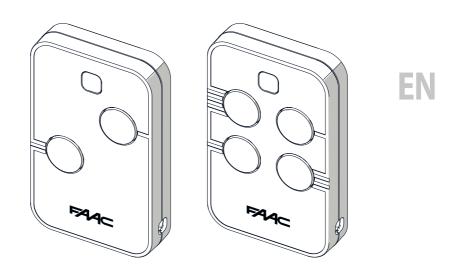
XTO2-XTO4







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1. INTRODUCTION TO THE INSTRUCTION MANUAL



The images of the receiver board are for illustration purposes only and do not represent a specific model or receiver. For detailed information, please refer to the manual of the installed board.

1.1 MEANING OF THE SYMBOLS USED



ATTENTION - Indicates an important note.



TIME - Perform the operation within the time indicated.



CLOCK - Indicates the duration of the operation (in seconds).



Press and hold one or more buttons until a specific indication is given.



Release one or more buttons.



Press and release one or more buttons.



Refer to the instructions.



LED STEADY ON



LED OFF



SLOW EL ASHINO



FAST FLASHING



2. PRODUCT INFORMATION

The XTO is a transmitter designed for automatic vehicle and pedestrian entrance applications.

2.1 TECHNICAL SPECIFICATIONS

The XTO transmitter is available in four models that differ in frequency and number of channels: the XTO2 model has two channels, while the XTO4 model has four (each channel is assigned to a specific button).

The XTO transmitters are compatible with the following communication protocols:

- XTO 433 MHz: SLH-SL-DS-RC
- XTO 868 MHz: SLH-DS

Each button can be programmed to transmit a different protocol to the others.

SLH encoded XTO transmitters are fully compatible with the SLHP system.

XTO transmitters with SL and DS protocols can be stored on a board if they learn the code from an SL or DS transmitter already stored on the board.

2.1.1. AVAILABLE MODELS

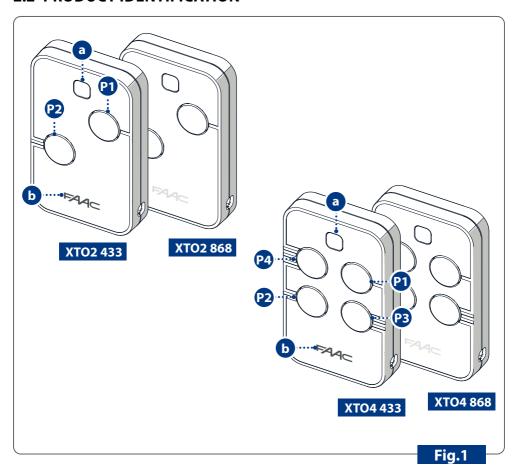
- XTO2 SLH-SL-DS-RC 433 MHz
- XTO4 SLH-SL-DS-RC 433 MHz
- XTO2 SLH-DS 868 MHz
- XTO4 SLH-DS 868 MHz

2.1.2. TECHNICAL DATA

	XTO2 SLH-SL-DS-RC 433 MHz	XTO4 SLH-SL-DS-RC 433 MHz	XTO2 SLH-DS 868 MHz	XTO4 SLH-DS 868 MHz
Channels	2	4	2	4
Frequency	433.92 MHz	433.92 MHz	868.35 MHz	868.35 MHz
RF power	<10 dBm (10 mW)	<10 dBm (10 mW)	<10 dBm (10 mW)	<10 dBm (10 mW)
Compatible communication protocols	SLH-SL-DS-RC	SLH-SL-DS-RC	SLH-DS	SLH-DS
Default communication protocol	SLH	SLH	SLH	SLH
Power supply	1 lithium battery 3V CR2032	1 lithium battery 3V CR2032	1 lithium battery 3V CR2032	1 lithium battery 3V CR2032



2.2 PRODUCT IDENTIFICATION

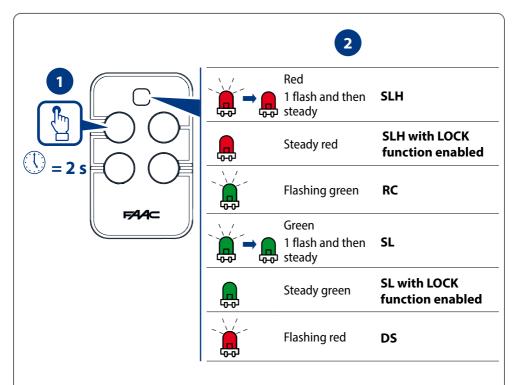


Pos	Description
a	LED
b	grey logo: 433 MHz white logo: 868 MHz
P1	Button P1
P2	Button P2
Р3	Button P3
P4	Button P4



2.3 IDENTIFYING THE ENCODING PROTOCOL

Each button on the XTO transmitter can be programmed with a different encoding protocol. To identify the protocol follow the procedure below.

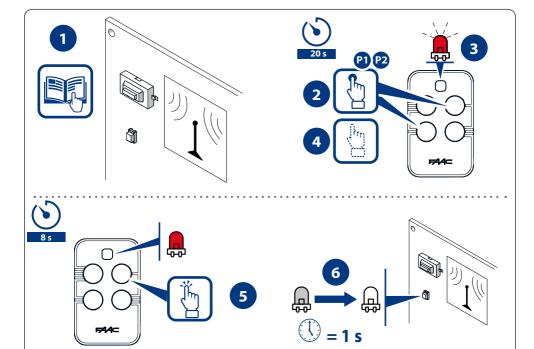


- 1. Press the button to be identified for 2 seconds.
- 2. The LED will light up or flash according to the type of radio protocol memorised.



3. PROCEDURE FOR XTO TRANSMITTERS WITH SLH ENCODING

3.1 MEMORISING THE FIRST XTO WITH SLH ENCODING



- 1. To activate the learning mode on the receiver, refer to the instructions for the board or receiver and follow the instructions carefully.
- 2. Press P1 and P2 at the same time within 20 seconds.
- 3. The LED on the transmitter starts flashing.
- 4. Release the buttons.
- 5. Press and release the button to be memorised within 8 seconds (P1 in the example).
- 6. The radio LED on the receiver board lights up steadily for 1 second and then goes out.



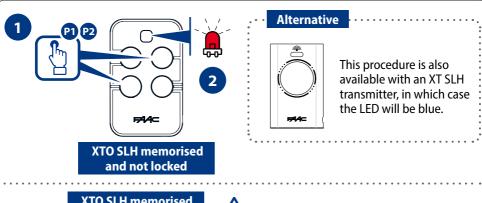
The first time it is used, press the memorised button twice in succession to obtain the command.

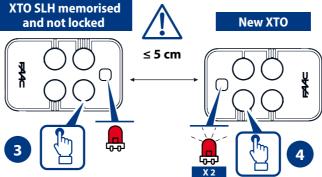


3.2 LEARNING FROM A PREVIOUSLY MEMORISED SLH TRANSMITTER



Self-learning can only take place if the transmitter is not locked. To determine the status, please see section: § 2.2 Product identification.





- 1. Press and hold buttons P1 and P2 on an unlocked and programmed transmitter.
- **2.** When the LED starts flashing red (blue on XT SLH models), release the buttons.
- **3.** Press and hold the button that has already been memorised. The red LED lights up steadily.
- **4.** Move the new XTO to within 5 cm of the one that has been memorised and press the button to be memorised. It has been successfully memorised when the LED flashes twice. Release both buttons.



The first time it is used, press the memorised button twice in succession to obtain the command.

On XT SLH models, the LED is blue.



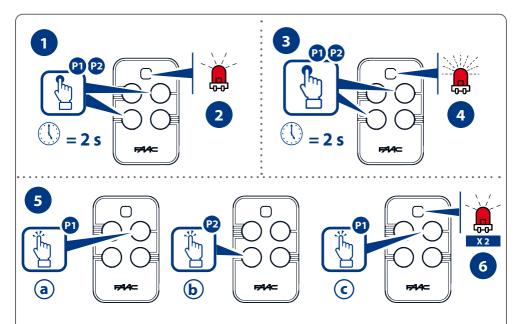
3.3 ENABLING THE LOCK FUNCTION ON XTO SLH

XTO with the lock function enabled cannot memorise its code on the receiver or transmit its code to another transmitter.



To disable the lock function, a factory reset must be carried out (see § 7.1 Restore factory settings (this operation is irreversible)

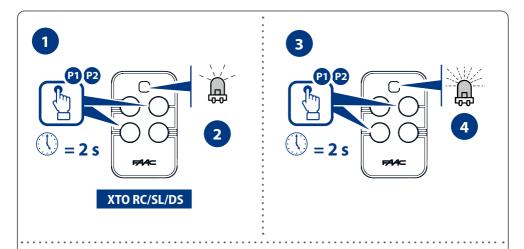
The lock function is only available for SLH and SL channels; enabling it will lock all SLH or SL channels on the transmitter.

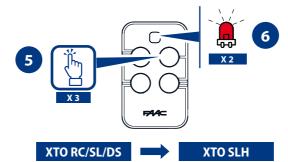


- 1. Press buttons P1 and P2 simultaneously for 2 seconds.
- 2. The red LED starts to flash slowly.
- **3.** Press and release buttons **P1** and **P2** simultaneously for 2 seconds.
- 4. The red LED starts to flash quickly.
- **5.** Press in sequence:
 - a. P1
 - **b.** P2
 - c. P1
- **6.** The red LED flashes twice and then goes out.



3.4 RESETTING AN RC/SL/DS CHANNEL TO SLH





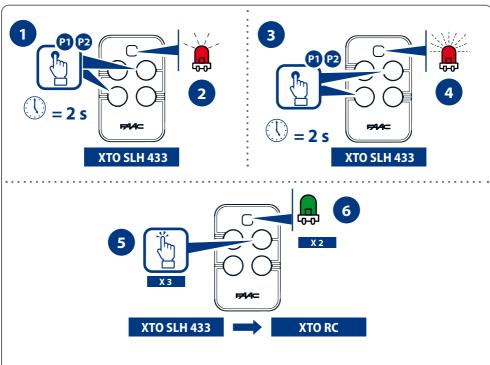
- 1. Press buttons P1 and P2 simultaneously for 2 seconds and then release them.
- 2. The LED starts flashing slowly (the colour varies according to the type of encoding).
- 3. Press buttons P1 and P2 simultaneously for 2 seconds and then release them.
- **4.** The LED starts flashing quickly (the colour varies according to the type of encoding).
- **5.** Press the button you wish to convert 3 times.
- 6. The red LED flashes twice: the operation has been successfully completed.



4. PROCEDURE FOR XTO TRANSMITTERS WITH RC ENCODING

4.1 CONVERTING AN SLH ENCODED CHANNEL INTO RC (433 ONLY)

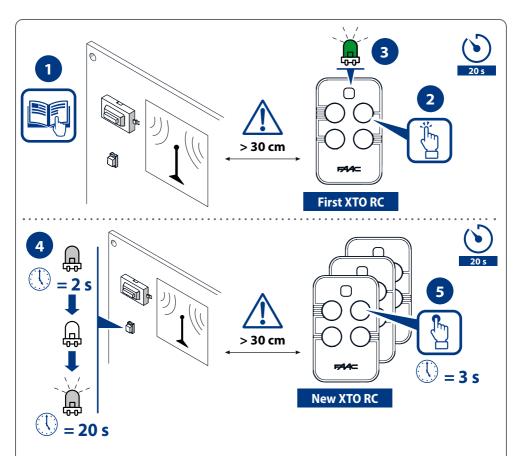
The XTO transmitters are set at the factory to use SLH encoding on all channels. To work with devices that require RC encoding, the channels must be converted to this encoding before carrying out memorisation.



- 1. Press buttons P1 and P2 simultaneously for 2 seconds.
- 2. The red LED starts to flash slowly.
- 3. Press and release buttons P1 and P2 simultaneously for 2 seconds.
- 4. The red LED starts to flash quickly.
- 5. Press the SLH button you wish to convert to RC 3 times.
- The LED turns green and flashes twice: the procedure has been successfully completed.



4.2 MEMORISATION ON RECEIVER

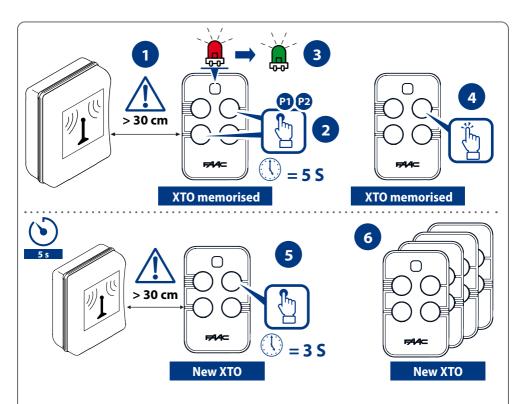


- 1. To activate the learning mode on the receiver, refer to the instructions for the board or receiver and follow the instructions carefully.
- 2. Press and release the button to be memorised within 20 seconds.
- 3. The green LED on the transmitter starts flashing.
- **4.** The LED on the receiver board switches to a steady light for 2 s and then starts flashing again for 20 seconds.
- **5.** The 20-second learning period starts again, during which other transmitters can be memorised. To end the learning procedure, wait until the flashing stops.



4.3 ADDING NEW XTO RCS WITHOUT ACCESSING THE BOARD

Transmitters with at least one channel in RC mode can activate the learning procedure from a transmitter that has already been memorised, without having to access the board.

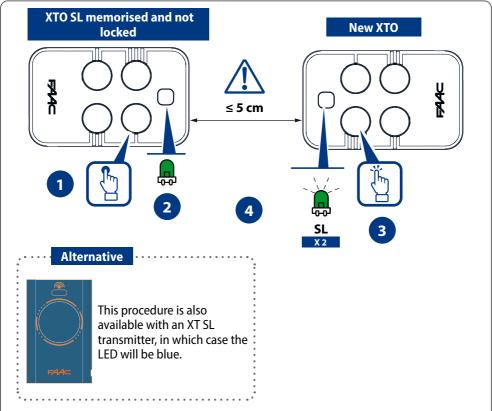


- 1. Use a previously memorised XTO and position yourself more than 30 cm from the receiver.
- 2. Press buttons P1 and P2 for about 5 seconds.
- **3.** The transmitter LED flashes red for 3 seconds and then starts flashing green. Release the buttons.
- Press the button on the transmitter that has already been memorised to start the memorisation procedure.
- 5. While the receiver LED is still flashing, press and release the RC button to be memorised.
- 6. The learning time (which varies according to the receiver model), is restarted, during which time other transmitters can be memorised. The procedure ends automatically at the end of the learning period.



5. PROCEDURE FOR XTO TRANSMITTERS WITH SL ENCODING

5.1 LEARNING FROM A PREVIOUSLY MEMORISED SL TRANSMITTER



- Bring the transmitters close together and press and hold the button that has already been memorised.
- 2. The green LED lights up steadily (blue on XT SL models).
- 3. Press the button to be memorised on the new transmitter.
- 4. The LED of the new XTO flashes green twice: it has been successfully memorised.
- 5. Release the buttons on both transmitters.



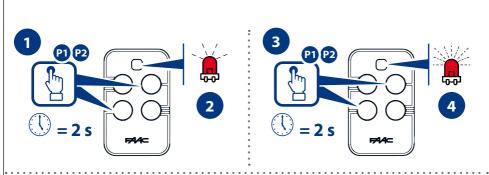
5.2 ENABLING THE LOCK FUNCTION ON XTO SL

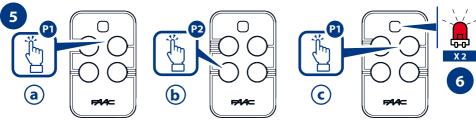
An XTO with the lock function enabled cannot memorise its code on the receiver or transmit its code to another transmitter.



To unlock the transmitter, it must be reset to the factory settings. To perform the reset, follow the instructions in section § 7.1 Restore factory settings (this operation is irreversible)

The lock function is only available on SLH and SL channels; enabling it will lock all SLH or SL channels on the transmitter.



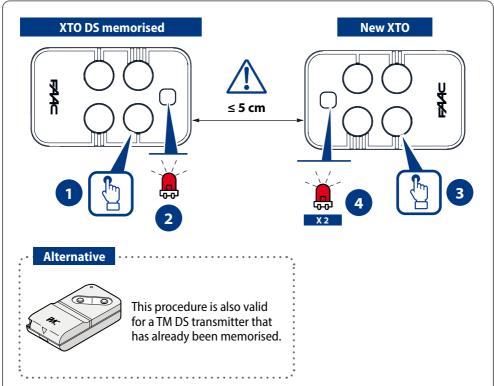


- 1. Press buttons P1 and P2 simultaneously for 2 seconds.
- 2. The red LED starts to flash slowly.
- 3. Press and release buttons P1 and P2 simultaneously for 2 seconds.
- 4. The red LED starts to flash quickly.
- **5.** Press in sequence:
 - a. P1
 - **b.** P2
 - c. P1
- **6.** The red LED flashes twice and then goes out.



6. PROCEDURES FOR XTO TRANSMITTERS WITH DS ENCODING

6.1 LEARNING FROM A PREVIOUSLY MEMORISED DS TRANSMITTER



- 1. Bring the transmitters close together and press and hold the button that has already been memorised.
- 2. The red LED starts flashing (steady in TM DS).
- **3.** Press the button to be memorised on the new transmitter.
- 4. The LED of the new XTO flashes red twice: it has been successfully memorised.
- 5. Release the buttons on both transmitters.

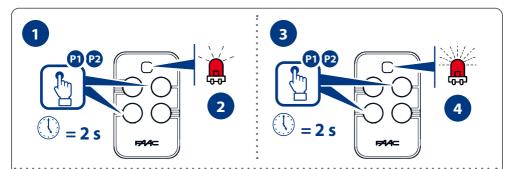


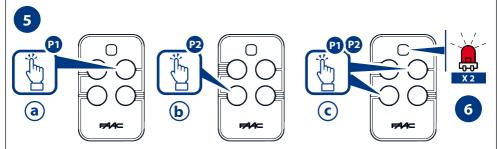
7. MAINTENANCE

7.1 RESTORE FACTORY SETTINGS (THIS OPERATION IS IRREVERSIBLE)



WARNING: resetting the transmitter reloads the factory settings and disables it on systems that have already been configured.





- 1. Press buttons P1 and P2 simultaneously for 2 seconds.
- 2. The red LED starts to flash slowly.
- 3. Press and release buttons P1 and P2 simultaneously for 2 seconds.
- **4.** The red LED starts to flash quickly.
- 5. Press in sequence:
 - a. P1
 - **b.** P2
 - c. P1 + P2
- 6. The red LED flashes twice and then goes out.



7.2 REPLACING THE BATTERY

