Lösungen für mehr Sicherheit

TwinLock compact

Manual

VdS

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Class 2 / C

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The manual contains detailed information for the operation and the programming of the high-safety lock ***TwinLock compact*** and is mainly intended for the system MASTER responsible for the system configuration and administration.

For users, we recommend the Quick Reference Guide. The concise document contains all important information required for normal system operation in short form.

The document ASSEMBLY INSTRUCTIONS has been created to assist with the installation of the system. This contains all information for the implementation of the TwinLock system.

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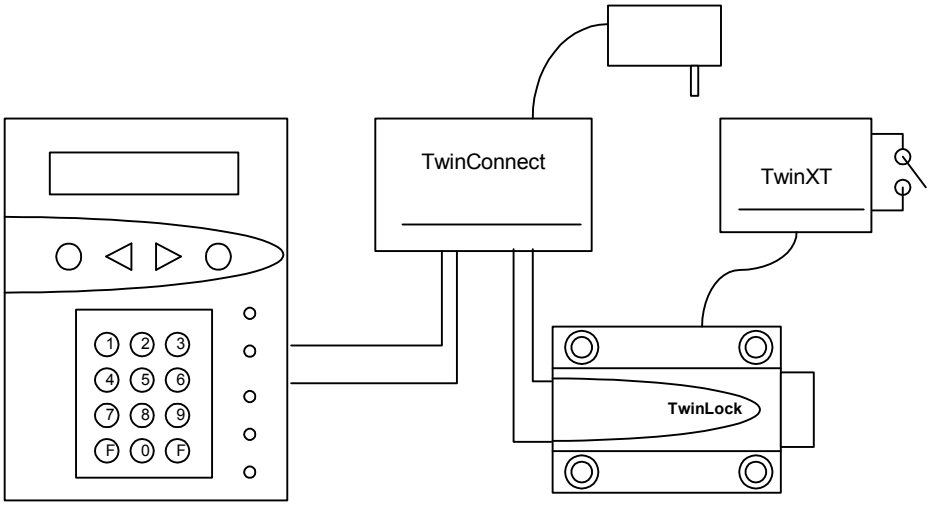
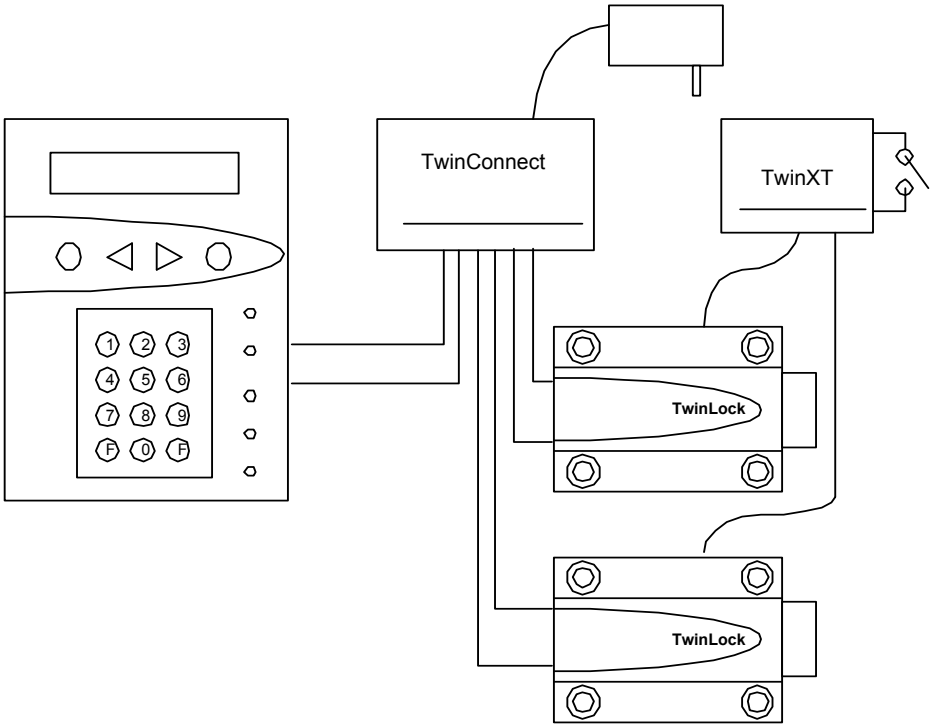
Support / Hotline

1. System Diagram

TwinLock compact – 1 lock with 12 VDC power supply / TwinXT optional



TwinLock compact – 2 locks with 12VDC power supply / TwinXT optional



2. System Description

TwinLock compact is an electronic high safety lock system with integrated arming device for a burglary alarm system class 3/C. It is a modular system.
The security-relevant system parts are designed fully redundant.

The system consists of the following components:

1-2 Control units = Terminals
1-2 locks
1 Bus distributor = Connector for the individual components (hub)
1 Extension units TwinXT

2.1. Input Unit : FlatControl

The input unit is mounted on the outside of the safe (see assembly of the input unit) and is used to control and operate the locking system (code input, programming, etc.), as well as to arm or disarm a burglary alarm system using a physical code (chip card).

2.2. Lock : TwinLock compact

The locks are mounted within the secured area of the safe (see assembly of locks). The mnemonic codes are stored and evaluated inside the locks.

2.3. Bus Distributor : TwinConnect

The bus distributor TwinConnect enables the connection of the individual system components.

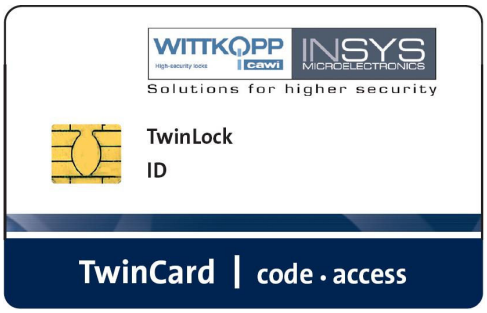
In addition, TwinConnect has a power supply unit (12 VDC), which can supply the TwinLock compact system. (When the arming device is connected, however, the system must be supplied through the BAS).

2.4. Extension Unit : TwinXT

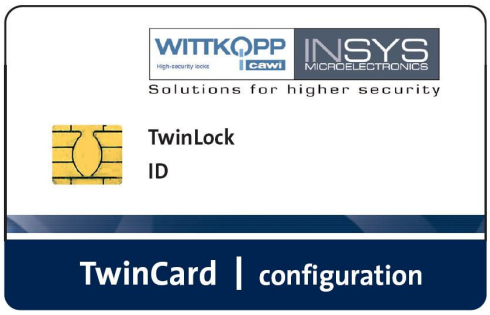
The TwinLock compact system can be extended by 2 inputs and 2 outputs by means of the extension unit **TwinXT** very easily. Basically, a TwinXT can be connected to each lock in the system. Consequently, each lock can be specifically locked or released, and each lock can have a bolt system contact.

2 switching inputs (release/bolt system contact) for lock 1
2 switching inputs (release/bolt system contact) for lock 2
2 relay outputs (status/silent alarm) (30V/1A)
Power supply 12 VDC
Antitamper loop with tamper switch

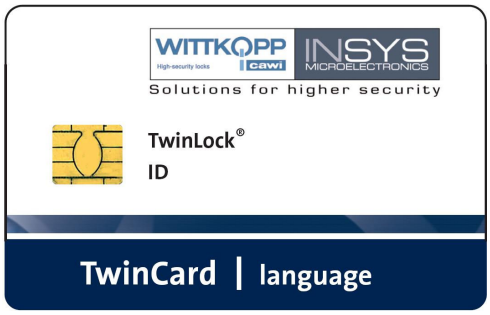
2.5. Chip Cards (TwinCard)



TwinCard code access
Chip card as ‘physical code’ to disarm a BAS.
The code is changed continuously.



TwinCard configuration
Chip card for the system configuration and the event log. In cooperation the with PC software TwinComm, the configuration can be imported or exported and the log can be read out.

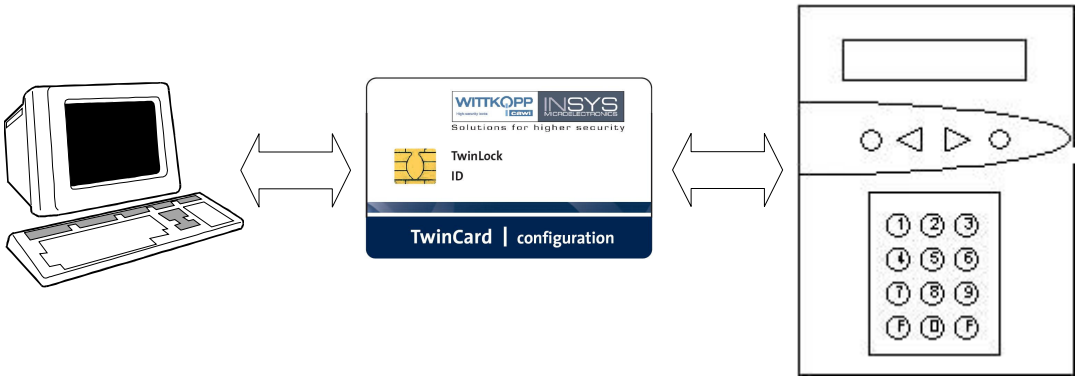


TwinCard language
Chip card for the configuration of the system language. (German, English, Czech, Portuguese…)

TwinCard TwinComm
Lizenzchipkarte for the TwinComm configuration Software.

2.6. Configuration Set TwinComm

The TwinLock compact system can be configured fast and conveniently using the program TwinComm in connection with the chip card reader of the configuration set and the chip card **TwinCard configuration**. All settings and the event log can be displayed, printed and saved.



3. Function Description

Code and Locking Functions

- 1 Master code per lock
- 1 System code
- 99 User codes per lock
- Status indicator for programmed user codes
- Code linking (Four-eye code)
- Silent alarm
- Code manipulation detection
- Quick unlocking code
- Opening duress (forced sequence)
- Parallel code
- Automatic lock with door switch

Timer Functions

- Time delay
- Alarm/sabotage delays
- Automatic switching to daylight savings time

Service Functions

- Event log 768 events
- Import/export of the configuration via chip card
- System language can be configured using the chip card
- Reset of the individual system components
- Query of the system component version
- System components login/logout
- Step-by-step operation for motor test
- System line free configurable
- System status indicator
- Voltage monitoring

3.1. Code and Locking Functions

Master code
Each lock has a master code (ID = 00 + 6-digit master code).
The master code has the authorization to program lock-specific procedures (e.g. time delay, user codes, etc.) or to unlock, respectively.
The master code can not be deleted or deactivated.

Attention:

The default code for the user 00 (= Master) of each lock is the pre-programmed code 1 2 3 4 5 6 . The user codes no. 01…99 of the individual locks have been deactivated by the manufacturer.
For safety reasons, the master codes of the individual codes must be changed IMMEDIATELY!
When programming the code you must see to the new unlocking code being checked repeatedly while the safe is open.
Do not use personal data when programming unlocking codes!

Loosing a master code can have very costly consequences!!!

Manager code
There is one manager code (6-character code) per lock. The manager code is also called the **system code**!
The manager code has the authorization to program the settings and time functions. It does not have any opening authorization, though.
The manager code cannot be deleted or deactivated.

ATTENTION:
The code 1 1 1 1 1 1 is pre-programmed as the works code for the system code.

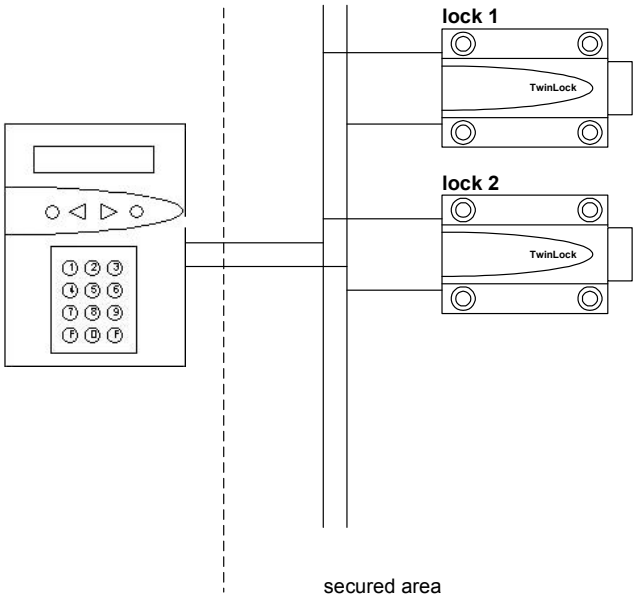
User codes, Benutzercodes
Each lock has 35 user codes (user ID + 6-digit user code).
The user codes are programmed or deleted by the according master code. A user can reprogram his/her user code autonomously. Otherwise, the user only has an unlocking authorization.
A user code can be assigned the possibility for “Quick unlocking” (= quick unlocking code) without time delay expiration (see timer programs 3.2.2).

Status indicator for programmed user codes
For each lock, the programmed user codes can be displayed. The programming status, i.e. OK or NOK is displayed. The display can only be activated by the according lock master.

Quick opening code

A user can be assigned the function of the quick opening code, which circumvents a programmed time delay. The user who has stored the code with number 09 has the quick opening code by default.

Code distribution in the TwinLock 7220 system



1 Systemcode =
1 Managercode **mnemonic codes**
1 Mastercode
99 Usercodes

1 Managercode **mnemonic codes**
1 Mastercode
99 Usercodes

Unlocking & Locking

The unlocking is tied to at least one code entry. This always takes place via the menu keys (see sabotage safety). Unlocking can be prevented by several functions (timer programs…).

Opening duress (forced sequence)

When a ‘opening duress’ is activated, the locks can only be opened in a certain order / sequence (lock 01, 02, ...). When locking the system, the sequence is reversed.
The system is only unlocked and accessible for configuration and service after all locks have been opened.

Automatic lock with door switch

The system can be locked automatically using a door switch or a bolt system contact, which is either connected to a TwinAlarm or TwinXT system, depending on the system variant.
This function can only be configured via the PC software TwinComm.

Code linkage

For the entire system, the function ‘Four-eye code’ can be programmed. A lock can thus only be unlocked by entering 2 user codes respectively. Programming can only be performed by the system master. If a four-eye code has already been programmed, the system master can perform the programming only in connection with other users of lock 01.

Parallel code
For a **2 lock system**, the function 'parallel code' can be programmed.
This function can only be configured via the PC software TwinComm.
In this case, the unlocking codes apply to 2 locks, e.g. the user does no longer need to select a lock, and he is not bound to a specific lock. In all locks, however, the same codes must be programmed for the according users, e.g.

User 08:	Lock 1: Code : 080808	
	Lock 2: Code : 080808	
User 009:	Lock 1 :	Code : 090909
	Lock 2 :	Code : 090909

Note on code linkage and parallel code:
Attention: The code linkage and the parallel code can not be set simultaneously.

Silent alarm
During a threatening situation, a special alarm code may be entered when locks are opened and closed, to trigger a silent alarm.
The alarm code consists of the normal user access code where the last number is increased by **+1** (9 switches to 0!).
The system now acts exactly like for the normal opening procedure for the user (and the intimidator), but at the same time a silent alarm signal is sent to the BAS.
Furthermore, an individual opening time delay may be defined for the case of an alarm. The lock can only be opened after the set waiting period has expired (see also timer programs 3.2.2).
The defined release time of the "normal" time delay is used as release time.

Example:
Unlocking code: 1-2-3-4-5-**6** >> Alarm code: 1-2-3-4-5-**7**

Code Manipulation
When the code has been entered incorrectly for four times, a blocking time of 1 minute is activated. During this blocking time, no opening procedure may be performed. Each further incorrect code entry increases the blocking time by one minute. The maximum blocking time is 15 minutes.
At the beginning of the locking period, the incorrect code entries are classified as a manipulation attempt and stored in the event memory. The next time that a correct code is entered, the code error counter is reset and the locking period is deleted.
(see also timer programs 3.2.2, sabotage safety 3.2.5)

```
wrong code
blocking time
```

3.2. Timer Functions

Time delay
Unlocking delay, individually configurable (00 - 99 min.). A release time (00 - 99 min.) can be programmed for each unlocking delay. After the time delay expiration an unlocking code must be re-entered.
The programming is performed by the system manager.
A user can be assigned a quick unlocking code function to bypass this program.

Alarm/sabotage delays
When the unlocking code was entered incorrectly 4 times, a time delay of 1 minute starts. For each further attempt with a wrong code the waiting period is extended by 1 minute, up to a maximum of 15 minutes.
When a silent alarm is triggered, a waiting period with a set duration will start.
These special programs can not be bypassed or interrupted.

3.3. Service Functions

Event Log
The latest 768 events (programming processes, hardware errors, and certain status messages, manipulation and sabotage attempts) are logged in chronological order, including date and time (perhaps the user number).
There is also the possibility to transfer the entire event memory to the TwinCard configuration. Display and printing of the event memory take place with the PC software TwinComm.

Configuration import/export
An entire configuration profile can be swapped out to the chip card Twin Card Configuration. This profile can then be edited with the PC software TwinComm and reimported or saved. The above-described event log is also written to the card and can be displayed, printed and saved using TwinComm.

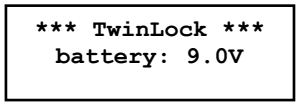
System language
The system language can be transferred using the chip card TwinCard language. This card is available in several languages and must be requested separately.

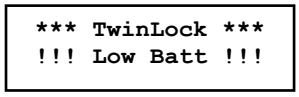
More functions
Reset of the individual system components
Query of the system component version
System components login/logout
Step-by-step operation for motor test
Operation of several control units

3.4. Operational Safety

Redundancy
A dual bus system and a dual electronic and mechanical locking system in the locks guarantee high system stability. The two identical system parts are completely independent from each other and can therefore function individually.

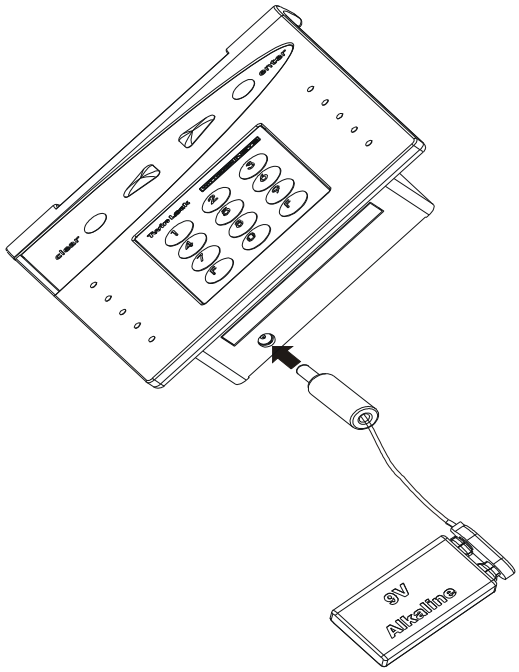
Voltage monitoring
When the power supply is applied or when the system recovers from energy saving mode, the state of the battery (system voltage) is checked. When the system falls below a set warning threshold, an entry is made in the log and a message is displayed. Press F2 to display the system voltage from the system menu.





Every time the system is restarted (battery replacement) or when the system is activated, the battery voltage is measured and checked. If the battery voltage falls below the set warning limit, the message
'!!! Low - Batt !!!' is displayed and also stored in the event memory.

Power Failure
The FlatControl receives its power supply via each of the two bus cables. When a voltage failure occurs, an emergency current feed for the entire system is possible via a jack at the bottom of the keyboard.
For this, an adapter cable 7237-101-0 and a 9 volt block battery (alkaline type) is required. For the connection of the adapter cable, see figure.



Real time clock
The date and the time are generated by a specially buffered real time clock and will survive even if the system receives no current for several days.
If a real time clock still happens to be deleted, the system will be in an undefined state.
It must therefore be possible to set the date and time even when the system is locked.
Key F2 in the system menu >> system voltage >> key F2 >> 1 >> 0 >> date/time
(system code required)

Further functions
Protection against locking the locks while the bolt system is open.
(only in connection with TwinXT or TwinAlarm)
Constant self-diagnosis of the bus lines and system components.
Log entry of all warning and error messages.
Validity check of entered times and dates.

3.5. Sabotage safety

Input unit TwinControl/FlatControl
The input unit in the unsecured area is secured by different measures.
Opening the case (battery compartment TwinControl) is immediately detected and displayed until an authorized user unlocks the system lock properly.
A person standing next to the authorized user cannot watch the entering of the code. A special film in the view window of the terminal prevents the reading of the display from a lateral position.
Besides that, the opening code is not entered via the keyboard, but via the arrow keys above a digit selection on the display. After each entry of a digit, the cursor will be displayed at a randomly selected new position.

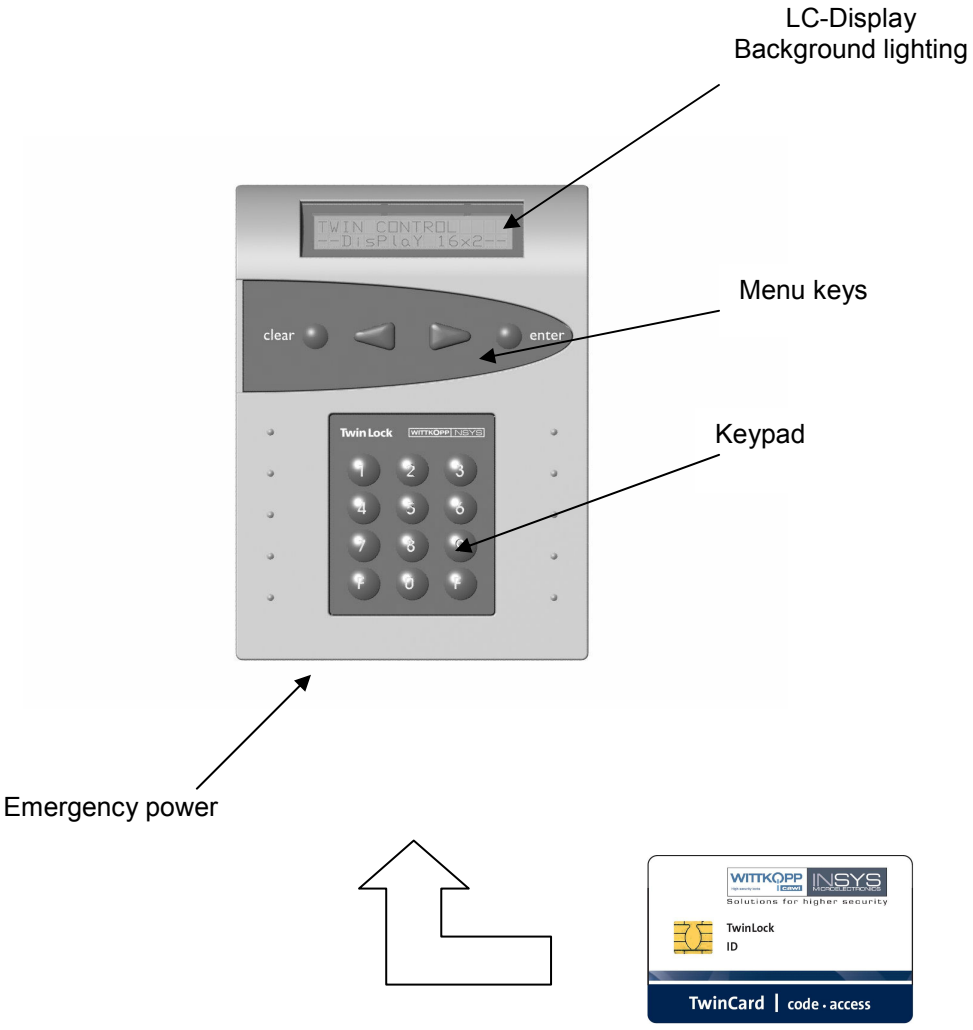
Further functions
All codes are saved and evaluated within the secured area.
Log entry of all safety-relevant events.
Blocking times when a wrong code is entered repeatedly.
(see code programs, timer programs)
Configuration only possibly for unlocked systems after entering the system codes.

3.6. PC Support with Configuration Set TwinComm

Basically, the TwinLock compact system also works without PC support, but using the software simplifies the configuration and enables easy reading of the event log.
The exchange of data with the lock system takes place with the chip card **TwinCard configuration** and the service function **'Import/Export'** at the control unit.
Read-out configuration profiles can be saved, printed, or modified and reimported.
All timer programs and system settings can be programmed.
When the system settings are read out, the event log is also written to the chip card.
The protocol can be displayed and printed with TwinComm.

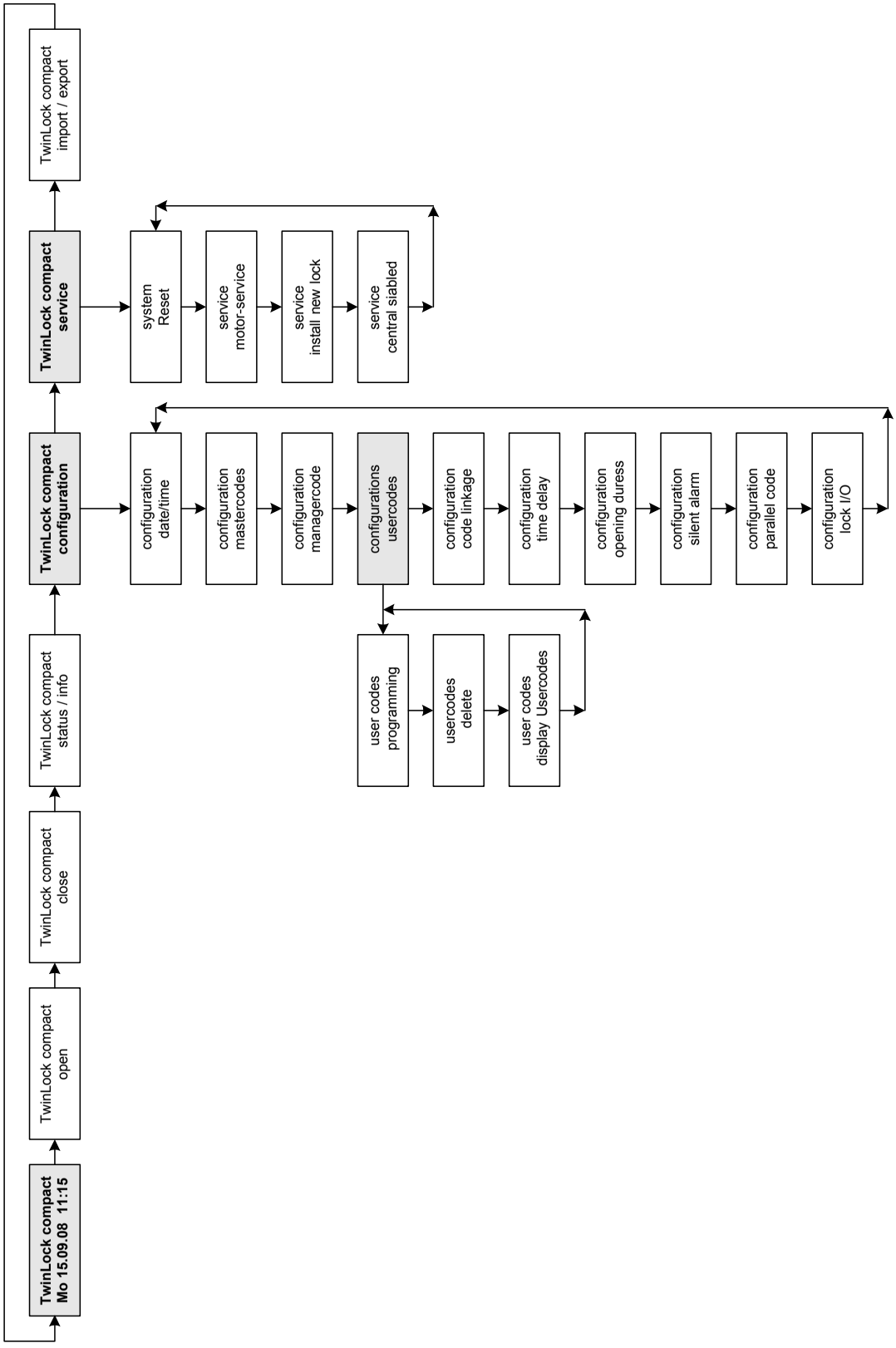
4. Operation

4.1. Display and Control Elements of the Input Equipment



Insertion of the chip card
Chip at the bottom

4.2. Menu Navigation



4.3. General Operating Instructions

System Activation

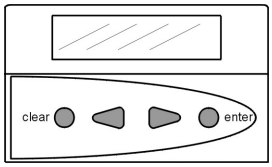
When idle, the TwinLock System is activated by operating a menu key at the control unit. After the activation, a system check is performed and the individual states of the connected locks and of the TwinLock system are displayed.

```
system check
lock opened 01
```

```
system check
system locked
```

Key Functions

Menu Keys:



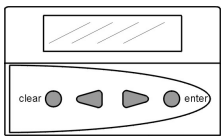
>	Menu navigation to the right, i.e. next menu item
<	Menu navigation to the left, i.e. previous menu item
enter	Selection or confirmation
clear	Cancel, return to previous menu item (press 2 seconds = return to system menu)

Key Pad:

0...9	Numeric keys to enter timer programs, etc.
F2	Display of the current battery voltage (only possible in the system menu)

Code input

The code is only entered via the number keys. The menu keys are intended for menu navigation and extended entries.

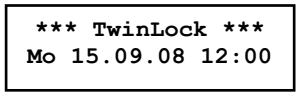


Using the menu keys for Menu Navigation

Entering the code using the numeric keypad

System Menu

The start page of the menu structure is called system menu . The system menu consists of one editable line (line 1 = system line, which can contain individual text), and the current date/time display (line 2).



Programming the Code

Important notes regarding the programming of the code

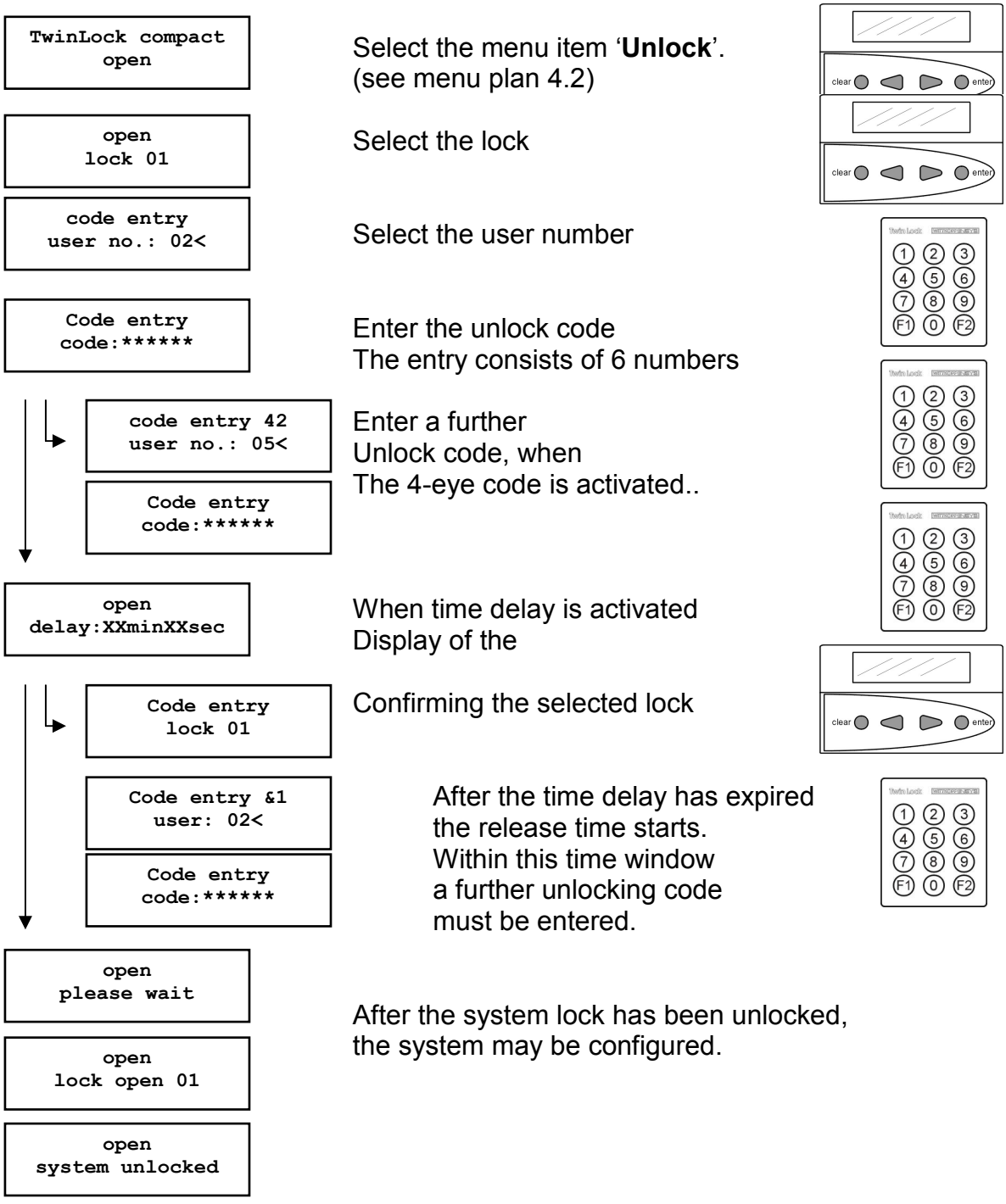
* **For security reasons, switch the system code or the master code of the individual codes immediately after Installation.**
  The default code 1 2 3 4 5 6 is pre-programmed for the user no. 00 (= system master) and for the system master is 1 1 1 1 1 1. The user codes no. 01…99 of the individual locks have been deactivated by the manufacturer.

* **When programming the code you must see to the new unlocking code being checked repeatedly while the safe is open!**

* **Do not use personal data when programming unlocking codes!**

5. General Operation Processes

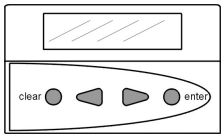
5.1. Unlocking a Lock

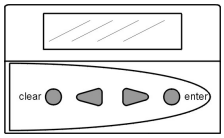


Automatic return after 3 seconds

5.2. Closing a Lock

`TwinLock compact` `close`	Select the menu item “Close” (see menu plan, 4.2.)
`close` `lock 01`	Select a lock
`close` `Please wait`	Lock locks
`close` `lock closed 01`	
`close` `system locked`	With the lock closed, the system cannot be re-configured

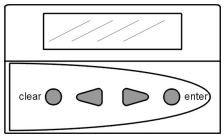


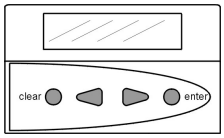


Automatic return after 3 seconds

5.3. Status Request of a Lock/ version request

`TwinLock compact` `Status / Info`	Select the menu item “Status” (see menu plan 4.2.)
`Status / Info` `Lock closed 01`	The status of the selected component is displayed.
`Version query` `SW version : TS01`	
`Lock` `SW version : S01`	With 2 locks in the system, the version of the second lock also is on display.





Automatic return after 3 seconds

5.4. Responses

Unlocking Messages

`open time lock week`	No unlocking possible, because the current time is not within the time window defined in the weekly program.
`open time lock day`	No unlocking possible, because the current date coincides with the date of a defined special day.
`open locking period`	No unlocking possible, because the blocking time program is active.
`open part blocking`	No unlocking possible, because the chosen lock is partly blocked.
`Open cancel Blocking time`	An active timer program is cancelled by activating the input TIMEOUT in the secured area.
`open terminal switch`	The control unit was switched or re-initialized.
`open ! manipulation !`	At the last code entry, a user entered a wrong code more than three times. ! Attention!
`Restart or currentless`	The system has either been restarted or the power supply has been interrupted.

Status messages

`system check failure Bus A`	Lock can no longer be addressed at bus A. **Please call customer service !**
`system check failure Bus B`	Lock can no longer be addressed at bus B. **Please call customer service !**
`system check failure motor A`	Final bolt position of the lock at bus A is not accessible. **Please call customer service !**
`system check failure motor B`	Final bolt position of the lock at bus B is not accessible. **Please call customer service !**

System check failure motor AB	Final bolt position of the lock is not accessible at bus A or bus B. **Please call customer service !**
Status DMS XX Error	General lock fault. **Please call customer service !**

General Error Messages

. . . . . . invalid code	Code entry incorrect. Please enter correct code!
. . . . . . invalid input	Incorrect or invalid entry. Check entry and retry!
. . . . . . failure BUS A	Addressed component at bus A does not respond. **Please call customer service !**
. . . . . . failure BUS B	Addressed component at bus B does not respond. **Please call customer service !**
. . . . . . failure motor AB	Error when unlocking/locking a lock. **Please call customer service !**
. . . . . . COM - Error	Error during communication between control unit and lock. **Please call customer service !**

6. Programming the System with the Control Unit

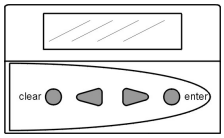
The following functions and settings can be performed using the control unit:

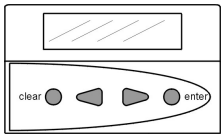
- Reprogram master code
- Reprogram manager code
- Program user codes
- Delete a user code
- Display a programmed User code
- Activate/deactivate code linkage
- Date/Time
- Program unlocking delay
- Program silent alarm
- Program parallel code
- Activate lock I/O, TwinXT
- Write configuration and log to chip card
- Read configuration from chip card
- Import new system language
- Automatic locking with door switch

Some of these functions and all others can be implemented by means of the **Configuration Set TwinComm**.

6.1. Reprogramming a Master Code

`configuration Mastercodes`	Select the menu item “Master Code” (see menu plan, 4.2.)
`configuration lock 01`	Select lock
`Mastercodes Code:******`	Enter the master code Schlosses eingeben
`Mastercodes Please wait`	Evaluate the entry
`New M-Code Code:******`	Enter the new master code Of the selected lock
`Confirm Code Code:******`	Reconfirm the new master Code once more
`New M-Code Please wait`	Save the new code
`New M-Code Saved`	Action completed





Automatic return after 3 seconds

Besides the normal unlocking authorization, the master code is also authorized to program the user codes.
When entering the code, the user = 00 is the master.

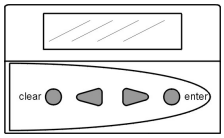
ACHTUNG:

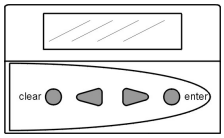
The default code *1 2 3 4 5 6 is pre-programmed for the master of each lock.* For safety reasons, the master codes of the individual locks must be changed immediately.

When programming the code make sure that the new unlocking code is checked repeatedly while the safe is open.
Do not use personal data when programming unlocking codes!
Loosing a master code can have very costly consequences!!!

6.2. Reprogramming the Manager Code

`configuration` `Manager Code`	Select the menu item '**Managercode**' (see menu plan, 4.2.)
`configuration` `lock 01`	Select the lock
`Manager code` `Code:******`	Enter the Manager Code of the Selectec lock
`Manager Code` `Please wait`	Evaluate the entry
`New Manager Code` `Code:******`	Enter the new manager code of the selected lock
`Confirm Code` `Code:******`	Confirm new manager code again
`New Manager Code` `Please wait`	Save the new code
`New Manager Code` `Saved`	Action completed





Automatic return after 3 seconds

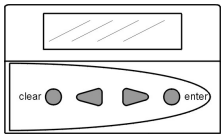
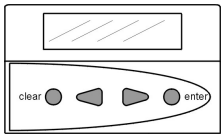
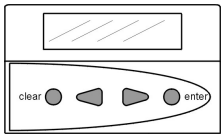
The manager code does not have any opening authorization.
It does grant authorization to configure the system. When the code is entered, the user using this code is identified to be the system manager.

ACHTUNG:
The default code 1 1 1 1 1 1 is pre-programmed for the manager.
For safety reasons, the master codes of the individual locks should be changed immediately.
Do not use personal data!

The master code of lock 01 is also called the system code!!!

6.3. Programming and Reprogramming of a User Code

The programming of the user codes is just possible if the locks are open.

`configuration` `usercodes`	Select the menu item '**User Codes**' (see menu plan, 4.2.)	
`usercodes` `programming`	Select programming	
`Usercodes` `lock 01`	Select the lock	
`old M/U code` `user: xx`	Enter the user number.	
`old M/U code` `code:******`	Enter the old unlocking code (user codes) or master code	
`programming` `user no.: xx`	Enter the user number of the user code to be programmed	
`new usercodes` `code:******`	Enter the new unlocking code	
`confirm code` `code:******`	Re-enter the new unlocking code	
`usercodes` `please wait`		
`usercode xx` `saved`	The new user code is saved	

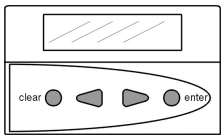
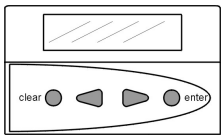
Automatic return after 3 seconds

User codes
A user can reprogram his/her user code autonomously. Otherwise, the user only has an unlocking authorization.
When a user code is programmed for the first time, the master code has to be entered first.

Attention:

When programming the code you must see to it that the new unlocking code is checked repeatedly while the safe is open.
Do not use personal data when programming a code

6.4. Delete a user code

usercodes delete	Select menu item **'Delete user codes'** (see menu diagram, 4.2.)	
delete lock 01	Select lock	
Code entry user no.: 00	Enter the user number 00 for the master code	
old M/U code code:******	Enter the master code of the selected lock	
delete user no.: xx	Select the user to be deleted	
delete please wait	The selected user is deleted	
usercode xx deleted	Action completed	

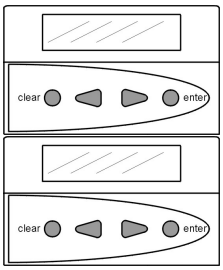
Automatic return after 3 seconds

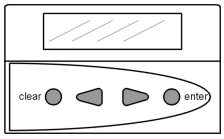
Only the according owner of the master code can delete user codes. This action is saved in the event log.

The function itself can only be performed at the control unit.

6.5. Display the Programmed User Codes

Usercodes Anzeige Usercode	Select the menu item '**Display User Code**' (see menu plan 4.2
Usercodes Schloss 01	Select the lock
Mastercodes Code:******	Enter the master code of the selected lock
Mastercodes Bitte warten	Evaluate the entry
Prog.U-Codes 03 U-Code 01: OK	Navigate through the user numbers Use the arrow keys (< >) Terminate with ENTER/CLEAR





Display the Programmed User Codes
For each lock, the users can be displayed, which were entered in it. This means that not the codes themselves are displayed, but the status (programmed, not programmed).
The display of a programmed user code can only take place by entering the according master code of the lock.

```
Prog.U-Codes 03
Usercode 01:  OK
```

Comment:
1. line: *Number of programmed user codes for this lock*

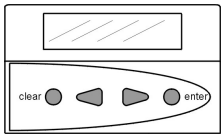
e.g. progr. u codes 03: Three user codes are programmed all in all

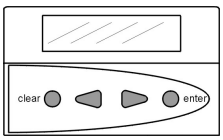
2. line: Displays which user code is programmed:
OK = programmed
NOK = not programmed

e.g. u code 01: OK
User code 01 is programmed

6.6. Setting the Date, Time and Weekday

`configuration` `date/time`	Select the menu item **'Date/Time'** (see menu plan 4.2)
`System Code` `Code:******`	Enter system code
`System code` `Please wait`	Evaluate the entry
`time: 10:01 Mo` `date: 20.12.07`	Select time-date/weekday Display current settings Activate the entry with enter Set the day of the week with menu keys
`time: 12:00 Mo` `date: 18.08.07`	Re-enter date, time or weekday
`date/time` `saved`	Action completed





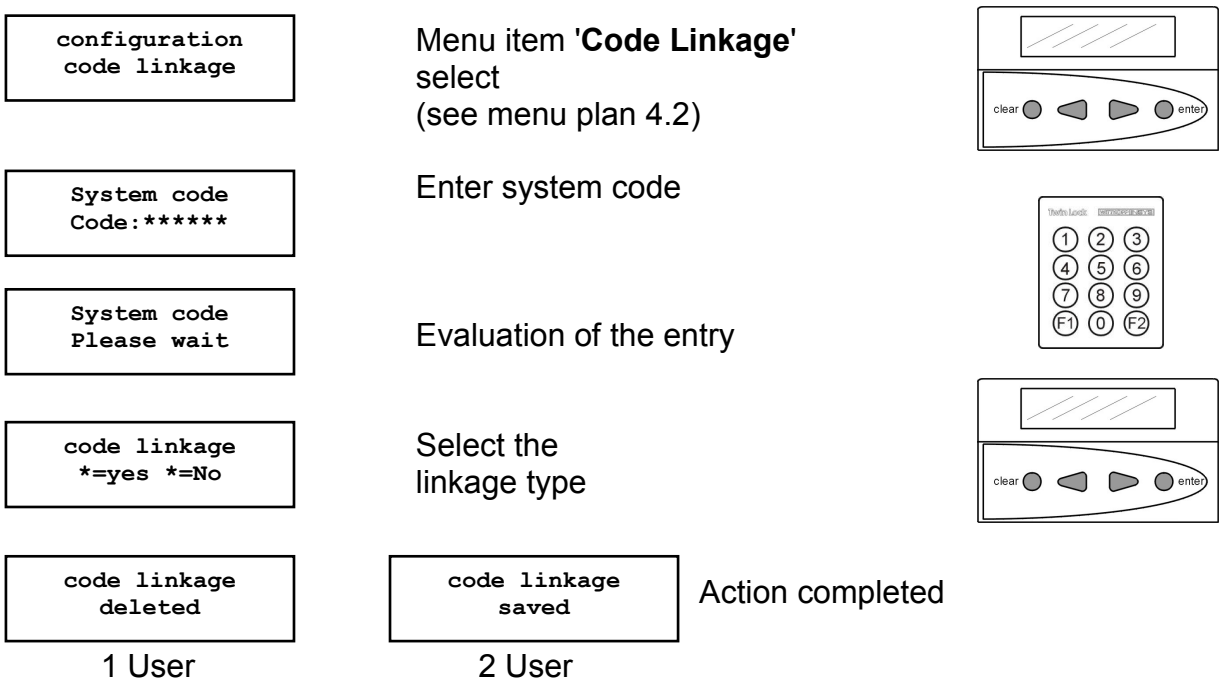
Date/Time

The date/time/weekday can only be changed by the owner of the system code. This action is saved in the event log.

Attention:

The correct setting of the date/time/weekday is the basis for all timer programs in the system or the event log to run properly.

6.7. Code Linkage Programming (Four-Eye-Code)

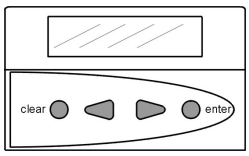
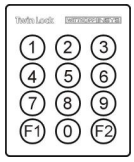
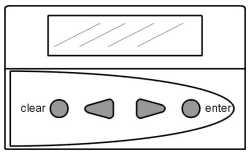


Automatic return after 3 seconds

Code linkage
When code linkage was selected (four-eye code), the lock can only be unlocked or programmed by entering 2 codes. The arrangement of the 2 codes is random.
The function applies to the entire system, i.e. each lock must be unlocked with 2 codes, when code linkage is activated.
The programming of this function can only be performed by the owner of the system code and is saved in the event log!

After the 4-eyes principle has been activated, the system code also has to be entered in connection with a second code (user code) for programming.

6.8. Program Unlocking Time Delay

`configuration` `Delay`	Select the menu item '**Delay**' (see menu plan 4.2)	
`Delay` `Lock 01`	When several locks are available In the system, select one lock	
`Master code` `Code:******`	Enter the master code of the Selected lock	
`Master code` `Please wait`	Evaluate the entry	
`Master code` `Please wait`		
`Delay` `time:00 free:00`	Display current settings Start the entry with ENTER.	
`Delay` `time:04 free:05`	Enter the new end time	
`Delay` `saved`	`Delay.` `Deleted`	Action completed

Automatic return after 3 seconds

Time Delay for Unlocking:

This function delays the unlocking procedure when the code is entered correctly. The time is entered in minutes (00-99). A time delay can be entered for each lock.

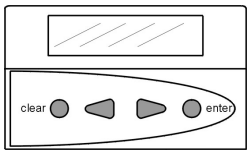
Release time:
The release time is used to safeguard the time delay. If a release time was programmed (e.g. >00), a correct unlocking code must be entered after the time delay has expired, to finally open the lock.
The release time is set in minutes (00-99) and specifies the period, during which the user can re-enter the unlocking code after the time delay has expired. If no release was programmed (00), the lock will open without re-entering the code after the time delay has expired.

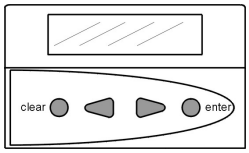
The programming of this function can only be performed by the owner of the system code and is saved in the event log!

Factory setting: Time: 00 Rel.: 00 (deactivated)

6.9. Program Opening Duress (Forced Sequence)

configuration Opening duress	Select the menu item **'Opening duress'** (see menu diagram / see above)
System code Code:******	Enter system code
Systemcode Please wait	Evaluate the entry
Forced sequence *= Yes *=No	Display of the current setting and definition of the new condition
Forced sequence Saved	Action completed





Automatic return after 3 seconds

Opening Duress (Forced Sequence)
Programming the function 'Opening Duress' determines the unlocking or locking sequence.
The system is in unlocked state only when all locks are open. It will be in a locked state if all locks are closed.

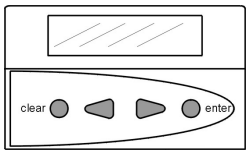
Opening sequence: lock 1, lock 2 (system unblocked)
Locking sequence: lock 2, lock 1 (system locked)

The programming of this function can only be performed by the owner of the system code and is saved in the event log!

Factory setting:
No opening duress, no forced sequence (= No).

Note:
This function is only possible with a 2-lock system.

6.10. Program silent alarm

configuration Silent alarm	Select the menu item **'Silent alarm'** (see menu plan 4.2)	
System Code Code:******	Enter system code	
System Code Please wait	Evaluate the entry	
Silent alarm *=yes *=No	Display of the current setting and selection of the new condition	
Silent alarm Alarm delay 00	Enter the unlocking delay time	
Silent alarm Saved	Silent alarm Deleted — Action completed	

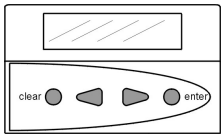
Automatic return after 3 seconds

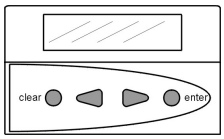
Silent alarm
A silent alarm is indicated via the alarm output of the arming device (relay output).
When the function is activated, a silent alarm is triggered by entering a valid unlocking code (last code digit +1, see example) and stored in the event log.
A time delay can be set (00-99 min), which is only activated during the triggering of an alarm. The defined release time of the programmed „normal“ time delay is used as release time.
The function 'Silent alarm' can only be performed by the owner of the system code and is saved in the event log.

Example:
User code: 1-2-3-4-5-**6** >> alarm code 1-2-3-4-5-**7**
(9 becomes 0!)

6.11. Programming activation of TwinXT lock I/O

configuration lock I/O	Select the menu item **'Lock I/O'** (see menu plan 4.2)
Systemcode Code:******	Enter manager code
Systemcode Please wait	Evaluate the entry
locj I/O *=yes *=No	Activate TwinXT
Door switch *=yes *=No	Activation of the function: Automatic locking via door switch
lock I/O saved	Action completed





Automatic return after 3 seconds

Lock I/O
The inputs or outputs of the locks can be programmed by means of the system code
The following functionality (**blocking element**) can be achieved:

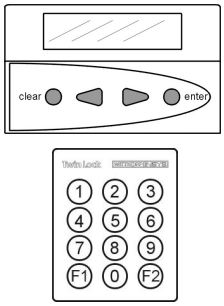
Input functions:
* Locking feature (contact for external release/blocking of the lock)
* Locking after bolt contact query

Output functions:
* Silent alarm (relay contact for silent alarm messages)
* Display of the lock bolt position (relay contact)

This programming action is saved in the event log!

Factory setting:
TwinXT inactive
Release and bolt system contact = high active

6.12. Reset the Input Unit



System Reset	Select the menu item **'System Reset'** (see menu plan 4.2.)
System code Code:******	Enter system code
System code Please wait	Evaluate the entry
Reset saved	Action completed

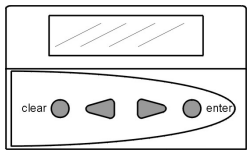
Automatic return after 3 seconds

System reset:
Only the owner of the manager code can perform the system reset. The following settings are reset to factory defaults:

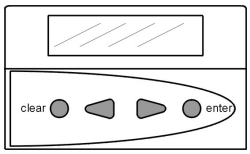
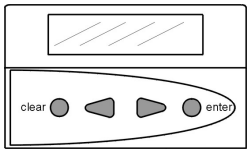
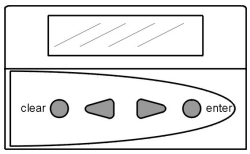
Unlocking delay	Inactive
System line	TwinLock compact
Battery warning limit	8,0V
Code linkage	1 User
Locks	0
Parallel code	Inactive
Forced Sequence / Opening Duress	Inactive
Quick unlocking code	user 09

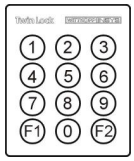
Only the control unit is reset. This means that all settings which are stored in the control unit are reset to factory defaults. The locks are not reset during this procedure and therefore maintain their allocations.

After a control unit has been reset, it is restarted. The system sends a prompt for re-registering.

System-Setup New system	

To re-integrate the existing locks into the system, the menu item “Terminal switch” must be activated using the arrow keys.

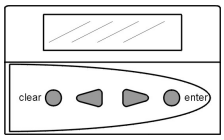
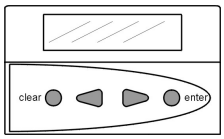
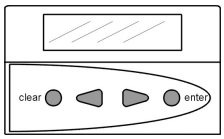
System setup Terminal switch	Switch to “Terminal switch”. Acknowledge with Enter	
System-Setup Terminal No.: 01<	Select the number of the control unit. Acknowledge with Enter. (Usually always: 01)	
System Setup No. DMS : 01<	Select the number of locks available in the system. Acknowledge with Enter.	

System code Code: ******	To assign a serial number, the system code of the lock or locks must be entered (e.g.1 1 1 1 1 1).	
Serial number Please wait	The serial number is transmitted to the lock.	
Serial number saved	The serial number has been stored in the lock.	

For the 2nd lock, the master code of lock 2 has to be entered.

After all data is entered, a system check is performed and the system is operational.

6.13. Lock Motor Service

Service Motor-Service	Select the menu item **'Motor service'** (see menu plan 4.2)	
Motor service Lock 01	Select the lock	
Master code Code:******	Enter the master code of the selected lock	
Master code Please wait	Evaluate the entry	
Motor service <=Open Closed=>	Open and close gradually Cancel with ENTER/CLEAR	

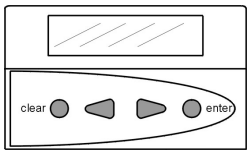
Automatic return after 150 seconds

Gradual opening and closing:
With this function, the lock can be opened and closed gradually for service purposes. This function can only be activated or performed by the owner of the according master code of the according lock. The user has 150 seconds to the next motor step. If no key is pressed, the function is cancelled.

The gradual opening or closing of the lock bolt is only meant for service purposes and can only be performed in an unlocked system state.

After this function is completed, it is stored in the event log.

6.14. Register/Replace Locks in the System

Service Reg. lock		Select the menu item '**Reg. lock**' (see menu plan 4.2)	
System code Code:******		Enter system code	
System code Please wait		Evaluate the entry	
SReg. lock New lock	Reg. lock Replace lock	Selection: or	Re-register replace a lock
	Replace lock Lock 01	Select the lock to be replaced	
!!Bus cable on!!		Connect both bus cables of the according lock to TwinConnect and acknowledge with ENTER	
System code Code: ******		To allocate the serial number, the system code of the new lock must be entered. (1 1 1 1 1 1)	
Serial number Please wait		The serial number is transferred to the lock	
Reg. lock Lock 02 OK		Detect and initialize the lock Acknowledge the lock number	

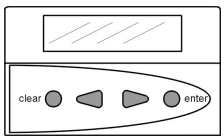
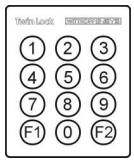
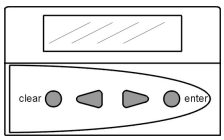
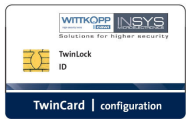
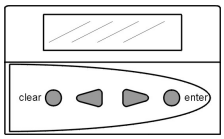
Automatic return after 3 seconds

Re-registering/replacing of locks:

Only the owner of the system code can re-register or replace a lock. This action is stored in the event log.

A maximum of 2 locks can be registered!

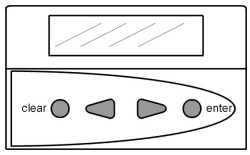
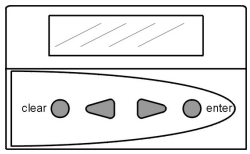
6.15. Write Log and Configuration to Chip Card

`TwinLock compact` `Import / Export`	Select the menu item **'Import / Export'** (see menu plan 4.2) 
`Systemcode` `Code:******`	Enter System Code 
`System code` `Please wait`	Evaluate the entry
`Import / Export` `Daten - Export`	Select data export with the menu keys 
`Data export` `Insert card`	Insert the TwinCard configuration 
`Data export` `Configuration`	Select Export configuration 
`Write data` `>>>>>>`	Data is written to the chip card
`Daten - Export` `Remove card`	Remove card 

The data can be read by means of the **Configuration set TwinComm** and can be processed further.

The data export procedure is stored in the event log.

6.16. Write Log and Configuration to Chip Card

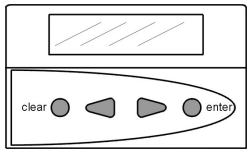
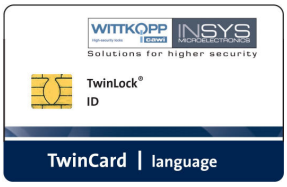
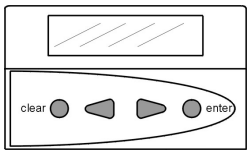
`*** TwinLock *** Import / Export`	Select the menu item **'Import / Export'** (see menu plan 4.2/ see above)
`System code Code:********`	Enter system code 
`System code Please wait`	Evaluate the entry
`Import / Export Data - Export`	Select data export with the menu keys 
`Data export Insert card`	Insert the TwinCard configuration 
`Data export Configuration`	Select Export configuration 
`Write data >>>>>>`	Data is written to the chip card
`Data export Remove card`	Remove card

The data can be read by means of the **Configuration set TwinComm** and can be processed further.

The data export procedure is stored in the event log.

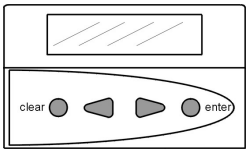
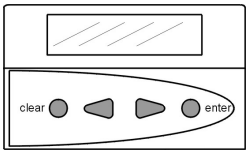
6.17. Read New System Language

To switch the language of your system, you need an according **TwinCard language**.
The language cards can be ordered on request.

`*** TwinLock *** Import / Export`	Select the menu item **'Import / Export'** (see menu plan 4.2)
`System code Code:********`	Enter system code 
`System code Please wait`	Evaluate the entry
`Import / Export Data import`	Select data import with the menu keys 
	Insert the TwinCard language 
`Data import Insert card`	Select Export configuration
`Data import Language`	Data is read from the chip card into the system 
`Read data >>>>>>`	Remove card
`Data import Remove card`	

The data import procedure is stored in the event log.
The new language is activated immediately after the card has been read

6.18. Ignore Bolt System Position Switch

System **Central inactive**		
Central inactive ***= Yes *=No**	Select "Yes“	
Central inactive **Stored**	The setting is stored	

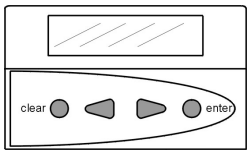
The bolt system position switch, which may be connected to TwinAlarm or TwinXT, is ignored for one locking procedure.
This means that the system can still be locked properly even if the switch is damaged.

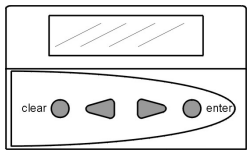
Note:

In any case, the customer service should be informed!

6.19. Activate Parallel Code

Settings Parallel code	
Systemcode Code:******	Enter system code
System code Please wait	Evaluate the entry
Parallel code *= Yes *=No	Display of the current setting and selection of the new condition
Parllel code Saved	Save setting Action completed





Notes:

Only possible, if there are 2 or 3 locks in the system

Unlocking procedure:
During the unlocking procedure, the status of lock 01 is queried first. If lock 01 is closed, an unlocking code must be entered without selecting lock 01 beforehand. If lock 01 is open, the condition of lock 02 is automatically queried. When lock 02 is closed, an unlocking code must be entered without selecting lock 02 beforehand. Lock 02 unlocks.

Programming of the codes
In all locks, the same codes must be programmed for the according users,
e.g.
User 08: Code: Lock 1: 080808
Code: Lock 2: 080808

Notes:
1. For this functionality, the explicit four-eye code (code linkage) is deactivated.
2. This function is only approved for 2 lock operation.

6.20. Automatic Locking

The TwinLock system can be automatically locked using a door switch or a bolt system position switch. The switch is connected to a TwinXT or TwinAlarm system, depending on the system variant.

In idle state (display off), the door or bolt system switch is queried periodically. Pressing the key will automatically lock the system.

Connection to TwinXT

The following connections and settings must be performed:

- Connect the switch at the terminals of the bolt system position switch (see assembly instructions). For a two lock system, the terminals of the bolt system position switch must be bridged for lock 1 and 2.
- Activate TwinXT (via the menu or the PC software)
- Set the forced sequence (via the menu or the PC software TwinComm)
- Setting the switching status for the locking (via PC software TwinComm)
  Active low => when the contact is closed -> System locks
  Active high => when the contact is open -> System locks
- Setting: Automatic locking with door switch (via PC software TwinComm)
- Optional: Combination with partial blocking time (via PC software TwinComm)

7. Programming the System with the PC Software TwinComm

The following functions can be performed with the configuration software TwinComm.

General settings

- Silent alarm, alarm delay
- TwinXT active
- Automatic switching to daylight savings time
- Quick unlocking code
- Four-eye-principle
- Parallel code
- Lock after bolt system contact query
- Automatic locking with door switch
- Quick unlocking code
- System line
- Battery warning limit

Timer Programs

- Alarm time delay
- Time delay, release time

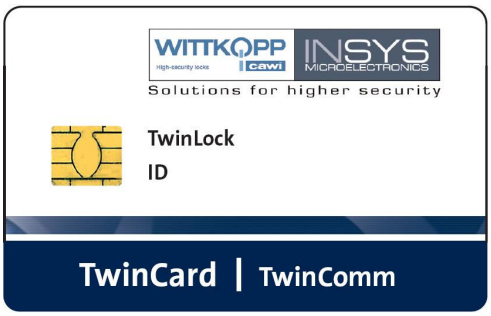
Managing functions

- Customer data
- User data
- Menu simulator and menu wizard

7.1. General Operation

License chip card

To active the PC software you will need a license chip card, which is a part of the scope of delivery of the configuration set. After TwinComm is started, this card must be inserted into the chip card reader.



After the license chip card has been read, the according locking system can be selected. (-> **TwinLock compact**)

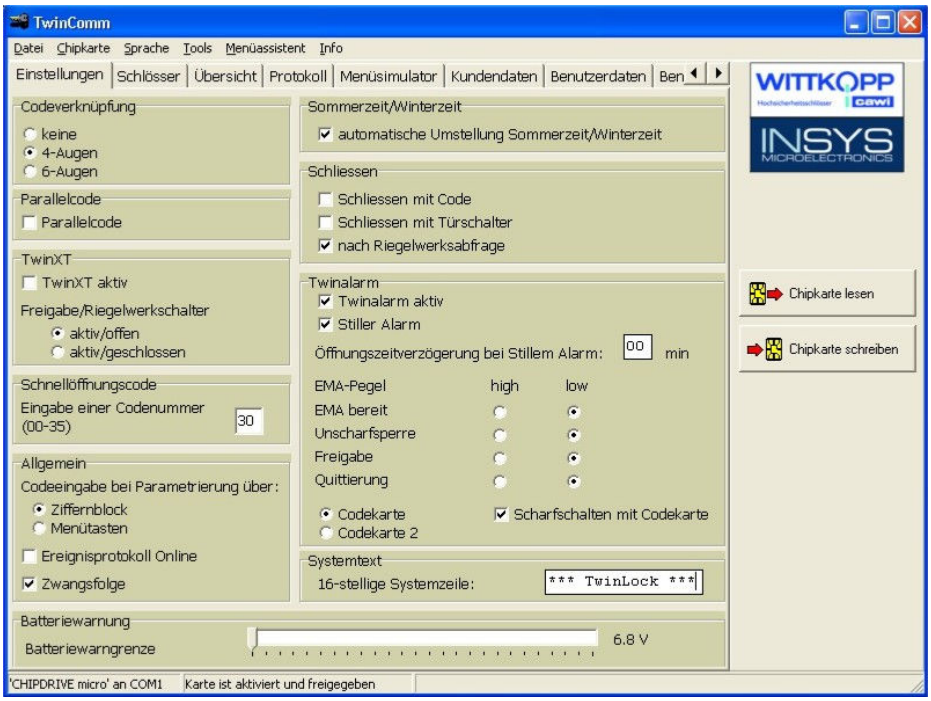
Start screen

Before the chip card reader is used, the serial interface to which the reader is connected must be activated.
The setting is done in the menu "**Chip card -> Configure**". Or the user is prompted to select the interface when the PC software starts for the first time.

To read the data from the chip card “ **TwinCard configuration**“, it must be inserted into the chip card reader. Then push the button “**Read chip card**".

To save the data to the chip card “**TwinCard configuration**“, it must be inserted into the chip card reader.
Then push the button “**Write chip card**".

7.2. Programming of General Settings



Code linkage

Programming the four-eye code principle
For unlocking and programming, 2 code entries each are required

Activate TwinXT

Lock I/O. The inputs and outputs of the extension unit TwinXT are activated and queried. TwinXT must be activated for the function of automatic locking with door switch.

Parallel code

Only possible, if there are 2 or 3 locks in the system

Unlocking procedure:
During the unlocking procedure, the status of lock 01 is queried first. When lock 01 is closed, an unlocking code must be entered without selecting lock 01 beforehand.
When lock 01 is open, the condition of lock 02 is queried automatically. When lock 02 is closed, an unlocking code must be entered without selecting lock 02 beforehand. Lock 02 unlocks.

Programming of the codes
In all locks, the same codes must be programmed for the according users, e.g.

user 08: Code : lock 1 : 080808
Code : lock 2 : 080808

Notes:
1. For this functionality, the explicit four-eye code (code linkage) is deactivated.
2. This function is only approved for 2 locks operation.

Quick unlocking code

A user code that skips the unlocking delay can be defined as quick unlocking code.

General

not with TwinLock compact
except for forced sequence

Forced sequence / Opening Duress

programmable, i.e. the unlocking and locking sequence.
Unlocking: Lock 01 -> Lock 02
Locking: Lock 02 -> Lock 01

Battery warning limit:

With this function, the threshold of the battery warning can be set between 6.8 V and 9.3 V. Critical dropping of the supply voltage is automatically detected and the following message is displayed:

```
*** TwinLock ***
!!! Low Batt !!!
```

Switching to Daylight savings time:

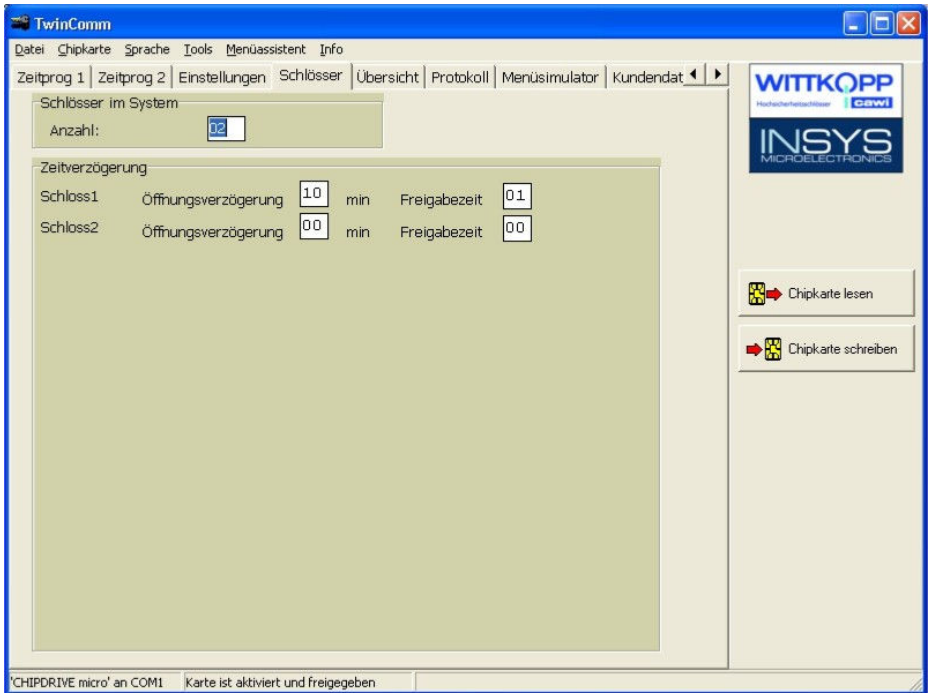
The time is automatically switched at the last weekend in March and at the last weekend in October.

Automatic locking a door switch

Automatic locking with
bolt system or door switch.
For this action, the function **TwinXT active** must be programmed.

Manual locking after bolt system query	Before the locking procedure, the position of the bolt system is queried using a switch. For this action, the functions **TwinXT active** must be programmed.
TwinAlarm active	not with TwinLock compact
Silent alarm	Activate silent alarm, time delay 01-99 minutes
BAS level	not with TwinLock compact
Arming with code card	not with TwinLock compact
System line:	The system line is displayed in the 1st. line of the main menu, on the display of the control unit. It can be changed and set as required anytime.

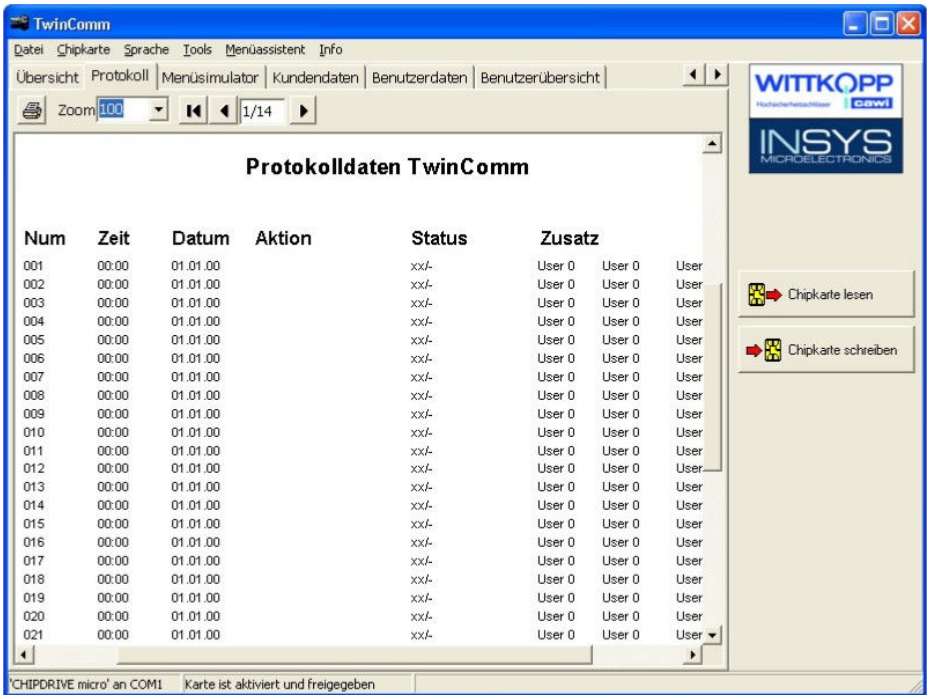
7.3. Programming the Unlocking Delay



For each lock, an unlocking delay of 01 – 99 minutes can be programmed. A release time of 01 – 15 minutes can be programmed as well, during which a code entry must take place after the unlocking delay has expired.

Unlocking delay = 00	No unlocking delay
Release time = 00	No code entry after unlocking delay The lock is immediately unlocked

7.4. Display Event Log



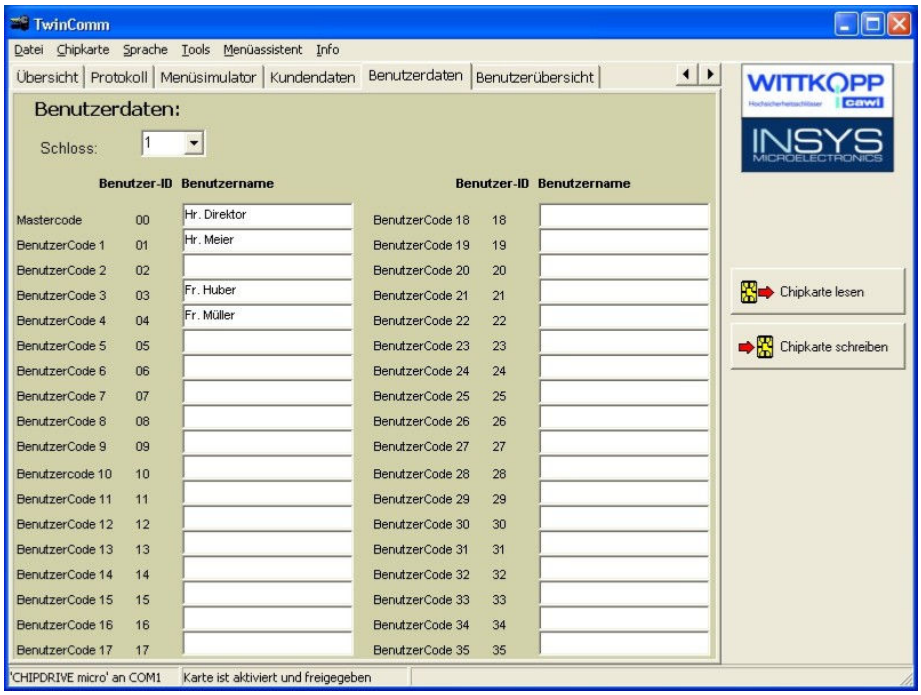
The following events are logged:

All unlocking and locking procedures and all code entries are logged. Furthermore, all configuration procedures and manipulation attempts are logged.

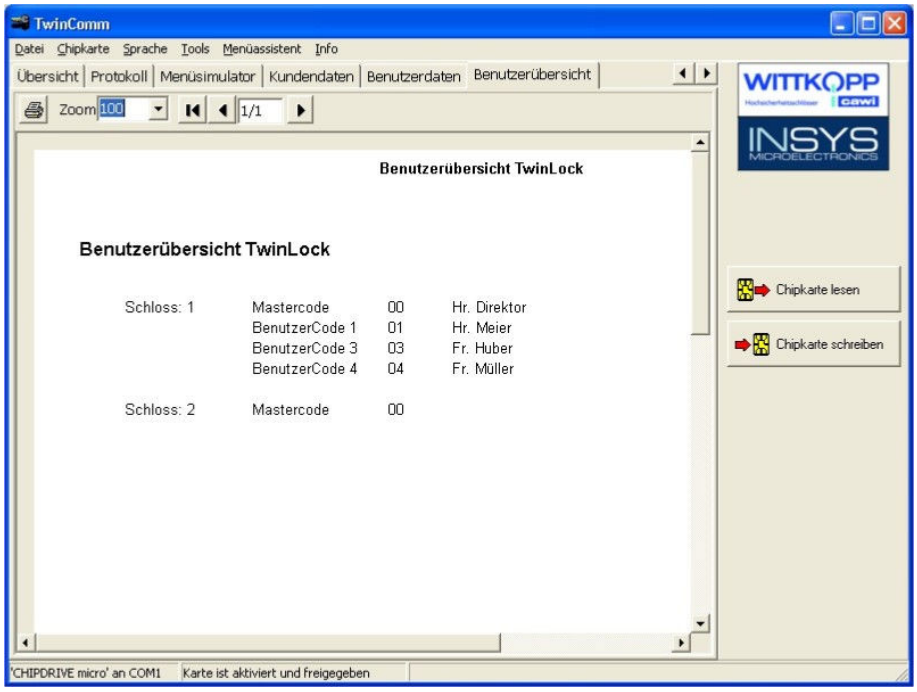
The log list can be printed on a connected printer or saved and archived in a file.

Use the button “Update user” to display the according user names after the log is being read, if the users were entered.

7.5. User Data Management

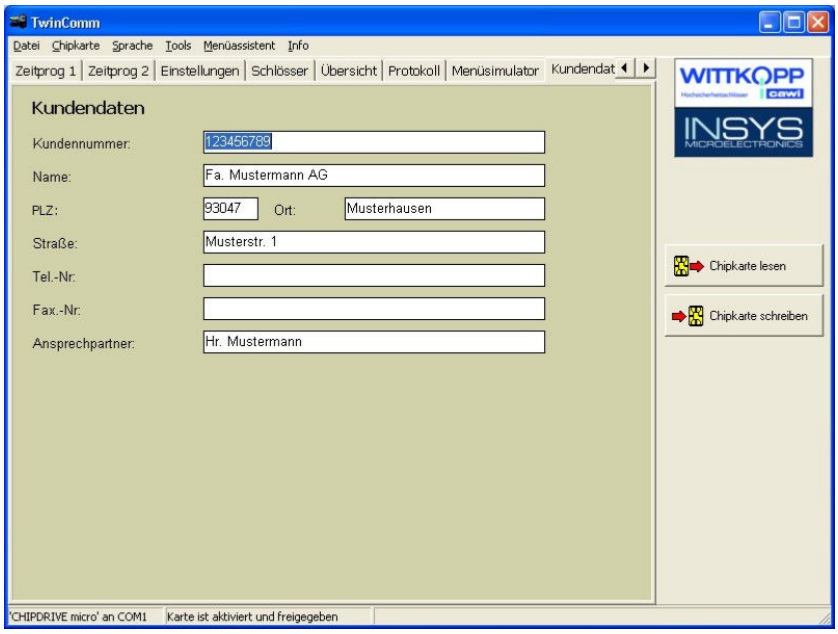


Each user of the lock can be allocated a name which is also saved in the event log.



The user overview can be printed or saved for administrative purposes.

7.6. Customer Data Management



Customer data can be saved and archived for each programming. This means that an individual configuration file can be created for each customer.
This file can be read also at a later date.

8. Technical Data

Input Unit: FlatControl

Power supply:	9 VDC Alternatively, power supply unit 12 VDC via TwinConnect Alternatively emergency power supply via mini DC jack
Current consumption:	Stand-by condition: approx. 30 µA Input condition (display active) approx. 55mA
Dimensions:	3.54 x 2.40 x 1.34 inches (L x W x H)
Environment:	32°F - 122°F, 75% RH Environment class II according to VdS
Protection class:	IP 30

Schloss : TwinLock compact

Power supply:	9VDC
Current consumption:	Idle state: ca. 40µA Motor operation (without bolt load):approx. 110 mA
Dimensions:	90 x 61 x 34 mm (L x B x H)
Environment:	0-50°C, 75% r.F Umweltklasse II nach VdS
Protection class:	IP 30

Bus distributor: TwinConnect

Power Supply	12 VDC (optional)
Current consumption	For power supply operation 12 VDC: Approx. 9 mA Only as distributor: 0 mA
Dimensions:	3.94 x 2.36 x 0.98 inches (L x W x H)
Environment:	32°F - 122°F, 75% RH Environment class II according to VdS
Protection class:	IP 30

Extension Unit: TwinXT

Power Supply	12 VDC (optional) Only for output relay operation
Current consumption	For power supply operation 12 VDC:Approx. 20 mA Per relay Only when the inputs are used: 0 mA
Dimensions:	3.94 x 2.36 x 0.98 inches (L x W x H)
Environment:	32°F - 122°F, 75% RH Environment class II according to VdS
Protection class:	IP 30

Revision History

Version	Date	Modification	Name
1.00		First edition	MB
1.01	04.07.05	Update	MB
1.02	08.05.06	New name TwinLock compact	MB
1.03	04.10.06	Update	ES/GH
1.04	30.10.06	update TwinCards	ES
1.05	07.12.06	Update	MB
1.06	15.09.08	Update user terminal and number of users	MR

!!! Subject to correction !!!

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