

ELECTRONIC LOCK OFFERING A TOTAL CHOICE OF AT LEAST 111,000,000 GENUINE LOCKING COMBINATIONS

Master Programming Instructions for Electronic Lock TeamLock 4

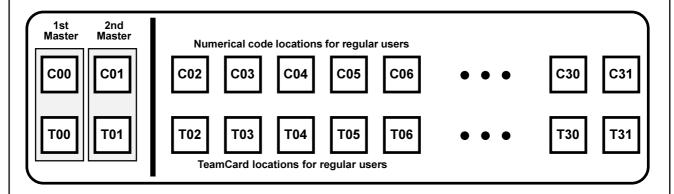
TeamLock 4 is an electronic locking system capable of managing up to 64 opening secrets. These are either contained in 6 to 8-digit numerical codes or in non-contact identifiable transponder-fitted cards, the so-called TeamCards. All TeamCards are one-of-a-kind; their characteristic features cannot be copied onto any other transponder units or duplicated in any way - they are genuine, one-of-a-kind "keys" whose identification has to be fed into the lock to activate their access authorization. Access is gained - either immediately or after a programmed delay - by keying in one of the valid opening secrets (or several interdependent opening secrets which can be entered in any order).

LOCK CHARACTERISTICS, FACTORY SETTINGS

The lock is designed to manage a total of 64 opening secrets: up to 32 numerical codes (C00, C01, C02 ... C31) in addition to up to 32 TeamCards (T00, T01, T02 ... T31). Whereas each authorized user is free to change his own enabled and pre-entered numerical code himself any time he pleases, the other basic settings can only be altered with the lock in the master programming mode. Examples of the activities reserved for the masters:

- Initial and subsequent re-assigning of additional opening secrets (numerical codes and TeamCards)
- Deletion of existing opening secrets
- Alteration of the authorization level of a pre-entered opening secret from full to partial authorization and vice versa
- Programming of opening delays
- Identification of TeamCards

The first two numerical code locations as well as the first two TeamCard locations have been given master location status as factory settings. These can only be used as master secrets that have been assigned extended user rights. All other numerical code and TeamCard locations can be allocated by the masters according to the intended use within the scope of the additional lock settings.



Generally speaking, a master's numerical code and TeamCard locations cannot be deleted, but they can be assigned a different secret. The lock comes with two factory-set secrets (a numerical code and a TeamCard) per master.

FACTORY SETTINGS:

First Master: Numerical code C00 is: "1 2 3 4 5 6"

TeamCard T00 is: logged on and defined as "T00"

Second Master: Numerical code C01 is: "4 5 6 7 8 9"

TeamCard T01 is: logged on and defined as "T01"

Opening delay: Zero minutes; the lock can be opened without delay

In order to enter the master programming mode and before the masters can open the lock, they have to enter any two master opening secrets. The masters are authorized to perform the following:

- 1. Each master can open the lock or enter the master programming mode for programming of the lock by himself. To do so, he has to use his valid master code as well as his personal Master TeamCard as opening secrets, i.e. C00 and T00, or C01 and T01.
- 2. The masters can also open the lock or enter the master programming mode jointly. To do so, each master has to enter either of his two opening secrets. <u>Any two</u> opening secrets of the two masters together fulfill the condition to be met to gain access. Example: C00 and C01, or C00 and T01.
- 3. With a pre-entered opening delay of between 1 and 99 minutes, even the master has to wait for the set delay to lapse before he can open the lock. However, he can <u>immediately</u> enter the master programming mode to change any lock setting without being affected by the opening delay. The only exception is the programming of a new setting for the opening delay itself. This number can only be reprogrammed by the master by entering the master programming mode after the end of the opening delay.
- 4. On locks provided with an access timer (optional feature), the masters -contrary to the "regular users" can perform his opening or programming operations irrespective of the access timer's status.
- 5. Each master is authorized to change his <u>own</u> two opening secrets and to perform all other lock settings. However, the opening secret of one of the two masters can also be changed after using one opening secret of <u>each</u> of the two masters to enter the master programming mode.

STARTING PROCEDURE FOR OPERATING THE LOCK

The lock is supplied with the settings needed to open the safe; i.e. the factory-set numerical codes C00 "1 2 3 4 5 6" and C01 "4 5 6 7 8 9". This allows the safe to be opened for the purpose of initial programming even in the event that the lock was shipped with the two pre-installed Master TeamCards inside the safe for safekeeping. If this is the case, open the safe as follows:

- 1. Press EIN/ON key.
- 2. Following a short, high-pitched signal tone, key in the numerical code (factory setting of first master code C00): enter 1, 2, 3, 4, 5 and 6.
- 3. Press ENTER key; you will hear the short, high-pitched tone again, indicating that the lock has accepted the first master code. A short, low-pitched signal tone indicates that you entered the wrong combination.
- 4. Now enter 4, 5, 6, 7, 8 and 9 (second master code C01).
- 5. Press ENTER key; you will hear the short, high-pitched tone indicating that the second master code has been accepted, immediately followed by a long, high-pitched tone indicating that the entries needed to open the lock are complete.
- 6. Open the lock by the lock handle by turning it -speedily, but not in an overly hurried manner- a half turn. The lock handle must be in the end position before you start turning it. Complete the half turn within 5 seconds; after that the electronic system will automatically switch itself off.
- 7. Now open the door by manually turning the door handle.

For security reasons we recommend to perform all resetting operations with the door open and blocked in the open status.

IMPORTANT - PLEASE NOTE!

For security reasons the lock settings can only be changed after the factory settings (123456 and 456789) of the two master codes C00 and C01 have each been changed to a new numerical code. No parameter change is possible while the factory settings are still valid.

CHANGING THE SECRET COMBINATION OF A MASTER CODE

ONLY RECODE THE LOCK WITH THE DOOR OPEN AND THE LOCK BLOCKED, AND DO NOT USE ANY PERSONAL DATES (e.g. a birthday).

If the programmed master code is no longer available, it can only be recoded using two other master secrets (i.e. the two Master TeamCards T00 and T01) in the master programming mode. Therefore:

DO NOT FORGET THE NEW MASTER CODE! KEEP IT IN A SAFE PLACE!!!

- 1. Press the EIN/ON key.
- 2. Key in your valid 6 to 8-digit numerical code.
- 3. Hold the ENTER key pressed down (six seconds) until you hear a long, high-pitched tone.
- 4. Key in your new combination of 6 to 8 numbers.
- 5. Press ENTER key.
- 6. Key in the new combination once more.
- 7. Press ENTER key. If you have a performed the coding process correctly, you will hear two long, high-pitched signal tones

Two long, low-pitched tones indicate that you made a mistake entering the new numerical code. The old code is still valid. Please start over at 1.

MASTER PROGRAMMING MODE

All lock parameters can be set or changed in the master programming mode which is only accessible by the masters using two of their opening secrets, i.e. one master using both his opening secrets (number code plus Master TeamCard) or two masters, each providing one of their secrets. If more than 30 seconds lapse between keying in two numbers, the electronic system will switch itself off for security reasons. The number coding process will then have to be repeated from the beginning. However, all changes entered and acknowledged by the lock up to that point remain valid.

Entering the master programming mode:

The standard routine for entering the master programming mode is by pressing the EIN/ON key and entering any two master secrets. Contrary to the normal opening, which requires you to complete the operation by pressing ENTER, the ENTER key now has to be held pressed down for approximately six seconds until the lock indicates your entering the master programming mode with one long, high-pitched tone. Now key in a two-digit number to define your programming objective and, for example, enter the number of the parameter you wish to change. The new setting is completed by pressing ENTER. For some programming purposes, there are certain conditions to be met before the lock allows you to enter the programming mode for security reasons. These special programming objectives are:

- Changing an existing opening delay from 1 to 99 minutes. Whereas with other programming objectives, you can enter

the master programming mode and change a lock setting immediately, i.e. without waiting for the end of the opening delay, you have to wait for it to lapse before you can change the delay itself to a different number for security reasons. To change the delay, enter two master opening secrets followed by ENTER, as for a normal lock opening. After the delay has lapsed, the entering of the secrets is repeated -as for the normal lock opening-, but the ENTER key is held pressed down for approximately six seconds until the long, high-pitched tone signals you have entered the master programming mode. The master is now able to enter a new opening delay.

- Overwriting of a lost master code. In this case, two master secrets from two <u>different</u> masters have to be entered before entry in the master programming mode is enabled (the master secret to be written over cannot be used).

Settings in the master programming mode:

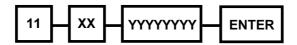
After entering the master programming mode you can adjust as many set values as you wish in the order you wish. The lock acknowledges each accepted entry with two long, high-pitched tones. Two long, low-pitched tones indicate coding process incorrectly performed; the change has not been made. If you wait too long between keying in two numbers, the lock will also sound two long, low-pitched tones and switch itself off.

IMPORTANT - PLEASE NOTE!

Each time lock settings are changed, the effectiveness of the new values should be checked several times by going through the respective entries.

The following setting instructions (listed according to programming objectives) can be performed in any combination and order immediately after having successfully entered the master programming mode:

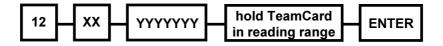
Programming objective 11: New installation or overwriting of a user numerical code



Key in the numbers 1 and 1, then key in the 2-digit storage location number of the numerical code (C02 to C31) you wish to install or write over, follow that with the selected 6- to 8-digit numerical code and press ENTER.

The first time a numerical code is installed, the lock automatically allocates the full access authorization number 12. If required, it can be reduced to a smaller figure later (see programming objective 13).

Programming objective 12: Redefining or overwriting of a user TeamCard's secret code



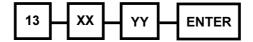
Key in the numbers 1 and 2, then key in the 2-digit storage location number of the TeamCard (T02 to T31) you wish to install or write over, follow that with the 7-digit TeamCard key code, hold the TeamCard in the effective reading zone so it can be "read", and press ENTER.

The first time a TeamCard location is installed, the lock automatically allocates the full access authorization number 12. If required, it can be reduced to a smaller figure later (see programming objective 14)

IMPORTANT - PLEASE NOTE!

The only time you need the 7-digit TeamCard key code is to "sign in" the TeamCard as a valid opening secret. You will find the code on the adhesive label of a new TeamCard. This TeamCard combination is an encrypted part of the secret information stored in the card. Although unauthorized users cannot use the number for any activities that would jeopardize the lock's security, we recommend to remove the label after programming the TeamCard, and to keep it in a safe place in case you need to "sign in" the TeamCard again at a later date. Without the TeamCard's key code, it is not possible to sign in the card in this or in any other lock.

Programming objective 13: Changing the authorization level of a user numerical code



When a numerical code is first installed, the lock automatically assigns the full access authorization number 12. If required, it can be reduced to a smaller figure by means of this programming objective.

Key in the numbers 1 and 3, then key in the 2-digit storage location number of the numerical code location already installed (C02 to C31) which you now wish to change in authorization level, follow that with the 2-digit access authorization level (00 to 12), and press ENTER.

Assigning the access authorization number 00 means that the numerical code assigned to this storage location is maintained, but that it no longer holds an access authorization. A value of between 01 and 11 means that the numerical code in question has a part authorization. To be fully authorized to open the lock, it has to be combined with at least one other opening secret assigned a value that, added to the first part authorization's value, will give the full authorization number 12.

IMPORTANT - PLEASE NOTE!

To open the lock, part authorizations can be used whose individual values <u>add up to exactly 12</u> (e.g. a numerical code assigned the authorization value 08 together with a numerical code assigned the authorization value 04).

Programming objective 14: Changing the authorization level of a user TeamCard



When a TeamCard location is first installed, the lock automatically assigns the full access authorization number 12. If required, it can be reduced to a smaller figure by means of this programming objective.

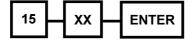
Key in the numbers 1 and 4, then key in the 2-digit storage location number of the TeamCard location already installed (T02 to T31) which you now wish to change in authorization level, follow that with the 2-digit access authorization level (00 to 12), and press ENTER.

Assigning the access authorization number 00 means that the TeamCard assigned to this storage location is maintained, but that it no longer has an access authorization. A value of between 01 and 11 means that the TeamCard in question has a part authorization. To be fully authorized to open the lock, it has to be combined with at least one other opening secret assigned a value that, added to the first part authorization's value, will give the full authorization number 12.

IMPORTANT - PLEASE NOTE!

To open the lock, part authorizations can be used whose individual values <u>add up to exactly 12</u> (e.g. one TeamCard assigned the authorization value 08 together with a TeamCard assigned the authorization value 04).

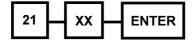
Programming objective 15: Changing the opening delay



The opening delay can be set in whole minutes from 00 to 99. The factory setting is 0 (zero) minutes. Please note that you can only change the opening delay after waiting for the existing opening delay to lapse before you enter the master programming mode.

Key in the numbers 1 and 5, then key in the 2-digit number for the new opening delay in minutes, and press ENTER.

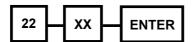
Programming objective 21: Cancellation of a user numerical code



The purpose of this program option is to delete a secret combination, possibly unknown to the master, assigned to a known storage location (C02 to C31).

Key in the numbers 2 and 1, then key in the 2-digit storage location number of the user card's numerical code to be deleted, and press ENTER.

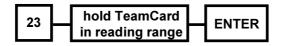
Programming objective 22: Cancellation of a user TeamCard



The purpose of this program option is to cancel (invalidate) a TeamCard assigned to a known storage location (T02 to T31). If the storage location of the TeamCard is not known, please identify the TeamCard first by means of programming objective 23.

To cancel a TeamCard, key in the numbers 2 and 2, then key in the 2-digit storage location number of the user TeamCard to be canceled (invalidated) (T02 to T31), and press ENTER.

Programming objective 23: <u>Identifying a TeamCard</u>



The purpose of this program option is to identify a TeamCard whose storage location number in the lock is no longer known. The lock reads in the TeamCard and responds with two groups of signal tones indicating the storage location (T00 to T31) of the TeamCard in question.

Key in the numbers 2 and 3, hold the TeamCard within the lock's reading range and press ENTER. The lock responds by transmitting signal tones which you are asked to count -and write down, if necessary- to give you the storage location of the card to be identified.

The lock identifies the card storage location by emitting two groups of tones (very short, high-pitched tones) separated by a pause. The number of tones in the first and second groups correspond to the first and second digits of the 2-digit storage location number (T00 to T31). Ten tones correspond to the number "0", one tone is the number "1", two tones the number "2" nine tones is the number "9". Besides emitting two groups of signal tones, the lock can also output error messages:

3 times very short, low-pitched:

"there is no TeamCard in the reading range" or "the TeamCard has a defect"

1 time short, low-pitched:

"the read-in TeamCard has failed the identification check"

Programming objective 31: Simultaneous cancellation of all user numerical codes



This option allows you to reprogram the lock quickly. With a <u>single</u> operation, <u>all</u> user numerical codes are canceled. Before you proceed, think again if this is really what you want to do. The cancellation does not affect the master numerical codes.

Key in the numbers 3 and 1 and press ENTER.

Programming objective 32: Simultaneous cancellation (invalidation) of all user TeamCard codes



This option allows you to reprogram the lock quickly. With a <u>single</u> operation, <u>all</u> user TeamCards are reported as invalid to the lock. Before you proceed, think again if this is really what you want to do. The cancellation does not affect the master TeamCards. To re-activate the canceled TeamCards, you can enter the 7-digit TeamCard key codes again later to give them back their status of valid opening secrets.

Key in the numbers 3 and 2, and press ENTER.

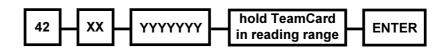
Programming objective 41: Overwriting of a master numerical code



This program option allows you to overwrite a master numerical code which is no longer known. The condition for this activity is that two masters use one of their secrets each to enter the master programming mode (i.e. one's own master TeamCard plus the master numerical code of the other master, or both masters' TeamCards T00 plus T01).

Key in the numbers 4 and 1, then key in the 2-digit storage location number of the numerical code to be written over (C00 or C01), key in the newly selected 6 to 8-digit master code, and press ENTER.

Programming objective 42: Overwriting of a master TeamCard's secret code



This program option allows you to assign a new secret combination to a master TeamCard if the old combination is no longer available. The condition for this activity is that two masters use one of their secrets each to enter the master programming mode (i.e. one's own master numerical code plus the master TeamCard of the other master, or both masters' numerical codes C00 plus C01).

Key in the numbers 4 and 2, then key in the 2-digit storage location number of the TeamCard (T00 or T01) you wish to write over, follow that with the 7-digit key code of the TeamCard, hold the TeamCard in the effective reading zone so it can be "read", and press ENTER.

Programming objective 99: Leaving the master programming mode



Key in the numbers 9 and 9, and press ENTER. You will hear two long, high-pitched tones. This completes your activities in the master programming mode and switches off the lock.

IMPORTANT - PLEASE NOTE!

After changing lock settings and leaving the master programming mode, the effectiveness of the new values should be checked several times by going through the respective entries.

PROGRAMMING EXAMPLES

EXAMPLE 1: Installing a new user numerical code:

For the purpose of this example, we will assume that the numerical code 2 4 3 7 1 9 is to be installed at the thus far unoccupied storage location

- 1. Press EIN/ON key.
- 2. Following a short, high-pitched signal tone for entering the master programming mode, key in a master numerical code (no factory setting!) to serve as first required master secret.
- 3. Briefly press ENTER key an other short, high-pitched signal tone indicates that the master numerical code has been accepted; a short, low-pitched signal tone would indicate wrong combination.
- 4. To enter the second required master secret, hold a master TeamCard in front of the lock's reading range.
- 5. Press ENTER key and hold it pressed down for approximately six seconds.
- 6. A long, high-pitched signal tone indicates that you have successfully entered the master programming mode.
- 7. Key in the numbers 1 and 1 (11) to select the program objective "Installation of a new user numerical code".
- 8. Key in the two numbers 0 and 2 for the numerical code storage location C02 you want to assign a new combination.
- 9. Key in the numbers of the new user numerical code, i.e. 2 4 3 7 1 9.
- 10. Press ENTER briefly. You will hear two long, high-pitched signal tones indicating that all entries were correct and plausible. The lock has automatically provided this user numerical code with the full access authorization (authorization number 12). Two long, low-pitched tones means you made a mistake between steps 6 and 9, above, and that the lock has not accepted the setting. Begin again at step 6.
- 11. To leave the master programming mode, key in the numbers 9 and 9 and briefly press ENTER. You will hear two long, high-pitched tones. You have completed your activities in the master programming mode and switched off the lock.

EXAMPLE 2: Redefining of user TeamCards:

For the purpose of this example, we will assume that four new user TeamCards are to be assigned to the TeamCard storage locations T02, T03, T04 and T05 such that the two users holding TeamCards T02 and T03, and those holding T04 and T05 can only open the lock jointly. However, the four cards within this group should not be able to team up in different pairs to open the lock. To meet this condition, we want to assign TeamCard T02 the access authorization value 08, and TeamCard T03 the value 04 (giving a total value of exactly 12, or the number of the full access authorization). In a similar fashion, we assign TeamCard T04 the figure 07 and TeamCard T05 the figure 05 (07 plus 05 equals 12). By doing this, we prevent, for example, TeamCard T02 teaming up with TeamCard T04 to open the lock (08 plus 07 does not equal 12).

- 1. Press EIN/ON key.
- 2. Following a short, high-pitched signal tone for entering the master programming mode, key in a master numerical code (no factory setting!) to serve as first required master secret.
- 3. Briefly press ENTER key an other short, high-pitched signal tone indicates that the master numerical code has been accepted; a short, low-pitched signal tone would indicate wrong combination.
- 4. To enter the second required master secret, hold a master TeamCard in front of the lock's reading range.
- 5. Press ENTER key and hold it pressed down for approximately six seconds.
- 6. A long, high-pitched signal tone indicates that you have successfully entered the master programming mode.
- 7. Key in the numbers 1 and 2 (12) to select the program objective "Installation of a new user TeamCard's secret code".
- 8. Key in the two numbers 0 and 2 for the numerical code storage location T02 which you want to assign a new TeamCard.
- 9. Now take a new user TeamCard Key so far not used with the lock, and key in the 7-digit TeamCard key code which you will find on the label affixed to the card. Entering of the card's identification code completed, hold the TeamCard in the reading range of the lock.
- 10. Press ENTER briefly. To indicate that all entries were correct and plausible, you will hear two long, high-pitched signal tones to indicate that the programming operation is finished. The lock has automatically provided this user numerical code with the full access authorization (authorization number 12). Two long, low-pitched tones means you made a mistake in the last three steps of the procedure and that the lock has not accepted the setting. Repeat from the point of defining the program objective (go back 3 steps). However, three very short, low-pitched tones indicate that the lock failed to recognize the card held in the reading range; you can have the lock try and read the TeamCard again by pressing ENTER.
- 11. Repeat steps 7 through 10 for the other three new TeamCards, assigning these to the storage locations T03 through T05.
- 12. All four TeamCards have now been enabled in the lock, but each still holds the full access authorization, which means that the access authorization levels of the TeamCard secret combinations still have to be changed according to the task specified above. To do this, key in the two figures 1 and 4 (14) to select the programming objective "Changing the authorization level of a user TeamCard".
- 13. Key in the two numbers 0 and 2 for the first TeamCard storage location 02 to be modified.
- 14. To enter the access authorization level, key in the two numbers 0 and 8 for TeamCard storage location T02 and briefly press ENTER.
- 15. Repeat steps 12 through 14 for the TeamCards at storage locations T03, T04 and T05 (i.e. assign them access authorization values 04, 07 and 05, respectively).
- 16. To leave the master programming mode, key in the numbers 9 and 9 and briefly press ENTER. You will hear two long, high-pitched tones. You have completed your activities in the master programming mode and switched off the lock.
- 17. We recommend to mark the TeamCards with the selected storage locations in the space provided, and to store the adhesive labels with the 7-digit TeamCard key codes in a safe place. Note the key codes and their associated TeamCards in a suitable manner so that the cards may be registered with the TeamLock again at a later date, if required.

EXAMPLE 3: Cancellation of a TeamCard:

For the purpose of this example, we will assume that a TeamCard so far "known" to the lock, whose TeamCard storage location number is unknown, is to be canceled as a valid secret combination.

- 1. Press EIN/ON key.
- 2. Following a short, high-pitched signal tone indicating you have entered the master programming mode, key in a master numerical code (first required master secret).
- 3. Press ENTER key an other short, high-pitched signal tone indicates that the master numerical code has been accepted; a short, low-pitched signal tone would indicate wrong combination.
- 4. To enter the second required master secret, hold a Master TeamCard in front of the lock's reading range.
- 5. Press ENTER key and hold it pressed down for approximately six seconds.
- 6. A long, high-pitched signal tone indicates that you have successfully entered the master programming mode.
- 7. Key in the numbers 2 and 3 (23) to select the program objective "Identification of a TeamCard".
- 8. Hold the TeamCard to be identified within the reading range of the lock and press ENTER briefly.
- 9. The lock will now, for example, answer with 10 very short high-pitched tones, stops, and continues with 6 very short, high-pitched tones. This shows you that the TeamCard in question has the TeamCard storage location T06.
- 10. Now key in the numbers 2 and 2 to select the program objective "Cancellation of a user TeamCard".
- 11. Key in the TeamCard storage location number 06 and press ENTER briefly. You will hear two long, high-pitched signal tones when all entries were correct and plausible; canceling of storage location T06 has been completed positively, and this TeamCard is no longer a valid opening secret for the lock.
- 12. To leave the master programming mode, key in the numbers 9 and 9 and briefly press ENTER. You will hear two long, high-pitched tones. You have completed your activities in the master programming mode and switched off the lock.