



Warning

If you use remote start, please put your gear position on neutral or parking, and apply hand brake for safety

*This design and specifications of this model could be changed without prior notice for the improvements.

S Sinew Systems

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The Spearhead
**FUZZY TWO-WAY CAR ALARM &
ENGINE STARTING SYSTEM**

Car Alarm System with
Remote Starter
User's Manual



Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC statements

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

S Sinew Systems

Acknowledgements for Customers

- ◆ Welcome and thank you for choosing **SPEAR 5000** of newly developed and cutting edge car alarm system with remote starter.
- ◆ Before customers' pointing out, we endeavor to make products which satisfy ourselves confidently and by doing so, we believe, we can make customers happier.
- ◆ For customer's safety and conveniences, we are promised to develop and advance our technologies continuously.



*The design and specifications of this model could be changed without prior notice for the improvements.

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System Contents

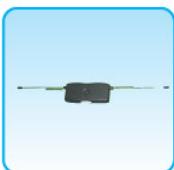
SPEAR 5000



Remote Controller



Main Control Box



Transceiver module
with two-way
antenna



Shock Sensor



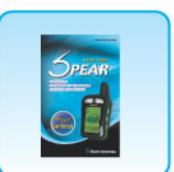
Knock Sensor



Siren



Wiring Harness, Relays



User's Manual



SPEAR Logo Sticker

Notice to Customers

Review the following safety precautions and user instructions to avoid injury and prevent damage to this product or any products connected to it.

To avoid potential hazards, use this product only as specified.

- 1) Users are responsible for car damages and various car accidents due to their faulty installations, incorrect uses and children's misuse etc.
Manufacturer and retailers are not responsible for these in civil and criminal aspects.
- 2) There can be a difference of remote sending and receiving distance due to user's surroundings.
- 3) Warrant period will be 1 year and our headquarters will be responsible for manufacturing defects and our service centers will repair installing defects free of charge during warrant period.
- 4) Although this product provides car robbery protection and user conveniences in car uses, we are not responsible for any car damages and car robberies.
- 5) Please check the product features regularly and prepare car damages can be occurred.
- 6) If car owner changed, our service centers can fix the product for new owner, but service charge can be happened.



* System contents can be changed without prior notice for the improvements of specifications and functions.

Product & Function Descriptions



Remote Controller Buttons



	Arm & door lock
	Disarm & door unlock
	Remote engine starter
	Trunk release
	Car finder



Turning System On & Replacing Battery

- 1) Insert AAA 1.5 battery into the opening on the back of remote.
- 2) All functions displayed in the screen with music and vibration.
- 3) Set the time



Viewing the Display Screen



	Valet function		Receiving signal status
	Automatic/manual transmission		Hood
	Optional functions (window roll up/down & sunroof open/close etc.)		Emergency light
	Arm & door lock		Door opens
	Disarm & door unlock		Battery status for remote
	Alarm display		Car battery's voltage
	Engine starting display		Shock sensor on mode
	Engine start reservation of manual transmission vehicle		Passive (emergency) mode
	24-hour engine start reservation		Turbocharged vehicle mode
	Arm & door lock		Clock, ignition, parking, driving, temperature and voltage display
	Disarm & door unlock		5door/4door
	Mute alarm		Shock reception display
	Vibration mode		Shock sensor on mode
	Trunk release		Turbocharged vehicle mode
	Pager for owner		
	Shock reception display		

Installing Program Modes



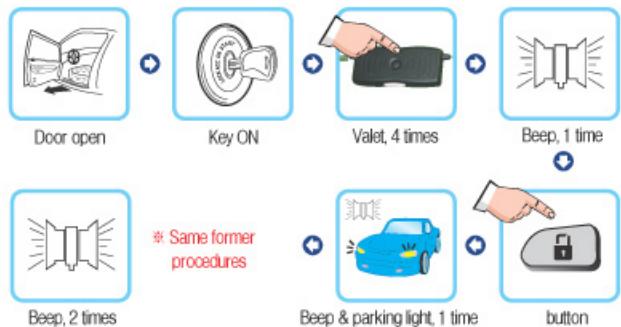
General Remote Code Programming

* After finish the car installation and power apply to the main unit, programs can be input within 3 seconds.

- ▶ Leave the door open.
- ▶ Turn the key to ON position.
- ▶ Press valet button 4 times. Beep sounds 1 time.
- ▶ Press  button then program is installed with one beep sound and one parking light flash. If no input occurs within 7 seconds, programming will be done.
- ▶ If you want to set up second remote, press  button then program is installed with two beep sounds.

Third remote can be programmed with same method. And beep sounds 3 times.

- ▶ You can program total three remotes (two of 2-way remotes first and then one auxiliary remote).



Valet Function

1) Temporary valet: when parking, washing and maintaining the car

- ▶ Using valet button : Leave the door open. Turn the key to ON position. And press valet button for 5 seconds. Then temporary valet will work with one beep sound and one parking light flash. In this mode, you can use door lock/ unlock function. If you repeat same steps, this mode will be inactivated.

- ▶ Using remote controller : Leave the door open. Turn the key to ON position. And press  button for 2 seconds. Then temporary valet will work with one beep sound and one parking light flash. In this mode, you can use door lock/ unlock function. If you repeat same steps, this mode will be inactivated.

▼ Use valet button



2) Permanent valet : when you lost remote controller (until you input programs to new remote)

- ▶ Leave the door open. Turn the key to ON position. And press valet button for 10 seconds. Then permanent alarm disarming will work with one beep sound and one parking light flash. In this mode, you can not use any function until you will use new remote. If you repeat same steps, this mode will be inactivated.



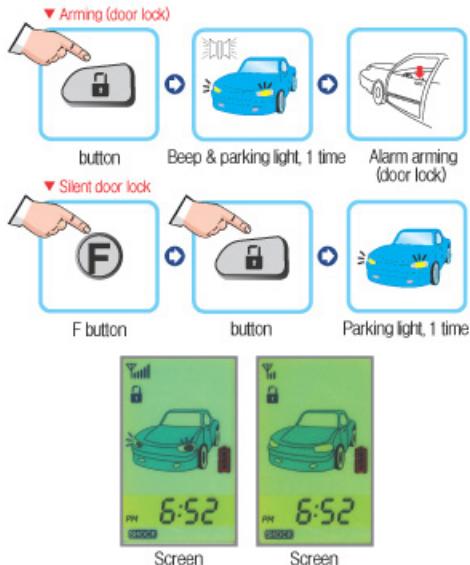
Standard Functions

1) Arming (door lock) function: press button for 1 second.

- ▶ Siren 1 time, parking light 1 time
- ▶ Door will be locked
- ▶ Silent door lock (press  button and then  button): parking light, 1 time
- ▶ Door lock remained during engine starting & driving
- ▶ At this mode, if you have door or trunk or hood opens or have a shock, siren will sound for 30 seconds and parking light flash will be on and off.

This can be occurred total 3 times when same situation continues but it will not affect battery discharge.

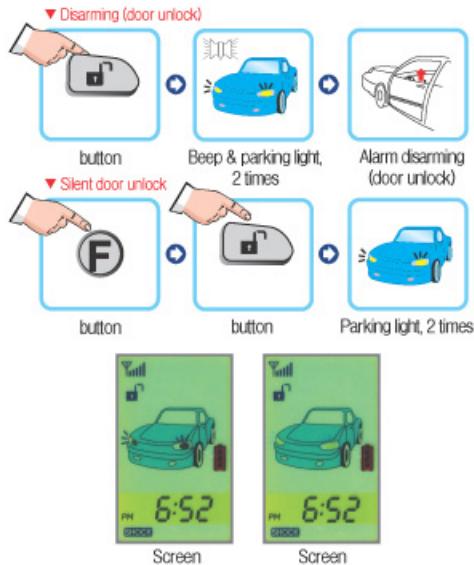
Press any button if you want to stop siren and flash.



- ▶ In the screen of remote, door lock icon displayed.
- ▶ Remote's beep sounds 1 time and back lights will be on. (If you are not connected, beep will sound 3 times and no change of the screen and no back lights.)

2) Disarming (door unlock) function : press button for 1 second.

- ▶ Siren 2 times, parking light 2 times
- ▶ Door will be unlocked
- ▶ Silent door unlock (press  button and then  button): parking light, 2 times
- ▶ Door lock remained during engine starting & driving
- ▶ At this mode, any alarming modes will be inactivated.
- ▶ If you do not open the door within 10 seconds, function will be back to alarm arming mode.

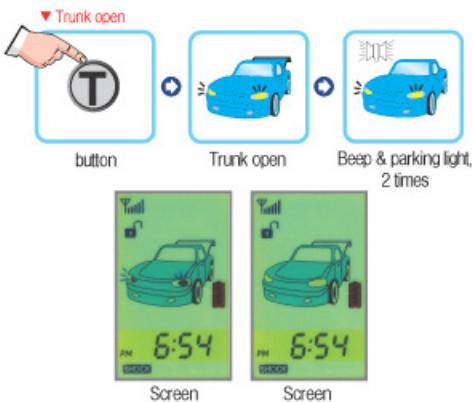


- ▶ In the screen of remote, door unlock icon displayed.
- ▶ Remote's beep sounds 2 times and back lights will be on. (If you are not connected, beep will sound 3 times and no change of the screen and no back lights.)
- ▶ If you do not open the door within 10 seconds, function will be back to arming mode.

Standard Functions

3) Trunk release: press **T** button for 2 seconds.

- ▶ Trunk will be open
- ▶ Alarm will be disarmed
- ▶ Siren 2 times, parking light 2 times.
- ▶ In 10 seconds, back to alarm arming mode.
- ▶ 4 door mode: Before back to arming mode, if you open the door, rearming will not work.
- ▶ 5 door mode: If you open the trunk, rearming will not work.

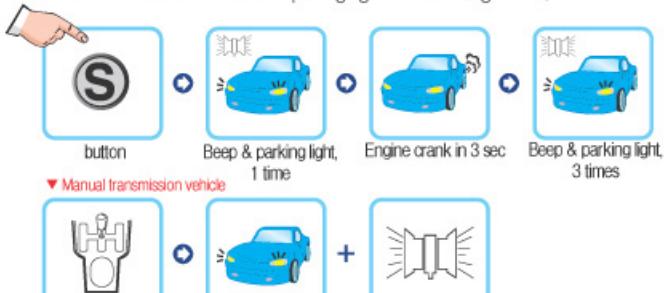


- ▶ In the screen of remote, trunk open displayed.
- ▶ Back lights of remote will be on (if you are not connected, beep will sound 3 times and no change of the screen and no back lights.)



4) Engine start function: press **S** button for 2 seconds (apply to both auto and manual transmission vehicles).

- ▶ Siren 1 time, parking light 1 time.
- ▶ In 3 seconds (7 seconds for diesel vehicles), engine will crank (in case of failure, please try more 2 times).
- ▶ If engine starts, siren sounds 3 times and parking light flashes 3 times. If it failed, beep sounds 2 times.
- ▶ In manual transmission vehicles, if you did not reserve engine start function, siren will sound 3 times and parking light will flash long 1 time.



Do not reserve --> Parking light, 1 time long + Press button for 2 sec



Engine start reserve in manual transmission Engine starting and duration time in manual transmission

- ▶ In the screen of remote, exhaust gas icon and engine start duration time displayed.
- ▶ If engine starts, remote will chirp 2 times and back lights will be on (if you are not connected, beep will sound 3 times and no change of the screen and no back lights.)
- ※ In manual transmission vehicles, if engine start function reserved, P icon is on and off in the screen.

Standard Functions

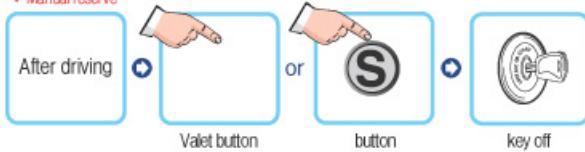
5) Engine start reserve function (manual transmission vehicles)

- ▶ Auto reservation: After driving, if you turn the key to OFF position, you can move to engine start reserve mode automatically.
- ▶ Manual reservation: After driving, press VALET button (or press **S** button for 2 seconds), and turn the key to OFF position then you can move to engine start reserve mode.
- ▶ And then, if you take off the key within 20 seconds, and go out from the car within 20 seconds, and close the doors and press  button within 20 seconds, engine will die and engine start reserve will be finished.

▼ Auto reserve



▼ Manual reserve



In case of turbo installed and LPG vehicles, after closing doors, press

S button for door lock then after 2 minutes engine will die automatically.

If you do not need this function, just press  button for door lock then engine will stop immediately.

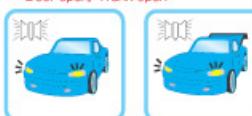
▼ Turbo & LPG vehicle



6) Alarm function: when alarming situation happened (not in valet mode)

- ▶ If doors open, siren sounds for 30 seconds and parking light is on and off for 30 seconds.
- ▶ If doors open continuously, above will happen 3 more times. If engine-starter-kill relay installed, it will make engine stop.
- ▶ If trunk opens, siren sounds for 30 seconds and parking light is on and off for 30 seconds.
- ▶ If trunk opens continuously, above will happen 3 more times.
- ▶ If this mode worked, there will be door/ trunk open icon in the screen you use door lock/ unlock function (door opens: 2 times, trunk opens: 3 times). And it displayed in both car siren and remote.

▼ Door open/ Trunk open



▶ Siren 30 sec, parking light will on & off for 30 sec



Door open Screen



Trunk open Screen

7) Kill engine start function: when alarming situation happened (not in valet mode)

- ▶ In case of engine-start-interrupt relay installed vehicles, you can stop engine working.

8) Car finder function: press **F** button twice

- ▶ Siren 7 times, parking light 7 times.



▼ Car finder

Press F button twice



Screen

Standard Functions

9) Page for car owner: knock sensor in front window is received a tap

- ▶ Parking light 1 time.
- ▶ Chirp sound 4 times.
- ▶ Cell phone icon in the screen.



Page for car owner



Parking light, 1 time



chirp, 4 times



Screen

10) Dual shock sensor

- ▶ Light impacts: beep sound 6 times, parking light flash 6 times.
- ▶ Heavy impacts: siren sounds for 30 seconds, parking light flash on and off for 30 seconds.
- ▶ Light impacts: in remote, beep sounds 6 times and shock-receive icon in the screen.
- ▶ Heavy impacts: in remote, chirp sounds 13 times and shock-receive and hammer icon in the screen.



Light impacts



Heavy impacts

Convenience & Optional Functions

※ On time adjusting functions, press **(S)** button to confirm and press **(T)** button to cancel.

1) Time setting in remote

- ▶ **(F)** + **(S)** button at the same time for 2 seconds, then press **(S)** button for hour setting and press **(S)** button for minute setting. Press **(S)** button when finished..



Screen

2) Vibration and soundless of remote

- ▶ **(F)** + **(S)** button at the same time for 2 seconds, then remote mode will change to consecutively sound → vibration → soundless mode.



Screen



Screen



Screen

3) Cold start function

- ▶ To use this function, press **(F)** and **(S)** button at the same time. If you release this function, repeat one more time.



Screen

Convenience & Optional Functions

4) 24-hour engine start reservation

- ▶ Press **F** + **T** button at the same time for 2 seconds, then press  button for hour setting and press  button for minute setting. Press **S** button when finished.

* For example) in case of your work in and out time is constant at every day



5) Alarm notice function

- ▶ Press  + **S** button at the same time for 2 seconds, then press  button for hour setting and press  button for minute setting. Press **S** button when finished. **T** button for cancellation.
- ▶ To inactive this function, press  + **S** button at the same time for 2 seconds and press **T** button.

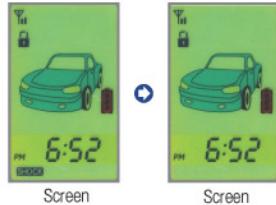


6) Window roll up & down/ Sunroof open & close (optional)

- ▶ Press **T** + **S** button at the same time, then windows will roll up for 2 seconds. Press **T** +  button at the same time to roll down windows for 2 seconds.

7) Remove shock sensor mode

- ▶ Press **T** + **S** button at the same time, then shock sensor mode will be inactivated. Repeat same step to back to shock sensor mode.



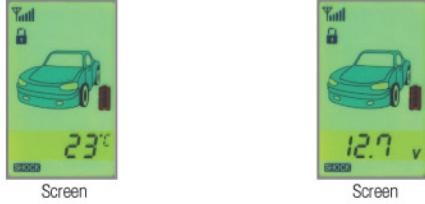
8) Parking time display

- ▶ After engine stops, press **T** button twice then parking duration time will appear.



10) Car inside temperature display

- ▶ Press **T** and  button consecutively to check the voltage of car battery.



11) Car voltage display

- ▶ Press **T** and  button consecutively to check car voltage.

Convenience & Optional Functions

12) Check DIP SW and current status activated

► Press **F** and **S** button consecutively to check current status.

* After replacing battery, please do this function to check current status (replacing battery makes remote initialize so adjust time related functions such as current time, alarm notice and 24-hour engine start reserve function etc.).



Screen

13) Assistance One way Transmitter



	Arm & door lock
	Disarm & door unlock
	Remote engine starter
	Trunk release

13) Functions when it installed (H/W)

► Functions can be changed by DIP SW.

Choice	1	2	3	4
Off (↑)	Gasoline (5sec)	General	General	Auto reserve
On (↓)	Diesel (7sec)	MUSSO	Turbo/ LPG	Manual reserve

14) Customers can choose below when they install

After door open, turn the key to ON position and press valet button 6 times (within 7 sec)	1 sec	Soundless mode -inactivate
	1 sec	Passive mode - inactivate
	2 sec	Silent mode (car off, remote on) - inactivate
	2 sec	Unlock auto door lock vehicle - inactivate
	2 sec	IG lock - inactivate

15) Service centers can choose below for customers

After door open, turn the key to ON position and press valet button 8 times (within 7 sec)	1 sec	Extend cranking time, 1 sec (LPG cars) - inactivate
	1 sec	4 door/ 5 door - 5 door
	2 sec	Engine start recognize: noise (1 time)/ Slide SW: TACHO (2 times)
	2 sec	2 min (chirp, 1 time), 5 min (chirp, 2 times), 20 min (chirp, 3 times)
	2 sec	Factory installed

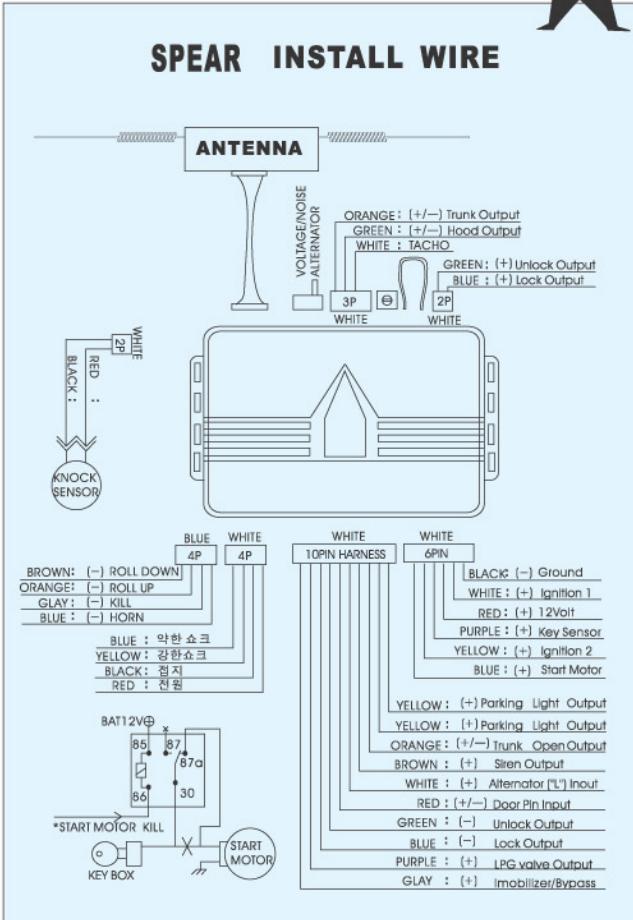
16) Simultaneous siren and horn sound function

17) If shock and car interrupt happened, remote and car displayed and indicated these

* If battery is out of power, there will be no display in the screen and back light will be on and off and remote will vibrate weakly.

---- Need to replace battery.

Main Wiring Diagram



Item	Contents	
Name	SPEAR-5000	
Lot No.		
Production Date		
Purchase Date	YY /MM /DD (warrant until YY /MM /DD)	
Customer	Name	Tel
Address		
Agent/Service center	Name	Tel
Address		

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