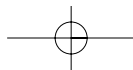


Thank you.

Thank you for your purchase of an **MAGICAR** alarm and/or remote-start system. **MAGICAR** alarms and remote-start systems are the most advanced systems on the market with amazing features, incomparable ease of use, and breakthrough technologies never before used in the automotive environment.

Please take time to read and understand this owner's manual so that you can fully use and enjoy you new **MAGICAR** system.



I. BEFORE BEGINNING	4
1. Remote Description	5
2. Technical Specification	5
3. LCD Screen	6
4. LCD Icons	6
II. BUTTON FUNCTIONS	9
1. Button Functions Description.....	10
2. Locking/Arming	11
3. Unlocking/Disarming	12
4. Auto Mode	14
5. AUX Mode	15
6. Remote Start	16
7. Trunk Release	18
8. Query Function	19
9. Panic Mode	20
10. Siren Chirp	20
11. Valet Mode	21
12. Shock Sensor	22
13. Drive Lock (Ignition Control Door Lock)	22
14. Passive Arming	23
15. Timer Start Reservation	24
16. Parking Timer	25
17. Turbo Function	26
18. EL Lamp	27
19. Button Hold Function	28
III. OPTION FUNCTIONS	29
1. Warning of Vehicle Battery Drain	30
2. Trunk Open Sensor	30
3. Wakeup Interception Function	30
4. Preheating Sensor	30
IV. SETUP & OTHER FUNCTIONS	31
1. Shock Sensor Function	32
2. Theft Function (Door, Trunk or Hood Trigger)	32
3. Car Owner Calling Function	32
4. Cold Start Function	33
5. Ultra Sonic Sensor (Optional)	33
6. Code Unlock Function	34
7. In Range Display	36
8. Battery Save Function	36
9. Time Information Backup	37
10. Door Open Indicating Function	37
11. GAS(LPG) Option Setup	38
12. Remote Start Reservation Mode for Manual Transmission Vehicles	39
13. Examination of Remote Wakeup Failure	40
14. Setting the Shock Sensor Sensitivity	41
15. Entering Valet Mode Using a Key	41
16. Setup of Remote Options	42

I. BEFORE BEGINNING

1. Remote Description	5
2. Technical Specification	5
3. LCD Screen	6
4. LCD Icons	6

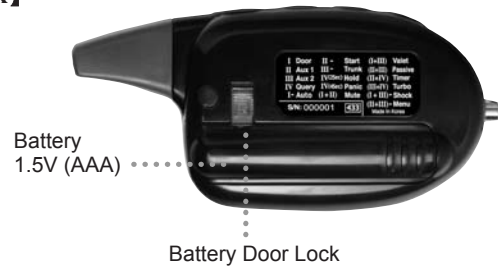
Before using your Magicar system, please take some time to familiarize yourself with it.

1. Remote Description

【Front】



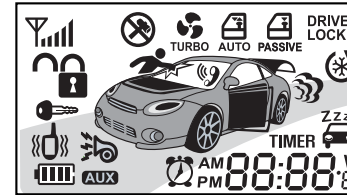
【Back】



2. Technical Specification












Application Frequency	433.92Mhz	Weight	33.5g (without Battery)
Frequency Stability	±2ppm/year	Transmitting Output	10 mW
Exterior	86 x 39 x 20 (mm)	Operating Temperature	-15°C ~ +50°C







3. LCD Screen



4. LCD ICONS

TIMER	• Timer Function On M110AS
TURBO	• Turbo Function On M110AS
PASSIVE	• Passive Function On
AUTO	• Auto Function On
	<ul style="list-style-type: none"> • On - Siren will chirp when arming or disarming. • Off- Siren will not chirp when arming or disarming. The siren will still be activated if the alarm is triggered or PANIC mode is activated.
	<ul style="list-style-type: none"> • On - Remote will vibrate (when applicable), and give audible confirmation. • Off - Remote will only vibrate (when applicable), no audible confirmations will be given.

	<ul style="list-style-type: none"> • On - Impacts to the vehicle will be ignored by the alarm. • Off - Impacts to the vehicle, depending on the severity, will trigger the alarm.
	<ul style="list-style-type: none"> • Alarm Clock On
DRIVE LOCK	<ul style="list-style-type: none"> • Ignition Control Door Lock.
	<ul style="list-style-type: none"> • Doors locked/unlocked.
AUX	<ul style="list-style-type: none"> • AUX mode on
	<ul style="list-style-type: none"> • Door open.
	<ul style="list-style-type: none"> • Remote Start Availability Indication M110AS
	<ul style="list-style-type: none"> • Trunk open.
	<ul style="list-style-type: none"> • This icon displays the signal strength while transmitting or receiving.
	<ul style="list-style-type: none"> • Display of remaining remote control battery life.
	<ul style="list-style-type: none"> • Impact to the vehicle is detected.
	<ul style="list-style-type: none"> • Indicates that someone is using the RPS to page you from your vehicle.
	<ul style="list-style-type: none"> • Car Call function using the RPS is on.

	<ul style="list-style-type: none"> • Valet mode is on, only the door lock function will be available.
	<ul style="list-style-type: none"> • Indicates that the vehicle is currently remote-started.
	<ul style="list-style-type: none"> • Used while displaying temperatures and other features.
	<ul style="list-style-type: none"> • Parking lights are flashing.
V	<ul style="list-style-type: none"> • Voltage display.
	<ul style="list-style-type: none"> • Cold Start Function On M110AS
	<ul style="list-style-type: none"> • Hood Open
88:88	<ul style="list-style-type: none"> • Displays current time, remote start runtime, remaining, turbo mode time inside temperature of the vehicle, battery voltage of the vehicle, start reservation time, failure of signal transfer.

Note

- ▶ Each icon will be displayed while the function it corresponds to is operating.
- ▶ The screen may be hard to see in direct sunlight.

II. BUTTON FUNCTIONS

1. Button Functions Description	10
2. Locking/Arming	11
3. Unlocking/Disarming	12
4. Auto Mode	14
5. AUX Mode	15
6. Remote Start	16
7. Trunk Release	18
8. Query Function	19
9. Panic Mode	20
10. Siren Chirp	21
11. Valet Mode	22
12. Shock Sensor	22
13. Drive Lock(Ignition Control Door Lock)	23
14. Passive Arming	24
15. Timer Start Reservation	25
16. Parking Timer	26
17. Turbo Function	27
18. EL Lamp	28
19. Button Hold Function	28

1. Button Functions Description

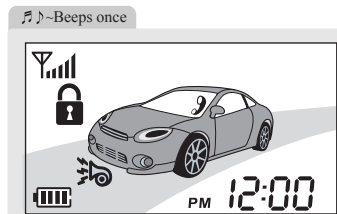
Buttons			Functions			
1	I	0.5Sec	ARM/DISARM	Arming(Locking)/Disarming(Unlocking)		
		2Sec	Extension	If the vehicle is remote started or turbo operated, the runtime will be extended.		
2	II	0.5Sec	AUX #1	Activates AUX #1 output		
		2Sec	START/STOP	If the remote start availability icon is on, this will start the remote start process If the remote start was running, this will stop the remote start process.		
		M110AS				
3	III	0.5Sec	AUX #2	Activates AUX #2 output		
		2Sec	Trunk	Trunk release.		
		Tap Twice	Back Light On	The backlight of remote is turned on for 10Sec		
4	IV	0.5Sec	Query	Car Check function -1st tap:Vehicle temperature -2nd tap:Voltage of vehicle battery -3rd tap:Voltage of remote battery In valet mode, it shows valet.		
		2Sec	Button HOLD	Button hold on/off		
		4Sec	Panic	Panic mode (for 90sec)		
		Tap Twice	Parking Timer	Parking timer on/off		
		5	(I+II)	0.5Sec	MUTE	Siren chirp on/off
		2Sec	PROGRAM #1	Main controller option #1		
6	(I+III)	0.5Sec	VALET	Valet mode on/off		
		2Sec	SHOCK ON/OFF	Shock Sensor on/off		
7	(I+IV)	0.5Sec	DRIVE LOCK	Drive lock(Ignition door lock) on/off		
		2Sec	PROGRAM #2	Main controller option #2		
8	(II+III)	0.5Sec	PASSIVE ON/OFF	Passive arming on/off		
		2Sec	MENU	Entering into Remote menu		
9	(II+IV)	0.5Sec	TIME ON/OFF	TIME starting reservation on/off M110AS		
		2Sec	AUTO ON/OFF	Auto door on/off		
10	(III+IV)	0.5Sec	TURBO ON/OFF	Turbo function on/off M110AS		
		2Sec	AUX ON/OFF	AUX mode on/off		



- Note**
- ▶ 0.5 sec: press shortly (between 0.5 and 1.0 sec.)
 - ▶ - : press until a car responds (longer than 2 sec.)
 - ▶ +: Press two buttons at the same time.
 - ▶ Performing the same button functions again will toggle the various modes between on and off.

2. Locking/Arming

If the system is unlocked/disarmed, pressing button **I** for a half second will lock the doors and arm the alarm. This function will still operate even while the vehicle is remote started. The remote and vehicle will beep once.



1) Arming

- Red LED of Car Call sensor flashes, and the doors, shock sensor and Car Call are monitored.

2) Door Trigger

- If the alarm is armed and a door is opened, the alarm will be triggered, playing the siren and flashing the parking lights for 30 seconds. (Even if the Siren Chirp is turned off.)

3) Shock Sensor

- If the shock sensor detects a heavy impact to the vehicle after 30 seconds of the alarm being armed, the alarm will be triggered, playing the siren and flashing the parking lights for 9 seconds. The remote will be notified of the impact and will beep rapidly while displaying the impact icon; a person hitting the wind shield. The siren will not play at this time if the Siren Chirp has been turned off.
- In the case of a light impact, the siren will chirp four times, and the remote will display the impact icon.

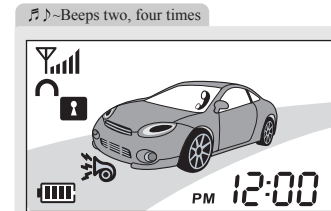
4) RPS (Remote Paging Sensor)

- If the RPS sensor is triggered while the alarm is armed, the remote will be paged and will display the RPS icon.

Caution! ● Siren may go off if you arm the vehicle while the hazard lights are on.

3. Unlocking/Disarming

If the system is locked/armed, pressing button **I** for a half second will unlock the doors and disarm the alarm. This function will still operate even while the vehicle is remote started. The remote and vehicle will chirp twice.



1) Disarming

- The door(s) will be unlocked the RPS LED will stop flashing, and the following details will be indicated according to the number of chirps and parking light flashes:
 - >> Twice: No trouble while the system was armed.
 - >> Four times: Alarm was triggered by strong impact or a opened door.

2) Auto Rearm

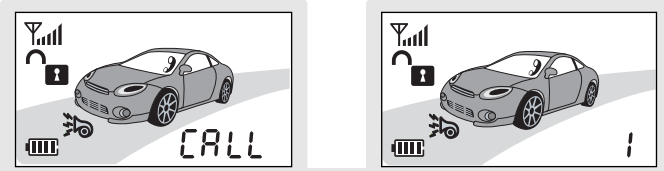
- If a door has not been opened within 30 sec. of disarming the alarm, the doors will be relocked and the alarm will arm. This feature is meant to protect against an accidental disarm of the system. To prevent the rearm process, simply open a door within 30 sec. of disarming the alarm. The system will not arm again until given the command through the remote.

Note

- ▶ In the alarm has been triggered, press button **I**. The siren will stop, but the alarm will still be armed. The system will not respond for the first few seconds after the alarm was triggered, this is because it is still trying to send a signal out to the remote during that time.
- ▶ Press button **I** again to disarm the alarm.

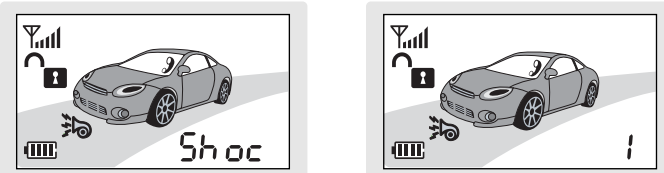
3) RPS Display

- When disarming, if the RPS was triggered while the system was armed, the numbers of times it was triggered will be displayed.



4) Function of Shock Alarm

- When disarming, if the Shock Sensor was triggered while the system was armed, the numbers of times it was triggered will be displayed.



4. AUTO Mode (ON/OFF) [II + IV] -

Pressing button II and IV for 2 sec. will turn on Auto mode. With Auto mode, the vehicle will unlock/disarm when the remote is getting closer, and lock/arm when the remote is far away.

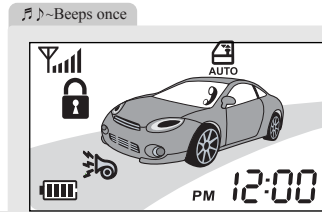
1) Automatic door lock/unlock function starts.

- Operating distance may differ from vehicle and different environments.
This function works on the following order: **auto mode 1 → auto mode 2 → auto mode 3 → OFF**

Press button I again for 2 sec. to switch to the next mode.

Auto Mode 1	Short distance	Icon on.
Auto Mode 2	Long distance	Icon flashes in 1.5 second intervals.
Auto Mode 3	Long distance	Icon flashes in 0.5 second intervals.
OFF	No operation	Icon off.

- Auto mode 3 suspends AUTO mode when it senses consecutively arming/disarming signals.
- The suspension above is cancelled by pressing button I once.



2) When the door is locked

- ♪♪~ dodoreremimifafamimiredodo

3) When the door is unlocked

- ♪♪~ beep beep beep beep

✔ Note

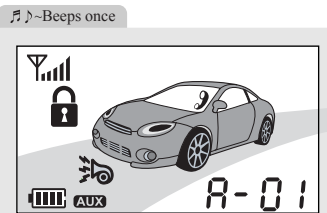
- Due to varying vehicles and environments, there may be a small area of distance in which the system thinks the remote is far enough away to lock, and, close enough to unlock. If your remote is within this area, the system will repeatedly arm and disarm. To avoid this situation, try placing your remote farther away from the vehicle.
- Auto mode will drain your remote battery faster than normal.
- Weather and temperature differences will affect the operation distance of Auto mode.

5. AUX Mode Entry (ON/OFF) [+] -

As you enter AUX mode, the **AUX** icon will be displayed. If an auxiliary channel is not triggered within 60 sec., Aux mode will be cancelled. An auxiliary channel can be programmed for a pulsed, latched, or timed latch output. You can use them to open or close windows, turn on lights, activate heated seats, and other features. Please follow instruction.

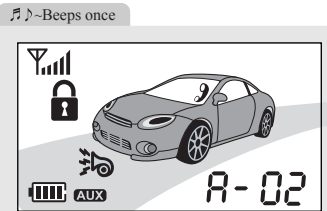
1) AUX 1 (optional)

- After entering AUX mode, AUX 1 output will be triggered, if button **II** is pressed for 0.5 sec.
- While operating AUX 1, the remote control will indicate that AUX 1 is operating.



2) AUX 2 (optional)

- After entering AUX mode, AUX 2 output will be triggered, if button **III** is pressed for 0.5 sec.
- While operating AUX 2, the remote control will indicate that AUX 2 is operating.

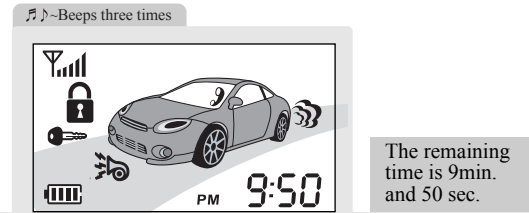


Note

- ▶ Options that utilize auxiliary outputs generally cost extra for installation.

6. Remote Start (ON/OFF) -

The vehicle will start and run for a preset time if button **II** is pressed for 2 sec. If the vehicle is a diesel, the system will pause for a moment after turning on the ignition to allow time to glow plug warm-up. (If needed.)

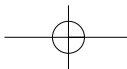


- Vehicle will be armed (if unarmed before start) by getting the signal from remote.
- If the vehicle fails to start, a second and third attempt will be made.
- Remote Start will run for the preset time (10, 25, 3, 5min.). If button **II** is pressed again for 2 sec. Remote Start will shut off.
- The remote start running will continue for 20sec after a door opens. The car key needs to be in On position within the 20 seconds.
- After the vehicle has been remote started, the remaining run-time will be displayed on the screen.
- If the timer goes 1 minute, the remote will warn your with (beep) that the vehicle is about to shut off.



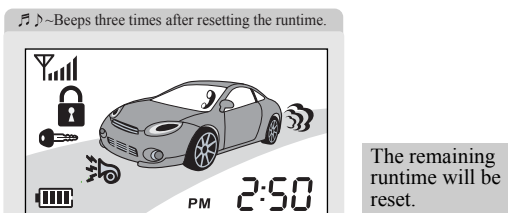
Caution!

- Remote starting should be avoided while people are inside the vehicle.
- You will need to turn the key to the ON position in order to drive the vehicle. Turning the key past the ON position could cause damage to the vehicle starter.



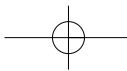
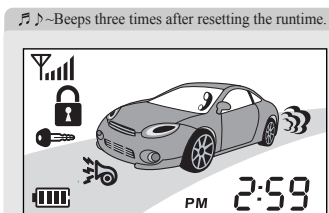
1) Extension of Remote Start Timer

- During the running time, if you press button **I** for 2 sec. " Start-Again" will scroll across the screen once and the timer will be reset to the preset time.



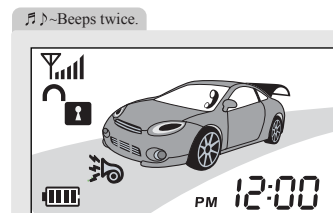
2) Remote Start Display

- If the remote start confirmation is not received by the remote for different reasons, pressing any button within range of the vehicle will update the remote and show the remaining run time.



7. Trunk Release

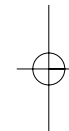
The trunk will be opened/unlocked, if a button **III** is pressed for more than 2 sec. If the alarm is on, it will disarm and unlock the doors as well.



- If the vehicle has not a trunk actuator, it may be convenient to put the system in Valet mode if you are going to be in the trunk doing work for an extended period of time.
- If the vehicle trunk release is a cable type and not electric, extra installation steps will be required to make the remote trunk release functional.
- On vehicles with a trunk actuator, if the trunk is opened more than 20 sec. while the vehicle is remote started, the remote start will be cancelled and the vehicle will shut off.

Note

- ▶ If trunk sensor is installed in a manual transmission vehicle, opening trunk will cancel the remote start reservation.
- ▶ Installation of a trunk open sensor or connection of the sensor wire will generally cost extra as it is an optional feature.



8. Query Function

If button **IV** is pressed for 0.5 sec., the remote and vehicle will respond with beeps/chirps and parking light flashes to report the status of the vehicle.

Division	Car Inspection	Remote Control Operation
Armed, Remote Start OFF	♪-Peep	♪-Beep Beep Beep
Disarmed, Remote Start OFF	♪-Peep Peep	♪-Beep Beep
Armed, Remote Start ON	♪-Peep Peep Peep	♪-Beep Beep Beep Beep Beep Beep
Disarmed, Remote Start ON	♪-Peep Peep Peep Peep	♪-Beep Beep Beep Beep

1) When armed:

- The icons of door lock, shock and Car Call flash.

2) When disarmed:

- The icon of unlock flashes. Door will be opened.

3) Car's Indoor Temperature Indication

- Internal temperature of vehicle will be indicated with °C.
(However, the temperature indicated is the temperature of where a sensor is located, and if temperature sensor doesn't exist, FAIL will be indicated)
- The temperature sensor can be located in a specific location per a customer's request by using the extended cable if needed. (Option)

4) Car's Battery Voltage Check

- In checking the conditions of a car, the battery voltage of a car can be checked with the numbers, if a **IV** button is pressed for 0.5 second, once.

5) Remote Control's Battery Check

- After checking the voltage of a car, the battery voltage of a remote control can be checked with the numbers, if a **IV** button is pressed for 0.5 second, once.

Changes of Menu

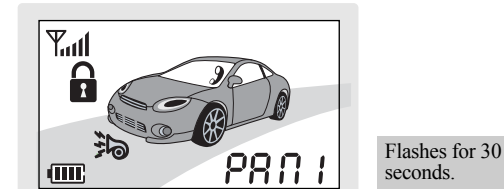
The menu will change from **indoor temperature check** → **battery voltage check** → **the remainder of a remote control battery check** in order, if a **IV** button is pressed.

Note

- ▶ These functions should be operated within transmitting and receiving range of the vehicle.

9. Panic Mode – four seconds

If button **IV** is held for more than 4 sec., Panic mode will be initiated. The doors will lock, the parking lights will flash and the siren will play for 1 min. and 30 sec. " PANIC " will scroll across the remote screen for 30 sec.



- In operating self-emergency, remote control will be turned off, in the case of remote wakeup.
- In operating self-emergency, a siren will operate for 1 min 30sec, in the case of car silence.

Canceling Panic Mode

- To cancel Panic mode, press button **I** for 0.5 sec.

Note

- ▶ You can use this feature to draw attention to you and your vehicle if you are attacked or otherwise threatened.

10. Siren Chirp (ON/OFF) +

By pressing buttons **I** + **II** for 0.5 sec, at the same time, the siren chirps from the vehicle will be muted. To un-mute the siren chirps, press buttons **I** + **II** for 0.5 sec. again.

Exception

- The siren will still play in these situations:
- If the alarm is triggered by opening the trunk or a door.
The siren will still be silent if the alarm is trigger via the shock sensor.
- If Panic mode is activated.

11. Valet Mode (ON/OFF) [I + III]

Activate Valet mode by pressing buttons **I + III** for 0.5 sec. at the same time. (Valet mode can also be activated with the ignition key as well, see page 36.) Valet mode will put the system to sleep and almost all functions will be disabled. Remote lock/unlock, code unlock, remote option programming, and the query function will still operate.



Warning!

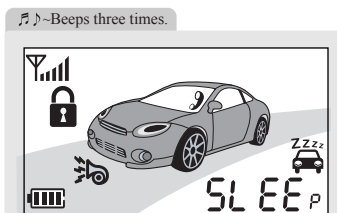
- When the system is in Valet mode, the alarm is not active, even when the doors are locked. Any starter or ignition kill systems that have been installed will be disabled as well.

1) Valet Mode OFF

- Pressing buttons **I+III** for 0.5 sec. at the same time again will turn Valet mode OFF, which restores all functions to the remote.

2) Valet Mode Display

- The only functions available will be:
 - Button **I** for 0.5 sec. (lock/unlock)
 - Buttons **I + III** for 0.5 sec. (Valet OFF)
 - Button **IV** for 0.5 sec. (Query Function)
 - Button **III** double press. (EL Lamp ON)
 - Buttons **II + III** for 2 sec. (Remote Set-Up)
- If any other functions are attempted, the remote will beep three times and "SLEEP" will scroll across the screen to indicate that the system is in Valet mode.



Warning!

- If you loan your vehicle to someone who is not familiar with this CompuStar system, you may want to use Valet mode to avoid any problems they might have by accidentally activating various features.

12. Shock Sensor (ON/OFF) [I + III] -

- To turn off the shock sensor, press buttons **I + III** for 2 sec.
- The shock sensor is turned off if the [] icon is displayed on the LCD of the remote.
- This mode is useful if you will be parked in a loud or high traffic area such as an airport. Turning the shock sensor off will help prevent false alarms.

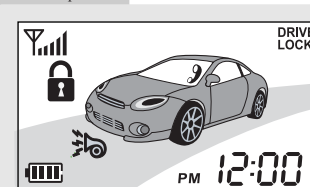
13. Drive Lock(Ignition control door lock) (ON/OFF) [I + IV]

Drive lock icon [] will be displayed on remote control, by pressing **I+IV** buttons for 0.5 sec at the same time, and the doors will be locked right after brake pedal is pushed

Drive Lock OFF

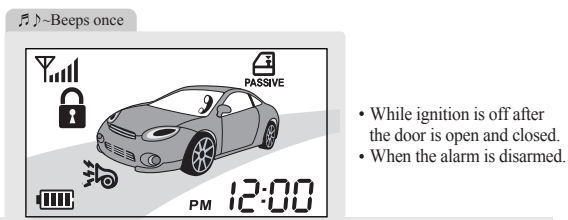
- Drive lock will be OFF, and drive lock icon will be turned off, again by pressing **I+IV** buttons for 0.5 sec at the same time.
- Drive Lock function is not activated:
 - << during remote start,
 - << a door opens within 30 seconds after ignition is turned on,
 - << a door is open when the vehicle is started with key.
- Doors will be unlocked when ignition is turned off.

Beeps once



14. Passive Arming (ON/OFF) +

Passive Arming, which will lock/arm the vehicle if it is disarmed, after 30sec, can be turned ON by pressing buttons **II+ III** at the same time, it operates under the following conditions.



1) Instant Locking

- After remote start reservation is complete in a manual transmission vehicle.
- In the case of turbo function ON, after the door is open and closed following the removal of Key

2) Passive Arming OFF

- To turn off Passive Arming, press buttons **II+ III** buttons at the same time for 0.5 sec. The siren will beep twice and the parking lights will flash.

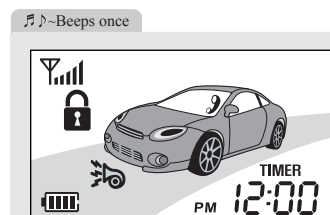


Caution!

- If Passive Arming is ON, the doors will be locked automatically, the remote should be taken with you when you leave the vehicle so that it does not get locked inside.
- If you will be staying in the vehicle for an extended period of time without the engine running, you should turn Passive Arming off so that it does not become a nuisance.

15. Timer Start Reservation (ON/OFF) +

Timer start reservation is activated by pressing buttons **II+ IV** at the same time for 0.5 sec if timer has been set up. Once activated, the vehicle will start by itself at preset time in every 24 hours .
(See page 42-Timer Start Set-Up)



※ However, for a manual transmission vehicle, the remote start reservation is required for this function to work.

Timer Start Reservation

- To turn off Timer Start, press buttons **II+ IV** buttons at the same time for 0.5 sec. The siren will beep twice and the parking lights will flash.



Note

- ▶ The, timer start reservation and turbo mode functions are not turned from the factory, these options must be turned on before use.

16. Parking Timer (ON/OFF) tap twice

1) Parking Timer

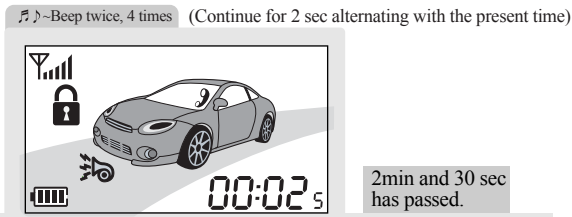
- The Parking Timer can be used to monitor the time passed while driving or being parked.

2) Parking Timer Set-up

- By pressing buttons **IV** twice, the parking timer will be set up and the remote will beep

3) Parking Timer Display

- After starting the parking timer, the display will alternate between the present time (for 1 sec.) and the parking timer (for 2 sec.)
- The parking time will also shows on tenth of a minute **0~9(one tenth of 60 sec)**.
- The maximum display time of the parking timer is 99 hours 59 min.



4) Parking Timer Release

- Parking timer will be turned off with a chirp from the remote, if buttons **II+IV** are pressed for more than 2 sec, while the parking timer is on.

17. Turbo Function (ON/OFF) +

Turbo function can be turned on by pressing buttons **III+IV** for 0.5 sec. With Turbo mode active, the vehicle will stay running after the key has been removed from the ignition

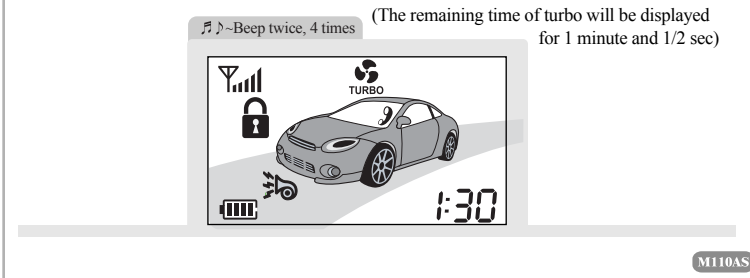
- In the case that Key is removed and the door is locked, wakeup will maintain for turbo function set-up time, however, a car whose auto alarming function is ON will be immediately locked.
- In the case that turbo operating time is set-up for 1 min, wakeup will maintain for a while, if Key is removed, but the door unlocked/locked doesn't work.
- To stop the vehicle from running via the Turbo Timer, press button **II** for more than 2 sec. (In the case of a manual transmission vehicle, remote start reservation will be maintained.)
- In the case the door is unlocked in the middle of turbo operating, engine will shut off in 20 seconds assuming that owner will be ready to drive the vehicle.

1) Turbo Function OFF

- Turbo Timer will be turned off with a chirp from the remote, if buttons **III+IV** are pressed for 0.5 sec.
- If you pressing button **III+IV** while engine is running by Turbo Timer, both engine and Turbo Mode will be turned off

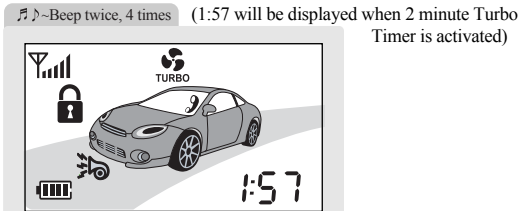
2) Check Function of Turbo Time

- The remaining time is displayed, and turbo icon will flash



3) Turbo Time Extension

- Pressing button **I** for more than 2 sec. while the turbo timer is operating will extend the run time, as **Turbo Again** is scrolled across the display.



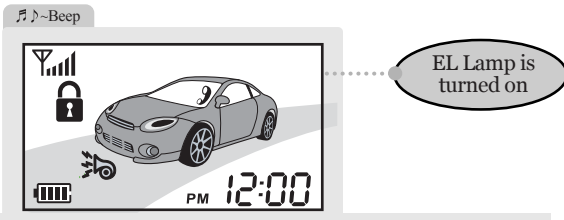
Note

- A turbo timer is designed for vehicles with turbo chargers. After hard use, the turbo housing will be very hot and allowing the vehicle to idle for a few minutes will cycle more oil through the turbo while it cools.
- Turbo Function works differently with LPG option vehicles.
Warning! Since engine is running without key with this Turbo Mode, the driver should make sure that the vehicle's gear is in neutral.

M110AS

18. EL Lamp Double Tap

If it is hard to see the screen because of low light conditions, tap button **III** twice, the EL Lamp will be turned on.

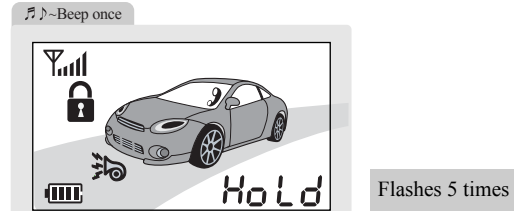


19. Button Hold Functions - 2 sec

This function prevents accidental button presses while carrying your remote.

1) Button Hold Set-up

- To activate the Button Hold function, press button **IV** for 2 sec. The remote will beep and display "Hold" on the screen.

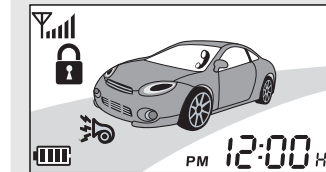


2) Button Hold Cancellation

- To cancel the Button Hold function, press button **IV** for 2 sec. again while the Button Hold function is active. The remote will beep twice, and the normal functions will return to the remote.

3) Button hold Display

- Normally, Button Hold operation is indicated on the right side of the screen as an "H"



Note

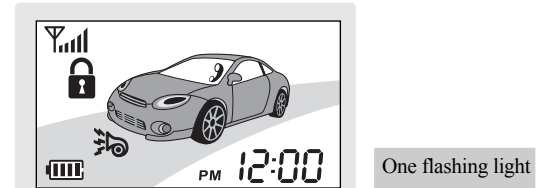
- The Button Hold function will be cancelled if you activate Panic mode by pressing button **IV** for 4 sec.

III. OPTION FUNCTIONS

- 1. Warning of Vehicle Battery Drain 30
- 2. Trunk Open Sensor 30
- 3. Wakeup Interception Function 30
- 4. Preheating Sensor 30

1. Warning of vehicle battery drain

If the vehicle is locked (armed) with a taillight on, the parking lights will flash once and siren will chirp 7 times



2. Trunk Open Sensor

With this sensor installed and the alarm armed, the alarm will be triggered if the trunk is opened. The siren will be activated and the parking lights will flash.

3. Wakeup Interception Function

With this option installed: If the door is forced open, while the vehicle is armed/locked, the vehicle will not start with either the remote or key.

4. Preheating Sensor

For remote starting diesel vehicles, the system monitors Wait to start lights to preheat the engine.

Note

- ▶ Options will generally cost extra for installation and parts.

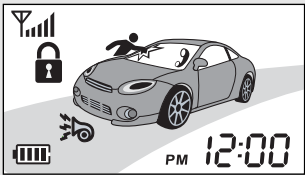
IV. SETUP & OTHER FUNCTIONS

1. Shock Sensor Function	32
2. Theft Function (Door, Trunk or Hood Trigger)	32
3. Car Owner Calling Function	32
4. Cold Start Function	33
5. Ultra Sonic Sensor (Optional)	33
6. Code Unlock Function	34
7. In Range Display	36
8. Battery Save Function	36
9. Time Information Backup	37
10. Door Open Indicating Function	37
11. GAS(LPG) Option Setup	38
12. Remote Start Reservation Mode for Manual Transmission Vehicles	39
13. Examination of Remote Wakeup Failure	40
14. Setting the Shock Sensor Sensitivity	41
15. Entering Valet Mode Using a Key	41
16. Setup of Remote Options	42

1. Shock Sensor Trigger

If the alarm is armed and the shock sensor is triggered by an impact to the vehicle, the following sequence will occur:

♪-Beeps for 9 sec

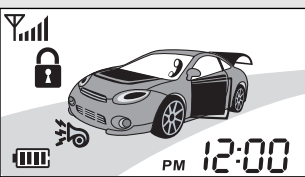


■ **CAR** : The siren will activate and the parking lights will flash for 9 sec.
 ■ **Remote control** : Vibration/theft indication sound.
 Remote will beep at 4 second intervals until a button is pressed.

2. Theft Function (Door, trunk or hood trigger)

If the alarm is armed and the door, trunk, or hood is opened, the following sequence will occur:

♪-Beeps for 30 sec

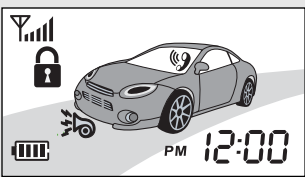


■ **CAR** : The siren will activate and the parking lights will flash for 9 sec.
 ■ **Remote control** : Vibration/theft indication sound.
 Remote will beep at 4 second intervals until a button is pressed.

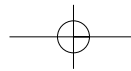
3. Car Owner Calling Function

If the alarm is armed and the RPS function is turned on, when a person knocks on the RPS sensor, the remote will be paged and will ring like a telephone and vibrate.

♪-Beeps



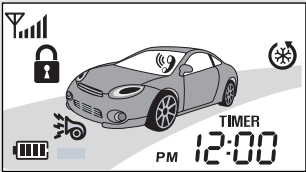
■ **CAR** : The vehicle LED changes from red to green.
 ■ **Remote control** : Vibration/telephone ring. (4 times)
 Remote will beep at 6 second intervals until a button is pressed.



4. Cold Start Functions

This is the function that when the timer start reservation is on, engine will be started automatically based on fixed 3 steps of temperature setting if the temperature is below 0°C, the engine will be started automatically. Temperature setting can be adjusted by changing main controller option.

♪ -Beeps



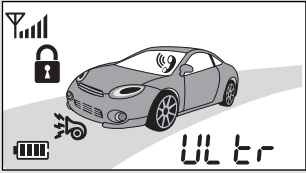
■ **CAR** : The siren will activate and the parking lights will flash for 9 sec.
 ■ **Remote control** : Vibration/theft indication sound.
 Remote will beep at 4 second intervals until a button is pressed.

M110AS

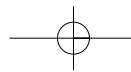
5. Ultra Sonic Sensor (Optional)

It perceives someone is inside the car, and makes car alarm activated and transfer the signal to the remote controller when it detects someone is inside the car. This is an optional product.

♪ -Beeps for 30 sec



■ **CAR** : The siren will activate and the parking lights will flash for 9 sec.
 ■ **Remote control** : Vibration/theft indication sound.
 Remote will beep at 4 second intervals until a button is pressed.



6. Code Unlock Function

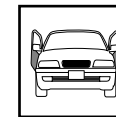
Enter the four numbers (1111~9999) as a password, by using a RPS sensor, entering the correct pass code will unlock the doors, without either remote control or Key. ("0" should be avoided for a password.)

- Each knock in a set needs to be done within 1.5 sec. of each other. Waiting longer than 1.5 sec will switch to the next set of knocks.
 - Green LED should be checked at the first knock.
- Conditions for Entering the Password the First Time

Conditions for Entering the Password the First Time



Doors
Unlocked



Door
Open

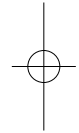


Key On, but
Engine Off



Note

- ▶ If you enter the wrong password more than 5 times within 30 min, this function will not be available for 24 hours. (The remote will still operate during this 24 hour period.)
- ▶ If you give up in the middle of entering the password, it will not count toward the wrong entry count of 5.



Knocking (For door open or entering the password.)

The password should be entered under the, **car conditions for entering a password** (see page 28).

- ① Push the Button or Knock on the RPS sensor 10 times



The Green LED will flash at the first knock.

- ② Red LED flashes fast



The next knock shall be done within 1.5 sec.

- ③ Push the Button or Knock as many times as the first password number, and then check to see if the red LED flashes. (Knock as many times as the first password number)



After 1.5 sec
Green LED will flash at the first knock.



Red LED flashes as many times as the number of the first set of knocks.

After the first set

The second, third, and fourth password numbers should be entered the same as above.

(As the password has four numbers.)

- ④ After entering the final set

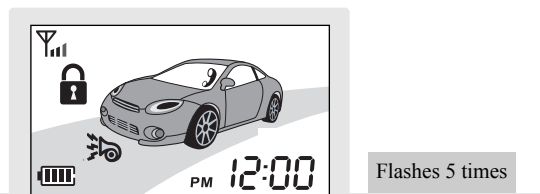
The parking lights will flash, signaling that the password has been entered.

Unlocking the doors using the RPS

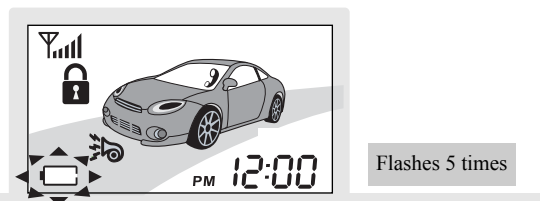
To unlock the doors using the RPS, the code must be entered correctly, matching the code you specified initially. The remote will be paged and will show that the doors have been unlocked.

7. Set-up and Other Functions**In Range Display Method**

If the remote and vehicle are within operating range of each other, the signal strength will be displayed beside the antenna icon on the display.

**8. Battery Save Function**

When the battery is almost dead and ready to be replaced, the battery icon will flash and Battery Save Mode will operate.

**Battery Save Mode Operation**

The remote will only receive confirmation signals for button **I** operations.

The other buttons will still function, but they will not receive confirmation signals back from the vehicle.

The transmitting power will be reduced for a close range operation only.

9. Time Information Backup

1) It saves time information (current time, start-up reservation time and alarm time) in the status where power has not been supplied to remote (at a time of replacing batteries). If the power is supplied again, users do not have to re-adjust the time information.

2) Remote default is set in the status when the time information backup is released. In order to set up the time information backup for the remote, users need to execute the menu of the remote once or more.

After users execute the menu ((2+3)-), the time information backup is automatically executed.

3) Cautions at a time of replacement of batteries

In order to use the time information backup function more effectively, press button No.4 of the remote before and at a time of the replacement of the batteries (communication with the main not needed at that time) to back up more accurate time information.

10. Door Open Indicating Function

The parking lights will flash to indicate that the door is open.
(See INSTALLATION MANUAL for the setup procedure "the main option")

11. GAS(LPG) Option Set-up

※ *Burning off gas residue in the system:*

- **Auto Transmission Car**

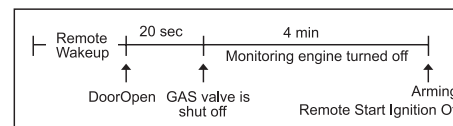
- While engine is running, shut off the gas valve and wait. Then turn off the key after the gas residue was burnt off.
- Activating Turbo Mode will be a convenient way of burning off the gas residue since engine will continue running like a manual transmission vehicle until the gas residue is burnt off. See below.

- **Manual Transmission Vehicle**

Turn off the key first then shut off the gas valve. Engine will continue running until the gas residue is burnt off. If you open and close the door while engine is still running, the remote start reservation is also completed.

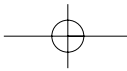
- **Remote Start**

After remote start is completed, the ignition wire will continue to be powered for 4 more minutes (or 4 minute and 20 seconds if a door opens while engine is running) by the system to make sure the gas residue is burnt out.



Note

- ▶ In Turbo Mode, if Key is turned OFF but the GAS valve is not shut off, then the engine will be turned off in 4 minutes without burning off the gas residue.
- ▶ In Turbo Mode, the remote will show the engine running to burn off the gas residue.



12. Remote Start Reservation Mode for Manual Transmission Vehicles

Reservation Mode prevents a manual transmission vehicle from starting in gear if the system has been installed properly.

Automatic(Passive) Reservation

When key is turned off, the doors will unlock and the engine will remain running up to 2 minutes. Within the 2 minutes, if a door opens then closes, the engine will shut off completing the remote start reservation. " []" icon shall be displayed to confirm the reservation.

Active Reservation

If button II is pressed for more than 2 sec., before the key turned off and removed from the ignition, the parking lights will flash and the siren will chirp one time. The engine will stay running for 2 min. even if the key is taken out of the ignition. Before the 2 min. timer expires, you must get out of the vehicle and shut the door. Once the door closes the engine will shut off and Reservation mode has now been set. The remote start availability icon, " []" will be displayed on the remote screen.

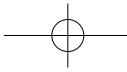
※ This procedure is for the vehicles that have a problem with the Automatic Reservation procedure.

Note

- ▶ In the process of Reservation mode set up, the display lights in the instrument cluster may be ON for 3 sec after the engine has been turned off. (This is a normal process.)
- ▶ In the process of Reservation mode set up, when the key is removed, the ABS light may be ON/OFF, this is a normal operation.

! warning !

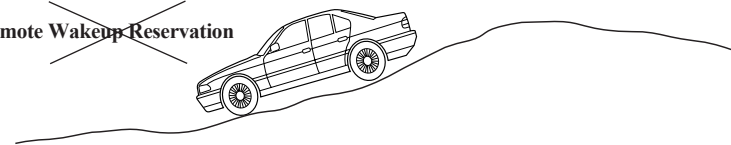
- When this product is installed in a manual transmission vehicle, it must be set to Manual Transmission Mode. Our company is not responsible for any accident resulting from selecting wrong mode (Automatic Transmission Mode) for a Manual Transmission vehicle. Customer must confirm this with his/her installer and check and inspect by himself/herself.
- Automatic transmission vehicles must be checked in the same manner, ensuring that the vehicle will not start with the key



Reservation Mode Cancellation in Manual Transmission Vehicles

- After Reservation Mode has been set up, it will be cancelled if either the trunk or a door is opened.
- After driving and removing Key, the engine will stay running for 2 minutes. If button II is pressed for more than 2 sec. during this time, Reservation Mode will be cancelled.
- If Valet Mode is ON, Reservation Mode will be cancelled.

Remote Wakeup Reservation



! warning !

- On the slopes, a car may move. You should not set up the reservation mode.

13. Examination of Remote Wakeup Failure

If there is a problem remote starting your vehicle, you will hear three chirps from the remote to indicate that there is a problem. If you go to the vehicle and try again, an error code will be displayed through the parking lights. The lights will flash three times, pause, and then flash a number of times equivalent to the error code number. Example for error code 4, the parking lights will flash three times, pause, and then flash four times.

Number of Flashes	Error Explanation
Once	Engine is already running.
Twice	Ignition (Key) is on.
3 times	Door open.
4 times	Trunk open.
5 times	Reservation Mode not set. (Manual transmission vehicles only.)

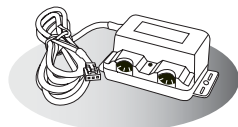


14. Setting the Shock Sensor Sensitivity

Controlling Shock Sensor Sensitivity

To adjust the shock sensor sensitivity, locate the shock sensor and adjust the dial on the sensor. The higher the number on the dial, the higher the sensitivity of the sensor.

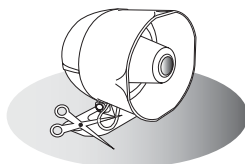
※ Shock Sensor sensitivity can vary from vehicle to vehicle for many reasons including where and how it is mounted, and the size of the vehicle. Some after install adjustment may be necessary to fine tune the sensor.



〈The higher the numbers, the more sensitive〉

Control of Siren Sound

In order to increase the volume of the siren, locate the siren, (usually under the hood in the engine bay) and cut the loop of black wire at the base of the siren. Be careful not to cut the thicker black ground wire of the siren.



15. Entering Valet Mode Using a Key

If the remote has been lost or damaged, you can enter Valet Mode using the ignition key of the vehicle. The following steps must be completed within a limited amount of time, so please read through the instructions before beginning.

- 1) Turn the key to the "Ignition On" position. When the ignition is on, the lights in the instrument cluster will turn on. In most vehicles this position is two "clicks" forward from the "Off" position.
- 2) Move the key back one "click" to the "Accessory On" position. The lights in the instrument cluster should turn off.
- 3) Steps 1 and 2 must be repeated for a total of three times within three seconds. Once this has been done, the alarm will turn off and valet mode will be active

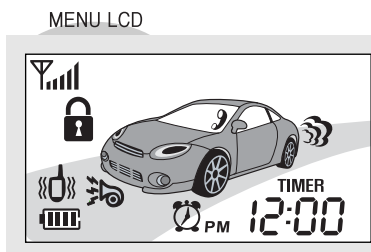


(Key Box)

- Valet Mode can only be turned off through the remote (Press buttons **I** + **III** for 0.5 sec. at the same time, the siren will chirp and the parking lights will flash twice.)

16. Setup of Remote Options [**II** + **III**]—

→ Entering the Main Menu



The remote can be programmed after pressing buttons **II** + **III** for more than 2 sec. at the same time.

→ Button Control Method

Function(Menu)	Button			
	I	II	III	IV
Set-up of present time	hour control	minute control	▲ back to the previous menu	▼ back to the next menu
Set-up of timer start reservation time M110AS	hour control	minute control		
Set-up of alarm clock time	hour control	minute control	▲ back to the previous menu	▼ back to the next menu
Set-up/cancellation of alarm clock function	change(basic : cancellation)			
Set-up/cancellation RPS	change(basic : Activation)			
Set-up/cancellation of vibration mode	change(basic : cancellation)		▲ back to the previous menu	▼ back to the next menu
Change of the temperature unit	change (basic : "°F")	The change of °F or °C		

✔ Note

- ▶ The icon corresponding to the option you are changing will flash on the screen.

→ Menu End Method

- To exit the remote programming menu, press buttons **II** + **III** for more than 2 sec.
- The remote will automatically exit the programming menu if 15 sec. pass without a button being pressed.

