

# OPERATING INSTRUCTIONS

**Paxos**<sup>®</sup> *compact*

Electronic high-security locking system



# Operating Manual

Electronic high-security locking system

## Paxos compact with dialling-knob input unit

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##### Option: Time functions

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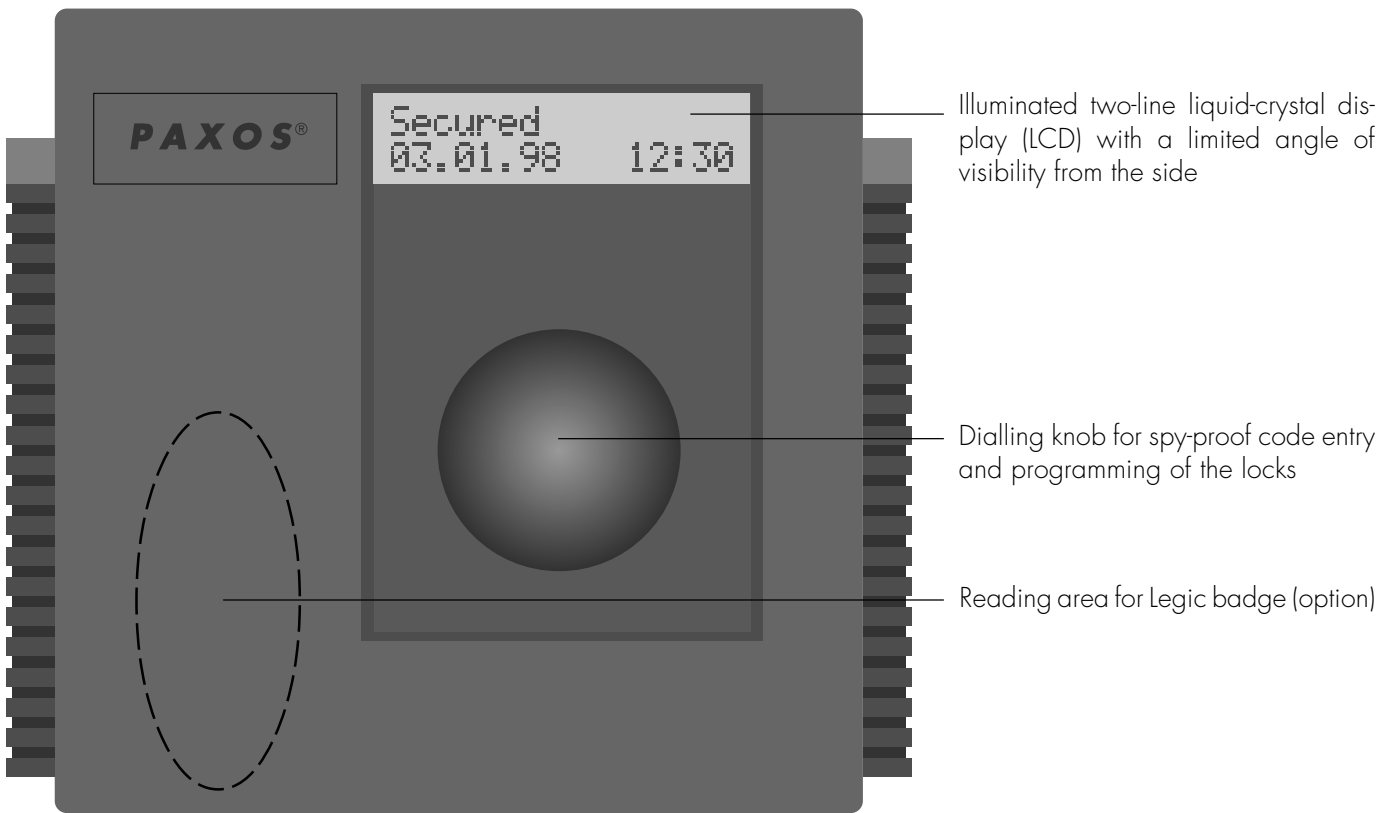
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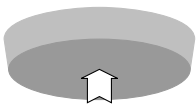
Alphabetic index



```
Open lock 1
Code : 96.....
```

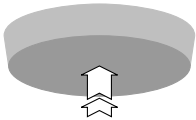
Spy-proof code input

To enter a code, change a random two-digit number between 00 and 99 to the correct value of the corresponding position in the secret code by turning the knob.



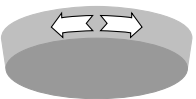
Brief knob depression

The specified number, date, or time is entered by pressing the knob briefly.



Long knob depression

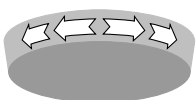
By pressing the knob longer (>1.5 seconds) the specified input is cancelled or the system returns to the previous menu level.



Slow knob rotation

Turning the knob slowly causes the individual menu options to be displayed or changes a code number, date, or time.

Clockwise rotation increases the displayed value; counter-clockwise rotation decreases the value.



Fast knob rotation

Turning the knob rapidly increases or decreases the displayed value by increments of three units.

## Normal functions

Codes	For the Paxos compact high-security locking system with dialling knob input, code combinations can be formed with the digits 0 to 9. Each code consists of eight digits and is entered as four two-digit numbers. A random-number generator displays a random two-digit number from 00 to 99, which you then change into the correct value by turning the knob. The secret codes should consist of randomly chosen digits. Do not use simple sequences such as 11223344 or combinations of birthdays or other personal data that can easily be guessed. The different codes used in a locking system should not differ by just one or two digits.
Opening codes (OC)	The opening codes for a combination lock are designated by (OC). Up to 26 different opening codes can be defined for each lock. They are distinguished by adding the letters 'a' to 'z' to the name (OCa, OCb, ... OCz). The number of the corresponding lock is also added (OCa1, OCb1, ... OCa2, OCb2 ...) after each opening code.
AND codes (&)	AND codes (&) can be defined for the first two opening codes (OCa and OCb). When an AND code has been activated, you must also immediately enter the corresponding AND code to open the lock with the opening code OCa or OCb. This function can be used to divide the opening authorisation among several persons (multiple-eyes principle), even when only one lock has been installed.
Code linkage	If the 'code linkage' function is activated, a second, freely definable opening code for the same lock must be entered immediately after the opening code. This function is used to transfer opening authorisation to any combination of several persons (multiple eye principle). A person with opening authorisation is, however, not tied to any particular other person with opening authorisation.
Emergency code and code storing	At least two opening codes (OCa and OCb) must be used in order to be able to use all functions of the Paxos compact electronic locks. The second code must be written down and stored in a secure place (another safe or a bank safe). The second code can be used to open the lock should the first opening code (OCa) get lost. If several opening codes (>5) are used for each lock, it is no longer necessary to store the code.
Mutation code (MU)	The mutation code (MU) is used as an authorisation identification when the code is changed. The holder of this code can change the code and activate other opening codes (OCc... OCz). The mutation code itself is not an opening code. The mutation code is also provided with the lock number (MU1, MU2).
Time code (TC)	With the time code (TC) access to the time functions of the lock is controlled. The holder of this code can set or change time functions. The time code itself is not an opening code. The time code is also provided with the lock number (TC1 or TC2).
Master code (MA)	With the master code (MA) access to all setting functions of the lock is permitted. The holder of this code can activate other opening codes (OCc... OCz), change all codes and set and change time functions. The master code itself is not an opening code. The master code is also provided with the lock number (MA1 or MA2).

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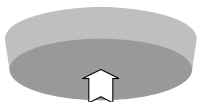
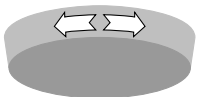
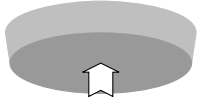
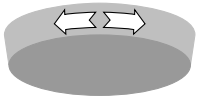
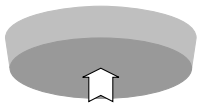
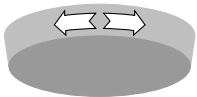
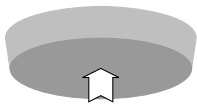
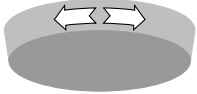
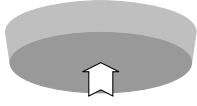
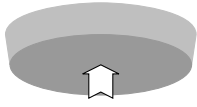
<b>Parallel mode</b>	If the parallel mode is activated, in two-lock operation the opening codes (OCa...OCz) for lock 1 and lock 2 are defined identically. If the code is changed the respective opening code is also changed at the same time in both locks. If lock 1 is opened with an opening code (e.g. OCd1), lock 2 can be opened with any other code (OCa2...OCz2) except OCd2. The advantage of this is that the allocation of opening authorisation for four-eyes identification is independent of the lock number. Each person with opening authorisation can apply the multiple eye principle with any other person with opening authorisation.
<b>Opening delays</b>	Opening delays of one second to 100 minutes can be programmed for normal opening or for an opening executed in a hold-up situation. In two-lock operation opening delays can also be programmed for the second lock. These are only active during partial locking. The time for an additional code entry after an opening delay can be limited from one to 99 minutes.
<b>Monitoring the maximum door-open period</b>	The maximum door-open period can be limited from 1 second up to 100 minutes. An acoustic signal is given if this period is exceeded.
<b>Manipulation detection and disabling</b>	After more than five wrong code entries, the Paxos compact electronic high-security locking system refuses to operate for six minutes. Starting after the tenth wrong code entry, the system is blocked for twenty minutes every time. When a correct code is entered, the authorised operator is notified of the manipulation attempt.
<b>Automatic locking</b>	After the bolts have been closed, the safe is automatically secured and the code is scrambled (standard setting).
<b>Manual locking</b>	In special cases, the locking process of the electronic lock can be made dependent on manual confirmation (by pressing the knob). This makes sense for safes with an additional mechanical lock, where, e.g. due to the design, the mechanical lock has to be locked first after the bolts are closed, or if the system is to be secured temporarily with only the mechanical lock. This special function can be activated by the customer service (see page 57).
<b>'Low battery' or power failure</b>	<p>The message 'Low battery' appears when the batteries are empty and must be replaced, or after a long power outage (&gt; 12 hours) while the system was set to the option 'Mains operation'. The locking system can be used all the same. If the energy of the batteries (or the accumulator in case of mains operation) is insufficient to close the lock securely, the message 'Low battery' also appears. In this case, however, the locks cannot be opened any more until the batteries are replaced or the power supply returns.</p> <p>When the battery compartment has been opened, the entry of the master code MA1 (if active) is requested first, if the option 'Time functions', the option 'Event time' or the option 'Switching unit' is present. Instead of the master code it is also possible to enter the time code TC1 or the mutation code MU1. This function serves to display a possible attempt at spying or sabotage by opening the input unit. Additionally, the time and possibly the date must be set after power has been interrupted.</p>

---

## Other functions (options)

Time/date	In systems with the Time functions or Event time option, the date and time are displayed. The time and the date can be changed after identification with the time code (TC1) or the master code (MA1).
Summer time changeover	The date and the time for the changeover from normal time to summer time and vice versa can be programmed one year in advance.
Locking periods	With the Time functions option up to twelve non-recurring locking periods (national holidays or vacations) can be programmed, each for up to 31 days.
Locking periods programmes	With the Time functions option it is possible to permanently enter programmes for annually or weekly recurring locking periods. Up to twelve annual locking periods and 28 weekly locking periods can be programmed.
Authorisation disabling	With the Authorisation disabling option (only for systems with the Mains operation option), the input unit can be enabled or disabled with respect to opening from a control point or room.
Duress alarm	This function (only with the connection and options box) allows triggering a silent alarm when the lock is opened under threat (for instance when hostages are taken).
Partial locking	With the Time functions option, the function 'Partial locking' (day/night changeover) can be used in systems with two locks. With it up to 28 partial-locking periods can be defined within a weekly programme, during which the first lock does not close. This means that during the partial-locking periods the safe can be opened by entering one single code. The code entry for lock 1 is omitted.
Locking-period interruption	With the Locking-period interruption option, a current locking period can be interrupted for approximately two minutes. During this time, the safe can be opened by entering a valid opening code.
Mains operation	If the Mains operation option is present, the power for the system is supplied by the mains via a small mains converter. The batteries usually present in the system are replaced by accumulators which supply power when the mains is interrupted. To prevent a breakdown of the accumulators, they should preventively be replaced once every three years.
UPS connection	With the UPS connection option the power is supplied to the system directly from an installed uninterruptible power supply (UPS), e.g. from the danger detection system. Instead of the batteries normally contained in the system, only the empty battery holder is fitted.
Sabotage detection	The input unit can only be dismantled after the battery compartment has been opened. In the event of a mains failure, opening the battery compartment or sabotaging the connection to the authorisation disabling triggers an alarm that can be picked up via electrical contacts on the options box.
Switching unit VdS	With the switching unit VdS a higher-level central station, e.g. the intruder detection system (IDS) can be armed or disarmed. Up to 26 copy-protected, proximity badges (contactless) can be assigned to one or more systems as authorisation.

System secured



Retract the bolts by activating the bolt mechanism.

[Empty display box]

Open the lock ?

Open lock 1  
Code : 96.....

Open lock 1  
Code : 10.....

Open lock 1  
Code : --29....

Open lock 1  
Code : --20....

Open lock 1  
&-Code: 47.....

Open lock 1  
&-Code: 99.....

Lock opening  
\*

Open lock 2  
Code : 57.....

All locks open  
Open bolt

Unlocked

The display is switched off after an operating pause of over 16 seconds.

Press the knob to switch the display on. The opening procedure can now be started.

Press the knob again and enter the opening code for the first lock.

Turn the knob until the random number is changed to the correct value.

Press the knob to enter the number. A new random number immediately appears in the next two positions of the opening code.

Turn the knob again to change the random number to the correct value.

Press the knob to enter the number. Repeat the above procedure until the entire eight-digit opening code has been entered. **If an AND code or the 'code linkage' function is activated**, the prompt for entering this code appears immediately.

Enter the additional eight-digit code in the same way as the opening code.

If the correct codes were entered, the lock opens.

Enter the code for the second lock (if any). When a wrong code is entered, an error message appears.

When the locks are open, an acoustic signal is given after 5 seconds. Open the bolts within 60 seconds, otherwise the locks lock again. This does not apply when the function 'Manual locking' (see page 9) is active. In that case, first open any mechanical locks and then the bolts.

The door can now be opened.



# Automatic locking (standard)

## Basic functions

System unlocked

**Unlocked**

Without the Time functions and Event time option, this message is displayed when the system is in the unlocked state. After an operating pause of over 16 seconds, however, the display is switched off.

**Unlocked**  
03.01.98 15:26

In systems with the Time functions or Event time option, the date and time are displayed as well.

Closing door and bolts

**Lock closing**  
\*

The locks are set automatically as soon as the door and the bolts have been closed.

Paxos compact with Time functions or Event time option

**Secured**  
03.01.98 17:16

The secured status for each installed lock is signalled with a triple acoustic signal and one of these two messages appears for 16 seconds. Then, the display is switched off again.

Paxos compact without Time functions and Event time option

**Secured**

Obstruction of the locking process

The closing of a lock may be obstructed due to mechanical factors if the lock (bolts) is manipulated while the lock bolt is moving. In this case, the Paxos compact lock automatically tries to reach the locked state by switching to the redundant second lock part. If all efforts (including a total of 4 closing attempts) are in vain, an acoustical 'thunderstorm' follows and a fault message is displayed ...

**Lock error 1B**  
**Service (51)**

Example of a fault message when the lock of a one-lock system is mechanically obstructed.

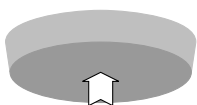
... or, in a two-lock system, the message 'Locked' of the other lock appears if it did reach the 'Locked' state.

**Locked**  
03.01.98 17:16

Message when a lock of a two-lock system is mechanically obstructed.

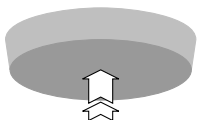
Procedure to open an obstructed lock

If the obstruction of the lock can only be ended by opening the lock, proceed as follows:



**Lock error 1A**  
**Service (51)**

Press the knob to confirm the fault message and to switch to the other, redundant lock part.



**Open lock 1**  
**Code : 96.....**

Press the knob for some time to confirm the fault message and to start the opening procedure by means of an opening code.

### Basic functions

It is also possible to have the closing procedure of the electronic lock start only after confirmation. This only makes sense for safes with additional mechanical locks, if the mechanical lock must be activated first, for example due to the design, or if the safe is to be secured temporarily with the mechanical lock only. If necessary for your safe, this special function has already been installed.

System unlocked

Unlocked

Without the Time functions and Event time option, this message is displayed when the system is in the unlocked state. After an operating pause of over 16 seconds, however, the display is switched off.

Unlocked  
03.01.98 15:26

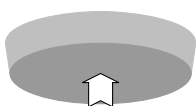
In systems with the Time functions or Event time option, the date and time are displayed as well.

Close door and bolts as well as any mechanical locks present

To lock  
press knob

As soon as the door and the bolts have been closed, the additional mechanical lock can be activated. The display requests a confirmation before the electronic locking system is locked.

**Caution:** After an operating pause of more than 16 seconds, the display is switched off. In this case, it is no longer apparent that the safe is not yet fully secured! When the function 'Manual locking' is active, the system no longer locks automatically!



Paxos compact with Time functions and Event time option

Lock closing  
\*

Confirm by pressing the knob. The electronic locks are now locked.

Paxos compact without Time functions or Event time option

Secured  
03.01.98 17:16

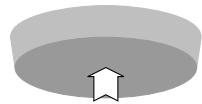
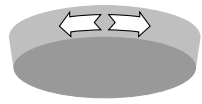
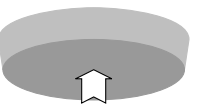
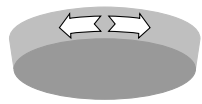
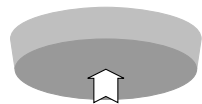
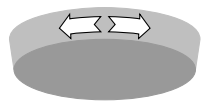
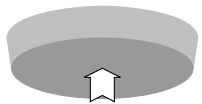
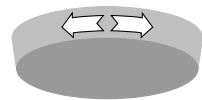
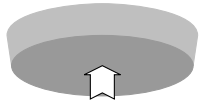
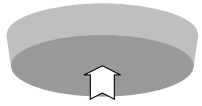
The fact that the secured state is reached is signalled with a threefold acoustic signal, and one of these two messages is displayed for 16 seconds. Subsequently, the display is switched off again.

Secured

Obstruction of the locking process

In the event of obstruction of the locking process during manual locking the same procedure applies in principle as for automatic locking (see page 8). Note that the message 'To lock press knob' must be confirmed (press the knob) before every closing procedure.

System unlocked



Unlocked  
03.01.98 14:33

Change code ?

Opening code a1  
Change code ?

Opening code b1  
Change code ?

OCb1 change  
Old cd: 75.....

OCb1 change  
Old cd: 38.....

New OCb1  
Code :13.....

New OCb1  
Code :74.....

Repeat OCb1  
Code :18.....

Repeat OCb1  
Code :74.....

Change OCb1  
executed

Opening code a1  
Change ?

Codes can only be changed when the system is in the unlocked state.

Press the knob to activate the main menu.

At the 'Change code' menu, press the knob again to activate this menu.

Turn the knob until the code you want to change is displayed.

Press the knob to activate the selected code. The old code must be entered as authorisation identification. Instead of the old code, the mutation code (MU) or the master code (MA) can be entered here, if these have been activated.

Turn and press the knob to enter the code just as you would for opening the lock.

After the last number has been entered, press the knob. The prompt for entering the new code appears.

Turn and press the knob again to enter the new eight-digit code.

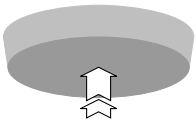
After entering the new code, it must be repeated for security reasons.

To verify the new code, enter it again in the usual way.

If both entered codes match, the modification is confirmed on the display for about 2 seconds. Otherwise, an error message appears.

Thereupon, the first function of the 'Change code' menu reappears and...

... if the knob is not operated for 16 seconds, the display is switched off again.

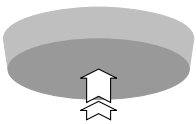


**Open lock 1**  
Code :----17..

If an error is already detected while the code or the time is being entered, the entire entry can be cancelled by pressing the knob for some time.

**Entry deleted**

In such a case, the system confirms the cancellation with this message and a short beep.



**Change code ?**

By pressing the knob longer, one can also return from an erroneously activated menu to the previous menu.

**Wrong code**

**Wrong code!**

This message appears on the display if a code is entered incorrectly. The system allows five consecutive wrong entries. Then ...

**Manipulation when the system is unlocked**

**Repetition of wrong codes**

... if the safe is unlocked, these two messages appear alternately, accompanied by an intermittent acoustic signal. The system accepts no further input. After the safe has been secured...

**Please lock bolt**

**Manipulation when the system is secured**

**Repetition of wrong codes**

...these two displays appear alternately. The input is disabled for six minutes. Each additional wrong entry blocks operation for another six minutes. From the tenth wrong entry on, the system is blocked for twenty minutes each time.

**Please wait**

**Manipulation detected !**

When a correct code is then entered, the message 'Manipulation detected!' and a continuous acoustic signal report the manipulation attempt to the authorised operator. The display must be confirmed by pressing the knob.

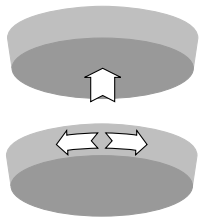
**Manipulation during partial locking**

If manipulation is detected during a partial-locking period (see page 46), lock 1 closes as well. After expiration of the manipulation disabling, lock 1 can be opened; the system operates with partial locking again. As soon as a valid opening code for lock 2 is entered, it opens and the manipulation attempt is displayed.

**Caution:** If manipulation is detected, the codes of the concerned lock should be changed and the cause should be determined.

By default the languages German, English and French can be selected in the Paxos Compact high-security locking system. A fourth language can be used as an option. The display language of the locking system can be changed when the safe is secured or unlocked. The language last selected also remains valid if the power supply is interrupted.

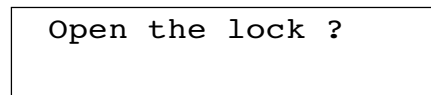
With secured system:



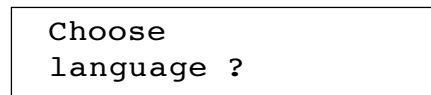
The 'Choose language' function is contained in the first menu level when the safe is secured as is 'Open lock' and 'Indicate status'.



After an operating break of more than 16 seconds the display is switched off.

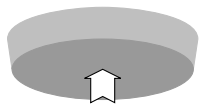


The display is switched on by pressing the knob, the opening procedure can be initiated.

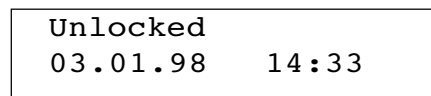


Turn the knob until the 'Choose language?' function appears on the display.

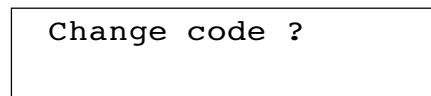
With unlocked system:



The 'Choose language' function is on the same menu level when the safe is unlocked as 'Change code' and 'Time functions'.

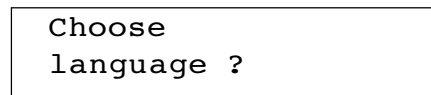
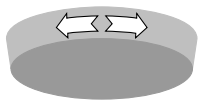


When the system is unlocked the display shown opposite appears. The date and time are only displayed in systems with the Time functions or Event time options. After an operating break of more than 16 seconds the display is, however, switched off.

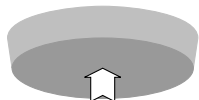


The main menu is activated by pressing the knob.

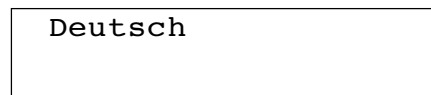
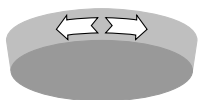
Selecting the language



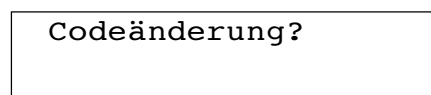
Turn the knob until the 'Choose language' function appears on the display.



Press the knob to activate the menu.



Turn the knob until the required language appears on the display.

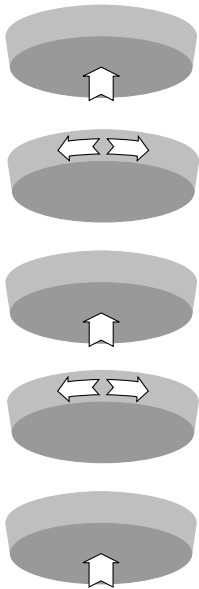


Activate the language version by pressing the knob. The display switches immediately to the selected language.

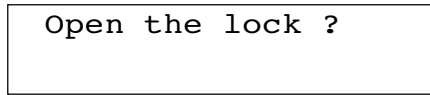
# Basic functions

# Displaying the lock status

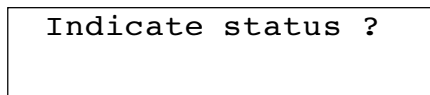
System secured



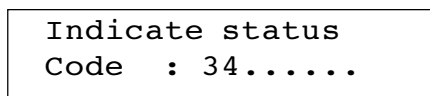
The display is switched off after an operating pause of over 16 seconds.



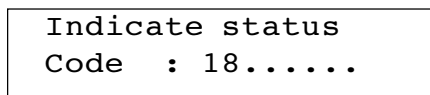
Press the knob to switch the display on. It would now be possible to start the opening procedure.



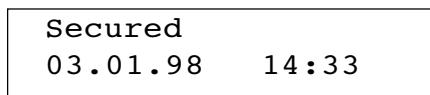
Turn the knob until the function for checking the system status is displayed.



Press the knob. A valid code of lock 1 must be entered as proof of authorisation.



Turn and press the knob repeatedly to enter the code as you would for opening the lock.

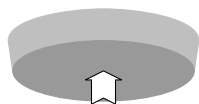


If the correct code is entered, the current lock status is displayed; otherwise, an error message appears.

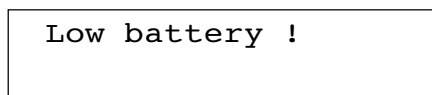


If the knob is not operated for 16 seconds, the display is switched off again.

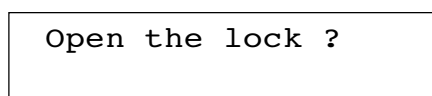
In the secured state:



The display is switched off after an operating pause of over 16 seconds.

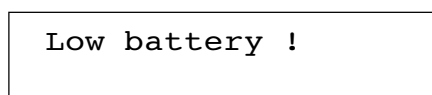


If the battery power falls below a first limit, the message 'Low battery' is displayed for about 2 seconds whenever the display is activated with the system in the secured state. Confirm the display by pressing the knob.



Next, the usual message for the secured system reappears automatically.

It is possible to continue using the system in the usual way, but the batteries must be replaced in the next few days (see page 58).



If the battery power falls below a second limit, the message 'Low battery' appears for about 3 seconds whenever the display is switched on in the secured state, and a beep signal is given. Then, the display is switched off again.

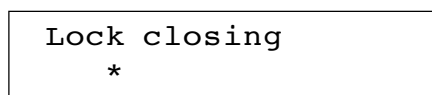
In this case, the battery power is too low to guarantee safe operation. The secured system can no longer be opened; all functions are disabled until the batteries are replaced (see page 58).

In the unlocked state:

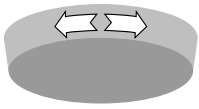


If the power falls below a third limit, nothing is displayed any more. However, the unlocked system tries to use the remaining energy to reach the secured state after the bolts are closed.

With new batteries:

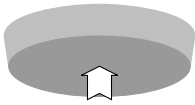


The system is automatically put in the secured state if the bolt is closed during battery replacement in the unlocked state. This does not apply when the function 'Manual locking' is active (see page 9).



**Master code**  
**MA1 cd:34.....**

When new batteries have been fitted, first the master code MA1, the mutation code MU1 or the time code TC1 must be entered, if these are activated, if the Time functions or Event time or Switching unit options are installed. Don't forget to check the date and the time and to correct them, if necessary (see page 32).



**Battery compart.**  
**has been opened!**

The next time a valid opening code is entered, the message 'Battery compartment has been opened' appears for each lock and a beep signal is given to notify the authorised operator of a possible attempt of spying or sabotage by opening the input unit. The display must be confirmed by pressing the knob.

**With Mains operation option:**

In systems with the option Mains operation the described displays may be active if the power supply is interrupted for prolonged periods (longer than 12 hours). In this case, the accumulators have been discharged to such a low level that a warning is triggered. Make sure that the power is switched on as soon as possible and avoid unnecessary opening and closing procedures.

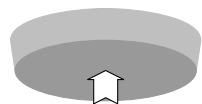
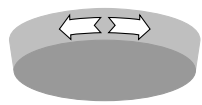
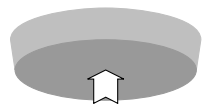
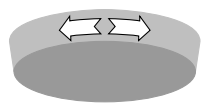
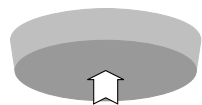
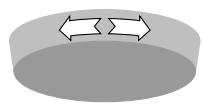
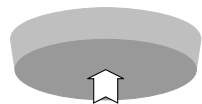
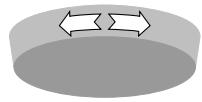
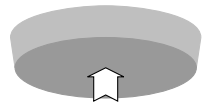
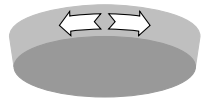
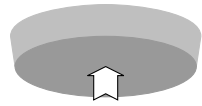
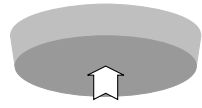


## Section 3

### Special functions

### Activating other code functions

System unlocked



Unlocked  
03.01.98 14:33

Change code ?

Opening code a1  
Change code ?

Other code  
functions ?

Opening code a1 &  
Change code ?

Master code 1  
Change code ?

MA1 change  
OCa1 cd:62.....

MA1 change  
OCa1 cd:38.....

New MA1  
Code :13.....

New MA1  
Code :74.....

Repeat MA1  
Code :18.....

Repeat MA1  
Code :74.....

Change MA1  
executed

Inactive codes can only be activated when the system is in the unlocked state and when individual codes for OCa and OCb (not 10 20 30 40) have been defined.

Press the knob to activate the main menu.

At the 'Change code' menu, press the knob again to activate this menu.

Turn the knob one position to the left to display the 'Other code functions' menu. This menu contains all codes that have not been activated.

Press the knob to activate the menu.

Turn the knob until the code you want to activate is displayed.

Press the knob to start the activation of the code. The demanded code, in this case OCa1, must be entered for identification.

Turn and press the knob repeatedly to enter the opening code just as you would for opening the lock.

After the opening code has been entered, the prompt for entering a new code of one's own appears.

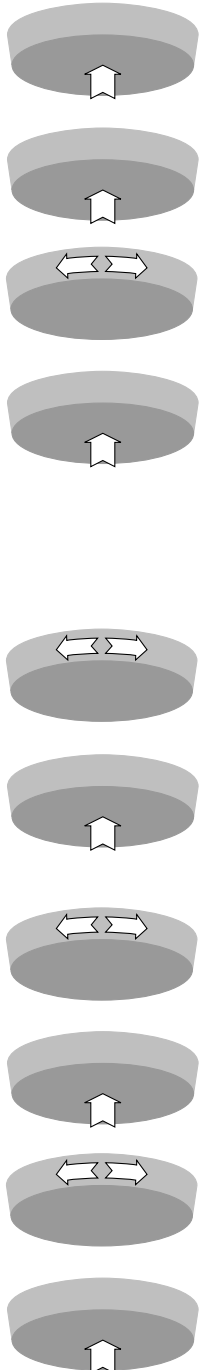
Turn and press the knob again to enter the new eight-digit code.

After entering the new code, it must be repeated for security reasons.

To verify the new code, enter it again in the usual way.

If both entered codes match, the modification is confirmed. The code is activated and will from now on appear in the 'Change code' menu and no longer in the 'Other code functions' menu.

System unlocked



Unlocked  
03.01.98 14:33

Codes can only be deactivated when the system is in the unlocked state.

Change code ?

Press the knob to activate the main menu.

Opening code a1  
Change code ?

At the 'Change code' menu, press the knob again to activate this menu.

Opening code b1&  
Change code ?

Turn the knob until the code you want to deactivate is displayed.

OCb1& change  
Old cd: 75.....

Turn and press the knob to activate the code modification. Instead of the old code it is possible to enter the mutation code (MU) or the master code (MA), if these are activated.

OCb1& change  
Old cd: 38.....

Turn and press the knob to enter the code in the usual way.

New OCb1&  
Code :13.....

After the last number has been entered by pressing the knob, the prompt for entering the new code appears.

New OCb1&  
Code :10.....

Enter the cancellation code 10 20 30 40 to deactivate the code.

Repeat OCb1&  
Code :18.....

After entering the cancellation code, it must be repeated for security reasons.

Repeat OCb1&  
Code :10.....

As verification of the cancellation code, enter it again.

Change OCb1&  
executed

If both entered codes match, the modification is confirmed for about 2 seconds. Otherwise, an error message appears.

The deactivated code no longer appears in the 'Change code' menu, but reappears in the 'Other code functions' menu.

Opening code a1  
Change code ?

Thereupon, the first function of the Time functions menu reappears and, if the knob is not operated for 16 seconds, the display is switched off again.

### Second opening code OCb

The second opening code, OCb, is used as an emergency code to open the lock should the first opening code (OCa) get lost. Just as the first opening code (OCa), the second opening code (OCb) can be combined with an AND code (&).

For each lock in the system, both opening codes (OCa and OCb) must be set to an individual code before further codes or functions of the Paxos compact electronic lock can be used.

If an AND code is used together with the first opening code, an AND code must also be defined for the second opening code.

### Activating the second AND code

An AND code for the second opening code (OCb) can be activated with the function 'Other code functions' in the 'Change code' menu (see page 16).

### Opening with the second opening code

To open the lock with the second opening code, just enter it instead of the first opening code (see page 7). The same applies for any AND code. The lock will open in the same way as when the first opening code is entered (an opening delay remains in effect).

### Changing the second opening code

Just as any other code, the second opening code (OCb) and the second AND code (OCb&) can be changed with the function 'Change code' (see page 10).

### Deactivating the second AND code

Like all other codes, an AND code for the second opening code (OCb&) can be deactivated by changing it to the cancellation code (10 20 30 40, see page 17). Deactivated AND codes reappear in the 'Other code functions' menu.

### Writing down the second opening code

Unlike the first opening codes, the programmed second opening codes (OCb and OCb&) of the system should be written down on paper and be deposited in a different, but equally secure safe (bank safe or safe of a branch). They are only needed in case of an emergency.

### AND code (&)

AND codes can be defined for the first two opening codes (OCa and OCb) of each lock. This makes the opening authorisation dependent on two codes and allows a division of responsibilities among two persons for each lock. To open the lock, the opening code and the AND code must be entered in immediate succession. In case of a pause of over 30 seconds between both entries, the first code is scrambled again and, if the lock was opened, it is automatically closed again.

### Activating the AND codes

AND codes can be activated with the function 'Other code functions' in the 'Change code' menu (see page 16). Activation is only possible, however, when individual codes (not 10 20 30 40) have been programmed for the opening codes OCa and OCb of each installed lock.

### Opening with AND codes

To open the lock, enter the AND code immediately before or after the opening code (see page 7).

### Changing the AND codes

Like all other codes, the AND codes can be changed with the function 'Change code' (see page 10).

### Deactivating the AND codes

Like all other codes, an AND code for the second opening code (OCb&) can be deactivated by changing it to the cancellation code (10 20 30 40, see page 17). Deactivated codes reappear in the 'Other code functions' menu.

### Code linkage

If the 'Code linkage' function is activated the opening authorisation is linked with two code entries. Responsibility for one installed lock can therefore be divided among two persons.

In contrast to the AND code, in this case a person with opening authorisation is not bound to any specific other person with opening authorisation. Each person with opening authorisation can open a lock together with any other person with opening authorisation.

To open the respective lock, a second, freely definable opening code of the same lock must be entered immediately after entering the opening code. (If the same code is entered twice the message 'Wrong code' appears.) If there is a delay of more than 30 seconds between both entries, the first code is scrambled and any already open lock subsequently automatically closed. This special function can be activated individually by your customer service (see page 57) for each installed lock.

### Activating additional codes

Codes which have not yet been activated are activated with the 'Other code functions' function in the Change code menu (see page 16). Activation is, however, only possible if separate, individual codes are programmed for the opening codes OCa and OCb and also for the master code MA of all installed locks (not 10 20 30 40). It is not possible to activate any AND codes (OC&) in combination with the 'Code linkage' function.

### Code changes

If the safe is unlocked the codes can be changed with the Change code function (see page 10).

### Writing down the opening codes

Both first opening codes (OCa and OCb) of each installed lock should be written down on paper and be deposited in a different, but equally secure safe (bank safe or safe of a branch). These are only required in an emergency (loss of code).

### Parallel mode

If the parallel mode is activated, in two-lock operation the opening codes (OCap...OCzp) for lock 1 and lock 2 are defined identically. Instead of the lock number in parallel mode the opening codes are marked with the index 'p'. If the code is changed the respective opening code is also changed at the same time in both locks. If lock 1 is opened with an opening code (e.g. OCdp), lock 2 can be opened with any other opening code (OCap...OCzp) except OCdp. This has the advantage that for four-eye identification the allocation of opening authorisation is independent of the lock number. Each person with opening authorisation can apply the multiple eye principle with any other person with opening authorisation.

The 'Parallel mode' function can be activated and deactivated by your customer service (see page 57).

### Activating additional codes

Codes which have not yet been activated are activated with the 'Other code functions' function in the 'Change code' menu (see page 16). Activation is, however, only possible when separate, individual codes (not 10 20 30 40) have been programmed for the opening codes OCap and OCbp and the master codes MA1 and MA2.

### Code changes

In parallel mode codes (OCap...OCzp, MA1, MA2, MU1, MU2, TC1, TC2) can also be changed with the 'Change code' function (see page 10).

Opening codes (OCap...OCzp) are then automatically changed in lock 1 and lock 2 to the same opening code. Instead of the old code the master code (MA1) or the mutation code (MU1) of lock 1 can be used for authorisation identification followed by the master code (MA2) or the mutation code (MU2) of lock 2.

### Writing down the opening codes

Both first opening codes (OCap and OCbp as well as OCap& and OCbp& if provided) must be noted on a piece of paper and deposited in another safe with the same security rating (bank safe or safe of a branch). These are only required in an emergency (loss of code).

## Master code (MA)

A separate master code (MA) can be activated for each lock. This is both required for activation of the additional opening codes (OCc to OCz) or for changing the code instead of the old code as authorisation identification. On the other hand the master code also controls the access to all time functions of the respective lock. In addition, the master code is requested after the battery compartment has been opened if the Time functions option, the Event time option or the Switching unit option is present to signal the need to set the clock. The lock cannot be opened with the master code. As all other codes the master code must comprise eight numbers. When the master code is activated, the prompt for entering the master code appears automatically after calling the function 'Change code'.

The master code can be entered at any time instead of the time code TC (see page 23) or the mutation code MU (see page 24) of the respective lock.

**Master code**  
MA1 cd:96.....

When the battery compartment has been inserted, if the Time functions or Event time options are installed, the locking system first requests the master code MA1 if this is activated. Instead of the master code it is also possible to enter the time code TC1 or the mutation code MU1.

**Master code**  
MA1 cd:--29....

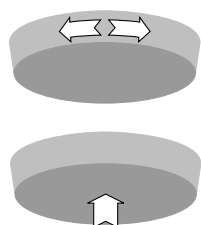
Enter the code in the customary manner.

**Unlocked**  
03.01.98 17:16

Then the first function of the main menu is displayed or,...

**Open the lock?**

...if the locking system is secured, the opening procedure can be initiated.



## Activating the master code

The master code is activated with the option 'Other code functions' in the 'Change code' menu (see page 16).

## Changing the master code

The master code can be changed with the function 'Change code' (see page 10) in the same way as the other codes.

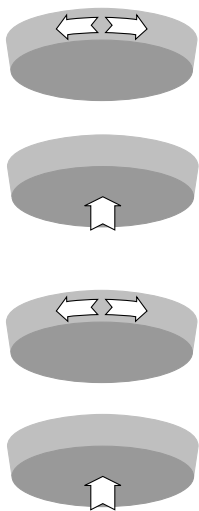
## Deactivating the master code

Like all other codes, the master code can be deactivated by changing it to the cancellation code (10 20 30 40, see page 17). Deactivated codes reappear in the 'Other code functions' menu.

**Caution:** If the master code is cancelled all other dependent codes (OCc...OCz, MU, TC), badges (A1...Z1) and functions (time functions, code linkage, fast locking, authorisation disabling, etc.) are also cancelled or deactivated.

## Time code (TC)

For each lock it is possible to activate a time code (TC) in addition to the master code. This controls the access to all time functions of the system. In addition it is requested after the battery compartment has been opened if the Time functions option, the Event time option or the Switching unit option is present to signal the need to set the clock. It is not possible to open the lock with the time code. As every other code the time code must contain eight numbers. If the time code is activated a prompt to enter the code appears automatically each time a respective function is called up. The time code is entered instead of the master code when this is demanded as authorisation for activating, changing and deactivating time functions:



**Set clock?**

Turn the knob until the time function to be changed is displayed.

**Time code**  
TC1 cd:96.....

Press the knob to activate the menu. The master code can be entered here as identification instead of the time code.

**Time code**  
TC1 cd:--29....

Turn and press the knob to enter the time code in the customary manner.

**Set clock**  
03.01.98 14:33

When the code has been correctly entered the respective time function can be processed.

## Activating the time code

The time code is activated with the function 'Other code functions' in the 'Change code' menu (see page 16).

## Changing the time code

The time code can be changed in the same manner as other codes with the 'Change code' function (see page 10).

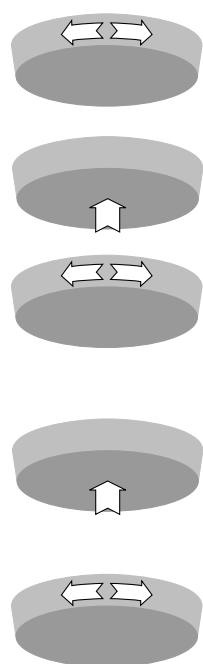
## Deactivating the time code

The time code is deactivated as all other codes by changing to the cancellation code (10 20 30 40, see page 17). Deactivated codes appear again in the 'Other code functions' menu.



## Mutation code (MU)

For each lock it is possible to activate a mutation code (MU) in addition to the master code. This can be used as authorisation identification when activating the additional opening codes (OCc to OCz) or for changing the code instead of the old code or the master code. It is not possible to open the lock with the mutation code. As all other codes the mutation code must contain eight numbers. If the mutation code is activated the prompt to enter the code appears automatically when a respective function is called up. If a code is changed the mutation code of the respective lock can always be entered instead of the old code or the master code to obtain the change authorisation:



**Opening code b2**  
Change code?

Turn the knob until the code to be changed is shown in the display.

**OCb2 Change**  
Old cd:96.....

Start modification by pressing the knob. The display shows a prompt to enter the old code.

**OCb2 Change**  
Old cd:--29....

Instead of the old code enter the mutation code in the customary manner by turning and pressing the knob.

**New OCb2**  
Code :47.....

After entering the last number by pressing the knob, the prompt automatically appears to enter the new code.

**New OCb2**  
Code :--64....

Further entries are made as described under 'Change code' (see page 10).

## Activating the mutation code

The mutation code is activated with the 'Other code functions' function in the 'Change code' menu (see page 16).

## Changing the mutation code

The mutation code can be changed with the 'Change code' function (see page 10) in the same way as the other codes.

## Deactivating the mutation code

The mutation code is deactivated in the same way as all other codes by changing to the cancellation code (10 20 30 40, see page 17). Deactivated codes appear again in the 'Other code functions' menu.

**Additional opening codes  
OCc to OCz**

When master codes (MA1 and/or MA2) have been activated, an additional 24 opening codes OCc to OCz besides the opening codes OCa and OCb are available for each lock.

For each lock in the system, both opening codes (OCa and OCb) must be set to an individual code before further codes or functions of the Paxos compact electronic lock can be used.

No AND codes are available for the additional opening codes, if required the 'Code linkage' function can, however, be used (see page 20).

If several opening codes (>5) are used for each installed lock, code storage of the second opening code (OCb) is not necessary.

**Activating the additional  
opening codes**

Additional opening codes (OCc to OCz) can be activated with the function 'Other code functions' in the 'Change code' menu (see page 16). For activation authorisation, in contrast to the example described on page 16, either the master code (MA) or the mutation code (MU) of the respective lock must be entered instead of the opening code OCa. If the 'Parallel mode' function is activated, the master codes or the mutation codes of both locks must be entered in succession.

**Opening with the additional  
opening codes**

To open the lock with an additional opening code, just enter it instead of the first opening code (see page 7). The lock will open in the same way as if the first opening code were entered (an opening delay remains in effect). The hold-up alarm can also be triggered when the lock is opened with additional opening codes (see page 50).

**Changing the additional  
opening codes**

Just as any other code, the additional opening codes (OCc to OCz) can be changed with the function 'Change code' (see page 10).

**Deactivating the additional  
opening codes**

An additional opening code may be deactivated by changing it to the cancellation code (10 20 30 40, see page 17). Deactivated opening codes reappear in the 'Other code functions' menu.

## Opening delays

For each lock an opening delay can be defined. This serves to delay the lock automatically each time it is opened for the set time (1 second to 99 minutes, 59 seconds). Opening delays can only be changed after identification with the master code (MA) or the time code (TC) of the respective lock.

After the code for opening lock 1 has been entered, the elapsing delay time is displayed as follows :

```
Delay
04:52
```

The elapsing delay time is displayed for 16 seconds. Subsequently the display is switched off, can, however, be reactivated by pressing the knob. When the delay time has elapsed, an acoustic signal is given so that entry can be continued or the safe opened.

```
Open lock 2
Code :77.....
```

After expiration of the delay time, the opening procedure can be continued in the usual way.

## Activating an opening delay

If the master code (MA) or the time code (TC) of the respective lock is activated, it is possible to define opening delays in the 'Other time functions' sub-menu of the 'Time functions' menu.

```
Unlocked
03.01.98 14:33
```

Time functions can only be changed when the system is in the unlocked state.

```
Change code ?
```

Press the knob to activate the main menu.

```
Time functions ?
```

Turn the knob until the 'Time functions' menu is displayed.

```
Weekly lock.per.
Change ?
```

Press the knob briefly to activate the menu.

```
Other time
functions ?
```

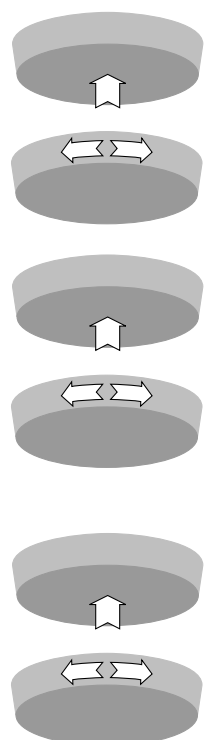
Turn the knob one position to the left to display the 'Other time functions' menu. This menu contains all inactive time functions.

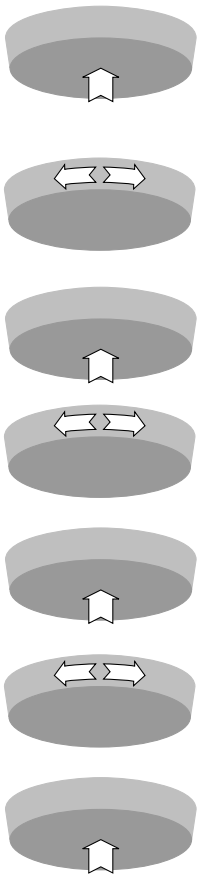
```
Locking periods
Change ?
```

Press the knob to activate the menu.

```
Normal opening
delay lock 1 ?
```

Turn the knob until the function 'Opening delay' or 'Hold-up opening delay' of the respective lock is displayed.





**Time code**  
TC1 cd:29.....

Press the knob to start the activation procedure. For identification either the time code or the master code of the respective lock must be entered.

**Time code**  
TC1 cd:34.....

Enter the time code or the master code in the usual manner by turning and pressing the knob.

**Opening delay**  
delay <18>00

After the last number has been entered by pressing the knob, the prompt for entering the duration of the delay appears.

**Opening delay**  
delay 18<05>

Turn the knob to set the number of minutes (00 to 99) and enter by pressing the knob, subsequently turn the knob to set the seconds of the delay duration (00 to 59).

**Opening delay**  
stored

Press the knob to terminate the entry of the delay. The opening delay is stored. The function now appears in the 'Time functions' menu.

**Weekly lock.per.**  
Change ?

After about 2 seconds, the first function of the Time functions menu reappears and ...

... if the knob is not operated for 16 seconds, the display is switched off again.

**Changing an opening delay**

An existing opening delay can also be changed in the same way as for activation of the opening delay in the 'Time functions' menu. The new delay time simply replaces the old one.

**Deactivating an opening delay**

To deactivate (switch off) the opening delay, simply set it to zero (enter 00 00). Subsequently, this function reappears in the 'Other time functions' menu.

**Hold-up opening delay**

A special hold-up opening delay can be programmed in the same way as the normal opening delay. This delays opening of the respective lock by the entered time if during the opening procedure a duress code was entered (see page 50). If the system is equipped with the connection and options box or the Switching unit option and linked with a corresponding alarm centre, it is also possible to initiate a silent alarm. Please consult a specialist of your alarm systems company.

**Opening delay for the second lock**

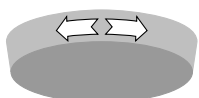
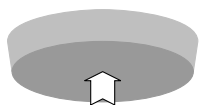
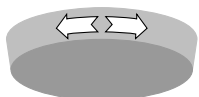
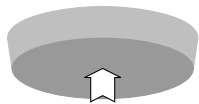
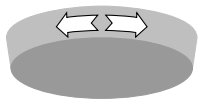
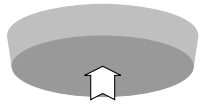
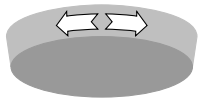
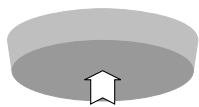
In the same manner as for lock 1 in a two-lock system it is also possible to define opening delays for the second lock. These delay opening of the second lock during partial locking (see page 46). Opening delays for the second lock are only initiated if the first lock was open for longer than one minute.

## Identification after delay

A time limit (1 minute to 99 minutes, 59 seconds) can be set for the entry of another code after an opening delay has elapsed. When the delay time has elapsed an acoustic signal is given and a prompt for another code entry appears on the display. This code can be any opening code of the respective lock. The opening procedure is terminated if no code is entered during the defined time. The lock remains closed. If the time is defined as zero (00 00), the respective lock opens when the opening delay has elapsed without any additional code entry.

## Activating identification after delay

If the master code for the respective lock is activated, the functions 'Entry-time after delay lock 1' or 'Entry-time after delay lock 2' appears in the 'Other time functions' menu.



Unlocked  
03.01.98 14:33

Time functions can only be performed when the system is unlocked.

Change code ?

Press the knob to activate the main menu.

Time functions ?

Turn the knob until the 'Time functions' menu is displayed.

Weekly lock.per.  
Change ?

Press the knob to activate the menu.

Other time  
functions?

Turn the knob anticlockwise to access the 'Other time functions' menu. This includes all time functions which have not been activated.

Locking periods  
Change ?

Activate the menu by pressing the knob.

Entry-time after  
delay lock 1 ?

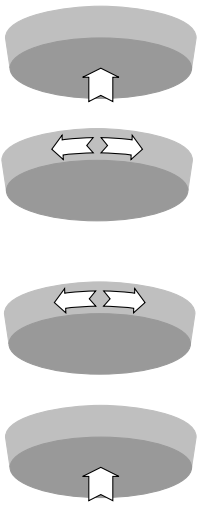
Turn the knob until the function 'Entry-time after delay lock 1 (2)' is displayed.

Time code  
TC1 cd:29.....

Start the activation procedure by pressing the knob. For identification the time code or the master code of the respective lock must be entered.

Time code  
TC1 cd:----34..

Enter the code in the usual manner by turning and pressing the knob.



**Entry-time after delay <11>00**

After entering the last number by pressing the knob, a prompt appears automatically for entry of the entry-time after the delay.

**Entry-time after delay <15>00**

First set the minutes (00 to 99) by turning the knob and enter the value by pressing the knob.

**Entry-time after delay 15<25>**

Turn the knob to set the seconds of the entry-time (00 to 59).

**Time after delay stored!**

Finish the entry by pressing the knob. The entry-time after the delay is stored. The function then appears in the 'Time functions' menu.

Note: If a value of less than one minute is entered, the error message 'Entry invalid' appears.

**Weekly lock.per. Change ?**

After approximately 2 seconds the first function of the Time functions menu is displayed once more and....

... after 16 seconds without operation of the knob the display is switched off again.

**Changing the entry-time after delay**

An existing entry-time after delay can be changed in the same way as it is activated. The old entry-time after delay is simply overwritten with the new values.

**Deactivation of identification after delay**

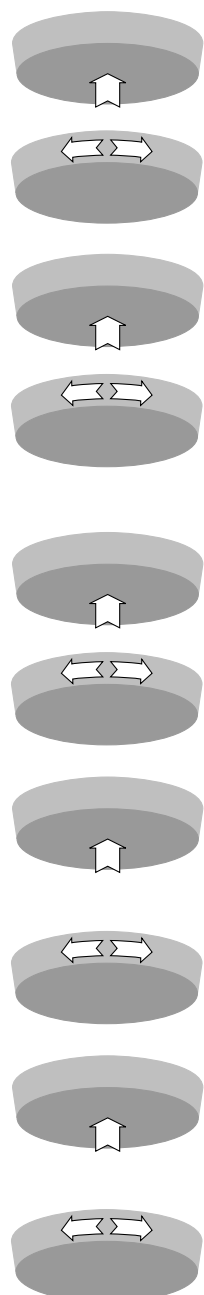
To deactivate identification after delay, the entry-time is simply set to zero (entry: 00 00). The function subsequently appears in the menu 'Other time functions' again.

## Monitoring the door-open period

The maximum time the system is allowed to remain open can be programmed in lock 1 (1 second to 99 minutes, 59 seconds). When the set time has elapsed when the locks are open an intermittent audible signal is given until the system is locked (with manual locking until the boltwork is closed). This function is available as soon as the master code of the first lock (MA1) is activated.

## Activating the maximum door-open period

If the master code (MA1) or time code (TC) is activated, the function 'Maximum door-open time' appears in the 'Other time functions' menu.



Unlocked  
03.01.98 14:33

Time functions can only be changed when the system is in the unlocked state.

Change code ?

Press the knob to activate the main menu.

Time functions ?

Turn the knob until the 'Time functions' menu is displayed.

Weekly lock.per.  
Change ?

Press the knob briefly to activate the menu.

Other time  
functions ?

Turn the knob one position to the left to display the 'Other time functions' menu. This menu contains all inactive time functions.

Locking periods  
Change ?

Press the knob to activate the menu.

Maximum door-  
open time ?

Turn the knob until the function 'Maximum door-open time ?' is displayed.

Time code  
TC1 cd:29.....

Press the knob to start the activation procedure. For identification the time code or the master code must be entered.

Time code  
TC1 cd:34.....

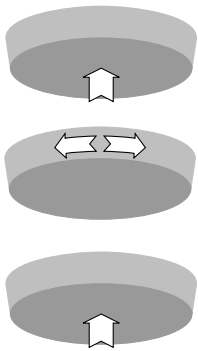
Turn and press the knob to enter the code in the usual way.

Maximum door-  
open time <00>00

After the last number has been entered by pressing the knob, the prompt for entering the maximum door-open time appears.

Maximum door-  
open time <72>00

Turn the knob to set the number of minutes (00 to 99).



Maximum door-  
open time 72<00>

Press the knob to enter the value.

Maximum door-  
open time 72<25>

Turn the knob to set the number of seconds (00 to 59) for the door-open period.

Max. door-open  
time stored!

Press the knob to terminate the entry. The maximum door-open time is stored. The function now appears in the 'Time functions' menu.

Weekly lock.per.  
Change ?

Subsequently, the first function of the Time functions menu reappears and ...

... if the knob is not operated for 16 seconds, the display is switched off again.

**Changing the maximum door-open period**

An existing maximum door-open period can be changed in the same way as it is entered the first time. The new maximum door-open period simply replaces the old one.

**Deactivating the maximum door-open period**

To deactivate the maximum door-open period, simply set it to zero (enter 00 00). Subsequently, this function reappears in the 'Other time functions' menu.



Optional functions

The Paxos compact high-security lock can be equipped with the Time functions option or the Event time option. These options can also be added to existing Paxos compact systems.

Time functions option

The Time functions option contains the handling of redundant clocks and date-oriented functions for locking periods, etc.

Event time option

The Event time option contains the handling of redundant clocks but does not support date-oriented functions for locking periods, etc.

**Secured**

Status display of a system without the Time functions and Event time option.

**Secured**  
**03.01.98 14:33**

Status display of a system with the Time functions or Event time option.

Setting the clock

This function for setting the clock is entered on systems with the 'Time functions' or 'Event time' functions in the 'Other time functions' menu as soon as the master code (MA1) is activated. This function can be used to set the date as well as the time.

**Unlocked**  
**03.01.98 14:33**

Time functions can only be changed when the system is in the unlocked state.

**Change code ?**

Press the knob to activate the main menu.

**Time functions ?**

Turn the knob until the 'Time functions' menu is displayed.

**Weekly lock.per.**  
**Change ?**

Press the knob briefly to activate the menu.

**Other time**  
**functions ?**

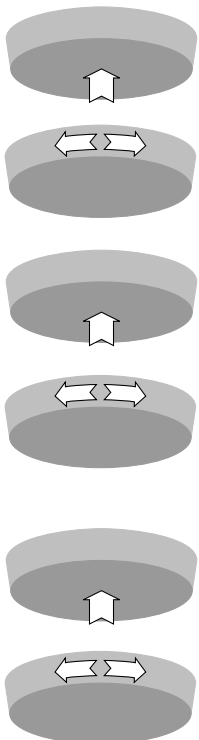
Turn the knob one position to the left to display the 'Other time functions' menu. This menu contains all inactive time functions.

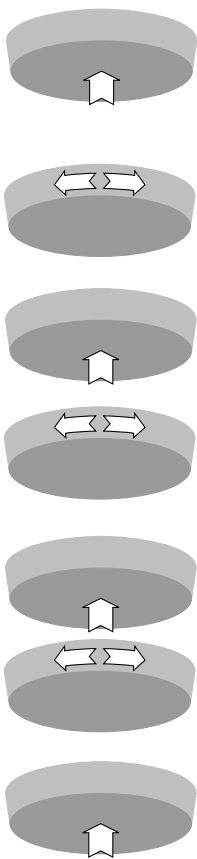
**Locking periods**  
**Change ?**

Press the knob to activate the menu.

**Set clock ?**

Turn the knob until the function 'Set clock?' is displayed.





**Time code**  
TC1 cd:29.....

Press the knob to start the setting procedure. For identification either the time code or the master code must be entered.

**Time code**  
TC1 cd:34.....

Turn and press the knob to enter the code in the usual way.

**Set clock**  
<03>01.98 14:33

After the last number has been entered by pressing the knob, the prompt for entering the date and time appears.

**Set clock**  
<04>01.98 13:33

Turn the knob to change the day of the date.

**Set clock**  
04.01.98 13<33>

Press the knob to enter the value. Now, the next positions of the date and the time can be changed and entered.

**Set clock**  
04.01.98 13<27>

Values from 00 to 23 are accepted for defining the hour; values from 00 to 59 are accepted for defining the minutes.

**Clock set**  
04.01.98 13:27

After entering the minutes, press the knob to terminate the entry. The entered date and the new time are set.

**Locking periods**  
Change ?

After about 2 seconds, the first function of the Time functions menu reappears and ...

... if the knob is not operated for 16 seconds, the display is switched off again.

**Value range of the system clock**

The system clock of Paxos compact has a calendar from 1994 to 2073. Years entered as 94 to 99 are interpreted as the years from 1994 to 1999; years entered as 00 to 73 are interpreted as the years from 2000 to 2073. Years entered as 74 to 93 are invalid and are not accepted by the system. The system acknowledges leap years and handles them correctly. All times are displayed in the 24-hour format. This setting cannot be changed.

## Optional functions

## Summer/winter time changeover

### Summer/winter time changeover

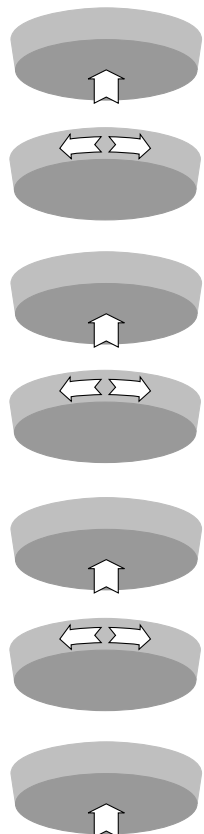
In the Paxos compact electronic high-security lock, the times when the clocks are reset from summer to winter time and vice versa can be entered one year in advance.

With the function 'Summer time from', the time in spring is programmed when the clocks are reset to summer time. When the system time of the Paxos compact locking system reaches the time programmed for the switch to summer time, the system clock is set forward by exactly 60 minutes (+ 1 hour). With the function 'Winter time from', the time in the autumn is programmed when the clocks are set back to winter or normal time. When the system clock of the Paxos compact locking system reaches the time programmed for the switch to winter time, the system clock is set backward by exactly 60 minutes (- 1 hour).

Locking periods or partial-locking periods active when the clocks are reset are automatically increased or decreased by 60 minutes.

### Entering the times for the summer/ winter time changeover

When switch times have been programmed, the function 'Summer/winter time' is located in the 'Time functions' menu; otherwise, it is in the 'Other time functions' menu.



Unlocked  
03.01.98 14:33

Time functions can only be changed when the system is in the unlocked state.

Change code ?

Press the knob to activate the main menu.

Time functions ?

Turn the knob until the 'Time functions' menu is displayed.

Weekly lock.per.  
Change ?

Press the knob briefly to activate the menu.

Summer/  
winter time ?

Turn the knob until the function 'Summer/winter time' is displayed.

Time code  
TC1 cd:29.....

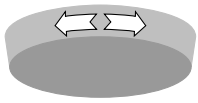
Press the knob to activate the function. For identification either the time code or the master code must be entered.

Time code  
TC1 cd:34.....

Turn and press the knob to enter the code in the usual way.

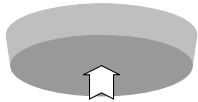
Summer time from:  
<03>01.98 14:33

After the last number has been entered by pressing the knob, the prompt for entering the start of summer time appears. The current date or the previously entered date is displayed.



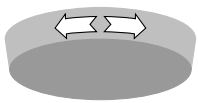
**Summer time from:**  
27.03.98 02<00>

Turn and press the knob to enter the time for the switch to summer time.



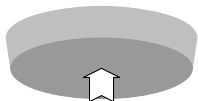
**Winter time from:**  
<03>01.98 14:33

After the last number has been entered by pressing the knob, the input field for the switch to winter time appears. The current date or the previously entered date is displayed.



**Winter time from:**  
25.09.98 03<00>

Turn and press the knob to enter the time for the switch to winter time.



**Switching dates stored**

After the last number has been entered by pressing the knob, the storing of the summer and winter time changeover is confirmed with this message.

**Locking periods Change ?**

After about 2 seconds, the first function of the Time functions menu is displayed again.

**Checking the summer/winter time changeover**

When the system is in the unlocked state, the programmed changeover times can be read out or changed with the function 'Summer/winter time' in the 'Time functions' menu. Expired switching times remain stored, but are not used again the next year. New dates have to be programmed each year.

**Deactivating the summer/winter time changeover**

When the system is in the unlocked state, programmed switching times can be deactivated by entering zeroes (enter: 00 00 00 00 00).

**Limitations for defining change-over times**

To prevent the date from being changed when the system switches to summer or winter time, switching times between 23:00 and 23:59 for the start of summer time or between 00:00 and 00:59 for the start of winter time are rejected with the following message:

**Entry invalid !**

When a switching time is entered which would cause a change of date, this message is displayed for about 2 seconds.

## Optional functions

## Locking periods

### Locking periods (1 to 12)

If the Time functions option has been installed in a Paxos compact electronic locking system, up to twelve locking periods (of up to 31 days each) can be defined. During these periods, the system cannot be opened, for example during vacation or on official holidays. To define the locking periods the master code (MA1) or the time code (TC1) must be activated.

The locking periods have the highest priority. As soon as a locking period has started, it cannot be deactivated (exception: the function Locking-period interruption). The safe cannot be opened before the end of the locking period. After an attempt to open the safe during a locking period, the following message is displayed:

```
Time lock until
05.04.98  08:15
```

The date and the time of the end of the locking period are displayed for about 2 seconds.

If locking periods have been activated, the function 'Locking periods Change' is located in the 'Time functions' menu, otherwise it is in the 'Other time functions' menu.

### Activating locking periods

```
Unlocked
03.01.98  14:33
```

Time functions can only be changed when the system is in the unlocked state.

```
Change code ?
```

Press the knob to activate the main menu.

```
Time functions ?
```

Turn the knob until the 'Time functions' menu is displayed.

```
Weekly lock.per.
Change ?
```

Press the knob briefly to activate the menu.

```
Other time
functions ?
```

Turn the knob one position to the left to display the 'Other time functions' menu.

```
Normal opening
delay ?
```

Press the knob to activate the menu.

```
Locking periods
Change ?
```

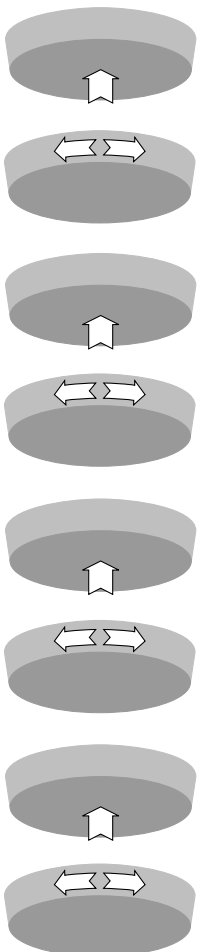
Turn the knob until the function 'Locking periods Change ?' is displayed.

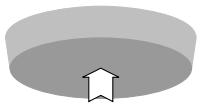
```
Time code
TC1 cd:29.....
```

Press the knob to start the activation procedure. For identification either the time code or the master code must be entered.

```
Time code
TC1 cd:34.....
```

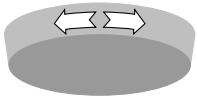
Turn and press the knob to enter the code in the usual way.





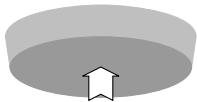
Start lock.p. 11  
00.00.00 00:00

If the master code is correct, the first free locking period is displayed.



Start lock.p. 5  
05.01.98 17:30

If you want to change an existing locking period, turn the knob to select it.

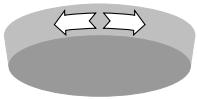


Start lock.p. 11  
<03>01.98 14:33

Press the knob to start the entry. For free locking periods, the current date is displayed as a default.

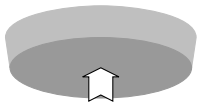
Start lock.p. 11  
31.03.98 17<45>

Turn and press the knob to enter the start of the locking period. Or accept the displayed value without making any changes by pressing the knob.



End lock. per. 11  
<31>03.98 00:00

Now the end of the locking period can be entered. The programmed start date is displayed as a default.

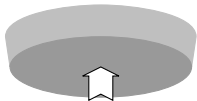


End lock. per. 11  
05.04.98 08<15>

Turn and press the knob to enter the end of the locking period.

31.03.98 17:45 -  
05.04.98 08:15?

The beginning and the end of the locking period are displayed for verification. The locking period can be cancelled by pressing the knob for some time at this point.



Locking per.  
stored

Press the knob briefly to confirm your entries. The locking period is now programmed.

Start lock.p. 12  
00.00.00 00:00

After about 2 seconds, the next free locking period or the first locking period is displayed.

**Reading out the programmed locking periods**

When the system is in the unlocked state, programmed locking periods that have not yet ended can be read out or changed with the function 'Locking periods Change' in the 'Time functions' menu.

When the system is in the secured state, programmed locking periods can be displayed with the function 'Check locking periods' (see page 42).

**Deactivating a locking time**

When the system is in the unlocked state, programmed locking periods can be deactivated before they have started by entering zero values (enter 00 00 00 00 00) as the date and the time for the start of the locking period. Once a locking period has started, it can only be interrupted with the locking-period interruption function or by breaking open the system. The safe remains securely locked until the programmed end of the locking period.

**Limitation for the definition of locking times**

For reasons of security, a pause of at least four days (96 hours) must be observed between locking periods. The start of the locking time may not be in the past, otherwise an error message is displayed.

## Optional functions

## Weekly locking-periods

### Weekly locking-periods

In a Paxos compact electronic lock with the Time functions option, a weekly programme of up to 28 locking periods can be defined. During these periods, the safe cannot be opened.

In order to define locking periods in a weekly programme, the master code (MA1) or the time code (TC1) must be entered. Once a locking period has started, it cannot be interrupted (exception: the function Locking-period interruption). The safe cannot be opened before the end of the locking period.

After an attempt to open the safe during a weekly locking period, the following message is displayed:

```
Time lock until
03.01.98  07:20
```

The end of the locking period is displayed for approximately 2 seconds with date and time.

### Programming the weekly locking periods

If weekly locking periods have been defined, the function 'Weekly locking period Change' is located in the 'Time functions' menu; otherwise, it is in the 'Other time functions' menu.

```
Unlocked
03.01.98  14:33
```

Time functions can only be changed when the system is in the unlocked state.

```
Change code ?
```

Press the knob to activate the main menu.

```
Time functions ?
```

Turn the knob until the 'Time functions' menu is displayed.

```
Locking periods
Change ?
```

Press the knob briefly to activate the menu.

```
Weekly lock.per.
Change ?
```

Turn the knob until the function 'Weekly locking periods Change' is displayed.

```
Time code
TC1 cd:29.....
```

Press the knob to activate the function. For identification either the time code or the master code must be entered.

```
Time code
TC1 cd:34.....
```

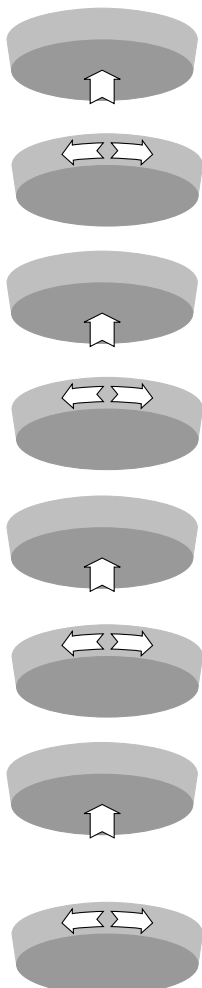
Turn and press the knob to enter the code in the usual way.

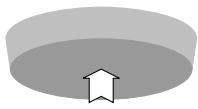
```
Start ** 00:00
End   ** 00:00
```

After the last number of the code has been entered by pressing the knob, an empty input field of the weekly locking-period programme appears.

```
Start We 18:45
End   Th 07:20
```

The existing locking periods can be displayed by turning the knob.

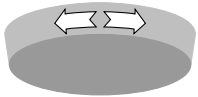




```
Start <Mo>00:00
End   ** 00:00
```

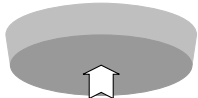
To enter a new weekly locking period, press the knob briefly when the empty input field is displayed.

To change an existing weekly locking period, turn the knob and press it briefly when the period you want to change is displayed.



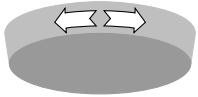
```
Start <Fr>00:00
End   ** 00:00
```

Turn the knob to select the weekday on which the locking period is to start.



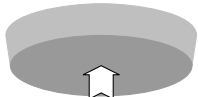
```
Start Fr<00>00
End   ** 00:00
```

Press the knob briefly to enter the day for the start of the period.



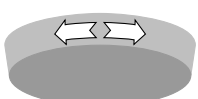
```
Start Fr 19<10>
End   ** 00:00
```

Turn and press the knob to enter the hours and minutes of the start of the period.



```
Start Fr 19:10
End   <Fr>00:00
```

After the start of the period has been entered, the weekday on which the locking period should end appears between the brackets.



```
Start Fr 19:10
End   Mo 07<20>
```

Turn and press the knob to enter the end of the locking period. The day of the week can be forwarded by at most three days by turning the knob. The locking period is cancelled by selecting the two asterisks (\*\* ) instead of the end day and then pressing the knob.



```
Weekly lock.per.
stored
```

Briefly press the knob to confirm the entered values. The locking period is now programmed.

```
Start ** 00:00
End   ** 00:00
```

After several seconds, the next locking period can be entered. Press the knob for a long time to terminate the function.

**Cancelling weekly locking periods**

A weekly locking period can be cancelled by selecting the two asterisks (\*\* ) instead of the end day and then pressing the knob. This action is acknowledged with the message 'Weekly locking period deleted'.

**Reading out the programmed weekly locking periods**

When the system is in the unlocked state, programmed weekly locking periods can be read out by turning the knob immediately after the master code or the time code has been entered.

When the system is in the secured state, programmed weekly locking periods can be displayed with the function 'Check locking periods' (see page 42).

**Limitations for the definition of weekly locking periods**

A pause of at least 60 minutes must be observed between individual weekly locking periods, during which the safe is not locked. The maximum duration of an individual weekly locking period is 72 hours.

If these rules are not observed, an error message is displayed.



## Optional functions

## Yearly locking periods

### Yearly locking period

In connection with the Time functions option up to 12 recurring locking periods can be defined in a yearly programme in the electronic Paxos compact lock. During these periods it is not possible to open the safe. In order to define such yearly locking periods, the master code (MA1) or the time code (TC1) must be activated. If a locking period has started, it cannot be deactivated (exception: Locking period interruption function). The safe can only be opened again when the locking period has elapsed.

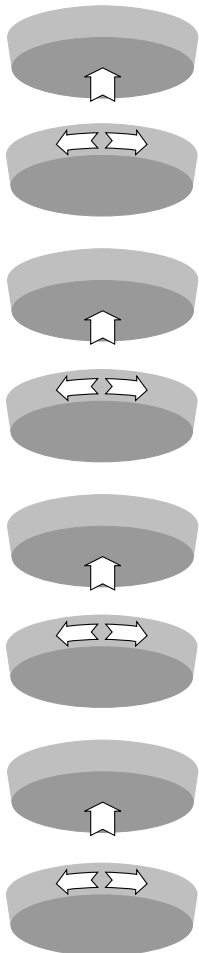
During a yearly locking period the following display appears when an operation attempt is made:

```
Time lock until
02.05.98  07:20
```

The end of the locking period is displayed with the date and time for approximately 2 seconds.

### Programming the yearly locking periods

If yearly locking periods are already defined, the 'Yearly locking period change' function is contained in the 'Time functions' menu, or otherwise in the 'Other time functions' menu.



```
Unlocked
03.01.98  14:33
```

Time functions can only be processed when the system is unlocked.

```
Change code?
```

The main menu is activated by pressing the knob.

```
Time functions?
```

Turn the knob until the 'Time functions' menu is displayed.

```
Locking periods
Change ?
```

Press the knob briefly to activate the menu.

```
Yearly lock. per.
Change ?
```

Turn the knob until the 'Yearly locking period change' function appears.

```
Time code
TC1 cd:29.....
```

Start activation by pressing the knob. The time code or the master code must be entered.

```
Time code
TC1 cd:----34..
```

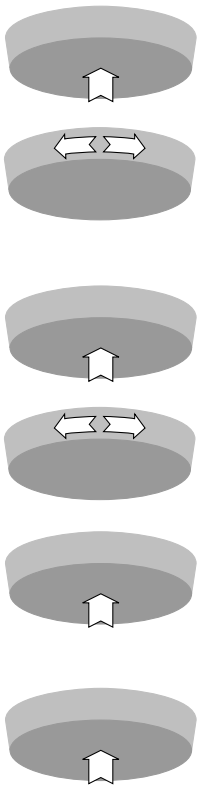
Enter the code in the usual way by turning and pressing the knob.

```
Start lock.p. 11
00.00  00:00
```

If the code is valid the first free yearly locking time is displayed.

```
Start lock.p. 5
05.01  17:30
```

The yearly locking period to be changed can also be displayed by turning the knob.



```
Start lock.p. 11
<03>01  14:33
```

Start entry by pressing the knob. With free locking periods the current date is taken.

```
Start lock.p. 11
31.04  17<45>
```

Enter the start of the locking period by turning and pressing the knob. The display can also be accepted without changes by pressing the knob.

```
End lock.per. 11
<31>04  00:00
```

The end of the locking period can then be entered. The programmed starting time then also appears automatically.

```
End lock.per. 11
02.05  07<20>
```

Enter the end of the locking period by turning and pressing the knob.

```
31.04  17:45 -
02.05  07:20?
```

For verification the start and end are displayed once more. The locking period can be discarded by pressing the knob for a prolonged period.

```
Locking per.
stored
```

Confirm the entries by pressing the knob briefly. The locking period is programmed.

```
Start lock.p. 12
00.00  00:00
```

The next free or the first locking period is displayed after approximately 2 seconds.

**Cancelling yearly locking periods**

A programmed yearly locking period can be deleted when the system is unlocked by entering the value zero for date and time (entry: 00 00 00 00) as the beginning of the yearly locking period. The display 'locking time deleted' appears as confirmation.

**Checking the programmed yearly locking periods**

When the system is unlocked, a programmed yearly locking period can be checked and also changed in the 'Time functions' menu with the 'Yearly locking period change' function. When the system is secured, a programmed yearly locking period can be displayed with the 'Check locking periods' function (see page 42).

**Limitation and special points when defining yearly locking periods**

The maximum duration of an individual yearly locking period is 15 days. For safety reasons there must be a break of at least two days (48 hours) between two yearly locking periods. If this is not observed an error message appears.

In leap years a locking period which extends over the end of February into March is automatically extended by the extra day. If the yearly locking period ends on the last day in February it is preferable to enter the end date as the 29 February.

Yearly locking periods with a starting date on 29 February start in a non-leap year on 1 March at 00:00 hours. Yearly locking periods with the end date on 29 February end in a non-leap year on 28 February at 24:00 hours.

# Option: Time functions

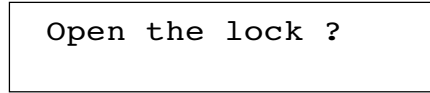
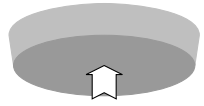
## Checking locking periods when the system is in the secured state

### Optional functions

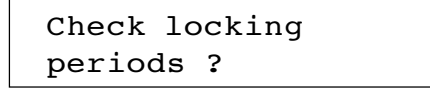
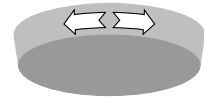
System secured



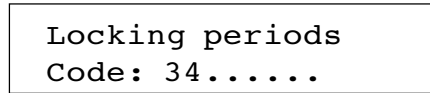
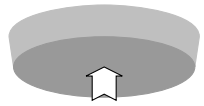
The display is switched off after an operating pause of over 16 seconds.



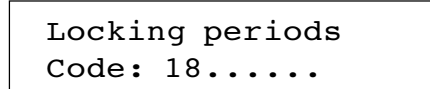
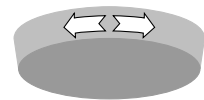
Press the knob to switch the display on; it would now be possible to start the opening procedure.



Turn the knob until the function 'Check locking periods ?' is displayed. This function only appears if locking periods, weekly or yearly locking periods are defined.

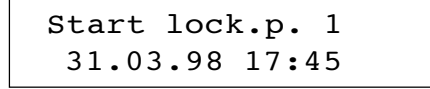
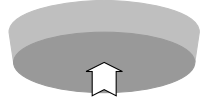


Press the knob. Any valid code of lock 1 must be entered to obtain the reading authorisation.



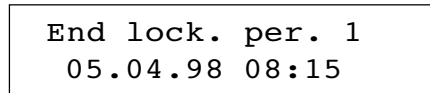
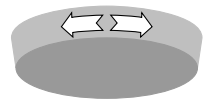
Turn and press the knob repeatedly to enter the code in the usual way.

Displaying locking periods



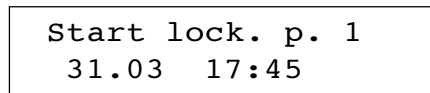
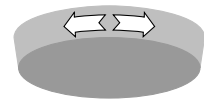
If the code is correct the start of the first locking period is displayed. If the code is incorrect, an error message is displayed.

If no locking period has been programmed, zeroes are displayed for the date and the time (00.00.00 00:00).

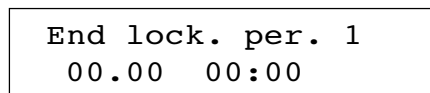


The end of the locking period as well as other locking periods can be displayed by turning the knob clockwise.

Displaying yearly locking periods

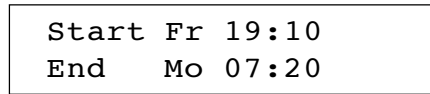
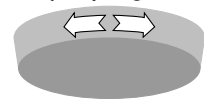


After the last locking period the first yearly locking period appears. Turn the knob clockwise to display the other yearly locking periods.

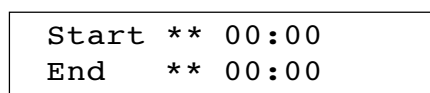


If no yearly locking period is programmed, only zeros are displayed for date and time (00.00. 00:00).

Displaying weekly locking periods



The first weekly locking period appears after the last yearly locking period. The other weekly locking periods can be displayed by turning the knob clockwise.



If no weekly locking period has been programmed, an empty display with asterisks instead of the day of the week and 00:00 as the time is displayed.

## Optional functions

## Fast locking

### Fast locking

In systems with an installed Time functions option each holder of a code of lock 1 can define an immediately effective locking period with an adjustable maximum locking duration of 3 days (72 hours) from the time of entry onwards. The 'Fast locking' function can be called up when the system is unlocked or secured as long as the master code (MA1) is activated and the 'Fast locking' function has been released by your customer service (see page 57).

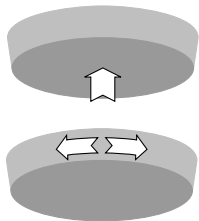
If the locking period has started when the safe is secured, it can no longer be deactivated (exception: Locking-period interruption function). The safe can only be opened once more when the locking period has elapsed.

During the locking period the following message appears if an opening attempt is made:

```
Time lock until
17.01.98  08:15
```

The end of the locking period is displayed for approximately 2 seconds with date and time.

### With secured system:



The function 'Fast locking change' is on the first menu level when the safe is secured as is 'Open lock' and 'Indicate status'. If the fast locking period has started, this function is not available.

After an operating break of more than 16 seconds the display is switched off.

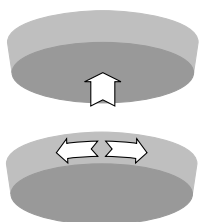
```
Open the lock ?
```

The display is activated by pressing the knob; it is possible to initiate the opening procedure.

```
Fast locking
change ?
```

Turn the knob until the function 'Fast locking change ?' appears on the display.

### With unlocked system:



The function 'Fast locking change' is on the same menu level as 'Change code' and 'Time functions' when the safe is unlocked.

```
Unlocked
03.01.98  14:33
```

If the system is unlocked the display opposite is shown. After an operating break of more than 16 seconds the display is switched off.

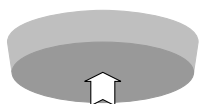
```
Change code?
```

The main menu is activated by pressing the knob.

```
Fast locking
change ?
```

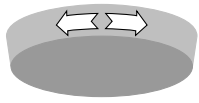
Turn the knob until the 'Fast locking change ?' function appears on the display.

### Programming the fast locking time



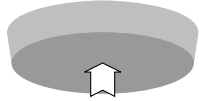
```
Fast locking
Code: 29.....
```

Press the knob to activate the function. For identification any valid code of lock 1 must be entered.



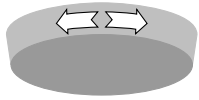
**Fast locking**  
**Code: ----34..**

Enter the code by turning and pressing the knob in the usual manner.



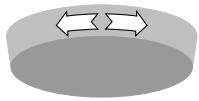
**Fast lock. until**  
**<03>.01.98 18:33**

On the display the current time plus four hours with date appears as a setting as the end of the fast locking time.



**Fast lock. until**  
**03.01.98<22>33**

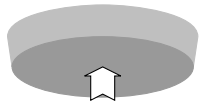
Turn the knob clockwise to extend the duration of fast locking in steps of one hour ...



**Fast lock. until**  
**03.01.98<17>33**

... and turn anticlockwise to reduce in steps of one hour.

Note: The end of fast locking can also be entered after pressing the knob for a prolonged period in the same way as a normal locking period by turning and pressing the knob.



**Fast locking**  
**stored!**

Press briefly to confirm the entries and fast locking is activated. The safe remains blocked after locking until the programmed time.

## Deleting fast locking

A programmed fast locking period can be deleted when the safe is still open by overwriting with a series of zeros.

Programmed fast locking is also deleted when the safe is open if the time or date is set to a value after the end of fast locking or before start of fast locking.

## Limitation and special points of fast locking

The maximum duration of a fast locking period is 3 days, the minimum duration is one minute. If this is not observed an error message appears.

## Optional functions

## Locking-period interruption

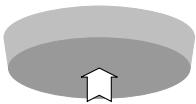
### Interrupting an active time locking period or delay time

If the Paxos compact high-security lock is equipped with the Time functions option, an electric contact (push button) on the options box or on the switching unit box or an external activation element (signal + 12 volts or short circuit contact) can be connected. This function can be used, for example, to free persons trapped in the strong room by a locking period. If the activation element is operated from the non-secured side, the electronic evaluation of a combination code (keypad input) is to be preferred to a simple button!

When the system is in the secured state, the locking-period interruption interrupts an active time locking for about 2 minutes. During this time, the system can be opened in the usual way by entering the opening code. If the safe is not opened during the locking-period interruption, the locking period is reactivated after the interruption.

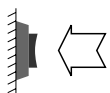
The locking-period interruption also interrupts a current opening delay of lock 1 (not, however, a hold-up delay) or suppresses these with an opening procedure within the next approximately two minutes.

Note: If the switching unit option is installed, actuation of the locking-period interruption simultaneously initiates the sabotage alarm. This can only be reset if the power supply to the switching unit is interrupted.



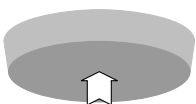
**Time lock until**  
02.05.98 07:20

When an attempt is made to open the lock during a locking period, the end of the locking period is displayed for about 2 seconds.



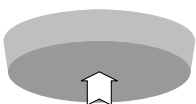
**Open the lock ?**

Press the button for the locking-period interruption (with the switching unit option the adhesive film must be broken). The active locking period is interrupted for two minutes, or the delay time terminated.



**Open lock 1**  
**Code: 43.....**

Restart the opening procedure. The usual prompt for entering the opening code for the first lock appears.



**Time lock until**  
02.05.98 07:20

After the locking-period interruption, the system is secured and when an attempt is made to open the lock while the locking period is active, the end of the locking period is displayed again.

## Optional functions

## Partial-locking periods

### Partial-locking periods

If the Paxos compact high-security lock is equipped with the Time functions option, up to 28 partial-locking periods can be defined in a weekly programme. During these periods, the first lock remains open and only the second lock closes. In order to define partial locking periods, two locks must be installed and the master code (MA1) or the time code (TC1) must be activated.

If a locking period starts during a partial-locking period, both locks close as soon as the bolts are closed.

During partial locking, the following message is displayed when the safe is in the secured state:

```
Locked
03.01.98  09:53
```

When the safe is in the secured state, partial locking is indicated with this message.

### Programming the partial-locking periods

If partial-locking periods have been defined, the function 'Partial locking Change' is located in the 'Time functions' menu; otherwise, it is in the 'Other time functions' menu.

```
Unlocked
03.01.98  14:33
```

Time functions can only be changed when the system is in the unlocked state.

```
Change code ?
```

Press the knob to activate the main menu.

```
Time functions ?
```

Turn the knob until the 'Time functions' menu is displayed.

```
Locking periods
Change ?
```

Press the knob briefly to activate the menu.

```
Partial locking
Change ?
```

Turn the knob until the function 'Partial locking Change' is displayed'.

```
Time code
TC1 cd:29.....
```

Press the knob to activate the function. For identification the time code or the master code of lock 1 must be entered.

```
Time code
TC1 cd:34.....
```

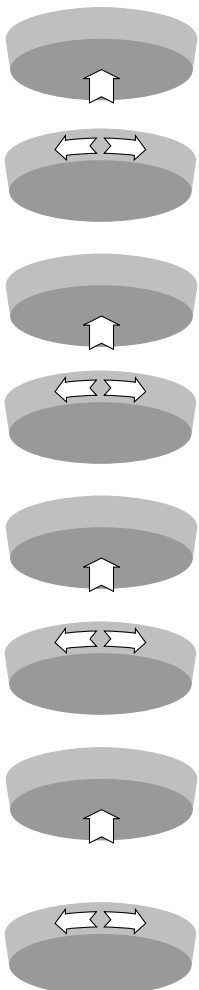
Turn and press the knob to enter the code in the usual way.

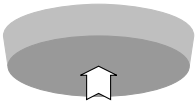
```
Start ** 00:00
End   ** 00:00
```

After the last number of the code has been entered by pressing the knob, an empty input field of the partial-locking programme appears.

```
Start We 08:00
End   We 12:00
```

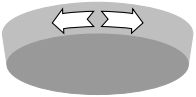
The existing partial-locking periods can be displayed by turning the knob.





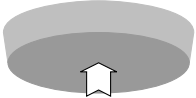
```
Start <Mo>00:00
End   ** 00:00
```

To enter a new partial-locking period, press the knob briefly when the empty input field is displayed.  
To change an existing partial-locking period, turn the knob and press it briefly when the period you want to change is displayed.



```
Start <Fr>00:00
End   ** 00:00
```

Turn the knob to select the weekday on which the partial locking should start.



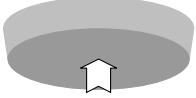
```
Start Fr<00>00
End   ** 00:00
```

Press the knob briefly to enter the day on which the period is to start.



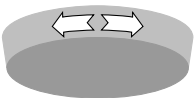
```
Start Fr 07<45>
End   ** 00:00
```

Turn and press the knob to enter the hours and minutes of the start of the period.



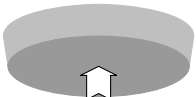
```
Start Fr 07:45
End   <Fr>00:00
```

After the start of the period has been entered, the weekday on which the partial-locking period should end appears between the brackets.



```
Start Fr 07:45
End   Fr 12<10>
```

Turn and press the knob to enter the end of the partial-locking period. The day of the week can be forwarded by at most four days by turning the knob. The partial-locking period is cancelled by selecting the two asterisks (\*\* ) instead of the end day and then pressing the knob.



```
Partial locking
stored
```

Briefly press the knob to confirm the entered values. The partial-locking period is now programmed.

```
Start ** 00:00
End   ** 00:00
```

After several seconds, the next partial-locking period can be entered. Press the knob for a long time to terminate the function.

### Cancelling partial-locking periods

A partial-locking period can be cancelled by selecting the two asterisks (\*\* ) instead of the end day and then pressing the knob. This action is acknowledged with the message 'Partial locking deleted'.

### Reading out the programmed partial-locking periods

If the system is unlocked, directly after entering the time or master code in the 'Partial locking period change' function the previously programmed partial locking periods can be viewed by turning the knob.  
When the system is in the secured state, programmed partial-locking periods cannot be displayed.

### Limitations for the definition of partial-locking periods

A pause of at least 15 minutes must be observed between individual partial-locking periods of the weekly programme, during which the safe is fully locked. The maximum duration of an individual partial-locking period is 72 hours. If these rules are not observed, an error message is displayed.



### Logging

If the Time functions, the Event time or the Switching unit option has been installed and the master code has been activated, the date and the time are automatically added to the event log which is kept in the code memory of lock 1 and which is not disturbed by a power failure. Without option, the events are recorded in chronological order and are printed with a continuing number.

The event memory can hold the last approximately 500 events (870 lines). When the memory is full, the oldest entry is overwritten with the latest event. The contents of the memory can be output via a unidirectional current loop (TTY 20 mA). This allows logging all important data on a printer or another electronic storage medium (terminal, computer), if necessary.

In combination with the Mains operation option, online logging can be connected to the connection and options box, recording each event immediately.

The event log can be printed with the function 'Print event memory' in the 'Other time functions' sub-menu. The time code or master code of lock 1 must be entered as identification.

### Logged data

All events (e.g. opening or closing the locks, partial opening, code activation, change and deactivation, incorrect code entry, duress code entry, manipulation, changes to time functions, error messages, etc.) are logged and supplemented with additional information such as the lock number, code identification or entered data. Programmed codes or security-relevant information are not read out or can be suppressed.

### Transmitted characters

The transmitted code consists of pure ASCII characters. To produce plain text, this code must be interpreted. One line of 22 characters is transmitted for each event:

`CC_SSSS_DD.MM.YY_hh:mm<CR>` (with Time func./Event time option)

`CC_SSSS__nnn<CR>` (without Time func./Event time option)

CC Event code (two ASCII characters)

SSSS Supplementary information (four ASCII characters)

DD Day (two digits)

MM Month (two digits)

YY Year (two digits)

hh Hour, 24-hour format (two digits)

mm Minutes (two digits)

nnn Consecutive event number (flush right)

For further information, please consult the technical description 'Event logging'.

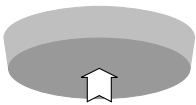
## Optional functions

## Authorisation disabling

### Authorisation disabling

The Paxos compact high-security lock can be equipped with the Authorisation disabling option (only in connection with the Mains operation or the Switching unit option).

The opening function, and if the Switching unit option is installed, disarming, can be enabled or disabled with a contact located at some distance from the safe (e.g. a key switch in another room). When authorisation disabling is active, the unlocked system can be fully operated, but the secured system can no longer be disarmed or opened. If an attempt is made to open the lock by pressing the knob when the function 'Open the lock' is displayed, the following message appears:



**Input  
disabled !**

When the authorisation disabling is active, this message is displayed when an attempt is made to open the lock.

The electric connection between the external enabling contact and the electronic evaluation in the locking system is monitored for sabotage (interruption or short-circuit). When sabotage is detected, the opening or disarming function is automatically disabled and the tamper alarm is triggered.

### Duress alarm

If the electronic high-security lock Paxos compact is equipped with a connection and options box or the Switching unit option and a connection to an alarm centre exists, a silent alarm can be triggered with any code entry – except when changing codes.

To trigger the alarm, simply add three to the last pair of digits of the code. This entry triggers the alarm and also executes the activated function as if a normal code were entered. If the duress code is entered when lock 1 is opened (or during partial locking of lock 2), the delay time programmed with the function 'Hold-up opening delay lock 1 (lock 2)' is automatically applied. If the duress code happens to match another valid opening authorisation for the lock, no alarm is triggered. This problem will hardly occur, however, if the opening codes are defined in a random way rather than being composed of digit groups in which only the last positions distinguish individual codes.

If the result of the addition comes to more than two digits, enter only the last two digits of the result (the code remains six, seven or eight digits long):

Addition		Enter
$96 + 3 = 99$	⇒	99
$97 + 3 = 100$	⇒	00
$98 + 3 = 101$	⇒	01
$99 + 3 = 102$	⇒	02
$00 + 3 = 03$	⇒	03

### Examples:

To trigger the alarm, for example, substitute the opening code 19 27 35 **39** by 19 27 35 **42** or substitute the code 22 31 56 **98** by the code 22 31 56 **01**.

### Triggering the alarm with the master code, time code or mutation code

The duress alarm can also be triggered in the way described above when entering the master code (MA), the time code (TC) or the mutation code (MU):

When the system is in an unlocked state, if for the time function the master code, the time code or the mutation code have to be entered with an increase of three.

Or when the system is in the locked or secured state, if the master code, time code or mutation code of the lock increased by three is entered to open a lock instead of the normal opening code. In this case the lock reacts with the message 'Wrong code' and the duress alarm is triggered. The lock does not open.

## Optional functions

## Disarming / Opening

### Switching unit VdS

With the Switching unit VdS option Paxos compact can - in addition to its function as a numeric combination code lock - also be used as a switching unit VdS ('Blockschloss') for arming and disarming a higher-level centre, e.g. the intruder detection system (IDS).

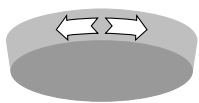
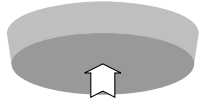
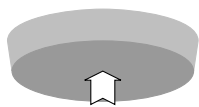
### Disarming sector

After identification with a special badge on the locking system the secured sector is disarmed.

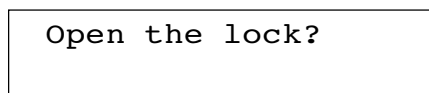
If required the authorisation for disarming can be made dependent on the entry of a valid opening code (precondition for systems of certain security classes). This special function can be activated by your customer service (see page 57).

In partial locking (reduced security) material identification (badge) is always sufficient for disarming authorisation.

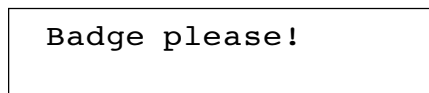
System locked or secured, sector armed



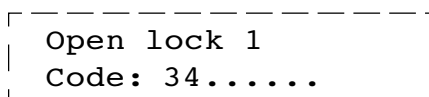
After an operating break of more than 16 seconds the display is switched off.



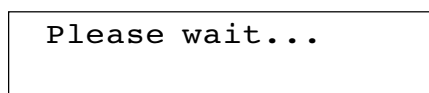
The display is switched on by pressing the knob, the opening procedure can be initiated.



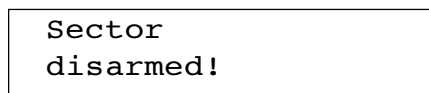
Press the knob briefly. For identification an assigned badge must be held in the reading area of the input unit and,...



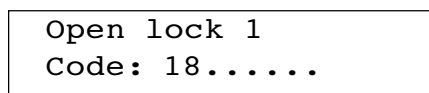
...depending on the system setting, an additional valid opening code of lock 1 must be entered. Turn and press the knob to enter the code in the usual manner.



The switching unit waits for confirmation from the alarm centre that the monitored sector is disarmed.



The disarming confirmed by the alarm centre is displayed for approximately 2 seconds.



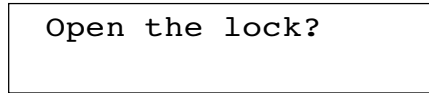
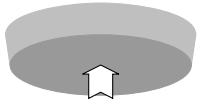
If no valid opening code has yet been entered for disarming, this is now demanded as opening authorisation.

Enter the code by turning and pressing the knob and continue the opening procedure in the usual manner (see page 7).

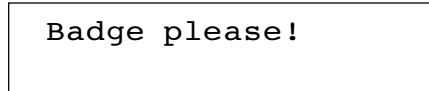
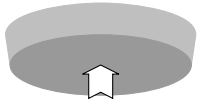
System locked or secured, sector already disarmed



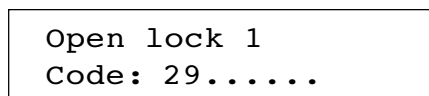
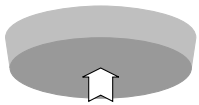
After an operating break of more than 16 seconds the display is switched off.



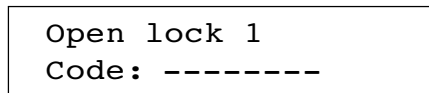
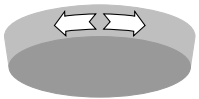
The display is switched on by pressing the knob, the opening procedure can be initiated.



Press the knob briefly. Ignore the prompt 'Badge please' and press the knob briefly once more.

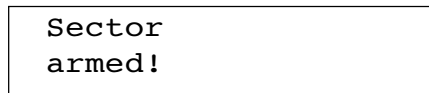


Enter an opening code of the respective lock in the usual manner by turning and pressing the knob.



After entering the code the status of the centre is checked. If the centre is disarmed the opening procedure can be continued in the usual manner (see page 7).

Valid opening code, sector not yet disarmed



If the centre has not yet been disarmed, this is indicated with the message shown opposite after the valid opening code has been entered. The opening procedure is terminated.

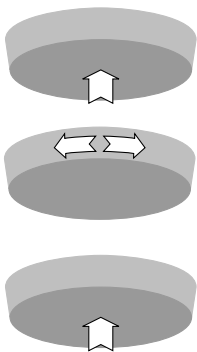
## Optional functions

## Arming

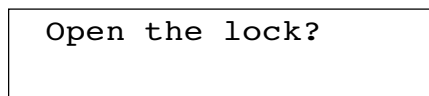
### Arming sector

On systems with the installed option Switching unit VdS the monitored sector can be armed by identification with a special badge.  
If the system is assigned at least one badge, it is possible to select the function 'Arm sector' if the locking system is locked or secured.

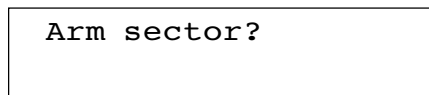
### System locked or secured



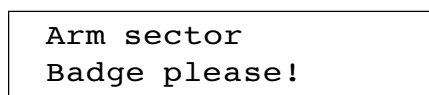
After an operating break of more than 16 seconds the display is switched off.



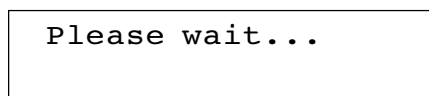
The display is switched on by pressing the knob, the opening procedure can be initiated.



Turn the knob one position anticlockwise, the function 'Arm sector?' is shown on the display.



Press the knob briefly. For identification an assigned badge must be held in the reading area of the input unit.



The switching unit waits for confirmation from the centre that the monitored sector is armed.



When arming has been completed and confirmation received from the centre, the operator is informed with the message shown opposite.

### Unknown or invalid badge

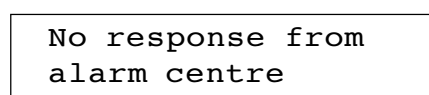
If during identification for arming or disarming an invalid badge (non-system or non-assigned badge) is held in the reading area of the input unit, the operator is informed of this with the following message.  
Note: If incorrect badges are used no manipulation blocking is triggered (the manipulation counter is not incremented).



Display when a non-assigned or non-system badge is used for arming or disarming.

### Arming or disarming not executed

If within 15 seconds no response is received from the centre, or if the procedure is terminated by pressing the knob for a prolonged period, the non-executed arming or disarming operation is signalled to the operator with the following message. If arming is not executed, an audible 'thunderstorm' occurs:



Display with no response from the alarm centre or termination by operator after attempted arming or disarming.

As authorisation for arming and disarming of a higher-level centre, e.g. the intruder detection system (IDS), up to 26 copy-protected proximity badges can be assigned to the locking system. The switching unit VdS option can only be applied if at least one badge is assigned. Without assigned badges the function 'Arm sector' and the prompt 'Badge please' do not appear in the operating menu. The same badge can be assigned any number of Paxos compact locking systems with the Switching unit VdS, but each individual locking system only once.

System unlocked

```
Unlocked
03.01.98  14:33
```

Badges can only be assigned when the system is unlocked and if the mutation or master code of lock 1 is activated (not 10 20 30 40).

```
Change code ?
```

The main menu is activated by pressing the knob.

```
Opening code a1
Change code ?
```

Press the knob briefly on the 'Change code' menu to activate the menu.

```
Other code
functions ?
```

Turn the knob one position anticlockwise and the 'Other code functions' menu appears on the display. This contains all identifications (codes and badges) of the system which are not activated or assigned.

```
Opening code a1&
Change code ?
```

Activate the menu by pressing the knob.

```
Assign
badge G1 ?
```

Turn the knob until the badge which is to be assigned appears on the display.

```
Mutation code
MU1 cd:34.....
```

Press the knob briefly. The mutation code or the master code of lock 1 is demanded as identification.

```
Mutation code
MU1 cd:----29..
```

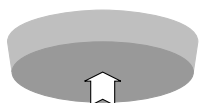
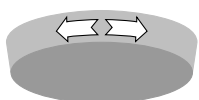
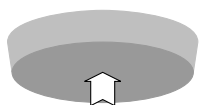
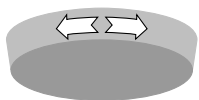
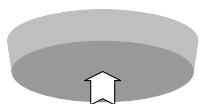
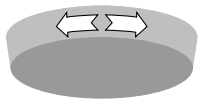
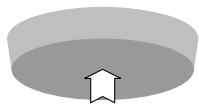
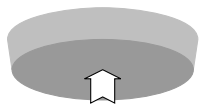
Enter the code in the usual manner by turning and pressing the knob.

```
Assign badge G1
Badge please !
```

When the code has been entered correctly, the respective badge must be held in the reading area of the input unit for several seconds.

```
Badge G1
assigned !
```

The opposite display confirms the assignment. Assigned badges can be viewed in the 'Change code' menu and no longer in the 'Other code functions' menu.



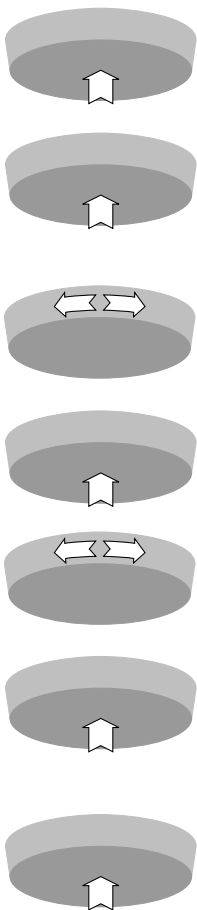
## Optional functions

## Removing a badge

Badges assigned to the switching unit VdS as authorisation for arming and disarming can also be removed, i.e. declared invalid. The identification number of the respective badge is deleted from the memory. The badge itself is not required to this purpose (e.g. loss, theft). If a lost or stolen badge has been assigned to several locking systems, the respective badge must be removed from each system.

Removed badges can, once found, be reassigned with the 'Assign badge' function (see page 54).

System unlocked



Unlocked  
03.01.98 14:33

Badges can only be removed (declared as invalid) when the system is unlocked.

Change code ?

The main menu is activated by pressing the knob.

Opening code a1  
Change code ?

Press the knob once more in the 'Change code' menu to activate the menu. This contains all activated or assigned identifications (codes and badges).

Remove  
badge G1 ?

Turn the knob until the badge to be removed appears on the display.

Mutation code  
MU1 cd:34.....

Press the knob briefly. For identification the mutation code or the master code of lock 1 must be entered.

Mutation code  
MU1 cd:----29..

Enter the code in the usual manner by turning and pressing the knob.

Remove badge G1  
Are you sure ?

For safety reasons it is necessary to press the knob briefly again to remove the badge. Press the knob for a prolonged period to cancel the operation.

Badge G1  
removed !

Subsequently the confirmation of completed removal is displayed for approximately 2 seconds. The removed badge no longer appears in the 'Change code' menu, but once more in the 'Other code functions' menu.

Opening code a1  
Change code ?

Subsequently the first function of the 'Change code' menu is displayed and ....

...after 16 seconds without knob actuation the display is switched off once more.



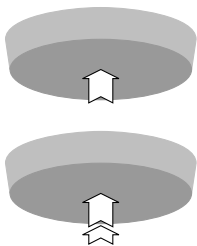


Service information

Fault messages

Fault messages

The Paxos compact electronic high-security lock has a diagnostics program that continuously monitors all functions. A fault does not cause a total system failure, since all electronic components in the secured range are redundant (present twice) and the part that is still working immediately takes over the functions. However, it is extremely important to remedy any signalled errors immediately. A fault detected by the diagnostics program is displayed as follows:



```
Lock error 2B
Service (51)
```

Faults are displayed in this format.

```
Unlocked
03.01.98 14:33
```

Press the knob briefly to acknowledge the fault. The system remains operational.

```
Open lock 2
Code:34.....
```

The opening procedure can be restarted with several faults by pressing the knob for a prolonged period.

In the event of a fault always write down the entire fault message and immediately get in touch with the customer service (address and telephone number are shown below), even if the safe continues to operate normally.

Enforced repair

If existing faults are not remedied, the opening function of the locks is automatically disabled after the tenth consecutive fault message. This disabling can only be cancelled by the customer service. The disabling prevents a total system failure that could result in the system being locked permanently.

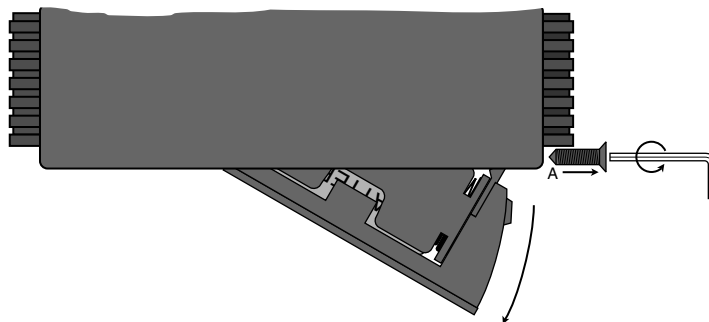
Customer service

If you encounter any malfunction or operating problems with the Paxos compact high-security lock, please contact our sales representative or the customer service:



### Opening the battery compartment

The battery compartment is located on the bottom side of the input unit. To remove the batteries unscrew the screw (A) with a hexagon socket screw size 2 and swivel the battery compartment out of the input unit.

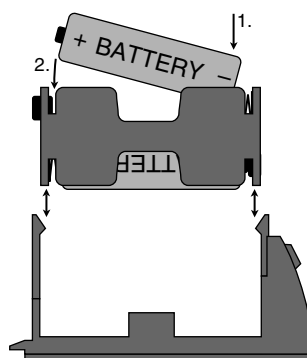


### Replacing the batteries

Pull the battery module out of the battery-compartment lid to be able to reach all batteries. Remove the empty batteries and insert the new batteries.

**Observe the polarity of the batteries!**

Use only new batteries marked as 'Alkaline' and always replace all six batteries at the same time.



### Batteries

You need six batteries 'Alkaline' 1.5 Volt size 'Mignon', 'AA', 'LR6', 'E91' or 'AM3'. Only use rechargeable batteries if the Mains operation option is installed, as their capacity is not sufficient for trouble-free operation.

### Rechargeable battery pack with the Mains operation option

For operation with the Mains operation option replace the battery module with a special rechargeable battery pack for bridging power failures. **The rechargeable battery pack must be replaced after three years as a precautionary measure.** Please only use our special environmentally-friendly high-capacity rechargeable batteries type 'Ni-MH' (Nickel metal hydride).

**In mains operation never insert any normal batteries!**

The batteries and the locking system would suffer damage.

### UPS connection

When connecting the locking system to an uninterruptible power supply (UPS), e.g. of the alarm system, only insert the **empty** battery module.

Menu survey

The diagram on the next page shows the menu structure of the Paxos compact electronic high-security locking system with dialling-knob input unit, two-lock operation, and all optional functions. Your individual installation may differ from this diagram in that some functions are not present. All functions, however, may be added later on.

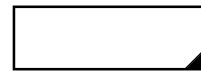
If the system is secured the lock status or the programmed locking periods can be displayed or fast blocking can be activated by entering a valid code of lock 1.

For each type of programming, the system must be unlocked and the bolts must be in their open position. Follow the line and press or turn the knob to 'page' through the menu. Each of the functions shown can be activated by pressing the knob briefly when the corresponding option is displayed.

With Time functions, Event time or Switching unit VdS option

The functions 'Summer/winter time' and 'Set clock' are only available with the Event time, the Time functions or the Switching unit VdS option. The function 'Locking periods', 'Weekly locking periods', 'Yearly locking periods' and 'Partial locking' are only available on systems with the Time functions or the Switching unit VdS option.

Functions that are only present in systems with one of these options are identified by a black corner:



With switching unit VdS option

If the Switching unit VdS option is installed, the monitored sector can be armed or disarmed with a special badge when the locking system is secured. Functions which are only available with this option are shown in the diagram in dotted frames:

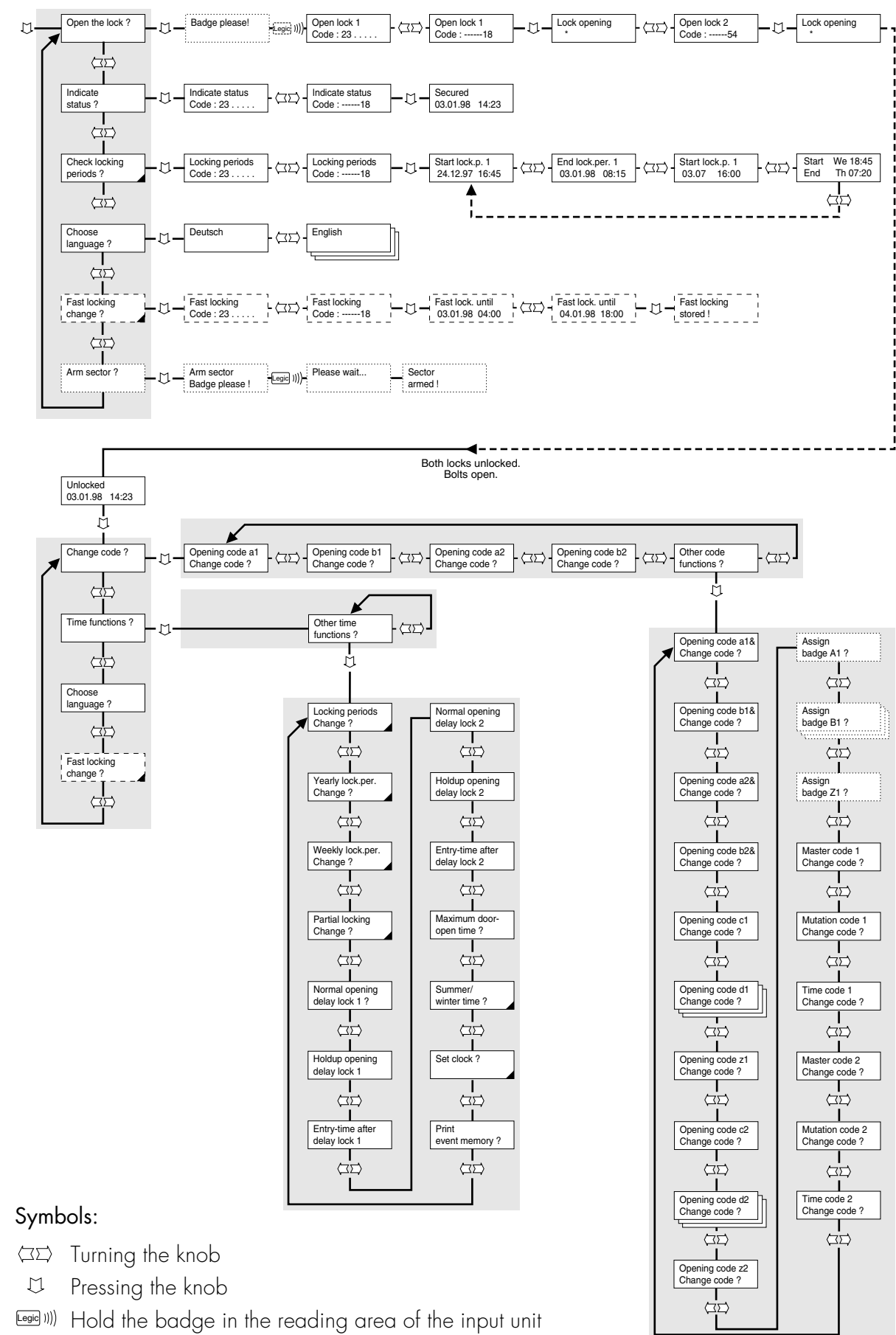


Activated functions

When the functions in the sub-menus 'Other code functions' and 'Other time functions' are activated, they are located in the 'Change codes' or 'Time functions' menu and no longer in the sub-menus.

One-lock systems

On installation with only one lock all codes are absent which are marked in the diagram opposite with the lock number 2 as well as the delay times for the second lock. The time function 'Partial locking' is also absent, since it is impossible with one lock.



Symbols:

↔ Turning the knob

→ Pressing the knob

🛡️ Hold the badge in the reading area of the input unit

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