

KEETEC®

⚠ WARNING: Carefully read following instructions and technical specifications in this manual before installation. The device must be installed and used only according to this manual. The device is designed for vehicles with 12V/24V power supply. It has to be connected to 12V/24 output and to the ground. Neither producer nor seller of the system is responsible for damages caused by incorrect installation, using or operating of this product. Unprofessional operation or modification of the system can damage the system alone, or the electric system of the vehicle and leads to warranty loss. For proper working of the system we recommend the installation to be made by authorized service.

I. SYSTEM DESCRIPTION

KEETEC TS CAN car alarm is designed for vehicles with 12/24V power supply. It is used to monitor doors, trunk and hood. After disruption the system indicates alert by optical signaling (hazard lights) and sound signaling (siren). TS CAN is operated by using the original remote control or it can be controlled by the additional module RF Smart and the remote control RC Smart. The system can be connected to vehicle by analogue connection or CAN Bus connection. Can bus provides the information about doors, trunk or hood opening, locking/unlocking the vehicle by remote control. Set up function F9, F10, F11 depending upon the type of connection.

II. SYSTEM INSTALLATION

Remove plastic covers from the car dashboard. Find cables for car alarm connection. Use a digital multimeter to test the function of cables in vehicle, even if you are sure which function the specific cable does have. After choosing the right cables, disconnect the car battery and connect the car alarm cable harness to cables according to the wiring diagrams attached. Solder and isolate all connections. After finishing the car alarm installation, connect the car battery and plug in a fuse to the fuse cover of the car alarm. Test correct functionality of the car alarm and the electrical installation of the car (ignition, hazard lights,...). Mount the plastic covers back on to the dashboard.

ATTENTION: It is necessary to adjust the settings in the car alarm when connecting to a vehicle with 24V power supply. This needs to be done prior to connection to 24V, either by PC program with USB connection or by connecting the alarm to 12V and setting to 24V with the button.

NOTE: The immobilizer relay is out of order when using 24V system. Blocking is possible with an additional relay (not supplied with the alarm) controlled by programmable output.

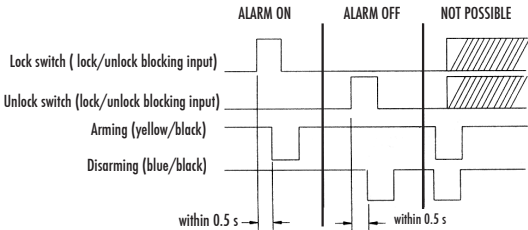
CONTROL UNIT AND LED LOCATION

Place the control unit from the inner side of protection plastics of the car dashboard. Place the LED diode on a well visible place to have access to the service button.

ATTENTION: Keep the maximum current loading on outputs allowed. For controlling a higher current loading, please use additional devices (R1215, IMO 15).

III. ANALOGUE CONNECTION TO CENTRAL LOCKING SYSTEM

If vehicle is not equipped with CAN BUS or it is not in the list of supported vehicles, it is possible to connect the system by analogue and connect it to the central locking system in two ways. Variant A or variant B.



VARIANT A

3 wires need to be connected for the proper functionality and the car alarm arming/disarming. Connect the yellow/black to the wire with +12/24V impulse at locking, the blue/black to the wire with +12/24V impulse at unlocking. Most of the vehicles have switches in actuators to control the central locking system. Connect the lock/unlock switch signal through rectifier diodes (IN4007 - not supplied with the alarm) to the lock/unlock blocking input to prevent the car alarm from arming/disarming when the car key is mechanically used in the lock. This wire is automatically set to the function lock/unlock blocking. The lock/unlock switch polarity is adjustable +/- (default setting is ~-). Connecting the lock/unlock blocking input is important for the alarm arming/disarming only when using remote control for central locking system.

VARIANT B

1.If hazard lights flashing only at locking/unlocking of the central locking system by remote control, you just need to connect yellow/black and blue/black wires. Connect the yellow/black to the wire with + impulse at locking. Connect the blue/black to hazard lights. When using variant B, connect the optical signaling to parking

lights!

2. If hazard lights flashing at locking/unlocking of the central locking system by remote control, it is necessary to set up the programmable input via PC setup to the lock/unlock blocking function and to opt input polarity +/- .There are switches in actuators to control the central locking system. To prevent the car alarm from arming/disarming when the car key is mechanically used in the lock, connect the lock/unlock switch signal through rectifier diodes to the programmable input where the lock/unlock blocking function needs to be set. For proper car alarm functioning it is necessary to program the system to lock and unlock sequences of sensing signals. For some vehicles, lock and unlock take effect after 4 seconds or more, the system accepts only positive (plus) impulses in this mode.

PROCEDURE FOR PROGRAMMING OF ALARM SWITCH OFF - VARIANT B

1. Activate service mode
 2. Close doors and lock the vehicle. Turn the ignition on (alarm is disabled) and press theprogramming button 9 times within 10 seconds (Alarm is disabled when connecting to power supply for the first time).
 3. Turn off ignition, siren beeps 2 times and LED is flashing,
 4. Now unlock the vehicle within 10 seconds from the point 3.
 5. Siren beeps 2 times to confirm programming.
- If the system cannot learn the unlocking sequence, siren beeps 3 times

NOTE: Always press the button on remote control only once! Pressing the button more than one time can cause wrong programming. Always program the unlock sequence first. If not, it may cause difficult disarming.

PROCEDURE FOR PROGRAMMING OF ALARM SWITCH ON - VARIANT B

1. Activate service mode, close doors. Turn the ignition on and press the programming button 8 times within 10 seconds.
 2. Turn off the ignition, siren beeps 1 time and LED is flashing.
 3. Lock the vehicle with remote control within 10 seconds.
 4. Siren beeps 2 times to confirm programming.
- If the system cannot learn the unlocking sequence, siren beeps 3 times

NOTE: Always press the button on remote control only once! Pressing the button more than one time can cause wrong programming.

IV. CONNECTING THE SYSTEM TO CAN BUS

When the system is connected to CAN BUS, it reads all the information from this bus. Please check the list of supported vehicles if your vehicle is ready for CAN BUS installation and is compatible with this system. If your vehicle is in the list, check what information is available from CAN BUS (doors, trunk, hood open, locking/unlocking, turn on ignition, hazard lights, close windows, etc.). Connect by analogue where the information is not available. Some vehicles have the same information about locking/unlocking when using RC or key on CAN BUS. In this case, set the inputs like the lock/unlock blocking and connect equally as connected by analogue so if you unlock the central locking system by key, the car alarm will not be deactivated. For proper functioning of the system it is necessary to enter three digit code of the vehicle that can be found in the list of supported vehicles

V. ENTERING THE CODE USING CAN BUS CONNECTION

Find the three digit code of your vehicle in the list of supported vehicles for reading and the code for writing and remember them.

- In deactivated mode press and hold the service button for 10 seconds until the LED switches on.
- Release the button and by pressing the button enter the first digit of the vehicle code. After each button pressing the LED flashes. After entering the first digit the LED flashes quickly.
- Now you can enter the second digit of the vehicle code.By pressing the button enter the second digit of the vehicle code. After each button pressing the LED flashes. After entering the second digit the LED flashes quickly.
- Now you can enter the third digit of the vehicle code.By pressing the button enter the third digit of the vehicle code. After each button pressing the LED flashes. After entering the third digit the LED flashes quickly and the vehicle code is already programmed.If the led starts flashing again after the quick flashing you entered a code that is not in the list of supported vehicles.

NOTE: Digit „0“ is entered by pressing the button 10 times

VI. SYSTEM FUNCTIONS PROGRAMMING

Follow these steps when programming functions:

1. Activate the service mode (see section VIII)
2. Turn on ignition and press the service button 7 times within 10 seconds
3. Turn off ignition, LED flashes 3 times
4. Push the valet button as many times as it corresponds to the first digit of the function you want to set up. The LED will flash 3 times.
5. Push the valet button as many times as it corresponds to the second digit of the function you want to set up. The LED will flash 3 times.
6. Siren beeps once or 2 times depending upon which function is set.The alarm returns to the service mode. If you want to set up other functions, repeat the procedure starting from the step 2.

NOTE: For functions F01 to F09 it is necessary to enter the first digit as zero. Digit „0“ is entered by pressing the button 10 times.

For setting the functions F17-F22 (input/output settings) follow these steps:
After entering codes F17-F22, the Led long flash indicates a query to enter a code for input/output. After successful setup the system restarts and siren beeps once. After entering a wrong code or attempting to set up IN1-IN3 as output, siren beeps 5 times.

VII. FUNCTIONS TABLE NO.1

PROG. MENU	FUNCTIO	FACTORY SETTINGS 1 SIREN BEEP	ADJUSTABLE 2 SIREN BEEPS
F01	power supply 12V / 24V	12V	24V
F02	write CAN BUS - hazard lights	disabled	enabled
F03	write CAN BUS - windows roll-up	disabled	enabled
F04	not read from CAN BUS - doors	disabled	enabled
F05	not read from CAN BUS - hood	disabled	enabled
F06	not read from CAN BUS - trunk	disabled	enabled
F07	not read from CAN BUS - ignition	disabled	enabled
F08	not read from CAN BUS - hazard lights	disabled	enabled
F09	lock/unlock sens-ing	see the table of default inputs/ outputs	CAN BUS factory settings
F10	lock/unlock sens-ing	see the table of default inputs/ outputs	by analogue variant A - adjustable
F11	lock/unlock sens-ing	see the table of default inputs/ outputs	by analogue variant B - adjustable
F12	lock/unlock sens-ing	see the table of default inputs/ outputs	RF Smart adjustable
F13	immobilizer circuit contacts	NC	NO
F14	hazard lights output	+12V analogue	-
F15	hazard lights output	-	+12V sequential
F16	hazard lights output	-	0V sequential
F17	setting IN1	via 2 digit code see the settings table	
F18	setting IN2	via 2 digit code see the settings table	
F19	setting IN3	via 2 digit code see the settings table	
F20	setting IN4/OUT1	via 2 digit code see the settings table	
F21	setting IN5/OUT2	via 2 digit code see the settings table	
F22	setting IN6/OUT3	via 2 digit code see the settings table	
F23	input IN1 polarity	(+)	(-)
F24	input IN2 polarity	(+)	(-)
F25	input IN3 polarity	(+)	(-)
F26	input polarity IN / OUT1	(+)	(-)
F27	input polarity IN / OUT2	(+)	(-)
F28	input polarity IN / OUT3	(+)	(-)
F29	input activation delay	5 seconds	40 seconds

F30	automatic rearm-ing	disabled	enabled
F31	passive system activation	disabled	enabled
F32	activation after trunk closing	disabled	enabled
F33	optical signaling when arming / disarming	not active	active
F34	silent / loud activation	silent	loud
F35	system activation reminder	OFF	ON
F36	siren output	siren permanently switched on	horn switched on in short intervals
F37	quiet siren	disabled	enabled
F38	trunk bypass	3 seconds	1 minute
F39	RF SMART silent mode	disabled	enabled
F40	RF SMART	disabled	-
F41	RF SMART	-	basic blocking ANTI HI JACK
F42	RF SMART	-	basic blocking + arm/disarm by button pressing
F43	RF SMART	-	basic blocking + arm/disarm by approach/retreat
F44	RF SMART	-	basic blocking + arm/disarm by approach/retreat + ANTI HI JACK
F45	Anti Hi Jack up to 10km/h	blocking can be activated anytime	blocking can be activated only under 10 km/h
F46	silent alarm	disabled	enabled
F47	double unlock impulse	disabled	enabled
F99	factory settings		

NOTE: If the system is set with the valet button (CAN BUS, Variant A by analogue, Variant B by analogue, NONE), the programmable inputs and outputs are automatically preset - they vary in each of 4 modes as they are designed to make installing easier either by CAN BUS or by analogue.

F01. POWER SUPPLY 12V / 24V
DEFAULT: 12V.
ADJUSTABLE: 24V, immobilizer relay is inactive, immobilizing can be achieved by the alarm status output.

F02. WRITING TO CAN BUS - HAZARD LIGHTS
DEFAULT: writing to CAN BUS disabled.

ADJUSTABLE: writing to CAN BUS enabled for hazard lights

F03. WRITING TO CAN BUS - WINDOWS ROLL UP
DEFAULT: writing to CAN BUS disabled.

ADJUSTABLE: writing to CAN BUS enabled for windows roll up

F04. NOT READ FROM CAN BUS - DOORS
DEFAULT: reading information of opened doors from CAN BUS enabled.

ADJUSTABLE: reading information of opened doors from CAN BUS disabled – sensing needs to be done by analogue.

F05. NOT READ FROM CAN BUS - HOOD
DEFAULT: reading information of opened hood from CAN BUS enabled.

ADJUSTABLE: reading information of opened hood from CAN BUS disabled – sensing needs to be done by analogue.

F06. NOT READ FROM CAN BUS - TRUNK
DEFAULT: reading information of opened trunk from CAN BUS enabled.

ADJUSTABLE: reading information of opened trunk from CAN BUS disabled – sensing needs to be done by analogue..

F07. NOT READ FROM CAN BUS - IGNITION
DEFAULT: reading information of ignition from CAN BUS enabled.

ADJUSTABLE: reading information of ignition from CAN BUS disabled – sensing needs to be done by analogue.

F08. NOT READ FROM CAN BUS - HAZARD LIGHTS
DEFAULT: reading information of hazard lights from CAN BUS enabled.

ADJUSTABLE: reading information of hazard lights from CAN BUS disabled – sensing needs to be done by analogue.

F09. LOCK/UNLOCK SENSING
DEFAULT: inputs and outputs are set according to the table of default settings

F10. LOCK/UNLOCK SENSING
DEFAULT: inputs and outputs are set according to the table of default settings

ADJUSTABLE: by analogue variant A

F11. LOCK/UNLOCK SENSING
DEFAULT: inputs and outputs are set according to the table of default settings

ADJUSTABLE: by analogue variant B

F12. LOCK/UNLOCK SENSING
DEFAULT: inputs and outputs are set according to the table of default settings

ADJUSTABLE: RF Smart – arming and disarming only with RF SMART.

F13. IMMOBILIZATION CIRCUIT CONTACTS
DEFAULT: NC - immobilization circuit is connected to COM and NC (circuit is disabled if you turn ignition on when alarm is activated).

ADJUSTABLE: NO - immobilization circuit is connected to COM and NO (circuit is permanently disabled. It turns on only when you turn on ignition and alarm is deactivated)

F14. HAZARD LIGHTS OUTPUT
DEFAULT: +12V by analogue

F15. HAZARD LIGHTS OUTPUT
ADJUSTABLE: +12V sequential

F16. HAZARD LIGHTS OUTPUT
ADJUSTABLE: 0V sequential.

F17. SETTING IN1 via 2 digit code see the inputs/outputs settings table.

F18. SETTING IN2 via 2 digit code see the inputs/outputs settings table.

F19. SETTING IN3 via 2 digit code see the inputs/outputs settings table.

F20. SETTING IN4 / OUT1 via 2 digit code see the inputs/outputs settings table.

F21. SETTING IN5 / OUT2 via 2 digit code see the inputs/outputs settings table.

F22. SETTING IN6 / OUT3 via 2 digit code see the inputs/outputs settings table.

F23. POLARITY IN1
DEFAULT: (+)
ADJUSTABLE: (-)

F24. POLARITY IN2
DEFAULT: (+)
ADJUSTABLE: (-)

F25. POLARITY IN3
DEFAULT: (+)
ADJUSTABLE: (-)

F26. POLARITY IN / OUT1
DEFAULT: (+)
ADJUSTABLE: (-)

F27.POLARITY IN / OUT2
DEFAULT: (+)
ADJUSTABLE: (-)

F28. POLARITY IN / OUT3
DEFAULT: (+)
ADJUSTABLE: (-)

F29. INPUTS ACTIVATION DELAY
DEFAULT: inputs active after 5 seconds.

ADJUSTABLE: inputs active after 40 seconds.

F30. AUTOMATIC REARMIG
DEFAULT: disabled

ADJUSTABLE: enabled. The system rearms after 30 seconds unless any of the doors

is open.

F31. PASIVE SYSTEM ACTIVATION
DEFAULT: disabled.

ADJUSTABLE: the systems rearms automatically after 30 seconds when ignition is turned off and all doors are closed.

F32. AUTOMATIC ACTIVATION AFTER TRUNK CLOSING
DEFAULT: disabled - car alarm is not activated after trunk closing.

ADJUSTABLE: enabled - car alarm is activated after trunk closing after 30 seconds.

F33. OPTICAL SIGNALING WHEN ARMING / DISARMING
DEFAULT: disabled.

ADJUSTABLE: enabled.

F34. SILENT / LOUD ACTIVATION
DEFAULT: siren does not beep when arming/disarming.

ADJUSTABLE: siren beeps when arming/disarming.

F35. SYSTEM ACTIVATION REMINDER
DEFAULT: reminder is disabled.

ADJUSTABLE: when ignition is off, siren beeps two times after 10 seconds since the last door is closed.

F36. SIREN OUTPUT
DEFAULT: siren is permanently switched on.

ADJUSTABLE: horn switched on in short intervals.

F37. QUIET SIREN
DEFAULT: confirming signals and alarm in normal volume level.

ADJUSTABLE: confirming signals in lower volume , alarm in normal volume level.

F38. TRUNK BYPASS
(e.g. Ducato, Boxer,... - trunk control input connected).

DEFAULT: alarm is not triggered when trunk is unlocked with OEM remote control and opened within 3 seconds.

ADJUSTABLE: alarm is not triggered when trunk is unlocked with OEM remote control and opened within 1 minute. If opened after 1 minute, alarm is triggered.

F39. RF SMART SILENT MODE
DEFAULT: if RF SMART is not read within 20 seconds from unlocking, blocking remains active but siren is not beeping. Output pager is activated.

ADJUSTABLE: if RF SMART is not read within 20 seconds from unlocking, blocking remains active and siren is beeping. Output pager is activated.

F40. RF SMART ADDITIONAL PROTECTION
DEFAULT: disabled. Only basic blocking active when keyfob is not present.

F41. RF SMART ADDITIONAL PROTECTION
ADJUSTABLE: basic blocking + ANTI HI JACK.

F42. RF SMART ADDITIONAL PROTECTION
ADJUSTABLE: basic blocking + arm/disarm by button pressing.

F43. RF SMART ADDITIONAL PROTECTION
ADJUSTABLE: basic blocking + arm/disarm by approach/retreat.

F44. RF SMART ADDITIONAL PROTECTION
ADJUSTABLE: basic blocking + arm/disarm by approach/retreat + ANTI HI JACK.

F45. ANTI HI JACK UP TO 10KM/H
DEFAULT: ANTI HI JACK blocking can be activated anytime.

ADJUSTABLE: ANTI HI JACK blocking can be activated only under 10 km/h. This function works only for vehicles where information of the speed can be read from CAN BUS. The speed 10km/h is approximate depending upon type of vehicle.

F46. SILENT ALARM
DEFAULT: disabled – when alarm is triggered, immobilization circuit is activated, siren is beeping and hazard lights are flashing.

ADJUSTABLE: enabled – when alarm is triggered, immobilization circuit is activated, siren is not beeping a hazard lights are not flashing.

F47. DOUBLE UNLOCK IMPULSE
DEFAULT: disabled – if the lock/unlock inputs are set, they are active for 0.9 sec when locking/unlocking.

ADJUSTABLE: if the lock/unlock inputs are set, they are active for 0.9 sec twice with 1 sec pause when locking/unlocking.

F99. FACTORY SETTINGS
The function resets and restores factory settings.

INPUTS/OUTPUTS SETTINGS TABLE		
OPTIO	SETTING	default input polarity setting
IN/OUT	not connected – input/output not used	
IN02	ignition input – sensing information of ignition by analogue.	(+)
IN03	doors input – sensing information of doors by analogue. Default input polarity setting (-)	(-)
IN04	trunk input – sensing information of trunk by analogue.	(-)
IN05	hood input – sensing information of hood by analogue.	(-)
IN06	direction indicator lights – sensing information of direction indicator lights by analogue.	(+)
IN07	trunk control input – for trunk bypass e.g. for DUCATO, BOXER...	(+)
IN08	lock/unlock blocking input – for analogue connection variant A or for vehicles with CAN BUS lock/unlock sensing to avoid mechanical key.	(-)
IN09	Input for external sensor blocking – e.g. for using independent heating.	(+)
OUT10	Comfort closure output – output is active for 30 seconds after 5 seconds from system activation.	
OUT11	Pager output – output is active during alarm	
OUT12	Alarm status output– output copying status of alarm. Not active when disarmed, active when armed.	
OUT13	Lock output – 0.9 sec impulse to lock vehicle with RF SMART or after crossing the speed 10km/h if set.	
OUT14	Unlock output – 0.9 sec impulse to unlock vehicle with RF SMART or after vehicle stops, if locked (after crossing the speed 10km/h). RF Smart must not be set to contactless mode.	
OUT15	AUX output – status (on/off) is switchable by 3 second RC SMART button pressing	
OUT16	Front parking sensors output – output is active after ignition is turned on, output is inactive after crossing the speed 10km/h. The function is available only for the vehicles where speed can be read from CAN BUS. The speed 10km/h is approximate, depending upon type of vehicle	
OUT17	Trunk output - 0.9 sec impulse to unlock trunk with RF SMART (by 3 sec keyfob button pressing).	

VIII. RF SMART
Additional module RF SMART helps to increase basic protection with more options:
-basic blocking– RF SMART is searching for a keyfob after door opening. In case it is not found , it blocks the immobilizer relay, alarm is triggered after 20 seconds (if the RF SMART silent mode is not set)
-basic blocking + ANTI HI JACK
-basic blocking + arm/disarm by button pressing
-basic blocking + arm/disarm by approach/retreat
-basic blocking + arm/disarm by approach/retreat + ANTI HI JACK

NOTE: It is necessary to switch RF SMART to the contactless mode when using arm/disarm by approach/retreat. For more see the RF SMART manual.

ANTI HI JACK DESCRIPTION: If keyfob is out of range in deactivated mode, the alarm triggers ANTI HI JACK sequence – when ignition is on, hazard lights start flashing after 15 seconds. Siren is beeping as well with increasing volume. After next 15 seconds siren is beeping permanently, after next 15 seconds the immobilizer relay blocking is active. If ANTI HI JACK is set to 10km/h, ANTI HI JACK blocking can be activated only when speed is under 10km/h. The function is available only for the vehicles where speed can be read from CAN BUS. The speed 10km/h is approximate, depending upon type of vehicle.

ATTENTION: Using ANTI HI JACK function may be prohibited in some countries. Check if using the function is allowed according to law in your country.

WITH RF SMART also trunk can be opened if any of the inputs is set to this function. Then the output is active for 0.9 sec when the keyfob button is pressed and held for 3 seconds. Only one RF SMART module can be used with the system, can be connected to CN5 or CN6. RF SMART is after connecting automatically identified and configured, no further settings via PC setup need to be made.

RF SMART KEY FOBS can be paired in the service mode with the button (see the RF SMART manual) or with the KEETEC software. To set up range of key fobs, start test mode where the alarm beeps at each key fob button pressing. The test mode can be activated/deactivated jwith the KEETEC software or with the button :
activation : turn ignition on, press the button 4 times, turn ignition off
deactivation: turn ignition on, press the button 5 times, turn ignition off.

IX. SERVICE MODE
Service mode activation:
1. Turn ignition on and push the valet button 2 times within 5 seconds.
2. Turn ignition off. The LED flashes once.
3. Press the valet button as many times as the first digit value of PIN code. The LED flash three times.
4. Press the valet button as many times as the second digit value of PIN code. The LED flash three times.
5. Press the valet button as many times as the third digit value of PIN code. The LED flash three times.
6. Press the valet button as many times as the fourth digit value of PIN code. The LED flash three times.
If you enter correct PIN code, siren beeps twice and the LED shines. Service mode is activated.
Service mode deactivation:
- turn ignition on and press the valet button 2 times within 5 seconds.
- turn ignition off. Siren beeps two times and the LED stops shining. Service mode is deactivated.
NOTE: Digit „0“ is entered by pressing the button 10 times
NOTE: Default PIN code is **4321**

X. EMERGENCY DEACTIVATION
1. Open the door and turn ignition on.
2. Press the valet button as many times as the first digit value of PIN code within 8 seconds and turn ignition off. The LED flashes once.
3. Press the valet button as many times as the second digit value of PIN code. The LED flash three times.
4. Press the valet button as many times as the third digit value of PIN code. The LED flash three times.
5. Press the valet button as many times as the fourth digit value of PIN code. The LED flash three times, siren beeps twice. The system is deactivated.

XI. PIN CODE CHANGE
1. turn ignition on and press the valet button 10 times within 10 seconds.
2. turn ignition off, siren beeps once, the LED flashes once.
3. Press the valet button as many times as the first digit value of PIN code. The LED flash three times.
4. Press the valet button as many times as the second digit value of PIN code. The LED flash three times.
5. Press the valet button as many times as the third digit value of PIN code. The LED flash three times.
6. Press the valet button as many times as the fourth digit value of PIN code. The LED flash three times.
If you enter correct PIN code, siren beeps once and the LED flashes once.
7. Press the valet button as many times as the first digit value of a new PIN code. The LED flashes three times.

8. Press the valet button as many times as the second digit value of a new PIN code. The LED flashes three times.
9. Press the valet button as many times as the third digit value of a new PIN code. The LED flashes three times.
10. Press the valet button as many times as the fourth digit value of PIN code. The LED flashes three times, siren beeps twice.
NOTE: Keep your PIN code safe. Contact your dealer in case of loss.

XII. WIRES DESCRIPTION
CONNECTOR CN1 (12-PIN) - INPUTS AND OUTPUTS CONNECTOR

Black (-) ground of vehicle (input wire)
Red (+) power supply +12/24V (input wire)
Orange/brown CAN input- L (input wire) (ver. CAN)
Orange/green CAN input- H (input wire) (ver. CAN)
Orange (+10A / -300mA) power or sequential output for hazard lights (output wire)
White/red (+10A) siren (output wire)
Yellow/black (+/-) input IN1 (input wire)
Blue/black (+/-) input IN2 (input wire)

Brown (+/-) input IN3 (input wire)
Green (+/-) input or (-300mA output) IN / OUT1 (input / output wire)
Blue (+/-) input or (-300mA output) IN / OUT2 (input / output wire)
Grey (+/-) input or (-300mA output) IN / OUT3 (input / output wire)
Poznámka: When using sequential output for hazard lights, connect wire without rectifier diodes placed in original harness. It is also necessary to sense information of hazard lights from CAN BUS or by analogue.

CONNECTOR CN2 (3-PIN) - CONNECTION OF ADDITIONAL SENSOR

The connector is used to connect one-zone or two-zone additional sensor.

CONNECTOR CN3 (3-PIN) - CONNECTION OF ADDITIONAL SENSOR

The connector is used to connect one-zone or two-zone additional sensor.

CONNECTOR CN4 (3-PIN) - CONNECTION OF VALET BUTTON WITH LED

Place the LED diode on a well visible place for comfort access to the service button.

CONNECTOR CN5 (4-PIN) - CONNECTION OF RF SMART

The connector is used to connect additional RF SMART module.

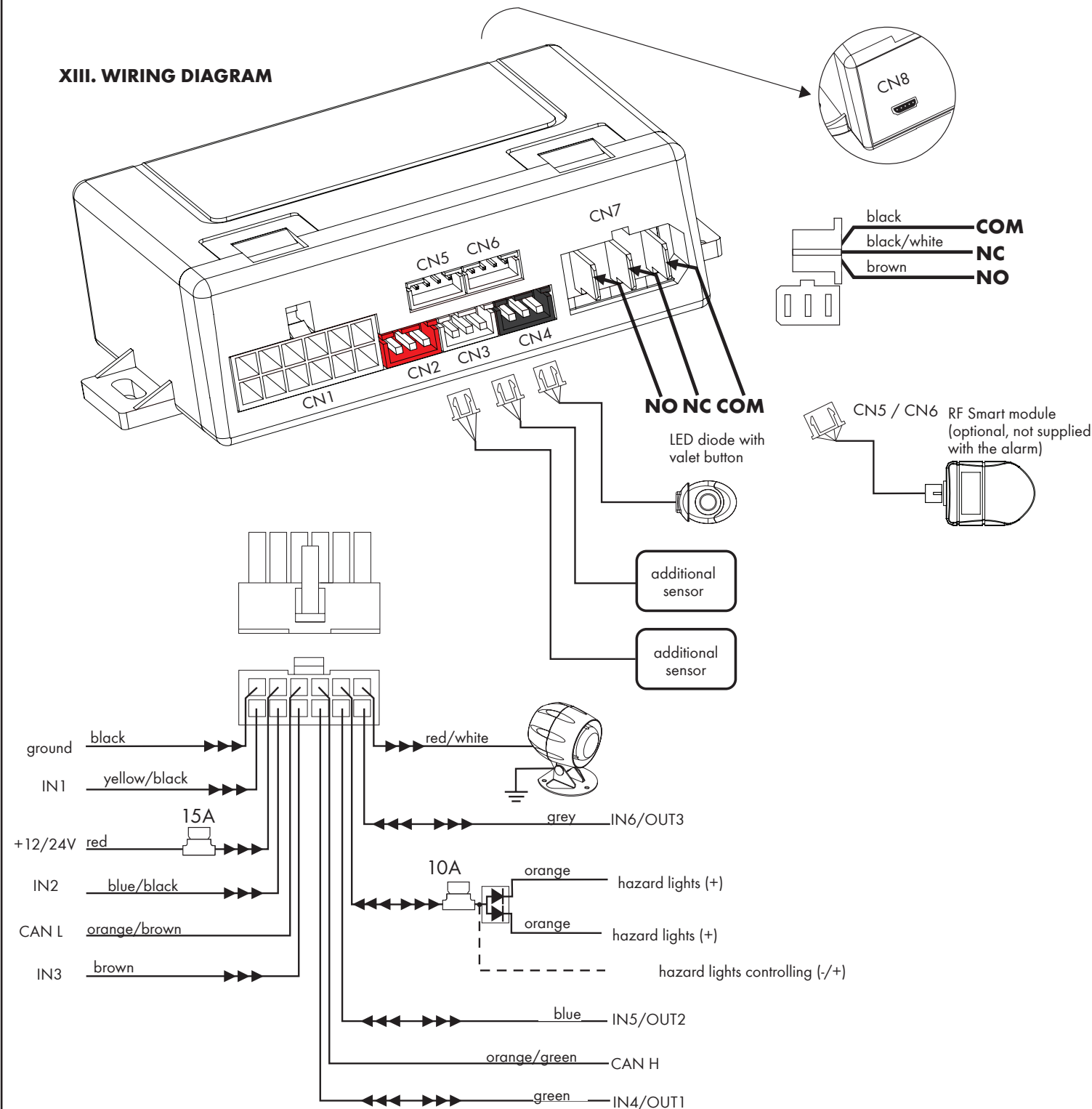
CONNECTOR CN6 (4-PIN) - CONNECTION OF RF SMART

The connector is used to connect additional RF SMART module.

CONNECTOR CN7 (MICRO USB) - PROGRAMMING CONNECTOR

The connector for PC connection via micro USB to program system functions.

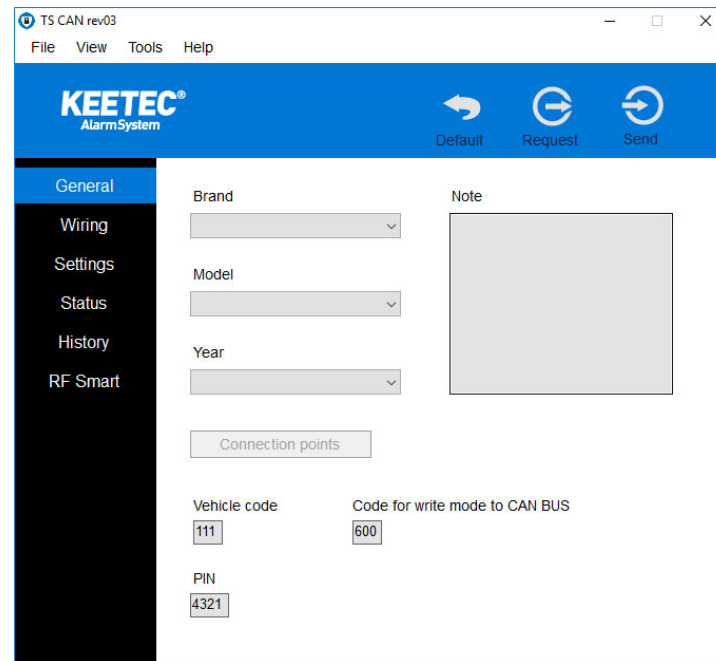
XIII. WIRING DIAGRAM



Default inputs/outputs table

wire/polarity	CAN BUS/RF Smart	VARIANT A BY ANALOGUE	VARIANT B BY ANALOGUE
IN1	ignition sensing (+)	lock (+)	lock switch (+)
IN2	hazard lights sensing (+)	unlock (+)	analogue input hazard lights (+)
IN3	doors sensing (-)	doors sensing (-)	doors sensing (-)
IN4/OUT1	comfort closure output (-)	ignition sensing (+)	ignition sensing (+)
IN5/OUT2	parking sensors output (-)	lock/unlock blocking (-)	hood sensing (-)
IN6/OUT3	pager output (-)	trunk sensing (-)	trunk sensing (-)

KEETEC SOFTWARE

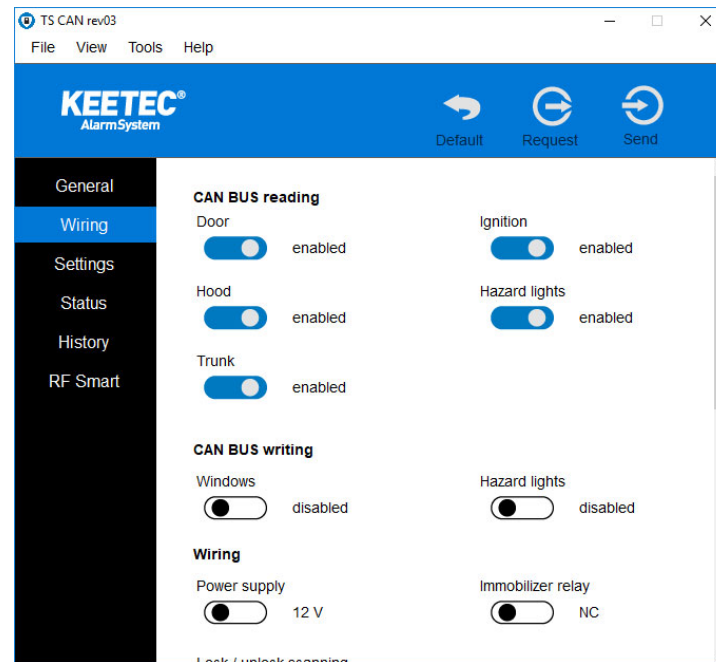


GENERAL SETTINGS: choose car make, model and year of production. Wiring diagram will be displayed after clicking on connection point

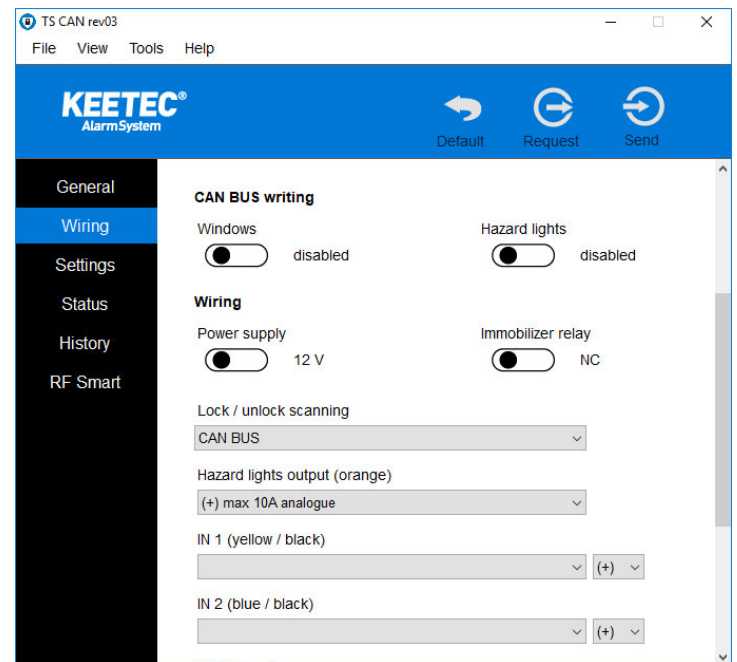
VEHICLE CODE: will be set automatically after choosing the vehicle (the vehicle code can be found in the list of supported vehicles)

VEHICLE CODE FOR WRITING TO CAN BUS : will be set automatically after choosing the vehicle (the vehicle code can be found in the list of supported vehicles)

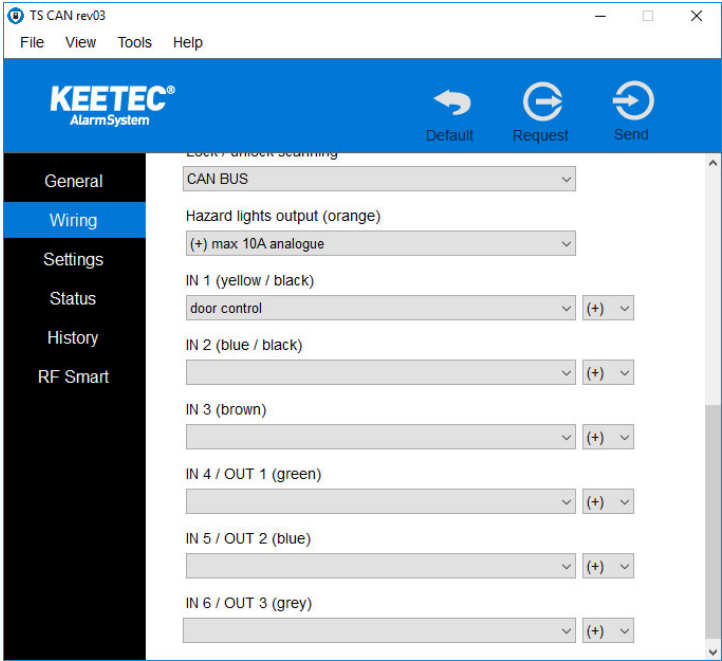
PIN CODE : default PIN CODE set to 4321 (can be changed)



CONNECTION (READING): reading from CAN BUS enabled/disabled for doors, hood, trunk, ignition, hazard lights



CONNECTION (WRITING): writing to CAN BUS enabled/disabled for windows comfort closure, hazard lights. Power supply option 12/24V. Immobilizer relay ON/OFF



OPTIONS FOR LOCK/UNLOCK SENSING

- CAN BUS, variant A by analogue, variant B by analogue, RF Smart

OPTIONS FOR HAZARD LIGHTS OUTPUT: (+) max. 10A by analogue, (+) max. 10A sequential, (-) max. 300mA sequential

OPTIONS FOR INPUT (IN1) YELLOW/BLACK: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking, external sensor input blocking

OPTIONS FOR INPUT (IN2) BLUE/BLACK: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking, external sensor input blocking

OPTIONS FOR INPUT (IN3) BROWN: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking

OPTIONS FOR INPUT/OUTPUT (IN4/OUT 1) GREEN: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking, comfort closure sensing (roll up power windows), pager output, alarm status output, lock output , unlock output, AUX output, parking sensors output, trunk output

OPTIONS FOR INPUT/OUTPUT 2 (IN5/OUT 2) BLUE: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking, comfort closure sensing (roll up power windows), pager output, alarm status output, lock output , unlock output, AUX output, parking sensors output, trunk output

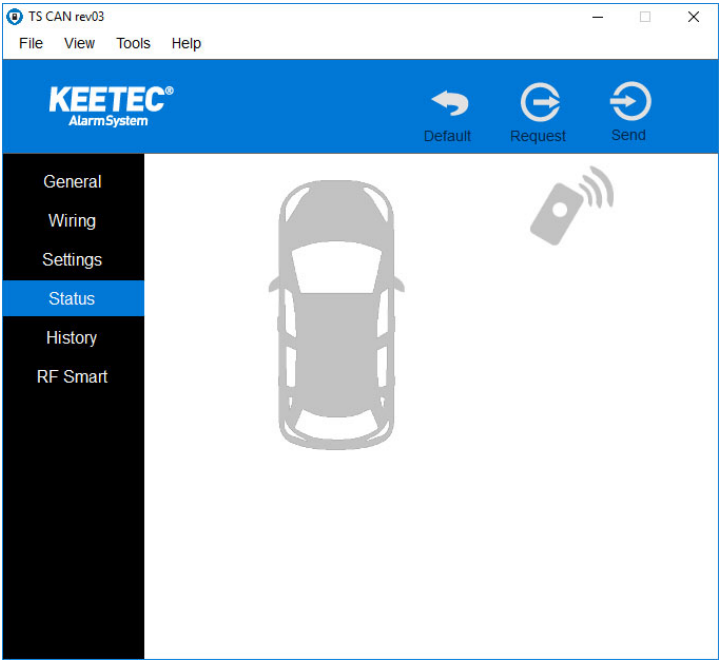
OPTIONS FOR INPUT/OUTPUT 3 (IN6/OUT 3) GREY: ignition sensing, doors sensing, trunk sensing, hood sensing, hazard lights sensing, trunk control input, lock/unlock blocking, comfort closure sensing (roll up power windows), pager output, alarm status output, lock output , unlock output, AUX output, parking sensors output, trunk output

SETTINGS

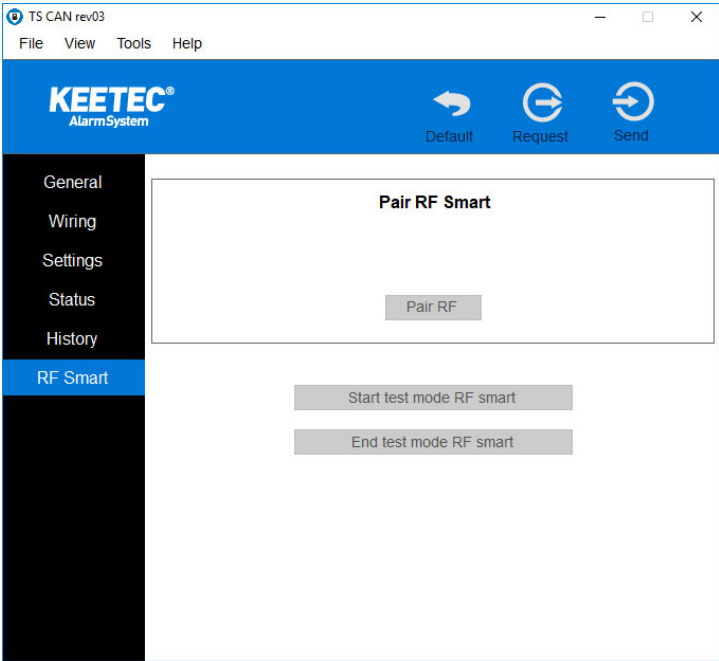
- arm delay - inputs activation delay: 5 sec/40 sec (if connected to ceiling light)
- automatic rearming: disabled/enabled (system relocking after an unwished unlocking)
- last door arming - activation after closing all doors : disabled/enabled (automatic activation after the last door is closed)
- activation after closing trunk: disabled/enabled (automatic activation after the trunk is closed)
- light flashing at arming/disarming: disabled/enabled (optical signaling when arming or disarming)
- silent arming/disarming: disabled/enabled
- arming reminder: disabled/enabled (acoustic warning when system not active)
- siren output: siren/horn (permanent or intermittent siren output)
- quiet siren: disabled/enabled (quieter siren sound when arming/disarming)
- trunk bypass: 3 seconds/1 minute
- lock/unlock after crossing 10km/h: disabled/enabled
- silent alarm: disabled/enabled (silent alarm for RF SMART)
- trigger by RF SMART: disabled/enabled
- Anti Hi-Jack blocking when speed under 10km/h: disabled/enabled
- double pulse unlock: disabled/enabled

RF SMART PROTECTION

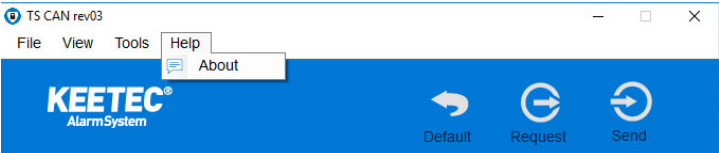
- identification (engine is being blocked only when the system is active and ignition off)
- identification + ANTI HI JACK (engine is being blocked when the tags are out of reach)
- identification + Arm/Disarm (identification + arming/disarming by RC Smart button pressing)
- identification + Arm/Disarm by aproach/retreat (identification + arming/disarming by RC Smart when approached/retreated)
- identification + Arm/Disarm by aproach/retreat + ANTI HI JACK (identification + arming/disarming by RC Smart when approached/retreated, engine is being blocked when the tags are out of reach)



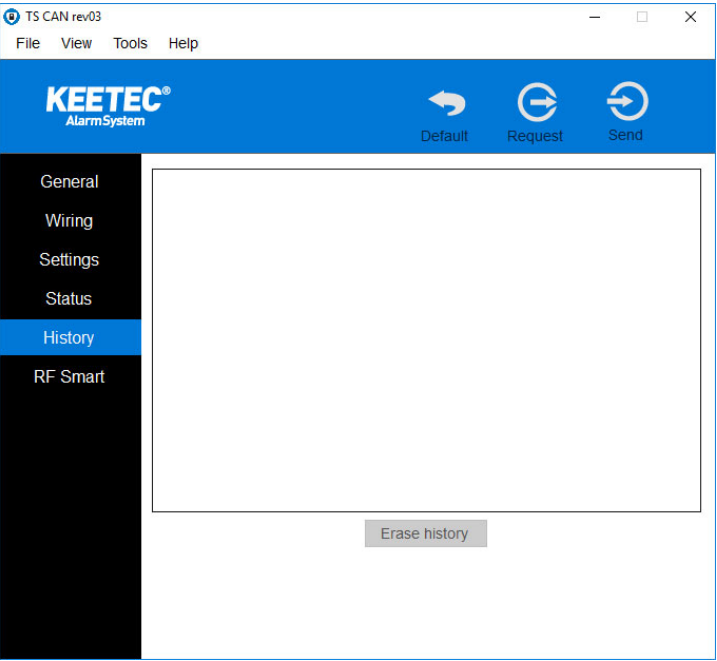
STATUS: current status overview



RF SMART: pair RF Smart, start or end RF Smart test mode



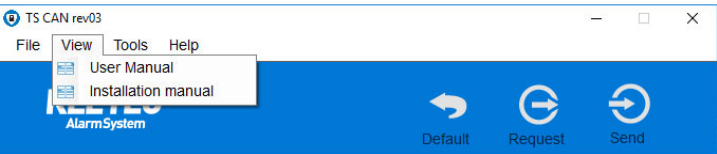
HELP: software version info



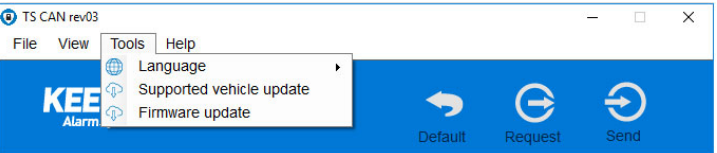
HISTORY: history of settings overview



FILE: open or save profile, save or print alarm history, exit



VIEW: user of installation manual available



TOOLS: language settings, supported vehicles update, firmware update

TECHNICAL PARAMETERS	
Power supply	12/24V +/- 25%
Operating temperature	from -30 °C up to 70 °C
Idle power consumption	8mA
Alarm duration	30 secs