio.com* .