
dormakaba
Combi B 90 with metal input unit

## User Manual

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## 1 Glossary

| Terms | Meaning |
| :--- | :--- |
| audit | Approximately 960 events (opening, closing, configuring the <br> lock etc.) are saved in the audit memory of the lock. |
| button | An icon that can be clicked with the cursor. |
| code | A numerical sequence of 8 digits which consists of an ID <br> and a PIN. It serves as an identification for the operator. |
| Courier Code | By using this code it is possible to open the lock without <br> waiting for a defined Time Delay. |
| CW | Confirmation Window <br> An adjustable time which starts after the Opening Delay <br> has elapsed. It is only possible to open the lock during the <br> set Confirmation Window. |
| Dual Mode | 2 different valid codes are required to open the lock. |
| Duress Alarm | When this function is activated on the lock, a Duress Alarm, <br> imperceptible for the intruder, will be triggered. |
| Emergency key | By using this physical key it is possible to open the lock me- <br> chanically and independently at any time. |
| ID | A fixed 2 digit number. |
| lockout period | After entering a code 3 times incorrectly the lockout period <br> is activated, no code entries are possible during the lockout <br> period. |
| User Code | If the Manager Code with the ID 01 is activated in the PC <br> Software, the following functions can be configured: <br> - Configuring or deleting OD/CW |
| Manager Code | By using this code it is possible to open the lock. Users can <br> also change their own code. |
| Aactivating or deactivating Dual Mode |  |
| OD | This is the highest code in the code hierarchy |
| operator | Opening Delay <br> An adjustable time which must pass before it is possible to <br> open the lock. |
| Ahe master, manager, users and the courier are operators |  |
| of the lock. |  |

## 2 About this document

### 2.1 Purpose and objective

This User Manual describes the Combi B 90 electronic safe locks with metal input unit.
It gives information on:

- The product and components
- Functionality
- Operation
- Service


### 2.2 Target group

This document is intended exclusively for end users.

### 2.3 Additional documents

The following documents are available:

- User Manual Combi B 90 PC Software


## 3 Safety information

### 3.1 Intended use

The purpose of the electronic safe lock is to lock and unlock the mechanical blocking point of a safe or vault which is usually activated manually by bolt work.
Do not modify the electronic safe lock since it will impair the security and safety of the unit. The electronic safe lock is only designed for indoor applications. It must be applied in environmentally protected areas.

### 3.2 Hazard category

## NOTICE

Information on how to handle the product correctly.
Failure to observe this information may result in malfunctions. The device or something in its vicinity could be damaged.

### 3.3 Info

Tips for usage, useful information which help to make the best use of the product and its functions.

## 4 Product overview

### 4.1 Lock system

NOTICE

## Damage to surface or interior of the lock

Applying grease, lubricants or aggressive liquids to the lock, will cause damage to the lock.

- Do not apply grease, lubricants or aggressive liquids.
- Only use a moist cloth for cleaning.

The lock system consists of an input unit and a lock installed in the secure storage unit. All configured codes and functions will be saved in the lock, in a secured area.

The lock is designed for use in the temperature range from $+10^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ and with a humidity range from $30 \%$ to $80 \%$ (non-condensing).

## Operating elements of the input unit


1 Actuating knob
2 Keypad
5 NUMERIC keys 0 ... 9
6 Enter key
3 Red LED
$7 \quad \mathbf{P}$ key
4 Green LED

Mini USB socket


1 Mini USB socket

## Lock housing and interfaces



## Connections on the lock housing



1 Power supply
2 Connection for further components (e.g. EMA)
3 Connection for input unit

## 5 Functionality

### 5.1 Authorizations

Authorization is given to:

- Master Code
- Manager Code
- User Codes
- Courier Code
- Emergency key

The Setup Code is not a real code and only as long valid as the lock will be started up. It is not meant for permanent use.

| ID | Code type | Authorizations |
| :---: | :---: | :---: |
|  | Emergency key | - Opening the lock without OD / CW <br> - Opening the lock without lockout period <br> - Assigning a new Master Code <br> - Resetting the lock <br> - Changing the configurations of the lock via software <br> - Changing the Master Code via software |
| 00 | Master Code | - Opening the lock if necessary with Duress Alarm <br> - Changing the own code <br> - Activating, enabling, disabling or deleting User Codes and the Courier Code, even with activated Dual Mode <br> - Activating or deactivating Dual Mode <br> - Activating or deactivating Duress Alarm <br> - Configuring or deleting OD / CW <br> - Acknowledging the tamper switch message <br> - Reading-out audits <br> - Access via PC software |
| 01 | Manager Code (is optional and can be activated via the PC software) | - Opening the lock if necessary even by activating a duress alarm <br> - Changing the own code <br> - Activating, enabling, disabling or deleting User Codes and the Courier Code, even with activated Dual Mode <br> - Activating or deactivating Dual Mode via PC software <br> - Configuring or deleting OD / CW |


$\left.$| ID | Code type | Authorizations |
| :--- | :--- | :--- |
| From 02 to <br> 89 | User Codes | - Opening the lock if necessary by activating <br> a Duress Alarm <br> From O1 to <br> 89 | | If the Manager Code is not ac- |
| :--- |
| tivated via PC software. |$\quad$| Changing the own code |
| :--- | \right\rvert\, | 95 | Courier Code | - Opening the lock without OD / CW if neces- <br> sary with Duress Alarm <br> - Changing the own code |
| :--- | :--- | :--- |
|  | Setup Code | - Opening the lock |

### 5.2 Overview of commands

| Command | Authorization given to | Function |
| :--- | :--- | :--- |
| P | Every operator | Changing the own code |
| P1 | Master | Reading-out audits <br> P2 <br> the Manager) |
| P3 | Master | Activating users |
| P4 |  | Enabling or disabling users |
| P5 |  | Deleting users |
| P6 |  | Query of code status |
| P7 | Master (optionally executed by <br> the Manager) | Activating or deactivating Dual Mode |
| P8 | Master Code | Activating or deactivating Duress Alarm |
| P9 |  | Acknowledging the tamper switch message |
| P0 | Ermergency key | Resetting the lock |
| P |  | Re-assigning the Master Code |

### 5.3 Overview of possible signals

| Signal | Occurrence of the signal | Event |
| :--- | :--- | :--- |
| Acoustic signal sounds once | With every key press | Pressing a key (e.g. code <br> entry) |
| Green light blinks twice <br> and the acoustic signal sounds <br> twice | After pressing the ENTER key | Code is valid (a message <br> that the code is correct) <br> Correct code entry |
| Red light blinks 3 times <br> and the acoustic signal sounds <br> 3 times | After pressing the ENTER key | Error message (e.g. invalid <br> code) <br> Recurring code entry (e.g. <br> code confirmation), not <br> matching codes <br> Cancellation (manual can- <br> cellation with PP or time- <br> controlled cancellation if <br> there is no code entry) |
| Approximately every 0.5 sec. <br> the red light blinks without <br> acoustic signal | Permanently after pressing the <br> ENTER key | Lockout period |
| Red light blinks 10 times | After pressing the ENTER key | Undervoltage |
| 3 sec. acoustic signal and 3 sec. <br> red light | After pressing the ENTER key | Hardware error |
| Red light is permanently on | After fastening the top part of <br> the input unit | No connection to the lock. |


| Signal | Occurrence of the signal | Function |
| :--- | :--- | :--- |
| Green light blinks once, then 2 <br> sec. break | Permanently after pressing the <br> ENTER key | Dual Mode (the code entry <br> of a second code is ex- <br> pected) |
| Red light blinks once, then 5 <br> sec. break | Permanently after pressing the <br> ENTER key | OD |
| Green light blinks once <br> and the acoustic signal sounds <br> once, then 5 sec. break | Permanently after pressing the <br> ENTER key | CW |
| The acoustic signal sounds <br> once and green light is on | Permanently after pressing the <br> ENTER key | Programming Mode |
| Red light blinks once | With every key press | Remote Disabling is acti- <br> vated (it is not possible to <br> open the lock) |


| Signal | Occurrence of the signal | Code status message |
| :--- | :--- | :--- |
| Green light blinks once <br> and the acoustic signal sounds <br> once | After pressing the ENTER key | Code is active |
| The red light blinks 3 times and <br> the acoustic signal sounds 3 <br> times | After pressing the ENTER key | Code is active but disabled |


| Signal | Occurrence of the signal | Code status message |
| :--- | :--- | :--- |
| Red light blinks once <br> and the acoustic signal sounds <br> once | After pressing the ENTER key | Code is deleted or inactive |

## 6 Operation

### 6.1 Start-up of the lock

The lock has the option for partial or full start-up by the safe manufacturer or distributor. For a partial start-up, basic configurations are loaded to the lock without activating the Master Code. The lock still opens with the Setup Code "1". All configurations performed previously with the software are immediately valid only after activating the Master Code.

For a full start-up the lock has already been provided with a Master Code and further settings. For partial and full start-up the set basic configuration is communicated separately by the safe manufacturer or distributor.

## Opening the lock with the Setup Code

Upon delivery the lock is set by dormakaba SAL GmbH to the Setup Code "1".
The lock can be opened with the Setup Code until the lock system is put into operation.

As long as the lock is opened with the Setup Code (the master is not activated yet), there is no lockout period for incorrect code entries and no signal message for the tamper switch.

The Setup Code is only meant for lock mounting at the factory and not for further permanent use.
For security reasons it is highly recommended to activate the Master Code with the individual code immediately after start-up of the lock in order to deactivate the Setup Code.

1. Press 1 .
2. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice.
3. Turn the actuating knob within 4 seconds through $90^{\circ}$ clockwise to the stop.
4. Open the secure storage unit.

## Activating the Master Code

The Master Code must be activated with the secure storage unit open to have every time access to the secure storage unit and the lock.

1. Press $\mathbf{P}$.
2. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
3. Enter the new Master Code OOXXXXXX.
$00=1 \mathrm{D} ; \mathrm{X}=$ freely selected 6-digit combination (0...9)
4. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
5. Confirm the new Master Code with OOXXXXXX.
6. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks 3 times and the acoustic signal sounds 3 times, all steps must be repeated since both codes do not match or the ID (here OO) has been entered incorrectly.

It is possible to cancel the change of the Master Code any time by pressing the $\mathbf{P}$ key twice. It is also possible to cancel the process if no code is entered within 30 seconds.

### 6.2 Configuration functions of the Master Code

All configuration functions require the Master Code for authorization.

For security reasons, the configuration and testing of the configuration must always be performed with an opened secure storage unit. This is necessary to have always access to the secure storage unit and the lock.

The configuration can be performed any time individually and without waiting times (exception - lockout periods), even if Dual Mode or OD/CW are activated. It is possible to cancel all configuration processes by pressing the $\mathbf{P}$ key twice.
It is possible to cancel the code entry if no code is entered within 30 seconds.

### 6.2.1 Changing the Master Code

For security reasons, the configuration and testing of the configuration must always be performed with an opened secure storage unit. This is necessary to have always access to the secure storage unit and the lock.

The entire procedure must be repeated if these errors occur:
The red light blinks 3 times and the acoustic signal sounds 3 times if the current Master Code has been entered incorrectly.

The red light blinks 3 times and the acoustic signal sounds 3 times after the second attempt to enter the new Master Code for code confirmation.
The 2 codes entered do not match.

After changing the Master Code, the old Master Code is invalid. The functions of the new Master Code must be checked by opening the lock with the secure storage unit open.

1. Press $\mathbf{P}$.
2. Enter the current Master Code OOXXXXXX.
$00=I D ; X=$ previously configured 6-digit combination
3. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
4. Enter the new Master Code OOYYYYYY

$O O=I D ; Y=$ new 6 -digit combination
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Confirm the new Master Code by entering OOYYYYYY
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

### 6.2.2 Creating User Codes or the Courier Code (P3)

After the activation, the new saved code is valid and can be used. The new code must be tested by opening the lock.

!
When activating a new operator, make sure that the new code is entered directly by the operator on site. If the new code is not entered by the respective operator, but is assigned by the master, the respective code must be replaced as soon as possible by a real personal code from the respective operator.

Do not use personal data or data for your code which are easy to find out.


ID = 01 to 89 for User Codes or 95 for the Courier Code; $X=$ freely selectable 6-digit combination (0...9)

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P3.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter a new code ID $X X X X X X$.
7. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
8. Confirm the new code with ID $X X X X X X$.
9. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.


If both entered codes do not match (the first entry for the new code and the second entry for code confirmation), the red light blinks 3 times and the acoustic signal sounds 3 times.
if the red light blinks 3 times and the acoustic signal sounds 3 times after the first code entry, the code is already active.

### 6.2.3 Disabling User Codes or the Courier Code (P4)

After a code is disabled, the code cannot be used as long until the code will be enabled.

Keep in mind that it is not possible to disable the Master Code.

00 = ID; X = valid 6-digit combination for the Master Code

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P4.
5. Press the ENTER key.
$\Rightarrow$ The green light stays on and the acoustic signal sounds twice.
6. Enter the ID to be disabled.

ID = 01 to 89 for user or 95 for the courier
7. Press the ENTER key.
8. The green light turns off, the red light blinks twice, the acoustic signal sounds twice.

### 6.2.4 Enabling User Codes or the Courier Code (P4)

After a disabled code has been enabled, the code can be used.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
$00=I D ; X=$ valid 6 -digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P4.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter the ID to be enabled.

ID = 01 to 89 for user or 95 for the courier
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

### 6.2.5 Deleting User Codes or the Courier Code (P5)

The deletion of the Master Code is not possible. But it is possible to re-assign the Master Code by using the emergency key.

When deleting codes, the codes are irretrievably lost. To use these codes again, it is necessary to activate these codes. Disabled codes can be deleted without previous enabling.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
$00=$ ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P5.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter the ID to be deleted.

ID = 01 to 89 for user or 95 for the courier
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks 3 times and the acoustic signal sounds 3 times, either the ID has not been activated or the ID is not available.

### 6.2.6 Code status query (P6)



There is a maximum of 30 sec . for each individual key press. If no key is pressed during these 30 sec ., the electronics will shut down automatically.

It is possible to request the status of any code (active, disabled or inactive respectively deleted) in this query. Neither the codes nor the statuses of the codes are changed by this operation. It is possible to request the statuses of any number of IDs successively.

| Code status | Green light | Red light | Acoustic signal |
| :--- | :--- | :--- | :--- |
| active | blinks once |  | sounds once |
| active but disabled | blinks once | blinks once | sounds once |
| deleted / inactive |  | blinks once | sounds once |

1. Press $\mathbf{P}$.
2. Enter the valid Master Code $00 X X X X X X$.


OO = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P6.
5. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice.
6. Enter all the IDs to be requested successively.
7. Press the ENTER key.
$\Rightarrow 1$ code status message is generated for each ID.
8. Cancel the query mode by pressing PP.
9. Alternatively wait for 89 seconds.
$\Rightarrow$ The red light blinks 3 times and the acoustic signal sounds 3 times.

### 6.2.7 Activating OD and CW (P2)

Opening Delay (OD) is the time period which must elapse before it is possible to open the lock. The Confirmation Window (CW) is the time window during which it is possible to open the lock as soon as OD has elapsed. To activate OD the possible value to be defined is between 1 and 99 minutes. To activate CW the possible value to be defined is between 1 and 19 minutes. The set times apply to all users and the master but not to the courier.

If the function OD/CW is activated and values for OD/CW were defined, those values are valid for the Master Code, Manager Code and all activated User Codes except for the Courier Code. The Courier Code can still open the lock.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
$00=I D ; X=$ valid 6 -digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P2.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter a defined value for the Opening Delay XX.
7. Enter a defined value for the Confirmation Window YY.
$X X=01$ to 99 min.; $Y Y=01$ to 19 min.
8. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks 3 times and the acoustic signal sounds 3 times, the defined times are outside the maximum permitted range. The red light blinks 3 times and the acoustic signal sounds 3 times if $O O$ is only defined either for OD or for CW. The activation of OD/CW is only possible with defined valid values.

### 6.2.8 Deactivating OD and CW (P2)

To deactivate the Opening Delay (OD) and Confirmation Window (CW), enter twice "OO" to define the time for OD/CW. After the deactivation of OD/CW all operators can open the lock without delay.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.


00 = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P2.
5. Press the ENTER key.
$\Rightarrow$ The green light stays on and the acoustic signal sounds twice.
6. Enter 0000 .
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

### 6.2.9 Activating Dual Mode (P7)

Keep in mind that for the activation of the Dual Mode at least 2 operators with valid codes are necessary. Otherwise, an error message is displayed during the activation of the Dual Mode.

It is possible to configure the lock in such a way that 2 activated, but different codes (different IDs) are required for lock opening e.g. the Master Code and any other second code or any 2 other codes. The Dual Mode includes all operators (Master Code, User Codes and the Courier Code). The Dual Mode must be deactivated before to be able to be activated.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.


00 = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P7.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks twice and the acoustic signal sounds twice, Dual Mode has been deactivated before. All steps must be repeated to activated Dual Mode.

### 6.2.10 Deactivating Dual Mode (P7)

The Dual Mode function must be activated to be able to be deactivated.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.

OO = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
4. Press P7.
5. Press the ENTER key.
$\Rightarrow$ The red light blinks twice and stays on, the acoustic signal sounds twice.

i
If the green light blinks twice and the acoustic signal sounds twice, Dual Mode has been activated before. All steps must be repeated to deactivate Dual Mode.

### 6.2.11 Activating Duress Alarm (P8)

A Duress Alarm is triggered when entering a special code. This is an alarm message which is sent by the lock via an alarm output. The lock can still be opened during the activation of a Duress Alarm.
To send the alarm message, the alarm output must be connected to an intrusion detection system.

After activating a Duress Alarm, the Duress Codes can be used. The Duress Alarm function must be deactivated to be able to be activated.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.
i
OO = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P8.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice. deactivated before. All steps must be repeated to activate the Duress Alarm.

### 6.2.12 Deactivating Duress Alarm (P8)

If the Duress Alarm is deactivated, the Duress Codes are acknowledged as incorrect codes and the lock does not open. The Duress Alarm function must be activated to be able to be deactivated.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.


00 = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P8.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off, red light blinks twice and the acoustic signal sounds twice.
If the green light is on and the acoustic signal sounds twice, the Duress Alarm has been activated before. All steps must be repeated to deactivate the Duress Alarm.

### 6.2.13 Acknowledging the tamper switch message (P9)

The lock is equipped with a tamper switch which is tripped when opening the input unit (e.g. to replace the battery or after a manipulation). After having opened the input unit, the manipulation signal is displayed for each opening or operation until the tamper switch message has been acknowledged (the red light and the green light blink 3 times in change and the acoustic signal sounds 6 times). This event is saved in the memory of the lock.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code OOXXXXXX.

00 = ID; X = valid 6-digit combination for the Master Code
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P9.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the manipulation signal is displayed even if no battery has been replaced, it is likely that the input unit has been manipulated e.g. to spy out the code.

Before acknowledging the tamper switch message, make sure that the input unit has not been manipulated. If you are not sure, whether there has been a manipulation or not, consult an authorized service.

### 6.3 Configuration functions of the Manager Code

The Manager Code must be activated with the PC software (see User Manual Combi B 90 PC software), otherwise the code with the ID 01 is a User Code.

For security reasons, the configuration and testing of the configuration must always be performed with an opened secure storage unit. This is necessary to have always access to the secure storage unit and the lock.

It is always possible to perform configurations individually without time delays (with exception to blocking periods), even if the functions Dual Mode or OD/CW are activated. All configuration processes can be canceled by pressing twice $\mathbf{P}$. Alternatively, the configuration will be canceled if no key has been pressed for 30 seconds.

### 6.3.1 Changing the Manager Code ( $P$ )

After changing the Manager Code, the old code is invalid. While the secure storage unit is open, the new Manager Code must be checked if it is possible to open the lock with the new code.

1. Press $\mathbf{P}$.
2. Enter the current Manager Code O1XXXXXX.
$01=$ ID; X = previously configured combination of 6-digits
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Enter the new Manager Code O1YYYYYY.
$01=I D ; Y=$ newly configured 6-digit combination
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Confirm the new Manager Code by entering O1YYYYYY.
$01=I D ; Y=$ newly configured 6-digit combination
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks 3 times and the acoustic signal sounds 3 times after entering the new Manager Code, a wrong code was entered.

If the red light blinks 3 times and the acoustic signal sounds 3 times after having entered the new code for confirmation, both new codes do not match.

### 6.3.2 Creating User Codes or the Courier Code (P3)

Codes must be activated before being used. The new code must be tested by opening the lock.

For correct use of the lock, the Manager Code must be activated.

When activating a new operator, make sure that the new code is entered directly by the respective operator on site. If the new code is not entered by the respective operator, but the new code is assigned by the manager, the respective code must be replaced as soon as possible by the real personal code from the respective operator.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.

$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P3.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter a new code ID XXXXXX.
$01=I D ; Y=$ newly configured 6-digit combination
7. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
8. Confirm the new code with ID XXXXXX .
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.


If both entered codes do not match, the red light blinks 3 times and the acoustic signal sounds 3 times after the second code entry when the code confirmation is wrong.

If the red light blinks 3 times and the acoustic signal sounds 3 times after the first code entry, the code is already active.

### 6.3.3 Disabling User Codes or the Courier Code (P4)

After a code is disabled, it is not possible to use the code until the code will be enabled.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.

$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
4. Press P4.
5. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
6. Enter the ID to be disabled.

ID = 02 to 89 for user or 95 for the courier
7. Press the ENTER key.
8. The red light blinks twice and the acoustic signal sounds twice.

### 6.3.4 Enabling User Codes or the Courier Code (P4)

After a disabled code has been enabled, the code can be used.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.
$01=1 D ; X=$ valid 6 -digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P4.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter the ID to be enabled.
i
ID = 02 to 89 for user or 95 for the courier
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

### 6.3.5 Deleting User Codes or the Courier Code (P5)

In contrast to disabling, deleted codes are irretrievably lost. These codes must be activated to be used again.

1. Press $\mathbf{P}$.
2. Enter the valid Master Code O1XXXXXX.
$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P5.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter the ID to be deleted.

$I D=02$ to 89 for user or 95 for the courier
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.


If the red light blinks 3 times and the acoustic signal sounds 3 times, either the ID has not been activated or the ID is not available.
It is not possible to delete the Manager Code with the manager. The Master Code can reassign the Manager Code.

### 6.3.6 Code status query (P6)

It is possible to request the status of any code (active, disabled or inactive respectively deleted) in this query. Neither the codes nor the statuses of the codes are changed by this operation. It is possible to request the status of any number of IDs successively.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.

$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P6.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.
6. Enter all the IDs to be requested successively.
7. Press the ENTER key.
$\Rightarrow 1$ code status message is generated for each ID.
8. Cancel the query mode by pressing PP.
9. Alternatively wait for 30 seconds.
$\Rightarrow$ The red light blinks 3 times and the acoustic signal sounds 3 times.

| Code status | Green light | Red light | Acoustic signal |
| :--- | :--- | :--- | :--- |
| active | blinks once |  | sounds once |
| active but disabled | blinks once | blinks once | sounds once |
| deleted / inactive |  | blinks once | sounds once |

### 6.3.7 Activating OD and CW (P2)

The function OD and CW for the Manager Code must be activated in the PC software (see User Manual Combi B 90 PC Software). Otherwise, this function is not available.

Opening Delay (OD) is the time period which must elapse before it is possible to open the lock. The Confirmation Window (CW) is the time window during which it is possible to open the lock as soon as OD has elapsed. To activate OD the possible value to be defined is between 1 and 99 minutes. To activate CW the possible value to be defined is between 1 and 19 minutes. The set times apply to all users, the manager and the master but not to the courier.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.
$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P2.
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Enter a defined value for the Opening Delay XX.
7. Enter a defined value for the Confirmation Window YY.
$X X=01$ to $99 \mathrm{~min} . ; Y Y=01$ to 19 min.
8. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

If the red light blinks 3 times and the acoustic signal sounds 3 times for a wrong code, the entered values are out of the maximum permitted range.

The red light also blinks 3 times and the acoustic signal also sounds 3 times for a wrong code, if the entered values for either OD or CW are 00.

### 6.3.8 Deactivating OD and CW (P2)

To deactivate an Opening Delay (OD) and a Confirmation Window (CW), the value 0 must be entered for OD as well as for CW. After deactivating OD/CW, the users can open the lock without a time delay.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.
$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice stays on, the acoustic signal sounds twice.
4. Press P2.
5. Press the ENTER key.
6. Enter 0000 .
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

### 6.3.9 Activating Dual Mode (P7)

It is possible to configure the lock in such a way that 2 activated, but different codes (different IDs) are required for lock opening e.g. the Master Code and any other second code or any 2 other codes. The Dual Mode includes all operators (Master Code, User Codes and the Courier Code). The Dual Mode must be deactivated before to be able to be activated.

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.

$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P7.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.


To activate Dual Mode, it is necessary that at least 2 valid codes are active, otherwise an error message is displayed when trying to activate Dual Mode. If the red light blinks twice and the acoustic signal sounds twice, Dual Mode has been deactivated before. All steps must be repeated to activate Dual Mode.

### 6.3.10 Deactivating Dual Mode (P7)

1. Press $\mathbf{P}$.
2. Enter the valid Manager Code O1XXXXXX.

$01=I D ; X=$ valid 6-digit combination for the manager
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press P7.
5. Press the ENTER key.
$\Rightarrow$ The red light blinks twice and the acoustic signal sounds twice.

If the green light blinks twice and the acoustic signal sounds twice, Dual Mode has been activated before. All steps must be repeated to deactivate Dual Mode.

### 6.4 Lock functions of all users

There is a maximum of 10 sec . for each individual key press. If no key is pressed during these $10 \mathrm{sec} .$, the electronics will shut down automatically. Uncompleted operations must be restarted after the shutdown.

Every key press is confirmed by an acoustic signal. It is possible to cancel code entries and all further functions (e.g. configuration operations) until the last key press by pressing the $\mathbf{P}$ key twice.

### 6.4.1 Opening the lock without configured OD and CW

Every key press is confirmed by an acoustic signal. It is possible to cancel the code entry any time by pressing the $\mathbf{P}$ key twice. Alternatively, it is also possible to cancel the code entry if no code has been entered within 10 seconds.
After 3 incorrect code entries the lock switches to the lockout period.

1. Enter a valid opening code IDXXXXXX.

ID = 00 to 89 or 95 respectively; $X=$ configured 6 -digit combination for the corresponding ID
2. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice.
3. Turn the actuating knob within 4 seconds through $90^{\circ}$ clockwise to the stop.

If the red light blinks 3 times and the acoustic signal sounds 3 times after a code has been entered, the code entry must be repeated. After 3 incorrect code entries the lock switches to the lockout period.

### 6.4.2 Opening the lock with configured OD and CW

It is possible to cancel the running Opening Delay any time by pressing the $\mathbf{P}$ key twice.

1. Enter a valid opening code IDXXXXXX.
2. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice.
3. If you have not entered the Courier Code (ID 95), the signal for the running Opening Delay will be displayed.
$\Rightarrow$ The red light blinks every 5 seconds.
$\Rightarrow$ The Confirmation Window starts after the Opening Delay has elapsed. The green light blinks once and the acoustic signal sounds once every 5 seconds.

ID = 00 to $89 ;$ = configured 6-digit combination for the corresponding ID
4. Enter a valid opening code IDXXXXXX.
5. Press the ENTER key.
6. Turn the actuating knob within 4 seconds through $90^{\circ}$ clockwise to the stop.

If the red light blinks 3 times and the acoustic signal sounds 3 times after a code has been entered, the code entry must be repeated. After 3 incorrect code entries the lock switches to the lockout period.

- There are 2 options to bypass a configured OD/CW by using the Courier Code:
- After entering the Courier Code (ID 95) it is possible to bypass a configured OD and open the lock immediately.
- Bypassing a configured OD/CW if the Dual Mode function is activated. The Courier Code must be the first entered code. After having entered the Courier Code, the second code must be entered. Now it is possible to open the lock.
- Bypassing a configured OD/CW by using the emergency key:
- The Opening Delay can be bypassed by using the emergency key, but not deleted.


### 6.4.3 Opening with Dual Mode

1. Enter the first valid opening code ID XXXXXX .


ID = 00 to 89 or 95 respectively; $X=$ configured 6 -digit combination for the corresponding ID
2. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice. Then for 30 sec . the green light blinks once and the acoustic signal sounds once.
3. Enter the second valid opening code ID YYYYYY,

ID = 00 to 89 or 95 ; another opening code than the first one; $Y=$ configured 6 -digit combination for the corresponding ID
4. Press the ENTER key.
5. The green light blinks twice and the acoustic signal sounds twice.
6. Turn the actuating knob within 4 seconds through $90^{\circ}$ clockwise to the stop.

It is necessary that the operator IDs of both codes are different. The order of the code entry is irrelevant.

If the red light blinks 3 times and the acoustic signal sounds 3 times, the second entered code is incorrect or identical to the first code entry (identical IDs). In both cases the code entry must be repeated.

After a total of 3 incorrect code entries the lock switches to the lockout period. No matter if the first or the second code was entered incorrectly.

### 6.4.4 Opening with Duress Alarm

If there is a threatening situation, it is possible to open the lock by simultaneously generating a Duress Alarm, provided that the Duress Alarm has been activated before and the lock is connected to an intrusion detection system.

The Duress Code consists of a valid code. The last digit of the Duress Code is increased or decreased by 1 digit ( +1 or -1 ). If a Duress Code is entered, the lock opens externally as usual but a Duress Alarm is initiated imperceptibly for the aggressor.

If the Duress Alarm is deactivated, the Duress Codes are acknowledged as incorrect codes. It is neither possible to open the lock nor to activate OD.

| Code type | Decreased / increased digit | Code |
| :--- | :--- | :--- |
| Normal code |  | 00123459 |
| Duress Code | -1 | 00123458 |
| Duress Code | +1 | 00123450 |


| Code type | Decreased/increased digit | Code |
| :--- | :--- | :--- |
| Normal code |  | 00123456 |
| Duress Code | -1 | 00123455 |
| Duress Code | +1 | 00123457 |

1. Enter a modified valid opening code as Duress Code IDXXXXXY.
$I D=00$ to 89 or $95 ; X=$ the first 5 positions of the configured 6 -digit combination for the corresponding ID
$Y=$ increased by 1 or decreased by 1 at the 6 th position of the combination
2. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and the acoustic signal sounds twice.
3. Turn the actuating knob within 4 seconds through $90^{\circ}$ clockwise to the stop.

If the red light blinks 3 times and the acoustic sounds 3 times after a wrong code has been entered, the code entry must be repeated. After 3 incorrect code entries the lock switches to the lockout period.

Keep in mind that with the activated Dual Mode it is sufficient to enter both codes as Duress Codes to activate the Duress Alarm. However, the alarm is only activated if both codes required for opening have been entered completely.

### 6.4.5 Lockout period

After 3 incorrect code entries, the lock switches to a 1 -minute lockout period. For each further incorrect code entry the lockout period will be extended to $2,4,8$ and finally to 16 minutes. During the entire lockout period it is not possible to enter any code. It is only possible to bypass the lockout period by using the emergency key, but the period cannot be deleted. Only after the lockout period has elapsed, the lock can be opened.

### 6.4.6 Closing the lock

After closing the lock by the actuating knob counterclockwise, make sure to check if the lock is correctly locked. The knob must turn maximally $45^{\circ}$.

1. Turn the actuating knob counterclockwise through $90^{\circ}$ to the stop. No code entry is required.

### 6.4.7 Changing codes ( $P$ )

All users are authorized to change their own codes any time. The master is neither authorized to change User Codes nor the Courier Code. The master is able to activate, disable, enable and delete other codes.

After changing a code, the old code is invalid and the new code must be used instead. The functioning of the new code must be checked by opening the lock with an opened secure storage unit.

1. Press $\mathbf{P}$.
2. Enter the code to be changed IDXXXXXX.


ID = 00 to 89 or 95 respectively; $X=$ configured 6 -digit combination for the corresponding ID
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Enter the new code IDYYYYYY.


The same ID of the code to be changed; $Y=$ new 6 -digit combination for this ID
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Confirm the new code by entering IDYYYYYY.
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.

All steps must be repeated if the following errors occur:
If the red light blinks 3 times and the acoustic signal sounds 3 times after the entry of a code to be changed. The code has been entered incorrectly or the code has not been assigned and so the code cannot be changed.

If the red light blinks 3 times and the acoustic signal sounds 3 times after a new code has been entered, the ID does not match with the ID of the code that had been changed. The ID must always be kept, even in case of code change.

If the red light blinks 3 times and the acoustic signal sounds 3 times after a second attempt to enter the new code for confirmation, the 2 codes entered do not match.

### 6.4.8 Opening with activated additional functions

The lock has special additional functions which can only be set by using the optional Combi B PC software. It is only possible to activate one function at a time. If one of these functions is activated, the lock reacts differently.

- Remote Disabling: If the Remote Disabling function is activated and there is an active corresponding input signal, each key press is acknowledged with the red light blinking once. No code entry is possible.
- Overriding OD/CW: If any Opening Delay and associated Confirmation Window have already been configured and the function 'Overriding OD/CW' is activated in the Combi $B$ PC software, the configured OD/CW can be overridden.
- Overriding Dual Mode: If the Dual Mode function is activated, the configured Dual Mode turns into a Simple Mode. Only 1 code is necessary for lock opening.
- Duress Alarm: If the Duress Alarm function is activated in the Combi B PC software, a separate input signal must be initiated max. 60 seconds before the code entry (e.g. by means of a hidden button). If no signal was initiated, the lock will generate a Duress Alarm regardless of whether a correct code has been entered.


### 6.5 Emergency key functions

### 6.5.1 Opening the lock with the emergency key

## NOTICE

## Damage to the lock

Forcibly opening the lock with the emergency key results in destruction of the lock

- Insert the emergency key carefully when opening the lock.

Even if the code is lost, the emergency key allows full access to the lock and all lock configurations. The key is at the highest hierarchy level of the lock.

Store the emergency key in a safe place. Do not keep the key in the secure storage unit.

Opening the lock with the emergency key is only intended for emergency situations and not for permanent use.
It is also possible to open the lock with the emergency key during the lockout period. It is not possible to remove the key in the open position of the lock.

1. In case the lock must be opened with the emergency key, the rotary knob must be dismounted first.
2. Always mark first the position of the rotary knob for the assembly later, since the rotary knob can be inserted in steps of $90^{\circ}$.
3. Use an adhesive tape on the input unit to mark the position of the marking on the rotary knob.

4. Insert the enclosed Allen wrench up to the stop into the small hole on the lateral wall of the input unit.

5. Pull out the rotary knob to the front from the input unit.

6. Remove the Allen wrench.

7. Pull out the square shaft out of the lock.

$\Rightarrow$ The emergency key can now be inserted into the lock.
8. If the installation position is not known, determine the correct position of the emergency key by testing in $90^{\circ}$ steps.
9. After correct insertion of the emergency key through approximately $150^{\circ}$ to the right to the stop.
$\Rightarrow$ The lock is now open.
10. After opening the lock with the emergency key, mount the input unit again in reverse order.

### 6.5.2 Closing the lock with the emergency key

## NOTICE

## Malfunction of the lock

Removing the o-ring from the undrilled end of the square shaft may cause the lock to malfunction.

- Do not remove the installed o-ring from the undrilled end of the square shaft.
- The o-ring must be installed approximately 5 to 8 mm at the end of the undrilled square shaft.


1. Turn the emergency key to the stop counterclockwise through approximately $150^{\circ}$.

2. Remove the emergency key.
3. Secure the key against unauthorized access.

4. Insert the square shaft with the end of the bore forewards into the lock.

5. Mount the rotary knob on the undrilled end of the square shaft where the O-ring is attached.
6. If the rotary knob has been mounted correctly, it is not possible to remove the rotary knob now.
7. Remove the marking from the input unit

### 6.5.3 Changing the Master Code by using the emergency key ( $P$ )

It is only possible to apply the configuration command while the lock is opened with the emergency key. The functioning of the Master Code must be checked by opening the lock with an opened secure storage unit.

The configuration command is used to change the Master Code without knowing the Master Code. This is helpful if the Master Code is no longer available and other lock settings remain unchanged.

1. Open the lock with the emergency key.
2. Press $\mathbf{P}$.
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Enter the new Master Code OOXXXXXX.
$00=1 \mathrm{D}$; freely selected 6-digit combination (0...9)
5. Press the ENTER key.
$\Rightarrow$ The green light is on and the acoustic signal sounds twice.
6. Confirm the new Master Code OOXXXXXX.
7. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.
8. Close the lock with the emergency key.
9. Mount the rotary knob.
10. Test the functioning of the Master Code with an opened secure storage unit

If the red light blinks 3 times and the acoustic signal sounds 3 times after the second code entry, both entered codes do not match,

If the red light blinks 3 times and the acoustic signal sounds 3 times after the first code entry, the ID is incorrect. During the change of the Master Code, the ID must always be 'OO'.

It is possible to cancel the procedure without change any time by pressing $\mathbf{P}$ twice. Alternatively, the change of the Master Code is canceled if there is no code entry for 30 seconds or if the lock is closed with the emergency key during the change of the Master Code.

### 6.5.4 Resetting the lock ( PO )

It is only possible to apply the configuration command while the lock is opened with the emergency key. The functioning of the new Master Code must be checked by opening the lock with an opened secure storage unit.

The configuration command is used to reset the lock. This procedure deletes all lock settings (User Codes, Courier Code, Dual Mode, Duress Alarm, Opening Delay and Confirmation Window), only the Master Code and the audit remain unchanged.

1. Open the lock with the emergency key.
2. Press $\mathbf{P}$.
3. Press the ENTER key.
$\Rightarrow$ The green light blinks twice and stays on, the acoustic signal sounds twice.
4. Press PO.
5. Press the ENTER key.
$\Rightarrow$ The green light turns off and the acoustic signal sounds twice.
6. Close the lock with the emergency key.
7. Mount the rotary knob.

It is possible to cancel the procedure any time by pressing $\mathbf{P}$ twice. Alternatively, the change is canceled if there is no code entry for 30 seconds or if the lock is closed with the emergency key.

### 6.5.5 Reconfiguring the lock via the PC software

After opening the lock with the emergency key and connecting the lock to the PC software, it is possible to reconfigure the lock completely without knowing or changing the Master Code. Only an audit entry is created.

For further information on this procedure, refer to the User Manual Combi B 90 PC software.

### 6.6 Special functions

### 6.6.1 Connecting the lock to the PC software

The lock has an additional mini USB interface on the input unit. It is possible to configure the lock via this interface by using the PC software available as an accessory.

- The following functions are available when using the additional PC software:
- Reading-out audits
- Configuring the lock settings

For further information, see the User Manual Combi B 90 PC software.

### 6.6.2 Additional functions via the signal inputs

The lock has an option which allows implementing additional functions via the signal input. For further information on the assignment of the signal inputs, see the Installation Manual.

It is only possible to activate an additional function with the PC software.

### 6.6.3 Additional functions via the signal outputs

The lock has 2 signal outputs:

- Duress Alarm
- Micro switch for the detection of the bolt position, no additional configuration is possible


## 7 Service

In case of faults or service tasks it is recommended to contact a service technician or the safe manufacturer. On the inside of the top part of the input unit, there is the production data. This data is useful for a first phone consultation or in case of service for an initial fault localization.

Label with production data


### 7.1 Power supply

2 batteries of type AAA are available for the input unit for power supply of the lock. It is highly recommended to replace the batteries every 2 years, irrespectively of how often the lock has been used.

As soon as the status message 'low battery' is displayed, it is still possible to open the lock, but it is not possible to reconfigure the lock until after the battery replacement. An audit entry is created. As soon as the battery is almost completely exhausted, it is not possible to open the lock and every key press is acknowledged with an undervoltage signal.

## Permanent power supply

If necessary, along with the battery power supply it is also possible to supply the lock with voltage permanently. There are 3 options available for this purpose:

- Power supply via the intrusion detection system and the alarm box
- Power supply via the alarm box for the connection to the signaling equipment without power supply, option via the additional 12 V power supply unit at the alarm box
- If the lock is used without any signaling equipment: 9 V power supply can be connected directly to the lock.


### 7.2 Battery replacement

For security reasons batteries must always be replaced and tested with an opened secure storage unit.

Do not apply force to the lock. Avoid touching electronic components, this will destroy the lock.

1. Dismount the rotary knob of the lock for battery replacement.
2. Always mark first the position of the rotary knob for the assembly later, since the rotary knob can be inserted in steps of $90^{\circ}$.
3. Use an adhesive tape on the input unit to mark the position of the marking of the rotary knob.

4. Insert the Allen wrench up to the stop into the hole on the lateral wall of the input unit.

5. Pull out the rotary knob to the front of the input unit.

6. Remove the Allen wrench.

7. Uninstall the screw in the handle recess.

8. Move the top part of the input unit.

9. Remove the top part to the front.

10. Replace the 2 batteries which are located on the base part of the input unit
11. Mount the input unit on the base part from the front.
12. Move the base part laterally until the base part engages and the red LED is off.
13. Install the screw to secure the top part.
14. Mount the rotary knob in the position of the marking.
$\Rightarrow$ If the mounting is correct, the rotary knob can no longer be removed.
15. Remove the marking.
16. Neutralize the tamper switch message with the Master Code.

## Notes

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