

Identification by reading 2 iButton keys

Task:

Simultaneous identification of driver and trailer using iButton.



Using the MyLogic script in UMK trackers

The script checks for the presence of 2 iButton keys. The ownership of the key is carried out according to the following principle:

If the read value of one of the keys is greater than or equal to 1,000,000, then it is accepted as a driver key; if the key value is in the range from 1 to 999,999, then it is accepted as a trailer key.

If one of the keys is not read or is not transmitted for more than 5 seconds, then 0 is transmitted in the corresponding parameter. When connecting, changing the value, or if the value of the key is not read for more than 5 seconds (the key is disabled), an extraordinary point is generated.

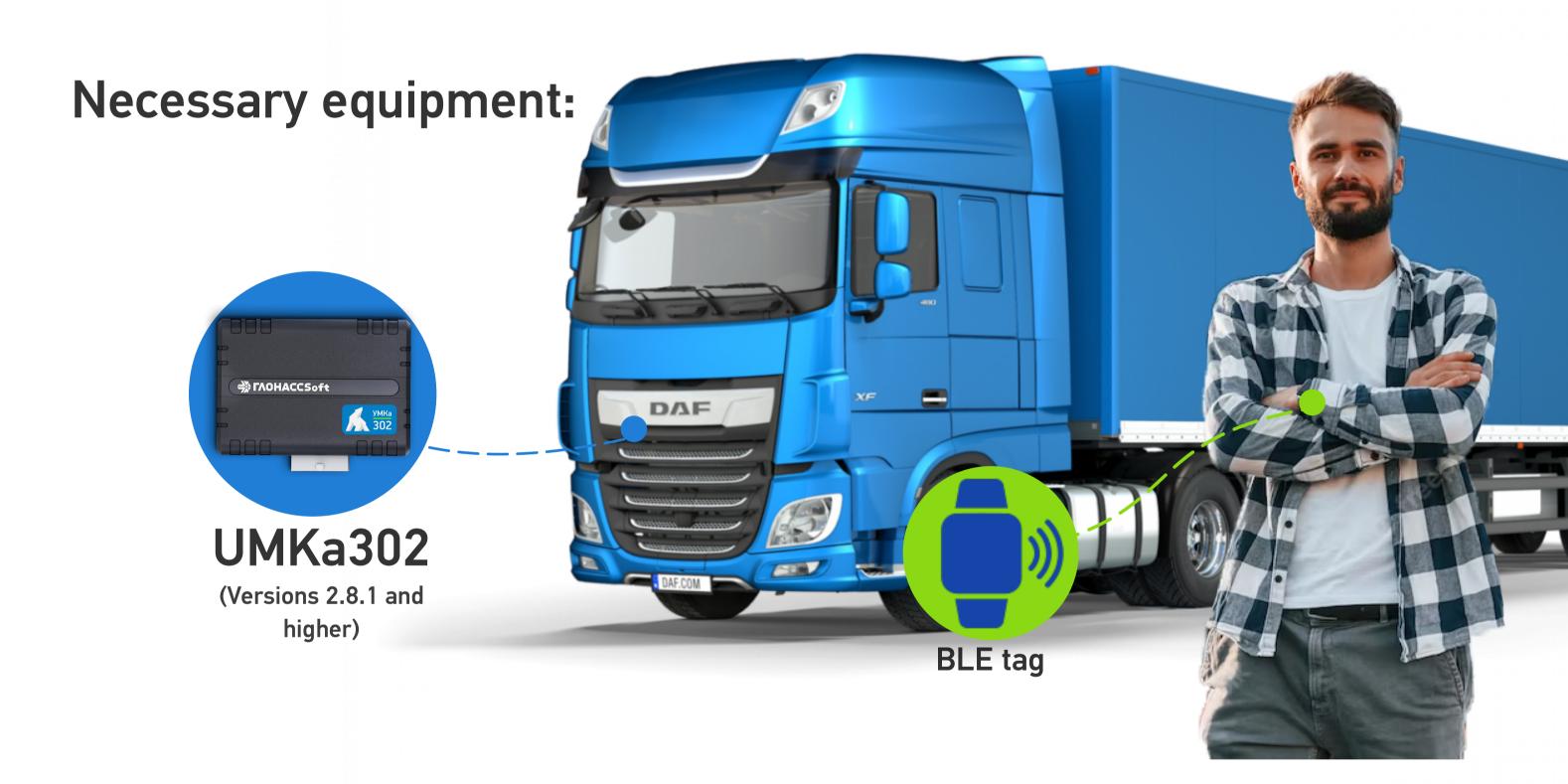




Driver authorization using BLE tag

Task:

Identification of drivers by BLE tag.



Using the MyLogic script in UMK trackers

The driver with the BLE tag opens the car and turns on the ignition. The UMKa302 tracker authorizes the driver by finding his tag. Authorization notification - a short buzzer signal.

An authorized driver makes a trip, and the presence of an authorized tag is constantly monitored.

After completing the trip, the driver turns off the ignition and a 5-minute timer starts, after which the driver is removed from the site and can re-authorize according to paragraph 1.

"Service mode" is provided. Upon receipt of the appropriate command, UMKa302 turns off the buzzer and operates without driver authorization.

If the driver's tag is not detected in steps 1 and 2, when driving above 10 km/h the buzzer turns on and does not go off until the driver is assigned.





Issuing a certain amount of fuel using RFID cards

Task:

Control of fuel dispensing using RFID cards.



Using the MyLogic script in UMK trackers

When dispensing fuel, the driver inserts the driver card into the UMKa200 RFID reader. When the card is installed, the blockage from the fuel supply valve is removed. This is indicated by the fuel dispensing indicator (connected to the discrete output of the reader). If the limit is reached, the valve is blocked (when a card with the limit has been reached is applied, the indicator blinks three times) and fuel dispensing stops. The next time you can use the card in an hour.

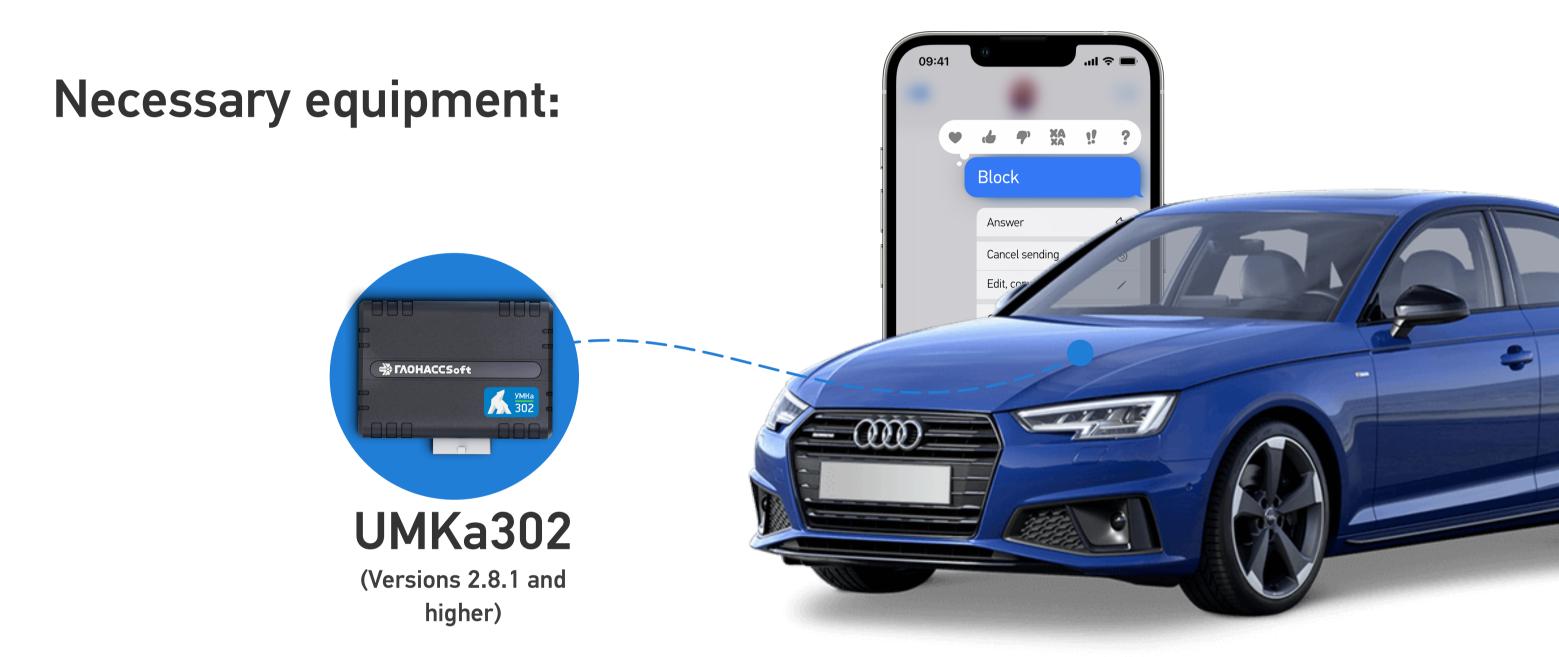




Engine blocking control via SMS commands

Task:

Engine blocking control using SMS commands.



Using the MyLogic script in UMK trackers

Reception of commands and transmission of responses to them is carried out via SMS messages.

- If the blocking command is received, check the presence of the ignition to ensure that the engine is running.
- If the engine is started (there is an ignition signal), wait for it to turn off and then activate the lock.
- If the engine is not started, we turn on the blocking by activating the discrete output.
- Receiving the unlock command deactivates the discrete output.
- There is support for commands for requesting the status of the current and required engine blocking.

Commands (not case sensitive):

- BLK block the engine (response to the command: "ENGINE BLOCKING").
- UNBLK deactivate engine blocking (response to command: "ENGINE UNBLOCKED").
- CSTAT request the status of the required mode response format: "block command status: 0/1" (1 block activation, 0 deactivation).
- ESTAT request the current state of the engine; response format: "engine blocked status: 0/1" (1 blocked, 0 unblocked).





Engine blocking control based on breathalyzer data

Task:

Verification of the driver using the iButton key and blocking of the vehicle when the fact of alcohol intoxication of the driver is detected using an on-board breathalyzer.



iButton key

Using the MyLogic script in UMK trackers

The script implements driver verification using an iButton key and vehicle blocking when the fact of driver intoxication is detected using an on-board breathalyzer.

Script algorithm:

- 1. When started, the script blocks the vehicle engine by activating the OUTO output.
- 2. The script checks for the presence of voltage at the discrete input DINO (the presence of voltage at the input means the vehicle ignition is turned on). If there is no voltage, the test is repeated.
- 3. If the voltage at IN2 is above the logical one threshold, the iButton value of the driver key is checked using the iButton reader connected to the terminal.
- If the key value is zero or not received, the check is repeated.
- 4. If the iButton value of the driver key is received and is not equal to zero, the breathalyzer's functionality is checked: at the analog input AINO to which the device is connected, a voltage of 0.5 V should be present during its operation. If the voltage is below this threshold, the voltage check on AINO is repeated.
- 5. If the voltage at AINO is greater than or equal to 0.5 V, a pause of 5 minutes is waited to "warm up" the breathalyzer. Then the voltage value at AINO is read again. If the received voltage value is in the range of 0.6 1.9 V, the engine blocking is disabled (the output of the OUTO terminal is deactivated). If the voltage at AINO is more than 1.9 V, the engine blocking is not disabled.

When the ignition is turned off, the algorithm begins execution from point 2.

