

E27 97RA-01\*1042\*00



**WARNING:** Carefully read following instructions and technical specifications in this manual before installation. The system install and use in agreement with this manual only. The system is assigned for installation to all vehicles with 12V power supply. The system has to be connected on 12V and to ground. Producer neither seller of the system are not responsible for damages caused by incorrect installation, using or operating of this product different to install or user's manual. Unprofessional operation to the system or modification of the system can damage system or electrical system of vehicle and cause warranty loss. For correct work of this system we commend installation in the professional service.

### SYSTEM DESCRIPTION

KEETEC TS 6000 is two-way car alarm for vehicles with 12 V power supply. The system is possible to connect on vehicle CAN BUS link by CAN BUS module (M CAN). If the car alarm is connected on CAN BUS of vehicle, then the system is possible to control by original transmitter and LCD transmitter works like a pager. If the car alarm is connected on CAN BUS line in vehicle, then door contacts, hood and trunk is not necessary to connect (not all vehicles). The system has relay outputs for central lock connection and control, 2x engine-cut output, foot-brake sensing for doors lock at turn ON ignition, sequential output for optical alerting and 2x AUX time adjustable outputs. The car alarm has hopping code second generation. LCD transmitter with display monitors and controls the vehicle on range 2000m. The system has many other functions.

### PACKING

- control unit • 2-stage shock sensor • siren • antenna • LED indicator • valet button • battery 1,5V AAA • engine-cut relay • pin switch • LCD transmitter with pager + case • cable ties

### I. SYSTEM INSTALLATION

Disassemble plastic cover of car dashboard. Find wires for car alarm connecting. Use a digital multimeter for function test of wires in the vehicle as well as if you know the function of wire. After wires designation disconnect accumulator of vehicle and connect cable harness of the car alarm to wires need for correct functionality according to wire diagram. Solder up all wiring and isolate. After finish of the car alarm installation connect accumulator of vehicle and plug-in a fuse to fuse cover of the car alarm. Checkout correct functionality of the car alarm as well as electrical installation of vehicle (ignition, direct indicators, ...). Fit plastic cover of car dashboard.

#### Control unit and antenna placement

Place the control unit inside of dashboard and antenna on front window of vehicle in horizontal plane.

**Attention:** Outputs of the control unit have (without output on direct indicators and central) maximum allowable current loading 250mA. For bigger current loading use additional feature (R1215, IMO 15). Direct indicators can be loaded maximum on 2x5A.

#### CONNECTOR CN1 (6-PIN) - INPUTS AND OUTPUTS CONNECTOR

##### 1. WHITE (+) Direction indicators (output wire)

Connect to direction indicators wire (+).

##### 2. WHITE (+) Direction indicators (output wire)

Connect to direction indicators wire (+).

##### 3. RED (+) Power supply +12V (input wire)

Connect to wire with constant +12V (30). Find the wire with larger intersection.

##### 4. BLACK (-) Ground (input wire)

Connect this wire to a clean, paint-free sheet metal location (driver kick panel).

##### 5. BROWN (+) Siren (output wire)

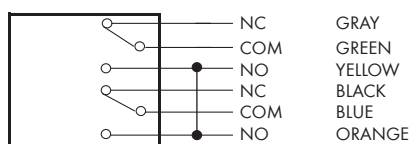
Connect this wire to the (+) wire of the siren.

##### 6. ORANGE (+/-) Trunk unlock (output wire)

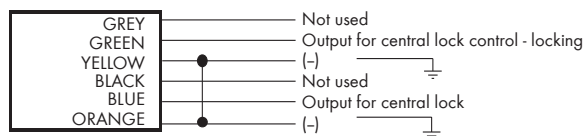
Connect to the lock or the switch of trunk (for electric lock only). Change polarity by the jumper on control unit if is necessary.

#### CONNECTOR CN3 (6-PIN) - CENTRAL LOCK CONNECTION

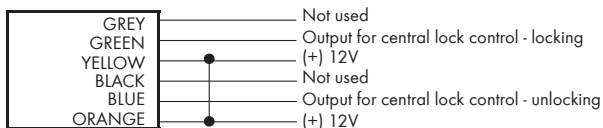
The central lock connects according to these wire diagrams depends on central lock type of vehicle.



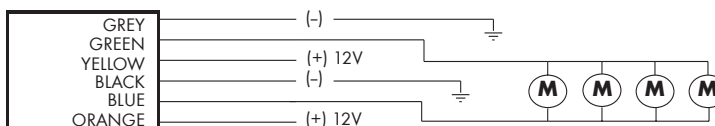
##### Central lock control by negative impulse



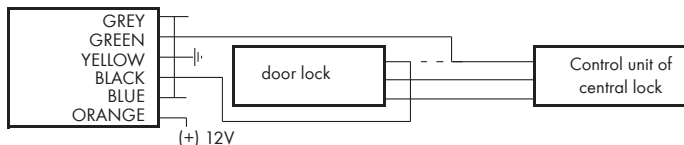
##### Central lock control by positive impulse



##### Direct connection to actuators of central lock



##### Pneumatic central lock connection



#### CONNECTOR CN3 (8-PIN) - OUTPUT AND INPUT CONNECTOR

##### 1. White (-250mA) Engine-cut output 1 (output wire)

This wire supplies (-)250mA ground as long as the system is armed. But kill out is not outputted at the remote starter.

**Notice:** Devide next equipment connection by diode!

**Attention:** Disconnect for engine-cut a starting wire only!

##### 2. Red (-250mA) Engine-cut output 1 (output wire)

After disarming is (-) 12V (250mA) on this output. The wire can be used for ex. ignition blocking.

##### 3. Gray (-250mA) Hood sensing (input wire)

Connect to a hood switch. If the vehicle has not the hood switch is necessary to install it additionally.

##### 4. Brown (-250mA) AUX 1 (output wire)

Auxiliary output AUX1 is activated by transmitter. The output time is possible change in 3-5 of the program menu.

##### 5. Yellow (+) Ignition (input wire)

Connect to a wire with +12V at turned ignition ON and also during start.

##### 6. Green (-) Trunk sensing (input wire)

Connect this wire to the trunk switch.

##### 7. Violet (-) Sequential output (output wire)

Connect to a warning light switch (pulse wire). The output for optical signalling of alarm. If this output is used then the power outputs for direction indicators are not necessary to connect.

##### 8. Blue (-/+) Doors open sensing (input wire)

Connect to a wire showing ground when any door is opened. In any vehicles is necessary to use individual door trigger by 1A diode.

**Polarity change of sensing:** The input polarity is possible change by jumper J1 in control unit and a wire to connect where is +12V at opened doors (ex. Ford). The input is adjustable to negative pulse sensing.

#### CONNECTOR CN4 (2-PIN) - LED CONNECTION

Mountain the LED indicator in a visible location such as dash or console. Plug the LED into the control module.

#### CONNECTOR CN5 (3-PIN) - SHOCK SENSOR

1 zone: Input (-) less then 0.6 sec. triggers alarm (optical and sound) alerting.

2 zone: Input (-) more then 0.6 sec. triggers alarm for 30 sec.

#### CONNECTOR CN6 (2-PIN) - VALET BUTTON

The Valet button should be accessible from the driver's seat.

#### CONNECTOR CN7 (5-PIN) - ANTENNA CONNECTION

The best location for the receiver/antenna is centered on left of the front windshield. The antenna should be mounted horizontally.

**Attention:** Metallic window tint can also affect range, so this should be a consideration when determining the mounting location.

#### Antenna installation:

1. Clean the mounting area with a quality glass cleaner or alcohol to remove any dirt or residue.
2. Plug the 5 pin cable into the receiver/antenna.
3. Mount the receiver/antenna using the supplied double-sided tape.
4. Plug the receiver/antenna cable into the main control unit.

#### CONNECTOR CN8 (3-PIN) - ADDITIONAL SENSOR CONNECTION

Input for additional sensor connection - ultrasonic, microwave, tilt.

**Attention:** Check power supply polarity of additional sensor and outputs of control unit.

#### CONNECTOR CN9 (8-PIN) - CAN BUS MODULE CONNECTION M CAN

M CAN module is assigned for vehicles with CAN BUS link, where get available data that convert on analogue outputs for correct functionality. The module M CAN obtains the informations about opened doors, hood, trunk, and turning ignition ON. Using by this module the system is possible to control by original remote control of vehicle. The LCD transmitter is used as pager in this case.

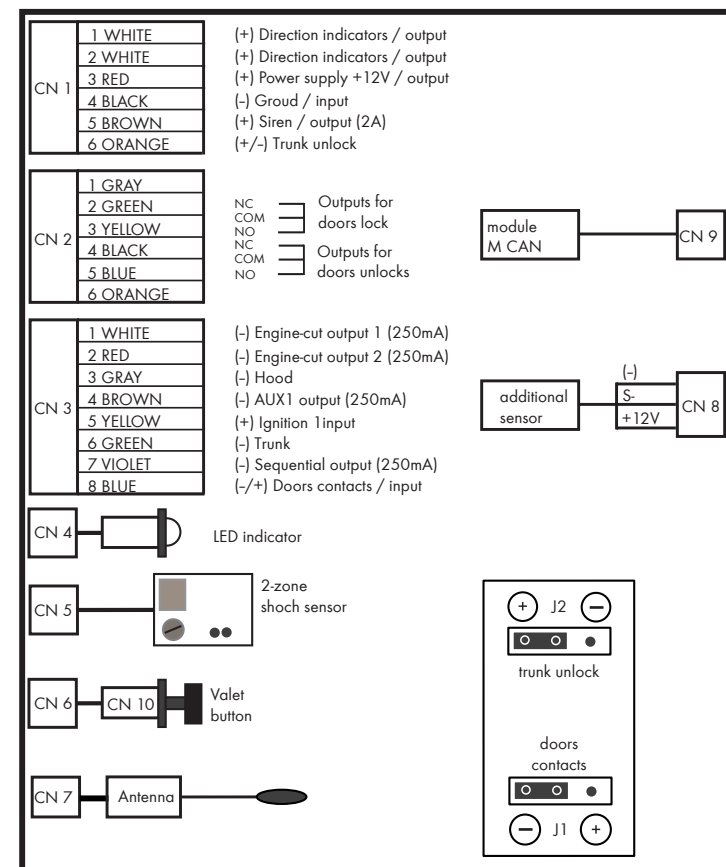
**Notice:** If you don't desire to control the system by original remote control, cut blue and white wire of M CAN module.

### II. JUMPER SETTING IN CONTROL UNIT

**Jumper J1:** polarity input setting for doors contacts (CN3- pin 8)

**Jumper J2:** polarity setting for trunk unlock output (CN1- pin 6)

### III. WIRE DIAGRAM



### IV. PROGRAM SETTING

Program setting method is different according to transmitter. Two-way and one-way transmitter must be disarm at the program setting.

#### LCD 2-WAY TRANSMITTER



- Step 1: Press the **F** button 3x
- Step 2: You can change to menu of the P-1,P-2,P-3,P-4 by press **M**
- Step 3: Choose the function you want by press the trunk button **3**
- Step 4: Choose the program state by press the button 1 (ON) **1** or button 2 (OFF) **2**
- Step 5: Function you choose will be transmit a main and setting is completed by press the **F** button.

#### One way transmitter

One way transmitter can be change only in P-1 and P-2 of the program menu.

Program menu step is marked by chirp sound (ex: Menu 1-1 = 1x, 1-2 = 2x, ...)



### PROGRAM SETTINGS

Program menu	LCD	P-2 Basic functions	Factory setting	Optional
			Press button 1 or 2	
2-1	CCH	N/C		
2-2	IGL	Ignition lock/unlock	OFF	ON
2-3	PSA	Passive arming	OFF	ON
2-4	PSL	Passive lock	OFF	ON
2-5	LdA	Last door arming	OFF	ON
2-6	CHP	Chirp sound	ON	OFF
2-7	dUP	Double unlocking pulse	OFF	ON
2-8	dLP	Double locking pulse	OFF	ON

Program menu	LCD	P-3 Timing settings	Factory setting	Optional
			Press button 1 or 2	
3-1	Stt	N/C		
3-2	Std	N/C		
3-3	Sto	N/C		
3-4	CSr	N/C		
3-5	Au1	Aux 1 output (LCH=Continue)	1 5 10 20 40 LCH (Sec.)	
3-6	Au2	N/C		
3-7	ttt	N/C		
3-8	Amd	Delay of outputs protection	5 10 15 25 35 45 (Sec.)	

Program menu	LCD	P-4 Advanced settings	Factory setting	Optional
			Press button 1 or 2	
4-1	SPo	Siren pulse output	OFF	ON
4-2	AEd	Automatic engine disable	OFF	ON
4-3	Lot	Unlocking pulse	0,5 s	3,5s
4-4	BPs	Arm reminder	OFF	ON
4-5	dom	N/C		
4-6	SAC	SMART access mode ON/OFF	OFF	ON
4-7	CAS	Locking pulse	as unlock	20 s
4-8	Acd	Arm cancel mode at door open	OFF	ON

### PROGRAM MENU (P-2) - BASIC SETTINGS

#### 2-2 Ignition lock/unlock

When turned ON, the doors will be locked when step on brake after the ignition is turned ON. The doors will be unlocked when the ignition is turned OFF. Getting on the vehicle during remote start: Door is locked when ignition key ON and then step on the brake.

#### 2-3 Passive arming

When turned ON, the system will arm automatically after 30seconds if the ignition key is OFF and door open/close.

#### 2-4 Passive lock

When turned ON: When the system is arm by passive arming, door lock will be automatically operated.

#### 2-5 Last door arming

When turned ON, if all door is closed at the disarm, door lock will be operated with arm after 30 seconds.

#### 2-6 Chirp sound

In the default setting, siren of the vehicle will output chirp sound when you operate transmitter.

#### 2-7 Double unlocking pulse (installation only)

If this function is ON, each door unlock = 2 impulses. The function is activated, when unlock impulse is setting on 0,5 sec.

#### 2-8 Double locking pulse (installation only)

If this function is ON, each door lock = 2 impulses.

### PROGRAM MENU (P-3) - TIMING SETTINGS

#### 3-5 Aux 1 output (installation only)

Duration of Aux1 output setting. If CLH is adjusted, Aux1 output is constant (the output will be activated till disarm by transmitter).

#### 3-8 Arm delay time setting

Arm delay time delay of sensing for doors, trunk, hood and ignition. Shock sensor will work 20 sec. after delay time.

### PROGRAM MENU (P-4) - ADVANCED FUNCTIONS

#### 4-1 Siren pulse output

In the default setting, siren will be continually outputted for 30 seconds when alarm is operated. When turned ON : Siren will be outputted to pulse

#### 4-2 Automatic pulse disable

When turned ON, starter kill will be automatically outputted 30 seconds after ignition OFF with LED blink slowly.

#### 4-3 Unlock pulse (installation only)

If this function is ON, unlocking impulse length is 3,5s. If this function is OFF, unlocking impulse length is 0,5s.

#### 4-4 Arm reminder

If this function is ON, the car alarm will sound 2x, after each open and close door over 10 sec., it reminds that is OFF. If the function 2-3 or 2-5 is ON, The reminder doesn't work.

#### 4-6 SMART access mode ON/OFF

When turned ON, LCD display ACCESS icon. And the main control unit sense the transmitter when transmitter is near by vehicle, the system will be automatically disarm (Unlock). If the transmitter is far from vehicle, the system will be arm. If you use this function, the transmitter battery life will be short.

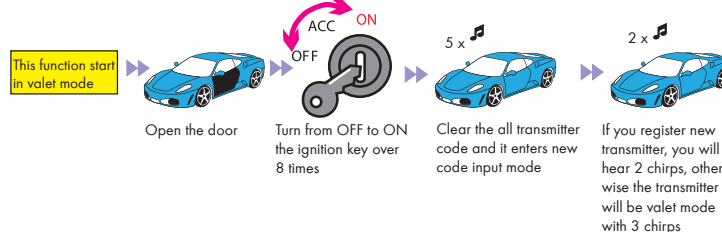
#### 4-7 Locking pulse

If this function is ON, locking impulse length is 20 sec. If the function is OFF, locking impulse is the same as unlocking impulse.

#### 4-8 Arm cancel mode at door open

When turned ON, if the door is open, arm is not operated by transmitter. In this case, you can operate arm after closing the door.

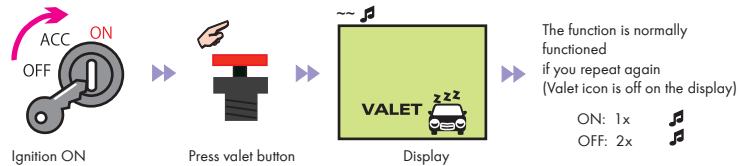
### V. TRANSMITTER CODE LEARNING



This function is used when you lose transmitter or break down. You can use this function though siren is continually operated.

The transmitter input is possible to each maximum 2pcs both one way and two way transmitter.

### VI. VALET MODE (EMERGENCY DEACTIVATION)



In the case of the valet mode, you can operate only door lock/unlock and trunk open by transmitter. Use this function when you leave your car to other person that don't know how to use this transmitter.

Use this steps also for emergency deactivation.

### VII. PROGRAM RESET

**Program reset of the main control unit:** If you press **⊕** and **⊗** button simultaneously for 2 seconds within 30sec after ignition OFF at the valet mode, all program will default setting.

**Program reset of the LCD transmitter:** If you reset main control unit, you must reset of the transmitter. Put battery in with press **M** button after remove the battery of the transmitter and then all program of the transmitter will default setting.

TECHNICAL PARAMETERS	
Power supply	12V +/- 25%
Working temperature	-30°C to 70°C
Stand-by mode	10mA
Transfer frequency	433,92 MHz
Alarm duration	30 sec