

2-WAY REMOTE & Antenna STARTING SYSTEM

WITH 1 BUTTONS

FOR AUTOMATIC TRANSMISSION

KEYLESS ENTRY SYSTEM

2WR3R-FM / ANT-2WFMX

User Guide

WARNING

It is the responsibility of the vehicle operator to ensure that their vehicle is parked in a safe and responsible manner.

1. When leaving the vehicle, it is the user's responsibility to ensure that the gearshift lever is in "Park" in order to avoid accidents upon remote starting. (Note: Make sure that the automatic vehicle cannot start in "Drive".)
2. It is the user's responsibility to ensure that the remote starter is disabled or put into valet mode before servicing.

FCC COMPLIANCE

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.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void user's authority to operate this device.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

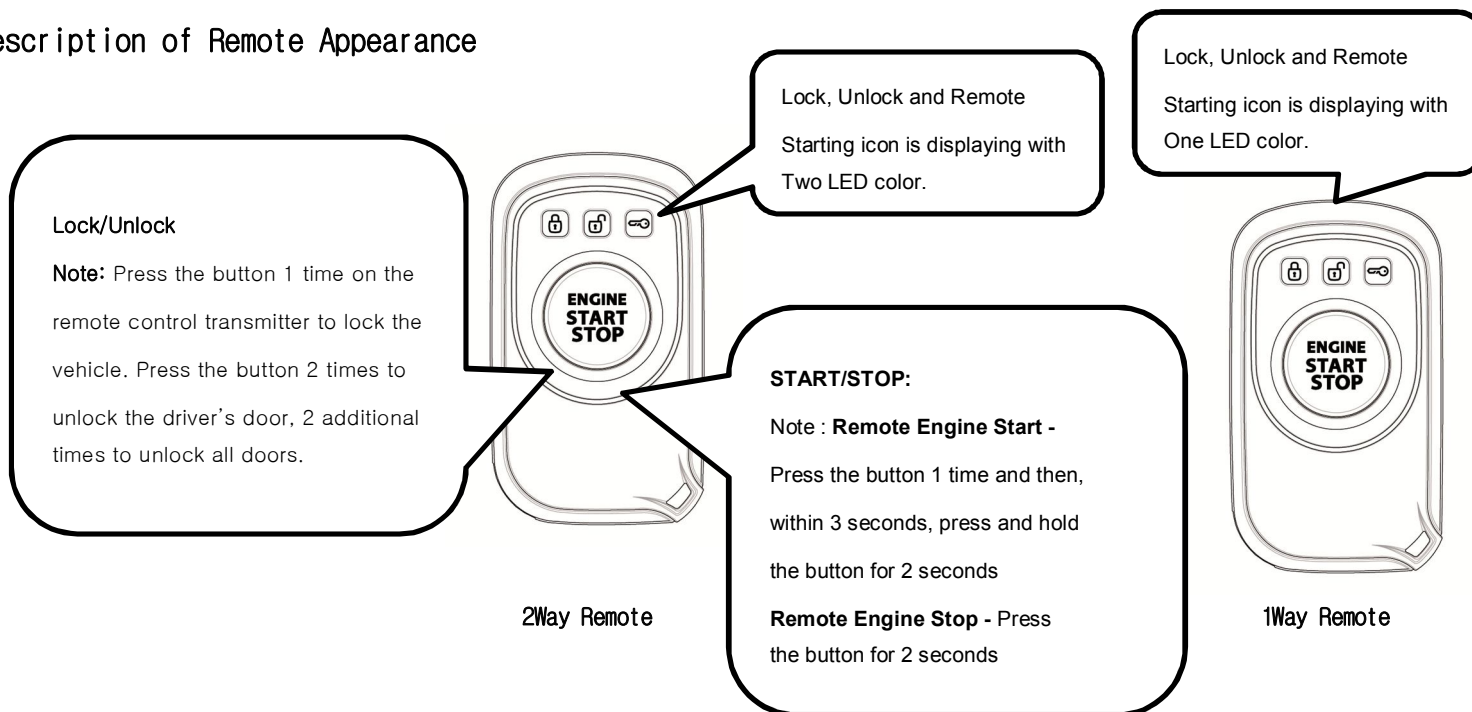
L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Using the remote control

Description of Remote Appearance



Button Functions

Button	Press buttons for	LED	Function
	Press 1time		Lock
	Press 2 times Press 2times x 2		Unlock driver's door Unlock all doors
	2 seconds		Remote start/stop

Note: You make sure press button only after LED lighting ends to activate each feature properly.

Vehicle Presets

Heater

When leaving the vehicle it is recommended to preset the accessory controls in preparation for the Next remote start. Settings for the blower motor(fan),front and rear (if equipped),should not be left on HIGH. It is recommended to leave the settings on **LOW** or **MEDIUM** instead.

Windshield Wipers, Headlights

Certain vehicles require the windshield wipers and headlights circuits to become energized while running under remote start. When leaving the vehicle you must ensure that the windshield wipers and headlights switches are OFF. Leaving the headlights switch ON on certain types of vehicles could cause them to remain ON even after remote starter shutdown, resulting in a dead battery.

Leave Windshield Wipers off to avoid damage wipers/motor with remote start.

Changing the Remote Control Transmitter Battery

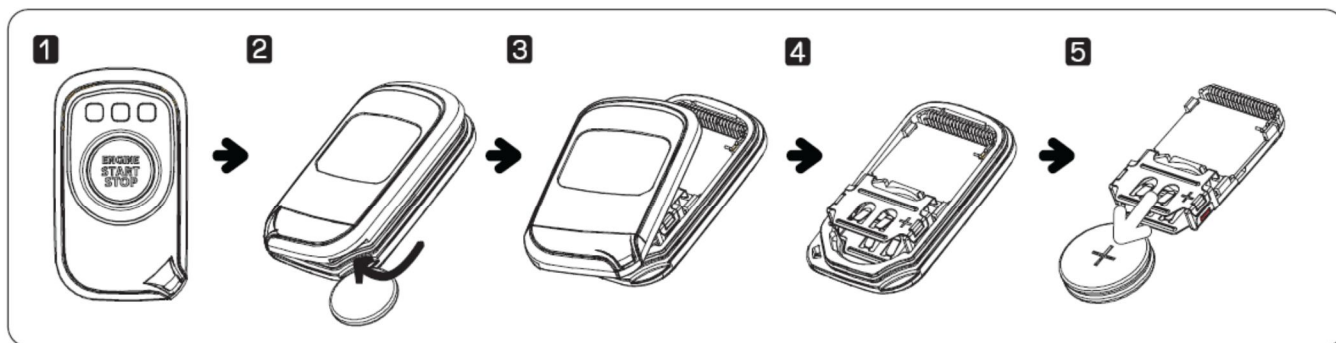
Remote transmitter should be provided with two 3-volt lithium battery (Model: CR-2025).

Please pay attention that with low battery LED in the remote might not work and the remote start distance might get shorter.

Batteries can be purchased at any electronic device stores.

Following the instructions below to change the remote control battery

1. You may use a coin to pry the remote control halves apart
2. Remove the old battery and replace with a new one
3. Be sure to observe the (+) sign when inserting the new battery.
4. Before assembling transmitter case, you should test the remote control.



Note: Recycle or dispose of the old Batteries according to local laws or regulations.

Note: LED icon of 2way transmitter indicates firstly blue color and then change to “RED” color when you press any button. In this case, it's time to change CR2025 battery newly

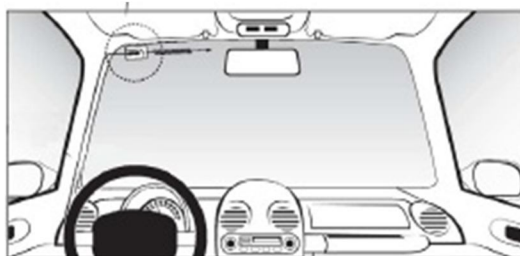
Description of Antenna Appearance



2Way Antenna



Antenna Harness



<< Installation of Antenna >>

Note: Use the power of the antenna car battery 12volts.

The Antennas have been calibrated for horizontal installation at the left-top corner of the windshield.

Remote-Starting your Vehicle

Remote-Starting

For the 2-way remote:

1. Press the  button one time. The remote will beep once and display the Lock icon. Then, press the  button within 2 seconds. The remote will beep once and display the KEY icon.
2. 5 seconds later, the remote will activate starter. The Key icon will be shown with 3 different tones of beeping then the LED Icon will be scrolled..

For the 1-way remote:

1. Press  button one time and Lock LED will be displayed. Then press  button for 2 seconds within 3 seconds.
2. Remote Stop - Press button for 2 seconds.

If your vehicle does not start at the first attempt, the system will shut down, wait a few seconds and try to start the engine again. There will be 3 start attempts before the system gives up.

Note: Please make sure press to button only after LED lighting ends to activate each feature properly.

Driving Off (Steps from Remote Start to Driving)

With the vehicle running remotely, press  button 2 times to disarm the OEM Starter Kill and/or the OEM alarm and unlock the doors. Enter the vehicle and do the following:

1. Turn the ignition key to the IGNITION ON (RUN) position.

(Do not turn the key to the CRANK position while the engine is running. This would cause the starter motor to reengage. Disarm the remote starter mode by pressing the foot brake)

2. Press the brake pedal to disengage the remote starter unit. With the vehicle key is in the IGNITION ON position, press the brake pedal or wait 30 seconds for the vehicle to turn to ready status to drive.

Note: In remote engine start status, engine will be deactivated according to following conditions.

- Open the door and 30 seconds is passed.
- Press brake pedal without key is in IGNITION ON position.

Engine Run Time

Your Remote Car Starter can be programmed to run the engine for 10 or 5 minutes (10 minutes by default).

Note : Run time is set by installer.

To check the amount of runtime remaining (2-way only):

After pressing  button once, if you press  button 2 times within 3 seconds, remote starter will be operated. Once remote starter is succeeded and the engine is turned on, the remote will receive signal and shows the remaining remote starter time as a START LED icon.

Remote Starter Features

Remote Start Error Diagnostic

If remote engine starter fails, the vehicle will not be started and the horn will sound accordingly to the table below.

Number of Horn times	Remote Start Error
1	Hood open
2	KEY IN or IG1 ON
3	Valet mode
4	Brake press
5	Trunk open
6	Door open

Valet/Service Mode

For REMOTE Start KEY Fob

Valet/Service mode is used to prevent the system from unexpectedly starting the engine while being serviced.

When your vehicle is in Valet Mode, the remote starter functionalities are disabled. If the vehicle needs to be serviced, or if you park it indoors, the Valet Mode will prevent the engine from being remote-started accidentally.

Any of the following features will put your remote car starter into Valet Mode :

Remote Valet:

- This feature allows you to put your system into Valet Mode by using the transmitter.

To Engage Valet Mode/Service Mode: (Approaching to Function stop mode)

- 1) Insert the vehicle's key to the IGNITION, turn to the ON position.
- 2) Press and hold the vehicle brake.
- 3) Press and hold the remote  button for 2 seconds, the key LED will flash and the vehicle's indicator will flash 1 time. Valet mode is engaged.

To take the system out of Valet Mode (Return the system to its normal operating mode): (Disarming "Function Stop Mode")

- 1) Insert the vehicle's key to the IGNITION, turn to the ON position.
- 2) Press and hold the vehicle brake.
- 3) Press and hold the remote  button for 2 seconds, the key LED will flash and the vehicle's indicator will flash 2 times, Valet mode is cancelled.

To verify whether the system is in Valet Mode using the 2-way remote:

If system is in Valet mode, buzzer sounds shortly when lock or unlock button is pressed.

Advanced Features: Installation-programmable Options

The Remote Car Starter was designed with flexibility and OEM integration in mind. With its programmable options, this unit can virtually control nearly any electrical system in your vehicle.

Caution: The programming of your system should be left to a professional.

Changing any one of the settings may affect the operation of your Remote Car Starter.

Engine Run Time setting

Option Setting Condition

Disarm the vehicle with remote control transmitter.(Unlock)

Driver s door must be physically Open, Engine Stop, Ignition ON, Trunk Open and Hood Open.

Option Setting Instruction

- Under option setting condition, press button for 2 seconds.

Light and Horn of vehicle will activate according to Engine Run Time option.

Number of Indicator+ Horn	Settings
1 Time	10 Mins (Default)
2 Times	5 Mins

Light Blinking during remote engine start

Option Setting Condition

Disarm the vehicle with remote control transmitter.(Unlock)

Driver s door must be physically Open, Engine Stop, Ignition ON, Trunk Open and Hood Open.

Option Setting Instruction

- Under option setting condition, press button for 2 seconds.

Light and Horn of vehicle will activate according to Light Blinking during remote engine start.

Number of Indicator+ Horn	Status
1 Time	Blink OFF (Default)
2 Times	Blick ON

Pairing Remote Start Fob

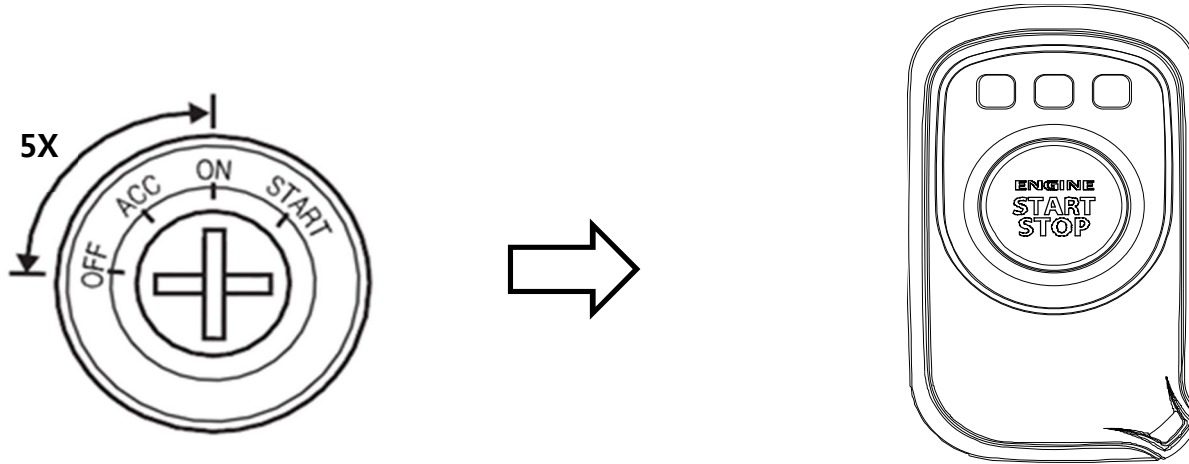
The Remote Start Fobs in Remote Start Kit are already paired with the main module at the time of production.

There is no need to pair the Fobs at the time of the first installation.

1. When a new registration is needed

- When replacing a remote due to loss or malfunction of a remote.
- When replacing the main controller installed in the vehicle.
- When adding or changing the remote upon user's need.

2. Pairing procedure



- 1) Open driver's door and trunk.
- 2) Insert the key into the ignition. Turn the key from OFF to ON position 5 times within 5 seconds.
- 3) After step 2), within 5 seconds, Press button on the 1st Remote Start Fob 1 time.
- 4) After registering the 1st Remote Start Fob, within another 5 seconds, Press button on the next 2nd Remote Start Fob 1 time.
- 5) Verify that all Fobs are functioning correctly by performing Lock / Unlock function.

NOTE:

- 1) A system can recognize up to 3 remotes maximum.
- 2) If a new Fob, or additional Fob, is needed later, the Fob pairing process should be done with the original Fob or oldest available Fob.

Troubleshooting Poor Transmitting Range

Many factors may affect the operating range of the transmitter. Some of these are:

- The condition of the batteries in the transmitter.
- The operating environment (for example: downtown radio-frequency noise, airports, cellular phone towers, etc).
- Metal in the area of the vehicle of transmitter. This includes the vehicle itself.
- The shape of the vehicle can affect range as well. Vans in general have greater interference.

The shape of the roof and A-pillars causes considerable radio-frequency interference.

Demonstrate to users that the best range is facing the vehicle's front.

The worst range is facing the vehicles right or left side.

Please inform the users that facing the vehicle's front offers the best range.

The worst range is experienced facing the R or L side.

- The amount of other vehicles in the area of the target vehicle.

- The method of using the transmitter. Always hold the transmitter high, approximately at shoulder height.

Automatic Engine Start Repeat

Remote Start is programmed to repeat the engine start sequence two (2) more times after ten (10) seconds if the engine start fails because of low vehicle battery.