⚠ WARNING: Carefully read following instructions and technical specifications in this manual before installation. The system must be installed and used only according to this manual. The system is designed for vehicles with 12V power supply. It has to be connected to 12V output and to the ground. Neither producer or 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.

SYSTEM DESCRIPTION

KEETEC TS 10 car alarm is designed for vehicles with remote central locking system and with 12V power supply. It is used to monitor doors, trunk and hood. After disruption system indicates the alert by optical signalisation (directional lights) and sound signalisation (siren). When car alarm is turned on, immobilizer is activated too, which interrupts the starter circuit and thereby prevents unauthorized starting of the vehicle. Car alarm is controled by RC, which is used to control central locking system, too. It is possible to program up to 3 remote controls.

I. SYSTEM INSTALLATION

Remove plastic covers of car dashboard. Find cables for car alarm connection. Use a digital multimeter to test the function of cables in vehicle, even if you're sure which function specific cable does have. After choosing the right cables, disconnect the car battery and connect the cable harness of car alarm to those cables according to the attached wiring schemes. Solder and isolate all connections. After finishing the installation of car alarm, 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, direction lights). Mount the plastic covers back on to the dashboard.

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. demontujte plastové kryty prístrojovej dosky vozidla.

Attention: Outputs of the control unit have maximal current load of 300mA (except of power output for directional lights)! To control bigger current load, please use additional device (R1215, IMO 15).Directional lights output has maximum current rating 2x5A.

II. SERVICE MODE

Turn on the ignition and press service button 2x within 8 second. Turn off the ignition. If security mode is not activated, siren sounds 2x and LED lights permanently. Service mode is activated. When security mode is activated (function 16), LED diode starts flashes slowly. Enter security mode. If you entered corrent PIN code, siren sounds 2x and LED diode lights permanently. Service mode is activated.

Deactivation of service mode

Turn on ignition and press the service button 2x within 8 seconds. Turn off the ignition. Siren sounds 2x and LED diode lights no longer. Service mode is deactivated.

III. PROGRAMING SYS TEM FUNCTION

Follow this steps when programming functions:

1. Activate the service mode
2. Push the valet button 7 times within 10 seconds.
3. Turn off the ignition, LED will start to flash.
4. Push the valet button within 20 seconds so many times, that corresponds to the number of the function you want to set up. Siren will sound after each push of the valet button. If the number is greater than 10, hold the valet button for over 3 seconds. After pressing the button siren sounds 1x and after 3 seconds sounds 2x. For example if you want to set up function 13, press the valet button (siren sounds once) and hold it for over 3 seconds (siren will sound 2 times), then release the button. Press the valet button 3 more times (siren will sound 1 time after each push). After turning the ignition on, siren will sound 1 or 2 times, depending on which setting was set. Turn the ignition off. If you want to set up function No. 25, press the valet button (siren sounds once) and hold it for over 3 seconds (siren will sound 2 times), then release the button. Push the valet button again for over 3 seconds. After releasing the siren will again sound for 2 times. Push the valet button 5 times (siren will sound after each push).
5. Turn the ignition on. Siren will sound 1 or 2 times, depending on which setting was set. Turn off the ignition.
6. You can finish programming by turning the ignition on. System is now in valet mode.

PROGRAMMING TABLE

Prog. menu	Function	Factory settings 1 tone of siren	Adjustable 2 tones of siren
F1	silent / loud activation	silent	loud
F2	lock the central locking system when turn ON ignition	off	on
F3	input activation delay	8 sec.	30 sec.
F4	system activation reminder	off	on
F5	door contacts input polarity	"-" input	"+" input
F6	double locking impulse	off	on
F7	double unlocking impulse	off	on
F8	sequential output polarity	"-" input	"+" input
F9	output for directional lights	normal	sequential
F10	programmable output	trunk opening	immobilizer
F11	unlocking time	0,5 sec.	3,5 sec.
F12	locking time	same as unlocking	20 sec.
F13	automatic activation after closing last door	off	on
F14	closing the central locking system after automatic activation	off	on
F15	security mode	off	on
F16	automatic reactivation	on	off
F25	system reset	reset	

IV. FUNCTION DESCRIPTION

F1. SILENT / LOUD ACTIVATION
PRE-SET : when activate / deactivate the siren does not sound.
ADJUSTABLE : when activate / deactivate the siren is heard.

F2. LOCK THE CENTRAL LOCKING SYSTEM WHEN TURN IGNITION ON
PRE-SET : central locking system locks vehicle after turning ignition ON
ADJUSTABLE : central locking system doesn`t lock vehicle after turning ignition ON

F3. INPUT ARMING DELAY
PRE-SET : inputs are active after 8 seconds after activation of the system
ADJUSTABLE : inputs are active after 30 seconds after activation of the system

F4. SYSTEM ARMING REMINDER
PRE-SET : reminder is off.
ADJUSTABLE : when ignition is off and after last door is closed siren sounds 2x after 10 seconds.

F5. DOOR CONTACTS INPUT POLARITY
PRE-SET : input for door contacts react on negative (-) impulse.
ADJUSTABLE : input for door contacts react on possitive (+) impulse.

F6. DOUBLE LOCKING IMPULSE
PRE-SET : double locking impulse is off
ADJUSTABLE: double locking impulse is on

F7. DOUBLE UNLOCKING IMPULSE
PRE-SET : double unlocking impulse is off
ADJUSTABLE : double unlocking impulse is on

F8. SEQUENTIAL OUTPUT POLARITY
PRE-SET : negative polarity on sequential output (- 300mA)
ADJUSTABLE: positive polarity on sequential output (+ 300mA)

F9. OUTPUT FOR DIRECTIONAL LIGHTS
PRE-SET : normal - power output for directional lights is active
ADJUSTABLE: sequential - sequential output for directional lights is active
Note : if output is set as sequential, connect orange wire on directional light for feedback

F10. PROGRAMMABLE OUTPUT
PRE-SET : output set as trunk opener (- 300mA)
ADJUSTABLE: output set as immobilizer (- 300mA)

F11. UNLOCKING TIME
PRE-SET : unlocking impulse is 0,5 sec.
ADJUSTABLE : unlocking impulse is 3,5 sec. (it is not possible to set double unlocking impulse)

F12. LOCKING TIME
PRE-SET : according to leght of unlocking time
ADJUSTABLE : set to 20 seconds

F13. AUTOMATIC ACTIVATION AFTER CLOSING LAST DOOR
PRE-SET : after turned ignition off and closed last door system will be activated automatically after 30 seconds
ADJUSTABLE: function is prohibited

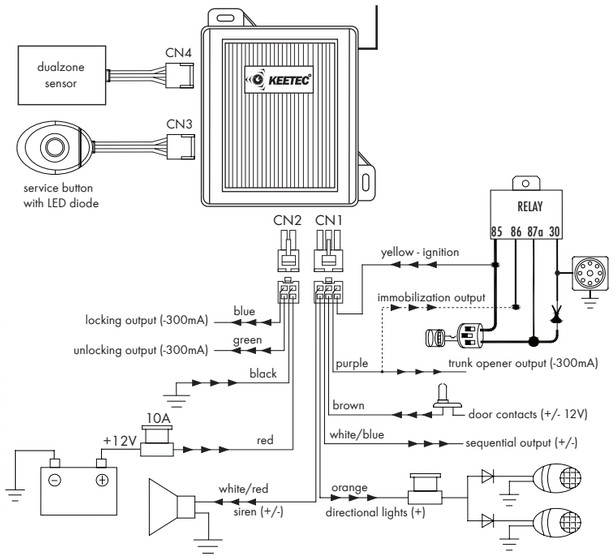
F14. CLOSING THE CENTRAL LOCKING SYSTEM AFTER AUTOMATIC ACTIVATION
PRE-SET : after turned ignition off and closed last door system will be activated automatically and central locking system will be locked after 30 seconds
ADJUSTABLE : function is prohibited

F15. SECURITY MODE
PRE-SET : security mode is deactivated
ADJUSTABLE : security mode is active

F16. AUTOMATIC REACTIVATION
PRE-SET : function is allowed. If there are no open doors after deactivation, system will be activated after 30 sec.
ADJUSTABLE : function is prohibited

F25. SYSTEM RESET
System reset to factory default.

V. SCHEMATIC



Connector CN1 (6-pin) - outputs and inputs connector
Yellow (+) ignition +12V (input wire)
Purple (-300mA) trunk open (output wire)
(-300mA) immobilization circuit for blocking the start of engine (output wire)
Brown (+/-) door contacts sensing (input wire)
White/blue (+/-) sequential output for optical signalization (output wire)
Orange (+) power output for directional lights (output wire)
White/red (+) siren output (output wire)

Connector CN2 (4-pin) - outputs and inputs connector
Red (+) power supply +12V (input wire)
Black (-) GND (input wire)
Blue (-300mA) locking output (output wire)
Green (-300mA) unlocking output (output wire)

Connector CN3 (3-pin) - connection of service button with LED diode
Place the LED diode on a well visible place for easy access to service button.

Connector CN4 (3-pin) - connection of additional dual-zone sensor
Connector serves for connection of additional sensor (MWS 2, LSK 2).

VI. ENTER THE SECURITY MODE

You will enter security mode by entering the 4 digit PIN code. If the security mode is active (function F16), LED will start to flash slowly when programming.
- if the LED will flash so many times which is the value of first PIN number, push the service button one time. LED will start to flash again.
- if the LED will flash so many times which is the value of second PIN number, push the service button one time. LED will start to flash again.
- if the LED will flash so many times which is the value of third PIN number, push the service button one time. LED will start to flash again.
- if the LED will flash so many times which is the value of fourth PIN number, push the service button one time.

VII. PIN CODE CHANGE

1. Turn on ignition.
2. Press service button 10x within 10 seconds
3. Turn off ignition. If security mode is deactivated, siren sounds 1x and now you are in PIN code programming menu. If security mode is activated (function F16), LED diode starts flashes slowly. Enter to security mode. If you entered correct PIN code, siren sounds 1x and LED diode turns off. Now you are in PIN code programming menu.
4. Push the service button. LED diode starts flashes slowly and you can enter a new PIN code:
- if the LED will flash so many times which is the new value of first PIN number, push the service button one time. First PIN number is saved. LED will start to flash again.
- if the LED will flash so many times which is the new value of second PIN number, push the service button one time. Second PIN number is saved. LED will start to flash again.
- if the LED will flash so many times which is the new value of third PIN number, push the service button one time. Third PIN number is saved. LED will start to flash again.
- if the LED will flash so many times which is the new value of fourth PIN number, push the service button one time. Fourth PIN number is saved.
- 5 seconds after entering the fourth code number LED diode will show the new PIN code with the number of flashes with 2 seconds pause between every number.
5. Turn the ignition on or wait for 10 seconds after showing the new PIN code and system will automatically end the PIN code programming mode.

PIN CODE RESET

Disconnect the power supply of system. Disconnect the jumper in the unit of the control system and connect to power. Connect the jumper in the control unit within seconds. PIN code is reset to factory setting - 4321.

VIII. PROGRAMMING REMOTE CONTROLS

1. Turn on ignition and press the service button 5x within 8 sec. Turn ignition off. If security mode is not active, siren sounds 5x, programming mode will be activated and LED starts flashes fast. If security mode is active (function F15), LED diode starts flashes slowly. Enter the security mode. If you enter correct PIN code, siren sounds 5x and now you are in programming mode. LED diode starts flashes fast.
2. Press any button on RC within 5 seconds. If you do not press any button or you turn ignition off, system automatically ends programming.
3. Siren confirms programing of RC by short beep. In addition which controller has been programmed, so many siren sounds. Correct programming of first RC is signalized by one beep, correct programming of second RC is signalized by two beeps, etc.
4. If you want to program new RC, old RCs must be reprogrammed, too.
5. System allows you to program max. 3pcs of RC. When programming new RCs, system automatically delete old RCs. iren confirm correct programming by short beep.

IX. NÚDZOVÁ DEAKTIVÁCIA

1. Open door and turn ignition ON.
2. Push service button so many times, which is value of the first number of PIN code within 8 second and turn ignition OFF. If security mode is disabled, siren sounds 2x, directional lights flashes 2x and system will be deactivated. If security mode is active (function F15), LED diode starts flashes slowly. Enter the security mode. If you entered right PIN code, siren sounds 2x and directional lights flashes twice. System is deactivated.

TECHNICAL PARAMETERS	
Power supply	12V +/- 25%
Working temperature	-30°C až 70°C
Stand-by current	10mA
Operational frequency	433,92 MHz
Lenght of alarm	30 s