Note:

The cover sheet provides warning information, and an explanation of the symbols and terms used, together with our disclaimer.

1 Contents

2 Profile concept

Unlike many systems available on the market with rigid assignment of rights for administrative roles, such as "Master" or "Manager" or different user groups, the user roles of Gunnebo Encry family locks can be freely defined within the framework of a profile configuration. (Assignment within the rights matrix is usually prepared by Gunnebo in consultation with the customer.)
An "authorised user" is therefore always defined as the "executing person" in the following descriptions. This usually corresponds to a "Master" in the usual context, but no fixed function can be assigned to the designation.

Permissions to execute functions and assign additional restrictions, such as weekly programs, time delays or the dual code condition, are thus defined using profiles. Every user is assigned precisely one profile.

Profile definitions can be customer-specific or project-specific. A description of the assignment of rights can be found in Appendix E.

3 Input unit

In the description below, inputs are described regardless of whether they correspond to dynamic key assignment or are permanently assigned to a physical key.

A detected keystroke is acknowledged by a short beep. The Gunnebo Encry input unit shown is a so-called "scrambling" keypad. Key assignment is random and is displayed on the LCD.

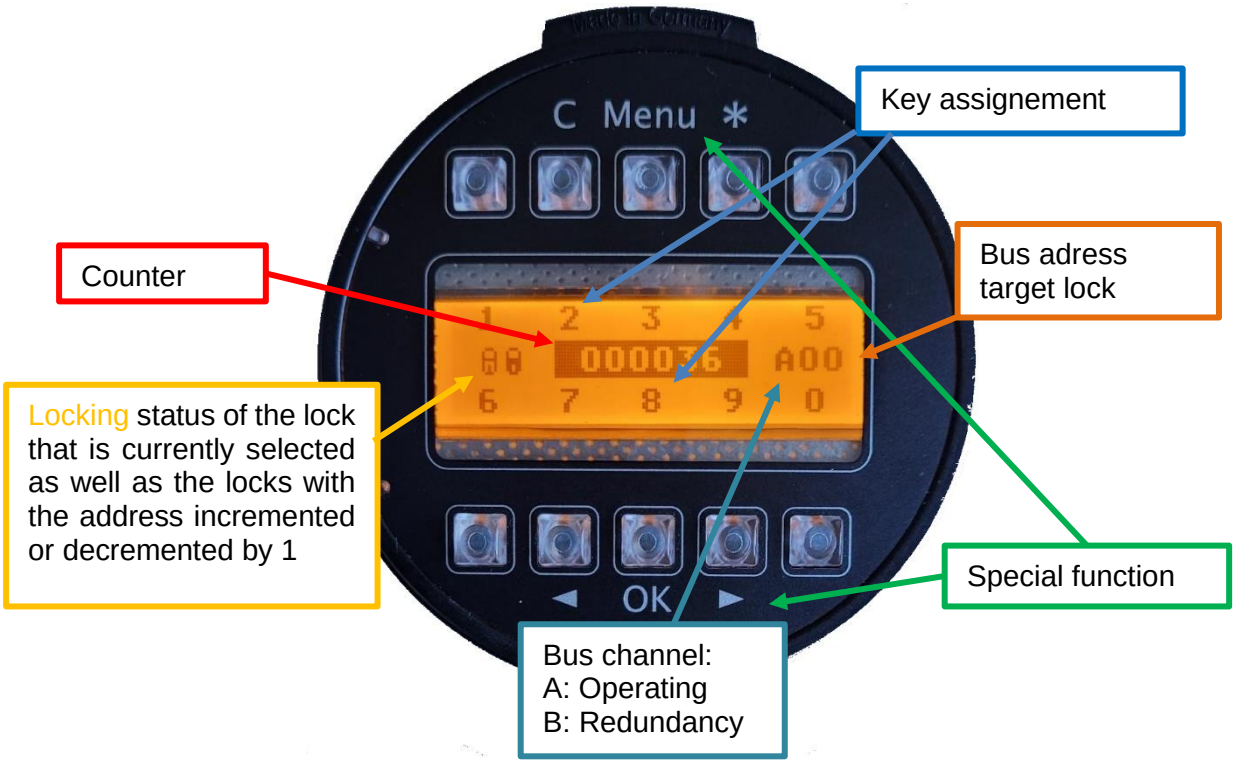


Figure 1 - Gator DS II

On the Gunnebo Encry keypad shown, the decimal digit value is displayed in the lower row of keys above the corresponding key, and below the corresponding key in the LCD for the upper row of keys.

Number assignment is random and changes after each code entry. Press any key briefly to display the key assignment from sleep mode.

The example output shown on the lock status display is for a dual lock system. The locking status for the selected address (here 00) is signaled by the blank padlock. Likewise, the locking status for the lock with the next higher address (here 01) is determined by the completed padlock.

If there is a lock with an address smaller than the selected bus address, the status of the lock with the next smaller address to the left of the unfilled symbol is also displayed filled.

 : Lock secured with the target address

 : Lock with target address not secured

 : Lock secured with the address incremented or decremented by 1

 : Lock not secured with the address incremented or decremented by 1

3.1 Belegung Sondertasten

If permanently assigned special assignments are to be selected, this requires a long keystroke (1-2 s) until it is detected and signalled.

Selection can also be performed directly from sleep mode.

[OK] Output of the closure status. With multi-lock systems, the output is only issued with certainty when all the locks listed in the configuration are secure.

[Menu] Jump to the menu navigation

[*] Special symbol to highlight a menu shortcut, address or channel selection.

[<] bzw. [>] Address / channel selection

[C] Lock time display (counter) / Cancellation of the last input digit (cancel)

The [C] key is a special case as a currently running lock time is displayed by a progress bar from sleep mode, but the last digit within a running entry is cancelled.

Lock times can represent penalty times after multiple incorrect code entries or delay times.

3.2 Multi-lock systems / Redundancy

With multi-lock systems, the target lock needs to be selected accordingly before performing a menu / command.

If they also consist of redundant locks, the communication path / channel may also have to be determined.

3.2.1 Channel selection

This function is used almost exclusively in redundant locks (G6000, G8000 and G9000). These feature two equivalent independent electronic units in one housing. The right side of one or more locks is the operating side and the left side is the redundancy side.

This results in two bus lines, designed on the keypad side by bus A for the operating side (in blue in the topology overview) and bus B for the redundancy side (yellow in the topology overview).

The operating side is configured with the required profile set and application-specific settings. A single user is set up from the redundancy side. The configuration cannot be changed.

This means that the system usually always operates on the operating channel. Only in the unlikely event of an electrical or mechanical fault (e.g. due to interruption of a bus line, failure of a motor etc.)

can the redundancy channel be switched over and an emergency opening performed). However, the default setting is always the operating channel.

Channel selection A (operating channel):

Channel selection B (redundancy):

The optional OTC module is only connected to the operating side and therefore does not function in redundant mode!

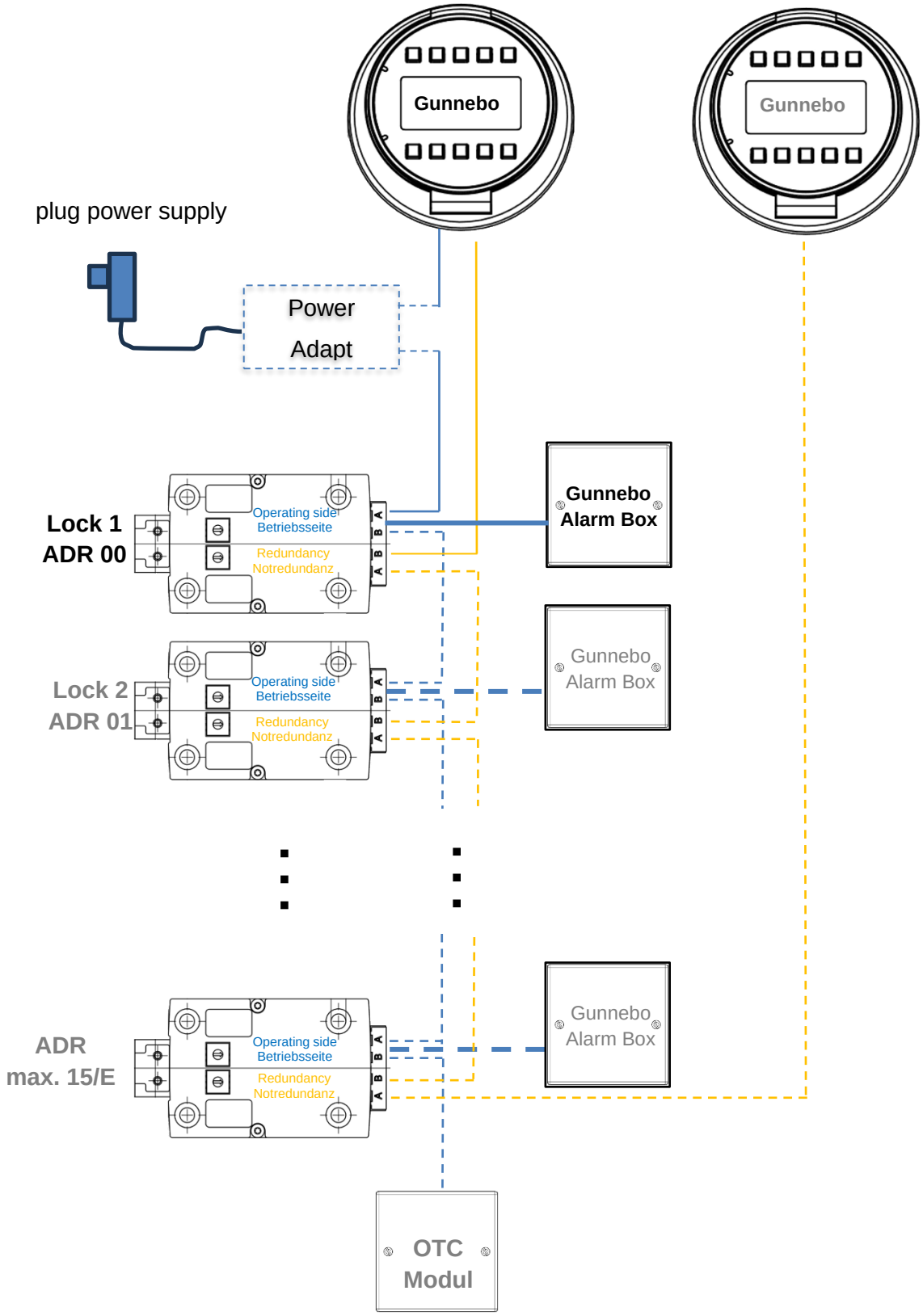


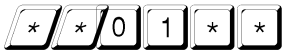
Figure 2 - Topology overview

The thin lines (dashes or solid line) mark the system cables equipped with 4-pin Molex connectors. Bold printed lines represent the 8-pin system cables for connection of the signal boxes.

3.2.2 Adress selection

If multiple locks are connected to one input unit, they all need different bus addresses. The address is set during installation using the locks' encoder switches.

You can find out which lock address is assigned to which locking point in its safe in the instructions for the safe. A lock is selected using the following key sequence:

e.g. selection of a lock with address 01: 

Alternatively, the arrow keys can be used to toggle between the lock addresses.
Pressing > increases the lock address, while pressing < decreases the lock address by one digit. The selection is executed when the selection is confirmed with OK.

The address counter works with an 'overrun'. This means that when the highest available address is reached, the counter returns to the smallest (generally 00) and vice versa.
This configuration restricts the number of addresses that can be selected using the arrow keys to the number of locks installed.

3.3 Operation

In principle, a distinction is made between two input modes. One to execute a command or an address selection,

and the direct input of an ID and a code to open or close a lock.

3.3.1 Code length / silent alarm

The user's ID is always two-digit. The code length depends on the lock class of the system. It needs to be 6 digits for Class B, and 8 digits for Classes C and D.
With optional OTC module:
For OTC users (screen entry using key 5), the OTC user ID is 4 digits, the OTC user code is 6 digits, and the actual OTC is 10 digits.

The alarm addend to activate a silent alarm is defined via the configuration. If the last digit of a code is alternated accordingly, the code is accepted and a lock opening etc. is started, and the assigned alarm output is set for approx. 2s.
(Example see Opening with an alarm code)

3.3.2 Code input

If the input of the user ID starts with a number less than 5 (this results from the number range of valid user IDs 00-49), this is automatically evaluated as the code entry.

Depending on the locking status, the code is checked for an opening or closing authorisation.

3.3.3 OTC input

Can only be carried out in combination with the OTC module. The application software that generates the one-time codes may only be installed and operated in a secure environment.

If a 5 is entered as the first digit, the display automatically switches to an input screen for the entry of a
One Time Code (OTC).
The four-digit OTC user ID, the six-digit individual OTC user code, and the ten-digit generated OTC must be entered one after the other here.

This is done in two views. The OTC user ID and the OTC user code are entered in the first input screen. When the last digit is entered, the entry automatically switches to the screen for the actual OTC.

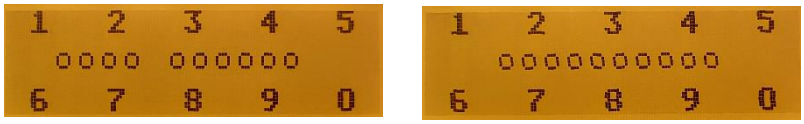


Figure 3 - OTC input screen

The OTC User ID input and OTC sequence are entered with a fixed key assignment. Key assignment is random for the input of the OTC user codes.

Progress of the input is indicated by the circles filling up for the digits already entered.

Figure 4 - Random key assignement

3.3.4 Menu – Command execution

A command execution can be initiated as described above by pressing the * key followed by the command shortcut and input of a further *.
Alternatively, the command overview can be started via the menu button. Navigate around the command structure using the arrow keys and select with OK.

Each individual operating menu or command is represented by a symbol. The command hierarchy is limited to two levels. (see table below)
When a menu function or command execution is started, the corresponding icon / symbol is briefly displayed and switches to input mode after 1-2 seconds.

Shortcut	Menu / Command		Icon
* 6 7 *	Download audit (1.Block / serial)		
* 6 8 *	Download audit (2.Block)		
* 9 9 *	Firmware information		
* 9 8 *	Configuration information		
* 7 3 *	Output of date and time		
* 7 4 *	Output of bolt position		
* 0 0 *	Create user		
* 0 1 *	Change code		
* 0 2 *	Delete user		
* 0 4 *	Immediate lock (1-99 h)		
* 2 2 *	Activate profile		
* 2 3 *	Deactivate profile		
* 2 1 *	Opening delay setting		
* 3 0 *	Activate inputs and outputs		
* 3 1 *	Deactivate inputs and outputs		
* 3 5 *	Temp. Deactivation of the boltwork contact		
* 6 1 *	Set date and time		
* 6 4 *	Check the system / keypad		
* 6 5 *	Upload configuration		
* 6 6 *	Download configuration		
* 6 9 *	Activate parallel mode		
* 8 2 *	Set the OTC institute key		OTC Inst.key
* 8 3 *	System set-up / Pairing		
* 8 4 *	Adjust the brightness of the backlight		

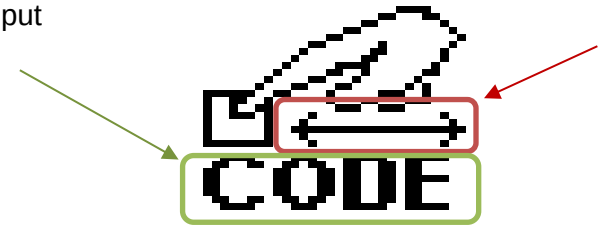
3.3.5 Menu guidance

Whenever the system expects an input, a symbolic hand with an outstretched finger pressing a key is displayed. The abbreviated word indicates the type of information to be entered. The user code is to be entered in the enlarged article shown below.

If a double or replacement arrow is displayed, this is an indication to enter the changed value. In this case, this would correspond to the new user code, i.e. as part of a code change.

Note:
What kind of input is expected

Note:
Enter a modified value



List of input prompts:

ID	↔ ID	ID	User administration	User ID, enter new ID, enter ID to be deleted
CODE	CODE			User code, enter new user code
				Enter profile number
			Immediate lock	Enter lock time
			Delay time	Lock time, enter opening window duration
				Enter date and time
CODE	Ch. A	00↔01	Parallel mode	Activate code doubling, parallel mode for channels A (B), automatic. Adress change
locks			Setup	Number of locks
box				Signal box (yes / no)
ISK	↔ISK			Installation key, enter new installation key
gate				Gateway (yes / no)
OTC	↔OTC			Institute key, enter new inst. key for OTC calculation
Kpad				Additional keypad (yes / no)

3.3.6 Error messages

The successful completion of a menu process is acknowledged with a sequence of tones increasing in pitch and with the ✓ symbol.

A rejection or an error will lead to the display of the ✕ symbol and a two-digit error code if there is no proprietary error symbol for the specific case.

Error list:

Message			Description
Invalid user ID	00		User is not active or does not have the required rights in the command context
Invalid user code	01		Code input length incorrect
Incorrect code	02		Incorrect code
Input error	03		Generally, the input resulted in a cancellation. This can result from a range being exceeded or an incorrect format.
Lock time running	04		The system has been temporarily locked because of the repeated input of an incorrect code.
Delay time running	05		Code input to open was rejected due to a delay time in progress. Repeat the input in the opening window
External lock	06		A lock process was prevented due to a pending lock signal
Invalid dual code	07		Code entry was aborted because at least one code is wrong
No profile right	08		The user does not have the required right to execute a command
A lock process was prevented due to a pending lock signal	09		The code lifetime has expired. Depending on the configuration, the code can be reused by changing it.
Weekly program – restriction	0A		Operation is only possible within the defined time window for users to whom a WP is assigned via the configuration.
Invalid profile	0B		The user is linked to an inactive profile and therefore cannot execute the command.
Locked days – restriction	0C		Operation is locked on the defined calendar days for users who are governed by the restriction due to locked days

Invalid Dallas key	10		The Dallas key used to upload/download does not have the correct identifier. Only Gunnebo keys can be used.
Blocked by days off	11		Access was denied because the user is subject to the "days off" restriction and a special blocking day is currently active.
Protocol error	12		This error is output if there are errors in the communication itself or in the communication sequence. Check the installation!
Incorrect dual code partner	13		The user of the 2nd code cannot resolve the dual code condition due to the associated profile. Jointly open with a user with appropriate rights.
Local configuration error	14		The configuration does not feature consistent data
Immediate lock active	15		The user is not governed by the lock time restriction Opening is only possible once the set time has elapsed.
Denied by lock status	17		A command cannot be executed because one or more locks are not in the required initial state.
Access denied due to parallel code condition	18		User ID cannot be used to open due to parallel code requirement.
OTC for invalid lock	19		The OTC cannot be resolved for the calculated target lock.
OTC rejected due to date setting	1A		OTC was not calculated for the current date.
OTC too many openings	1B		OTC was rejected due to exceeding the number of permitted openings
Invalid OTC dual code	1C		The dual code condition managed via the OTC system could not be resolved.
OTC dual code required	1D		An OTC dual code is required to open the OTC
Battery warning	AB		Change battery as soon as possible
Initial configuration is required	AD		Note during production. Before configuration, the lock must be provided with an initial configuration

Dateninkonsistenz	BE		Hinsichtlich des Nutzermanagement verfügen die Schlösser über einen unterschiedlichen Speicher-inhalt. Zur Nutzung der automatischen Code-dopplung muss eine Synchronisierung erfolgen.
No Dallaskey connected	CA		The command flow expects a connected Dallaskey, but no connection can be established.
Keypad cover open / power supply disconnected			Valid user code to acknowledge the keypad flap closed / Restore the power supply

3.3.7 Status indicators

A data exchange between the bus participants (keyboard, lock, module) is signaled by the display “syncing” and a running storage process is signaled by a diskette symbol.

During these processes, operation is not possible. If a lock is configured for automatic closing in conjunction with a bolt position contact, it will periodically query the input signal for the bolt position contact after the set re-closing time has elapsed.

This process is signalized by

Operation is also not possible for the duration of the display.

3.4 Battery

In general, a system can be powered by battery (9 V LR6) and power supply. The lifetime depends heavily on the bolt load and the type of lock used. For redundant motor locks, supply by the power supply or signal box (customer's 12 V supply) is strongly recommended.

If there is insufficient battery charge or undervoltage, a warning signal is issued after an opening. A warning tone is emitted several times in rapid succession. In this case, change the battery as soon as possible. The programmed codes and audit information are retained while the battery is changed.

The keypad is prepared for a button cell to buffer the date and time. With a buffer battery such as this, the internal clock is also retained even after a longer power outage.

3.5 Interfaces

The locks are pre-equipped for connection of the Gunnebo Alarm box. The signal is assigned via the system configuration.

3.6 Timeout

3.6.1 Timeout input

If there are pauses of longer than 5 seconds between a keystroke and the subsequent keystroke, any entry started is aborted and deleted.

3.6.2 Code input timeout

If two valid codes need to be entered to open or execute a configuration upload command due to a dual code restriction, there can not be more than 30 seconds between the code inputs.

3.7 Penalty time

A penalty time of between 2 minutes (Class II) and 20 minutes (Class IV) is imposed after 4 invalid code inputs. A penalty time is then reimposed after two further incorrect entries until a valid code has been entered.

4 Opening process

Press any key to wake up the keypad. An opening code can be entered without any additional prefix as soon as the key assignment is displayed. Neither the ID nor the code need to be completed by entering the * key.

Key assignment is fixed for input of the user ID. Assignment in Classes C & D is essentially random for code entry.

The opening process or retraction of the bolt can take a few seconds depending on the type of lock and the bolt load. In order to avoid unnecessary bolt loads, only operate the boltwork after receiving the signal that the opening process has been completed.

A multi-lock system is always opened according to a pattern.

(Example 2 Lock system):

1. Address selection, e.g. **01** or alternatively arrow key selection + [OK]
2. Opening sequence as described below
3. Address selection of the next lock to be opened, e.g. **02** or alternatively arrow key selection + [OK]
4. Opening sequence as described below

Each lock is independent of its users and possible restrictions. The profiles and users can be different on both locks.

The configuration can be used to automatically perform the address changeover, i.e. steps 1 and 3. (see Appendix E)

4.1 Opening

The user is authorised to open without additional restrictions.
e.g. User 01, Code 8765432**1**

ID-authorised user

0 1 = ✓

Code-authorised user

8 7 6 5 4 3 2 1 = ✓

Connect the assigned Dallas key to the keypad = ✓

The lock is open. ✓

The key assignment corresponds to the standard assignment for input of the ID number.
Key assignment is random for one input cycle for input of the code digits.
If a Dallas key was assigned to the user as a physical key during set-up (optional), the user is prompted by the DK symbol to present it to a corresponding reader.

The orange-coloured application of the Dallas key may be required as additional authentication after the respective code entry for all the following descriptions of opening processes, if a corresponding key has been assigned when creating the user. This is no longer explicitly shown below.

4.2 Opening with a dual code

For example, user 01, code 43219876 and user 15, code 00708150 are governed by a dual code restriction.

ID-authorised user 1

0 1 = ✓

Code-authorised user

4 3 2 1 9 8 7 6 = ✓

ID-authorised user 2

1 5 = ✓

Code-authorised user

0 0 7 0 8 1 5 0 = ✓

The lock is open. ✓

The key assignment corresponds to the standard assignment for input of the ID number.
Key assignment is random for one input cycle for input of the code digits.

4.3 Opening with active time delay

Example user 04, code 43214321 is authorised to start a delay time. After the delay time, another user 15, code 08151704, opens the lock

ID-authorised user

0 4 = ✓

Code-authorised user

4 3 2 1 4 3 2 1 = ✓

… after the time in the release window has elapsed

ID-authorised user

1 5 = ✓

Code-authorised user

0 8 1 5 1 7 0 4 = ✓

The lock is open. ✓

If the input unit is woken up during the delay time, the symbol for the running delay time is displayed.

In the event of an incorrect entry within the opening window, the function is aborted and must be restarted for an opening.

4.4 Triggering a silent alarm

The user is authorised to open without additional restrictions.
e.g. User 01, Code 87654321, alarm addend 3.

ID-authorised user

0 1 = ✓

Code-authorised user

8 7 6 5 4 3 2 4 = ✓

The lock is open. ✓

If the "silent alarm" is active the last code digit is changed. The calculation is done on the basis of the last digit + alarm addend. If a number is carried over then the units are evaluated:
e.g. code number 9 + alarm addend
2 = 11, so the last digit = 1

The function is only available in conjunction with a Gunnebo alarm box and activated input/output functions.

5 Closing

The system configuration defines whether the re-closure is automatic after a defined period of time or by means of a closing command. The profile definition regulates whether the user can only enter their ID number followed by the * key or whether this can only be done in combination with their valid opening code.

The latter setting is always useful if the audit is intended to make it perfectly clear who initiated the manual closure.

The description of the configuration in Appendix E provides information about the setting made.

In principle, a lock can also be closed by an input before the set re-closing time expires as described.
Except, of course, in applications where configured secondary conditions, such as a bolt contact, are intended to prevent closure.

5.1 Single lock system

For single lock systems, the system is considered secured when the lock bolt is fully extended and secured.

The locking check can be carried out by pressing and holding the OK button or by using the key sequence *74*.

5.2 Multilock systems

In multi-lock systems, not all Gunnebo locks need to be queried separately. The locking status of the entire Gunnebo Locks system can be determined via a collective message: This collective message is displayed by pressing and holding the OK button.

The Gunnebo Locks system is considered secured when the bolts of all Gunnebo locks are fully extended and secured. The locking control can be carried out specifically for individual locks by selecting the address of the addressed Gunnebo lock via *74*.

If the result of a test (individual lock or collective message) is “secured”, a closed padlock is displayed; if the status is “not secured”, an open padlock is displayed.

 = secure  = not secure

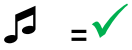
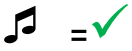
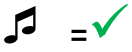
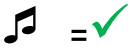
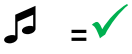
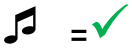
6 Menu functions

The move to a menu or the start of a command can be performed either using the shortcut or via Menu – Navigation. The code length depends on the lock class.

Only 6 digits need to be entered for lock class B / II, therefore the digits 7 and 8 are shown in grey in the command sequences in the examples shown.

6.1 00 Creating a user

e.g. Admin or Master User ID: 00, Code 8765432**1** is created by user 05 with set-up code 1111111**1**

Direct selection using command number *00*	Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *  	The code created is a set-up code. This means that an opening or a command entry is only possible after the user has changed it.
Code-authorised user 8 7 6 5 4 3 2 1 *  	
ID of the new user to be created 0 5 *  	
Enter new user code 1 1 1 1 1 1 1 1 *  	
Repeat new user code 1 1 1 1 1 1 1 1 *  	
Profile number of the new user 0 5 *  	
Code was successfully created	

If a Dallas key is connected during the set-up process, the ID of the Dallas key is read and assigned to the user by entering the profile number at the end of the process. In this case, the user can only open the lock if they hold the physical key to a corresponding reader or if a reader is connected to the keypad with code input.

6.2 01 Changing the code

e.g. user with ID: change 07 code from 12345678 to 11111111

Direct selection using command number *01*	Selection using menu guidance [MENU] [OK]
User ID, e.g. 0 7 * ID ♫ = ✓	Both the user codes and the master code can be changed using the change function.
Enter user code 1 2 3 4 5 6 7 8 * CODE ♫ = ✓	
Enter new user code 1 1 1 1 1 1 1 1 * CODE ♫ = ✓	
Repeat new user code 1 1 1 1 1 1 1 1 * CODE ♫ = ✓	
Code was successfully changed	

6.3 02 Deleting a user

e.g. Admin or Master User ID: 00, Code 87654321 cancels user 05

Direct selection using command number *02*	Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 * ID ♫ = ✓	Warning: The user is deleted by entering the ID number and confirming with the star key. There is no additional prompt.
Code-authorised user 8 7 6 5 4 3 2 1 * CODE ♫ = ✓	
ID for user to be deleted 0 5 * ID ♫ = ✓	
User has been deleted	

6.4 04 Activating time lock

e.g. Admin User ID: 00, Code 87654321 activates the time lock for 5 hours

Direct selection using command number *04*	Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *  = ✓ Enter user code 8 7 6 5 4 3 2 1 *  = ✓ Enter the lock time in hours 0 5 *  = ✓ All the affected profiles are locked for 5 hours	The locking time is entered as two digits in h. Once the time lock has been activated, all users whose profile is affected by this restriction will no longer have access to the system for the set time. It is not possible to cancel the lock time. The lock can only be opened by the users of unrestricted profiles.

6.5 21 Setting the opening delay

e.g. Admin or Master User ID: 00, Code 87654321 sets a delay of 15 minutes with an opening window of 3 minutes for delay profile 0.

Direct selection using command number *21*	Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *  = ✓ Code-authorised user 8 7 6 5 4 3 2 1 *  = ✓ Number of delay profile 0 *  = ✓ Enter delay time 1 5 *  = ✓ Enter opening time 0 3 *  = ✓ The delay time has been set	The times are entered as two digits in minutes. A delay time of 1 to 99 minutes and an opening window of 1 to 19 can be defined. Entering 00 for the delay time deactivates the function.

The delay time profile 4 was activated by input of an alarm code. Regardless of the delay time otherwise assigned, the delay set for delay time 4 is started and, at the same time, the opening time window defined for this purpose is applied after the delay time has expired.

6.6 22 Activating a profile

e.g. User ID: 00, Code 87654321 activates profile 11

Direct selection using command number *2 2 *	**Selection using menu guidance** *[MENU] [OK]*
ID-authorised user 0 0 * ID = ✓ Code-authorised user 8 7 6 5 4 3 2 1 * CODE = ✓ Enter profile number 1 1 * = ✓ Profile 11 has been activated	The profile number is entered as two digits. When a profile is activated, all assigned active users are automatically available.

6.7 23 Deactivating a profile

e.g. User ID: 00, Code 87654321 deactivates profile 11

Direct selection using command number *2 3 *	**Selection using menu guidance** *[MENU] [OK] icon incorrect*
ID-authorised user 0 0 * ID = ✓ Code-authorised user 8 7 6 5 4 3 2 1 * CODE = ✓ Enter profile number 1 1 * = ✓ Profile 11 has been deactivated	The profile number is entered as two digits. When a profile is deactivated, all assigned users are automatically deactivated, but not deleted. They will be available again after re-activation.

6.8 30 Activating I/Os

e.g. User ID: 00, Code 87654321 activates the I/O function
This is only of benefit if a "Gunnebo Alarm box" is connected.

Direct selection using command number *30*	Selection using menu guidance *[MENU]* I/O *[OK]*
ID-authorised user 00 * ID ♪ = ✓ Code-authorised user 87654321 * CODE ♪ = ✓ IO function switched on	When activated, appropriately configured input/output functions become active. This includes, for example, the silent alarm function or the bolt position contact. The input and output functions are activated globally regardless of which lock a signal box is connected to.

6.9 31 Deactivating I/Os

e.g. User ID: 00, Code 87654321 deactivates the I/O function

Direct selection using command number *31*	Selection using menu guidance *[MENU]* I/O *[OK]*
ID-authorised user 00 * ID ♪ = ✓ Code-authorised user 87654321 * CODE ♪ = ✓ IO function switched off	The input and output functions are deactivated globally regardless of which lock the keypad is connected to. Closing restrictions, such as a bolt position contact, are thus also deactivated.

If "Automatic closing" is configured, the lock retracts after deactivating the bolt position contact regardless of the boltwork position.
Moving "to a hard stop" can cause damage to the lock mechanism

6.10 35 Temp. deactivation of boltwork contact

The boltwork contact prevents the locks from closing as long as the boltwork is not in the locking position. If this is defective, it is not possible to lock the safe without configuration, i.e. the PC software. Appropriate administration rights are also required.

With the command below, an authorized user (usually any user authorized to open) can switch off the blockage for a locking process. This temporary deactivation must be carried out separately for each lock.

e.g. User ID: 00, code 87654321 deactivates the locking function of the boltwork contact

Direct selection using command number	Selection using menu guidance
[MENU] 3 5 *[OK]*	
ID-authorised user 0 0 * ID = ✓	The blocking function through the boltwork contact is deactivated once when a lock is closed.
Code-authorised user 8 7 6 5 4 3 2 1 * CODE = ✓	

Blocking function by boltwork contact switched off.

Before the locking function is “overridden”, the user must check and ensure that the bolt mechanism is actually in the locking position. Otherwise the bolts of the motor locks will block. This can result in mechanical jamming of the bolt or boltwork and damages the lock mechanism.

6.11 61 Entering the date and time

z.B. User ID: 00, Code 87654321 sets the current date and time to 27.10.2023 11:55

Direct selection using command number *21*	Selection using menu guidance [MENU] [OK]
ID-authorised user 00 *  = ✓ Code-authorised user 87654321 *  = ✓ Enter the date as MMDDYY 102723 *  = ✓ Enter the time as hhmm 1155 *  = ✓ Date & time were set	The date is entered in the format MMDDYY (US format). Time format hhmm with 24-hour clock.

6.12 64 Keypad and system check

Direct selection using command number *64*	Selection using menu guidance [MENU] [OK]
Check key 1 1 *  = ✓ Check key 2 2 *  = ✓ … Check key 0 0 *  = ✓	The checking function can be done without entering the ID or code. Lock communication is also checked as well as the key functions. Key assignment is fixed during the keypad check.

6.13 65 Uploading a configuration into the lock

e.g. Admin User ID: 00, Code 8765432**1** uploads a new configuration. It is governed by the dual code restriction. This means that, according to the sample configuration shown, a second user must confirm the command by code input. Here ID 06, Code 1122334**4**

Direct selection using command number (*) 6 5 *			Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *	ID	= ✓	Depending on the user profile, the assigned ranges are overwritten in the memory. If a dual code restriction is set up, a second user assigned according to the configuration with the right to upload must enter the ID and their code as confirmation. The step highlighted in orange is omitted without dual code restriction.
Code-authorised user 8 7 6 5 4 3 2 1 *	CODE	= ✓	
Prompt to enter the dual code			
ID of confirming user 0 6 *	ID	= ✓	
Code of confirming user 8 7 6 5 4 3 2 1 *	CODE	= ✓	
Input prompt to present the Dallas key or interface to start serial transfer			Progress indicator + acoustic feedback (periodic beeps) during transfer

6.14 66 Downloading the configuration from the lock

e.g. User ID: 00, Code 87654321 downloads a configuration from the lock.

Direct selection using command number *66*		Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *	ID = ✓	The lock configuration is read back from the lock and stored on the Dallas key or output to the UART.
Code-authorised user 8 7 6 5 4 3 2 1 *	CODE = ✓	
Input prompt to present the Dallas key or interface to start serial transfer		Progress indicator + acoustic feedback during transfer

6.15 66 Downloading the audit from the lock

The lock's audit memory records 2000 events in a ring buffer. If a Dallas key is used to transport data, it can only be read out in 2 blocks due to the storage limitations of the transport medium. The command *67* should be used for the first block and the command *68* should be used for events 1001 to 2000.

Alternatively, it is possible to read out the audit on a PC using the DataConnect cable via the serial connection in the keyboard cover head. The reading process starts automatically when the command *67* is entered and the connection is established.

e.g. User ID: 00, Code 87654321 downloads the audit from the lock.

Direct selection using command number *67*		Selection using menu guidance [MENU] [OK]
ID-authorised user 0 0 *	ID = ✓	The audit is read back from the lock and stored on the Dallas key or output to the UART.
Code-authorised user 8 7 6 5 4 3 2 1 *	CODE = ✓	
Input prompt to present the Dallas key or interface to start serial transfer		Progress indicator + acoustic feedback during transfer

Uploading and downloading configurations and audit histories always needs to be done per lock. The data is individual for each lock.

6.16 69 Activation of parallel mode

To open a safe when parallel mode is active, at least two users with opening authorization must be set up on both locks (address 00 and 01) and the associated channel.

e.g. User ID: 00, Code 87654321 activates parallel mode only for channel A. The executing user must have general upload rights.

Direct selection using command number			Selection using menu guidance
[*] [6] [9] [*]			[MENU] [OK]
ID-authorised user [0] [0] [*]	ID	= ✓	After authorization, you will be asked whether parallel mode can be activated for both channels and whether code duplication, i.e. changing codes, creating and deleting users as well as that (De-)activation of users should be done automatically. Automatic code doubling should only be activated if it is ensured that the user management on both locks is identical.
Code-authorised user [8] [7] [6] [5] [4] [3] [2] [1] [*]	CODE	= ✓	
Activation of parallel mode for ch. A yes [1] / no [0] [1] [*]	Ch. A	= ✓	
Activation of parallel mode for ch. B yes [1] / no [0] [0] [*]	Ch. B	= ✓	
Automatic code duplication yes [1] / no [0] [1] [*]	CODE	= ✓	
Automatic adress change yes [1] / no [0] [1] [*]	00↔01	= ✓	
Parallel mode activated for channel A with automatic code doubling and address change	✓		

The term “automatic code duplication” implies the duplicate execution of all administrative user management commands. This means that the functions of creating users, deleting users and changing a code by the user as well as (de)activating profiles are always carried out on both locks (address 00 and 01). Regardless of which target address the input unit is currently set to, the command is always executed in the order first lock address 00 and then 01.

6.18 73 Output of date and time

Direct selection using command number *73*		Selection using menu guidance [MENU] [OK]
Display output, e.g. for 27. Of Oct. 2024	10/27/24 11:55	The date and time is output using the RTC format. MMDDYY hh:mm

6.19 74 Output of bolt position

Direct selection using command number *74*		Selection using menu guidance [MENU] [OK]
Open		Secured is only displayed when the bolt is fully extended and locked.
Secured		

If a signal box is connected to the lock from which the bolt position is queried, the switching status of the inputs and outputs is displayed. The display is independent of the assigned signal function.

For an input, a filled circle means that the associated optocoupler is energized (LED on the signal box lights up), i.e. the input is set. Similarly, a filled circle at an output indicates that the associated relay has been switched.

Input 1: set,
Input 2: not set

Output 1: Relais switched,
Output 2 and 3: Relais not switched

6.20 82 Setting the OTC institute key

The function is only available in the S-00108 configuration and when a Gunnebo OTC module is connected. The key exchange is solely related to the module and thus applies throughout the system.

The institute key represents the calculation basis for the OTC algorithm. This needs to match the institute key entered in the generator database.

Direct selection using command number *8 2 *	**Selection using menu guidance** *[MENU]* OTC Inst.key *[OK]*
Enter the institute key 0 0 0 0 0 0 0 0 0 0 *	No user authentication is needed to set up the institute key. It is replaced by comparing it with the key already entered. Use the factory key (10x "0") with new systems.
Enter new institute key 0 8 1 5 0 0 4 7 1 1 *	
Repeat new institute key 0 8 1 5 0 0 4 7 1 1 *	
Set-up completed, pairing successful	

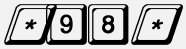
6.21 83 System set-up / pairing

e.g. Admin or Master User ID: 00, Code 87654321 effects the set-up for a new redundant 2 lock system, with a signal box on the first lock and OTC module

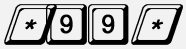
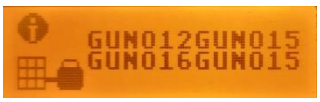
Direct selection using command number *83*			Selection using menu guidance [MENU] [OK]
ID-authorised user 00 *	ID	♫ = ✓	After authorisation, the system topology is requested. This means how many locks are used in combination with how many modules. The lock types are determined as part of the automated pairing process. There is therefore no need to pre-select the lock type. The locks are factory-supplied with an installation key 10x "0". Should a new pairing be needed, for instance following a component replacement or if the topology is changed due to the expansion of the system, the last assigned installation key will be needed to initiate the pairing process.
Code-authorised user 87654321 *	CODE	♫ = ✓	
Number of locks 02 *	locks	♫ = ✓	
Lock 1 signal box yes 1 / no 0 1 *	box	♫ = ✓	
Lock 2 signal box yes 1 / no 0 0 *	box	♫ = ✓	
Second keypad yes 1 / no 0 0 *	Kpad	♫ = ✓	
Gateway yes 1 / no 0 0 *	gate	♫ = ✓	
OTC module yes 1 / no 0 1 *	OTC	♫ = ✓	
Enter installation key 0000000000 *	ISK	♫ = ✓	
Enter new installation key 0190170533 *	↔ISK	♫ = ✓	
Repeat new installation key 0190170533 *	↔ISK	♫ = ✓	
Set-up completed, pairing successful	✓		

Store the installation key securely. Components can only be replaced and the pairing cancelled with the installation key last used.

6.22 98 Output identifier / configuration hash code

Direct selection using command number	Selection using menu guidance
	*[MENU]*  *[OK]*
e.g. 	The information corresponds to the initially installed version. Here configuration S-00108. Hash code of configuration BA80A0B9

6.23 99 Output of keypad firmware version / addressed lock

Direct selection using command number	Selection using menu guidance
	*[MENU]*  *[OK]*
z.B. 	The version markings allow reconstruction of the delivered state. The upper character string determines the version of the keyboard firmware, the lower one that of the lock.