



OTS20
(OTS Advance)
QUICK GUIDE – V3.2

ojmar.com

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1. OTS LOCKS

1.1 TYPES OF KEYS

There are a total of 15 types of different keys. 7 of them are mostly used.

1.1.1 Dedicated key

This can only be used in a Dedicated Lock that has been programmed with the same number as the key.

Up to 6 locks can be closed with the same card.

1.1.2 Free key

This can be used in any free lock that is not in use.

It can be configured to use up to 3 locks of the same type.

(*) **EXAMPLE:** A member with one key programmed for 3 locks can use up to 3 lockers at the same time.

1.1.3 Multifunction key

Up to three dedicated lock and up to three free locks not in use can be used.

1.1.4 Master key

This is used to open any type of lock in the same system. You can only open the lock.

(*) **EXAMPLE:** If lock no. 1 is closed by a user card and we use the master key on lock no. 1, the locker will open keeping the lock released. The user that is using locker no. 1 shall not be able to operate on another lock. They must contact the maintenance staff so that they can format their user key. Any other user may use locker Nº1.

(*) **NOTE:** This user, in particular, with their key may only operate on this locker Nº 1.

1.1.5 Service key

They are used to open and close any type of lock in the same system without modifying the status of the lock.

(*) **EXAMPLE:** If we use the service lock to open a lock closed by a user, the lock shall remain open but internally it will continue being used by the user key that closed it originally. In this way, only the user key that closed it originally and the service key can close this lock. IT IS UNADVISABLE TO USE THE SERVICE KEY TO LEAVE THE LOCKS OPEN.

(*) **EXAMPLE:** If we use the service key to open and close a lock closed by a user key, the lock shall remain in that state, with it only being able to be opened by the same user key that closed it originally.

1.1.6 Reset key

This key deletes all of the information from the lock and resets it to its factory configuration. Therefore, a set-up key must be used to restart it.


1.1.7 Test key

This key allows a lock to be opened and closed when it is factory configured or not initialised.

1.2 DESCRIPTION OF FLASHING LEDS

The OTS lock includes a LED on the knob. This LED lights up whenever an action is performed on it.

The colour codes are indicated in the following table:

GREEN LED 	RED LED 	YELLOW LED 	DURATION	DURATION (TIME)	DESCRIPTION
	1 Flash		Long	1seg	Communications fault.
	3 Flash	3 Flashes (first)	Very short	100ms	Mechanical error.
		3 Flashes	Regular	400ms	Low battery detection. Replace batteries
		3 Flashes	Very long	2seg	<ul style="list-style-type: none"> Battery used up. Replace batteries. Lock cannot be used until battery replacement.
2 Flash		5 Flashes (first)	Regular	400ms	Correct initialisation with keys.
2 Flash		1 Flash (first and long)	Regular	400ms	Key deleted OK.
1 Flash			Very long	2seg	Date and time recorded correctly on lock.
1 Flash			Very long	2seg	Winter/summer time cvhanges recorded correctly on lock.

2. PORTABLE PROGRAMMER

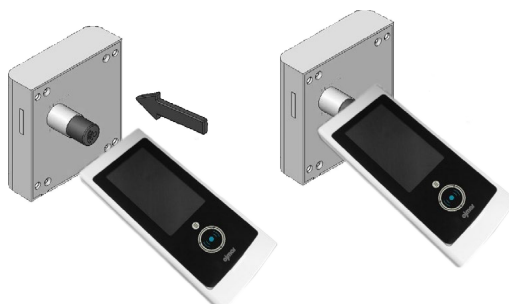
2.1 OJMAR NFC MODEL PROGRAMMER



1. Touch screen.
2. Key reading area: The keys must be placed in this area so that they can be read/ recorded by the programmer.
3. Screen On/Off.
 - On: Press the button quickly (a beep will be heard).
 - Off: Keep the button pressed down for 4 seconds.
4. PC Connection: USB socket used to connect the programmer to the Computer to download data collected by it.

(*) NOTE: A USB cable is supplied with the programmer.

5. Jack Connection.
6. NFC Reader: Allows for the programmer to connect to the lock. To do so: Bring the programmer reader towards the knob of the lock and press it inwards.



2.1.1 Main screen

The main screen of the Ojmar NFC programmer displays the following information:



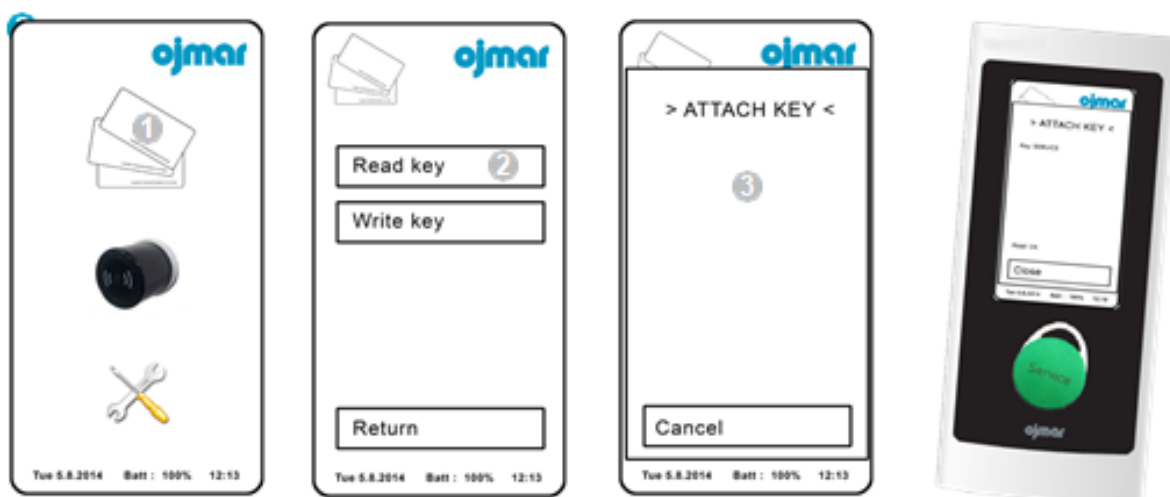
1. Operations with keys: See section 2.1.2.
2. Operations with locks: See sections 3.5, 3.6, 4.1.1 y 4.1.2.
3. Configuration.
4. Date and Time: Displays the date and time of the programmer. This information will be used when recording the locks and keys.

(*) **NOTE:** La fecha y hora se configura automáticamente al establecer comunicación entre el programador y el software de gestión OTS (see section 3.3).

5. Battery level: Displays the programmer battery level.

2.1.2 Operations with keys

1. Read Key: Reads the information associated to the key. To do so:
 - 1 Click on "Operations with keys".
 - 2 Click on "Read key".
 - 3 Attach key. By placing the key over the key reading area of the programmer, the information associated to it is displayed.



2. Write Key: Records the configuration recorded in the programmer on the key. A “Free” type key is recorded by default for 1 lock and within Subgroup 0. To do so:

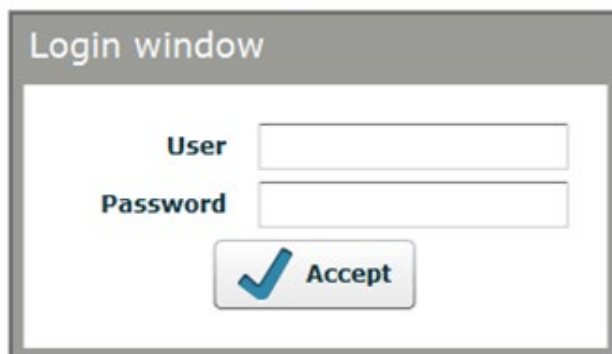
- 1 Click on “Operations with keys”.
- 2 Click on “Write key”.
- 3 Attach key. By placing the key over the key reading area of the programmer, the key will be read.



3. OTS MANAGEMENT SOFTWARE

3.1 ACCESING THE APPLICATION, CONFIGURATION, START-UP AND GENERAL OPTIONS

A user name and password are requested on accessing the application.

A screenshot of a login window titled "Login window". It features two input fields: "User" and "Password". Below the "Password" field is a button with a blue checkmark icon and the text "Accept".

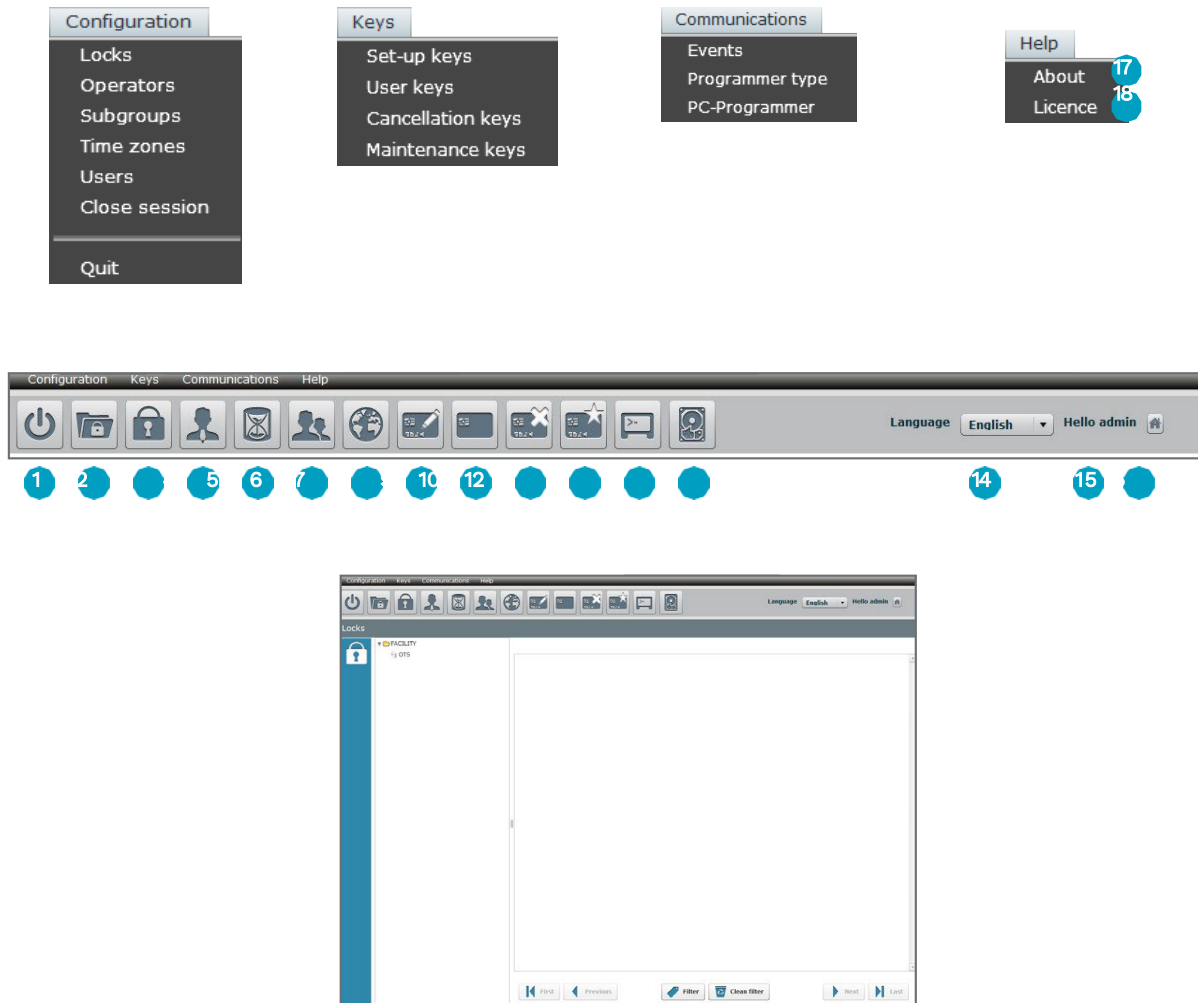
Login window

User

Password

In the "Licence" folder of the files received by email, contains a file called "default user" that includes an operator name and password.

Once inside the application, the following main screen is displayed:



(*) **NOTE:** The main screen displays the locks screen by default.

3.2 PROGRAMMER TYPE

One programmer and one communications port can be predetermined so that communications do not have to be established with the programmer whenever the keys are to be used.

Access this screen via the “Communications / Programmer Type” menu or by clicking on the following button on the main screen:



The main programmer type screen displays the following information:

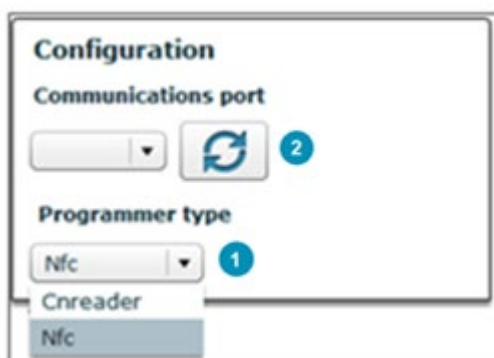


1. Programmer type: Select between Ojmar NFC or CN Reader model.
2. COM port number: Select the communication port where the programmer is connected.


(*) **NOTE:** See section 3.3 for information on the communications port (COM) that is connected to the programmer.

3.3 ESTABLISH COMMUNICATIONS WITH THE PROGRAMMER

Communications must be established with the programmer before you can use the keys.



To do so:

1. Select programmer type: Select between Ojmar NFC or CN Reader model.
2. COM port number: Click on the following icon  for the communications port (COM) to be automatically detected

(*) **NOTE:** The port resulting from the automatic search (COM1, COM2, etc.) may be used to configure the “Programmer Type” (see section 3.2).

3.4 RECORD USER KEYS

3.4.1 Write free key

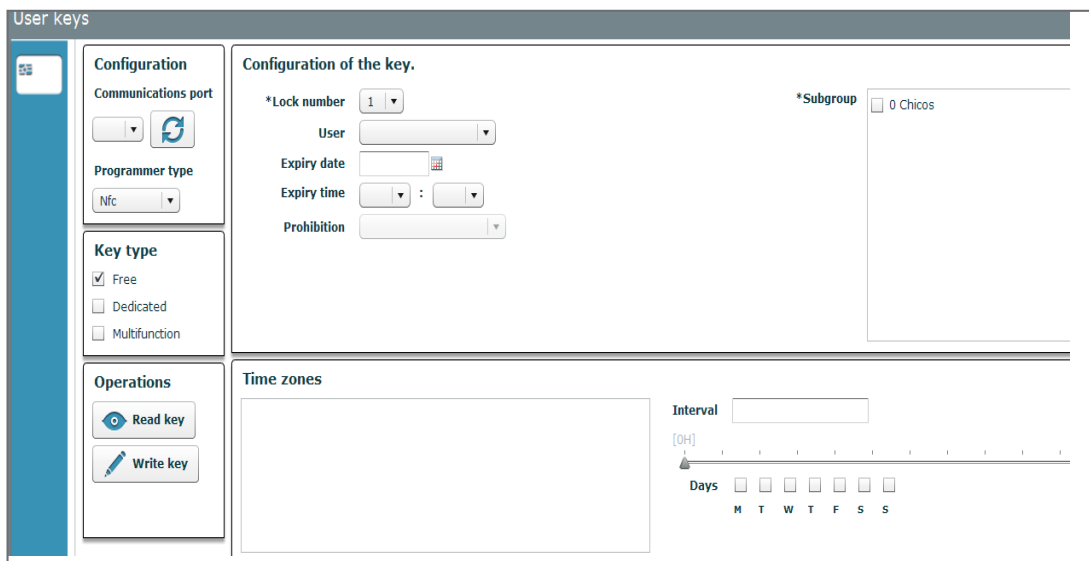
To write free user keys, access this screen through the “Keys/User keys” menu or by pressing the following icon on the main screen:



To do so follow the steps below:

1. Select in Card Type the “free” box.
2. Select no. of locks to open with the same key in the “No. of locks” box (with a free key 1 to 3 locks can be opened).
3. Select the subgroup to which the key belongs (more than one subgroup can be selected).
4. Press write card.

(*) **NOTE:** The rest of the fields are optional.

The screenshot shows the 'User keys' configuration interface. On the left is a sidebar with a blue header 'User keys' and a list of icons. The main area is divided into several sections: 'Configuration' with 'Communications port' (a dropdown and a refresh icon) and 'Programmer type' (a dropdown set to 'Nfc'); 'Key type' with three checkboxes: 'Free' (checked), 'Dedicated', and 'Multifunction'; 'Operations' with 'Read key' and 'Write key' buttons. The central 'Configuration of the key.' section includes fields for '*Lock number' (set to 1), 'User' (a dropdown), 'Expiry date' (a calendar icon), 'Expiry time' (a time selector), and 'Prohibition' (a dropdown). To the right is a '*Subgroup' section with a list box showing '0 Chicos'. At the bottom right, there is an 'Interval' field, a '[OH]' label, and a 'Days' section with checkboxes for M, T, W, T, F, S, S.

3.4.2 Write dedicated key

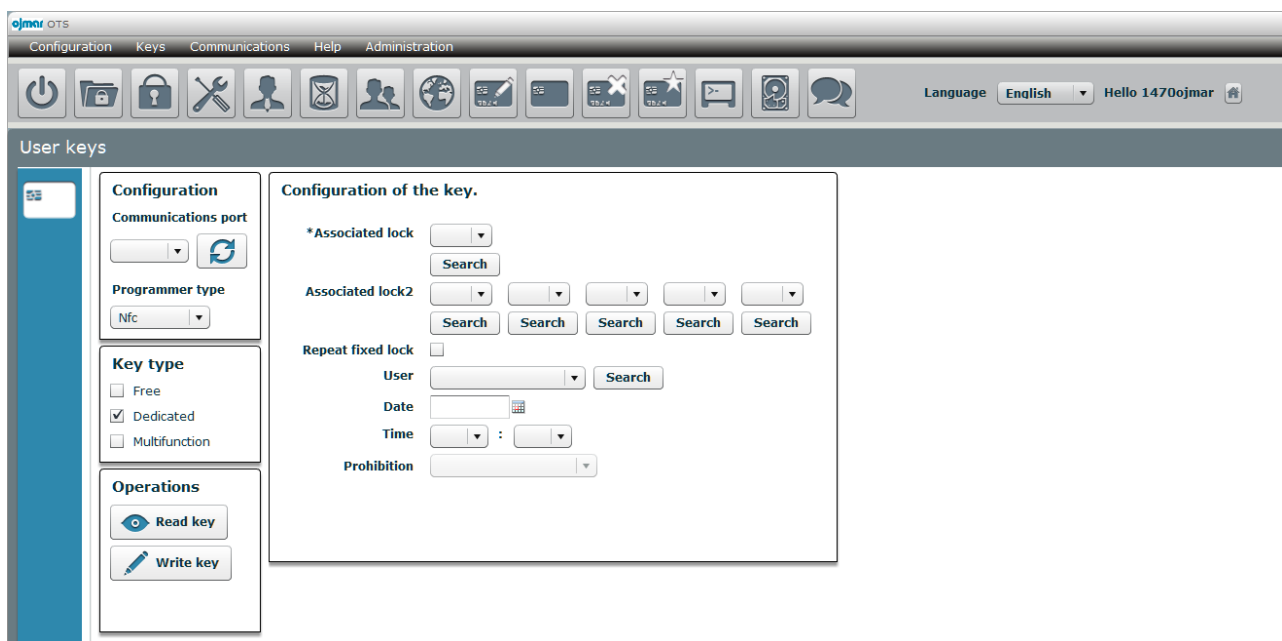
To write dedicated user keys, access this screen through the “Keys/User keys” menu or by pressing the following icon on the main screen:



To do so follow the steps below:

1. Select in Card Type the “Dedicated” box.
2. Select the merged lock by clicking on the drop-down menu. A list of locks that can be merged is displayed. Up to 6 locks can be written with the same card.
3. Repeat dedicated lock (optional): Allows for a duplicate dedicated key to be created. In this case, a list will be displayed with the lock numbers and an *above the lock number with a dedicated key already created.
4. Press write card.

(*) NOTE: The rest of the fields are optional.



The screenshot displays the 'User keys' configuration window in the ojmar OTS software. The interface includes a top menu bar with 'Configuration', 'Keys', 'Communications', 'Help', and 'Administration'. Below the menu is a toolbar with various icons. The main area is divided into a left sidebar and a central configuration panel.

Left Sidebar:

- Configuration:** Communications port (dropdown), Programmer type (Nfc).
- Key type:** Free (checkbox), Dedicated (checked checkbox), Multifunction (checkbox).
- Operations:** Read key (eye icon), Write key (pencil icon).

Central Configuration Panel: Configuration of the key.

- *Associated lock:** Dropdown menu with a Search button.
- Associated lock2:** Five dropdown menus, each with a Search button.
- Repeat fixed lock:** Checkbox.
- User:** Dropdown menu with a Search button.
- Date:** Calendar icon.
- Time:** Time selection controls.
- Prohibition:** Dropdown menu.

3.5 INITIALISATION

The initialisation operation can be carried out either with cards or with NFC programmer, nevertheless we recommend to initialize the locks through the NFC programmer to configure the exact time in all the locks.

3.5.1 Set up with keys

Set-up keys allow for a lock to be configured, leaving it operational (if the lock was previously factory configured) or changing their properties.

SET UP KEYS CAN:

- Configure one or several “Free” type locks.
- Configure one or several “Dedicated” type locks.
- Assign an automatic opening time to the lock.
- Change the time zone of the lock.
- Set the time on the lock.

Access this screen via the “Keys / Set-up keys” menu or by clicking on the following button on the main screen:



To do so follow the steps below:

1. Assign the lock type and the numbering of it: This is carried out with the initialisation key and it configures the locks in dedicated or free mode by assigning it the relevant numbering.
2. Assign the time to the lock: This is carried out with the time set key
3. Assign the time change to the lock: This is carried out with the time change key and it assigns the winter-summer time change to the lock for 5 years.

To write the initialisation keys communication with the programmer has to be established (see section 3.3).

3.5.1.1 Write initialization key for free keys

1. Place a blank card on top of the programmer.
2. Click on Free.
3. Select the subgroup in the drop-down menu.
4. Select the first lock to be initialised.
5. Select the last lock to be initialised.
6. Press write card.
7. Then pass the initialisation card in all the system's free locks by pressing the knob of the lock consecutively, starting on the lock with the number selected in the first lock (step 4) and ending with the number selected in the last lock (step 5).

3.5.1.2 write initialization key for dedicated keys

1. Place a blank card on top of the programmer.
2. Click on Dedicated.
3. Select the subgroup in the drop-down menu.
4. Select the first lock to be initialised.
5. Select the last lock to be initialised.
6. Press write card.
7. Then pass the initialisation card in all the system's dedicated locks by pressing the knob of the lock consecutively, starting on the lock with the number selected in the first lock (step 4) and ending with the number selected in the last lock (step 5).

3.5.1.3 Write a time set key

1. Place a blank card on top of the programmer.
2. Click on set time.
3. Press write card.
4. Then pass the time set card in all the system's locks by pressing the knob of the lock. This operation has to be carried out immediately after reading the card.

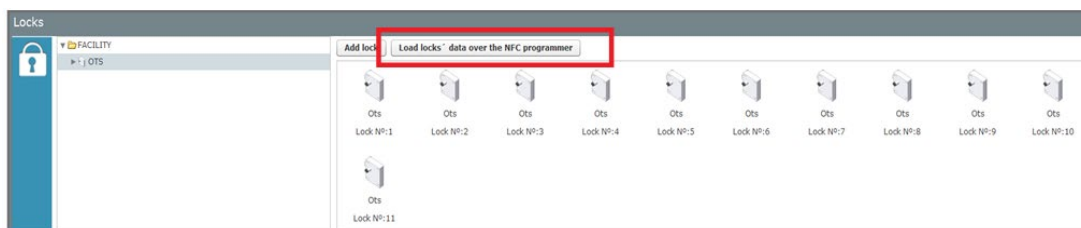
3.5.1.4 Read the time change key

1. Place a blank card on top of the programmer.
2. Click on Time Change.
3. Select the time zone in the drop-down menu.
4. Press write card.
5. Then pass the time change card in all the system's locks by pressing the knob of the lock.

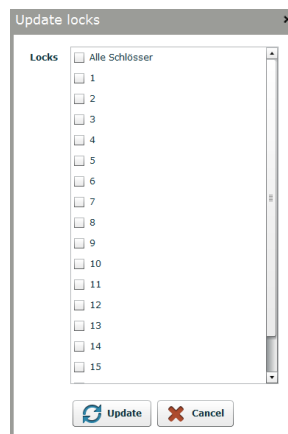
3.5.2 initialisation with NFC programmer

To carry out the initialisation of the locks with the programmer, firstly you have to load the locks in the NFC programmer. To do so, you have to follow the steps below:

1. Connect the NFC programmer to the PC using the supplied USB cable.
2. Establish communication with the programmer (see section 3.3).
3. Go to the set up/locks menu or click on the locks icon.
4. Click on the lock's name icon and the locks that are entered in the software will appear.
5. Click on the "load locks' data over the NFC programmer" icon.



6. In the menu where the lock numbers appear, click " All locks".
7. Click on update.
8. If the operation has been carried out correctly an updated message will come up.



THEN THE INITIALISATION DATA HAS TO BE SENT TO THE LOCKS WITH THE PROGRAMMER:

1. Click on the operations with locks icon.
2. Click on the OTS20 icon.
3. Click on the initialization icon.
4. Select the lock number that you wish to initialise.
5. Click on “Enter” icon.
6. Bring the programmer reader towards the knob of the lock and press it inwards (see point 2.1).
7. Click “Continue” to initialize the next lock.

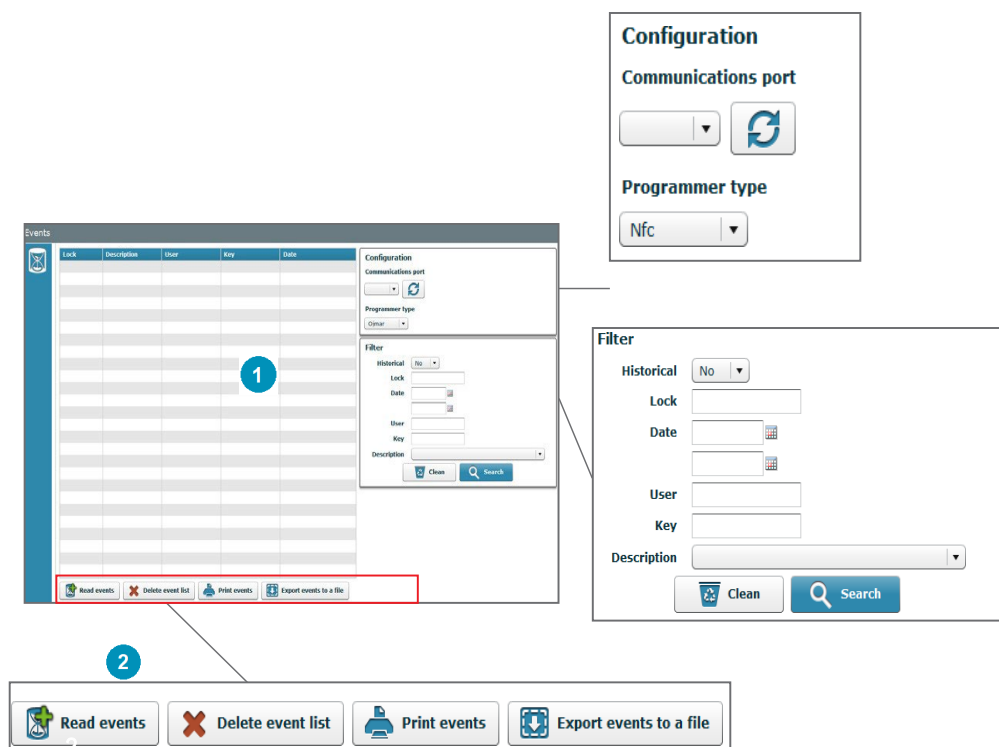
3.6 EVENTS

The locks are able to store accesses and actions that have occurred on them. The Ojmar NFC programmer or an events key must be used to collect these movements. The events screen displays these movements.

Access this screen via the “Communications / Events” menu or by clicking on the following button on the main screen:



The main Events screen displays the following information:



1. List of events: This list displays the events recorded on the events key or in the Ojmar NFC programmer. Example:
 - The lock number used.
 - Action taken on the lock.
 - User to have performed the event.
 - Key used.
 - Date of the event.
2. Read events: So as to read the events of the locks, firstly all the locks have to be loaded into the programmer. To do that, it is necessary to use “load lock’s data over the NFC programmer” option, as it was explained on point 3.5.2

3.6.1 Read events with the ojmar NFC programmer

To collect the events of one lock with the Ojmar NFC programmer the following steps are to be carried out:


1. Turn on the programmer
2. Click on the “Operations with locks” icon.
3. Click on the “OTS20” icon.
4. Click on the “Read events” icon.
5. Press the knob of the lock with the NFC programmer and wait until the Result message appears: OK
6. Repeat on the locks where events need to be read.
7. Connect the NFC Programmer to the PC using the supplied USB cable.
8. Establish communication with the programmer (see section 3.3).
9. In the SW access the events screen by clicking on communications/events.
10. Press the “Read events” button.
11. Select the read events from the programmer option.
12. Press the send button.


[illegible]

Select the mode to read events

☐ Read events from the programmer

☐ Read events from the key

 Send

 Cancel

4. MAINTENANCE AND FAQS

4.1 MAINTENANCE

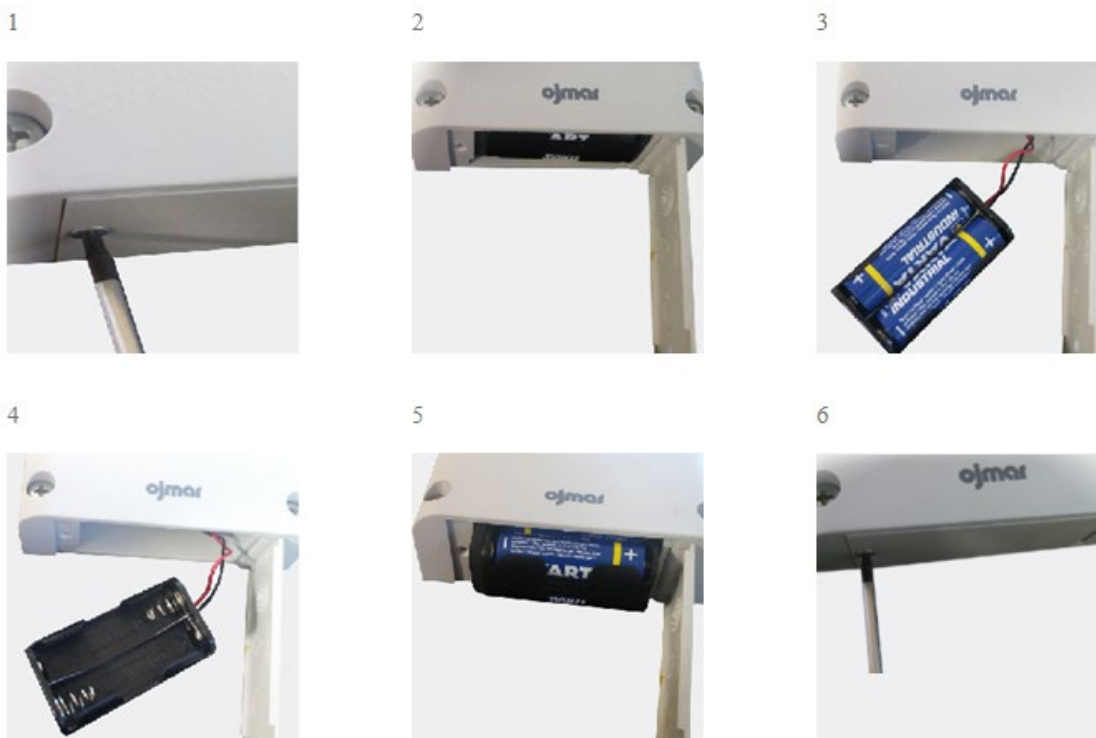
Ojmar locks automatically detect low battery levels. When this occurs, the yellow LED flashes 3 times for each opening or closure cycle performed.

Up to 9 opening and closure cycles are possible as of the time when the low battery is detected. On the tenth cycle, the lock can only be opened (never closed). This prevents the lock battery from being used up and the lock from being blocked.

4.1.1 Batteries replacement

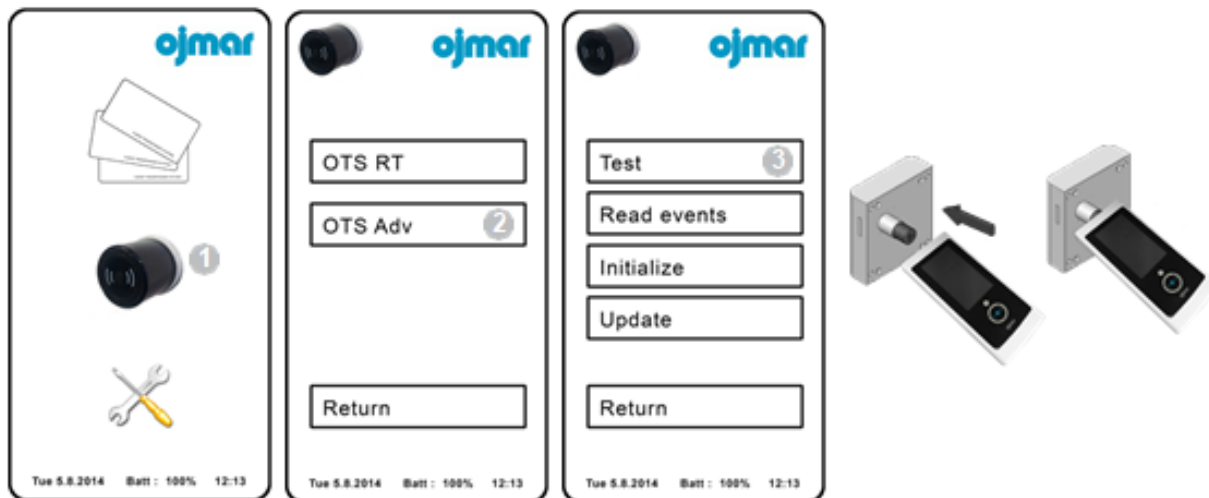
So as to replace the batteries, follow the steps below:

1. Remove the torx screw.
2. Open the battery cover.
3. Remove the battery holder.
4. Replace the four AA batteries (two on each side of the support).
5. Insert the battery holder. The cover should fit easily. To do so, first insert the wire and then the battery holder.
6. Fit the cover and tighten the torx screw.



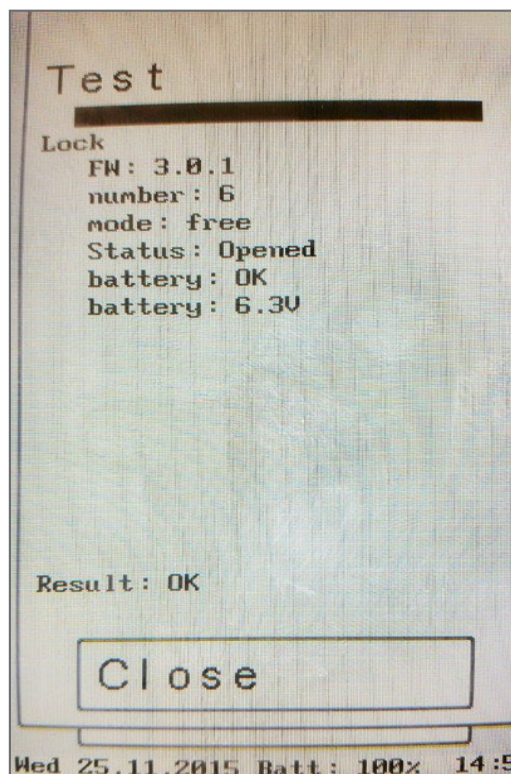
(*) **NOTE:** It's advisable to make a test with the NFC after batteries replacement to set up the correct time again.

4.1.2 Perform a test on the lock



(*) **TEST:** Performs a test on the lock and displays the results on the screen. To do so:

- 1 Press on the icon "Operations with locks".
- 2 Press on the icon "OTS₂₀".
- 3 Press on the icon "Test".
- 4 Bring the programmer reader towards the knob of the lock and press it inwards.



4.2 FAQs

QUESTION	CAUSE	SOLUTION
The following message is displayed on attempting to read a key: "Check the programmer's connection. As it may be turned off or disconnected".	Communications have not been established with the programmer.	Check that the programmer: <ul style="list-style-type: none"> • Is correctly connected to the USB port. • The programmer controllers are correctly configured. • Communications have been established with the programmer from the OTS Management Software. See section 3.3. • Select the correct programmer model: Cnreader or NFC.
The following message is displayed on attempting to connect to the programmer: "No COM port on the list is of the OTS type"	The programmer type is incorrect.	Select the correct programmer model: Cnreader or NFC.
The following message is displayed on attempting to read or record a key: "No key on the programmer".	No key has been placed on the programmer or it is incorrectly placed.	Place a key on the programmer within the reading limits.
When collecting events of a lock using the Ojmar NFC programmer, the following message is displayed on the screen: "Lock is NOT in the list".	The lock has not been added to the list of locks in the programmer.	Add the lock, following the steps given in section 3.5.2.
The lock does not close.	The lock is being used by another key.	Pass the master key (Red) and check that it has been correctly released by closing and opening the lock using a free user key.
The lock displays 3 amber flashes or does not flash.	The lock has detected flat battery.	Replace the lock batteries and check that it works by closing and opening it using a free user key.
The key does not work on the locks.	The key is being used in another lock or the key has never been used.	Check whether the key has never been used or is in use by reading it using the programmer or software. If it is being used, release it using the Management Software or by closing and opening the lock in use or by rereading it. If it has never been used, record the key on the programmer or in the Management Software.

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