

## Examples demonstrating the capabilities of “lock+Lock-security” locking systems

1. You go through your allotment garden together with a stranger. Approaching the front door of your country house, you take out a key, for example, hidden under the mat on the porch and open the front door lock with it.

But if this visitor tries to open the lock using the same key without you, he won't succeed, and your cell phone will receive an SMS-message such as “*Alert! Lock breaking attempt*”. It will be duplicated by a call without the need to pick up the phone which should immediately draw your attention to this particular SMS. This unsuccessful attempt is explained by the fact that he did not notice how you stepped on the moisture-resistant pushbutton hidden under the grass (for example) as you approached the house.

As a result the lock deadbolt was immediately unblocked for the pre-programmed time (of between 5 and 250 seconds) during which it is necessary to open the lock.

But if someone - without pressing the hidden pushbutton - moves the deadbolt even slightly, the blocking device will immediately send the above alarm SMS message to the programmatically set phone, as well as will turn on a remote siren to scare the intruder away.

2. Lockmasters know that a lock like *Guardian 12.01* can be lockpicked by a professional in manipulative methods of breaking mechanical locks in a matter of minutes.

And even breaking the locks of the 4th (highest!) security class is possible in just 30 minutes (see clause 5.7.4.1 of the Interstate standard GOST 5089-2011 “*Locks, latches, cylinder mechanisms. Technical conditions*”).

But we gave them an hour of time to unblock the deadbolt and open the lock, working as part of the “*Guardian 12.01+Lock-security*” locking system. Moreover, they were allowed to use not only any non-destructive lock tools, skeleton keys and instruments, but even the regular key for the lock. After the professionals had failed, our employee unblocked the deadbolt and opened the lock with this key for about one minute.

To the quite expected question: “*Is this possible?*” we will answer without hesitation “Yes, it is”. And we add that anyone who knows the “*Lock-security*” device will refuse almost certainly to participate in this experiment even if a primitive bolt is used instead of a lock.

3. Among the 10 operation modes of the innovative blocking device, there is, for example, one that increases the secrecy of the “lock+Lock-security” locking system to a level far higher than that of ATMs. In this mode to open the lock you should successfully overcome 4 security thresholds:

- call the blocking device from a mobile phone registered in the memory of its control unit;
- enter a PIN code consisting of several digits, sending them to the blocking device as DTMF commands;
- bring the RFID card to the reader activated by the previous steps, as a result the lock deadbolt will be unblocked;
- open the lock with its regular key.

While withdrawing money from an ATM it is enough to cross only 2 security thresholds:

- identify a bank card by inserting it into the ATM reader;
- enter a PIN code, usually consisting of 4 digits.

After 2-6 incorrect attempts to enter the PIN code or RFID-cards (the number is assigned when programming “*Lock-security*”), the device will raise the alarm and will ignore further unblocking attempts for a programmatically set time (for instance, between 5 and 250 minutes).

4. And finally, if the degree of secrecy of the locking system described in the previous example is seemed insufficient for someone, an additional electromechanical lock (e.g., *CISA 1A731*) can be installed at the door. It will be opened by an electric signal coming from the relay output of the “*Lock-security*” after this device receives another DTMF command (thus, this is already the 5th security threshold!).

Detailed information about the innovative door locking system with the “*Lock-security*” low-budget multifunctional autonomous blocking device can be found here: <https://hag.com.ua/index.php?p=62>.