User Manual

Remote	FCC ID Number	IC ID Number
2WNANO	VA5JR940-2WSS	7087A-R940WSS

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions;
(1) This device may not cause harmful interference.
(2) This device may 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 the user's authority to operate this device.

Statement : The term "IC". before the radio certification number only signifies that Industry Canada technical specifications were met.
CAUTION : The User that modifications to the unit may void the user's authori-ty to operate The unit

To maintain compliance with RF energy exposure guidelines, the antenna used for this transmitter must be maintained a separation distance of at least 20 cm from the user body when transmitting.

Co-located or operated in conjunction with any other antenna or transmitter is prohibited.

Quick Reference

Remote Maintenance – Battery Replacement

The only regular maintenance this system requires is remote control battery replacement.   No programming is required when replacing the battery.

Two Way Remotes:

First, remove the small Phillips screw located on the back of the remote. Once the screw has been removed, gently pull the remote apart taking care to not damage the circuit board. Your battery size should be listed on the battery. **IMPORTANT:** Be sure to observe correct polarity when installing the battery.

2 Way Remote Button Functions

Button(s)	Duration	Function	LED	Chirp(s)
🔒 (lock)	0.5 second	Locks doors and/or arms alarm.	🔒	Once
	3.5 seconds	Panic/vehicle locater (flashes vehicle's parking lights and sounds siren and horn).		N/A
🔓 (unlock)	0.5 second	Unlocks doors and/or disarms alarm.	🔓	Twice
🚗 (car)	0.5 second	Aux 1. Triggers the auxiliary 1 output (most commonly used for rear defrost or window roll-down).		Once
	2.5 seconds	Trunk release. Triggers the trunk release output and opens the vehicle's trunk.	🚗	Twice
🗝 (key)	0.5 second	Aux 2. Triggers the auxiliary 2 output (most commonly used for rear defrost or window roll-down).		Once
	2.5 seconds	Activates the remote start. Repeat and remote start will shut off. Will activate Stop and Go Mode if held when vehicle is running with the key.	Ⓢ	Once On / Twice Off
🔒 🔓 (lock + unlock)	0.5 second	Turns siren chirps on/off (Note: With the siren chirps off, it will still sound in the event the alarm is triggered).		Once On / Twice Off
	2.5 seconds	Option programming menu 1 - Installers Only.		Once
🔒 🚗 (lock + car)	0.5 second	Valet mode (see Valet Mode Section for details)		Once On / Twice Off
🔒 🗝 (lock + key)	0.5 second	Drive lock. Activates ignition controlled door locks.		Once On / Twice Off
	2.5 seconds	Option programming menu 2 - Installers Only.		Once
🔓 🚗 (unlock + car)	0.5 second	Activates passive arming (vehicle will arm/lock 30 seconds after the vehicle is disarmed)		Once On / Twice Off
	2.5 seconds	Activates the 2nd Car function. Your remote has the ability to control two systems with the same remote. You must have the same RF Kit in both of your vehicles.		Once On / Twice Off
🔓 🗝 (unlock + key)	0.5 second	Activates timer start mode. Timer start mode has multiple programmable settings: duration settings, temperature settings and self start settings.		Once On / Twice Off
🚗 🗝 (car + key)	0.5 second	Activates the built in Turbo Timer function. Additional installation is required when using this feature on automatic transmission vehicle's.		Once On / Twice Off
	2.5 seconds	Car Check (updates vehicle status on remote pager) / Secure Auxiliary		Twice

General System Functions

The remote transmitter functions have been predetermined and programmed from the factory. The four button configuration allows for many functions to be performed through a series of tapping, holding and / or multiple presses of buttons.

Sending Commands

When in range and a command has been sent, the remote will receive a page back and LED command. For example, to send a remote start command from the 2 Way remote, hold down the ⚷ button for 2.5 seconds. The remote will beep once to confirm the command has been sent and that the remote is in range. Once the vehicle has successfully remote started, the remote will receive a command indicating the vehicle is running.

Receiving Commands

The remote pager will receive commands indicating the status of the vehicle, confirmation of sending commands and alarm notifications. For example, after sending the lock command, the pager will receive LED and chirp signals confirming that the vehicle has been successfully locked/armed. To see if your pager is in range, hold the (🚗+ ⚷) buttons for 2.5 seconds – if the remote receives an audible and visual confirmation then it is in range. **IMPORTANT:** the 2WG5R-900SH does not receive page back alerts if an alarm is triggered only while your vehicle is remote started.

Active Lock/Arm and Unlock/Disarm

Tap button 🔒 for 0.5 second to lock/arm and unlock/disarm. The LED will flash on your remote. If your vehicle is locked, tap button 🔓 to unlock; if your vehicle is unlocked, tap button 🔒 to lock.

IMPORTANT: If the alarm has been triggered (Siren is going off), you must wait up to 5 seconds before disarming the alarm – the first 🔓 button tap will shut off the alarm and the second will unlock/disarm the system.

Passive Lock/Arm

The system can be configured to passively lock and arm the vehicle. Put the system in passive by tapping buttons (🔓+🚗) simultaneously for 0.5 second. The remote will beep once and the LEDs will illuminate to indicate the system is in passive lock and arming mode.

While in passive mode, the system will lock and arm the alarm 30 seconds after the last door is closed. As an indicator that the vehicle is going to passively lock and arm, the remote and siren will chirp once and the parking lights will flash once at both 10 and 20 seconds prior to passively locking and arming. If you want the system to passively arm and not passively lock, ask your local Firstech dealer to turn *Option 1-8* to setting *II.*

Automatic Transmission Remote Start Function

Hold the 🔑 button for 2.5 seconds to remote start an automatic transmission vehicle. If you are in range and if the vehicle is ready to remote start, the parking lights will flash once and/or siren chirp once to indicate that the remote start command has been successfully transmitted.

If you are in range and the remote beeps three times, there is a remote start error. Refer to the "remote start error diagnostic" on the last page of this manual for details.
Upon receiving confirmation that your vehicle is running, the remote LEDs will flash the and remote beep to show the run time. The remote start run time can be programmed for 3, 15, 25, or 45 minutes - ask your local Firstech dealer to adjust *Option 2-7* if you would like a run time other than 15 minutes (default).

IMPORTANT: Your vehicle's key must be inserted into the ignition and turned to the "on" position prior to driving your vehicle. If the foot brake is depressed prior to the key being in the "on" position, the vehicle will shut off.

Manual Transmission Remote Start Function (Reservation Mode)

In order to remote start a manual transmission vehicle, the system <u>must</u> first be set in Reservation Mode. Reservation Mode must be set each and every time you want to remote start a manual transmission vehicle. The purpose of Reservation Mode is to leave the transmission in neutral before exiting the vehicle.

IMPORANT:
- The transmission must be left in the neutral position.
- The vehicle's windows must be rolled up.
- The vehicle's door pins must be in working order.
- Do not install this remote start on a manual transmission vehicle that has a convertible or removable top.
- Do not set reservation mode or remote start with people in the vehicle.

Activating Reservation Mode

STEP 1: While the vehicle is running, place the transmission in neutral, set the emergency / parking brake, and remove pressure from the foot brake.

STEP 2: Remove the key from the vehicle's ignition. The vehicle's engine should remain running even after the key has been removed. If the vehicle does not remain running visit your local authorized Firstech dealer for service.

STEP 3: Exit the vehicle and close the door. The vehicle's engine should shut off instantly or within 10 seconds upon closing the last door. If the vehicle's engine does not shut off, your door trigger may be functioning improperly. Do not use the remote start feature and take your vehicle to a local authorized Firstech dealer for service.

Once the vehicle shuts off your system is in reservation mode and the vehicle is ready to safely remote start.

IMPORTANT: By default, the system will lock/arm the vehicle upon setting reservation mode. Take care to not lock your keys inside the vehicle.

Cancelling Reservation Mode

Reservation mode will be cancelled for the following reasons;
- You did not activate the parking brake prior to turning off the ignition.
- You pressed the foot brake after the key was removed from the ignition.
- You released the parking brake after the key was removed from the ignition.
- You entered valet mode, opened the vehicle's door, hood, trunk or set off the alarm.

Reservation Mode Settings

Reservation mode settings can be programmed with *Option 1-6.* It is recommended that reservation mode settings are programmed by your local authorized Firstech dealer.

Default 1: Locks doors when reservation mode is set.
Option 2: Does not lock doors when reservation mode is set.
Option 3: Reservation mode sets 10 seconds after the last door is closed, as opposed to immediately. This option will allow you to access the vehicle's rear doors, trunk or hatch prior to the system setting reservation and passively locking/arming.

Trunk Release

 Hold button ⬭ for 2.5 seconds to release the trunk or hatch. If you are in range, the remote will beep twice and the LEDs will flash indicating that the trunk release command has been successfully transmitted. **IMPORTANT:** Trunk release is an optional vehicle feature that may require additional parts and labor.

Auxiliary Outputs/Window Roll-Down/Sliding Doors

Your system is equipped with two additional outputs that can be configured to control windows, open power sliding doors, open a power sliding moon roof, or even turn on a rear defroster. These outputs can be configured for pulsed, timed or latched settings. Your authorized Firstech dealer can set these outputs up accordingly. Using auxiliary outputs to control additional vehicle functions will require additional parts and can be rather labor extensive.

Tap button ⬭ for 0.5 seconds to trigger auxiliary output 1. Tap button ⌬ for 0.5 second to trigger auxiliary output 2. The vehicle's parking lights will flash once and/or siren chirp once indicating that the auxiliary outputs have been triggered.

By default, the system is in Secure Auxiliary Mode, which requires you to hold buttons (⬭+ ⌬) for 2.5 seconds prior to triggering auxiliary 1 or 2. To turn off secure auxiliary, ask your authorized Firstech dealer to turn on *Option 4-5* to setting *II*.

Silent Arm/Disarm

Upon lock/arm and unlock/disarm, you can eliminate vehicle's audible confirmation by muting the siren. Normally, the siren will chirp once to indicate the system is locked/armed and twice to indicate the

system is unlocked/disarmed. To mute the siren tap buttons (🔒+🔓) simultaneously for 0.5 second. **IMPORTANT:** Even when the siren is muted, it will still go off in the event the alarm is triggered.

Advanced System Functions

The following section reviews advanced system functions. Many of these functions require multiple steps or additional programming by your local authorized Firstech dealer to be active.

Drive Lock/Ignition Controlled Door Locks

Tap buttons (🔒+🔑) simultaneously for 0.5 second to turn drive lock on and off (also known as ignition controlled door locks). The vehicle's parking lights will flash once and/or siren chirp once to confirm drive lock is off. The vehicle's parking lights will flash twice and/or siren chirp twice to confirm drive lock is on.

IMPORTANT: Drive lock mode requires that the dealer turn on *Option 1-9*. Drive lock has two settings;

Default 1: Off
Option 2: Locks the doors when the ignition is on and after the brake is depressed.
Option 3: locks the doors when the RPM's have reached two times that of idle speed (this setting requires that a tachometer wire is connected).

With both settings, the doors will unlock when the ignition is turned off. If using this feature on a manual transmission vehicle, the doors will unlock upon setting the emergency / parking brake.

Turbo Timer Mode

This feature can not be turned on with the 2 Way remote. The built in turbo timer keeps the vehicle's engine running for either 1, 2, or 4 minutes (programmable from dealer) after the vehicle key has been removed from the ignition. This feature will keep oil running through the turbo system to allow for appropriate cooling time. Tap buttons (🚗+🔑) simultaneously for 0.5 second to turn on or off turbo mode. The remote will beep once and the turbo icon will illuminate to confirm that turbo mode is activated. The remote will beep twice and icon will disappear to confirm turbo mode is off.

IMPORTANT: To utilize this feature, the emergency / parking brake wire must be connected to the Firstech system. Consult your local authorized dealer for installation.

2nd Car Mode (Multiple Vehicle Control)

This remote has the ability to operate a 2nd vehicle. Hold buttons (🔒+🚗) for 2.5 seconds to activate this feature. The remote's LEDs will flash confirming that 2nd car mode is activated. The remote will remain in 2nd Car Mode until you hold the (🔒+🚗) buttons for 2.5 seconds again. The remote will beep twice and the LEDs change from red to amber to confirm 2nd car mode is off.

IMPORTANT: 2nd car mode requires the remote to be programmed to a 2nd vehicle that is equipped with the same remote kit.

Car Call/RPS (Remote Paging Sensor)

The RPS is an optional feature. The car call/RPS feature uses a remote paging sensor that is designed to be mounted on the inside of the windshield. To trigger the car call or RPS sensor, you must knock on the windshield in front of the RPS at least two times. The switch on the RPS will adjust paging sensitivity – the smaller the dot represents the least sensitive setting. Use a key or pen for best results.

RPS (Remote Paging Sensor) Unlock/Disarm

The **RPS is an optional feature**. Basic RPS and car call functions do not require programming, however in order for the sensor to unlock/disarm the vehicle you must perform the following procedures;

STEP 1: Disarm/unlock the alarm (remote must be programmed first) and choose a 4 digit code. You can not have zeros.

STEP 2: Turn ignition key to the "on" position and leave the driver's door open.

STEP 3: Knock on the windshield in front of the RPS a total of 5 times (each time you knock the LED on the RPS will flash RED). The LED will begin to flash rapidly in BLUE with successful completion of this step.

STEP 4: Enter the first digit of the desired four digit pass code by knocking on the windshield in front of the RPS the desired number of times. For example, to enter 3, knock on the sensor 3 times (each time you knock the LED will flash RED) then wait.

STEP 5: The LED on the RPS will confirm your first number by flashing BLUE slowly. Once the LED begins to flash rapidly in BLUE, enter your second number by repeating step 4.

STEP 6: Repeat steps 4 & 5 to enter all four numbers.

STEP 7: Turn the ignition OFF - the RPS disarm/unlock feature is now programmed. Follow steps 3 – 5 to enter your disarm/unlock code.

Secure Valet Switch

The optional Secure Valet Switch prevents the alarm from being put into valet mode through cycling the ignition on/off five times. The Secure Valet Switch is more secure than traditional toggle / valet switches because it requires a two digit code. **IMPORTANT:** The first two digits of the RPS unlock/disarm pass code will be the default pass code for the secure valet – you do not need to program them independently. If you are not using the RPS unlock, following the below procedures to program your secure valet pass code;

STEP 1: Turn on *Option 3-10-III.* (Dealer programmed option)

STEP 2: Turn ignition key to the "on" position.

STEP 3: Hold down the valet switch for 1.5 seconds. The LED on the valet switch will begin to flash rapidly with successful completion of this step.

STEP 4: Enter the first digit of the desired two digit pass code by depressing the switch the number of times that coordinates with the desired first number. For example, to enter 3, depress the switch 3 times, then wait.

STEP 5: The LED will confirm the first number by flashing BLUE slowly. Once the LED begins to flash rapidly, enter your second number by repeating step 4.

STEP 6: Turn the ignition off - the Secure Valet Switch is now programmed. Follow steps 3 – 5 to enter your Secure Valet code.

Timer Start Mode

Timer start mode is used to cool or warm the vehicle automatically without use of the key or the remote.

While engaged, timer start will activate even while the remote is out of range. Tap buttons (⬓ + ⟲)simultaneously for 0.5 second to activate timer start mode. The remote will beep once and LEDs flash twice. Repeat the same step to turn off timer start mode. Timer start mode will be cancelled any time the vehicle is started manually or remotely. To change from the default setting to optional settings, see your place of purchase.

Cold/Hot Start Mode

Cold/hot start mode works in conjunction with timer start mode (see above) and the temperature sensor. It allows you to configure your timer start feature to check the vehicle's temperature prior to starting. All of these options require programming from your local dealer.

Anti Jacking Mode

Your system has a mode that requires you to keep your remote separate from your key chain. This feature also requires additional labor. Please consult your installer for more details. The Anti Jacking mode allows you to safely disable your vehicle once a thief has driven off with your property. If you are car jacked and still have your remote, you can panic the system by holding button 🔒 down for 3.5 seconds. The siren will sound for 30 seconds and the vehicle will shut down.

More Optional Sensors

If you purchased an Alarm or Alarm and Remote Start system you have the ability to add optional sensors from Firstech, LLC. You have the ability to protect your investment by adding a battery back up system to protect main power to your alarm or a tilt sensor to protect expensive rims and tires.