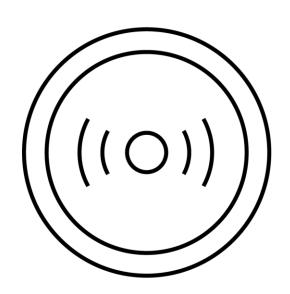
olmar





# OTS 20 Batteryless

This document is for information only and is not contractually binding. The information may have undergone changes that have not yet been incorporated in the present document and we therefore suggest that if in doubt you please contact Ojmar to obtain updated information.

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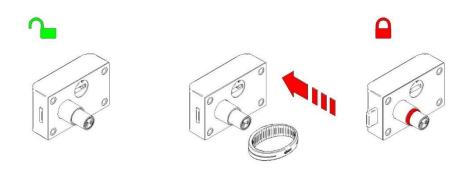
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## 1. OPENING AND CLOSURE

The lock opening and closure process is as follows:

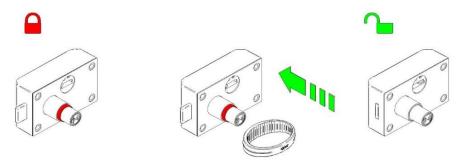
#### 1.1. CLOSURE

- 1. Bring the key towards the knob of the open lock and use the key to press the knob inwards.
- 2. Press the knob fully. The lock is then automatically closed, protruding the closed door indicator (red color).



#### 1.2. OPENING

- 1. Bring the key towards the knob of the lock and press it inwards using the key.
- 2. If the key matches the lock and has no restriction applied: it will automatically unlock. The knob will move outwards fully.



#### 1.3. LOCK TYPES

OTS locks can be configured in two different ways:

Free.

Dedicated.

These locks are configured using the keys previously programmed with the Ojmar Tablet Programer.

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 NOTE: If you have not purchased the Management software module or the Ojmar NFC programmer, please ask us about programming them.

#### 1.3.1. DEDICATED LOCK

The "dedicated" operating mode allows for a certain member number to be assigned to a lock.

o EXAMPLE: A lock is reserved for a gym member and only he/she may use it.

Only the dedicated keys associated to the lock will have access to it.

As many keys as required can be created for each dedicated lock and they may all have access at the same time.

 EXAMPLE: A member with two dedicated keys may close a lock with one key and open the same lock with the other key.

#### 1.3.2. FREE LOCK

The "Free" operating mode allows access to the lock by any programmed key of this type.

This works as follows:

A free key allows to open and close any free lock that is not in use at the time.

As soon as the lock is in use, the key cannot be used in any other free lock until the first one has been freed.

#### 1.4. KEY TYPES

There are a total of 10 types of different keys for OTS 20 Batteryless lock.

#### 1.4.1. DEDICATED KEY

It can be used only in dedicated locks that have been programmed with the same number as the key. It can be configured to use up to 6 locks of the same type.

#### 1.4.2. 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.

#### 1.4.3. MULTIFUNCTION KEY

These can be configured to use up to 3 dedicated locks and up to 3 free unoccupied locks.

#### 1.4.4. MASTER KEY

This is used to open and close any type of lock.

- NOTE: Once the lock is open, if it is not locked again with the master key, any user key can occupy the lock, deleting the previous user from memory.
- NOTE: Once the lock is open, if it is locked again with the master key, the user key that occupied the lock previously is retained in memory.
- NOTE: Just one master key (in keyring format) is supplied for each facility.
   Should you require an extra master key, please contact Ojmar.
- o NOTE: Only to be used exclusively by authorized staff of the facility.



#### 1.4.5. MASTER SUBGROUP KEY

This is used to open and close any type of lock of a subgroup. Same function as the master key but only works in a free lock that its subgroup number matches with the key subgroup number.

NOTE: To be used exclusively by authorized staff of the facility.

#### 1.4.6. CANCELLATION KEY

This key can cancel another key, preventing it from opening or closing any lock. It must be previously programmed. To do so:

Save the key number to be blocked in the cancellation key.

Use the cancellation key in all locks were using of the blocked key is not to be permitted.

- o NOTE: This key can be used in any lock type.
- o NOTE: To be used exclusively by authorized staff of the facility.

#### 1.4.7. SET-UP KEY

This initializes previously unused locks with the same type of set-up key. The following can be assigned:

Lock number.

Operating type.

A set-up key can initialize several successive locks, assigning them consecutive numbers.

- NOTE: To perform this action, a key must be created for each lock type (one for free locks and another for dedicated locks).
- o NOTE: To be used exclusively by authorized staff of the facility.
- NOTE: To initialize a lock, one pressing action is required if the lock is closed. If it opens, it means that it has been initialized correctly. In open locks, the first pressing action closes the lock, and the second pressing action opens and initializes the lock correctly.

#### 1.4.8. EVENT COLLECTION KEY

This key collects the events (Used keys, event order, etc.) stored in the locks.

- o NOTE: This key can be used on free and dedicated locks.
- NOTE: To be used exclusively by authorized staff of the facility.

### 1.4.9. RESET KEY

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

- o NOTE: Just one reset key is supplied for each facility. Should you require an extra reset key, please contact Ojmar.
- o NOTE: To be used exclusively by authorized staff of the facility.

#### 1.4.10. TEST KEY

This key verifies the correct mechanical status of a lock when it is factory configured or not initialized.

- o NOTE: This key only opens and closes locks. Nothing is configured on them. It only works when the lock is factory configured or not initialized. They are often exclusively used by installation fitters to check that the locks open and close correctly. They are of no subsequent use.
- o NOTE: Just one test key is supplied for each facility. Should you require an extra test key, please contact Ojmar.
- o NOTE: Only to be used exclusively by authorized staff of the facility.

#### 1.5. EVENTS

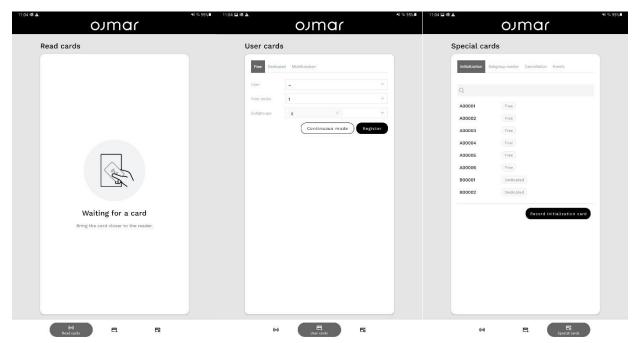
Each action taken on a lock generates an event that will be recorded in the lock together with its description. This information will be recorded on the event keys when used together with the locks.

The full list of codes is given below.

DESCRIPTION	DESCRIPTION
Client opening	Test from programmer
Client closure	Master subgroup key opening
Occupant key	Cancellation key
Master key opening	Master key closure
Key rejected: Different installation number	Initialisation from key
Key rejected: Checksum incorrect	Opening from programmer
Key rejected: Key not valid or not defined	Memory deleted with key
Key rejected: Key in use	Mechanical fault
Events read from programmer	Key rejected: Key cancelled on blacklist
Events read from key	Master subgroup key closure
Update programmer	Initialisation from programmer

#### 2. TABLET PROGRAMMER

The Ojmar Programmer is a lock and credential configuration device. This device automatically downloads the configuration of the locks from the software and configures them for the first time via RFID. The programmer also has the option to register the RFID credential for the first time to give them a number.



Using the programmer, the installation administrator will be able to:

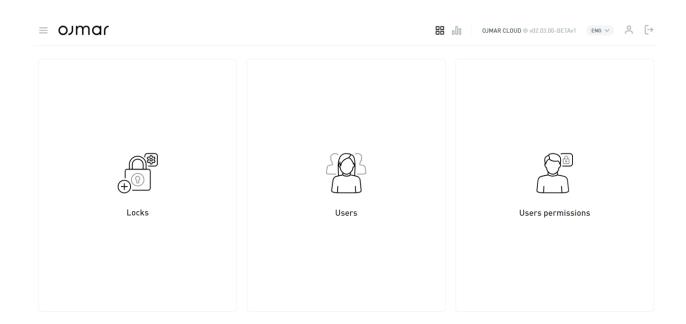
- · Read information about the existing card.
- · Read and update events from an event card.
- Generate new user cards associating card UID to a user.
- Create set-up cards.
- Create Subgroup master cards.
- Create Cancellation cards.
- Create Event recording cards.

#### 3. SOFTWARE

OJMAR's cloud management SW can manage the installation of OJMAR locks. It is a cloud-based application, so it is a multi-device, multi-platform, and scalable software. It can run on any device with any operating system installed, using the Google Chrome web browser. The SW is managed using the browser, and it is enough to go to the specific web page, provided by Ojmar.

The user will have a predefined operator profile or role, although the system allows to generate new ones with permissions. Each operator has a username and password to access his account.

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#### 3.1. SYSTEM ARCHITECTURE

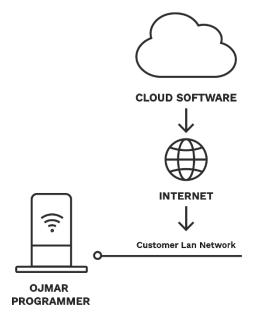
OJMAR's SW will be able to manage the following features:

- Locks: Access to the facility's locks list. Allows management: create/delete/edit (lock name and lock type).
- Subgroup: Access to the facility's locks subgroups. Allows management: create/delete/edit (subgroup name).
- Operators: The user to be used when log-in. Each operator has an associated role. Allows to create/delete/edit (username, password) operators.
- Roles: Created set of permissions to assign later to operators.
- Advanced settings: SW configuration parameters: domain name, UTC time, etc.
- Users: Access to the facility's users. Allows management: create/delete/edit (username; email and phone optionals). It's possible to import users from a CSV file.
- User permissions: Access to the UIDs list and permissions. Allows permission management filtering by UID or users. Free/Dedicated/Multifunction.
- Dashboard: Access to statistics.
- Data export: Allows data export of events, users, locks and resources (CSV or EXCEL format).
- Audit trail: Registered system events.
- Programmer management: Access to facility's Programmer list. Allows to see version and online status. It's also possible to edit Programmer's name.
- Downloads: Access to downloads. Allows to download the CSV template for user import.

#### 4. SYSTEM MANAGEMENT

#### 4.1. SYSTEM ARCHITECTURE

System architecture is the following one:



The SW is a cloud-based application, so it is a multi-device, multi-platform, and scalable software. It can run on any device with any operating system installed, using the Google Chrome web browser. The SW is managed using the browser, and it is enough to go to the specific web page, provided by Ojmar.

The programmer will be connected to the cloud via Wi-Fi by port 1921.

Locks can only be operated by cards; these cards can be managed with the programmer.

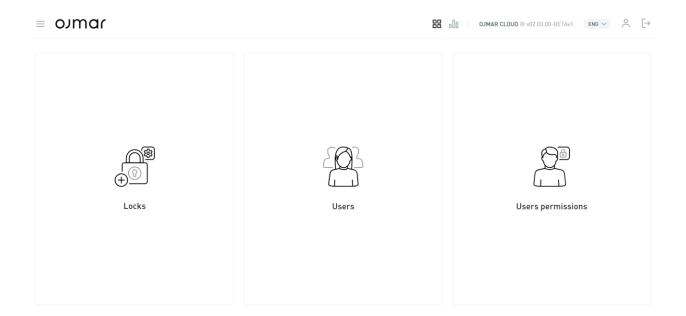
#### 4.2. SYSTEM SET-UP

Following steps must be done to set-up the system:

- 1- Log in to the software.
- 2- Create the locks on the software.
- 3- Connect the programmer to the WiFi network (Check that port 1921 is opened)
- 4- Create the set-up card and set the locks.

#### 4.3. LOG IN THE SOFTWARE

As part of the set-up procedure admin user will receive an e-mail with a web page to access. Clicking on the link will load the web page, and you will be prompted to enter a password for the "admin" user. Once entered, the user is logged in and will have access to the software.

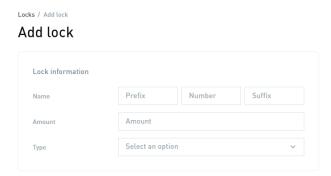


To change the administrator username and password, left click on the three horizontal bars at the top left of the screen, then select "Configuration/operators" and press the edit button of admin operator in order to change username and password.

- o NOTE: Different credentials can be created in "Configuration/Credential" to limit the modification and viewing permissions of different operators.
- NOTE: New operators can be added in "Configuration/Operators" and have assigned a specific credential to each one.

#### 4.4. LOCKS CREATION

In the main menu select option Locks, and then choose "Add lock".



Following options will need to be filled for the locks` creation.

- Name: Name of the first lock that is going to be created. A prefix (Up to 2 characters) and a suffix (Up to 2 characters) can be added to the name.
- Amount: Quantity of locks that will be created in a consecutive way
- Type: Type of lock (It can be chosen between Free, Dedicated).
- Subgroup: Only available for free locks. Subgroups can be used to distinguish between
  different groups of locks. You can also limit user permissions by providing access to some
  subgroups and not providing access to others.

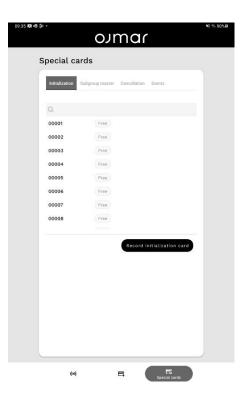
Once created, press save and following screen will be shown and information will automatically be downloaded to the programmer.

#### 4.5. LOCKS SET-UP

NOTE: If the locks have not been initialized from the factory, it is necessary to initialize them.

Once locks have been created in the software, is necessary to use the programmer to set-up the locks:
Using programmer, select the padlock symbol at the bottom right (Set up locks):

- · Choose the option "Record initialization card".
- The lock group (if any) is selected.
- Place the set-up card (delivered by Ojmar) on top of the programmer and press record.
- Push the lock nozzle with the card. If the lock is opened the card will close the lock without initializing it. Once the lock is closed, push the



lock nozzle with the card one second time and the lock will open, confirming successful initialization.

o NOTE: This operation is only necessary for the first time after receiving the locks. Any configuration changes can be made from the Ojmar Cloud SW.

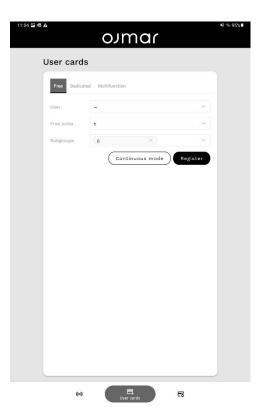
To test the communication with the Ojmar Cloud SW, use the master key provided by Ojmar to close and open each lock.

#### 4.6. SYSTEM USE

Cards must be registered for the first time in the system. In this case, programmer's second option must be chosen "Register Cards".

Following fields must be filled:

- Type of permit: Between free, dedicated and multifunction (free mode and dedicated at the same time).
- Fill the rest of the fields as desired.
- Place the card on top of the programmer and press record.
- Pass it through the lock with permissions and lock will get closed.



#### 4.7. LOCKS MANTENANCE KEYS

• With the programmer is also possible to create a master subgroup cards, event recorder cards and cancellation cards.

## 5. PORTABLE PROGRAMER

The portable programmers allow for the keys supplied by Ojmar to be read and recorded.



The Ojmar NFC programmer operates autonomously, it can read and record free keys.

- 1. Touch screen.
- 2. Key reading zone: The keys must be placed in this zone so they can be read/recorded by the programmer.
- Screen On/Off.
  - On: Press the button quickly (a beep will be heard).
  - Off: Keep the button pressed down for 4 seconds.
- 4. USB socket used to connect the programmer to charge it.
  - o NOTE: A USB cable is supplied with the programmer.
  - NOTE: PP NFC Reader can be connected to SW PC, but this functionality is not included with the "OJMAR's cloud management SW" if you Have an old version of PC SW, please read the "OTS20 Batteryless User Manual V1.0.2".
- 5. Jack Connection.
- 6. NFC Reader.

 NOTE: NFC Reader: Allows for the programmer to connect to the lock. This functionality is not included with the "OJMAR's cloud management SW" if you Have an old version of PC SW, please read the "OTS20 Batteryless User Manual V1.0.2".

#### 5.1. MAIN SCREEN

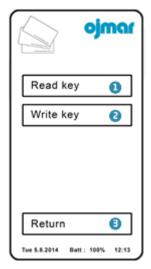
The main screen of the Ojmar NFC programmer displays the following information:



- 1. Operations with keys
- 2. Operations with locks
  - o NOTE: This functionality is not included for "OJMAR's cloud management SW"
- 3. Configuration
- 4. Date and time: Displays the date and time of the programmer.
- 5. Battery level: Displays the programmer battery level.
  - o NOTE: Do not switch the programmer off during charging

#### 5.1.1. OPERATIONS WITH KEYS

This screen displays the following buttons:



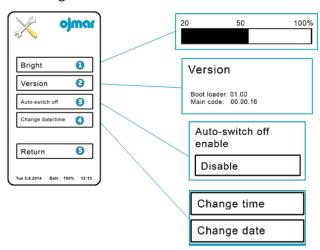
1. Read key: Reads the information associated to the key. The screen is displayed when this button is pressed:

By placing the key over the key reading zone 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
- 3. Back: Returns to the main menu.

#### 5.1.2. CONFIGURATION

This screen displays the following buttons:



- 1. Brightness: Allows for the level of brightness of the screen to be adjusted.
- 2. Version: Displays the version number of the software installed in the programmer.
- 3. Auto-off: On pressing this button, the programmer screen will switch off automatically after approximately 2 minutes of inactivity.
- 4. Change the date/time: This is used to change the date and time of the programmer.
- 5. Back: Returns to the main menu.

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# 6. FAQS

QUESTION	CAUSE	SOLUTION
The Credential does not work on the locks.	The Credential is being used in another lock or it has never been registered.	Check whether the credential is or not in use (via programmer or software). If in use, clear it using the Management Software or by closing and opening the corresponding lock.  If it not in use or registered in the system, record the credential using the programmer or via Software.
The lock does not open	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 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. If it is being used, release it using the Programmer or by closing and opening the lock in use. If it has never been used, record the key on the programmer.

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# OJMAR HQ

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