AUTO SECURITY
MAGICAR

Two-Way FM Remote

RF2WN

USER'S GUIDE

MAGICAR

MULTI CONTROL SYSTEM

USER'S GUIDE
RF2WN
By Youngshin Electronics Co., Ltd.
Website:www.magicar.com

YOUNGSHIN
Electronics Co., Ltd.
Website: www.magicar.com

Congratulations

Congratulation for your becoming a member of
Magicar family.

Thank you for choosing Magicar M902F, a state-of-the-art Two Way alarm
remot start system for your vehicle.
We, Youngshin Electronics Co., Ltd., are constantly performing research
and development in order to make your vehicle more safe and comfortable.
Security and comfort, that's what Youngshin Electronics Co., Ltd. is
all about.

When you insert a battery in the remote, the LCD will
show each icon one by one with music play.
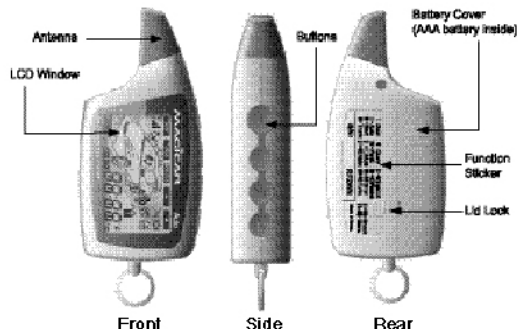
IMPORTANT INFORMATION

1. In order to auto-start your manual transmission car, you must first set the Magicar system to Reservation Mode before leaving your vehicle.
The purpose of Reservation Mode is to leave the transmission gear in the neutral position when you leave your vehicle.
Do not set the reservation mode while someone is inside of the vehicle.
It will be dangerous to use the system if the door pin switch is not in good working order.

2. NEUTRAL SAFETY SWITCH
Your vehicle should starts only in Parked or in Neutral position with the key.
If the vehicle starts in any other position, it is very dangerous to choose the automatic transmission mode. Youngshin shall not be responsible for any damages or consequences resulting from failure to choose the manual transmission mode for these vehicles.

3. The serial number of the remote is required for the warranty.
Please make sure your remote has the serial number.

4. You may be charged for repair if the damage is resulted from the Act of God, abuse or improper care of the product.
The Youngshin's warranty does not cover any of the optional accessories, such as, external relays or door actuators.

5. This product is intended only for Auto Security.
Any other use is not allowed.

※ We are not responsible for any injuries or damages resulting from your failure to comply with the above requirements.

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Description of Remote Appearance

The model name, RF2WN, stands for **2 Way FM 4 Button Remote.**

Antenna

LCD Window

Battery Cover
(AAA battery inside)

Buttons

Function
Sticker

Lid Lock

Front   Side   Rear

MAGICAR color LCD

The remote-pager comes with Magicar which is a unique color LCD display that visually tells the vehicle owner the security status of your car at all times. There are differing icons that will appear on your Magicar LCD indicating what your vehicle is currently doing.

LCD Icons

Icon	Explanation
▲	Indicates if Recording & Play on Voice Moduole (Optional) are on or off.
Auto ▲	Indicates if the Auto Lock/ Unlock mode is on or off. (Icon flashes for longer range.)
Timer	Indicates if Timer Mode is on or off.
Turbo	Indicates if Turbo Start Mode is on or off.
Passive	Indicates if Passive Arming Mode is on or off.
🜲	Indicates that the Shock Sensor has been triggered.
🌀	Indicates that Shock sensor is turned on or off.
zzzz	Indicates if you are in Valet Mode.
🔅	Indicates if your car parking lights are flashing.
🔊	Indicates that your car siren is turned on or off when you lock or unlock the vehicle.
☎	Indicates if RPS is on or off.
📞	Indicates that someone is paging you from your vehicle.
📶	Indicates that your remote-pager is transmitting signals to the controller unit.
📳	Indicates if Vibrator is on or off.
🔒 🔓	Display if your car is lock or unlock
🔋	Displays remaining battery life.
88:88	1. Time Clock. 2. Inside Temperature of the vehicle. (°F °C) 3. Remainder of the engine running time. 4. Remainder of the battery power.
🔲	Indicates if Ignition Lock/Unlock is on or off.

Icon	Explanation
⌐⌐	Displays if your door is open.
🔑	Displays if your vehicle has auto-started properly or ignition on.
⟍	Displays if your trunk is open.

Remote-Pager Button Functions

	Button	Pressed For	Function
1	I	1/2 sec	Alarm Mode - on/off, RPS - on/off, Siren Off, Starter Kill (Anti-Grind) - on/off
2	I – ①	2 sec	Auto Arming turned On.(Auto icon will be turned on).
3	I – ②	2 sec	Longer range Auto Arming On.(Auto icon Flashes.)
4	I – ③	2 sec	Auto Arming turned Off.
5	(III+IV) –	1/2 sec	Recording & Play on Voice Module(Optional)
6	II	1/2 sec	AUX 1
7	III	1/2 sec	AUX 2
8	IV	1/2 sec	Query Function
9	II –	2 sec	Auto-start Function - on/off
10	III –	2 sec	Trunk Release
11	IV –	2 sec	Panic, Press I to shut off Siren.
12	(I + II)	1/2 sec	Siren Chirps for Lock/Unlock-on/off
13	(I + III)	1/2 sec	Valet Mode - on/off
14	(I + IV)	1/2 sec	Ignition Lock – on/off.
15	(II + III)	1/2 sec	Passive Arming – on/off.
16	(II + IV)	1/2 sec	Timer Start Mode - on/off
17	(III + IV)	1/2 sec	Turbo Mode - on/off

	Button	Pressed For	Function
18	(I + III) –	2 sec	Shock Sensor - on/off
19	(I + II) –	2 sec	Programming Menu 1 - Installer Only
20	(I + IV) –	2 sec	Programming Menu 2 - Installer Only

Note : I button Proceeds in (1) ➡ (2) ➡ (3) ➡ (1)..... repeatedly.
At (2), 🔼 the icon will flash.

Note : " — " Represents pressing the button for 2 seconds.
" ( ) " Represents simultaneously pressing the buttons.
" ( ) – " Represents simultaneously pressing the buttons for 2 seconds.

More Button Functions

(1) Time Setting

	Button	Pressed For	Function
STEP 1	(II+III) –	2 sec	*Pro9* Beep sound for confirmation
STEP 2	(I)	1/2 sec	Time setting is on. The numbers flash. Beep Sound.
STEP 3	(I)	1/2 sec	Change time.
	(II)	1/2 sec	Change minutes.
STEP 4	(II+III) –	2 sec	Time setting is off. Beep sound. You may continue for motion option.

(2) RPS & Vibrator on or off select between ·℃ and ·℉ for temp.

	Button	Pressed For	Function
STEP 1	(II+III −)	2 sec	**Pro9** Beep sound for confirmation
STEP 2	(III)	1/2 sec	**♪ ON/OFF** RPS on or off, beep sound for confirmation.
	(IV)	1/2 sec	**📳 ON/OFF** Vibrator on or off, beep sound for confirmation.
	(I + IV)	1/2 sec	Select between ·℉ and ·℃

Note : The step 2 has to be completed within 15 seconds.

[I] Door Lock

🔒 If the doors are closed and unlocked, you can lock and arm the vehicle by pressing Button (I) for a ½ second. The siren chirps and the parking lights flash once to confirm the lock and arming.

[I] Door Unlock

🔓 If the doors are closed and locked, you can unlock and disarm the vehicle by pressing Button (I) for a ½ second. The siren chirps and the parking lights flash twice to confirm the unlock and disarm.
If you hear four chirps and 4 flash of the parking lights, that means the alarm went off while the vehicle was armed.

[I−] Auto Arming

Auto ◄► You can turn this function on or off by pressing Button (I) for 2 seconds. When set to Auto arming, your security system will arm automatically after all the car doors are closed, your remote is away

from the vehicle by more than 50 to 100 ft **and 15 seconds have passed since the last Auto Disarm.** Your system will disarm automatically if your remote comes within 50 to 100 ft radius from the vehicle.

▲ **Setting Auto Arming Function.**
The range varies significantly depending on the radio signal environment.
Each time you press I button for 2 seconds :
① First time : Auto icon is turned on.
② Second time : Auto icon flashes - for longer range.
③ Third time : Auto icon is turned off.

[II−] Auto-Start Function

Press Button (II) for 2 seconds to auto-start an automatic transmission engine. Upon receipt of the signal from the remote, the system will confirm the receipt by a chirp. A manual key in the ignition is required to drive the car.

Insert your key in the ignition and turn the key to On position within 20 second after you open the door of vehicle. The engine will shut off in 20 seconds after opening the door if you do not insert the key and turn to On position.
Do not crank the starter while the vehicle is running.

The engine will run 15/25/45/5 minutes and then shut off.
If your remote-pager has a problem starting the vehicle, Magicar will try 2 additional times. If the engine does not start after the third attempt, please call your authorized Magicar dealer.

▲ **88:88** shows the remainder of the engine running time.

[III−] Trunk Release

Press Button (III) for 2 seconds in order to unlock and release your trunk door. The installation of this mode is available only if your vehicle has a trunk actuator. Note that the trunk release function will not only release the trunk but will unlock all the doors as well. If the trunk sensing wire has been connected, the reservation will be cancelled when you open the trunk in the manual transmission mode.

(IV) Query Function

Query Function allows the owner to visually monitor the status of your car by looking at the remote-pager MagiGLO LCD icons.
Press Button (IV) for a ½ second to activate the Query Function.
You will receive one of the following
response if you are within the transmitting distance:

	LCD	Siren in the vehicle
Armed, engine not running	Beep, Beep, Beep	chirp
Disarmed, engine not running	Beep, Beep	chirp, chirp
Armed, engine running	Beep/Beep, Beep/Beep, Beep/Beep	chirp, chirp, chirp
Disarmed, engine running	Beep/Beep, Beep/Beep	chirp, chirp, chirp, chirp

▲ **Query tells you the inside temperature of the vehicle.**
   It tells you the temperature with either *F or *C

▲ **Query tells you the battery voltage also.**
   Press IV for Query. Press one more time within 6 seconds, it will tell you the battery's voltage.
   (EX) For example, if the battery voltage is 12.6 V, it will show **12_6**

(IV-) Panic Mode

Press Button (IV) for 2 seconds to enter Panic Mode. In this mode, the car will arm if not armed already and the siren will activate and the parking lights will flash for 90 seconds. Panic mode will stop the remote start.
In order to disengage Panic Mode, press Button (I) for a ½ second.
Then, press Button (I) for a ½ second to unlock/disarm your vehicle.

(I+II) Siren Chirp Delete for Arm/ Disarm ON/OFF

With this programming, the speaker icon in the LCD will disappear and siren chirp is deleted. Note: Siren will go off if door sensor, shock sensor, or panic mode is activated.

(I+III) Valet Mode

The only feature operating in valet mode is the keyless entry function and optional auxiliary functions. Valet Mode is very useful when washing your vehicle or having it serviced.

((I+III)-) Dual Stage Shock Sensor

Press Buttons (I+III) for 2 seconds to activate or deactivate the dual stage shock sensor. The dual stage shock sensor will activate in 30 seconds after the Magicar alarm mode is armed. When the dual shock sensor is engaged, the remote-pager security alerts will be triggered by the following:

▶ Light impact to your vehicle will activate the **first stage shock sensor** and the car siren will chirp 4 times in addition to the parking lights flashing 4 times. The remote pager unit will beep and the hammer icon shows up a couple of times

▶ Heavy impact to your vehicle will activate the **second stage shock sensor** and the car siren will chirp for 30 to 60 seconds and the parking lights will flash for 30 to 60 seconds. The remote-pager will be notified audibly and a hammer icon will blink in the LCD.
Press Button I for a 1/2 second to turn off the second stage shock sensor sirens and flashing lights.

(I+IV) Ignition Lock

This programmable option enables your vehicle to automatically lock the doors in 30 seconds after the vehicle has been started with a key while all the doors are closed.

In addition, the vehicle will automatically unlock the doors upon pulling the key out from the ignition.

(II+III) Passive Arming/ Active Arming

Passive ▲ **1.** You can turn this function on or off by pressing Buttons **(II+III)** for a ½ second. **Passive Icon will be highlighted in the LCD.** When set to passive arming, your security system will arm automatically 30 seconds after all the car doors are closed.

Passive locking means the door will lock when the system is passively armed. In the default factory setting, the system is armed and locked actively, which means the system will only arm/lock when the remote-pager is utilized.

2. If you select both Auto Arming and Passive Arming, Auto Arming takes priority over Passive Arming.

3. Under the Manual mode, the Passive arming will lock the doors upon reservation. Under the Turbo mode, the Passive arming will lock the doors upon closing the doors after the ignition has been turned off.

(II+IV) Timer (24 Hours) Reservation

You may reserve the remote starting time by 1) setting up the starting time and 2) turning on Timer icon.

▲ Procedure
1. Time icon should be turned off.
2. Set up the starting time. Make sure the current time is correct.
3. Turn on Time icon.

	Button	Pressed For	Function
STEP 1	(II+III)–	2 sec	$Pr o9$ Beep sound for confirmation.
STEP 2	(II)	1/2 sec	Time setting is on. The numbers flash. Beep sound.
STEP 3	(I)	1/2 sec	Change time.
	(II)	1/2 sec	Change minutes.
STEP 4	(II+III)–	2 sec	Set up completed. Beep sound.

(III+IV) Turbo Mode

Turbo ▲ You can turn this feature on and off by pressing Buttons **(III+IV)** for a ½ second. Under this mode, engine continues running for 2 minutes after key has been taken out from the ignition.

This mode is useful with Turbo vehicles that need to be cooled down after long drive.

((III+IV)–) Recording & Play on Voice Module (Optional)

The icon located on the left of Auto is On when pressed **III & IV** buttons simultaneously for 2 sec and converted to Recording & Play mode of Voice Module. And it can be recorded & played when pressed **II** and **III** for 0.5 sec. But, in case of not pressing within 60 sec, the Recording & Play mode is off automatically.

(II) Aux1

Aux 1 will go out if the button II is pressed for 1/2 second. There are four different types of outputs (Consult your installer) that are used to operate a sunroof, a mirror or any other auto accessories.

(II) Aux2

Aux 2 will go out if the button III is pressed for 1/2 second. Likewise, it has 4 different types of outputs.

Note :
1. The duration of the Aux output should be vary depending on the equipments that these outputs operate.

2. These Aux outputs are 250 mA outputs. Therefore, please use relays if you connect these outputs to equipment that uses more than 250 mA. Otherwise, you will damage these output circuitries.

3. These Aux functions will require extra installation fees. Please consult your installer.

Real Time Remote Paging Functions

Types : R.P.S(Remote Paging System), Theft and Shock Sensing Whenever one of these is triggered, it is reported to the remote with beeps and flashing icons in the LCD. In case when the owner has not been alerted, the remote continues making beeping sounds until turned off.

Theft - one beep every 2 seconds ;
Shock Sensing - one beep every 4 seconds ;
R.P.S - one beep every 6 seconds.
These functions will be availed while the vehicle is armed.

R.P.S(Remote Paging System)

R.P.S is a feature that allows an individual to page the owner of a vehicle by simply tapping the R.P.S sensor on the front windshield of the car. This vibration is detected and your remote-pager will ring four times and a telephone icon will appear on the LCD indicating that someone is paging you from your vehicle.

Keyless Entry with R.P.S. sensor

With the new patented RPS system, you can open the door without a key or a remote.
Programming 4 number pass words (1111 - 9999)
※Step 1: Key On
※Step 2: Door Open
※Step 3: Knock 10 times. Each time the green LED will flash once.
It should be less than 1.5 seconds between the knocks.
※Step 4: The red LED will flash rapidly. If it doesn't, go to the step 1.
※Step 5: Enter your 4 number pass words by knocking - each number 1-9.
To enter the first number, knock the same number of times. The interval between the knocks should be less than 1.5 seconds. Then, wait to confirm by counting the number of flash of the red LED. If the red LED flashes a wrong number, go back to the step 1. If the red LED confirms a correct number, continue entering the other 3 numbers.
※Step 6: Signal Lights will flash once to confirm the programming.

Keyless Entry with R.P.S sensor
※Step 1: Knock 10 times Each time the green LED will flash once.
It should be less than 1.5 seconds between the knocks.
※Step 2: The red LED will flash rapidly.
※Step 3: Enter the pass words. To enter the first number, knock the same number of times. The interval between the knocks should be less than 1.5 seconds. Then, wait to confirm by counting the number of flash of the red LED. If the red LED confirms a correct number, continue entering the other 3 numbers. If a wrong number is entered, the RPS will send out signals to the remote. Therefore, you go back to the step 1.
※Step 4: The door will unlock and remote will show unlock with two beeps.

Note : You may try up to 5 times within 30 minutes. After that, the keyless function will not be available for the next 24 hours or until you unlock the door with the remote whichever comes first.

Paging for Shock Sensing

When the shock sensor is triggered by an impact in the vehicle, it is reported to the Remote that will beep and the hammer icon shows up for 7 seconds. Press Button (I) for a ½ second to turn off the shock sensor sirens and flashing lights.

Paging for Theft

When the vehicle is armed, unauthorized car door opening will activate the car siren the remote will be notified audibly and the door icon will appear in the LCD. The siren will go off even under the mute mode.
Press Button (I) for a ½ second to turn off the car siren and flashing lights.
Repeat this step (press Button (I) for a ½ second) again to disarm alarm mode.

Low Car Battery Alert

When the driver exits the vehicle with the parking lights on, it is reported to the remote upon arming (active, passive or auto). The remote will make beeping sounds, Beep, Beep.

Starter-Kill Function

In alarm mode, the starter kill function is activated. This feature disengages the starter mechanism on your car, which prevents you from starting your car even with a manual key when your vehicle's alarm mode is activated.

Reporting Door Opening

The vehicle will indicate the door opening by flashing the signal lights. (This is the installer option)

Propane gas powered vehicles

In the case of propane gas powered vehicles, there is a risk of left over gas (anywhere between the gas tank and the engine cylinder) freezing during winter. Therefore, it needs to burn the left over gas completely before the engine is turned off.

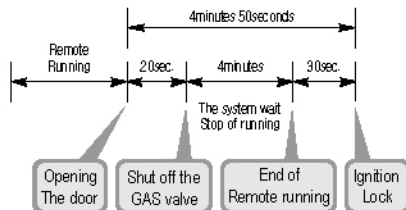▶ **25-1** How to burn the left over gas completely.

※**25-1-1** Automatic Transmission Vehicle Shuts off the Gas Valve switch before turn off the ignition so that the left over gas in the system burnt completely.
Then, turn off the ignition and take the key out.

※**25-1-2** Manual transmission vehicle or turbo mode of the automatic transmission vehicle.
In the case of the manual transmission vehicle or turbo mode of the automatic transmission vehicle, turn off the ignition first, shut off gas valve switch and then get out of the vehicle and close the door. The engine will shut off upon the left over gas has been completely burnt.

▶ **25-2** In the case of the manual transmission vehicle or turbo mode of the automatic transmission vehicle, if you do not shut off the gas valve switch there will be left over gas in the system after the engine is shut off 4 minutes running after door closing. And this left gas will be refrigerated at winter, so you have to shut off gas valve switch like above 25-1-2.

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▶ **25-3** Driving in short distance after remote-start for a gas powered vehicel
After the remote-start, if you drive the vehicle for less than 4 minutes and 20 seconds, the engine will continue running for 4 minutes and 20 seconds, that is because of the gas option, that shuts off the gas valve in 20 seconds and shuts off the ignition in 4 minutes after the door opening after remote start.
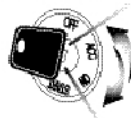
So in the case of Manual Transmission Vehicle, the system can not be entered to reservation mode in this 4minutes and 20 seconds period.

Remote-Pager Learn Routine

If you replace or add additional remotes, you can program up to three remotes, please perform the following procedure:

Step1 : Activate Valet/Programming mode by manually turning the ignition on and off five times (between Acc and On) with car key within a 10 second period. The parking light will flash once with successful completion of this step.

Step2 : Within a 10 second period after cycling the ignition for the 5ᵗʰ time, press button I. The car parking lights will flash once to confirm that the transmitter has been programmed. Continue program the additional remotes. The parking lights will flash two times when the programming mode is expired.
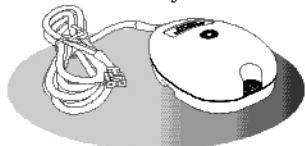
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Adjustable by Magicar Users

26-1 Adjusting the sensitivity of the shock sensor

It is advised that you may want to know where the shock sensor is located so that you can adjust the sensitivity of the volume depending on your need.
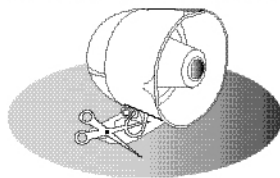
Warning: *Please be careful not to turn the volume beyond its limit.*
The volume can be damaged.

▶ 26-2 Adjusting the volume of the siren

The volume of the siren can be reduced by cutting off the jump wire attached to the siren.

▶ 26-2 Adjusting the volume of the R.P.S Sensor