



**OWNER'S MANUAL**  
**SmartControl Digital RF Kit system**

**MMCARFK5000**



This system must be installed by a professional.

**NOTICE**

The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. Please review the Installation Guide carefully before beginning any work.

# WELCOME TO SMARTCONTROLS

Congratulations on the purchase of your new system! Please take a moment to review the following guide to help you understand and use your system to its full potential.

## THE SYSTEM

This system has been designed so you can access the basic features from your remote starter, security and convenience unit using this simple 2-way 1 button remote.

When connected by Bluetooth®, the application will turn your smartphone into a virtual remote control that will centralize all of your vehicle information. Your smartphone will give you full access to all the functions of your unit with multiple dedicated buttons.

The application will display the current status of your door locks\*, unauthorized intrusion or alarm condition\*, the vehicle battery voltage, remote start runtime and shutdowns, etc...

The communication technology between the remote and the antenna uses the same RF technology as commercial LPWAN systems used to communicate with devices such as fire detectors and gas monitoring meters. This advanced technology will give you exceptional performance and stability on distances of up to 2.4Km (1.5 miles).

\*Some extra connections might be required by your installer in order to control certain functions on your vehicle.

## SYSTEM OVERVIEW

Download the App from the  
AppStore or Google Play  
Search for : SmartControls



**ANTENNA**



**REMOTE  
CONTROL**



### TECHNICAL DATA

Operating frequency	911 MHz
Max Operating Range (Remote - Antenna)	Up to 2.4km (1.5 miles) unobstructed
Max Operating Range (BT to Smartphone)	15 meters (50 feet)
Power source	Antenna - 12 volts
	Remote - Rechargeable li-ion 3.6 volts

## REMOTE FUNCTIONS

Your handheld remote can be used at anytime without the use of the smartphone app in order to control your vehicle. Please take a moment to get acquainted with the following functions below.



### LOCK & ARM

Press and Release the command button.

This will secure your vehicle by locking the doors and arming the factory alarm.

### LOCK CONFIRMATION

1x short beep

1x LED blink



### UNLOCK & DISARM

Press and Release the command button twice within 2 seconds.

This will give access to your vehicle by unlocking the doors and disarming the factory alarm.

### UNLOCK CONFIRMATION

2x short beep

2x LED blink



### START ENGINE

Press and Hold the command button for 3 seconds until a quick beep is heard, then release.

### START CONFIRMATION

2x short beep

2x LED blink

### SUCCESSFUL ENGINE START

3x short beep

3x LED blink

### ENGINE RUNNING

1x LED blink every 5 seconds

### ENGINE START FAIL

2x long beep

2x long LED blink



### EXTENDED RUNTIME / PITSTOP\*

While engine is running under remote start, Press and Hold the command button for 3 seconds until a quick beep is heard, then release.

This will reset the remote starter runtime to the preset runtime value.

### SUCCESSFUL EXTENDED RUNTIME

3x short beep

3x LED blink

\* Pitstop mode will allow you to take the keys out of the ignition and keep the engine running using the remote starter.



### STOP ENGINE

Press and Hold the command button for 5 seconds until a long beep is heard, then release.

### STOP CONFIRMATION

2x long beep

2x LED blink

### SUCCESSFUL ENGINE STOP

2x long beep

2x long LED



### COMMUNICATION ERROR

Any command sent by pressing the remote control command button which is not received by the antenna.

### NO RESPONSE

2x quick Low/High beeps



### LOW BATTERY

After any command sent by pressing the remote control command button

### LOW BATTERY WARNING

6x quick beeps

## REMOTE CONTROL BATTERY CHARGING

Your handheld remote control contains a long-lasting Li-Ion battery that can be recharged with a micro-USB cable (supplied). It is recommended that the battery be fully charged before the first use for maximum efficiency and range. During normal operation, the battery will last for approximately 1 month before recharging is required.



Micro USB  
Charging  
port

### LOW BATTERY INDICATOR

The remote control provides an audible warning to advise you that the battery needs to be changed. When 6 short beeps are heard after each command is received, this indicates that the battery is depleted. When the battery is low, it will have enough power to operate the remote control for only one day.

### REMOTE CONTROL MAINTENANCE

This remote control will not require any maintenance other than the periodic recharging of the battery. The remote control is not water resistant nor waterproof. **Do not** expose to rain, mud or snow. Never immerse the remote control in water.

### CHARGING THE BATTERY

1. Plug end of the provided cable into the USB port of a computer or a portable USB power supply. Insert the Micro-USB connector into the port located on the remote control. The Status LED will start blinking indicating the remote control is charging.
2. The transmit LED will continue to blink until the battery is fully charged. While charging, the remote control will remain fully functional.
3. Once fully charged, the transmit LED will stop blinking. Disconnect the cable from the remote control end first.

#### NOTE

When the battery charging process begins and the remote battery is completely discharged or if it is brand new and has never been programmed to a system, the transmit LED does not blink while charging. Pressing once on the command button of the remote control will reinstate the normal charging LED blinking status.

## ANTENNA FUNCTIONS

The antenna can learn a maximum of 4 remote controls. It is equipped with 2 visual status indicators, a red and a white LED. The red LED is used for programming, while the white LED is for status and diagnostics. Please refer to your remote starter/security user guide for flash diagnostics.

### Antenna Installation Location

The antenna is designed to be installed in a dry location, inside the passenger vehicle compartment. For optimum performances, the best location is typically in the windshield where it will not obstruct your view while driving. It should also be kept away from any metal surface such as the A-pillar, rearview mirror post, roof liner, transponder or electronic component. For instance, it's installation against the A-pillar can cut as much as 50% of the effective range.

### Pairing Label

On the antenna, you will find a scannable QR CODE label that is required to pair your system to your smartphone. **Please do not remove and/or discard this label as it will be required to pair any smartphones to your system now or in the future.**

### Temperature sensor

A temperature sensor is present inside the antenna. It will read the actual temperature inside the antenna case. Note that the temperature reading does not reflect the actual ambient temperature inside the vehicle, especially if it is in direct sunlight or ice is present on the windshield.

### Antenna Maintenance

The antenna does not require any maintenance and does not contain any batteries. It is not water resistant or dust proof and must be kept in a dry location. Be careful not to damage or disconnect the cable or spray cleaner directly on the antenna.


### Bluetooth® Low Energy

The remote control and antenna are both using Bluetooth® to link to the smartphone. Once connected to a smartphone, you will have full access to all the functions and commands available from your remote starter, security and convenience system. The antenna being the center of operation of the system, once paired, will provide the pairing information for the remote control(s).

### Bluetooth® maximum range

The Bluetooth® connecting/operating range to a smartphone is typically around 50 feet. Once paired, your smartphone can connect to either the remote control or the antenna if you are within this distance.

### Mobile Application

Download the Mobile app on your Android® or Apple® device through the Google Play® Store or App store. Create an account and login using your credentials. In "My Garage" section, press on the  sign at the bottom right of the screen to add a system and follow the pairing instructions.

# MANAGING YOUR DEVICES

## Connection to Remote Control

This pairing is prioritized over the antenna connection. The effective range of the smartphone to the remote control is limited by the Bluetooth® (around 50 feet). Any commands using the application will be sent to the transmitter and relayed to the antenna via long range RF signal. The command confirmation will take the same route: from the antenna to the remote control and then to the application on your smartphone.

## Connection to the Antenna

The smartphone can connect directly to the antenna of the vehicle without having a transmitter nearby. The effective range is limited by the Bluetooth® device (50 feet).

## Smartphone Pairing

Up to 4 smartphones can be paired to the system at the same time. The smartphone pairing is based on a First-In-First-Out method. Once 4 smartphones have been paired, an additional pairing of a smartphone will bump out the oldest one.

## Delete Pairing

You can delete all of the smartphone pairings memorized in the remote control and/or the antenna. Follow the procedure below to erase all smartphone pairing.

### Remote Control Procedure

1. Press and Release the side button 5 times, holding the side button on the 5th press until the GREEN LED lights constantly.
2. While GREEN LED is lit, Release side button, then press and hold again the side button until the GREEN LED blinks 3 times. Release the button.
3. All Smartphone pairing will then be erased from the remote control.

### Antenna Procedure

1. Press and Release the side button 5 times, holding the side button on the 5th press until the RED LED lights constantly.
2. While RED LED is lit, Release side button, then press and hold again the side button until the RED LED blinks 3 times. Release the button.
3. All Smartphone pairing will then be erased from the antenna.

NOTE: this operation will not erase the remote control programming to the antenna and can still be use to operate your remote starter, security and convenience system.

## To check if a Remote control is actively connected via Bluetooth® with a Smartphone as ONLY One (1) smartphone can be connected at once.

Press and Hold the side button

- Within 3 seconds, the BLUE LED will blink once if connected to a smartphone.
- Within 3 seconds, the GREEN LED will blink once if **NOT** connected to a smartphone.

## To check if an Antenna is actively connected via Bluetooth® with a Smartphone as ONLY One (1) smartphone can be connected at once.

Press and Hold the side button

- Within 3 seconds, the WHITE LED will blink once if connected to a smartphone.
- Within 3 seconds, the RED LED will blink once if **NOT** connected to a smartphone.

# smartcontrol

lightwave<sup>™</sup> connected  
TECHNOLOGY vehicle  
solutions

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